



POWER NOTES

IGCSE ECONOMICS

UPDATED TO 2023-2025 SYLLABUS

1. The Basic Economic Problem

1.1. The Nature of the Economic Problem

- Unlimited wants and limited resources
- The scarcity of resources is the basic economic problem
- Wants will grow more than resources

Economic and Free Goods

- Economic good. A good or service that requires resources to produce and has a degree of scarcity and, therefore, an opportunity cost.
- Free good. A good or service that is not scarce and is available in abundance. For example, the air we breathe.

1.2. The factors of production

- Resources that are used to make goods and services

CELL

- Land: natural resources used in production (e.g. soil)
- Labour: human resources used in the production of goods/services (e.g. workers)
- Capital: the manufactured resources that are used to produce goods/services (e.g. machines)
- Enterprise: a business owner who take risk, make decision and combine other factors of production to produce goods and services.

Rewards for Factors of Production

- Land: Rent
- Labour: Wages
- Capital: Interest
- Enterprise: Profit

Mobility of Factors

- Land is geographically immobile and occupationally mobile.
- Labour is both geographically and occupationally mobile.
- Enterprise the most mobile factor of production.

Geographical mobility	Occupational mobility
Land is geographically immobile as it cannot be moved from one place to another.	Land is occupationally mobile as it can be used for different purposes eg: grow crops, build a school.
Labour is geographically mobile – can reallocate and work in different places Might not be willing to move due to family ties, cost of living.	Labour is occupationally mobile – can work in different industry eg: work as a teacher or banker but vary depending on the skills and educational level.

Changes in the Quantity or the Quality of Factors of Production

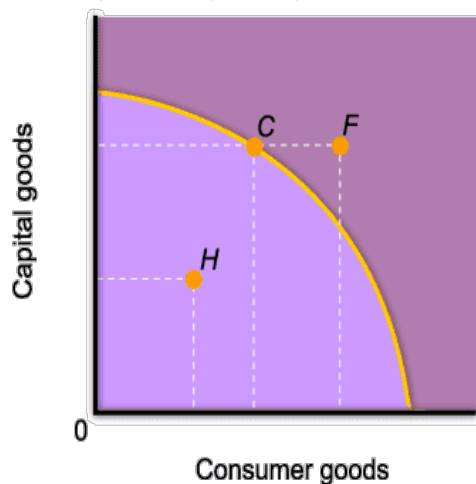
- Migration/education/healthcare (Labour)
- Weather Conditions (Land)
- Government policies (Enterprise)
- New technology (Capital)

1.3. Opportunity cost

- The next best alternative forgone while choosing the uses of a resource.
- Choosing one use will always mean giving up the opportunity to use resources in another way, & the loss of the next best goods & services they might have produced instead.
- Example 1: Land / resources used for growing wheat may be used to keep cows reducing the amount of wheat that can be produced.
- Example 2: An increase in government spending on higher education would leave less funds available to spend on alternatives e.g. healthcare/defence.

1.4. Production possibility curve diagrams (PPC)

- PPC shows the maximum output an economy can produce given a fully employed resources.



- All the points on the PPC shows maximum production for example C.
- A point within the curve signifies like H, represents inefficiency/unemployment/under-production.
- A point outside the curve, like F, represents impossible production due to the lack of resources.

Movement in PPC and Shift of PPC

Movement in PPC	Shift in PPC
<p>Movement along the PPC is when the resources utilized are moved from one product to another. For example, the movement from Point A to Point B is shown in the above diagram.</p>	<p>The shift of PPC occurs when the PPC curve is moved. This may be due to the discovery of new materials or better technology which causes an outward shift of the PPC or a decrease in resources due to natural disasters or war which causes an inward shift of the PPC.</p>

2. The allocation of resources

2.1. Microeconomics and macroeconomics

Microeconomics

- It is a study focus on individual markets / economic agents e.g. individuals, households, and firms.
- Example – demand and supply for cars.

