**All the notes below have been updated to match the CIE IGCSE Economics (0455) syllabus for examinations in 2020, 2021 and 2022.*

The Basic Economic Problem

A small insight into what is economics, before we start off:
"Economics is the social science that describes the factors that determine the production, distribution and consumption of goods and services."
(Source: Wikipedia)

THE NATURE OF THE ECONOMIC PROBLEM

Resources: are the inputs available for the production of good and services.
Scarcity: a lack of something (in this context, resources)
The fundamental economic problem is that there is a **scarcity** of resources to satisfy all human wants and needs.There are **finite resources** and **unlimited wants.** This is applicable to consumers, producers, workers and the government, in how they manage their resources.

Economic goods are those which are scarce in supply and so can only be produced with an economic cost and/or consumed with a price. Or in other words, an economic good is a good with an opportunity cost All the goods we buy are economic goods, from bottled water to clothes.
Free goods, on the other hand, are those which are abundant in supply, usually referring to natural sources such as air and sunshine.

THE FACTORS OF PRODUCTION

Resources are also called 'factors of production(especially in Business Studies).They are:

- **Land:** All **natural resources** in an economy. This includes the surface of the earth, lakes, rivers, forests, mineral deposits, climate etc.
  - The **reward** for land is the **rent** it receives

    - Since, the amount of land in existence stays the same, it’s **supply is said to be fixed**. But in relation to a country or business, when it takes over or expands to new area, you can say that the supply of land has increased, but the supply is not depended on it’s price, i.e. rent
    - The **quality** of land depends upon the soil type, fertility, weather and so on
    - Since it can’t be moved around, it is **geographically immobile** but since it can be used for a variety of economic activities it is **occupationally mobile**.

- **Labour:** All the **human resources** available in an economy. That is, the mental and physical efforts and skills of workers/labourers.
    - The **reward** for work is **wages**/salaries
    - The **supply** of labour is depended upon the number of workers available (which is in turn influenced by population size, no. of years of schooling, retirement age, age structure of the population, attitude towards women working etc) and the number of hours they work (which is influenced by number of hours to work in a single day/week , number of holidays, length of sick leaves, maternity/paternity leaves, whether the job is part-time or full-time etc)
    - The **quality** of labour will depend upon the skills, education and qualification of the labour
    - Labour **mobility** can depend up on various factors. Labour can achieve high occupational mobility (ability to change jobs) if they have the right skills and qualifications. It can achieve geographical mobility (ability to move to a place for a job) depending on transport facilities and costs, housing facilities and costs, family and personal priorities, regional or national laws and regulations on travel and work etc.

- **Capital:** All the **man-made resources** available in an economy. All man-made goods (which help to produce other goods – capital goods) from a simple spade to a complex car assembly plant are included in this. Capital is usually denoted in monetary terms, as the total value of all the capital goods needed in production.
    - The **reward** for capital is the **interest** it receives
    - The supply of capital is depended upon the demand for goods and services and how well businesses are doing. It can be quickly adjusted to demand in the economy
    - The **quality** of capital depends on how many good quality products can be produced using the given capital. For example, the capital is said to be of much more quality in a car manufacturing plant that uses mechanisation and

technology to produce cars rather than one in which manual labour does the work
    - Capital **mobility** can depend upon the nature and use of the capital. For example, an office building is geographically immobile but occupationally mobile. On the other hand, a pen is geographically and occupationally mobile.

- **Enterprise:** The **ability to take risks and run a business venture** or firm is called enterprise. A person who has enterprise is called an entrepreneur. In short they are the people who start a business. Entrepreneurs organize all the other factors of production and take the risks and decisions necessary to make a firm run successfully.
    - The **reward** to enterprise is the **profit** generated from the business
    - The **supply** of enterprise is dependent on entrepreneurial skills (risk-taking, innovation, effective communication etc), education, corporate taxes (if taxes on profits are too high, nobody will want to start a business), regulations in doing business and so on
    - The quality of enterprise will depend on how well it is able to satisfy and expand demand in the economy in cost-effective and innovative ways
    - Enterprise is usually highly mobile, both geographically and occupationally.

All the above factors of productions are scarce because the time people have to spend working, the different skills they have, the land on which firms operate, the natural resources they use everything is limited in supply. Which brings us to the topic of opportunity cost.

OPPORTUNITY COST

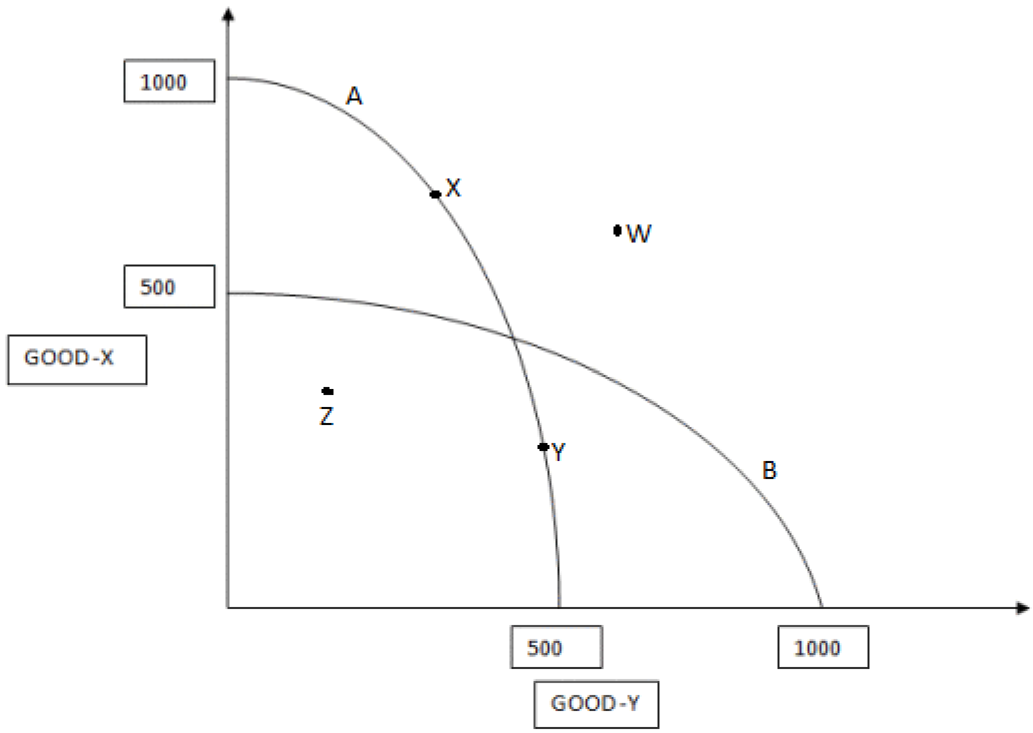
The scarcity of resources means that there are not sufficient goods and services to satisfy all our needs and wants; we are forced to choose what we want. Choice is necessary because these resources have alternative uses- they can be used to produce many things. But since, there is only finite resources, we have to choose.

When we choose something over the other, the choice that was given up is called the opportunity cost. **Opportunity cost**, by definition, **is the next best alternative that is sacrificed/forgone in order to satisfy the other**.

Example 1: the government has a certain amount of money and it has two options: to build a school or a hospital, with that money. The govt. decides to build the hospital. The school, then, becomes the opportunity cost as it was given up. In a wider perspective, the opportunity cost is the education the children could have received, as it is the actual cost to the economy of giving up the school.
Example 2: you have to decide whether to stay up and study or go to bed and not study. If you chose to go to bed, the knowledge and preparation you could have gained by choosing to stay up and study, is the opportunity cost.

PRODUCTION POSSIBILITY CURVE DIAGRAMS (PPC)

Because resources are scarce and have alternative uses, a decision to devote more resources to producing one product means fewer resources are available to produce other goods. A Production Possibility Curve diagram shows this, that is, **the maximum combination of two goods that can be produced by an economy with all the available resources**.



The PPC diagram above shows the production capacities of two goods- X and Y- against each other. When 500 units of good X is produced , 1000 units of good Y can be produced. But when the units of good X increases to 1000, only 500 units good Y can be produced.

Let’s look at the PPC named A. At point **X** and **Y** it can produce certain combinations of good X and good Y. These are points on the curve- they are attainable given the resources. Th economy can move between points on a PPC simply by reallocating resources between the two goods.
If the economy were producing at point **Z**, which is inside/below the PPC, the economy is said to be **inefficient**, because it is producing less than what it can.
Point **W**, outside/above the PPC, is unattainable because it is beyond the scope of the economy’s existing resources. In order to produce at point W, the economy would need to see a shift in the PPC towards the right.
For an **outward shift** to occur, an economy would need to

- discover or develop new raw materials. Eg : discover new oil fields
- employ new technology and production methods to increase productivity
- increase labour force by encouraging birth and immigration, increasing retirement age etc.

An outward shift in PPC, that is higher production possibility, will lead to economic growth.

In the same way, an **inward shift** can occur in the PPC due to:

- natural disasters, that erode infrastructure and kill the population
- very low investment in new technologies will cause productivity to fall over time
- running out of resources, especially non-renewable ones like oil or water

An inward shift in the PPC will lead to the economy shrinking.

How is opportunity cost linked to PPC?

Individuals, businessmen and the government can calculate the **opportunity cost** from PPC diagrams. In the above example, if the firm decided to increase production of good Y from 500 to 750, it can calculate the opportunity cost of the decision to be 250 units of good X (as production falls from 1000 to 750). They are able compare the opportunity cost for different decisions.

The Allocation of Resources

How Markets Work

Economy: an area where people and firms produce, trade and consume goods and services. This can vary in size- from your local town to your country, or the globe itself.

MICROECONOMICS AND MACROECONOMICS

Microeconomics is the study of individual markets. For example, it will deal with the effect of a price change on the demand and for a good. Microeconomic decision makers are producers and consumers (who directly involve in markets)

Macroeconomics is the study of an entire economy as a whole. So, it deals with, for example, the total size of the economy or the unemployment rate, among other things. Macroeconomic decisions are made by the government of the particular economy a town, state or country)

THE ROLE OF MARKETS IN ALLOCATING RESOURCES

Resource allocation: the way in which economies decide what goods and services to provide, how to produce them and for who to produce them for.

These questions- **what to produce, how to produce, and for whom to produce** for- are termed **'the basic economic questions'**. In short, resource allocation is the way in which economies solve the three basic economics questions.

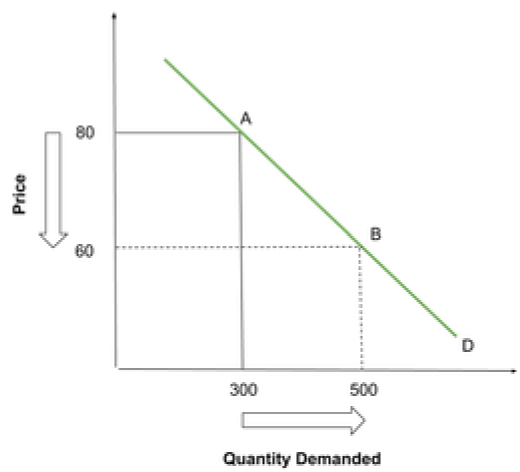
Market is any set of arrangement that brings together all the producers and consumers of a good or service, so they may engage in exchange. Example: a market for soft drinks.

Goods and services are bought and sold in a market at an equilibrium price where demand and supply are equal. This is called the price mechanism. It helps answer the three basic economic questions. Producers will produce the good that consumers demand the most, it will be produced in a way that is cost-efficient, and will be produced for those who are willing and able to buy the product. More on these topics below:

DEMAND

Demand is the want and willingness of consumers to buy a good or services at a given price. Effective demand is where the willingness to buy is backed by the ability to pay. (For example, when you want a laptop but you don't have the money, it is called demand. When you do have the money to buy, it is called effective demand). The effective demand for a particular good or service is called quantity demanded. (**Individual demand** is the demand from one consumer, while **market demand** for a product is the total (aggregate) demand for the product, or the sum of all individual demands of consumers).

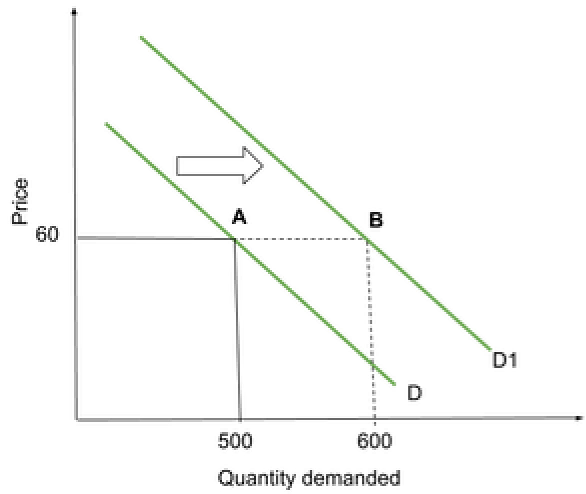
The law of demand states that **an increase in price leads to a decrease in demand, and a decrease in price leads to an increase in demand** (it's an inverse relationship between price and demand. However it's worth noting that an increase in demand leads to an increase in price and a decrease in demand leads to a decrease in price. The law of demand is established with respect to changes in price, not demand, hence the difference).



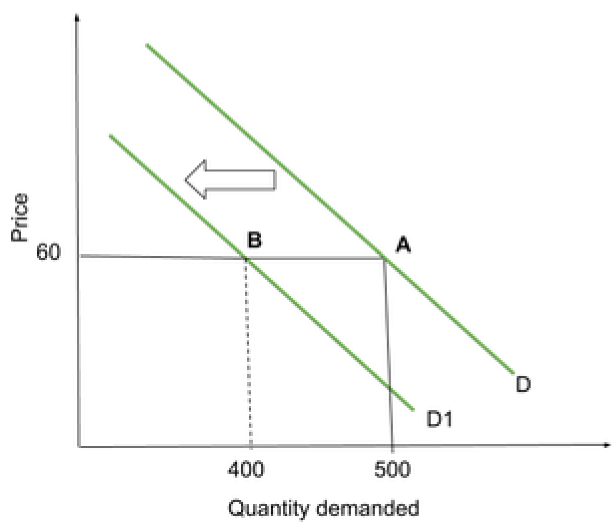
This is an example of a demand curve for Coca-Cola.

Here, a decrease in price from 80 to 60, has increased it's demand from 300 to 500. **The increase in demand due to changes in price** (without changes in other factors) **is called an extension in demand**. Here the extension in demand is from A to B.

In the above example, an increase in price from 60 to 80, will decreased the demand from 500 to 300. **The decrease in demand due to the changes in price** (without the changes in other factors) **is called a contraction in demand**. Here the contraction in demand will be from B to A.



In this example, there is a rise in the demand of Coca-Cola from 500 to 600, without any change in price. **A rise in the demand for a product due to the changes in other factors (excluding price), causes a shift to the right** (from A to B).



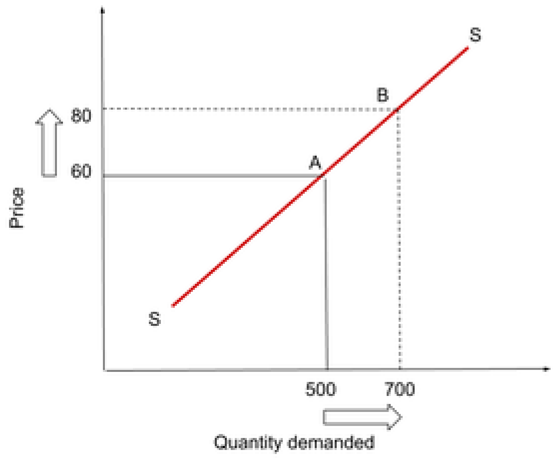
In this example, there is a fall in demand of Coca-Cola from 500 to 400, without any change in price.
A fall in demand for a product due to the changes in other factors (excluding price), causes a shift to the left (from A to B).

Factors that cause shifts in demand curve:

- **Consumer incomes**: a rise in incomes increases demand, causes a shift to right. And vice versa.
- **Taxes on incomes:** a rise in tax on incomes, means less demand, causing a shift to the left. And vice versa.
- **Price of substitutes**: **Substitutes** are goods that can be used instead of a particular product. Example: Tea and coffee are substitutes (they are used for similar purposes). A rise in the price of a substitute means, a rise in the demand for the product, causing a shift to the right. And vice versa.
- **Price of complements**: **Complements** are goods that are used along with another product. Example: printers and ink cartridges. A rise in the price of a complementary good, will reduce the demand for a particular product, causing a shift to the left. And vice versa
- **Changes in consumer tastes and fashion:** For example, the demand for mobile phones (as opposed to smartphones) have fallen. This will cause a shift to the left. And vice versa, if demand rises**.**
- **Degree of Advertising**: when a good is very effectively advertised (Coke, Pepsi), its demand rises, causing a shift to the right. And vice versa, when advertising is low.
- Change in population: A rise in the population will raise demand, and vice versa
- Other factors, such as weather, natural disasters, laws, interest rates etc.

SUPPLY

Supply is the want and willingness of producers to supply a good or services at a given price. The amount of goods or services producers are willing to make and supply is called quantity supplied.
(Market supply refers to the amount of goods and services all producers supplying that particular product are willing to supply or the sum of individual supplies of all producers).
The law of supply states that **an increase in price leads to a increase in supply, and a decrease in price leads to an decrease in supply.** (its a positive correlation between the both- moves in the same direction. It's also worth noting that however, an increase in supply leads to a decrease in price and a decrease in supply leads to an increase in price. The law of supply is established with respect to changes in price, not demand, hence the difference.)



This is an example of a supply curve for a product.
Here, an increase in price from 60 to 80, has increased its supply from 500 to 700. **The increase in supply due to changes in price** (without changes in other factors) **is called an extension in supply**.
In the above example, a decrease in price from 80 to 60, will decreased the supply from 700 to 500. **The decrease in supply due to the changes in price** (without the changes in other factors) **is called a contraction in supply**.

In this example, there is n rise in the supply of a product from S1 to S2, without any change in price. **A rise in the supply for a product due to the changes in other factors (excluding price), causes a shift to the right.**
A fall in supply from S1 to S3, without any changes in price is also shown. **A fall in the supply for a product due to the changes in other factors (excluding price), causes a shift to the left.**
Factors that cause shifts in supply curve:

- **Changes in cost of production:** when the cost of factors to produce the good falls, producers can produce and supply more products cheaply, causing a shift in the supply curve to the right. When cost of production rises, supply falls (can include **subsidies*** too, though it usually results in changes in price, causing either a contraction or extension in supply curve rather than a shift).

- **Changes in the quantity of resources available:** when the amount of resources available rises, the supply rises. And vice versa.
- **Technological changes**: an introduction of new technology will be able to produce more products, causing a shift to the right in the supply curve.
- **The profitability of other products**: if a certain product is seen to be more profitable than the one currently being produced, producers might shift to producing the more profitable product, reducing supply of the initial product(causing a shift to the left)
- Other factors: weather, natural disasters, wars.

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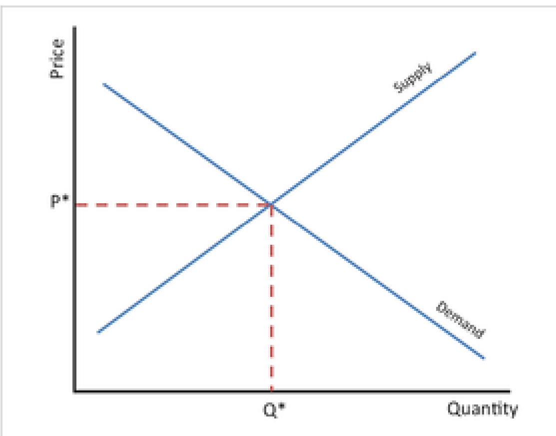
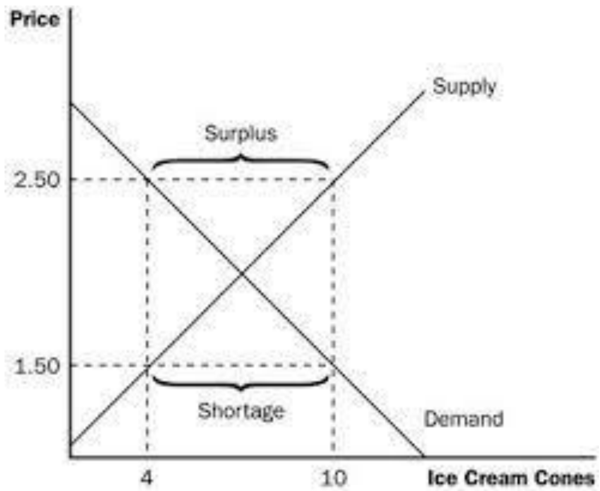
MARKET PRICE



The market **equilibrium price** is the price at which the demand and supply curves in a given market meet.
In this diagram, P* is the equilibrium price.

Disequilibrium price is the price at which market demand and supply curves do not meet, which in this diagram, is any price other than P*.

PRICE CHANGES



In this diagram, two disequilibrium prices are marked- 2.50 and 1.50.
At price 2.50, the demand is 4 while the supply is 10. There is excess supply relative to the demand. **When the price is above the equilibrium price, a surplus is experienced**. (Surplus means 'excess').
At price 1.50, the demand is 10 while the supply is only 4. There is excess demand relative to supply. **When the price is below the equilibrium price, a shortage is experienced.**
(This shortage and surplus is said <u>in terms of the supply</u> being short or excess respectively).

