

Chapter 1

The fundamental economic problem arises because resources are limited while people's wants are unlimited

The fundamental economic problem means that people need to make a choice due to scarcity of resources, Governments, firms and individuals.

Making a choice involves making decisions on how to allocate resources between many competing uses.

Wants are unlimited as everyone would want something else no matter what their income is.

Needs and wants are different. Needs are resources or items necessary for survival but wants are items or resources someone can live without, it is more for a better standard of living.

Scarce resources:

- Land
- Labour
- Capital
- enterprise

Scale of preference varies widely between humans, this can be due to multiple factors like upbringing, cultures and life experiences.

Due to the scale of preference, a Luxury for one person can be considered as essential to the other.

Wants can change with age, with family size, etc.

Due to unlimited wants and scarce resources, governments, firms and individuals need to make a choice. The true cost of the choice made between alternatives is known as the Opportunity cost.

Opportunity cost is the cost of the choice of the next best thing.

Opportunity cost is the cost expressed in terms of the next best alternative that is forgone when a choice is made.

If the value of a decision is greater than the opportunity cost then it is a good decision

If the value of a decision is less than the opportunity cost then it is a bad decision:

Then allocate resources to the opportunity cost instead of the current choice (pick the other one)

The fundamental economic problem leads to three main questions that every economy has to answer:

What to produce? – Economies can't produce everything, what to produce and in what quantity

(some countries focus more on military than others)

How to produce? – Firms consider how resources are used to produce the best output. Maximum use of their resources available.

(other concerns can also come into the play, like child labour being cheap but unethical)

For whom to produce? – Governments need to decide whether everyone is going to have the more or less equal share of what is produced or will some get more than the others.

Some economies aim to make a more equal society through policies that redistribute wealth from the rich to the poor. (Eg Taxation)

(inequality can be fixed through taxation)

Different types of taxes:

Chapter 2

Economics is divided into macro economics and micro economics.

Micro economics is taking into account a particular industry

Macro economics is taking into account the entire world's economy

Economics as a social aspect is because it looks into human behaviour particularly in relation to satisfying human needs and wants.

Economics is also considered a science, this is because it involves economists putting forward and investigating theories in the same ways as scientists.

Ceteris Paribus – Other things remain equal

- only one aspect changes rest remain the same

2.3 Positive and normative statements

Economists may analyse facts without making any value judgements. For example, an economist might make these statements:

- A fall in supply of petrol leads to an increase in its price.
- A 10% increase in tourist numbers in Mauritius has created 10% more employment.
- An increase in taxation on cars results in fewer cars being sold.
- The inflation rate in 2021 is 8%.

All of the above statements refer to what will happen, based on actual evidence or observation. The economist does not give their opinion or make a value judgement. Statements like these are known as **positive statements**.

When an economist expresses an opinion or makes a value judgement within their analysis, the statement can no longer be proven. Statements that express a value judgement are referred to as **normative statements**. For example, each of the normative statements below contains a value judgement within the analysis:

- A fall in the supply of petrol should lead to an increase in its price.
- A 10% increase in tourist numbers in Mauritius is likely to create at least 15% more jobs in the tourist industry.
- An increase in taxation on cars might result in a fall in demand for new cars.
- The inflation rate of 8% in 2021 was the worst in 10 years.

Chapter 3

Economists refer to the resources available in an economy as factors of production

Factors of production are the means by which an economy produces a whole range of goods and services to meet the needs of its population

Owners of factors of production receive payments when the factors are used by others.

Factors of production:

- Land
- Labour
- Capital
- Enterprise

Physical capital – Factors of production such as machinery and factories

The quality and quantity of physical capital is said to be the most important source of economic growth in low income and lower middle-income countries

Human capital – The value of labour to the productive potential of an economy

Human capital can also apply to individuals as well as the population as a whole. It includes the skills, knowledge and experience of labour that is being used to produce goods and services. These skills might affect the future earnings of individuals and the economy. Therefore human capital is seen as an investment by individuals, employers and the government to increase the future rate of economic growth.

One of the ways in which more goods and services can be produced in an economy is through specialisation

Specialisation – is the process by which individuals, firms and economies concentrate on producing those goods and services in which they have an advantage over others.

At an individual level, like in a household, every person does their own tasks, at this level specialisation allows individuals to concentrate and do things they are best at, producing more goods and services.

However, with specialisation, even though more is produced, no one is self sufficient. Eventually everyone has to trade for other resources, As an individual who specialises, they will eventually produce a surplus, they can use this surplus to trade for the surplus produced by others.

Specialisation has resulted in an increase in standard of living.

Specialisation has disadvantages too, the pace of technological change means that there is always the possibility that the specialist skills any individual has acquired, has become useless or redundant as the economy develops.

Individuals need to be more flexible and multi skilled and must be able to move between occupations.

At regional and national levels, the change in demand of a product can influence the quantity of goods and services produced which can lead to unemployment, however policies can be adopted to combat this.

Read 3.3

Entrepreneurs organise production by putting together factors of production

They are prepared to take risks and full fill their ambitions (spending money and using money of others)

Chapter 4

The economic system of a country determines what choices are made and how they are made.

Economic system – the way in which production is organised and choices are made in an economy

The economic system of a country identifies the means by which a household, firm or a government makes decisions relating to the three questions of economics.

There are three types of economies:

Market economy – where the decisions are mostly made by the market mechanism

Planned economy – Where resources are state owned and are allocated by a central body

Mixed economy – where both the free market and the government are involved in making the decision of how to allocate resources

Market mechanism = price mechanism

Market Economy:

Resources are allocated by the forces of demand and supply through the price mechanism

Decisions on how to allocate resources are taken regularly by individuals and firms.

Government has little to no direct involvement in resource allocation

Households and firms interact as buyers and sellers

Price and the unrestricted operation of the price mechanism is vital to the way in which resources are allocated

As Long as the price mechanism is working efficiently the government will not intervene

When the price mechanism does not provide efficient allocation of resources, the government intervenes.

When the price mechanism does not work efficiently the market fails

Government provides for under produced goods like fire fighters and education and healthcare

A true market economy is an ideal and cannot be 100% real

Planned economy:

Also only theoretically possible.

The government has the central role in making all the decisions

The three main Qs are all decided by the government

In principle production is controlled by the state.

The preferences of consumers and manufacturing organisations are also controlled centrally

Central government and its organisations are responsible for the allocation of resources

Production targets are set for the main sectors of the economy (agricultural and manufacturing)

Prices and wages are also controlled by the government

Ownership of the most productive resources and property is also in the hands of the state

Productive resources - resources available to be used

Market does not have a role to play in the allocation of resources

Artificially low prices result in excess demand relative to supply.

Planned economies have an objective, to achieve a high rate of growth.

Mixed Economy:

Typical economy system

Both the private sector and the public sector have a part to play in the allocation of resources

Decisions are made by the interaction of firms, labour and the government mainly through the price mechanism

There is private ownership of productive resources, however there are also public ownerships too

Privatisation Is taking place now days – Privatisation is when the owner ship changes to private from public

This has been the case in many economies even emerging economies

Some problems of the market forces:

Many jobs are lost due to companies wanting to lower costs and so move production elsewhere.

Many new mixed economy countries emerged from planned economies, have a great foreign investment in the retail and manufacturing sectors.

Chapter 5

The quantity and quality of factors of production determines an economy's production possibility

Production possibility: the goods and services an economy can produce with the resources available to it

Production possibility curve/production possibility frontier

Any point exactly on the line or curve represents a production situation where output is maximised.

Any point on a production possibility curve is important as it represents an efficient use of resources to produce the particular combination of products

(the economy is getting all it can get given the present state of the technology)

When a point is inside the production possibility curve, it represents an inefficient allocation of resources since the economy is producing less than what it actually can with the resources available

Any point outside the production possibility curve represents a position of scarcity, this is because the economy does not have the available resources to reach this level of output

When there is a straight line in the production possibility curve:

the opportunity cost is proportional to the fall in production of product A and the increase in product B, at any time

When there is a curve, the increase in production of product A is not proportional to the fall in production of product B

When the curve is steep, more of product A is sacrificed for product B

When the curve is flat, less of product B is sacrificed to make more of product A

So when it is steep, one product increases when more of the other product decreases

When the line is flat, more of one product is made for a less sacrifice of the other product

Constant opportunity costs are due to the factors of production being equally well suited to the production of both goods (straight line)

When the factors of production for goods is different, we follow the change in production based on a curve, so as one additional product is made, the opportunity cost grows even further.

There are factors that affect the production possibility curve:

Advancements in technology

Advancements in technology for a single product

Efficiency of creating products

Efficiency of creating a single product

A right shift indicates an increase in productive capacity

A left shift indicates the productive capacity has decreased

Two main reasons why shifts occur:

- More resources become available:

This can happen when the factors of production increase, the productive capacity of an economy increases when more resources are available or when an improvement in quality of resources happens.

For example, immigration results in an increase in labour. Or an increase in capital goods or improved opportunities for enterprise.