Macroeconomics

- It is a study of the whole economy.
- Example - Governments policy on the tax rates, unemployment, exchange rate.

2.2. The role of markets in allocating resources

- Resource allocation is determined by market forces of demand and supply.

Key Resources Allocation Decisions

The basic economic problem of scarcity creates three key questions

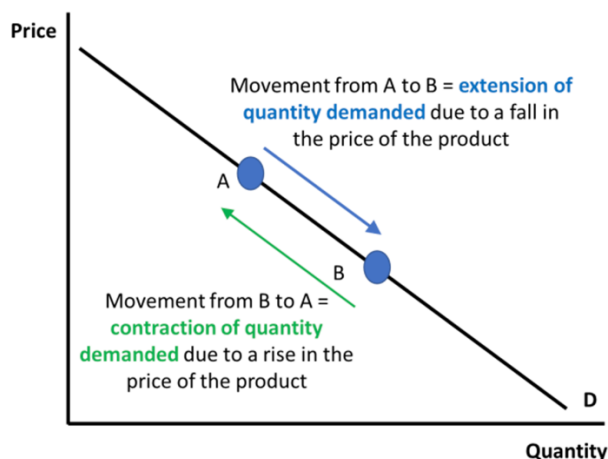
- What to produce?
- How to produce?
- For whom to produce?

Role of price mechanism in a market system

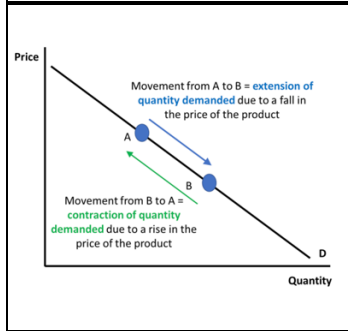
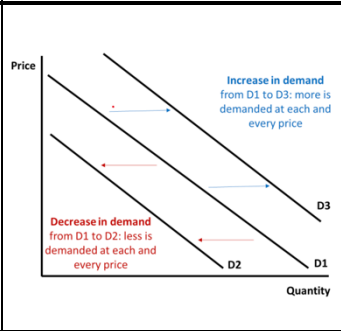
- An increase in demand will increase price. This will provide a financial incentive to supply more of the product due to profit motive and the resources will move away from less popular products.
- An increase in supply will reduce price. This will lead to a rise in demand resulting in more resources being devoted to the product.
- Consumers make the decisions and will encourage firms to use the most cost-efficient methods of production.

2.3. Demand

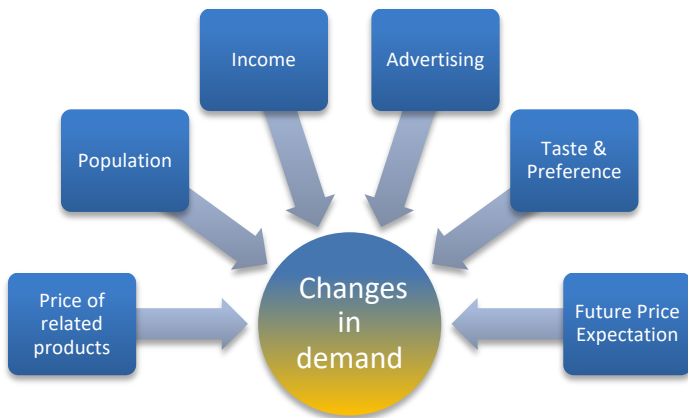
- Demand refers to the willingness and ability of customers to buy a good or service in a given period.
- The individual demand the demand of one individual or firm.
- The market demand represents the total of all individual demands.



higher price of a good (P) = lower quantity demanded (Qd)
 lower price of a good (P) = higher quantity demanded (Qd)
 Inverse relationship between price and quantity demanded