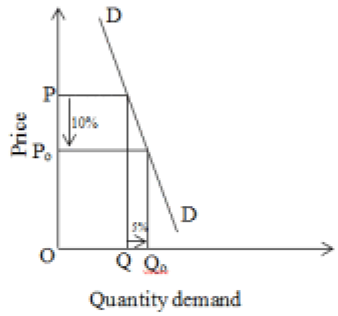
PRICE ELASTICITY OF DEMAND (PED)

The PED of a product refers to **the responsiveness of the quantity demanded for it to changes in its price.**
PED (of a product) = % change in quantity demanded / % change in price
For example, calculate the price elasticity of demand of Coca-Cola from this diagram.

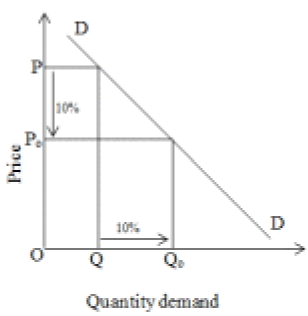
PED= [(500-300/300)*100] / [(80-60/80)*100]

= 66.67 / 25 = 2.67

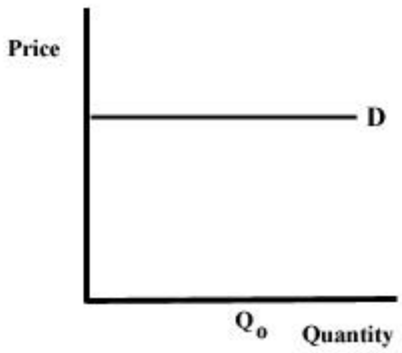
In this example, the PED is 2.67, that is, the % change in quantity demanded was higher than the % change in the price. Which means, **a change in price makes a higher change in quantity demanded**. These products have a **price elastic demand**. Their values are always above 1.



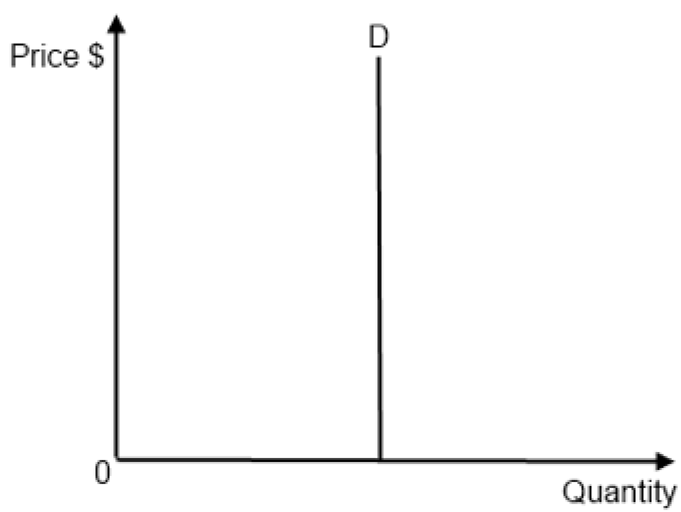
When the % change in quantity demanded is lesser than the % change in price, it is said to have a price **inelastic demand**. Their values are always below 1. **A change in price makes a smaller change in demand.**



When the % change in demand and price are equal, that is value is 1, it is called **unitary price elastic demand.**



When the quantity demanded changes without any changes in price itself, it is said to have an **infinitely price elastic demand.** Their values are infinite.



When the price changes have no effect on demand whatsoever, it is said to have a perfect price inelastic demand. Their elasticity is 0.

<u>What affects PED?</u>

- **of substitutes:** If a product has many substitute products it will have a elastic demand. For example, Coca-Cola has many substitutes such as Pepsi, 7 Up etc. Thus a change in price will have a profound effect on its demand (If price rises, consumers will quickly move to the substitutes and if price lowers, more consumers will buy Coca-Cola).

- **Time period**: Demand for a product is more likely to be elastic in the long run. For example, if the price rises, consumers will search for cheaper substitutes. The longer they have, the more likely they are to find one.
- **Proportion of Income spend on commodity**: goods such as rice, water (necessities) will have an inelastic demand as a change in price won't have any significant effect on its demand, as it will only take up a very small proportion of their income. Luxury goods such as cars, on the other hand will have a price elastic demand, as it takes up a huge proportion of consumers' incomes.

<u>Relationship between PED and Revenue and how it is helpful to producers?</u>

Producers can calculate the PED of their product and take a suitable action to make the product more profitable.

Revenue is the amount of money a producer/firm generates from sales, i.e., the total number of units sold multiplied by the price per unit. So, as the price or the quantity sold changes, those changes have a direct effect on revenue.

If the product is found to **have an elastic demand, the producer can lower prices to increase revenue**. The law of demand states that a price fall increases the demand. And since, it is an elastic product (change in demand is higher than change in price), the demand of the product will increase highly. The producers get more revenue.
If the product is found to **have an inelastic demand, the producer can raise prices to increase revenue**. Since quantity demanded wouldn't fall much as it is inelastic, the high prices will make way for higher revenue and thus higher revenue.

PRICE ELASTICITY OF SUPPLY (PES)

The PES of a product refers to **the responsiveness of the quantity supplied it to changes in its price.**
PES of a product= %change in quantity supplied / %change in price
Similar to PED, PES too can be categorized into price elastic supply, price inelastic supply, perfectly price inelastic supply, infinitely price elastic supply and unitary price elastic supply. (See if you can figure out what each supply elasticity means using the demand elasticities above as reference, and draw the diagrams as well!)

<u>What affects PES?</u>

- **Time of production**: If the product can be quickly produced, it will have a price elastic supply as the product can be quickly supplied at any price. For example juice at a restaurant. But product which take a longer time to produce, example cars, will have a price inelastic supply as it will take a longer time for supply to adjust to price.
- **Availability of resources**: More resource (land, labour, capital) will make way for an elastic supply. If there are not enough resources, producers will find it difficult to adjust to the price changes, and supply will become price inelastic.

MARKET ECONOMIC SYSTEM

In a market economic system or free market economic system, **all resources are allocated by the market – private producers and consumers**; that is, there is no government intervention or involvement in resource allocation. (There are virtually no economies in the world who follow this- there is a government control everywhere, though Hong Kong does come close.

Features:

- All resources are owned and allocated by private individuals. No govt. control exists.
- Thus, **profit** is the main-motive
- The demand and supply fixes the price of products. This is called **price mechanism.**
- What to produce is solved by **producing the most-demanded goods** for which people spend a lot, as their only motive is to generate a high profit.
- How to produce is solved by **using the cheapest yet efficient combination of resources**– capital or labour- in order to maximise profits.
- For whom to produce is solved by **producing to people who are willing and able to pay for goods** at a high price.

Advantages:

- A **wide variety of quality goods and services** will be produced as different firms will compete to satisfy consumer wants and make profits. Quality is ensured to make sure that consumers buy from them. There is consumer sovereignty.
- Firms will **respond quickly to consumer changes in demand**. When there is a change in demand, they will quickly allocate resources to satisfying that demand, so as to maintain profits.
- **High efficiency** will exist. Since producers want to maximise profits, they will use resources very efficiently (producing more with less resources).
- Since there is no govt. control, there are **no taxes on goods and services** and income. So consumers have more income to consume, and producers can cheaply produce.

<u>Disadvantages:</u>

- Only profitable goods and services are produced. **Public goods*** and some **merit goods*** for which there is no demand **may not be produced**, which is a drawback and affects the economic development.
- Firms will **only produce for consumers who can pay for them**. Poor people who cannot spend much won't be produced for, as it would be non-profitable.
- **Only profitable resources will be employed**. Some resources will be left unused. In a market economy, capital-intensive* production is favoured over labour- intensive* production*(because it's more cost-efficient). This can lead to unemployment.
- Harmful **(demerit) goods may be produced** if it is profitable to do so.
- Negative impacts on society (**externalities**) may be ignored by producers, as their sole motive is to keep consumers satisfied and generate a high profit.
- A firm that are able to dominate or control the market supply of a product is called a **monopoly**. They may use their power to restrict supply from other producers, and even charge consumers a high price since they are the only producer of the product and consumers have no choice but to buy from them.
- Due to high competition between firms, **duplication of products** may take place, which is a waste of resources.

***Public goods**: goods that can be used by the general public, from which they will benefit. Their consumption can't be measured, and thus cannot be charged a price for (this is why a market economy doesn't produce them). Examples are street lights and roads.
***Merit goods**: goods which create a positive effect on the community. Examples are schools, hospitals, food. The opposite is called demerit goods.
***Subsidies:** financial grants made to firms to lower their cost of production in order to lower prices for their products.

The Allocation of Resources

MARKET FAILURE

Before we dive into what market failure, let's familiarise with some terms related to market failure:

Public goods: goods that can be used by the general public, from which they will benefit. Their consumption can't be measured, and thus cannot be charged a price for (this is why a market economy doesn't produce them). Examples are street lights and roads.
Merit goods: goods which create a positive effect on the community. Examples are schools, hospitals, food. The opposite is called demerit goods.
External costs (negative externalities) are the negative impacts on the society (third-parties) due to production or consumption of goods and services. Example: the pollution from a factory.
External benefits (positive externalities) are the positive impacts on the society due to production or consumption of goods and services. Example: better roads for the society due to the opening of a new business.
Private costs are the costs to the producer and consumer due to production and consumption respectively. Example: the cost of production.
Private benefits are the benefits to the producer or consumer due to production and consumption respectively. Example: the better immunity received by a consumer when he receives a vaccine.
Social Costs = External costs + Private Costs
Social Benefits = External benefits + Private benefits

Market Failure:
Market failure occurs when the price mechanism fails to allocate resources effectively. This is the most disadvantageous aspect to the market economy. Causes of market failure are:

- **When social costs exceed social benefits**. (Especially where negative externalities (external costs) are high)
- **Over-provision of demerit goods** (alcohol, tobacco).
- **Under-provision of merit goods** (schools, hospitals, public transport).

- **Lack of public goods** (roads, bus terminals, street lights).
- **Immobility of resources.** When resources are not used to the maximum.
- **Information failure:** When information between consumers, producers and the government are not efficiently and correctly communicated. Example: a cosmetics firm advertises its products as healthy when it is in fact not. The consumers who believe the firm and use its products might suffer skin damage.
- **Abuse of monopoly* powers**: Monopolistic businesses may use their powers to charge consumers a high price and only produce products they wish to, since they know consumers have no choice but to buy from them.

*Monopoly: a single supplier who supplies the entire market with a particular product, without any competition. Example: Microsoft is very close to being a total monopoly, with hardly any competitors.

2.11 – MIXED ECONOMIC SYSTEM

In a mixed economic system, **both the market and government intervention co-exist**. Examples include almost all countries in the world (India, UK, Brazil etc.). This is because it overrides all the disadvantages of both the market and planned (govt. only) economies. It identifies the importance of the price mechanism in operating an efficient resource allocation and also the role of the government in correcting (any) market failures

Features:

- both the public and the private sector exists
- planning and final decisions are made by the govt. while the market system can determine allocation of resources owned by it, along with the public organizations.

Advantages:

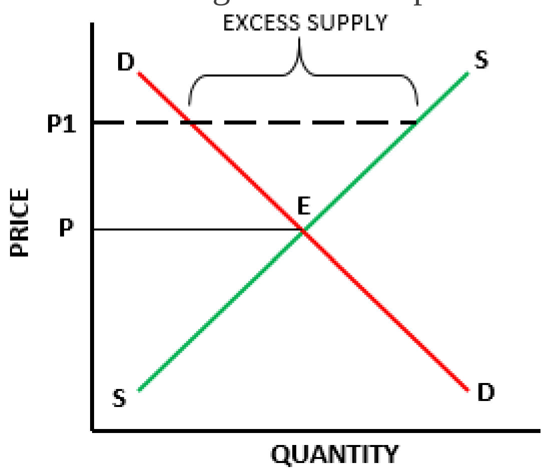
- the govt. can provide public goods, necessities and merit goods. The private businesses can provide most-demanded goods (luxury goods, superior goods). Thus, everyone is provided for
- the govt. will keep externalities, monopolies, harmful goods etc. in control
- the govt. can provide jobs in the public sector (so there is better job security)
- the govt. can also provide financial help to collapsing private organizations, so jobs are kept secure.

Disadvantages:

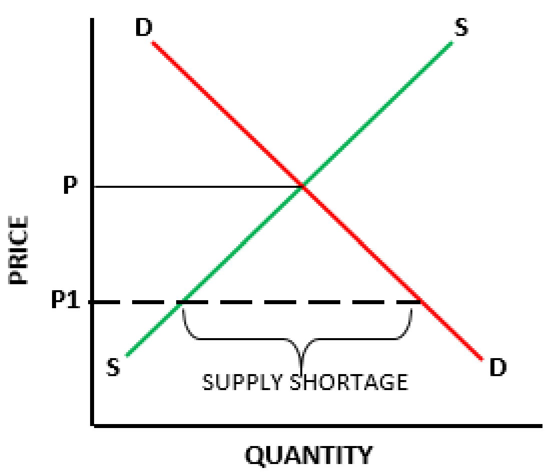
- taxes will be imposed, which will raise prices and also reduce work incentive
- laws and regulations can increase production costs and reduce production in the economy
- public sector organizations will still be inefficient and will produce low quality goods and services.

The specific ways in which the government, in a mixed economic system, can **correct market failures** of the market:

- **legislation and regulation** – the government can make laws that regulate market activity, for example, prohibit smoking in public (which would cause a negative externality). One important kind of legislation the govt. can undertake is **price controls** – setting a minimum price or maximum price on goods.

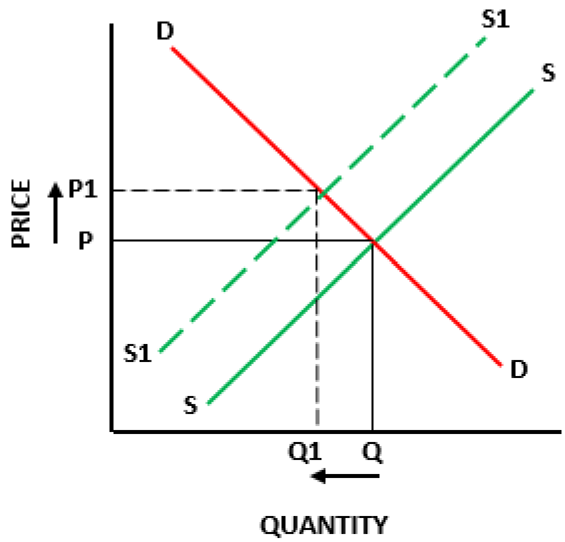


Minimum price or **price floor** is set to control a decreasing tendency of price. The minimum wage laws in many countries is an example of minimum price. The government sets the minimum wage above the existing market equilibrium wage, to ensure that all workers get a basic minimum wage to sustain them. But even as low-income workers now get better wages, the higher wage will cause the demand for labour to contract, as shown in the diagram to the left. There will also be higher supply of labour (workers who want work) because of higher wages. A reduced demand and increased supply will cause excess supply of labour i.e., unemployment.

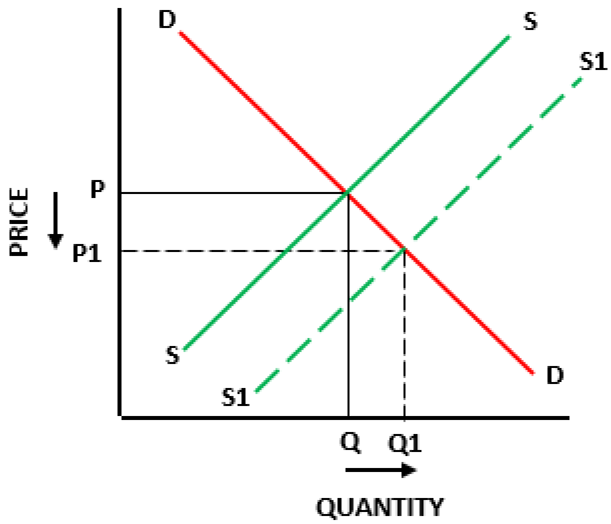


Maximum price or **price ceiling** is set to control an increasing tendency of price. It is usually set on rent (this is called rent control), to ensure that low-income tenants can afford to rent homes. But as a result of the lower rent, landlord will stop renting more homes, causing supply to contract, as shown in the diagram to the left. At the same time, lower rent will increase the demand for homes. A reduced supply of homes and higher demand for them will cause a shortage of supply in relation to demand.

- **direct provision of merit and public goods** – since there is little incentive for the price mechanism to supply these goods, government usually provide them. For example, free education, free healthcare, public parks. One way the govt. can do this is by **nationalising** certain products it considers essential to be provided by a governing authority, rather than the market. For example, in India, the government the government operates the only railway network because only it can provide cheap services to its millions of poor, daily passengers.
- **taxation** on products – imposing a tax on products (indirect taxes) with negative externalities can discourage its production and consumption. For example, a tax on tobacco will make it expensive to produce and consume. In the diagram below, a tax has been added on a product, causing its supply to shift from S to S1. The price rises from P to P1 because of the additional tax amount, and the quantity traded in the market falls from Q to Q1.



- **subsidies** – a subsidy is a grant (financial aid) on products that have a positive externality. Subsidising, for example, cooking gas for the poor, will increase the living standard of the population. In the diagram below, a subsidy has been imposed on a good, causing its supply to shift from S to S1. It results in a fall in price from P to P1 and subsequently, an increase in the quantity traded in the market from Q to Q1.



**Note: movements along a demand or supply curve of a good only happens as a result of a direct change in price of the good; changes caused by any other factor, tax and subsidy included, is represented by a shift in the curves.*

- **tradeable permits** – firms will have to buy permits from the government to do something, for example, pollute at a certain level, and these can be traded among firms. Since permits require money, firms will be encouraged to polluting less
- **extension of property rights** – one of the main reasons for pollution in public spaces is that it is public – it does not harm a private individual – the resource is the government who cannot charge compensations easily. So the government can extend property right (right to own property) of public places to private individuals. This will effectively **privatise** resources, create a market for these spaces and then individuals can be fined for polluting
- **international cooperation** among governments – governments work together on issues that affect the future of the environment.

Microeconomic decision makers

Money and Banking

MONEY

What is money?
A medium of exchange of goods and services.
Why do we need money?
We need money if we are to exchange goods and services with one another. This is because we aren't self-sufficient- we can't produce all our wants by ourselves. Thus, there is a need for exchange.
In the past, **barter system** (exchanging a good or service for another good or service) prevailed. This had a lot of problems such as the need for the double coincidence of wants (if the person wants a table and he has a chair to exchange, he must find a person who has a table to exchange and also is willing to buy a chair), the goods being perishable and non-durable, the indivisibility of goods, lack of portability etc.
Thus the money we use today are in the form of currency notes and coins, which are **durable, uniform, divisible** (can be divided into 10's, 50's , 100's etc), **portable and is generally accepted.** These are the characteristics of what is considered 'good money'.
The functions of money:
1. Money is a **medium of exchange**, as explained above.
2. Money is a **measure of value.** Money acts as a unit of account, allowing us to compare and state the worth of different goods and services.
3. Money is a **store of value.** It holds its value for a long, long time, allowing us to save it for future purposes.
4. Money is a means of **deferred payment**. Deferred payments are purchases on credit- where the consumer can pay later for the goods or service they buy.

BANKING

Banks are financial institutions that act as a intermediary between borrowers and savers.
Commercial banks are those banks that have many retail branches located in most cities and towns. Example: HSBC. While there is only one **central bank** that governs all other commercial banks in a country. Example: The Reserve Bank Of India (RBI).

Functions of a commercial bank:

- Accepting deposits of money and savings.
- Aid customers in making and receiving payments.
- Giving loans to businesses and private individuals.
- Buying and selling shares on customer's behalf.
- Providing insurance (protection in the form of money against damage/theft of personal property).
- Exchanging foreign currencies.
- Providing financial planning advice.

Functions of a central bank:

- It issues notes and coins for the nation's currency.
- It manages all payments relating to the government.
- It manages national debt. Central banks can issue and repay public debts on the government's behalf.
- It supervises and controls all the other banks in the whole economy, even holding their deposits and transferring funds between them.
- It is the lender of 'last resort' to commercial banks. When other banks are having financial difficulties, the central bank can lend them money to prevent them from going bankrupt.
- It manages the country's gold and foreign currency reserves. These reserves are used to make international payments and adjust their currency value (adjust the exchange rate).
- It operates the monetary policy in an economy.(This will be explained in a later chapter)

Microeconomic decision makers

Households

Disposable income is the income of a person after all income-related taxes and charges have been deducted.

SPENDING (CONSUMPTION)

The buying of goods and services is called **consumption**. The money they spend through consumption is called **consumer expenditure**.

Why do people consume?

To satisfy their needs and wants and give them satisfaction.

Factors affecting consumption:

- **Disposable income**: the more the disposable income, the more people consume
- **Wealth**: the more wealthy (assets such as property, jewels, company shares) a person is, the more he spends
- **Consumer confidence**: If consumers are confident of their jobs and their future incomes, then they might be encouraged to spend more now, without worries
- **Interest rates**: if interest rates provided by banks on saving is high, consumers might save more so they can earn interest and consumer expenditure will fall.

SAVING

Saving is income not spent or delaying consumption until some later date. People can save money by depositing in banks, and withdraw it a later date with the interest.

Factors affecting saving:

- **Saving for consumption**: people save so that they can consume later. They save money so that they can make bigger purchases in the future (house, car etc). Thus, saving can depend on the consumers' future plans
- **Disposable income:** if the amount of disposable income people have is high, the more likely that they will save. Thus, rich people save more than poor people

- **Interest rates**: people also save so that their savings may increase overtime with the interest added. **Interest** is the return on saving; the longer you save an amount and the higher the amount, the higher the interest received
- **Consumer confidence**: if the consumer is not confident about his job security and incomes in the future, he may save more now
- **Availability of saving schemes**: banks now offer a variety of saving schemes. When there are more attractive schemes that can benefit consumers, they might resort to saving rather than spending.