- Technological change

Investing in a range of capital goods that will increase economic potential in the longer run

Chapter 6

Excludable = exclusive:

Where it is possible to stop someone from consuming a good or service

Eg: Putting a price onto something, Expensive theme park

A good is non excludable if it is freely available and nothing can be done to prevent its consumption

Eg: Public roads

Rivalry = rival:

Where consumption by one person of a goods or service reduces the availability of the goods or service for others

Eg: food

A good is non rival when the amount available to others does not diminish

Eg: Netflix subscription

Private goods(economic goods) are both excludable and rival

Eg: Have to be bought, reduces the ability of others buying. Food Clothing Cars and Gadgets

Public goods are non excludable and non rival

Eg: Anyone can consume, does not hinder the ability of others also consuming it. Air, defence, Knowledge

Common Goods(quasi public goods) - are non excludable but rival

Eg: Fish, Timber, coal

Club goods (artificially scarce resources, quasi public goods)– are excludable but non rival

Eg: Country club memberships, satellite tv, toll roads, YouTube Premium

Private Goods:

- The fundamental economic problem arises when dealing with private goods.
- Bought by consumers for the benefits of themselves
- Excludable
- Rival

Free Goods:

- Zero opportunity cost
- Non rival
- Non excludable

Public Goods:

- Has to be non rival
- Non excludable

Public Goods:

- The Market may not produce them
- There may be consumers ready to consume the product however there is no mechanism to guarantee the production of these goods
- Arise the problem of the free rider – happens to the non excludability characteristic
 - When people use the goods without actually paying for them (comes from taxes)
- The very existence of public goods indicates that scarce resources are not being used in a desirable way.

Merit Goods:

- Thought to be desirable
- Underprovided by the market
- Governments tend to provide them
 - As it is likely under produced and under consumed

Demerit goods:

- Thought to be undesirable
- Over Provided by the market
- Overproduced and over consumed
 - Habit forming
 - Cheap
 - Readily available

Why people consume demerit goods:

- Information failure: a situation where a consumer does not have complete knowledge to make informed decisions
- Low Income

Chapter 7

Price mechanism is essential to the allocation of Resources

Price mechanism sends a signal from the consumers to the producers

The price mechanism is self-regulating :

- Does not require intervention from the government:
 - As Long as the price mechanism is working efficiently

Market: When people come together for the purpose of exchange and trade

Demand: The quantity of a product that a consumer is willing and able to buy at different prices per period of time and other things equal, *ceteris paribus*.

Supply: The quantity of a product that a consumer is willing and able to sell at different prices per period of time and other things equal, *ceteris paribus*.

Demand:

- Quantity: is the numerical of the product that is being demanded
 - Product:
 - Item that is being traded
 - Goods and services
 - Tradeable items like foreign currency or shares
- Buyers/Consumers
- Willing to buy:
 - Want a product
 - Notional demand:
 - Buyers are willing to purchase a product but is not always backed by the ability to pay
 - Able to buy:
 - Effective demand:
 - Demand that supported by the ability to pay
- Different prices:
 - Crucial to the functioning of the market
 - As prices go up (provided no changes have occurred):
 - More people judge the product to be less worth while
 - Per period time (20 big macs sold in a min vs a week)

Demand Curve:

- Market demand – the total amount demanded by consumers

We collect statistical data about consumer preferences and quantity of pcs people are willing and able to buy at various prices per period of time:

- While other things are the same/equal. Ceteris paribus

Demand curve has a negative or inverse relationship between price and quantity demanded

It goes downwards

Linear relationship

Other factors affecting demand:

- Income
- The price and availability
- Fashion, taste, attitudes

Income:

Positive relation between income and demand

Generally increase in the ability to pay leads to an increase in demand and vice versa

Normal Goods:

- Goods where the quantity demanded increases with income
- Cars, housing, restraint meals and quality clothing

Inferior Goods:

- As income rises, less is purchased
- As income decreases, more is purchased
- Packet noodles, low grade clothing
- As consumers become better off
- Recession

Related Products:

- Substitutes:
 - Alternative goods that satisfy the same want or need
 - Example coca cola and pepsi
 - A change in price of one is likely to have an effect for the quantity demanded of the other or the other similar products (substitutes)
 - Strong and Weak substitutes:
 - Strong substitutes means just 2 products exist
 - Weak substitutes – Many substitutes
- Complements:
 - Goods with joint demand
 - Goods are consumed together
 - Cars and fuel
- consumers attitudes can be:
 - Built up over time
 - Influenced by what they read or heard
 - What advertisers would like the consumer to believe

Supply:

- Refers to the quantity of a product that suppliers are willing and able to sell at different prices over a period of time
- Quantity:
 - Numerical amount of the product being sold
- Product: Any tradable item
- Suppliers: Sellers of the product
- Willing and able to sell:
 - Companies must be able to gain from sales
 - Assumed that companies will want to sell more when the price rises
 - Positive relationship

Supply Curve:

- A positive or direct relationship between price and quantity supplied:
 - Price increase → quantity supplied increase
 - Price decrease → quantity supplied decrease
- Casual relation:
 - Price change causes quantity supplied change
 - Linear relationship:
 - Continuous relationship
 - Time based relationship

Factors affecting supply:

- Price
- Costs – replacing labour with capital (decreases), how much output, how much exp
- Change in price of other products: changes in prices of competitors
- Government:
 - Tax – can cause reduction in price
 - Subsidies – increase in supply:
 - direct payments (lumpsum) made by the government to producers
 - Uncertain weather conditions, infestations

Shifts VS Movement along the curves:

- Movement:
 - There are no multiple curve
 - There are only changes in prices
 - Extension in the supply or demand curve:
 - And increase in quantity demanded or supplied
 - Contraction in the supply or demand curve:
 - Decrease in the quantity demanded or supplied
- Shifts:
 - There is another curve
 - Only done by other factors except price
 - Right shift:
 - Increase in demand or supply
 - left shift:
 - decrease in demand or supply

Shifts in demand curve:

- Apart from the price of the product, all other factors remain same
- When this assumption is relaxed:
 - Non price factors cause a demand shift
 - Right indicates an increase in demand (good)
 - Left indicates a decrease in demand (bad)
- Right Shift may mean:
 - increase in income
 - Increase in price of substitutes
 - A decrease in price of compliments
 - A favourable change in fashion, taste and attitudes
- Left shift may mean:
 - Decrease in income
 - Decrease in price of substitutes
 - Increase in price of compliments
 - Unfavourable change in fashion, taste and attitudes

Shifts in Supply Curve:

- Assumption that other than price every other factor remains the same
- If this assumption is relaxed and there are other reasons, there will be a shift:
 - Right shift (good):
 - Decrease in costs of production
 - Growth in the size of industry
 - Decrease in indirect tax
 - Increase in subsidies
 - Left shift (bad):
 - Increase in costs of production
 - Decline in the size of the industry
 - Increase in tax
 - Decrease in subsidies

Chapter 8

Elasticity: - a numerical measure of responsiveness of one variable following a change in another variable, *ceteris paribus*.

Elastic: small change in price results in a greater change in quantity demanded

Inelastic: Greater change in price results in a lower change in quantity demanded

Price Elasticity of Demand:

- Measures the responsiveness of the quantity demanded for a product following a change in the price of the product
- Change in Quantity demanded by a change in price
- PED Calculation:
 - $\% \text{ change in quantity demanded} / \% \text{ change in price}$
 - $PED > 1$ Elastic
 - $PED < 1$ Inelastic
 - Calculation answer is often negative:
 - Due to the negative relationship between price and quantity demanded
- Perfectly inelastic:
 - Where a change in price has no effect on the quantity demanded
 - Consumers are willing to buy/spend no matter the change in price
 - PED:
 - $0/10 = 0$
 - When $PED = 0$
- Perfectly Elastic:
 - Infinite / 10% = infinite
 - When the price is at a certain number, consumers are not willing to buy, however once reached a certain point, consumers are willing to buy all that is available.

Unit elasticity:

- Where the change in price is relative to the change in quantity demanded
- Changes by the same percentage

Factors affecting price elasticity of demand:

- The availability and attractiveness of substitute
 - Greater the number
- Closely substitutable
 - The narrower the definition of market:
 - PED will be greater
- Quality and extent to which information is available
- Extent to which the product is considered a necessity or a luxury
 - Addictive properties of the product
- Brand image
- The relative expense of the product:
 - Rise in price leads to a decline of purchasing power of an income and ability to pay for products:
 - The larger the extent to which the price has increased, the less the purchasing power of the income
 - Example: - 10% increase in price of a flight vs 10% increase in price of bus
- Time period (short run or long run):
 - Eventually everything goes from inelastic to elastic
 - Short run:
 - Consumers may find it difficult to change spending habits
 - If the price goes up and stays up:
 - Given enough time consumers look for other substitutes

Income elasticity of Demand: - Measures the responsiveness of the quantity demanded for a product following a change in income

How quantity demanded changes with a change in income

$YED = \frac{\% \text{change in quantity demanded}}{\% \text{change in income}}$

Same rules apply

Create Income/quantity graphs

Classification of goods in relation to income:

Four types of goods:

- Normal goods: quantity demanded increases as income increases
 - Majority products are like this
 - YED is positive
 - Between 0 and 1:
 - Greater percentage change in income than quantity demanded
 - Inelastic
- Inferior goods: quantity demanded decreases as income increases (vice versa)
 - Consumers usually use their higher income to buy higher quality items:
 - Replacing their inferior substitutes
 - YED is negative
 - The relation is negative (one increases other decreases)
- Necessity goods: quantity demanded is unlikely to change with a change in income
 - Foods
 - YED positive but close to 0
 - People still purchase these goods no matter their level of income
 - Inelastic
- Superior or luxury goods:
 - YED greater than 1
 - Normal good
 - Jewellery