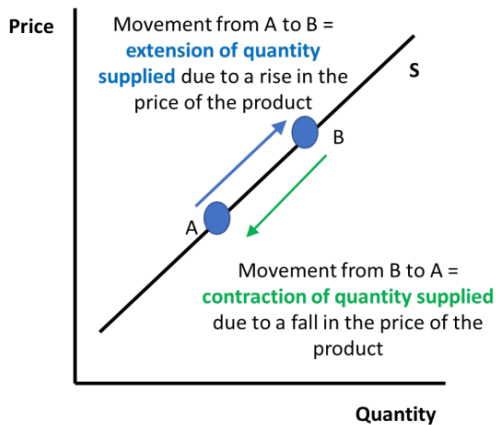
Movement along the curve	Shift of the curve
	
<p>A change in quantity demanded is caused by a <u>change in the PRICE of the product</u>. Quantity demanded rises when price falls. It is shown by a movement along the demand curve.</p>	<p>A change in demand is caused by: <u>OTHER FACTORS</u>. An increase in demand causes the demand curve to shift rightwards, and a decrease in demand shifts the curve towards the left.</p>

Factors that affect demand



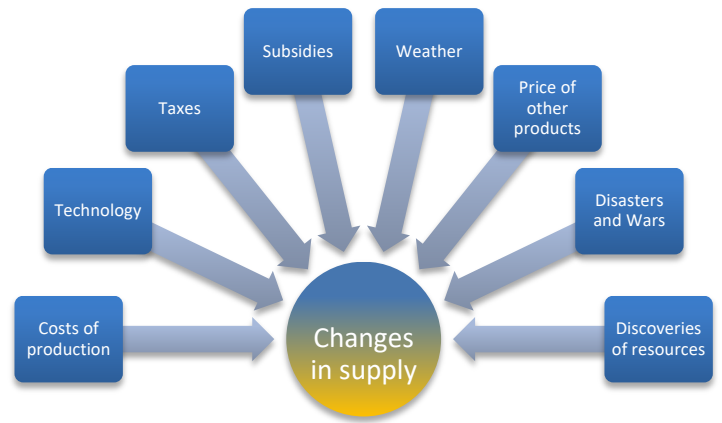
2.4. Supply

- Supply refers to the willingness and ability to sell a product at a given price/ in a given time period.



higher price of a good (P) = higher quantity supplied (Qs)
 lower price of a good (P) = lower quantity supplied (Qs)
 Positive relationship between price and quantity supplied

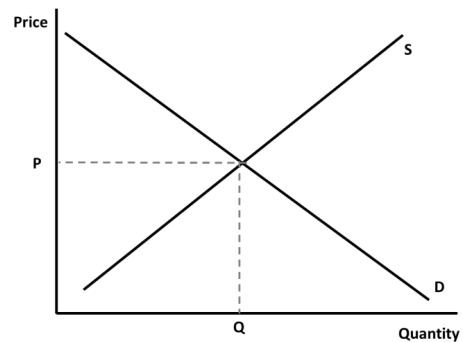
Factors that affect supply



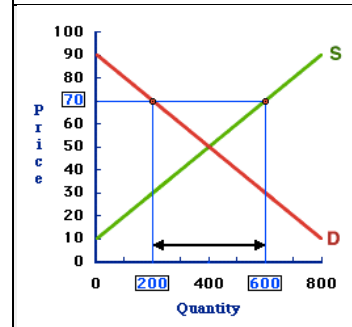
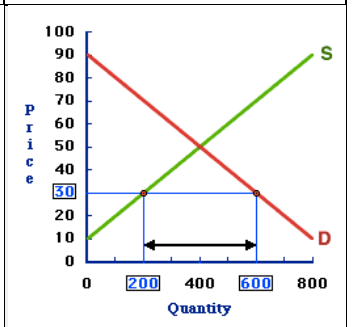
2.5. Price determination

Market equilibrium

- Where demand and supply are equal.
- At this point, there is no surplus or shortage. The price which will not change unless market conditions change.