BORROWING

Borrowing, as the word suggests, is simply the borrowing of money from one person to another. The lender gives the borrower money. The lender is usually the bank which gives out loans to customers.

Factors affecting borrowing:

- **Interest rates**: interest is also the cost of borrowing. When a person takes a loan, he must repay the entire amount with an extra amount interest, which is fixed by the bank. When the interest rates rise, people will be more reluctant to borrow and vice versa
- **Wealth/Income**: banks will be more willing to lend to wealthy and high-income earning people, because they are more likely to be able to repay the loan, rather than the poor. So, even if they would like to borrow, the poor end up being able to borrow much lesser than the rich
- **Consumer confidence**: how confident people feel about financial situation in the future may affect borrowing, too. For example, if they think that prices will rise (inflation) in the future, they might borrow now, so that they can make big purchases
- **Ways of borrowing:** the no. of ways to borrow can influence borrowing. Nowadays there are many borrowing facilities such as overdrafts, bank loans etc. and have more credit (period of payment) options such as hire purchases (payment is done in stages/installments overtime), credit cards etc.

Expenditure patterns between income groups

The richer people spend, save and borrow more amounts than the poor.
The poor spend more proportion of their disposable income, especially on necessities, than the rich.
The poor save less proportion of their disposable income in comparison with the rich.

Microeconomic decision makers

Workers

LABOUR MARKET

Labourers need wages to satisfy their wants and needs.

Payments for labour:

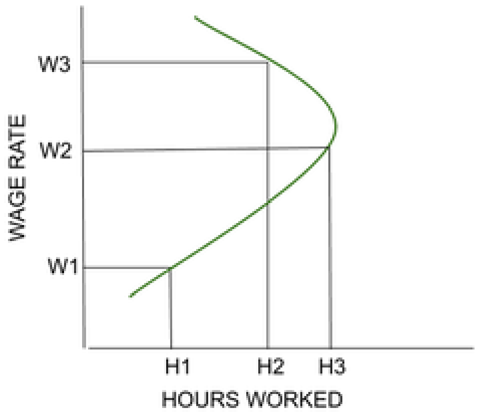
- **Time-rate wage**: wage given based on the no. of hours the employee has worked. An **overtime rate** can be given to workers who has worked extra no. of hours, which will be usually 1.5 times or even twice the normal time rate.
- **Piece-rate wage**: wage given based on the no. of output produced. The more output an employee produced, the more wage he earns. This is used in industries where output can be easily measured and gives employees an incentive to increase productivity.
- **Salary**: monthly payments made to workers, usually managers, office staff etc in non-manual jobs (work that is done with electronic devices and uses mental skills rather than being physically done with the use of hands).
- **Performance-related payments**: payments given to individual workers or teams of workers who have performed very well. The **commission** given to salespersons for selling to a targeted no. of customers comes under performance-related pay.

What affects an individual's choice of occupation?

- **Wage factors**: The wage conditions of a job/firm such as the pay rate, the prospect for performance-related pay, bonus etc will be considered by the individual before he chooses a job.
- **Non-wage factors**: This will include:
  - Hours of work
  - Holiday entitlement
  - Promotion prospects
  - Quality of working environments
  - Job security
  - Fringe benefits (free medical insurance, company car, price discounts etc)
  - Training opportunities
  - Distance from work to home

- Pension entitlement

Labour demand is the **demand of labour by firms to produce goods and services at a given wage rate.** This demand is called a **'derived demand'**, since the level of demand of a product determines that industry's demand for labour. That is, **the higher the demand for a product, the more labour producers will demand** to increase supply of the product.
When the wage increases, the demand for labour contracts, and vice versa.



Labour supply is the **supply of labour available and ready to work in a industry at a given wage rate.** When the wage rate increases, the supply of labour extends,and vice versa.
We also know that as the no.of hours worked increases, the wage rate also increases. However, when a person get to a very high position and his wages/salary increases highly, his no. of hours may decrease, such as that of a CEO. This can be shown in this diagram, called a **backward bending labour supply curve**
Just like in a demand and supply curve analysis, **labour demand and supply will extend and contract due to changes in the wage rate. Other factors that cause changes in demand and supply of labour will result in a shift in the demand and supply curve of labour.**

<u>Factors that cause a shift in the labour demand curve:</u>

- **Consumer demand for goods and services**: The higher the demand of the product, the higher the demand for labour.
- **Productivity of labour**: the more productive the labour is, the more the demand for labour.
- **Price and productivity of capital:** Capital is a substitute resource for labour. If the price of capital were to lower and its productivity to rise, firms will demand more of capital and labour demand will fall- shift to the left.
- **Non-wage employment costs**: Wages are not the only cost to a firm of employing workers. Sometimes, employment tax, welfare insurance for each employee etc will have to be paid. If these costs increase, firms will demand less labour.

<u>Factors that cause a shift in the labour supply curve:</u>

- **Advantages of an occupation:** The different advantages a job can offer to employees will affect the supply of labour- the people willing to do that job. Example: If the no. of hours worked in the airline industry increases, the labour supply there will shift to the left.
- **Availability and quality of education and trainin**g: is quality training and education for a particular job, say pilots, is lacking, then the labour supply for it will be low. When new education and training institutes open, the labour supply will rise- shift to the right.
- **Demographic changes**: the size and age structure of the population in an economy can affect the labour supply. The labour supply curve will shift to the right when more people come into a country from outside (immigration) and the birth rate increases (more young people available for work).

Why would a person's wage rate change overtime?

As a beginner, the individual would have a low wage rate since he/she is new to the job and has no experience. Overtime, as his/her experience increases and skills develop, he/she will earn a higher wage rate. If he/she gets promoted and has more responsibilities, his/her wage rate will further increase. When he/she nears retirement age, the wage rate is likely to decrease as their productivity and skills are likely to weaken.

Wage differentials

Why do different jobs have different wages?

- **Different abilities and qualifications:** when the job requires more skills and qualifications, it will have a higher wage rate.
- **Risk involved in the job**: risky jobs such as rescue operation teams will gain a higher wage rate for the risks they undertake.
- **Unsociable hours**: people who have night shifts and work at other unsociable hous are paid more than other workers.
- **Lack of information about other jobs and wages**: Sometimes people work for less wage rates simply because they do not know about other jobs with higher wage rates.
- **Labour immobility:** the ease with which workers can move between different occupations and areas of an economy is called **labour mobility**. If labour mobility is high, workers can move to jobs with a higher pay. Labour immobility causes people to work at a low wage rate because they can't move to the jobs with a higher wage.

- **Fringe benefits:** jobs which offer a lot of fringe benefits have low wages. But sometimes, the highest-paid jobs are also given a lot of fringe benefits, to attract skilled labour.

Why do wages differ between people doing the same job?

- **Regional differences in labour demand and supply**: for example, if the demand in an area for accountants is very high, the wage rate for accountants will be high; whereas, in an area of low demand for accountants, the wage rate for accountants will be low. Similarly, a high supply of accountants will cause their wages to be low while a low supply (scarcity) of accountants will cause their wages to be high. It's the law of demand and supply!
- **Fringe benefits**: some firms which pay a lot of fringe benefits, will pay less wages, while firms (in the same industry) which pay less fringe benefits will have higher wages.
- **Discrimination**: workers doing the same work may be discriminated by gender, race, religion or age.
- **Length of service**: some firms provide extra pay for workers who have worked in the firm for a long long time, while other firms may not. There is a wage differential.
- **Local pay agreements**: some trade unions may agree a national wage rate for all their members- therefore all their members (labourers) will get a higher wage rate than those who do the same job but are not in the trade union. This depends on the relative bargaining power of the trade union. More on this in this in the next topic
- **Government labour policies:** wages will be fairer in an economy where its government has set a minimum wage policy. The government's corporate tax policies can also influence the amount of wage firms will be willing to pay out.

Other wage differentials:

- **Public-private sector pay gap**: public sector jobs usually have a high wage rate. But sometimes public sector wages are lower than that of private sector's because low wages can be compensated by the public sector's high job security and pension prospects.
- **Economic sector:** workers in primary activities such as agriculture receive very low wages in comparison to those in the other sectors because the value of output they produce is lower. Further still, workers in the manufacturing sector may earn lesser than those in the services sector. But it comes down to the nature of the job itself. A computer engineer in the manufacturing sector does earn more than a waiter at a restaurant after all.
- **Skilled and unskilled workers**: Skilled workers have a higher pay than unskilled workers, because they are more productive and efficient and make lesser mistakes.

- **Gender pay gap**: Men are usually given a higher pay than women. This is because women tend to go for jobs that don't require as much skills as that required by men's jobs (teaching, nursing, retailing); they take career breaks to raise children, which will cause less experience and career progress (making way for low wages); more women work part-time than full-time. Sometimes, even if both men and women are working equally hard and effectively, discrimination can occur against women.
- **International wage differentials:** developed countries usually have a high wage rates due to high incomes, large supply of skilled workers, high demand for goods and services etc; while in a less-developed economy, wage rated will be low due to a large supply unskilled labourers.

DIVISION OF LABOUR/SPECIALISATION

Division of labour is the concept of dividing the production process into different stages enabling workers to specialise in specific tasks. This will help increase efficiency and productivity. Division of labour is widely used in modern economies. From the making of iPhones (where, the designs, processors, screens, battery, camera, software etc are made by different people in different parts of the world) to this very website (where notes, mindmaps, illustrations, design etc are all managed by different people).

<u>Advantages to workers:</u>

- **Become skilled:** workers can get skilled and experienced in a specific task which will help their future job prospects
- **Better future job prospects:** because of the skill and training they acquire, workers will, in the future, be able to get better jobs in the same field.
- Saves time and expenses in training

<u>Disadvantages to workers:</u>

- **Monotony**: doing the same task repetitively might make it boring and lower worker's morale.
- **Margin for errors increases:** as the job gets repetitive, there also arises a chance for mistakes
- **Alienation:** since they're confined to just the task they're doing, workers will feel socially alienated from each other
- **Lower mobility of labour:** division of labour can also cause a reduced mobility of labour. Since a worker is only specialised in doing one specific task(s), it will be difficult for him/her to do a different job.
- **Increased chance of unemployment:** when division of labour is introduced, many excess workers will have to be laid off. Additionally, if one loses the job, it will be harder for him/her to find other jobs that require the same specialisation

Advantages to firms:

- **Increased productivity:** when people specialise in particular tasks, the total output will increase
- **Increased quality** of products: because workers work on tasks they are best suited for, the quality of the final output will be high
- **Low costs:** workers only need to be trained in the tasks they specialise in and not the entire process; and tools and equipment required for a task will only be needed for a few workers who specialise in the task, and not for everybody else.
- **Faster**: when everyone focuses on a particular task, and there is no need for workers to shift from one task to another the production will speed up
- **Efficient movement of goods:** raw materials half-finished goods will easily move around the firm from one task
- Better selection of workers: since workers are selected to do tasks best suited for them, division of labour will help firms to choose the best set of workers for their operations
- Aids a **streamlined production process**: the production process will be smooth and clearly defined, and so the firm can easily adopt to a mass production scale
- **Increased profits**: lower costs and increased productivity will help boost profits

Disadvantages o firms:

- **Increased dependency:** The production may come to a halt if one or more workers doing a specific task is absent. The production is dependent on all workers being present to do their jobs.
- **Danger of overproduction:** as division of labour facilitates, mass production, the supply of the product may exceed its demand, and cause a problem of excess stocks of finished goods. Firms need to ensure that they're not producing too much if there is not enough demand for the product in the first place

Advantages to the economy:

- **Better utilisation of human resources** in the economy as workers do the job they're best at, helping the economy achieve it's PPC
- **Establishment of efficient firms** and industries, as the higher profits from division of labour will attract entrepreneurs
- Inventions arise: as workers become skilled in particular areas, they can innovate and invent new methods and products in that field

Disadvantages to the economy:

- **Labour immobility:** both occupationally and geographically
- **Reduces the creative instinct** of the labour force in the long-run as they are only able to do a single task repetitively and the previous skills they acquired die out.
- **Creates a factory culture**, which brings with it the evils of exploitation, poor working conditions, and forced monotony.

Microeconomic decision makers

Trade Unions

Trade Unions organizations of workers that aim at promoting and protecting the interest of their members (workers). They aim on improving wage rates, working conditions and other job-related aspects of workers.

The functions of a trade union:

- Negotiating **improvements in non-wage benefits** with employers.
- **Defending employees' rights**.
- **Improving working conditions**, such as better working hours and better safety measures.
- **Improving pay and other benefits.**
- **Supporting workers who have been unfairly dismissed or discriminated.**
- Developing the skills of members, by providing training and educations.
- Providing recreational activities for the members.
- **Taking industrial actions** (strikes, overtime ban etc) when employers don't satisfy their needs. These are explained later in this topic.

Collective bargaining: the process of negotiating over pay and working conditions between trade unions and employers.

When can trade unions argue for higher wages and better working conditions?

- **Prices are rising** (inflation). The cost of living increase when prices increase and workers will want higher wages to consume products and raise their families.
- **The sales and demand of the firm has increased.**
- **Workers in other firms are getting a higher pay.**
- **The labour productivity of the members have increased.**

Industrial disputes

When firms don't satisfy trade union wants or refuse to agree to their terms, the members of a trade union can organize industrial disputes. Here are some:

- **Overtime ban:** Workers refuse to work more than their normal hours.
- **Go-slow**: Workers deliberately slow down production, so the firm's sales and profits go down.

- **Strike:** workers refuse to work and may also protest, picket, outside their workplace to stop deliveries and prevent other non-union members from entering. They don't receive any wages during this time. This will halt all production of the firm.

Trade union activity has several impacts:

Advantages to workers:

- Workers benefit from collective bargaining power in order to establish **better terms of labour**
- Workers feel a **sense of unity and feel represented**, increasing morale
- **Lesser chance of being discriminated and exploited**

Disadvantages to workers:

- **Workers might get lesser wages – or none if they go on strike–** as the output and profits of the firm falls and they refuse to pay

Advantages to firms:

- **Time is saved in pay negotiations** with a union when compared to negotiating with individuals workers
- When making changes in work schedules and practices, a trade union's cooperation can help **organise workers efficiently**
- Mutual respect and good relationships between unions and firms are **good for business morale and increases productivity**

Disadvantages to firms:

- **Decision making may be long** as there will be need of lengthy discussions with trade unions in major business decisions
- Trade unions may **make demands that the firm may not be able to meet-** they will have to choose between profitability and workers' interests
- Higher wages bargained by trade unions will reduce the firm's profitability
- **Businesses will have high costs and low output if unions organise agitations.** Their revenue and profits will god own and they will enter a loss. They may also lose a lot of customers to competing firms.

Advantages to the economy:

- Ensures that the labour force in the economy is **not exploited** and that **their interests are being represented**

Disadvantages to the economy:

- Can negatively **impact total output** of the economy
- Firms may decide to substitute labour for capital if they can't meet trade union's expensive demands, and so **unemployment may rise**.
- Higher wages resulting from trade union activity can make the nation's exports expensive and thus **less competitive in the international market**

In modern times, the power of trade unions have drastically weakened. Globalisation, liberalisation and privatisation of economies are making markets more competitive. Firms have more incentive to reduce costs of production to a minimum in order to remain competitive and profitable. Therefore, it is much harder for unions to force employers to increase wages. Most unions operating nowadays are more focused on bettering the working conditions and benefits.

Microeconomic decision makers

Firms

CLASSIFICATION OF FIRMS

Firms can be classified in terms of the sectors they operate in and their relative sizes.

Firms are classified into the following three categories, based on the type of operations undertaken by them:

- **Primary:** all economic activity involving extraction of raw natural materials. This includes agriculture, mining, fishing etc. In pre-modern times, most economic activity and employment was in this sector, mostly in the form of subsistence farming (farming for self-consumption)
- **Secondary:** all economic activity dealing with producing finished goods. This includes construction, manufacturing, utilities etc. This sector gained importance during the industrial revolution of the 19th and 20th centuries and still makes up a huge part of economic activity
- **Tertiary**: all economic activity offering intangible goods and services to consumers. This includes retail, leisure, transport, IT services, banking, communications etc. This sector is now the fastest-growing sector as people’s demands for services have increased in developed and developing nations.

Firms can also be classified on the basis of whether they are publicly owned or privately owned:

- **Public:** this includes all firms owned and run by the government. Usually, the defence, arms and nuclear industries of an economy are completely public. Public firms don’t have a profit motive, but aim to provide essential services to the economy it governs. Governments do also run their own schools, hospitals, postal services, electricity firms etc.
- **Private:** this relates to all firms owned and run by private individuals. Private firms aim at making profits and so their products are those that are highly demanded in the economy.

Firms can also be classified on their relative size as small, medium or large depending on the output, market share, organisation (no. of departments and subsidiaries etc).

SMALL FIRMS

A small firm is an independently owned and operated enterprise that is **limited in size and in revenue depending on the industry.** They require relatively less capital, less workforce and less or no machinery. These businesses are ideally suited to operate on a small scale to serve a local community and to provide profits to the owners.

Advantages of small businesses:

- **Independence**: owner(s) are free to run the business as he pleases
- **Control**: the owner(s) has full control over the business, unlike in a large business where multiple managers, departments and branches will exist
- **Flexibility**: small businesses can adapt to quick changes as the owner is more involved in the decision-making
- **Better communication**: since there are fewer employees, information can be intimated easily and quickly
- **Innovation**: small businesses can to be more innovative because they have less to lose and are willing to take risks

Disadvantages of small businesses:

- **Higher costs:** cannot exploit economies of scales; the average costs will be higher than larger rivals
- **Lack of finance:** struggles to raise finance as choice of sources of acquiring finance is limited
- **Difficult to attract experienced employees:** a small business may be unable to afford the wage, training required for a specific skilled workers
- **Vulnerability**: when economics conditions change, it is harder for small businesses to survive as they lack resources

Small firms still exist in the economy for several reasons:

- **Size of the market: w**hen there is only a small market for a product, there is no a firm will see no point in growing to a larger size. The market maybe small because:
  - the market is local, for example, the local hairdresser.
  - the final product maybe expensive luxury items which only require a small-scale production eg:

    - personalised/ custom services can be given by small firms, unlike large firms that mostly give standardised services, eg: wedding cake makers
- **Access to capital is limited,** so owners can't grow the firm.
- **Owner(s) prefer to stay small:** A lot of entrepreneurs don't want to take risks by growing the firm and they are quite satisfied with running a small business.
- **Small firms can co-operate:** co-operation between small firms can lead them to set up jointly owned enterprises which allow them to enjoy many of the benefits that large firm have.
- **Governments help small firms:** governments usually provide help to small scale firms because small firms are an important provider of employment and innovations in the production process. In most countries, it is the medium and small industries that contribute much of the employment

GROWTH OF FIRMS

When a firm grows, it's scale of production (more inputs) increases. Firms can grow in to ways: internally or externally.

<u>Internal Growth</u><u>/Organic Growth</u>

This involves **expanding the scale of production of the firm's existing operations**. This can be done by purchasing more machinery/equipment, opening more branches, selling new products into the market, expanding business premises, employing more workers etc.

<u>External Growth</u>

This involves **two or more firms joining together to form a large business**. This is called **integration**. This can be done it two ways: mergers or takeovers.

A takeover or acquisition happens when a company buys enough shares of another firms that they can take full control. This can happen without the owners' agreement. The firm taken over loses its identity and become a part of what is known as the holding company. A well-known example would be Facebook's acquisition of Whatsapp in 2014.

A merger occurs when the owners of two or more companies agree to join together to form a firm.

Integration can happen in three ways:

- **Horizontal Integration:** integration of firms engaged in the production of the same type of good at the same level of production. Example: a cloth manufacturing company merges with another cloth manufacturing company.

<u>Advantages:</u>

- **Exploit internal economies of scale:** including bulk-buying, technical economies, financial economies
- **Save costs:** when merging a lot of the duplicate assets including employees can be laid off
- Potential to secure '**revenue synergies'** by creating and selling a wider range of products – (i.e. diversification)
- **Reduces competition:** by merging with key rivals, the two firms together can increase market share

Disadvantages:

- **Risk of diseconomies of scale:** a larger business will bring with a lot of managerial and operational issues leading to higher costs
- **Reduced flexibility**: the addition of more employees and processes means the need for more transparency and therefore, more accountability and red tape which can slow down the rate of innovating and producing new products and processes.

- **Vertical Integration**: integration of firms engaged in the production of the same type of good but at different levels of production (primary/secondary/tertiary). Example: a cloth manufacturing company (secondary sector) merges with a cotton growing firm (primary sector).
  - **Forward vertical integration**: when a firm integrates with a firm that is at a later stage of production than theirs. Example: a dairy farm integrates with a cheese manufacturing company.
  - **Backward vertical integration**: when a firm when a firm integrates with a firm that is at an earlier stage of production than theirs. Example: a chocolates selling firm integrates with a chocolate manufacturing company.

Advantages:

- It can give a firm **assured supplies or outlets** for their products. If a coffee brand merged with coffee plantation, the manufacturers would get assured supplies of coffee beans from the plantation. If the coffee brand merged with a coffee shop chain, they would have a permanent outlet to sell their coffee from.
- Similarly, one firms can prevent the other firm from supplying materials or selling products to competitors. The coffee brand can have the coffee plantation to only supply I their coffee beans. The coffee brand can also have the coffee shop chain from only selling coffees with their coffee powder.

- The profit margins of the merged firm can now be absorbed the merging firm
- The firms can increase their market share and become more competitive in the market

Disadvantages:

-
- **Risk of diseconomies of scale:** a larger business will bring with a lot of managerial and operational issues leading to higher costs
- **Reduced flexibility**: the addition of more employees and processes means the need for more transparency and therefore, more accountability and red tape which can slow down the rate of innovating and producing new products and processes
- **It's a difficult process**: The firms when vertically integrated, are entering into a stage of production/sector they're not familiar with and this will require staff of either firms to be educated and trained. Some might even lose their jobs. It can be expensive as well.