Cross elasticity of demand: measures the responsiveness of the quantity demanded for one product following a change in the price of another product

$XED = \% \text{ change in quantity demanded of prod A} / \% \text{ change in price of product B}$

Can be elastic or inelastic

XED positive:

- Goods are substitutes
- Increase in price of one good causes an increase in demand for another good

XED Negative:

- Products are compliments
- Increase in price of one good decreases the quantity demanded for another good
- Movie ticket price increase will lead to less popcorn being purchased

PED can be used to explain:

- Price variation in market
- Impact of changing prices on sales revenue and consumer expenditure
- Effects of changes in indirect tax on government income

Chapter 9:

Price elasticity of supply: measures the responsiveness of the change in quantity supplied following a change in price

The supply can be:

- Individual business
- Individual producer
- Market supply of an industry

$PES = \% \text{ change in quantity supplied} / \% \text{ change in price of the product}$

Supply curve is always upwards sloping:

- So PES is always positive

Elastic: Quantity supplied responds more than proportionally to a change in price

Inelastic: Quantity supplied responds less than proportionally to a change in price

Perfectly inelastic:

- If it is not possible for the producer to increase or decrease the supply regardless of change in price:
 - $PES = 0$
 - The Q_s is the only quantity that the supplier can supply at the given time

Perfectly Elastic:

- When a producer can produce more goods but can only sell at one price

Factors influencing price elasticity of supply:

- Availability of stocks:
 - The ease with which a business can accumulate or reduce stocks (inv)
 - Allows companies to meet variation in demand:
 - Through changing output rather than price of the product:
 - The more easily this is achieved the higher the PES
- Time period:
 - Time period in which they can increase their production
 - Short run:
 - Companies With spare production capacity:
 - Tend to have a higher PES (elastic)
 - Shortages will often lead to a Lower PES (inelastic)
- Productive capacity:
 - Over time, there is more investment leading to an increase in productive capacity, Businesses also can leave or join overtime, increases flexibility of supply

Chapter 10

Equilibrium: a situation where there is no tendency to change in a market

Quantity demanded = quantity supplied

The point where the consumer is ready to buy and the supplier is ready to sell at

Market is always at equilibrium however not all the time.

Disequilibrium: a situation where demand and supply are not equal in the market:

- Real world markets:
 - Keep trying to reach equilibrium
- Where there is excess supply:
 - Indicates clearing price is too high
 - Obvious move:
 - Suppliers should reduce the price
 - Eventually new equilibrium is achieved

Price was at p , goes to p_1 , so supply increased from q to q_2 . However the quantity demanded was at q_1 at p_1 , so there was excess supply from q_1 to q_2 . eventually the supplier has to reduce the price as excess supply indicates that the clearing price is too high, so consumers start purchasing again and so eventually market reaches **new equilibrium position** and **market clears**.

Where there is excess demand :

- Sign to producers to increase the price
 - Fewer customers are willing to buy at new price
 - Price continues to increase until new equilibrium position is reached and clears

Excess supply: quantity demanded is less than quantity supplied:

- Leads to stocking, How should they react?
 - Firms can cut prices and reduce supply:
 - Reduced prices attract older customers willing to pay lower prices
 - Disequilibrium starts to narrow
 - Assuming no other factors affect Supply and demand
 - Eventually market price moves back to EQ

Excess Demand: quantity demanded is greater than quantity supplied

- Low prices leads to excess demand:
 - Leads to inventory being sold out quick
 - Companies exist to make a profit, so they increase prices
 - This means that consumers are less willing to buy
 - Leading to new eq

Speed of adjustment depends on how long it takes producers and consumers to realise the new prices they are satisfied with.

Effects of shifts:

- Shifts occur when there is a non price factor
- Right shift is always increase
- Left shift is always decrease

Demand:

- Right: Increase in demand
- Left: Decrease in demand

Causes of demand curve shift:

- Income/ability to pay:
 - Purchasing power of an individual/ level of income
 - Availability of loans and credit
- Price and availability of the related products
 - For substitutes:
 - Change in price of one
 - Will effect the demand of many others
 - For compliments:
 - Rise in price of one
 - Reduces quantity demanded for the product and its associate
- Fashion, taste and attitudes

Shifts in supply curve :

- Right shift increase in supply
- Left shift decrease in supply

Causes of shifts:

- Costs associated with supply
 - Wage rates
 - Worker productivity
 - Raw material and component prices
 - Equipment maintenance costs
 - Distribution costs
 - Changes in technology
 - Changes in prices of other products:
 - Increase in price of a competitor will lead to an increase in sales for you
 - Vice versa
- Size and nature of the industry:
 - If the industry increases due to more firms or bigger firms:
 - More competition: as it effects the price all companies are willing to accept
 - Right shift
- Government policy:
 - Taxes: left shift
 - subsidies: right shift

Relationships between demands:

- Functions of price in allocating resources:
 - Rationing: where a producer limits the supply of products in the market to ensure the products remain exclusive
 - a producer may choose to limit his products:
 - to remain exclusive in the market
 - likely to have a higher price
 - jewellery

Chapter 11

Those who receive more satisfaction will be willing to pay more for the product

Most products already have a fixed price, firms are unable to change them no matter the customer's satisfaction level.

Consumer Surplus: - the difference between the price a consumer is willing to pay for a product and its actual market price

-There are people who are prepared to pay higher than the market price

Some people want goods at any price eg- world cup tickets

A fall in market price would lead to an increase in consumer surplus

When the price falls, it applies to existing customers too

Producer surplus: the difference between the price a producer is willing to accept and what is actually paid

Deals with the supply curve

Chapter 12

When markets work efficiently they produce the best allocation of resources – ideal situation

Market failure: happens when the free market does not make the best use of scarce resources

It is also an inefficient allocation of goods and services in the market

Market failure also starts to occur as economies grow larger and more complex.

Market failure also occurs when the price mechanism fails to take into account all of the costs and benefits that are necessary to produce or consume goods.

Markets are not perfect due to inefficient production and consumers not having perfect information to be able to make informed choices

Situation where market failure occurs, and requires government intervention:

- Lack of public goods
- Underproduction of merit goods
- Overconsumption of demerit goods
- Information failure

NON PROVISION OF PUBLIC GOODS:

The free rider problem: means that people can enjoy the use of public goods without contributing to its cost.

It is obvious that the private sector will not be interested in making public goods as there is no opportunity to make a profit from their investments. When left to the free market, public goods will not be provided for despite the benefits they give to those who consume it. It is for this reason that the government needs to intervene and fund the production of public goods out of their tax revenue in order to provide these goods for free of charge to the public.

However, this raises an issue of opportunity cost, since the tax revenue is limited and could be spent on other sectors of the government.

OVERCONSUMPTION OF DEMERIT GOODS:

This mainly happens due to information failure, demerit goods tend to be overproduced, and so over consumed, and people tend to consume these due to inadequate information about the goods such as tobacco. This is why the government tends to intervene in this market.

Governments have passed laws against smoking in public areas. They have also forced manufacturers to portray the health degradation through graphical photographs on packaging. Governments reason that such actions will promote the well being of consumers and protect the health of the public too. Other reasons for government intervention can also be to promote a much more productive workforce in order to raise output levels and efficiency of workers. Also to reduce the amount of patients that have to be treated with lung related issues in order to reduce spending on treating such diseases. These reasons are more relevant than the reduced tax revenue due to reduced sales of tobacco.

UNDER CONSUMPTION OF MERIT GOODS:

Merit goods are under consumed due to information failure on the consumer end. The problem with merit goods is that the private sector might not produce enough of it so the quantity demanded is less than the actual supply of it. Access is restricted to those who can afford to pay such prices. This is called market failure. The government wants the quantity supplied to be higher and at affordable prices too so it can appeal to everyone as it is a merit good.

For this the government can either completely take over this sector and then provide these services or the less expensive option would be to provide these services along with the private sector so the ones who can afford the private sector services can consume there while others can consume what the government provides.

Governments can also set maximum prices, to be effective the maximum price should be under equilibrium. This is done in order to benefit consumers for example, rent control, this is done in order to provide affordable housing for families on low income. It also attracts important people like nurses and teachers to areas with shortages due to high cost of housing. (price ceiling)

Governments can also set minimum prices, to be effective the minimum price must be above equilibrium. This is done to benefit producers such as agricultural farmers. By raising the minimum price the government secures the incomes of farmers and can be more certain about security of future supplies as now it will be less likely to need to buy crops in the international market. The downside to price flooring is that now the consumers are worse off since the price is now above equilibrium and fewer goods are being traded, it can also be argued that this is inefficient use of resources.

Chapter 13

Ad Valorem Tax is a tax that is included in the final price itself for example GST or VAT.

Specific Taxes are in the form of a fixed amount per unit purchased

Indirect taxes are used in order to discourage the consumption and production of demerit goods such as cigarettes. These taxes are originally placed on to producers however it is passed on to consumers through higher prices in the market.

Indirect taxes are to be paid by the producer, manufacturer, retailers, wholesalers to the government. This means a higher price needs to be charged to the customer.

When dealing with a specific tax, it can be represented by shifting the demand curve to the left.

Can also show the incidence of the indirect tax. (the burden borne by the producer and consumer)

The consumer now has to pay a higher price of P_1 instead of P and the producer now only receives the price of P_2 instead of the original P . The Burden on the producer is higher in this case due to a larger area.