Market disequilibrium

Excess Supply	Excess Demand
	
<p>If the price is set too high, excess supply will be created since the quantity supplied by the sellers exceeds the quantity demanded by the buyers. Price will fall later until reaches the equilibrium level.</p>	<p>If the price is set too low, excess demand will be created as the quantity demanded exceeds the supplied due to the low price. Price will rise later until reaches the equilibrium level.</p>

2.6. Price changes

Shift in demand

Increase in demand	Decrease in demand
<p>Demand shifts right from D1 to D2. The equilibrium price increases from P1 to P2 and equilibrium quantity increases from Q1 to Q2.</p>	<p>Demand shifts left from D1 to D2. The equilibrium price decreases from P1 to P2 and equilibrium quantity decreases from Q1 to Q2.</p>

Shift in supply

Increase in supply	Decrease in supply
<p>Supply shifts right from S1 to S2. The equilibrium price decreases from P1 to P2 and equilibrium quantity increases from Q1 to Q2.</p>	<p>Supply shifts left from S1 to S2. The equilibrium price increases from P1 to P2 and equilibrium quantity decreases from Q1 to Q2.</p>

2.7. Price elasticity of Demand (PED)

- The responsiveness of quantity demanded to a change in price.

$$PED = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}}$$

Inelastic demand	Elastic demand
PED less than 1	PED greater than 1
When a change in price results in a smaller percentage change in demand	When a change in price results in a larger percentage change in demand

Inelastic demand	Elastic demand
<ul style="list-style-type: none"> lack of substitutes - people may not be able to switch to rival producers addictive/necessity - difficult to reduce demand significantly should the price rise The product take up only a small part of income - a price change will not have a significant impact on the demand urgent case e.g. damaged roof may have to be repaired quickly even if price rises short time period - people do not have time to find alternatives 	<ul style="list-style-type: none"> more substitutes - people may be able to switch to rival producers luxury – easy to reduce demand when price rises The product take up a large part of income - a price change will have a significant impact on the demand not urgent- the purchase can be postponed longer time period - time will give consumers more opportunity to search out lower prices

- PED inelastic – should increase the price to gain more revenue
- PED elastic – should decrease the price to gain more revenue

Special Situation with PED

Perfectly Price Inelastic	Perfectly Price Elastic	Unitary Price Elastic
Changes in price do not affect the quantity demanded	Any changes in the price will lead to the quantity demanded being zero	The percentage change in price is proportional to the percentage change in quantity demanded

2.8. Price elasticity of Supply (PES)

- The responsiveness of quantity supplied to a change in price.

$$PES = \frac{\% \text{ change in quantity supplied}}{\% \text{ change in price}}$$

Inelastic supply	Elastic supply
PES less than 1	PES greater than 1
When a change in price results in a smaller percentage change in supply	When a change in price results in a larger percentage change in supply
<ul style="list-style-type: none"> • take time to produce the product for example agricultural goods • perishable goods /It may not be possible to store the product - this means that it cannot be taken out of storage when price rises • short period of time – difficult to adjust supply • no spare capacity – all the factors of production are in used 	<ul style="list-style-type: none"> • Production period is short due to advances in technology making it easier to alter the supply • Longer time period - easier to adjust supply • easy to store the product/non-perishable goods making it easier to bring more products onto the market • Mobility of factors of production - able to substitute between products being produced. • Large spare capacity – current unused resources can be used to increase supply

2.9. Market economic system

- An economic system that relies on the market forces of demand and supply to allocate market resources without government intervention.
- All the resources are owned by private sector.
- Freedom of choice in the economy.
- High level of competition and the aim of production is only making profit.