- **Lateral/Conglomerate integration**: occurs when firms producing different type of products integrates. They could be at the same or different stage of production. Example: a housing company integrates with a dairy farm. Thus, the firm can produce a wide range of products. This helps **diversify** a firm's operations.

Advantages:

-
- **Diversify risks:** conglomerate integration allows businesses to have activities in more than one market. This allows the firms to spread its risk. In case one market is in decline, it still has another source of profit
- **Creates new markets:** merging with a firm in a different industry, will open up the firm to a new customer base, helping it to market its core products to this new market
- **Transfer of ideas:** there could be a transfer of ideas and resources between the two businesses even though they are in different industries. This transfer of ideas could help improve the quality and demand for the two products.

Disadvantages:

- **Inexperience can lead to mismanagement**: since the firms are could be in entirely different industries, and the two firms might have no experience in the other's industry, cooperating and managing the two industries may be difficult and could turn disastrous
- **Lose focus**: merging with and focusing on an entirely new industry could cause the firm to lose focus of its core product

- **Culture clash**: as with all kinds of mergers, there could be a culture clash between the two firms' employees on practices, standards and 'how things are done'.

SCALE OF PRODUCTION

As a firm's scale of production increases its average costs decrease. **Cost saving from a large-scale production is called economies of scale.**

Internal economies of scale are decisions taken within the firms that can bring about economies (advantages). Some internal economies of scale are:

- **Purchasing economies**: large firms can be buy raw materials and components in bulk because of their large scale of production. Supplier will usually offer price discounts for bulk purchases, which will cut purchasing costs for the firm.
- **Marketing economies**: large firms can afford their won vehicles to distribute their products, which is much cheaper than hiring other firms to distribute them. Also, the costs of advertising is spread over a much large output in large firms when compared to small firms.
- **Financial economies**: banks are more willing to lend to lend to lend money to large firms, since they are more financially secure (than small firms) to repay loans. They are also likely to get lower rates of interest. Large firms also have the ability to sell shares to raise capital that do not have to be repaid. Thus, they get more money at lower costs.
- **Technical economies**: large firms are more financially able to invest in good technology, skilled workers, machinery etc. which are very efficient and cut costs for the firm.
- **Risk-bearing economies**: large firms with a high output can sell into different markets (even overseas). They are able to produce a variety of products (**diversification** in production). This means that their risks are spread over a wider range of products or markets; even if a market or product is not successful, they have other products and markets to continue business. Thus, costs are less.

External economies of scale occur when firms benefit from the entire industry being large. The may include:

- **Access to skilled workers**: large firms can recruit workers trained by other firms. For example: when a new training institution for pilots and airline staff opens, all airline firms can enjoy economies of scale of having access skilled workers, who are more efficient and productive and cuts costs.
- **Ancillary firms**: they are firms that supply and provide materials/services to larger firms. When ancillary firms such as a marketing firm locates close to a company, the company can cut costs by using their services more cheaply than other firms.
- **Joint marketing benefits:** when firms in the same industry locates close to each other, they may share an enhanced reputation and customer base.

- **Shared infrastructure**: a development in the infrastructure of an industry or the economy can benefit large firms. Examples: More roads and bridges by the govt. can cut transport costs for the firms, a new power station can provide cheaper electricity for firms.

Diseconomies of scale occur when a firms grows too large and average costs start to rise. Some common diseconomies are:

- **Management diseconomies:** large firms have a wide internal organization with lots of managers and employees. This makes communication difficult and decision-making very slow. Gradually, it leads to inefficient managerial running of the firms and increases costs.
- **Too much output** may require a large supply of raw materials, power etc. which can lead to shortage and halt production, increasing costs.
- Large firms may use automated production with lots of capital equipment. Worker operating these machines may feel bored in doing the repetitive tasks, and thus **demotivated and less cooperative**. Many workers may leave or others could go on strikes, stopping production and increasing costs.
- **Agglomeration diseconomies:** this occurs when firms merge/acquire too many different firms producing different products, and the managers and owners can't coordinate and organize all activities, leading to higher costs.
- More shares sold into the market and bought means more owners coming into the business. Having a lot of owners can lead to a lot of **disputes and conflicts** among themselves.
- A lot of large firms can face diseconomies when their **products become too standardized and less of a variety in the market.** This will reduce sales and profits and increase average costs.

A firm that doubles all its inputs (resources) and is able to more than double its output as a result experiences an **increasing returns to scale**.
A firm that doubles all its inputs and fails to double its output as a result experiences a decreasing or **diminishing returns to scale**.

Microeconomic decision makers

Firms and Production

DEMAND FOR FACTORS OF PRODUCTION

Some factors that determine the demand of factors of production:

- **The demand for the product**: If more goods and services are demanded by consumers, more factors of production will be demanded by firms to produce and satisfy the demand. That is, the demand for factors of production is derived demand, as it is determined by the demand for the goods and services (just like labour demand).
- **The availability of factors:** firms will also demand factors that are easily available and accessible to them. If the firm is located in a region where there is a large pool of skilled labour, it will demand more labour as opposed to capital.
- **The price of factors**: If labour is more expensive than capital, firms will demand more capital and vice versa, as they want to reduce costs and maximize profits.
- **The productivity of factors**: If labour is more productive than capital, then more labour is demanded and vice versa.

LABOUR-INTENSIVE AND CAPITAL-INTENSIVE PRODUCTION

Labour-intensive production is where more labourers are employed than other factors, say capital. Production is mainly dependent on labour. It is usually adopted in small-scale industries, especially those that produce personalised, handmade products. E.g., hotels and restaurants.

Advantages:

- **Flexibility:** labour, unlike machinery can be used flexibly to meet changing levels of consumer demand, e.g., part-time workers.
- **Personal services:** labour can provide a personal touch to customer needs and wants
- **Personalised services**: labourers can provide custom products for different customers.

Machinery is not flexible enough to provide tailored products for individual customers

- **Gives feedback:** labour can give feedback that provides ideas for continuous improvements in the firm
- **Essential:** labour is essential in case of machine breakdowns. After all, machines are only as good as the labour that builds, maintains and operates them.

<u>Disadvantages:</u>

- **Relatively expensive:** in the long-term when compared to machinery, labour has higher per unit costs due to lower levels of productivity
- **Inefficient and inconsistent**: compared to machinery, labour is relatively less efficient and tends to be inconsistent with their productivity, with various personal, psychological and physical matters influencing their quantity and quality of work
- **Labour relation problems:** firms will have to put up with labour demands and grievances. They could stage a overtime ban or strike of their demands are not met

Capital refers to the machinery, equipment, tools, buildings and vehicles used in production. It also means the investment required to do production. **Capital-intensive production** is where more capital is employed than other factors. It is a production which requires a relatively high level of capital investent compared to the labour cost. Most capital-intensive production is automated. E.g., car-manufacturing.

<u>Advantages:</u>

- **Less likely to make errors:** Machines, since they're mechanically or digitally programmed to do tasks, won't make the mistakes that labourer will
- **More efficient:** machinery doesn't need breaks or holidays, has no demands and makes no mistakes
- **Consistent:** Since they won't have human problems and are programmed to repeat tasks, it are very consistent in the output it produces
- **Technical economies of scale:** increased efficiency can reduce average costs

<u>Disadvantages:</u>

- **Expensive:** the initial costs of investment is high as well as possible training costs.
- **Lack of flexibility**: machines not be as flexible as labourers are to meet changes in demand

- **Machinery lacks initiative**: machines don't have the intuitive or creative power that human labour can provide the business and improve production

PRODUCTION AND PRODUCTIVITY

A firm combines scarce resources of land, labour and capital (inputs) to make (produce) goods and services (output). **Production is** thus, t**he transformation of raw materials (input) to finished or semi-finished goods and services (output).** In other words, production is the adding of value to inputs to create outputs. It is the production that gives the inputs value.

<u>Some factors that influence production:</u>

- **Demand for product:** the more the demand from consumers, the more the production
- **Price and availability of factors of production:** if factors of production are cheap and readily available, there will be more production
- **Capital:** the more capital that is available to producers, the more investment in production will take place
- **Profitability:** the more profitable producing and selling a product is, the more the production of the product will be
- **Government support:** If governments give money in grants and subsidies, tax breaks and so on, more production will take place in the economy

Productivity measures the amount of output that can be produced from a given amount of input over a period of time.

Productivity = Total output produced per period / Total input used per period

Productivity increases when:

- more output or revenue is produced from the same amount of resources
- the same output or revenue is produced using fewer resources

(Labour productivity is the measure of the amount of output that can be produced by each worker in a business).

<u>Factors that influence productivity:</u>

- **Division of labour:** division of labour is when tasks are divided among labourers. Each labourer specializes in a particular task, and thus this will increase productivity.

- **Skills and experience of labour force:** a skilled and experienced workforce will be more productive.
- **Workers' motivation:** the more motivated the workforce is, the more productive they will be. Better pay, better working conditions, reasonable working hours etc. can improve productivity
- **Technology:** more technology introduced into the production process will increase its productivity
- **Quality of factors of production:** replacing old machinery with new ones, preferably with latest technologies, can increase efficiency and productivity. In the case of labour, training the workforce will increase productivity
- **Investment:** introducing new production processes which will reduce wastage, increase speed, improve quality and raise output. This is known as lean production.

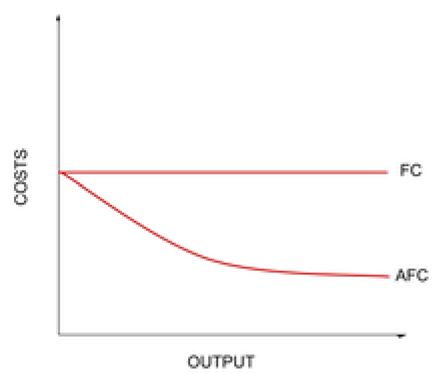
Microeconomic decision makers

Firms' Costs, Revenue and Objectives

COSTS OF PRODUCTION

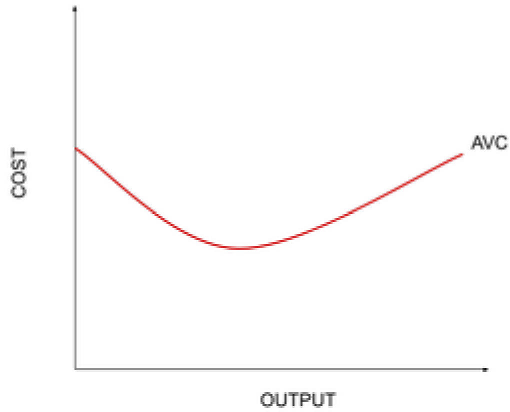
Fixed costs (FC) are costs that are fixed in the short-term running of a business and have to be paid even when no production is taking place. Examples: rent, interest on bank loans, telephone bills. These costs do not depend on the amount of output produced.

Average Fixed Cost (AFC) = Total Fixed Cost (TFC) / Total Output

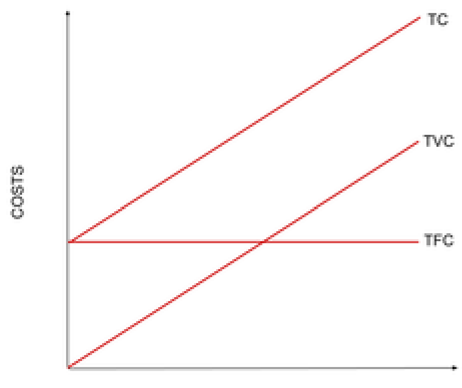


Variable costs (VC) are costs that are variable in the short-term running of a business and are paid according to the output produced. The more the production, the more the variable costs are. Examples: wages, electricity bill, cost of raw materials.

Average Variable Cost (AVC) = Total Variable Costs (TVC) / Total Output



Total Costs (TC) = Total Fixed Costs (TFC) + Total Variable Costs (TVC)

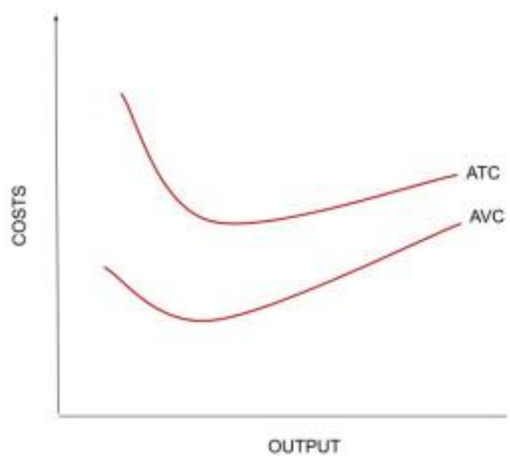


This is a simple graph showing the relation between TC, FC and VC. The gap between the TC and TVC indicates the TFC

Average cost or Average total Cost (ATC) is the cost per unit of output.

Average Total Cost (ATC) = Total Cost (TC) / Total Output or

Average Cost (AC) = Average Variable Cost (AVC) + Average Fixed Cost (AFC)



(Remember ‘average’ means ‘per unit’ and so will involve dividing the particular cost by the total output produced. In the graphs above you will notice that the average variable costs and average total costs first fall and then start rising. This is because of economies of scale and diseconomies of scale respectively. As the firm increases its output, the average costs decline but as it starts growing beyond a limit, the average costs rise).

Let's calculate some costs in an example:

Suppose, a TV manufacturer produces 1000 TVs a month. The firm's fixed costs in rent is $900, and variable cost per unit is $500. What would its TFC, TVC, AVC, AFC, AC and TC be, in a month?

No. of units of TVs produced = 1000

Total Fixed Costs for one month = $900
Average Fixed Cost = $900 / 1000 = $0.9 per unit

Variable Cost of producing one unit of TV = $500
Total Variable Costs for producing 1000 TVs in a month = $500 * 1000 = $500,000
Average Variable Cost = $500,000 / 1000 = $500 (AVC is the same as VC per unit!)

Total Costs = Total Fixed Costs + Total Variable Costs ==> $900 + $500,000 = $500,900
Average Costs = Total Costs / Total Output ==> $500,900 / 1000 = $500.9
or Average Costs = AFC + AVC ==> $0.9 + $500 ==> $500.9

REVENUE

Revenue is the total income a firm earns from the sale of its goods and services. The more the sales, the more the revenue.
Total Revenue (TR) = No. of units sold (Sales) * Price per unit (P)
Average Revenue = Total Revenue (TR) / No. of units sold (Sales) (= Price per unit (P)!)
Suppose, from the example above, a TV is sold at $800 and <u>the firm sells all the units it produces</u>, what is the firm's Total Revenue and Average Revenue, for a month?

No. of units sold (Sales) in a month = No. of units produced in a month = 1000
Total Revenue = Sales * Price ==> 1000 * $800 = $800,000
Average Revenue = Total Revenue / Sales = $800,000 / 1000 = $800

OBJECTIVES OF FIRMS

Objectives vary with different businesses due to size, sector and many other factors. However, many business in the private sector aim to achieve the following objectives.

- **Survival:** new or small firms usually have survival as a primary objective. Firms in a highly competitive market will also be more concerned with survival rather than any other objective. To achieve this, firms could decide to lower prices, which would mean forsaking other objectives such as profit maximization.
- **Profit:** profit is the income of a business from its activities after deducting total costs from total revenue. Private sector firms usually have profit making as a primary objective. This is because profits are required for **further investment** into the business as well as for the **payment of return** to the shareholders/owners of the business.
- **Growth:** once a business has passed its survival stage it will aim for growth and expansion. This is usually measured by value of sales or output. Aiming for business growth can be very beneficial. A larger business can ensure **greater job security** and **salaries** for employees. The business can also benefit from higher **market share** and **economies of scale**.
- **Market share:** market share can be defined as the sales in proportion to total market sales achieved by a business. Increased market share can bring about many benefits to the business such as increased customer loyalty, setting up of brand image, etc.
- **Service to the society:** Some operations in the private sectors such as social enterprises do not aim for profits and prefer to set more social objectives. They aim to better the society by aiding society financially or otherwise.

A business' objectives do not remain the same forever. As market situations change and as the business itself develops, its objectives will change to reflect its current market and economic position. For example, a firm facing serious economic recession could change its objective from profit maximization to short term survival.

Microeconomic decision makers

Market Structure

COMPETITIVE MARKETS

Firms compete in the market to increase their customer base, sales and market share and profits.

Price competition involves competing to offer consumers the lowest or best possible prices of a product. **Non-price competition** is competing on all other features of the product (quality, promotional campaigns, attractive displays, after-sales care, warranty etc) other than price.
Informative advertising involves providing information about the product to consumers. Examples include advertising of phones, computers, home appliances etc.
Persuasive advertising is designed to create a consumer want and persuade them to buy the product to boost sales. Examples include advertisements of perfumes,clothes, chocolates etc.
Pricing Strategies
What can influence the price that producers fix on a product?

- Level and strength of consumer demand
- The amount of competition from rival producers in the market
- The cost of production and the level of profit required

Price skimming: When a new and unique enters the market, it's producers charge a very high price for it initially as consumers will be willing to pay for the new product. As more competitors launch similar products, producers may lower prices.
Penetration pricing: when producers set a low price which encourages consumers to try the product and expand sales and increase loyalty. This way, the product is able to penetrate a market, especially useful when there are a lot of existing rival products.
Destruction pricing (predatory pricing): where prices are kept very low (lower than the cost of production per unit) in order to 'destroy' the sales of existing products, as consumers will turn to the lowest priced products. Once the product is successful, it can raise prices and cover costs.

Price wars happen when competing firms continually trying to undercut each other's prices.
Cost-plus-pricing: this involves calculating the average cost of producing each unit of output and then adding a mark-up for profit (extra value).
Price = (Total Cost/Total Output) + Mark-up
This is used to cover the cost of production of the products and to generate a profit.

Perfect Competition

In a perfectly competitive market, there will be **many sellers and many buyers**– a lot of different firms compete to supply an identical product to an equally large customer base.
As there is fierce competitions, **producers nor consumers cannot influence market price- they are all price takers.** If any firm did try to sell at a high price, it would lose customers to competitors. If the price were too low, they may incur a loss. There will also be a huge amount of output in the market.

Advantages:

- **High consumer sovereignty**: consumers will have a wide variety of goods and services to choose from, as many producers will sell similar products. They are also likely to be of high quality, in order to attract consumers.
- **Low prices**: as competition is fierce, producers will try and keep prices low to attract customers and increase sales.
- **Efficiency**: to keep profits high and lower costs, firms will be very efficient. If they aren't efficient, they would become less profitable. This will cause them to raise prices which would discourage consumers to buy their product. Inefficiency could also lead to poor quality products.

Disadvantages:

- **Wasteful competition**: In order to keep up with other firms, producers will duplicate items. Similar products are sold by many firms; this is considered a waste of resources.
- **Mislead customers**: To gain more customers and sales, firms might give false and exaggerated claims about their product, which would disadvantage both customers and competitors.

Monopoly

Dominant firms who have market power to restrict competition in the market are called monopolies. In a pure monopoly, there is only a **single seller** who supplies a good or service. Example: Indian Railways. Since, customers have no other firms to buy from, monopolies can raise prices- that is they are **able to influence prices** as it will not affect their profitability. These high prices result in monopolies generating excessive or abnormal profits.

<u>Disadvantages:</u>

- There is **less consumer sovereignty:** as there are no (or very litte) other firms selling the product, output is low and thus there is little consumer choice.
- Monopolies may **not respond quickly to customer demands**.
- **Higher prices**
- **Lower quality**: as there is little or no competition, monopolies have no incentive to raise quality, as consumers will have to buy it anyway. (But since they make a lot of profit, they may invest a lot in research and development and increase quality)
- **Inefficiency**: With high prices, they may create high enough revenue that, costs due to inefficiency won't create a significant problem in profitability.

<u>Why monopolies are not always bad?</u>

- As only a single producer exists, it will produce more output than what individual firms in a competition do, and thus benefit form economies of scale.
- They can still face competition from overseas firms.
- They could sell products at lower price and high quality if they fear new firms may enter the market in the future.

Government And The Macroeconomy

The Macroeconomic Aims of Government

THE ROLE OF GOVERNMENT

The public sector in every economy plays a major role, as a producer and employer. Governments work locally, nationally and internationally. Here are the roles they play in the economy:

- As a producer, it provides, at all levels of government:
  - merit goods (educational institutions, health services etc.)
  - public goods (streetlights, parks etc.)
  - welfare services (unemployment benefits, pensions, child benefits etc.)
  - public services (police stations, fire stations, waste management etc.)
  - infrastructure (roads, telecommunications, electricity etc.)
- As an employer, it provides- at all levels of government- employment to a large population, who work to provide the above mentioned goods and services. It also creates employment by contracting projects, such as building roads, to private firms.
- Support agriculture and other prime industries that need public support
- Help vulnerable groups of people in the society through redistributing income and welfare schemes
- Manage the macroeconomy in terms of prices, employment, growth, income redistribution etc.
- Governments also manage its trade in goods and services with other countries by negotiating international trade deals

GOVERNMENT MACROECONOMIC AIMS

The government’s major macroeconomic objectives:

- **Economic Growth:** economic growth refers to the gross domestic product (**GDP**) per head, i.e., the amount of goods and services available for every person in the economy. More output means more economic growth. But if output falls over time (economic recession), it can cause:
  - employment, incomes and living standards of the people will fall
  - the tax the govt. collects from goods and services and incomes will fall, which will, in turn, lead to a cut in govt. spending
  - the revenues and profits of firms will fall
  - investments will be very low, that is, people won't invest in production as economic conditions are poor and it will yield low profits
- **Price Stability:** inflation is the continuous rise in the average price levels. Governments usually have a target of a particular inflation it should maintain in a year, say 3%. If prices rise too quickly it can negatively affect the economy because it:
  - reduces people's purchasing powers as people will be able to buy less with the money they have now, than before
  - causes hardships for the poor
  - increases business costs especially as workers will demand for more wages to support their livelihood
  - makes products more expensive than products of other countries with low inflation. This will make exports less competitive
- **Full Employment:** if there is a high level of unemployment in a country, the following may happen:
  - the total national output (goods produced) will fall
  - government may have to give welfare payments (unemployment benefits) to the unemployed, increasing public expenditure
- **Balance of Payments Stability:** economies **export** (sell) many of their products to overseas residents, and receive income and investment from abroad; they also **import** (buy) goods and services from other economies, and make investments in other countries. These are recorded in a country's Balance of Payments (BoP)
Exports > Imports = Surplus in BoP
Exports < Imports = Deficit in BoP
All economies try to balance this inflow and outflow of international trade and payments and try to avoid any deficits because:
  - it may run out of foreign currency to buy imports
  - the value of its currency may fall against other foreign currencies and make imports more expensive to buy
- **Income Redistribution:** to reduce the inequality of income among its citizens, the government will redistribute incomes from the rich to the poor by imposing taxes on the rich and using it to finance welfare schemes for the poor. All governments struggle with income inequality and try to solve it because:

- widening inequality means higher level of poverty
- poverty and hardship restricts the economy from reaching its maximum productive capacity.