The extent to which the producer is able to pass the indirect tax on to the consumer is dependent on the elasticity of demand. If the demand is inelastic then the producer finds it easy to pass on the tax burden on to the consumer as they will still buy the goods even if the price changes by a great factor. However if the demand is elastic then the producer will have to absorb a lot of the indirect tax as the consumer will easily just purchase the goods less if the prices rise too much.

Another form of government intervention in the market is through subsidies, these are direct payments made by the government to the producers of goods and services.

Reasons to provide subsidies:

- To keep down the market prices for essential goods
- To encourage greater consumption of merit goods
- To contribute to a more equitable distribution of income
- To provide services that would not be provided by the free market
- To raise producer income, especially farmers
- To provide an opportunity for exporters to sell more goods
- To reduce dependence on imports by paying subsidies to domestic producers of close substitutes

When paid to a producer it has the opposite effect to that of an indirect tax. It is the equivalent of fall in costs for the producers and so results in a rightward shift of the supply curve.

The producer benefits and so does the consumer from subsidies, as the consumer has to pay lower prices than the original price due to shift in equilibrium to a lower price, and the consumers receive a higher price than what they would have been willing to sell it at.

The allocation of subsidies from limited government tax revenue is a controversial issue, it not only interferes with the workings market mechanism but also has the implications for opportunity cost. Subsidy payment usually comes out of tax revenue where there will be other conflicting demands for funding. It can also lead to government failure.

Estimating the size of subsidy to be provided is another further problem.

Subsidy payment is also a lumpsum payment and cannot be easily linked to incomes and the ability to pay.

However, when dealing with food, the cost of food is the same for a high income group and a low income group, so it is important to assess who benefits from a particular subsidy.

Market failure can occur where the price of a good in the free market is too high. This can prompt the government to impose a maximum price.

This can be seen as a way of assisting low income families, reducing inequality when it comes to consuming a particular product.

However when a maximum price is set, producers are unwilling to sell at such low prices and so the quantity supplied decreases, however the consumer now would like to buy the goods at the new price since it is a lower price and so demand increases to more than the original amount, and so a shortage is created as there is a difference between quantity supplied and quantity demanded .

Minimum prices are set above the equilibrium, government can apply a minimum price for multiple reasons like:

- To discourage the consumption of demerit goods
- To increase the income of farmers
- To protect workers, by setting a minimum wage

When a minimum price is set, the consumer is less willing to purchase the goods as they now have to pay a higher price, so quantity demanded falls, however the producer is now more willing to produce more goods as the price has increased, this means that there is a increase in quantity supplied and so there is a difference between quantity demanded and quantity supplied leading to an excess supply.

Because of the minimum price, it can cause producers to be inefficient, as a producer is now less willing to reduce costs as it could result in him needing to increase the costs back up again, by not decreasing costs he gains an advantage over his low cost competitor as now he needs to raise his prices up again.

There is a danger that an informal market may develop, the high rate of taxation and high minimum price means that these products are attractive for non market trading. Consumers will be more than happy to buy goods at a lower price.

Chapter 15:

National Income: the sumtotal (notebook)

People earn income from producing the output

- Income is then spent on the output
 - Total output=total income=total expenditure

An economy is doing well if it is growing at a sustained and sustainable rate

Government measures the total output of a country to assess the performance of an economy

National income statistics are used to compare the performance of countries:

- measures a country's economic activity in terms of it's output, income and expenditure

Higher output has the potential to increase people's living standards

If an economy is growing at a slower rate than what it is thought to be capable off:

- the government can introduce policies to stimulate growth of the economy

Both the Level and rate of growth should be taken into account:

- USA grows from 19.1 trillion to 20 trillion
- Malaysia grows from 100 billion to 300 billion
 - USA has a higher level
 - Malaysia has a higher rate of growth

National income is measured on a yearly basis and is compared in both short run and long run

Gross Domestic product (GDP) and Gross national income (GNI):

Gross Domestic Product: the total output produced by a country

- Most widely used measure of national income
- What is produced, earned and spent in an economy
- Total value of products produced using the Factors of income of that specific economy

Gross National Income: Gross domestic product + Net income from abroad

- Measures more than just what is produced:
 - Measures what is earned regardless of where it is earned by the firms and residents of a country
- Net income from abroad:
 - Net Property Income from abroad – receipts of profits, rent and interest earned on the ownership of foreign assets minus the payments of profit, rent and interests to non-residents
 - Profits, rent, interest from foreign (–) profits, rent, interest to foreign
 - Compensation of employees: income of workers who work in another country for a short period of time
 - Net taxes less subsidies on products
 - Gross national disposable income:
 - Income sent by relatives of people working abroad (–) income sent by relatives of people working in this country

GDP – Total output of a country, Has to be made in the country using the the factors of production

$GNI = GDP + \text{National income}$

National Income is calculated by 4 things:

- Net Property income from abroad
- Compensation of employees
- Net tax minus subsidies
- Gross national disposable income

Differences between GDP and GNI:

Most country's GDP and GNI are relatively similar

For some however there is a clear difference:

- Some countries have higher GDP
 - Foreign multinational companies and foreign workers make an important contribution to the output of these countries
- Some countries have higher GNI
 - Receive a net inflow of property income from abroad
 - Citizens working abroad

Measuring GDP:

Output Method: measures the value of the output by industries

Also called production method

It is Important to avoid counting the same output twice.

- Tyres sold to cars, cars sells the car WITH the tyres

To avoid double counting:

- Totalling the value of the final goods or services
- Value added at each stage of production:
 - Value added – difference between the price at which products are sold (-) price of the goods and services used in the production of the products

Income Method: a way of measuring GDP by totalling all the incomes earned in producing the country's output

Is based on the costs involved in producing output

Costs include:

- Wages
- Rent
- Interest
- Profits

Represents income paid to factors of production ^^

Important:

- Only include the payments received in return to providing a good or service
- Do not include transfer payments:
 - Government grants like subsidies
 - tax (that is our payment not our receipt)

Expenditure method: Calculating GDP by totalling all the spending on the country's output

Calculated by adding:

- Consumer expenditure
- Government spending on goods and services
- Total investment
- Changes in stocks
- Net exports (exports – imports)

Transfer payments are not included

What is produced in a year will either be sold or added to stocks

Expenditure + exports-imports

Market Price – prices paid by consumers, they take into account indirect taxes and subsidies

- Charged to consumers
- Include taxes and subsidies

Basic prices/Factor Costs – prices charged by producers before the addition of indirect taxes and deduction of subsidies

- Prices that would be charges without government intervention
- Equals to income paid to the factors of production

GDP and GNI Include Gross investment: gives us total investment

- Total spending on capital goods
- Includes output of capital goods used to replace older capital goods

Net Domestic Product (NDP) – GDP (-) Depreciation/capital consumption

Net National Income (NNI) – GNI (-) depreciation

Net investment - gives an indication whether the country's ability to produce goods and services in the future will increase, stay the same or decrease

Chapter 16

Chapter 17 Aggregate Demand and supply analysis

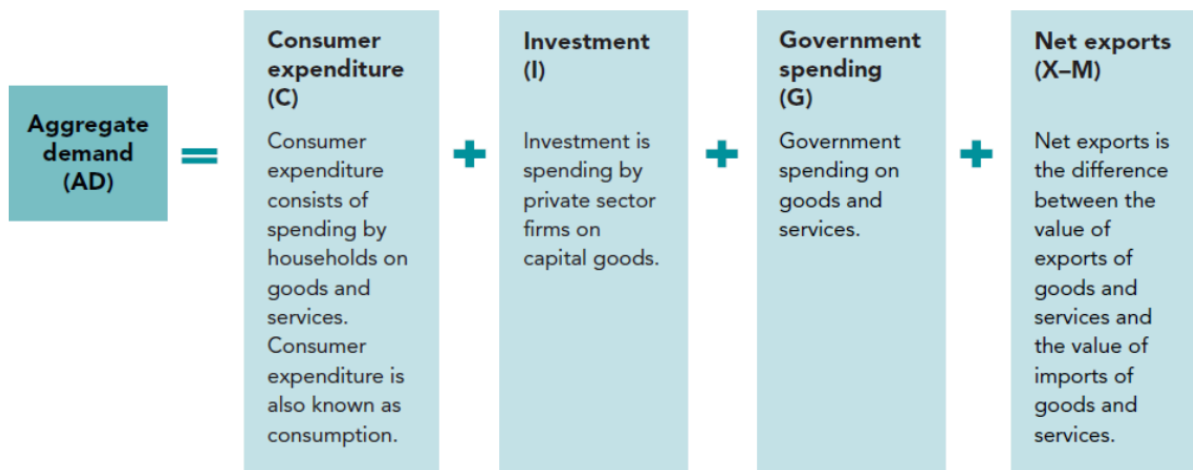
Aggregate Demand - the total demand for an economy's goods and services at a given price level in a given time period

Aggregate demand, total spending of:

- Consumers (household)
- Firms
- Government
- Net Exports

describe the total spending of consumers (households), firms and the government plus foreigners' spending on the country's exports minus spending by the country's consumers, firms and government on imports.

Aggregate demand consists of four components, as shown in Figure 17.2.