Advantages	Disadvantages
There is consumer sovereignty. Consumers determine what is produced. Firms will respond to changes in demand.	Poor consumers will have little influence on what is produced as they have little purchasing power. Income and wealth may be unequally distributed.
Prices may be low, quality may be high, high efficiency due to competition and the profit motive.	Monopolies may develop which may charge high prices and produce low quality.
A variety of products may be produced / there may be choice.	Merit goods will be under-produced eg: example education and demerit goods will be overproduced eg: cigarettes.

2.10. Market failure

- Market failure occurs when the market forces fails to allocate scarce resources efficiently, so social costs are greater than social benefits.

Social Costs = Private Costs + External Costs

- Private costs are costs borne by those producing the product / consuming the product
- External Costs are the negative side-effects on third parties.

Social Benefits = Private Benefits + External Benefits

- Private benefits are benefits enjoyed by those producing the product / consuming the product
- External benefits are the positive side-effects enjoyed by third parties.

2.11. Mixed economic system

- It has a private sector & a public sector.
- A government can try to correct market failures in a mixed-economic system.
- It can allocate scarce resources to provide goods and services that people need.
- Can introduce laws and regulations to control harmful activities.

Government intervention in correcting market failures

- Maximum price. It is a price control method that involves the government setting the price below the equilibrium point to make things more affordable. However, it creates a shortage of the good.
- Minimum price. The lowest level of price that a good or service can legally be sold for to reduce the consumption of demerit goods. However, it creates a surplus of the good.
- Government can provide public goods such as street lighting.
- Subsidies provided to increase the production and consumption of merit goods.
- Higher indirect taxes to reduce the production and consumption of demerit goods.
- Laws and regulations would protect the natural environment
- Educating consumers about the private costs of consuming demerit goods

Privatisation and Nationalisation

- Privatisation is the transferring a business from public ownership to private ownership.
- Nationalisation is the process by which private companies become owned and controlled by the government.

3. Microeconomic decision makers

3.1. Money and banking

Functions of money

- Medium of exchange: accepted as means of payment
- Unit of account: placing a value on goods/services for comparison
- Store of value: Money can be saved and used in the future.
- Standard of deferred payment: Enables people to borrow and pay back later.

Characteristics of money

- Acceptable - sellers willing to accept as a payment
- Durable - will last some time
- Scarce - must be in limited in supply to keep its value
- Portable - can be carried around easily
- Divisible - can be divided into units of different values
- Recognisable - people can easily see that the item is money

Functions of commercial banks

- To accept deposits: Customers keep their money and important documents in safe place.
- To lend: Banks make profit by charging interest from borrowers through lending e.g. loan.
- To enable customers to make payments: Include cheques, direct debit, debit/credit cards, and online banking.
- To provide financial advice - Assists customers in purchase and sale of assets.

Functions of central bank

- Acts as a banker to the government: Tax revenue is paid into the government's account at the central bank.
- Acts as a lender of last resort: It will lend to banks which are temporarily short of cash.
- Act as a banker to the commercial banks: Holding accounts at the central bank enables commercial banks to settle debts between each other and withdraw out cash.
- Manages the national debt – Helps government borrow money by issuing bond.
- Holds the foreign currency reserves: Central bank keeps foreign currency to influence the exchange rate.
- Issues bank notes: Responsible for printing and destroying notes.
- Implements monetary policy: Controlling the money supply and interest rate.
- Controls the banking system: Regulating and supervising the banking system.

3.2. Households

Influences on spending

- Income. Higher income increases purchasing power and the ability to spend.
- Interest rate. Low interest rate discourages saving thus encouraging spending.
- Tax rate. Lower income tax increases disposable income which leads to higher spending.
- Confidence. People spend more when they are optimistic about future income.
- Wealth. People can spend some of their wealth e.g. sell shares.