CONFLICT OF MACROECONOMIC AIMS

When a policy is introduced to achieve one macroeconomic aim, it tends to conflict with another or more aims. In other words, as one aim is achieved, another aim is undone. Let’s look at some conflicts of government macroeconomic aims.

<u>Full Employment vs Price Stability</u>
Low rates of unemployment will boost incomes of businesses and workers. This rise in incomes, mean higher demand and consumption in the economy, which causes firms to raise their prices- resulting in inflation. This is probably the most prominent policy conflicts in the study of Economics.
<u>Economic Growth & Full Employment vs BoP Stability</u>
Once again as incomes rise due to economic growth and low unemployment, people will import more foreign products and consume less of domestic products. This will cause a rise in imports relative to exports and a deficit may arise in the balance of payments
<u>Economic Growth vs Full Employment</u>
In the long run, when economic growth is continuous, firms may start investing in more capital (machinery/equipment). More capital-intensive production will make a lot of people unemployed.

Government And The Macroeconomy

Fiscal Policy

Budget: a financial statement showing the forecasted revenue and expenditure in the coming fiscal year. It lays out the amount the government expects to receive as revenue in taxes and other incomes and how and where it will use this revenue to finance its various spending endeavours. Governments aim for its budgets to be balanced.

GOVERNMENT SPENDING

Governments spend on all kinds of public goods and services, not just out of political and social responsibility, but also out of economic responsibility. Government spending is a part of the aggregate demand in the economy and influences its well-being. The main areas of government spending includes defence and arms, roads and transport, electricity, water, education, health, food stocks, government salaries, pensions, subsidies, grants etc.

Reasons governments spend:

- To supply goods and services that the private sector would fail to do, such as **public goods**, including defence, roads and streetlights; **merit goods**, such as hospitals and schools; and **welfare payments and benefits**, including unemployment and child benefits
- To **achieve supply-side improvements** in the economy, such as spending on education and training to improve labour productivity
- To **reduce the negative externalities**, such as pollution controls.
- To **subsidise industries** which may need financial support, and which is not available from the private sector, usually agriculture and related industries
- To help **redistribute income** and improve income inequality
- To inject spending into the economy to **aid economic growth**

Effects of government spending

- Increased government spending will lead to higher demand in the economy and thus **aid economic growth**, but it can also lead to inflation if the increasing demand causes prices to rise
- Increased government spending on public goods and merit goods, especially in infrastructure, can lead to **increased productivity and growth** in the long run

- Increased government spending on welfare schemes and benefits will increase living standards, and help **reduce inequality**.
- However too much government spending can also cause '**crowding out' of private sector investments**– private investments will reduce if the increase in government spending is financed by increased taxes and borrowing

TAX

Governments earn revenue through interests on government bonds and loans, fines, penalties, escheats, grants in aid, income from public property, dividend and profits on government establishments, printing of currency etc. but its major source of revenue comes from taxation**.** Taxes are a **compulsory payment made to the government** by all people in an economy. There are many reasons for levying taxes from the economy:

- **It is a source of government revenue**: if the government has to spend on public goods and services it needs money that is funded from the economy itself. People pay taxes knowing that it is required to fund their collective welfare
- **To redistribute income**: governments levy taxes from those who earn higher incomes and have a lot of wealth. This is then used to fund welfare schemes for the poor.
- **To reduce consumption and production of demerit goods**: a much higher tax is levied on demerit goods like alcohol and tobacco than other goods to drive up its prices and costs in order to discourage its consumption and production. Such a tax is called **excise duty**
- **To protect home industries:** taxes are also levied on foreign goods entering the domestic market. This makes foreign goods relatively more expensive in the domestic market, enabling domestic products to compete with them. Such a tax on foreign goods and services is called **customs duty**
- **To manage the economy**: as we will discuss shortly, taxation is also a tool for demand and supply side management. Lowering taxes increase aggregate demand and supply in the economy, thereby facilitating growth. Similarly, during high inflation, the government will increase taxes to reduce demand and thus bring down prices. More on this below.

<u>Classification of Taxes:</u>

Taxes can be classifies into direct or indirect and progressive, regressive or proportional.

Direct Taxes are taxes on incomes. The burden of tax payment falls directly on the person or individual responsible for paying it.

- **Income tax:** paid from an individual's income. Disposable income is the income left after deducting income tax from it. When income tax rise, there is little disposable income to spend on goods and services, firms will face lower demand and sales and will cut production, increasing unemployment. Lower income taxes will encourage more spending and thus higher production.
- **Corporation Tax:** tax paid on a company's profits. When the corporation tax rate is increased, businesses will have lower profits left over to put back into the business and will thus find it hard to expand and produce more. It will also cause shareholders/owners to receive lower dividends/returns for their investments. This will discourage people from investing in businesses and economic growth could slow down. Reducing corporation tax will encourage more production and investment.
- **Capital gains tax:** taxes on property and other valuable assets
- **Inheritance tax:** taxes on inherited wealth

<u>Advantages:</u>

- **High revenue**: as all people above a certain income level have to pay income taxes, the revenue from this tax is very high.
- Can **reduce inequalities in income and wealth:** as they are progressive in nature- heavier taxes on the rich than the poor- they help in reducing the difference between the income levels of the rich and the poor.

<u>Disadvantages:</u>

- **Reduce work incentives**: people may rather stay unemployed (and receive govt. unemployment benefits) rather than be employed if it means they would have to pay a high amount of tax. Those already employed may not work productively, since any extra income they make, the more tax they will have to pay.
- **Reduce enterprise incentives:** corporation taxes may demotivate entrepreneurs to set up new firms, as a good part of the profits they make will have to be given as tax.
- **Tax evasion:** a lot of people find legal loopholes and escape having to pay any tax. Thus tax revenue falls and the govt. has to use more resources to catch those who evade the taxes.

Indirect Taxes are taxes on goods and services sold. It is added to the prices of goods and services and it is paid while purchasing the good or service. It is called indirect because it indirectly takes money as tax from consumers. expenditure. Some examples are:

- **GST/VAT**: these are included in the price of goods and services. Increasing these indirect taxes will increase the prices of goods and services and reduce demand and in turn profits. Reducing these taxes will increase demand
- **Customs duty:** includes import and export tariffs on goods and services flowing between countries. Increasing tariffs will reduce demand for the products
- **Excise Duty:** tax on demerit goods like alcohol and tobacco, to reduce its demand

<u>Advantages:</u>

- **Cost-effective**: the cost of collecting indirect taxes are low compared to direct taxes.
- **Expanded tax-base**: directs taxes are paid by those who make a good income, but indirect taxes are paid by all people (young, old, unemployed etc.) who consume goods and services, so there is a larger tax base
- **Can achieve specific aims**: for example, excise duty (tax on demerit goods) can discourage the consumption of harmful goods; similarly, higher and lower taxes on particular products can influence their consumption.
- **Flexible:** indirect tax rates are easier to alter/change than direct tax rates. Thus their effects are immediate in an economy.

<u>Disadvantages:</u>

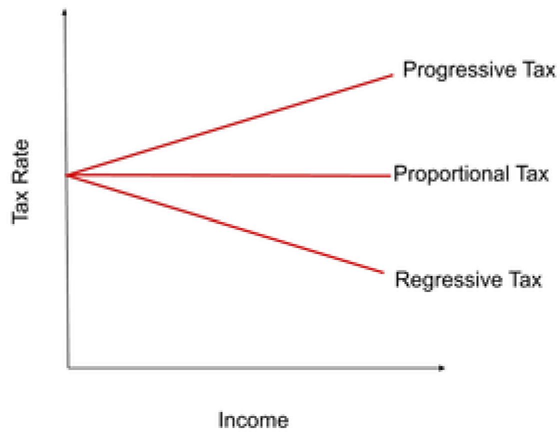
- **Inflationary**: The prices of products will increase when indirect taxes are added to it, causing inflation.
- **Regressive:** since all people pay the same amount of money, irrespective of their income levels, the tax will fall heavily on the poor than the rich as it takes more proportion of their income.
- **Tax evasion**: high tariffs on imported goods or excise duty on demerit goods can encourage illegal smuggling of the good.

Progressive Taxes are those taxes which burdens the rich more than the poor, in **that the rate of taxation increases as incomes increase**. An income tax is the perfect example of progressive taxation. The more income you earn, the more proportion of the income you have to pay in taxes, as defined by income tax brackets.

For example, a person earning above $100,000 a month will have to pay a tax rate of 20%, while a person earning above $200,000 a month will have to pay a tax rate of 25%.

Regressive Taxes are those taxes which burden the poor more than the rich, in that **the rate of taxation falls as incomes increase**. An indirect tax like GST is an example of a regressive tax because everyone has to pay the same tax when they are paying for the product, rich or poor.

For example, the GST on a kilo of rice is $1; for a person who earns $500 dollars a month, this tax will amount to 0.2% of his income, while for a richer person who earns $50,000 a month, this tax will amount of just 0.002% of his income.
The **burden on the poor is higher than on the rich**, making its regressive.
Proportional Taxes are those taxes which burden the poor and rich equally, in that **the rate of taxation remains equal as income rise or fall**. An example is corporation tax. All companies have to pay the same proportion of their profits in tax. For example, if the corporate tax is 30%, then whatever the profits of two companies, they both will have to pay 30% of their profits in corporate tax.



<u>Qualities of a good tax system (the canons of taxation):</u>

- Equity: the tax rate should be a justifiable and based on the ability of the taxpayer
- Certainty: the amount of tax to be paid, when to pay it, and how to pay it should all be informed to the taxpayer
- Economy: the cost of collecting taxes must be minimum and shouldn’t exceed the tax revenue itself
- Convenience: the tax must be levied at a convenient time, for example, after a person receives his salary
- Elasticity: the tax imposition and collection system must be flexible so that tax rates can be easily changed as the person’s income changes
- Simplicity: the tax system must be simple so that both the collectors and payers understand it well

<u>Impacts of taxation</u>

Taxes can have various direct impacts on consumers, producers, government and thus the entire economy.

- The main purpose of tax is to raise income for the government which can lead to higher spending on health care and education. The impact depends on **what government spend the money on**. For example, it may be necessary public sector investment or it could be to fund the government's debt repayment
- Consumers will have **less disposable income to spend** after income tax has been deducted. This is likely to lead to lower levels of spending and saving. However, if the government spends the tax revenue in effective ways, it shouldn't affect the economy.
- Higher income tax reduces disposable income and can **reduce the incentive to work**. Workers may be less willing to work overtime or might leave the labour market altogether. However, there are two conflicting effects of higher tax:
- **Substitution effect**: higher tax leads to lower wages, and work becomes relatively less attractive than leisure – workers will prefer to work less.
- **Income effect**: if higher tax leads to lower wages, then a worker may feel the need to work longer hours to maintain his desired level of income –workers feel the need to work longer to earn more
- The impact of tax then depends on which effect is greater. If the substitution effect is greater, then people will work less, but if income effect is greater, people will work more
- Producers will have **less incentive to produce** if the corporate taxes are too high. Private firm aim on making profits, and if a major chunk of their profits are eaten away by taxes, they might not bother producing more and might decide to close shop.

FISCAL POLICY

Fiscal policy is a government policy which adjusts government spending and taxation to influence the economy. It is the budgetary policy, because it manages the government expenditure and revenue. Government aims for a balance budget and tries to achieve it using fiscal policy.

A budget is in surplus, when government revenue exceed government spending. While this is good it also means that the economy hasn't reached its full potential. The government is keeping more than it is spending, and if this surplus is very large, it can trigger a slowdown of the economy.

When there is a budget surplus, the government employs an expansionary fiscal policy where **govt. spending is increased and tax is cut**.

A budget is in deficit, when government expenditure exceeds government revenue. This is undesirable because, if there is not enough revenue to finance the expenditure, the government will have to borrow and then be in debt.

When there is a budget deficit, the government employs contractionary fiscal policy, where **govt. spending is cut and tax is increased.**

Fiscal policy helps the government achieve its aim of economic growth, by being able to influence the demand and spending in the economy. It also indirectly helps maintain price stability, via the effects of tax and spending.
Expansionary fiscal policy will stimulate growth, employment and help increase prices.
Contractionary fiscal policy will help control inflation resulting from too much growth. But as we will see later on, controlling inflation by reducing growth can lead to increased unemployment as output and production falls.

Government And The Macroeconomy

Monetary Policy

The money supply is the total value of money available in an economy at a point of time. The government can control money supply and interest rates through a variety of tools including open market operations (buying and selling of government bonds) and changing reserve requirements of banks.(The syllabus doesn’t require you to study these in depth)
The **interest rate is the cost of borrowing money**. When a person borrows money from a bank, he has to pay an interest (monthly or annually) calculated on the amount he borrowed. Interest is also be earned on the money deposited by individuals in a bank.
(The interest on borrowing is higher than the interest on deposits, helping the banks make a profit).
Higher interest rates will discourage borrowing and therefore, investments; it will also encourage people to save rather than consume (fall in consumption also discourage firms from investing and producing more)
Lower interest rates will encourage borrowing and investments, and encourage people to consume rather than save (rise in consumption also encourage firms to invest and produce more).
The monetary authority of the country cannot directly change the general interest rate in the economy. Instead, it changes the rates of lending between the central bank and commercial banks, as well as the interest on its bonds and securities. These will then influence the interest rate provided by commercial banks to individuals and businesses.

Exchange rate is the rate at which one currency is exchanged for a different currency; the value of one currency in terms of another. For example: £1 = $1.2, means that one pound is equal to and can be converted to 1.2 dollars.

MONETARY POLICY

Monetary policy is a government policy that adjusts the interest rate and foreign exchange rates to influence the demand and supply of money in

the economy. It is usually conducted by the country's central bank and usually used to **maintain price stability, low unemployment and economic growth**. **Expansionary monetary policy** is where the government **increases money supply, cuts interests, causing exchange rates of the domestic currency to decrease** (increasing demand of exports**).** More money supply will mean more money being circulated among the government, producers and consumers, increasing economic activity. Low interest rates will mean more people will resort to spending rather than saving, and businesses will invest more as they will only have to pay little interest on their borrowings. **Economic growth** and an **improvement in the balance of payments** will be experienced and **employment will rise**. **Contractionary monetary policy** is where the government **decreases money supply, increases interest rates, causing exchange rates of the domestic currency to increase** (reducing demand of exports). Lower money supply will mean less money being circulated among the government, producers and consumers, reducing economic activity. Higher interest rates will mean more people will resort to saving rather than spending, and businesses will be reluctant to invest as they will have to pay high interest on their borrowings. This helps slow down economic growth and **reduce inflation**, but at the cost of possible unemployment resulting from the fall in output.

Government And The Macroeconomy

Supply-side Policy

Supply side policies are microeconomic policies aimed at increasing supply and productivity in the economy, to enable long-term economic growth. Some of these policies include:

- **Public sector investments:** investments in infrastructure such as transport and communication can greatly help the economy by making the flow of resources quick and easy and facilitate faster growth
- **Improving education and vocational training:** the government can invest in education and skills training to improve the quality and quantity of labour to increase productivity
- **Spending on health:** accessible, affordable and good quality health services will improve the health of the population, helping reduce the hours lost to illnesses and increasing productivity
- **Investment on housing:** as more housing spaces are built, the geographical mobility of the population will increase, helping increase output
- **Privatization**: transferring some public corporations to private ownership will increase efficiency and increase output, as the private sector has a profit-motive absent in public sector
- **Income tax cuts**: reducing income tax will increase people's willingness to work more and earn more, helping increase the supply in the economy
- **Subsidies** are financial grants made to industries that need it. More subsidies means more money for producers to produce more, thereby increasing supply
- **Deregulation:** removing or easing the laws and regulations required to start and run businesses so they can operate and produce more output with reduced costs and hassle –encouraging investments
- **Removing trade barriers**: the govt. can reduce or withdraw import duties, taxes etc. on imports so that more resources, goods and services may be imported to increase productivity and efficiency in the domestic economy. It can also reduce export duties and taxes to increase export of resources, good and services to other nations, thereby encouraging domestic firms to increase production.
- **Labour market reforms:** making laws that would reduce trade union powers would reduce business costs and increase output. Minimum wages could be reduced or done away with to allow more jobs to be created. Welfare payments like unemployment benefit could be reduced so that more people would be motivated to

look for jobs rather than rely on the benefits alone to live. These will not only increase the incentive to work but also increase the incentive to invest

For example, India, in the early 1990's undertook massive privatisation, liberalisation and deregulation measures; abolishing its heavy licensing and red tape policies, allowing private firms to easily enter the market and operate, and opening up its economy to foreign trade by reducing the excessive trade tariffs and regulations. This led to a period of high economic growth and helped India become the emerging economy it is today.

Supply-side policies have the direct effect of increasing **economic growth** as the productive capacity of the economy is realised. In doing so, it can also create more job opportunities and help **reduce employment**. Trade reforms will also enable to it to **improve its balance of payments**.

Government And The Macroeconomy

Economic Growth

Economic growth is an increase in the amount of goods and services produced per head of the population over a period of time.

The total value of output of goods and services produced is known as the **national output**. This can be calculated in three ways: using output, income or expenditure.

GDP (Gross Domestic Product): the total market value of all final goods and services provided within an economy by its factors of production in a given period of time.

Nominal GDP: the value of output produced in an economy in a period of time, measured at their current market values or prices is the nominal GDP.

Real GDP: the value of output produced in an economy in a period of time, measured assuming the prices are unchanged over time. This GDP, in constant prices, provides a measure of the real output of a country.

GDP per head/capita: this measures the average output/ income per person in an economy. Since this takes into account the population, it provides a good measure of the living standards of an economy.

GDP per capita = GDP / Population

An increase in real GDP over time indicates economic growth as goods and services produced have increased. It indicates that the economy is utilising its resources better. On a PPC, an economic growth will be shown by a movement towards the PPC (not an outward shift because the economy's productive capacity hasn't increased, but it has improved in the path towards achieving that productive capacity).

The economy is initially at point A, producing below its productive capacity. Because of economic growth, it is able to move towards the PPC, to point B

Causes of economic growth

- **Discovery of more natural resources**: more resources mean more the production capacity. The discovery of oil and gas reserves have enabled a lot of economies to grow rapidly.
- **Investment in new capital and infrastructure**: investment on new machinery, buildings, technology has enabled firms and economies to expand their production capacities. Investments in modern infrastructure such as airports, roads, harbours etc have improved access and communication in an economy, helping in quicker and efficient production
- **Technical progress**: New inventions, production processes etc. can increase the productivity of existing resources in industries and help boost economic growth
- **Increasing the quantity and quality of factors of production**: A larger and more productive workforce will increase GDP. More skilled, knowledgeable and productive human resources thus help increase economic growth. Similarly, good quality capital, use of better natural resources, emergence of innovative entrepreneurs all aid economic growth in the long run.
- **Reallocating resources**: Moving resources from less-productive uses to more-productive uses will improve economic growth.

The benefits of economic growth:

- **Greater availability of goods and services** to satisfy consumer wants and needs
- **Increased employment** opportunities and incomes
- In underdeveloped or developing economies, economic growth can drastically **improve living standards** and bring people out of poverty

- **Increased sales, profits** and business opportunities
- Rising output and demand will encourage **investment in capital goods** for further production, which will help achieve long run economic growth
- **Low and stable inflation**, if growth in output matches growth in demand
- **Increased tax revenue** for government (as incomes and spending rise) that can be invested in public goods and services

The drawbacks of economic growth:

- Technical progress may cause capital to replace labour, causing a rise in **unemployment**. This will be disastrous for highly populated underdeveloped and developing economies, pulling more people into poverty
- Scarce resources are used up rapidly when production rises. **Natural resources may get depleted** over time.
- Increasing production can **increase negative externalities** such as pollution, deforestation, health problems etc.
- If the economy produces over its productive capacity and if the growth in demand outstrips the growth in output, economic growth **may cause inflation**
- Economic growth has also been accused of **widening income inequalities** in developing economies, because rich investors and businessmen gain more than the working class and poor during growth- the benefits of growth are not evenly distributed. This will cause **relative poverty to rise**.

Governments aim for **sustainable economic growth** which refers to a rate of growth which can be maintained without creating significant economic problems for future generations, such as depletion of resources and a degraded natural environment.

Recession is the phase where there is **negative economic growth,** that is real GDP is falling. This usually happens after there is rapid economic growth. High inflation during the boom period will cause consumer spending to fall and cause this downturn. Workers will demand more wages as the cost of living increase, and the price of raw materials will also rise, leading to firms cutting down production and laying off workers. Unemployment starts to rise and incomes fall.