Determinants that influence components of aggregate demand:

1. Consumer expenditure:

- Spending by household on goods and services
- To satisfy current wants
- Main influence is level of disposable income
 - Disposable income - income after taxes, free to use as we wish
 - As income rises, spending rises, rich spend more than poor
 - Poor person, has to spend most if not all of his income to meet current needs
 - Dissaving - consumer expenditure exceeds consumer income, with people or countries needing to draw up on past saving or borrowings
 - When income rises income can be saved
 - Savings - disposable income minus consumer expenditure
- Distribution of income
 - Example: increase in direct taxes rates and state benefits, will lead to greater consumer expenditure
 - When rich people lose income, they are unlikely to cut spending significantly
 - Low income people who gain more will spend more of the extra
- Interest rate
- Availability of credit
- Expectation
- Wealth

Example of all of the above

Households will also usually spend more when interest rates are low. This is because the return from saving will be reduced, buying goods on credit will be cheaper and households that have borrowed before to buy a house, for example, will have more money to spend. If it becomes easier to obtain loans, total spending is likely to increase. However, people are unlikely to borrow and to increase their spending if they are pessimistic about the future. Indeed, expectations about future economic prospects are thought to be a major influence on consumer expenditure. When people become more optimistic that their future jobs are secure and that their incomes will rise, they are likely to increase their spending. An increase in wealth, which may result, for example, from a rise in the value of houses or the price of shares, will also probably increase consumer expenditure.

Investment:

- Spending on capital goods
- Private sector spendings by firms on capital goods like factories, offices and machines.
- Amount of private sector investment influenced by:
 - Consumer demand
 - If it rises, firms may want to buy more capital goods to expand their capacity
 - Rate of interest
 - Fall interest, will encourage more investment, as the cost of investment falls
 - Firms that borrow to buy capital goods, will find it cheaper
 - Firms that use retained profits will find that opportunity cost of investment has been reduced
 - Firms will expect higher sales as lower interests raise consumer demand
 - Technology
 - Cost of capital goods
 - Expectations:

As with consumer expenditure, expectations can play a key role in determining investment. When firms are optimistic that economic conditions are improving and demand for their products will rise, they will be encouraged to raise their investment. Governments can also seek to increase private sector investment by cutting corporate tax (the tax on company profits) and by providing investment subsidies.
 - Government policy

Government Spending:

- The total local and national government expenditure on goods and services

Government spending includes expenditure on providing merit goods, such as education and healthcare, and public goods, such as defence. It includes, for instance, medicines used in state hospitals, school equipment, military aircraft and government investment in infrastructure.

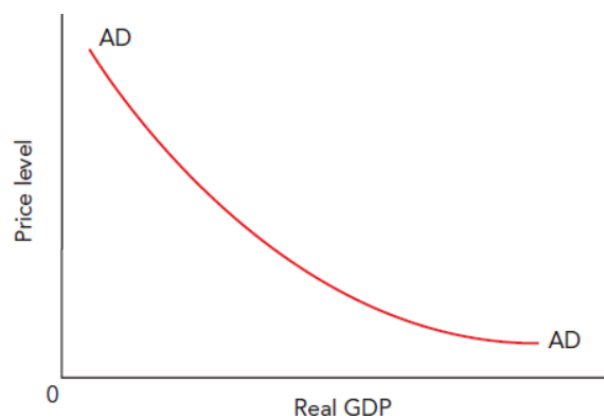
Net Exports: Exports - imports

- Level of net exports is influenced by the country's GDP, other countries' GDPs, the relative price and quality competitiveness of the country's products and its exchange rate
- When GDP of a country rises, Demand for imports increases
- Some products can be diverted from export market into domestic market
- Income rise abroad, can increase demand for a country's exports
- Level of exchange rate can be a key influence on net exports
 - If the exchange rate falls in value
 - Country's exports become cheaper and imports become expensive

- If demand for exports and imports is elastic
 - Export revenue will rise while import revenue will fall, causing net exports to fall

17.3 The aggregate demand curve

The aggregate demand (AD) curve shows the different quantities of total demand for the economy's products at different prices. A rise in the price level will cause a contraction in aggregate demand and a fall in the price level will result in an extension in aggregate demand. The downward sloping nature of the AD curve is shown in Figure 17.3.



So why does aggregate demand fall when the price level rises and rise when the price level falls? There are three reasons:

- 1** The wealth effect: A rise in the price level will reduce the amount of goods and services that people's wealth can buy. The purchasing power of savings held in the form of bank accounts and other financial assets will fall.
- 2** The international effect: A rise in the price level will reduce demand for net exports as exports will become less price competitive while imports will become more price competitive.
- 3** The interest rate effect: A rise in the price level will increase demand for money to pay the higher prices. This, in turn, will increase the interest rate. A higher interest rate usually results in a reduction in consumption and investment.

Shifts in the aggregate demand curve

While a change in the price level causes a movement along the AD curve, if any non-price level influence causes aggregate demand to change, then the whole AD curve will shift. A shift to the left indicates a decrease in aggregate demand while a shift to the right shows an increase in aggregate demand, as shown in Figure 17.4.

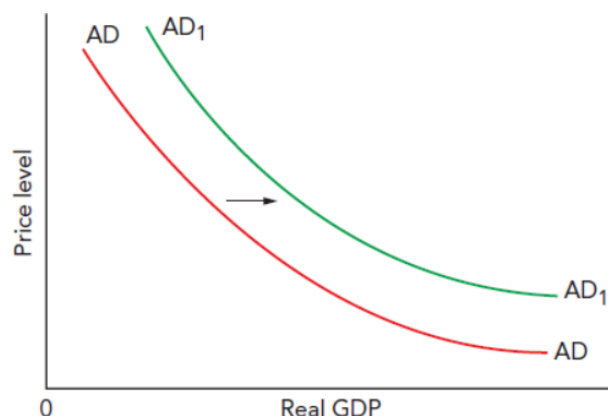


Figure 17.4: An increase in aggregate demand

A change in any non-price level influence on consumption, investment, government spending and net exports will shift the AD curve. Examples that would cause an increase in aggregate demand include:

- consumer expenditure – a rise in consumer confidence, a cut in income tax, an increase in wealth, a rise in the money supply, an increase in population
- investment – a rise in business confidence, a cut in corporate tax, advances in technology
- government spending – a desire to stimulate economic activity, a desire to win political support
- net exports – a fall in the exchange rate, a rise in the quality of domestically produced products, an increase in incomes abroad.

Aggregate Supply:

- The total output (real GDP) that producers in an economy are willing and able to supply at a given price level in a given time period
- Is total planned supply of all the producers in the country

Short run aggregate supply - the output of an economy that will be supplied when there has not been enough time for the prices of factors of production to change

Long run aggregate supply - the total output of a country supplied in the period when prices of factors of production have fully adjusted

The short-run aggregate supply curve

The short-run aggregate supply curve slopes up from left to right as shown in Figure 17.5.



Figure 17.5: The short-run aggregate supply curve

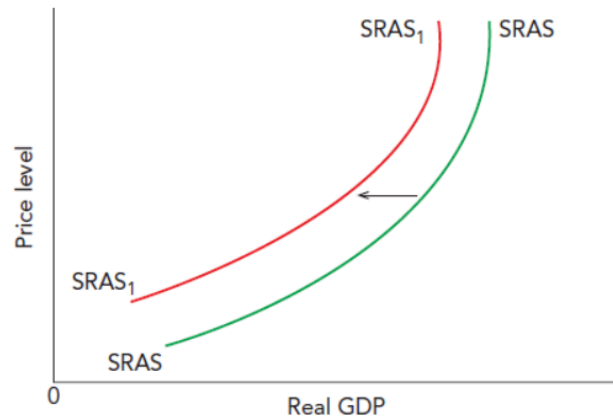
As the price level rises, producers are willing and able to supply more goods and services. There are three possible reasons for this positive relationship:

- 1** The profit effect: As the price level (that is, the price of goods and services) increases, the prices of factors of production such as wages do not change. So as the price level rises, the gap between output and input prices widens and the amount of profit increases.
- 2** The cost effect: It is assumed that wage rates, raw material costs and other input prices remain unchanged along an individual SRAS curve. However, **average costs** may rise as output increases. This is because, for example, overtime payments may have to be paid and costs will be involved in recruiting more workers. To cover any extra costs that may be involved in producing a higher output, producers will require higher prices.
- 3** The misinterpretation effect: Producers may confuse changes in the price level with changes in relative prices. They may think that a rise in the price they receive for their products indicates that their own product is becoming more popular. As a result, they may be encouraged to produce more.

Shifts in the short-run aggregate supply curve

While a change in the price level will cause a movement along the short-run aggregate supply curve, there are four main causes of a shift in the SRAS curve:

- 1** A change in the price of factors of production: A rise in wage rates, not matched by an increase in labour productivity, and raw material costs will cause a decrease in SRAS, shifting the curve to the left as illustrated in Figure 17.6.
- 2** A change in taxes on firms: A reduction in corporation tax or indirect taxes will cause an increase in SRAS.
- 3** A change in factor productivity/quality of resources: A rise in labour productivity and/or capital productivity will cause an increase in aggregate supply both in the short and long run.
- 4** A change in the quantity of resources: In the short run the supply of inputs may be influenced by **supply-side shocks** including natural disasters. These shocks may not have a significant impact on productive potential in the long run.