Causes of recession:

- **Financial crises:** if banks have a shortage of liquidity, they reduce lending and this reduces investment.
- **Rise in interest rates:** increases the cost of borrowing and reduces demand.
- **Fall in real wages:** usually caused when wages do not increase in line with inflation
- **Fall in consumer/business confidence:** reduces both supply and demand

- **Appreciation in exchange rate:** makes export expensive and less competitive, causing demand to fall
- **Fiscal austerity:** when government cuts spending and demand falls
- **Trade wars:** uncertainty in markets and thus businesses will be reluctant to invest during a trade war, causing supply to fall
- **Supply-side shocks:** e.g. rise in oil prices cause inflation and lower purchasing power
- **Black swan events:** black swan events unexpected events that are very hard to predict. For example, COVID-19 pandemic in 2020 which disrupted travel, supply chains and normal business activity, as well consumer demand.

Consequences of recession:

- **Firms go out of business:** as demand falls, firms will be forced to either reduced production to a level that is sustainable or close down the firm altogether
- **Unemployment:** cuts in production will cause a lot of people to lose work
- **Fall in income:** cuts in production also causes fall in incomes
- **Rise in poverty and inequality:** unemployment ans lack of incomes will pull a lot of people into poverty, and increase inequality (as the rich will still find ways to earn)
- **Fall in asset prices** (e.g. fall in house prices/stock market): recession trigger a crash in the stock markets and other asset markets as investors' and consumers' confidence in the well-being fall during a recession. The shares owned by investors will be worth less.
- **Higher budget deficit:** due to falling consumption and incomes, the government will see a fall in tax revenue, causing a budget deficit to grow
- **Permanently lost output:** as firms go out of business and employment falls, it results in a permanent loss of output, as **the economy moves inwards from its PPC** (the PPC doesn't shift inwards because the economy doesn't lose its productive capacity it's just producing lesser).

If the economy was producing at A on its PPC, a recession will cause production to fall to B.

Policies to promote economic growth

Expansionary fiscal and monetary policies (demand-side policies) and supply-side policies described in the previous sections can be employed to promote economic growth, depending on the nature of the problems that are holding back the economy from growing. For example, if it is the poor quality of human capital (labour) that is preventing the economy from achieving its maximum productive capacity, the government should invest in education and vocational training centres to improve the quality of the labour force and increase productivity. If it is a lack of effective demand causing slow growth, the government should focus on cutting income taxes, indirect taxes and interest rates to boost spending.

Effectiveness of such policies:

- Demand-side policies that increase the rate of growth above the long-run trend rate will **cause inflation** and quickly lead to a recession if not controlled
- Supply-side policies can **take considerable time to take effect**. For example, if the government invested in better education and training, it could take several years for this to lead to higher labour productivity
- In a recession, supply-side policies won't solve the fundamental problem of deficiency of aggregate demand. Increasing the flexibility of labour markets and encouraging investment may help to some extent, but unless there is sufficient demand, firms will be reluctant to increase production and make new investments

Government And The Macroeconomy

Employment and Unemployment

Some terms to be familiar with while we're discussing employment:

Labour force – the working population of an economy, i.e. all people of working age who are willing and able to work.
Dependent population – people not in the labour force and thus depend on the labour force to supply them goods and services to fulfil their needs and wants. This includes students in education, retired people, stay at home parents, prisoners or similar institutions as well as those choosing not to work.
Employment is defined as an engagement of a person in the labour force in some occupation, business, trade, or profession.
Unemployment is a situation where people in the labour force are actively looking for jobs but are currently unemployed.
All governments have a macroeconomic objective of maintaining a low unemployment rate.

Full Employment is the situation where the entire labour force is employed. That is, all the people who are able and willing to work are employed – unemployment rate is 0%.

CHANGING PATTERNS AND LEVEL OF EMPLOYMENT

Over time, patterns and levels of employment change. It could be due to the effects of business cycle that every economy goes through from time to time (growth and recession). It could be due to the changes to the demographics (population- age and gender) of the country. It could also be due to structural changes (dramatic shifts in how an economy operates). Let's look at some ways in which this happens:

As an economy develops, it undergoes a structural change as output and **employment shifts from primary sector to manufacturing and then to the tertiary** (services) **sectors.** This can be seen in rapidly developing countries like India where there employment in agriculture and allied industries are rapidly falling and people are moving towards the fast-growing service sector, especially IT

and retail.
In the same way, **employment moves from the informal sector** (unrecognised – output is not included in GDP and incomes are not taxed) **to the formal sector** (recognised – included in GDP and taxes) as economies develops. People who previously worked as street vendors may work in registered firms, as the economy develops.
Overtime, as an economy develops, the labour force also sees an **increase in the proportion of female labour**. As social attitudes become progressive and women working is encouraged, more women will enter the labour force and contribute to growth.
Similarly, as the country develops, the **proportion of old people may increase** in proportion to young and working people (because death and birth rates fall). This will cause the labour force to shrink and cause a huge burden on the economy.
As economies become more market-oriented (government enterprises and interventions decline), the economy will naturally see a large proportion of the **labour force shift to the private sector**.

HOW UNEMPLOYMENT IS MEASURED

Economies periodically calculate the number of people unemployed in their economies, to check the unemployment rate and see what policies they should implement to reduce it if it is too high. They can do this in two ways:

- **Claimant count:** unemployed people can file for unemployment claims, benefits/allowances provided to the unemployed job seekers, by the government. The government can count the total number of unemployment claims made in the economy.
- **Labour surveys:** economies conduct surveys among the entire labour force to collect data about it. This will include data on the number of people unemployed.

Unemployment rate = number of people unemployed / total no. of people in the labour force

There are some problems with measuring employment.

Under-employment: people may be officially classed as employed but they may be working fewer hours than they would like. For example, they may have a part-time

job, but want a full-time jobs. This is considered as unemployment because they may not fulfil the working hours needed to be considered employed.
Inactivity rates: the long-term unemployed may become discouraged and leave the labour market completely. In effect they are not working, but they are classed as economically inactive rather than unemployed. So, the unemployment rate can be understated.

THE CAUSES/TYPES OF UNEMPLOYMENT

- **Frictional unemployment**: this occurs as a result of workers leaving one job and spending time looking for a new one. This type of unemployment is short-lived.
- **Cyclical unemployment**: this occurs as a result of fall in aggregate demand due to an economic recession. When demand falls, firms will cut their production and workers will lose their jobs. There will be a nation-wide rise in unemployment.
- **Structural unemployment**: this occurs due to the long-term change in the structure of an economy. Workers end up having the wrong skills in the wrong place – causing them to be unfit for employment. This can be explained by dividing it further:
  - **Technological unemployment**: this has rose in recent times as industrial robot, machinery and other technology being substituted for labour.
  - **Sectoral unemployment**: unemployed caused as a sector/industry declined and leave its workers unemployed
- **Seasonal unemployment**: this occurs as a result of the demand for a product being seasonal. For example, the demand for umbrellas will fall in non-monsoon seasons, and so workers in umbrella manufacturing firms will become unemployed over those seasons.
- **Voluntary unemployment**: when people choose not to work for various reasons – they want to pursue higher education, would like to take a break etc.

THE CONSEQUENCES OF UNEMPLOYMENT

- People will **lose their working skills** if they remain unemployed for a long time and may find it even harder to find suitable jobs. As people remain unemployed, their incomes will be low, and **living standards will fall**
- Unemployment will also **lead to poverty,** homelessness and ill health and encourage people to steal and commit other crimes to make money– **crime rates** will rise
- People losing skills is not just detrimental to the unemployed individuals but also to firms who may employ these people in the future. They will have to **retrain these workers**.

- Firms will have to **pay redundancy payments** to workers they lay off
- **Workers will be demotivated** as they fear they could lose their jobs, especially in a recession.
- As firms lay off workers, they will be left with spare capacity- unutilised machinery, tools and factory spaces, leading to **higher average costs**
- Due to low incomes, people's purchasing power/consumption will fall, causing **demand to fall**.
- People will need to rely on charity or **government unemployment benefits** to support themselves. These benefits are provided from tax revenue. But now, as incomes have fallen tax revenue will also fall. This might mean that people remaining in work will have to pay more of their income as tax, so that it can be distributed as unemployment benefits to the unemployed. The **burden on tax-payers will rise**
- Public expenditure on other projects such as schools, roads etc. will have to be cut down to make way for benefits. There is **opportunity cost** involved here
- The economy doesn't reach its maximum productive capacity, i.e., they are **economically inefficient** on the PPC. The economy **loses output**.

POLICIES TO REDUCE UNEMPLOYMENT

Both demand-side policies and supply-side policies help reduce unemployment. Demand-side policies will address the unemployment caused by demand deficiency (cyclical) while the supply-side measures will curtail structural and frictional unemployment.

- **Expansionary policies to increase demand:** expansionary fiscal policies like cutting down taxes and increasing government spending (which also creates jobs) and expansionary monetary policies like cutting interest rates will help boost demand in the economy, to keep production and employment high. However these will take effect only with a time lag. Cutting tax rates won't help if people don't have confidence in the economy and prefer to save. Similarly, cutting interest rates will also be ineffective if banks are unwilling to lend to businesses, due to low confidence in the economy
- **Depreciate the exchange rate:** as the currency depreciates, the country's exports will become cheaper and so export demand from abroad will increase, helping boost production and employment in the export industries
- **Control inflation**: higher inflation causes firms to lay off workers to reduce costs. So if the government tries to control inflation via monetary tools, it will help reduce firm costs and increase employment. But there is also the argument that as unemployment rises, incomes will also rise, driving up prices, again

- **Cutting unemployment benefits** to provide incentive to work: many people don’t work because they are comfortable living off the unemployment benefits provided by the government. Cutting down on these benefits, will persuade them to look for work and earn. But this would of course, go against the welfare principle of the government
- **Restricting imports and encourage exports:** a lot of unemployment occurs when good quality and cheaper foreign products put domestic industries out of business. Controlling imports using import tariffs and quotas will encourage domestic firms to emerge and increase production and thus increase employment. Similarly, easing controls on labour-intensive export industries will open up new job opportunities. However such protectionist measures can harm the country in the long-run as efficient competition from abroad reduces
- **Cutting down minimum wages:** minimum wages increase firms’ labour costs and so they will lay off workers. Lowering the minimum wages will encourage firms to employ more labour
- **Remove labour market regulations:** letting the market have a free hand in the labour market – abolish maximum working weeks, minimum wages, making it easier to hire and fire workers – will improve the labour market flexibility, can improve imperfections in the labour market. However, this can cause temporary unemployment and cause greater job insecurity
- **Training/Retraining:** structural employment issues can be eliminated by retraining the unemployed in skills required in the modern markets. This will also improve occupational mobility. This is very expensive when done on a large scale across the economy, requiring training centres to be built, and trainers to be employed. The benefits of providing skills and training will only be reaped in the long-term
- **Promote industries in unemployed areas:** a lot of employment is created when government provide subsidies and tax breaks for new industries who set up in certain backward regions.
- **Increase geographical mobility of labour:** frictional unemployment is caused because people can’t move around to find good jobs. The government can improve labour mobility by investing in transport and housing services
- **Provide information:** frictional unemployment can be eliminated to an extent by making information available about job vacancies to the unemployed through job centres, newspapers, government websites etc.

Government And The Macroeconomy

Inflation and Deflation

INFLATION

Inflation is the general and sustained rise in the level of prices of goods and services in an economy over a period of time.
For example, the inflation rate in UK in 2010 was 4.7%. This means that the average price of goods and services sold in the UK rose by 4.7% during that year.
Inflation is **measured using a consumer price index (CPI)** or retail price index (RPI).
The consumer price index is calculated in this way:

- A selection of goods and services normally purchased by a typical family or household is identified.
- The prices of these**'basket of goods and services'** will then be monitored at a number of different retail outlets across the country.
- The average price of the basket in the first year or **'base year' is given a value of 100**.
- The **average changes in price of these goods and services over the year is calculated.**
- If it rises by an average of 25%, the new index is 125% * 100 = 125. If in the next year there is a further average increase of 10%, the price index is 110% * 125 = 137.5. The average inflation rate over the two years is thus 137.5 – 100 = 37.5

Causes of Inflation

- **Demand-pull inflation**: Inflation caused by an **increase in aggregate demand** is called demand-pull inflation. This is also defined as the increase in price **due to aggregate demand exceeding aggregate supply**. Demand could rise due to higher incomes, lower taxes etc. The demand curve will shift right, causing an extension in supply and a rise in price.

- **Cost-push inflation**: Inflation caused by **an increase in cost of production** in the economy. The cost of production could rise due to higher wage rate, higher indirect taxes, higher cost of raw materials, higher interest on capital etc. The supply curve will shift left causing a contraction in demand and a rise in price.
- A lot of economics agree that **a rise in money supply in contrast with output is the key reason for inflation**. If the GDP isn't accelerating as much as the money supply, then there will be a higher demand which could exceed supply leading to inflation.

The consequences of inflation

- **Lower purchasing power:** when the price level rises, the lesser number of goods and services you can buy with the same amount of money. This is called a fall in the purchasing power. When purchasing power falls, consumers will have to make choices on spending
- **Exports are less internationally competitive**: if the price of exports are high, its competitiveness in international markets will fall as lower priced foreign goods will rival it. This could lead to a current account deficit is exports lower, especially if they are price elastic.
- **Inflation causing inflation**': during inflation, the cost of living in the economy rises as you have to pay more for goods and services. This might cause workers to demand higher wages increasing the cost of production. If the price of raw materials also increase, the cost of production again increases, causing cost-push inflation.
- **Fixed income groups, lenders, and savers lose**: a person who has a fixed income will lose as he cannot press for higher wages during inflation (his/her real wages fall as purchasing power of his/her wages fall). Lenders who lent money before inflation and receive the money back during inflation will lose the value on their money. The same amount of money is now worth less (here, the people who borrowed gain purchasing power). Savers also lose because the interest they're earning on savings in banks does not increase as much as the inflation, savers will lose the value on their money.

Policies to control inflation

- **Contractionary monetary policy** that will reduce demand: contractionary monetary policy is the most popular policy employed to curtail inflation. Raising interest rates will discourage spending and investing (as cost of borrowing rises) and reduce the money supply in the economy, helping cut down on demand. But this depends a lot on the consumer and business confidence in the economy; spending and investing may still continue to rise as confidence remains high. There is also a considerable time lag for monetary policy to take effect

- **Contractionary fiscal policy** that will reduce demand: raising taxes will discourage spending and investing and cutting down on government spending will reduce aggregate demand in the economy, helping bring down the price level. However, this is an unpopular policy only employed when inflation is critical
- **Supply side policies:** supply-side policies such as privatisation and deregulation hope to make firms competitive and efficient, thus avoid inflationary pressures. But this is a long-term policy only helping to keep the long-term inflation rate stable. Sudden surges in inflation cannot be addressed using supply side measures
- **Exchange rate policy:** Appreciating the domestic currency can lower import prices helping reduce cost-push inflation arising from expensive imported raw materials. It also makes export more expensive, helping lower the export demand in the economy as well as creating incentives for exporting firms to cut costs to remain competitive.

DEFLATION

Deflation is the **general fall in the price level**.

Deflation is also **measured using CPI**, but instead of showing figures above 100, it will show an index below 100 denoting a deflation. For example, a drop in the average prices of the basket of goods in a year is 10%, the deflation will be 90% * 100 = 90.

Causes of deflation

- **Aggregate supply exceeding aggregate demand**: when supply exceeds demand, there is an excess of output in the economy not consumed, causing prices to fall
- **Demand has fallen** in the economy: during a recession, a fall in demand in the economy causes general prices to fall and cause a deflation
- **Labour productivity has risen**: higher output will lead to lower average costs, which could reflect as lower prices for products
- **Technological advance** has reduced cost of production, pulling down cost-push inflation

Consequences of deflation

- Lower prices will discourage production, resulting in **unemployment**
- As demand and prices fall, **investors will be discouraged to invest**, lowering the output/GDP

- Deflation can **cause recession** as demand and prices continue to fall and firms are forced to close down as enough profits are not being made
- **Tax revenue for the government will fall** as economic activity and incomes falls. They might be forced to borrow money to finance public expenditure
- Borrowers will lose during a deflation because now the value of the debt they owe is higher than when they borrowed the money
- Deflation will increase the real debt burden of the government as the value of debt money increases

<u>Policies to control deflation</u>

- **Expansionary monetary policy** to revive demand: cutting interest rates will encourage more spending and investments in the economy which will stimulate prices to rise. However, if interest rate is already at a very low point, where decreasing it any further won't increase spending because people still prefer to save some money and pay off debts and banks are not willing to lend at a very low interest rate. (This situation is called a liquidity trap).
- **Expansionary fiscal policy** to revive demand: increasing government spending in the economy, especially in infrastructure will help raise demand, along with cuts in direct taxes. The money for this expenditure can be created by quantitative easing (selling government bonds to the public).
- **Devaluation:** devaluing the currency through selling domestic currency and/or increasing the money supply will cause export prices to fall, encouraging production of export products, resulting in higher demand; and also increase prices of imported products which will raise costs and prices for products in the economy.
- **Change inflation expectations:** when a deflation is expected, businesses won't increase wages and consumer won't pay higher prices (because they expect prices to fall in the future). This will cause the deflation the expected. But if the monetary authorities indicate that they expect higher inflation, firms will pay their workers more and consumer will spend more now, avoiding a deflation.

Economic Development

Living Standards

Living standards or standards of living refer to all the factors that contribute to a person's well-being and happiness

Measuring Living Standards

- **GDP per head/capita**: this measures the average income per person in an economy.
  Real GDP per capita = Real GDP per head / Population

Merits of using GDP per capita to measure living standards:

- GDP is a useful measure of the total production taking place in the country, and so indicates the material well-being of the economy
- it also takes population into consideration, adding emphasis on the goods and services available to individuals
- since it is calculated on output, is a good indicator of the jobs being created
- GDP data is readily available so is population data

Limitations of using GDP per capita to measure living standards:

- **it takes no account of what people can buy using their incomes**. A country with a high GDP per head may be no better off than a country with a low GDP per head, if there are far fewer products to choose from
- similarly, **GDP doesn't consider changes in technology that can have a large impact on living standards.** People might have had more income in the last decade but they couldn't benefit from all the technology available today
- **distribution of income is very unequal in reality**, so the GDP per head isn't accurate. Some people might be very rich while others very poor, but the GDP per head will only give the average incomes
- real GDP **excludes the unpaid work people do** for charities and voluntary organizations etc. Thus, it understates the total output
- GDP **also doesn't differentiate between the positive and negative values economies place on different output/expenditure**. For example, if the output rises because the sales of tobacco, alcohol or pornographic materials, it might show in the records as a rise in GDP per head but might not actually make people better off.

Similarly, GDP might rise if the government has to rebuild after a natural disaster, which doesn't mean living standards have risen

- the official GDP figures can be overstated due to technical errors or by political manipulation to look good, and give a wrong picture of living standards
- this measure doesn't consider leisure activities, health and education levels, environmental quality- **all that determines people's happiness** and well-being
- in order to effectively compare GDP per head across countries, they need to be converted to a common currency and adjusted for differing purchasing power in different countries
- comparing GDP per head can also be unreliable as GDP accounting methods can be different for different countries.

-

- **Human Development Index (HDI)**: used by the United Nations to compare living standards across the globe, the HDI combines different measures into one to give a HDI value from 0 (lowest) to 1(highest). These are:
    - **Income index**, measured using the average national income – **GNI per head** adjusted for differences in exchange rate and prices in different countries (purchasing power parity)
    - **Education index**, measured by how many years on average, a person aged 25 will have spent on education (**mean years of schooling**) and how many years a young child entering school can now be expected to spend in education in his entire life (**expected years of schooling**)
    - **Healthcare index**: measured by **average life expectancy at birth**

The benefits of using HDI to measure living standards:

- it takes into account some **major indicators** of living standards
- recognises that it is not just output or income that determines living standards, but also **social factors**
- it is a useful method to **compare global living standards**– it shows clear patterns of living standards
- it is very **useful and reliable** measure since its produced by the UN and is thus also widely used and recognised

The limitations of HDI to compare living standards:

    -
    - **it combines a set of separate indicators into one**, so a country with good literacy rates and living standards but poor life expectancy can have a low HDI value
    - **there are wide divergences in HDI within countries**

- **GNI per head doesn’t say anything about inequalities in income and wealth within countries**
- **it doesn’t consider other factors** such as environmental quality, access to safe drinking water, political freedom, crime rates etc. which are also important indicators of living standards
- **the HDI information for all countries may not be available** such as war-struck countries where civilisation has been disrupted

In the 2019 HDI index published by the UN, Norway comes first with an HDI index of 0.954 while Niger comes last with an index of just 0.377 owing to very low levels of education and GNI per head. See the full list at http://hdr.undp.org/en/content/2019-human-development-index-ranking

Reasons for differences in living standards and income distribution within and between countries

These have been discussed above in the merits and limitations of using GDP per capita and HDI. More will be discussed in the coming chapters. Some other reasons are discussed below

Difference in living Standards within a country: there can be variations in living standards within a country. An excellent example of this is the high living standards of the Indian state of Kerala (where IGCSE AID is based!) which has a HDI index of 0.779 while the poorest state of Bihar stands at 0.567 (2018).

- **Regional variances in income and consumption**
- **Major type of sectors/jobs**: manufacturing and services heavy regions will have higher incomes, education and health services compared to agricultural regions
- **Local government provisions of education and health**

Difference in living Standards between countries:

- **Productivity of industries**: more productive industries yield more output and incomes
- **Major industries**: what makes countries like Qatar and Norway achieve some of the world’s highest per capita incomes is that their income comes mostly from petroleum industries that are scare and highly demanded internationally
- **Population**: dense population lower per capita income and put pressure on scarce resource
- **Ability of citizens pay taxes**: higher tax-base and taxable incomes allow governments to invest in infrastructure and welfare programmes
- **Provision of health and educational facilities**

- **Variety of goods/services produced**: if citizens can choose from a wide variety of products, living standards rise. Western countries like US enjoy this
- **War, crime and natural disasters**: war-struck countries of Asia, the high crime rates of Latin America and frequent natural disasters in island countries, drive down their living standards as they damage infrastructure and put people into hardship

Economic Development

Poverty

Absolute poverty: the inability to afford basic necessities needed to live (food, water, education, health care and shelter). This is measured by the number of people living below a certain income threshold.

Relative poverty: the condition of having fewer resources than others in the same society. It is measured by the extent to which a person;s or household's financial resources fall below the average income level in the economy. Relative poverty is basically a measurement of income inequality since a high relative poverty should indicate a higher income inequality.

Causes of poverty

- **unemployment**: when people are unemployed and have go without income for a long time, they may end up having to sell their possessions
- **low education levels:** this means that people are uneducated, unskilled and unable to find better jobs, keeping them in poverty
- **The size of family:** more family members with only few people earning, means more costs of living, pulling the family into poverty if they're not earning much
- **age**: older people are likely to have more health problems and less suitable for further employment, causing poverty. Young people are still employable and will find ways to earn an income.
- **poor government support** for basic services
- **poor health:** ill mental and physical health is both a cause and result of poverty
- **overpopulation**: high population density will put pressure on scarce resource and the economy may not be able to produce and provide for everyone, causing poverty
- **minority group/ethnicity/migrants: will** face discrimination from bureaucrats, employers and the society at large and so won't be able to access and enjoy all services. E.g.: African-Americans in the US tend to be poorer than their white counterparts
- **gender**: women usually face discrimination, especially in employment and end up being poorer than men

Policies to alleviate poverty

- Introduce measures to **reduce unemployment**: an expansionary fiscal/monetary policy will increase aggregate demand and increase employment opportunities. Income and standards of living will rise.
- **Impose progressive taxes**: income taxes are progressive, that is, they increase as incomes increases. Imposing these will mean that people on higher incomes will pay a large percentage of their incomes as tax and help reduce relative poverty.
- Introduce **welfare services**: money from taxes can be provided as income support to people with very low incomes. It can also be used to provide free or low-cost homes, healthcare and education.
- Introduce **minimum wage legislation** to raise the wage of low-paid employees
- Increase the quantity and **quality of education**.
- Attract and invite **inward investments** from firms abroad to provide jobs and incomes for people.
- **Overseas aid** could be gained from foreign governments and aid agencies. This will include food aid, financial aid, technological aid, loans and debt relief.

Economic Development

Population

Population is the total number of people inhabiting a specific area. Two-hundred years ago, the world population was just over a billion, now it is about 7.7 billion, with China and India having populations above 1 billion each! It is projected to hit 10 million by 2056.

FACTORS THAT AFFECT POPULATION

- **Birth rates:** the average number of children born in a country each year compared to the total population of an economy is known as the birth rate. This is usually expressed as the number of births for every 1000 people in the population.
  Why do different countries have different birth rates?
  - **Living standards**: improved quality and availability of food, housing, clean water and medical care result in fewer babies dying. Countries where children often die due to poor living standards, have higher birth rates because people have more families in case some of their children died. These children can then work to produce food and earn incomes.
  - **Contraception**: increased use of contraception and abortion have reduced birth rates in developed countries
  - **Customs and religion**: many religious beliefs doesn't allow the use of contraceptive pills, so birth rates in those communities rise. In developed economies it is now less fashionable to have large families, so birth rates have fallen.
  - **Changes in female employment**: as more females in developed countries enter employment have resulted in falling birth rates since they do not want motherhood to break their careers.
  - **Marriage**: in developed countries, people are tending to marry later in life, so birth rates have reduced.
- **Death rates:** the number of people who die each year compared to every 1000 people of the population is the death rate of an economy.
  Reasons for differing death rates in different economies:
  - **Living standards**: just as birth rates, death rates also tend to be very high in less-developed economies due to lack of good-quality food, shelter and medical care. Malnutrition remains the major cause of high death rates in these

countries. In developed countries, the cause of death include heart diseases and cancer caused by unhealthy diets.

- **Medical advances and heath care**: lack of medical care and infrastructure in less-developed countries continue to be a cause for high death rates.
- **Natural disasters and wars**: hurricanes, floods, earthquakes and famine due to lack of rain and poor harvests, and wars and civil conflicts have much effect on death rates.

- **Net Migration:** migration refers to the number of people entering (immigration) and leaving (emigration) the country. **Net migration** measures the difference between the immigration and emigration to and from an economy. A **net inward migration** will increase the working population of the economy, but can put pressure on governments on finances as demand for housing, education and welfare increase. A **net outward migration** will increase the income per capita and thus the HDI, but can result in loss of skilled workers.
  Reasons for differing net migration in different economies:

  - living standards: people move to countries where living standards are high and want to benefit from them
  - employment/wages: people migrate mainly to seek better job opportunities. Widespread unemployment and low wages in the home country will cause people to move to countries with better employment opportunities and higher wages
  - climate: very cold or very warm countries/regions will face more more emigration than other countries

POPULATION STRUCTURE

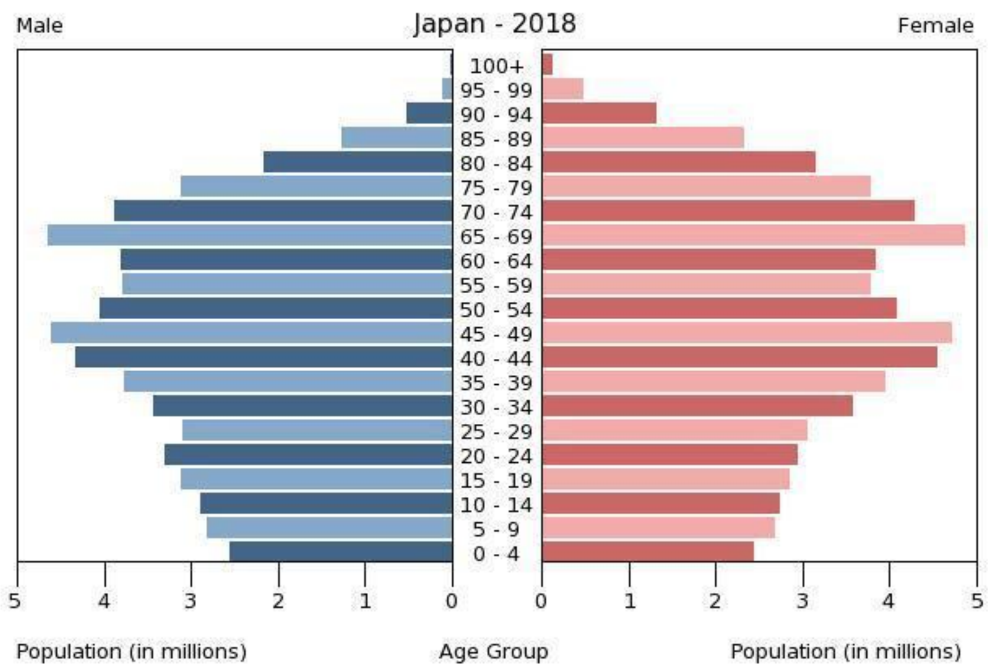
The structure of population can be analyzed using:

- **Age distribution**: the number of people in each age-group.
  Falling birth and death rates mean that the average age in developed countries are rising whereas in developing and less-developed economies, high death and birth rates result in low average ages. The median age in developed Monaco is highest at 53.1 while in under-developed Niger it is just 15.3.
  Consequences of an ageing population:
  - the workforce will decline and there will be much dependence on the tax-paying population to fund the welfare of old people
  - increase in demand for products for old people including healthcare

    - the government will have to spend more on housing, old age welfare schemes etc.
    - old people are less mobile and so the economy will be slow to adapt to new technologies.
- **Gender distribution**: the balance of males and females. The sex ratio measures the no. of males to the no. of females (the global sex ratio is 101:100; while Arab countries have sex ratios as high as 2.87 and island countries register low sex ratios). Since the average female lives longer than the average male, there are more females in the older age-groups than males. **Gender imbalance** is an excess of males or females and is caused by
    - Wars killing many young males
    - Violence towards females (honour killings, rapes)
    - Sex-specific immigration – more males immigrate to a country looking for work

    <u>Consequences of changes in the gender distribution:</u>
        - more females will encourage birth rates to rise and increase population growth
        - more females in employment will increase productivity
        - more females in education and employment will increase living standards
        - a more balanced gender distribution can aid better social equality as social attitudes towards women in education and employment become progressive

Population pyramids display the age and gender distribution of an economy. The vertical axes show the age groups and the horizontal axes show the gender groups- males on the left and females on the right.



As you can see, Japan has an ageing population that could harm their growth potential in the coming decades. In contrast, African countries that have a large young population have immense potential to grow

- **Geographic distribution**: where people live. 90% of the world population live in developing countries. This puts a lot of pressure on scarce resources in these countries. About half of the world population live in urban areas and this continues to rise which has helped increase production and living standards but resulted in rapid consumption of natural resources and high levels of pollution and congestion.
- **Occupational distribution**: what jobs people work in. In developed economies, more people work in the service sector while in less-developed economies, most people work in agriculture. In developing economies, there is a huge migration of workers from primary production to manufacturing and service sectors. Female employment and self-employment are also rising, which will add to production and higher living standards.

An optimal population is one where the output of goods and services per head of the population is maximised. An economy is underpopulated when it does not have enough labour to make the best use of its resources; and it is overpopulated when the population is too large given the resources it has.

<u>Effects or increasing population size</u>

- **increases size of the home market** and thus potential for increase in aggregate demand in the long-run

- higher demand and incomes will lead to **more economic growth** and expansion
- **increased supply of labour**
- puts more **pressure on already scarce resources**, especially land
- **more capital goods** will have to be produced to sustain and satisfy the needs and wants of the enlarged population
- **fall in rate of productivity** in line with the law of diminishing returns – too many people working on limited resources means low productivity
- **shift of employment and output from the primary sector towards the services sector** because land for primary activities is fixed but want for services is practically infinite as population grows and the emergence of mechanisation and technologies will force people out of the primary sector
- **congestion of urban centres:** as population and incomes rise, people will move to cities and town which will become crowded. There will be need for heavy transport, communications, housing, waste management infrastructure spending.

Economic Development

Developed and Less-developed Economies

Economic development refers to the increase in the economic welfare of people through growth in productive scale and wealth of an economy. Governments aim for their countries to expand from developing economies to developed economies.

Developed countries are characterised by high GDP per capita, high life expectancy, high literacy rate, a stable or dwindling population growth, excellent infrastructure, high levels of foreign investments, excellent healthcare, high productivity, and a relatively large tertiary sector. Example: Japan

Under-developed economies or less-developed economies are characterised by very low GDP per capita, high population growth, poor infrastructure, healthcare and education, low literacy rates, low levels of foreign investments, poor productivity, and a relatively large primary sector.
Example: Somalia

Developing economies are countries that are becoming more developed through expansion of the industrial sector and fewer people suffer the extremes of poverty. They may attract high levels of foreign investments and be undergoing major economic shifts towards the tertiary sector. However they may still have a low standard of living, owing to high population growth.
Example: India

The reasons for low economic development

- **Over-dependence on agriculture**: farming is the most common work in less-developed economies. Most people work to feed themselves and their families and sell off any surplus. This means that there is little or no trade happening , which results in poor incomes, no economic growth or development.
- **Domination of international trade by developed economies**: the more wealthier developed economies have exploited poorer countries by buying up their natural resources at low prices and selling products made from them in international markets at higher prices. Rich countries also protect their industries by paying subsidies to domestic producers, increasing global

supply, and in turn, lowering prices. Now the poor economies cannot compete with these very low prices, and they lose their jobs and incomes.

- **Low levels of savings** because of low incomes and widespread poverty
- **Lack of capital**: low incomes in under-developed economies lead to a lack of savings that can be invested in industries that can expand production
- **Poor investment in infrastructure:** good infrastructure in transport, health and education is essential for growth and development
- **High population growth**: rapidly expanding populations (due to high birth rates) in less-developed countries will reduce the real GDP/income per head.
- **Wars and conflicts deplete resources:** no scope for development when the country is a war zone.
- **Corrupt and/or unstable governments:** causes neglect of economy and citizens' welfare

The opposites are true for developed economies.

Some **development indicators** that are used to measure how developed an economy is:
GDP per capita, population living on less than $1 a day, life expectancy at birth, adult literacy rate, access to safe water supplies and sanitation, proportion of workers in different sectors of production etc.

International Trade and Globalisation

International Specialization

Specialization is when a nation **concentrates its productive efforts on producing a limited variety of goods in which they're really efficient and productive at and have an advantage over other economies in producing them.**
For example, due to the existence of vast oil and gas reserves in the region, Middle-Eastern countries concentrate their production on petroleum and have made a fortune off it
Specialisation is determined on the basis of either resource allocation or of cost of production.

Absolute advantage: when **one country can produce more efficiently than another** either by producing more of a good or service with same amount of resources or producing same amount of a good or service with fewer resources.
E.g.: India has an absolute advantage in operating call centres because of its abundant and cheap labour force, compared to most countries, say the Philippines.
Comparative advantage: **when one country can produce goods at the least opportunity cost** (in terms of other goods and services being forgone) than the other countries. Or in other words, it takes into account the opportunity cost incurred in order to achieve absolute advantage.
E.g.: India may have an absolute advantage in operating call centres against the Philippines but it gains more and thus has lower opportunity costs in the IT sector. The call centre industry has thus been declining in India, while the Philippines has seen a boom in its call centre industry because they have a comparative advantage in relating to American customers.
Note: you are not required by the syllabus to know the terms 'absolute advantage' and 'comparative advantage', but only the principles.

Advantages of international specialization:

- **Economies of scale and efficiency**: just like specialization by individuals, countries can specialize in what they do best, and this leads to efficiency and economies of scale. It can therefore increase output of the country while reducing costs. When more countries specialize, world output increases.

- **Job creation**: specialization leads to increased output and therefore it could lead to more investment and thus jobs are created as the output increases. Moreover, it requires skilled labour and thus earnings are higher.
- A**llows more international trade** to take place and therefore more goods that other countries produce can be imported as well. Therefore it increases choice for the people of the country
- **Revenue to the governmen**t: as income increases, and as more trade takes place, it gives the possibility for the government to increase the revenue.
- **Wider markets**: specialisation and trade, allows firms to sell their products to international markets, helping to build an international brand increase market shares and profits
- **Consumer sovereignty:** consumer across the globe will now be able to buy cheapa and high quality products from around the world. Because of specialisation and trade, we now can get the best chocolate from Switzerland, cheap IT services from India, oil from the Middle East and budget cars from Japan.

Disadvantages of international specialization:

- **Structural unemployment**: even though national level specialisation usually creates more jobs, there is a risk of certain types of structural unemployment to occur. As the country moves towards specialisation, the workers in the declining industries may not find suitable work for them
- **Over-exploitation of resources**: output maybe increased by over-exploiting resources. In this case today's output is increased at the cost of the future generations.
- **Negative externalities**/ social cost: There could be external costs like damage to the environment.
- **Threat of foreign competition:** industries that are not being specialised in will face more foreign competition for their products, because the country is not focusing on those industries
- **Risk of over-specialisation:** because of more international dependence on other countries for trade (they will have to sell their specialised products to other countries and buy other products they need from abroad), any global economic changes will greatly affect highly specialised countries. For e.g., this has been a problem for petroleum-exporting countries, for whom the drop in oil prices have caused major decrease in revenue. They are now trying to diversify into other products like tourism to sustain themselves
- **Strategic vulnerability:** relying on another countries for vital goods and services it needs makes a country dependent on those other countries. Political or economic changes abroad may impact the supply of goods or services available to the country.

International Trade and Globalisation

Globalisation, Free Trade and Protection

Globalization is a process of interaction and integration among the people, companies, and governments of different nations, a process driven by international trade and investment and aided by information technology [definition by: www.globalization101.org)

MULTINATIONAL CORPORATIONS (MNCS)

Businesses which **have their operations, factories and assembly plants in more than one country** are known as multinational business. Examples include Starbucks, IKEA, Toyota, Adidas etc. The country they are based in is called the home country, and the countries they operate in are called host countries.

Advantages to home country:

- MNCs create **opportunities for marketing** the products produced in the home country throughout the world
- They create **employment opportunities** to the people of home country both at home and abroad
- It aids and encourages the **economic growth** and development of the home country
- MNCs help to maintain **favourable balance of payment** of the home country in the long run as they export their products abroad

Advantages to host country:

- Provides significant **employment and training** to the labour force in the host country
- **Transfers of skills and expertise,** helping to develop the quality of the host labour force
- MNCs add to the host country **GDP** through their spending, for example with local suppliers and through capital investment
- **Competition** from MNCs acts as an incentive to domestic firms in the host country to improve their competitiveness and efficiency
- MNCs **extend consumer and business choice** in the host country

- MNCs bring with them **efficient business practices, technologies and standards** from across the world, that can influence the industries in the home country
- Profitable MNCs are a source of **significant tax revenues** for the host economy (for example on profits earned as well as payroll and sales-related taxes)

Disadvantages to home country:

- MNC's **transfer capital** from the home country to various host countries causing unfavourable balance of payment.
- MNC's **may not create employment** opportunities to the people of home country if it employs labour from other countries, perhaps due to lower costs or better skills
- As investments in foreign countries is more profitable, MNC's **may neglect the home country's industrial and economic development**.

Disadvantages to host country

- Domestic **businesses may not be able to compete** with MNC's efficiency, low costs, low prices and brand image, and may will be forced to close shop
- MNCs may **not act ethically or in a socially responsible way**, especially taking advantage of weak countries, who gain a lot from the MNCs presence in their country. For example, exploiting workers with low wages and poor working conditions in a country where labour laws are weak
- MNCs may be **accused of imposing their culture** on the host country, perhaps at the expense of the richness of local culture.
- **Profits earned by MNCs may be remitted back** to the MNC's home country rather than being reinvested in the host economy
- MNCs may make use of transfer pricing and other tax avoidance measures to significant **reduce the profits on which they pay tax** to the government in the host country

FREE TRADE AND PROTECTION

Free trade is when there are no restrictions for trade between economies.

The advantages of free trade:

- **Allows countries to benefit from specialization**: if there was no international trade, countries wouldn't be able to specialize, that is, they would have to become self-sufficient by producing all the goods and services they require. Total output would lower and costs would rise. With specialization and free trade, output, incomes and living standards will improve

- **Increases consumer choice**: consumers can now enjoy a variety of products from around the globe
- I**ncreases competition and efficiency**: international trade means that there will be more competition among firms in different countries. This would help increase efficiency
- **Creates new business opportunities**: free trade will allow businesses to produce and sell goods for overseas consumers and expand and grow their operations by doing so. Profits and revenue would rise
- **Enables firms and the economy to benefit from the best workforces, resources and technologies** from around the world
- **Increases economic inter-dependency** and thus reduces potential for international conflicts.

The disadvantages of free trade:

- **Free trade reduces opportunities for growth in less-developed economies and threatens jobs in developed economies.** Small businesses in developing countries may not be able to compete with larger foreign firms. Established businesses in developed countries may lose much of their market share as new firms keep entering the market, and lose profits and revenue
- **Causes rapid resource depletion and climate change** as more resources are used up by more firms
- Exploitation of workers and the environment: free trade has allowed firms to relocate to countries with lower costs (usually lower wages), where workers and the environment can be exploited (as health and safety and environmental laws in such countries are likely to be relaxed)
- **Income inequality worsens:** multinational firms and consumers have dominated the international supply and demands. This means that the rich keep getting richer (by buying and selling more products) while the poor lose out on products and resources.

Protection involves the use of trade barriers by governments to restrict international market access and competition. Trade barriers include:

- **Tariffs**: these are indirect taxes on the goods that make them more expensive to discourage domestic consumers from buying them
- **Subsidies**: government allows subsidies to domestic producers so that they can increase their output and reduce costs and in turn reduce prices, in the hope that

consumers will be encouraged to buy inexpensive domestic goods rather than expensive imports

- **Quotas**: this is a limit on the number of imports allowed into a country each month a year. Restricting their supply will push up their market prices and discourage consumption
- **Embargo**: this is a complete ban on imports to a country
- **Excessive quality standards**: imports may only enter a country after extensive quality checks which will be costly and so foreign producers will be discouraged to sell their products in the country, reducing imports

Reasons for protection:

- **To protect infant industries**: trade barriers will help protect infant/sunrise industries (industries that are new and slow and are hoping to grow). Lesser competition from foreign firms will increase their chances of survival and growth
- **To protect sunset industries**: sunset industries are those that are on their declining stage. They would still employ many people and closure of firms in the industry will result in high regional unemployment. Lesser competition from foreign firms will decrease their rate of decline
- **To protect strategic industries**: Strategic industries will include agriculture, energy and defence and governments will want to protect these so they are not dependent on supplies from overseas. If foreign firms supplied these, they would restrict output and raise prices.
- **To limit over-specialization**: If a country specializes in the production of too narrow a range of products and there is a great global fall in demand for one of them, then the economy is at risk. Protectionism will ensure diversification into producing more products and reduce this risk
- **To protect domestic firms from dumping**: Dumping is a kind of predatory pricing, that occurs when imports to a country at a price either below the price charged in the domestic market or below its cost of production, and result in domestic firms unable to compete and forces them to go out of business. Once this happens, the foreign firms will raise their prices. Trade barriers will eliminate the risk of dumping
- **To correct a trade imbalance**: protectionism can reduce the imports coming into a country and thus reduce expenditure on imports by domestic consumers. If a country is experiencing a deficit (imports exceeding exports), then protectionism will correct this imbalance
- Because other countries use trade barriers.