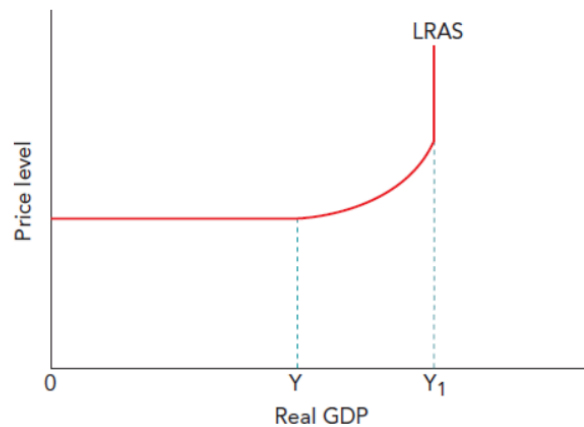
Long run aggregate supply:

The shape of the long-run aggregate supply curve

The long-run aggregate supply curve shows the relationship between real GDP and changes in the price level when there has been time for input prices to adjust to changes in aggregate demand.

A group of economists known as **Keynesians** often represent the LRAS curve as perfectly elastic at low rates of output, then upward sloping over a range of output and finally perfectly inelastic. This is to emphasise their view that, in the long run, an economy can operate at any level of output and not necessarily at full capacity. Figure 17.7 shows that from 0 to Y , output can be raised without increasing the price level.

When output and hence employment are low, firms can attract more resources without raising their prices. There is time for input prices to change but, due to the low level of aggregate demand, they do not. For example, when unemployment is high, the offer of a job may be sufficient to attract new workers.



As output rises from Y to Y_1 , firms begin to experience shortages of inputs and bid up wages, raw material prices and the price of capital equipment. When output reaches Y_1 , the economy is producing the maximum output it can make with existing resources.

Another group of economists, called **new classical economists**, illustrate the LRAS curve as a vertical line. This is because they think that in the long run the economy will operate at full capacity. This version of the LRAS curve is shown in Figure 17.8.

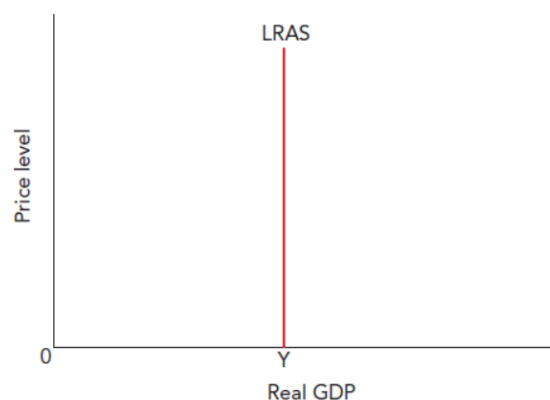


Figure 17.8: The new classical long-run aggregate supply curve

Shifts in the LRAS curve

Both Keynesian and new classical economists agree that the causes of a shift in the LRAS curve are a change in the quantity and/or quality of resources (factor productivity). Both of these will increase the productive potential of an economy.

The causes of an increase in the quantity of resources in the long run are:

- Net immigration: Net immigration will increase the size of the labour force if the immigrants are of working age.
- An increase in the retirement age: This will increase the size of the labour force. A number of countries have raised the age at which people can receive a state pension and some of these countries plan to raise it even further in the future as life expectancy increases.
- More women entering the labour force: The proportion of women who work varies from country to country. For example, in 2020, only 21% of women of working age were in the labour force in Saudi Arabia, while in Norway the equivalent figure was 72%.
- Net investment: If gross investment (total investment) exceeds depreciation (capital goods that have to be replaced because they have become worn out or out of date) there will be additions to the capital stock.
- Discovery of new resources: The discovery of, for instance, new oil fields or gold mines can increase a country's productive potential.
- Land reclamation (the creation of new land from the sea): For instance, in recent years, Dubai has added considerably to its land area by reclaiming land on which it has built apartments, hotels, marinas, theme parks and beaches.

The two main causes of an increase in the quality of resources are:

- 1** improved education and training – this will increase the skills of workers and so raise labour productivity
- 2** advances in technology – these both reduce costs of production and increase productive capacity.

New classical economists think that a rise in aggregate demand may increase output in the short run by encouraging firms to make more intensive use of their existing resources. Workers may be asked to work overtime and capital equipment may be operated for long periods before undertaking routine maintenance. In the long run, however, this more intensive use of resources will raise costs of production. The economy will move onto a new SRAS curve and back to the LRAS curve. Output will return to the initial level but at a higher price level, as shown in Figure 17.9.

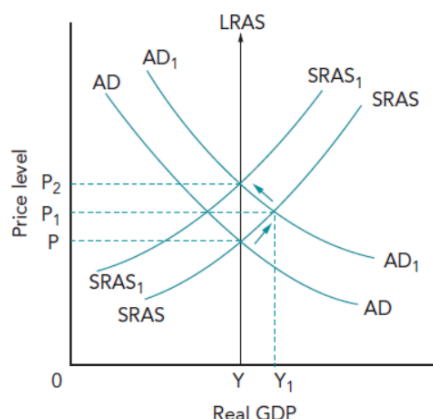


Figure 17.9: New classical view of an increase in aggregate demand

17.5 Macroequilibrium and disequilibrium

The equilibrium level of output and the price level are determined where aggregate demand is equal to aggregate supply. The **macroeconomic equilibrium** is illustrated by the point where the AD and AS curves intersect, as shown in Figure 17.11.

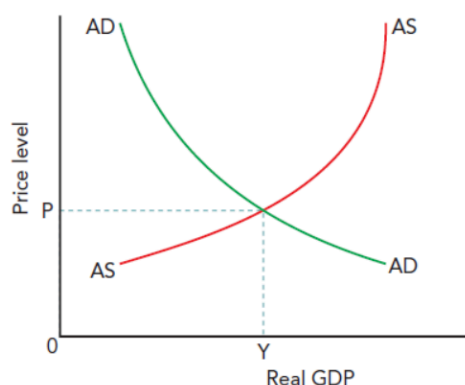


Figure 17.11: Macroeconomic equilibrium. The point of equilibrium is where AD and AS intersect

If the price level was initially below P , there would be macro disequilibrium. The excess demand would push the price level back up to the equilibrium level. If the price level was above P , some goods and services would not be sold and firms would have to cut their prices.

Changes in aggregate demand and aggregate supply will move the economy to a new macroeconomic position. Where that position will be depends on the direction of the change, the size of the change and the initial level of economic activity. For example, an economy may initially be operating below but close to its productive potential. In this case, an increase in aggregate demand may increase output, employment and the price level.

Chapter 18

Economic growth is a key indicator of macroeconomic performance

Economic growth is an increase in an economy's output

Economic growth rate is the **annual percentage change in output**

For people to enjoy more goods and services:

- Output has to increase by more than any growth in population
 - GDP per head (per capita) would increase

Economic Growth and Economic Development are different

It was hoped that an increase in Economic growth would lead to a **Trickle Down Effect**:

- The purchase or investment of a massive firm will create demand for more jobs and resources and so going all the way down to lower income jobs and providing economic benefit to them too.
 - Does not actually increase quality of life or standard of living
 - You can still increase standards of living without economic development:
 - If there is a more equal distribution of income or a reduction in pollution
 - **Economic development**: an increase in welfare and quality of life

Economic Growth is measured in terms of changes in **real GDP** - the country's output

output. The economic growth rate is the percentage change in real GDP from one time period to another, usually a year. Government statisticians first measure GDP in the prices operating at the time. They then take out the effects of changes in the price level to get real GDP.

Nominal (or money) GDP - GDP measured in current prices, prices operating in the year in which output is produced

Could give a misleading impression of how well a country is performing.

- One year the GDP can be 5 Billion, 5 dollars x 5 billion products and the next it could be 6 dollars for the same 5 billion products
 - So we convert to **Real GDP** - total output measured at constant prices

Inflation is accounted for when calculating Real GDP

The price index used to convert nominal into real GDP is called the **GDP deflator**, which measures the prices of products produced, rather than consumed, in a country. So it includes the prices of capital goods as well as consumer products and includes the price of exports but excludes the price of imports.

$$\text{Real GDP} = \text{nominal GDP} \times \frac{\text{price index in base year}}{\text{price index in current year}}$$
$$\$900 \text{ billion} \times \frac{100}{120} = \$750 \text{ billion}$$

Causes and consequences of economic growth:

If there is spare capacity:

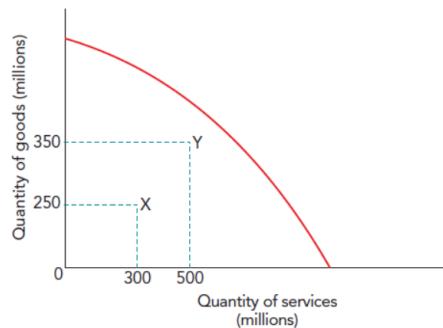
- Output can increase
 - As a result of increase in aggregate demand

Greater consumer confidence may lead to higher consumer expenditure and so an increase in aggregate demand

Ways of increasing output:

- Increase in government spending
- Decrease in taxes
- Decrease in rate of interest
 - More factors of production employed

factors of production being employed and output rising. Making more use of existing resources can be shown on a production possibility curve diagram, as shown in Figure 18.2.