Consequences of protection:

- **They restrict consumer choice**
- **They restrict new revenue and employment opportunities**
- High levels of import tariffs and quotas will increase the costs of production at home and drive up prices, causing **cost-push inflation**
- **They protect inefficient domestic firms**: when trade barriers are used to protect domestic industries, it might include inefficient industries. Protectionism means that domestic firms can now become efficient due to lack of competition from overseas
- **Other countries may retaliate**: if a country introduces trade barriers to restrict imports from other countries, the countries that are affected by this will also impose similar trade barriers. A trade war may develop. Relations between countries will worsen
- In today's globalised society, being heavily protected and not engaging in free trade will result in the country being out of pace with the rest of the world and **unable to grow and develop, and lose out on the benefits of free trade.**

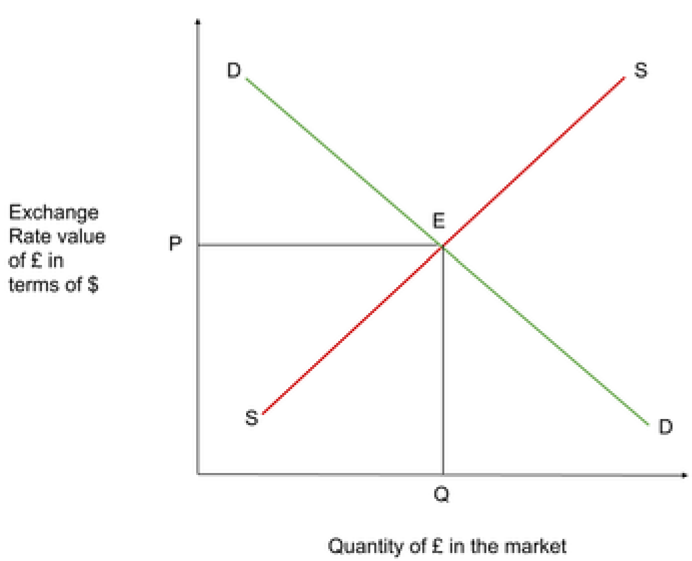
Tip: If you have trouble remembering all the pros and cons listed above, just remember this: basically, the advantages of free trade are the disadvantages of protectionism and the disadvantages of free trade are the advantages of protectionism.

International Trade and Globalisation

Foreign Exchange Rates

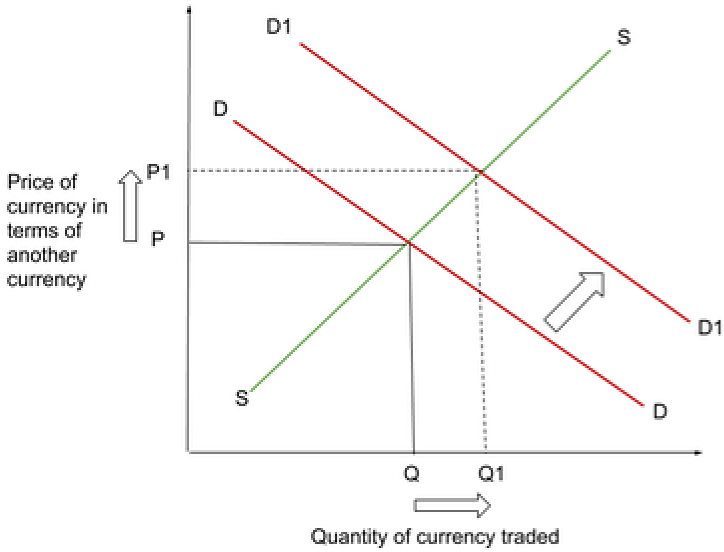
The foreign exchange rate is the value or price of a currency expressed in terms of another currency. For example, £1 = $1.2
This exchange rate will be used when these countries trade and need to convert money. So if a person were to convert £100 into dollars, he would get $120 (100 * 1.2).
The foreign exchange rate of each currency is **determined by the market demand and supply of the currency.**

- Demand for the a currency, say the pound sterling, exists as foreign consumers want to buy and import goods and services from the UK, when overseas companies buy pounds to invest in the UK etc. Here, the UK is gaining in demand and pounds, so the currency is in high demand
- Supply of a currency, say the pound sterling, exists as UK consumers want to buy and import goods and services from other countries, when UK companies buy foreign currencies to invest abroad. Here the UK is losing in demand and pounds, so the currency is in high supply (demand is low)
- The price at which demand and supply of the currency equal is the **equilibrium market foreign exchange rate** value of a currency against another currency

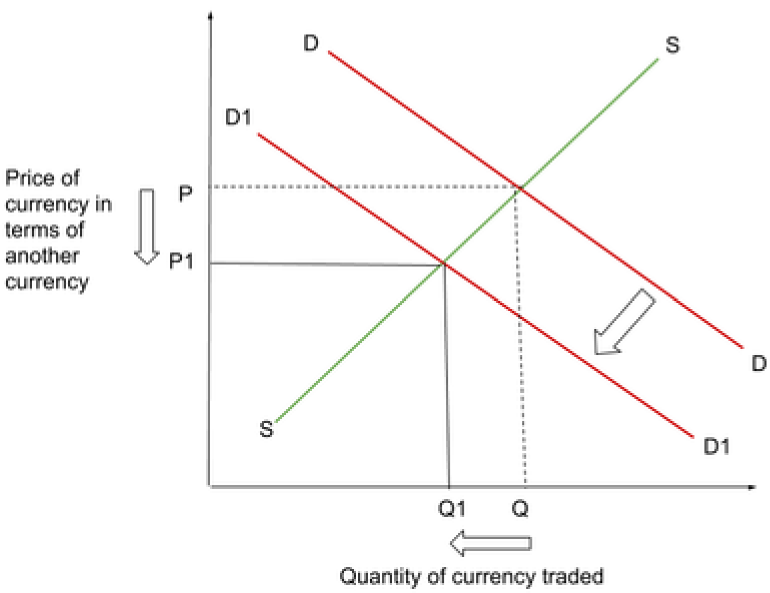


Causes of foreign exchange rates fluctuations:

- **Changes in the demand for exports and imports**: when a country's import value is more than its export value (that is a deficit), it means that more of their currency is being supplied (going out) than being demanded. The exchange rate for the country's currency will fall. If there is a surplus in the current account, the exchange rate will rise
- **Inflation**: if the inflation of a country is higher than that of other countries it trades with, the price of that country's goods in the international market will be very high compared to goods from other countries. The demand for the country's goods will fall and the so the currency demand will also fall, causing a fall in exchange rate
- **Changes in interest rate**: if a country's interest rate rises, overseas residents may be keen to save or invest money in that country. The demand for the currency will rise, and the exchange rate will rise. If interest rates fall below that of other countries, the currency will fall in value as overseas demand falls
- **FDI/MNCs:** globalisation and the economic activity of multinational companies mean that investment in overseas production plants requires the use of foreign currencies. For example, a US company with factories in UK needs to pay its labour with pound sterling, not with the US dollars, increasing the demand for the pound. Thus, inward FDI will boost the demand for a currency and increase its foreign exchange value. In contrast, outward FDI will increase the supply of a currency and cause its foreign exchange rate to fall.
- **Speculation:** foreign exchange traders and investment companies move money around the world to take advantage of higher interest rates and variations in exchange rates to earn a profit. As huge sums of money are involved (known as 'hot money'), this can cause exchange rate fluctuations, at least in the short run. If speculators lack confidence in the economy they will withdraw their investments in that country, thereby causing a fall in the value of the currency. In contrast, high confidence in the economy will invite investments and raise the foreign exchange value of the currency
- **Government intervention:** government intervention in the foreign exchange market can affect the exchange rate. For example, if greater demand for British goods causes a rise in the value of the pound, the Bank of England (UK's central bank) can sell their reserves of the pound sterling to increase it's supply and cause a fall in its value.



A rise in demand for the domestic currency (or a fall in supply) causes its exchange rate to rise



A fall in demand for the domestic currency (or a rise in supply) causes its exchange rate to fall

Consequences of foreign exchange rate fluctuations:

- **A fall in the foreign exchange rate causes import prices to rise**. Similarly, a **fall in the foreign exchange rate causes export prices to fall**. A fall in the foreign exchange rate of, say, the pound, means that now you have to pay more pounds when you're importing an American good to the UK, for example. If the initial exchange rate is $1 = £0.8, and the original price of the good was $2, you'd have to pay £1.6 ($2 * £0.8) to buy the good. Now, suppose the exchange rate

falls to $1 = £1 (a pound is now worth lesser dollars), you'd have to pay £2 ($2 * £1) to buy the good.
Similarly, a fall in the foreign exchange rate of the pound means that now you'll to get more dollars when you're exporting a British good to America. Using the initial exchange rate as described above, an export initially costing £2 means American consumers will have to pay $2.5 (£2 / £0.8) to buy it. After the exchange rate falls, they will have to pay $2 (£2 / £2).

- **A rise in the foreign exchange rate causes import prices to fall**.
Similarly, a **rise in the foreign exchange rate causes export prices to rise**.
A rise in the foreign exchange rate of, say, the pound, means that now you have to pay less pounds when you're importing an American good to the UK, for example. If the initial exchange rate is $1 = £0.8, and the original price of the good was $2, you'd have to pay £1.6 ($2 * £0.8) to buy the good. Now, suppose the exchange rate falls to $1 = £0.5 (a pound is now worth more dollars), you'd have to pay £1 ($2 * £0.5) to buy the good.
Similarly, a rise in the foreign exchange rate of the pound means that now you'll to get lesser dollars when you're exporting a British good to America. Using the initial exchange rate as described above, an export initially costing £2 means American consumers will have to pay $2.5 (£2 / £0.8) to buy it. After the exchange rate rises, they will have to pay $4 (£2 / £0.5).
- Now, if the country's export and import demands are price elastic (sensitive to price changes), a fluctuation in the exchange rate and the subsequent changes in the prices of exports and imports will change the demand for them.
A fall in exchange rate will make imports expensive and exports cheap, so import demand and spending will fall and export demand and spending will rise.
A rise in the exchange rate will make imports cheaper and exports expensive, so import demand and spending will rise and export demand and spending will fall.
- Hence, we can conclude that when PED > 1, **a fall in foreign exchange rate will improve the trade balance** (reduce deficits) of the country as exports will rise relative to imports.
- On the other hand, when PED < 1, **a rise in foreign exchange rate will worsen the trade balance** (but reduce surplus) of the country as imports will rise relative to exports.

FLOATING FOREIGN EXCHANGE RATE

This is an **exchange rate that is determined freely by market demand and supply** conditions, and so will fluctuate regularly.
The rise in the value of one currency against others, on a floating exchange rate is known as **appreciation** of the currency's exchange rate.
The fall in the value of one currency against others, on a floating exchange rate is known as **depreciation** of the currency's exchange rate

Advantages:

- **Automatic Stabilisation:** any disequilibrium in the balance of payments would be automatically corrected by a change in the exchange rate. For example, if a country suffers from a deficit in the balance of payments then, the country's currency should depreciate. This would cause the country's import demand to fall (as imports become expensive) and export demand to rise (as export prices fall). The balance of payments equilibrium would therefore be restored. Similarly, a surplus would be eliminated as the currency appreciates
- **Frees up internal policy:** a floating exchange rate allows a government to pursue internal policy objectives such as full employment and growth, not having to worry about balance of payments imbalances as they will be automatically adjusted
- **Insulated from external changes:** a floating exchange rate helps to insulate a country from inflation elsewhere. If a country were on a fixed exchange rate then it would 'import' inflation through higher import prices. A floating exchange rate would automatically adjust demand and supply in the economy to avoid such inflation
- **Don't need too much foreign reserves:** under a floating exchange rate system, there is no need to maintain large reserves to develop the economy. These reserves can therefore be used to import capital goods and other items in order to promote faster economic growth

Disadvantages:

- **Uncertainty:** since currency values fluctuate constantly, businesses, investors and consumers will be uncertain about the economy and its future. They may be lose confidence in the economy if it fluctuates too rapidly and widely
- **Lack of Investment:** the uncertainty introduced by floating exchange rates may discourage direct foreign investment. They will prefer to invest in countries with fixed exchange rate systems where they an effectively predict economic conditions and act accordingly
- **Speculation:** the day-to-day fluctuations in exchange rates may encourage speculative movements of 'hot money' from country to country, thereby causing more exchange rate fluctuations
- **Lack of Discipline:** the need to maintain an exchange rate imposes a discipline upon the national economy. With a floating exchange rate short-run problems such as domestic inflation may be ignored until they lead to a crisis.

FIXED FOREIGN EXCHANGE RATE

A fixed exchange rate is one that is fixed and controlled by the central bank, acting on behalf of the government of the country. The central bank will intervene in the market by **buying and selling its currency in the foreign exchange market** to maintain a fixed exchange rate.

A deliberate fall in the value of a fixed exchange rate is called a **devaluation**.

A deliberate rise in the value of a fixed exchange rate is called a **revaluation**.

Advantages:

- **Certainty:** since, the currency value is kept in check, there will be more certainty in the economy and businesses, consumers, investors and governments won't have to worry about the effects of automatic changes in exchange rate
- **Stability encourages investment:** a fixed exchange rate provides greater certainty and encourages firms to invest. One of the reasons Japanese firms are reluctant to invest in UK is because the pound works on a flexible exchange rate, unlike the Euro which is on a fixed system, causing uncertainty about the economy
- **Keep inflation low:** depreciation of a currency can cause inflation as demand and prices and costs for firms rise. On a fixed exchange rate, firms have an incentive to keep cutting costs to remain competitive
- **Balance of Payments stability:** since the exchange rate is not determined by market forces, sudden changes in the balance of payments will be eliminated, keeping it stable instead.

Disadvantages:

- **Conflict with other macroeconomic objectives:** to maintain a fixed level of the exchange rate may conflict with other macroeconomic objectives when the government intervenes with its policies. For example if it raises interest rates to remove the pressure of the currency to fall, economic growth might be adversely affected
- **Less flexibility:** in a fixed exchange rate, it is difficult to respond to temporary shocks. For example, if the price of oil increases, a country which is a net oil importer will see a deterioration in the current account balance of payments. But since the country operates a fixed exchange rate, it cannot devalue the currency too much and thus cannot make an effective intervention to improve the current account
- **Risk of overvaluation or undervaluation:** it is difficult to know the right rate to fix the rate at. If the rate is too high, it will make exports uncompetitive. If it is too low, it could cause inflation. It is difficult to ascertain the optimum foreign exchange rate

International Trade and Globalisation

Current Account of Balance of Payments

The Balance of payments is a record of all the monetary transactions between residents of a country and the rest of the world over a given period of time. It is divided into three main accounts: the current account, the capital account and the financial account.
(In the explanation below, we'll look at the balance of payments from the point of view of the UK)

THE CURRENT ACCOUNT

The Current account records the following:

- **The visible trade** (in goods)
- **The invisible trade** (in services)
- **Income received or made in payment for the use of factors of production**:
  - Income debits (outflows) include wages paid to overseas residents working in the UK, interests, profits and dividends paid out to overseas residents and firms who have invested in the UK.
  - income credits (inflows) include wages paid to UK residents working overseas, any interest, profits and dividends earned by UK residents and firms on investments they have in other countries.
  - **income received – income paid = net income**
- **Current transfers**, which include payments between governments for international co-operation and other transactions that **involve no direct payment or productive activity**:
  - debits (outflows) will include financial aid, donations, pension payments etc. paid to overseas residents and foreign governments and tax and excise duties paid by UK residents on foreign purchases
  - credits (inflows) will include financial aid, donations, grants, pension payments etc. received from overseas residents and foreign governments and tax and excise duties paid by overseas residents on UK purchases.
  - **transfers received – transfers paid = net transfers**

A current account example:

Item	$ (billion)
Visible exports (Xv)	784.2
Visible imports (Mv)	1230.4
Balance of trade (Xv – Mv =A)	**-446.2**
Invisible exports (Xi)	286.4
Invisible imports (Mi)	219.9
Balance on services (Xi – Mi =B)	**66.5**
Net income (C)	**21.0**
Net Current Transfers (D)	**-58.6**
Current account balance (A + B + C + D)	**-417.3**

When the current account shows a positive number, it is in **surplus** – inflows exceed outflows. When the current account shows a negative number, it is in **deficit** – outflows exceed inflows.

CURRENT ACCOUNT DEFICIT

When the financial outflows in the current account exceed its financial inflows, i.e., export demand and net incomes and transfers falls and/or import demand rises.

Causes:

- **Higher exchange rate:** if the currency is overvalued, imports will be cheaper and therefore there will be a higher quantity of imports. Exports will become uncompetitive and therefore there will be a fall in the Quantity of exports.
- **Economic growth:** if there is an increase in aggregate demand and national income increases, people will have more disposable income to consume goods. If producers cannot meet the domestic demand, consumers will have to imports goods from abroad. Thus faster economic growth enables the possibility of a current account deficit developing

- **Decline in competitiveness:** if export industries are in decline and cannot compete with foreign countries, the exports fall, ushering in a deficit. This is a major reason for many countries today experiencing current account deficits
- **Inflation:** this makes exports less competitive and imports more competitive
- **Recession in other countries:** if the country's main trading partners experience negative economic growth then they will buy less of the country's exports, worsening the current account
- **Borrowing money:** if countries are borrowing money from other countries to finance their expenditure and growth, current account deficits will develop

Consequences:

- **Low growth:** a deficit leads to lower aggregate demand and therefore slower growth

  Unemployment: deficit can lead to loss of jobs in domestic industries as there demand for exports is low and demand for imports is high
- **Lowers standard of living:** in the long run, persistent trade deficits undermine the standard of living as demand and income fall, especially if the net incomes and transfers show a negative balance
- **Capital outflow:** currency weakness can lead to investors losing confidence in the economy and taking capital away
- **Loss of foreign currency reserves:** countries may run short of vital foreign currency reserves as more foreign currency is being spent on imports and foreign currency revenues from exports is falling
- **Increased Borrowing:** countries need to borrow money or attract foreign investment in order to rectify their current account deficits. In addition, there is an opportunity cost of debt repayment, as the government cannot use this money to stimulate economic growth
- **Lower exchange rate:** a fall in demand for exports and/or a rise in the demand for imports reduces the exchange rate. While a lower exchange rate can mean exports become more price competitive, it also means that essential imports (such as oil and foodstuffs) will become more expensive. This can lead to imported inflation

The severity of these consequences depends on the size and duration of the deficit. Persistent deficits can harm the economy in the long-run as low export growth causes unemployment.

Correcting a current account deficit:

- **Do nothing because a floating exchange rate should correct it:** if there is a trade deficit, a depreciation will occur as more currency is being spent than received. Depreciation will make imports more expensive and exports cheaper. As a result, domestic demand for imports will fall and foreign demand for exports will rise, reducing the deficit

- **Use contractionary fiscal policy:** a government can cut public expenditure and increase taxes to reduce total demand in the economy, which will reduce demand for imports and improve the trade balance. However, a fall in demand may affect firms in the economy who may cut output and employment in response.
- **Use contractionary monetary policy:** a higher interest rate will attract more direct inward investments and balance and nullify the trade deficit. Higher interest rates will also make borrowing from banks more expensive and increase the incentive to save, thus discouraging consumers from spending. They can also devalue the exchange rate to improve export competitiveness and demand
- **Protectionist measures:** these measures reduce the competiveness of imports, thereby making domestic consumption more attractive. For example, tariffs raise the price of imports while quotas limit the amount of imports in the economy.

CURRENT ACCOUNT SURPLUS

When the financial inflows in the current account exceed its financial outflows, i.e., export demand and net incomes and transfers rise and/or import demand falls.

Causes:

- **Improved competitiveness**: exports have become more price competitive in the international market, due to perhaps, better labour productivity or low prices
- **Growth in foreign countries**: export demand may have risen due to trading partners experiencing growth and higher incomes
- **High foreign direct investment:** strong export growth can be the result of a high level of foreign direct investment
- **Depreciation:** a trade surplus might result from a country's depreciation of its exchange rate
- **High domestic savings rates:** high levels of domestic savings and low domestic consumption of goods and services cause more products to be exported and imports to fall
- **Closed economy:** some countries have a low share of national income taken up by imports, perhaps because of a range of tariff and non-tariff barriers

Consequences:

- **Economic growth:** net exports is a component of GDP, so a rise in exports and incomes will cause economic growth
- **Appreciation:** as exports increase, the demand for the currency increases and therefore the value of the currency increases, which will make imports more expensive and cause its demand to fall
- **Employment:** since exports have increased, jobs in the export industries will have increased too.

- **Better standards of living:** higher net incomes and transfers and export revenue make the country's citizens better off
- **Inflation:** higher demand for exports can lead to demand-pull inflation. This can diminish the international competitiveness of the country over time as the price of exports rises due to inflation

Correcting a current account surplus:

- **Do nothing because a floating exchange rate should correct it**: if there is a trade surplus, an appreciation will occur as more currency is being demanded. An appreciation will make imports cheaper and exports expensive. As a result, foreign demand for exports will fall and domestic demand for imports will rise, reducing a trade surplus
- **Use expansionary fiscal policy:** increasing public expenditure and cutting taxes can boost total demand in an economy for imported goods and services.
- **Use expansionary monetary policy:** lower interest rates will make borrowing from banks cheaper and increase the incentive to spend, thus encouraging consumers to spend on imports and correct a trade surplus
- **Remove protectionist measures**: reducing tariffs and quotas cause imports to rise and close a surplus in the current account