In order to achieve economic growth that can be sustained over time

- Necessary for productive capacity and aggregate supply to increase
 - **More resources**
 - **Better Quality Resources**

Quantity of resources:

Population increase and Net immigration:

- Supply of labour
- Supply of entrepreneurs

A rise in Retirement age or fall in age of leaving school

Government policies like:

- Deregulation - less government interference in an industry
- Privatisation - handing over public sector businesses to private sector

Supply of capital goods can increase:

- Net investment
- Firms buying more capital goods than what are needed to replace those capital goods

Quantity of land may increase:

- Discoveries of, Examples:
 - New oil fields
 - Gold mines

Quality of resources:

Increases productivity of factor inputs

Quality of labour and entrepreneurship can be improved by:

- Education
- Training
- healthcare

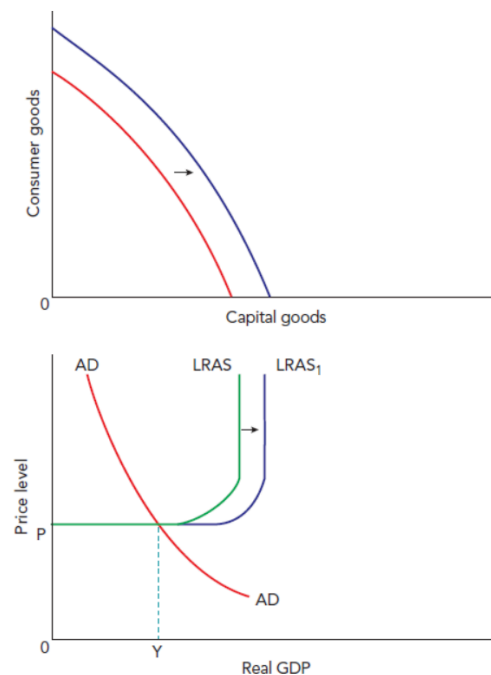
Capital goods quality:

- Increases as technology advances

Quality of land:

- Fertilisers
- Irrigation
- Drainage systems

Figure 18.4 shows productive capacity increasing using both a production possibility curve and an AD/AS diagram. Both diagrams illustrate an increase in the maximum output the economy is capable of producing. The first diagram shows that the production possibility curve has shifted to the right. The ability of the economy to make both consumer goods and capital goods has increased. It is now possible to produce a higher maximum combination of the two types of good. The second diagram also shows an increase in the economy's productive capacity. This time it is illustrated by a shift of the LRAS curve to the right.



much as it is capable of making. It is wasting resources. There may be, for instance, unemployed workers and unused machines. It would be possible to produce more of one type of good without having to give up any of the other type of good.

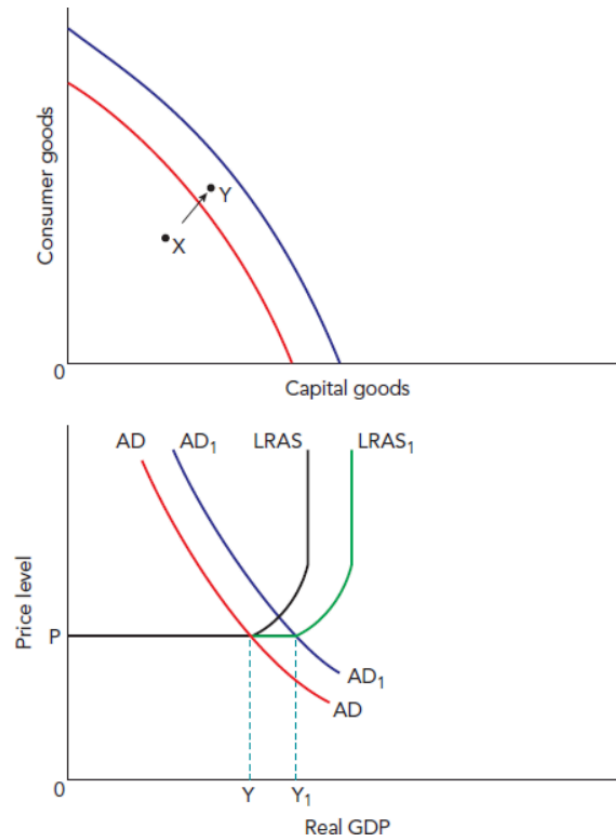


Figure 18.5: Economic growth resulting from a combination of higher aggregate demand and aggregate supply

The second diagram also shows both productive capacity and output has increased. The shift to the right in the AD and LRAS curves raises the country's output from Y to Y_1 . Again, however, the economy is not operating at maximum capacity either when it is making Y or Y_1 . Maximum output would be achieved if the AD curve cuts the LRAS curve on the vertical part of the LRAS curve.

Economic growth can be negative:

- It is possible for a country's Real GDP to fall
- **Recession - a decline in real GDP over at least two consecutive quarters**

Economic Growth in low income countries:

Main obstacle:

- Opportunity cost of allocating resources from their current use to somewhere else
 - Research and development included
- Producing more Capital goods may mean sacrificing consumer goods in the short run:
 - Decrease in living standards

China development:

- Increase in exports
- Increase in investment in the country

Costs of economic Growth:

- Economy running at full capacity
 - Opportunity cost
- Producing more capital goods
 - Increase country's productive capacity
 - Resources will have to be allocated to producing capital goods instead of consumer goods
 - Current consumption of consumer goods will have to be reduced
 - Short run problem
 - Long run - investment will increase output of both
- Increased stress and anxiety
- Workers may have to change their occupation
 - Some may find it difficult to cope
- Increased working hours
- Pressure to come up with new ideas and improvements
- Depletion of natural resources

Benefits of economic growth;

- Increase in goods and services
 - Raises living standards
- Easier to help the poor
 - Higher incomes means more spending
 - More spending means more tax revenue for the government
 - Greater benefits for the poor
 - Better housing
 - Better education
 - Better health care
 - Without increased output and income, government might have to raise taxes
 - Reduces living standards
- Raise in employment
 - Higher aggregate demand
 - A rise in Real GDP
 - Creates extra jobs
 - Higher aggregate supply
 - Country's products becomes more internationally competitive
 - Creates extra jobs
- Stable rate of economic growth
 - Encourages investment
- Can increase a country's power and prestige
- Essential for low income countries to combat poverty

Chapter 19 Unemployment

Unemployment occurs - when people who are willing and able to work can not find a job

Not everyone is unemployed:

- Children are too young to work
- Adults can be retired
- University adults
- Homemakers - people who look after the household of their own family
- Sick People

People who are not working (never worked) and trying to find employment:

- Economically inactive
 - Not part of the labour force
 - Labour force - the employed and the unemployed

People who are unemployed are part of the labour force

- They are considered Economically Active
- They are an economic resource that is currently not being used

Labour force - total number of workers who are available for work

- Those people who can contribute to the production of goods and services

Amount of labour force depends on:

- Demographic
- Economic social
- Cultural factors
 - School leaving age
 - people who remain in full time education above the school leaving age
 - Retirement age
 - Proportion of women who join the labour force

A country with a larger number of people in the working age is likely to have a larger labour force than a country with less people in the working age.

Labour force participation rate - the proportion of the population who are either working or actively seeking work

- Proportion of the total population that are of working age and who are either working or actively seeking work
- Percentage of the total population of working age who are actually classified as part of the labour force

Most economies the rate is between 50-70%

Why Labour force participation rate may be low in some countries:

- Higher participation rate in higher education
- Large proportion an early retirement
- Participation of women in the labour force:
 - Constrained due to social and cultural factors

The level of unemployment and the rate of unemployment:

Level of unemployment - refers to the number of workers unemployed.

Unemployment rate - unemployed workers as a percentage of the labour force

$$\text{Unemployment rate} = \frac{\text{Number of people unemployed}}{\text{Number of people in the labour force}} \times 100$$

The level and rate of unemployment may move in the same direction, but not always

The government may decide to measure the employment rate:

- Employed workers as a percentage of population of people of working age

-And the labour force participation rate

The employment rate and the unemployment rate do not add up to 100%. This is because the employment rate is the proportion of the working age population who are in work and not the **proportion** of the labour force in work.

19.4 The stock and flow of unemployment

A stock is measured at a particular time period whereas a flow is measured over time. The level of unemployment and the unemployment rate show unemployment at a particular time period. They are a snapshot of unemployment at a certain point in time. They do not show the exact situation as people move into and out of unemployment.

The number of people unemployed may stay the same over a period of months. This does not necessarily mean that it is the same people, because some workers will have become unemployed over the time period while others will have found jobs or will have left the labour force. One reason why some people leave the labour force is because they become **discouraged workers**, giving up on the chances of finding a job.

The main reasons why people may enter and why they may leave the state of unemployment are shown in Figure 19.3.

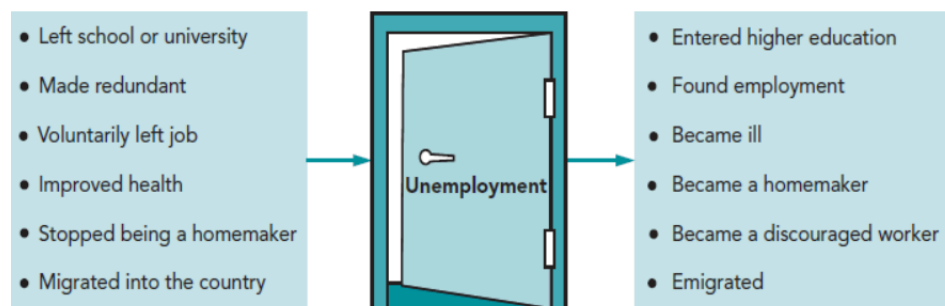


Figure 19.3: The main reasons why people may enter or leave unemployment

Measures of Unemployment:

Claimant count measure:

- A measure of unemployment based on those claiming unemployment benefits

Cheap and quick

Based on information the government collects as it pays out benefits

Figures obtained may not be entirely accurate:

- Can be over or under stated
- May omit unemployed people
- May include people who are not actually unemployed
- Some receiving benefits, may not be actively seeking for employment, illegal claiming
- Some who are looking for employment but don't come to register for benefits
- Too young or too old
- Entitled ones, who choose not to claim
- Full time students looking for work
- Non employment income is too high (those who's)

Labour force survey method:

- A measure of unemployment based on a survey that identifies people who are actively seeking a job

The **labour force survey measure** involves conducting a survey asking people if they are employed, unemployed or economically inactive.

Widely used more than the claimant count method

Conducts a survey:

- Using the international labour organisation definition of unemployment
Labour Organisation (ILO) definition of unemployment. The definition includes as unemployed all people of working age who, in a specified period, are without work, but who are available for work in the next two weeks and who are seeking paid employment.

The labour force measure picks up some of the groups not included in the claimant count. It also has the advantage that it is based on internationally agreed concepts and definitions, so makes international comparisons easier. More information is found on, for example, the qualifications job seekers have. However, the data are more expensive and time-consuming to collect than the claimant count measure. Also, as the data are based on a sample survey, they are subject to **sampling error** and to the practical problems of data collection.

Causes of unemployment:

Three types of unemployment:

- Frictional
- Structural
- Cyclical

Frictional:

- Unemployment which is temporary
- When workers are in between jobs
- Voluntary unemployment :
 - When workers are not willing to accept jobs at the current wage rate and working conditions
 - Might be influenced due to unemployment benefits being valued against low wage rates
 - If workers can gain more money by unemployment benefits, they would rather stay unemployed
- Search unemployment:
 - Unemployment that exists when people are searching for jobs they are willing to accept
 - When workers do not accept their first job offers
 - Spend time to look for a better paying job
 - **The provision of more and better quality information may reduce search unemployment**
- Casual Unemployment:
 - When people have left one short term job and before they take up another short term job
 - Out of work between periods of employment
 - actors , supply teachers, construction workers

In the case of **seasonal unemployment**, demand for workers fluctuates according to the time of the year. During periods of the year, people working in, for example, the tourism, hospitality, building and farming industries may be out of work.

Structural unemployment:

- Arises due to changes in structure of economic activity
 - Structural unemployment** arises due to changes in the structure of the economy. Over time, the pattern of demand and supply changes. Demand for some products decreases while demand for other products increases. Some industries expand and some industries contract. Methods of production change, often driven by advances in technology. During this time, there may be a mismatch between job vacancies and the skills, qualifications, experience and geographical location of those who have lost their jobs. If workers cannot move from one industry to another industry, due to a lack of geographical or occupational immobility, they may stay structurally unemployed for some time.
- Regional unemployment:
 - Unemployment arising from a decline in job vacancies in a particular area of the country
 - Can just be concentrated in one area
- Technological unemployment:
 - Caused by technological advances
 - Introduction of new labour saving techniques
 - Drones for delivery (same day)
- International unemployment:
 - When a country loses its international competitiveness in producing a product or products
 - Demand switches from domestic industries to more competitive foreign industries

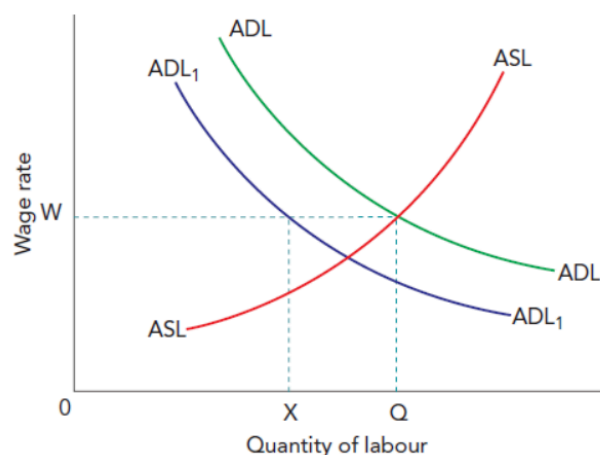
For instance, the number of steel workers in the UK has fallen significantly over the past 40 years as the UK steel industry has declined. In contrast, during this period, the Chinese steel industry has expanded, creating more jobs.

Both of these types arise due to problems on the supply side of the economy

Cyclical unemployment:

- Raised due to a lack of aggregate demand
- Demand deficit unemployment
- Affects the whole economy
- Job losses across a range of industries

range of industries. Figure 19.7 shows the labour market initially in equilibrium at a wage rate of W . Then as a result of a fall in aggregate demand, firms reduce output and aggregate demand for labour shifts to ADL_1 . If workers resist wage cuts, demand-deficient unemployment XQ will exist.



- **Figure 19.7:** Cyclical unemployment

Even if wage rates fall, this type of unemployment may persist. This is because a cut in wages would reduce demand for goods and services as people would have less money to spend, which would cause firms to reduce both their output further and make more workers redundant (lose their jobs).

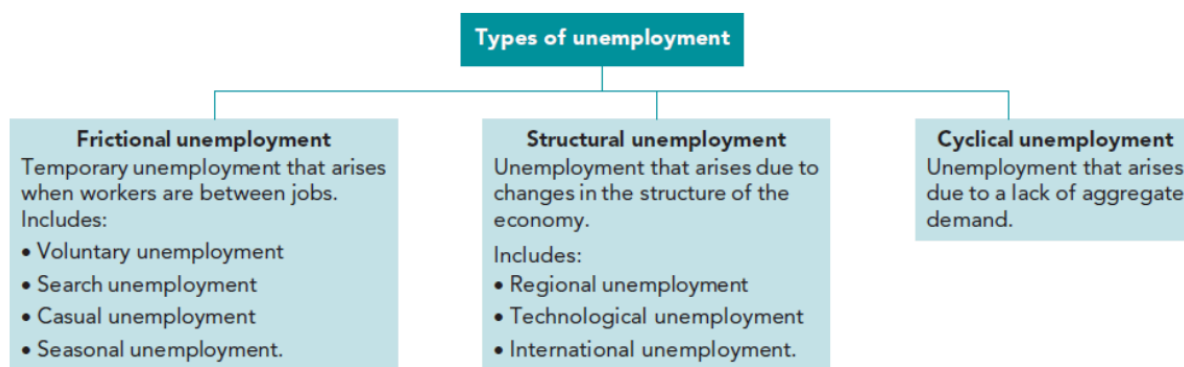


Figure 19.6: The main types of unemployment

Consequences of unemployment:

- Workers who lose their jobs, experience a fall in income
- Unemployed will find it harder to find work, the longer they stay unemployed:
 - Miss out on training
 - Out of touch with technological advances
 - May lose confidence
 - Decline in physical and mental well being
- A small chance:
 - A period of frictional or structural unemployment, may give them the opportunity to search for a job which they enjoy more and may be better paid

Firms wanting to expand may have a greater choice of potential workers. Frictional unemployment allows the economy to respond quicker to changes in demand and supply conditions, with workers moving from declining to expanding industries. Firms may also benefit from workers not requesting wage rises for fear of losing their jobs. Firms may, however, suffer from lower demand for their goods and services.

The economy will experience an opportunity cost. Output will be below its potential level. If the unemployed were still working, more goods and services would be produced and living standards would be higher. The tax revenue received by the government will be lower than with a higher level of employment. If state benefits are paid by the government, there will be an increase in government spending on the benefits which could have been put to other purposes.

The Significance of Unemployment:

Effects of unemployment depend significantly on:

- Rate
- Duration
- Type

Rate:

high rate of unemployment means that the economy is producing well inside its production possibility curve, forgoing a large quantity of output.

Duration:

Unemployment is also more significant the longer the workers are unemployed. The income of the long-term unemployed will be low. They may suffer poor mental health because of the stress of being out of work.

The chances of workers gaining employment tends to fall the longer they are out of work. This is for a number of reasons. The skills of the unemployed may become outdated, they may lose confidence and some may become discouraged workers. Employers may also be reluctant to employ those who have been out of work for a relatively long time.

Types:

Frictional:

- Considered the least serious type
- Some level of frictional unemployment is unavoidable in a changing economy

Cyclical:

- Can be extremely serious
- Can have a high rate
- Can last a long time

Governments usually consider that the harmful effects of unemployment outweigh any beneficial effects. This is why they seek to keep employment as low as possible. This does not mean zero unemployment, because a certain level of unemployment will always exist. The demand and supply of labour is always changing, with some workers having a time gap between leaving one job and taking up another job. What governments want to achieve is to avoid structural and cyclical unemployment and to keep frictional unemployment as low as possible.

Low unemployment is not always a sign of a strong economy. Some workers may be in low-paid and insecure jobs. Other workers may be experiencing **underemployment**. They may be in part-time jobs when they want full-time jobs or they may be in jobs that do not fully match their talents.

The reasons for a fall in a country's unemployment rate must also be closely examined. If the fall results from previously unemployed workers gaining good quality jobs, it is likely to be beneficial. However, this is unlikely to be the case if the reduction in the rate has been caused by the unemployed giving up on trying to find work.

Unemployment is not usually equally spread. Unemployment rates can vary between genders, age groups, ethnic background, regions and skills.