Influences on saving

- Interest rate. Higher interest rate encourages more savings since the return of saving is higher.
- For the future. E.g. unexpected events/save for retirement
- To buy expensive items e.g. cars, houses, furniture which can't be bought immediately
- For children's education to improve social mobility

Influences on borrowing

- Interest rate. A fall in interest rate making it cheaper to borrow.
- Income. Income may fall so people borrow to purchase necessities.
- Confidence level. People may become more optimistic about the future so more confident that they will repay loans.
- Price of housing. A fall in the price of housing may encourage people to take out mortgage loan.
- Family size. Increase in family size creates a greater need to borrow to support more children.
- Cost of education/healthcare. Higher cost of healthcare/ education may increase requiring people to pay more for the services.

Increase in...	Spending	Saving	Borrowing
Real income	↑	↑	↑
Direct tax	↓	↓	↕
Wealth	↑	↓	↑
Interest rates	↓	↑	↓
Availability of saving scheme	↓	↑	↓
Availability of credit	↑	↓	↑
Consumer confidence	↑	↓	↑

Rich vs. Poor

Rich		Poor
Higher income so higher purchasing power, therefore spending amount is higher	Spending	spend less due to lower income
spend a higher proportion on luxuries / wants		spend a higher proportion on basic necessities / needs e.g. food
spend a lower proportion of their income		spend a higher proportion of their income
Higher income so greater ability to save	Saving	Low confidence/ concerned about losing job so save more for unexpected events
Greater ability to borrow because banks are more willing to lend to the rich.	Borrowing	Lower ability to borrow because the poor have less income with which to repay.

3.3. Workers

Factors that influence the choice of occupational

Wage factors

- Wages
- Overtime pay
- Bonuses
- Comission

Non-Wage factors

- Fringe benefits - subsidised meals
- Job security- risk of losing job
- Career prospects – promotion chances
- Size of the firm- organizations often pay more and offer better career prospects
- Location- close to home/spend less time travelling
- Job satisfaction- find the work interesting / challenging / rewarding
- Danger – e.g. miners
- Working conditions- an attractive working environment
- Working hours- would increase leisure time
- Holidays- would increase leisure time

Why demand for labour might change

- Demand for the goods/services
- Productivity of labour
- Cost of labour vs capital

Why supply for labour might change

- Qualifications required
- Wage/non-wage factors
- Size of population / labour force

Skilled vs. Unskilled labour

Skilled labour (higher wages)	Unskilled labour (lower wages)
Higher qualifications and take longer to train. This reduces supply/makes supply more inelastic.	Lower qualifications needed. This increases supply/makes supply more elastic.
More skilled and more productive / efficient therefore in higher demand	Less prouedtive therefore in lower demand.
May have a more powerful trade union giving them greater bargaining power.	Weaker trade union with lower bargaining power.

Private sector vs. Public sector

Private sector	Public sector
Working conditions/wages may be better in the private sector if firms are competing for workers.	Greater job security as government may be reluctant to dismiss workers, less pressure on workers.
Private sector firms may earn high profits enabling them to pay higher wages/provide good working conditions, increasing living standards.	Wages may be higher as the government is not profit motivated
Working hours may be shorter, more leisure time.	Higher job satisfaction e.g. performs a public service.
Promotion chances may be higher if there is a large public sector.	May be paid higher pensions.

Older vs. Young worker

Older worker	Young worker
<ul style="list-style-type: none"> • More experience is likely to increase productivity/ skills. • Have received more training • may have been with the same employer for some time, regular increases in pay. • May have been promoted 	<ul style="list-style-type: none"> • May be more skilled with higher qualifications. • Fitter • more up to date with the latest technology • more mobile, can change occupations and locations • More creative/ new ideas • willing to work longer hours / less time off for illness

Wage differential within occupation

- Seniority and experience
- Promotion
- Age
- Regional differences
- Sexual discrimination

Division of labour

- The production process is broken down into different tasks and each labor concentrate on performing a particular task.

Advantages	Disadvantages
Employees can make the best use of their talents/skills and increase them by repeating tasks.	Doing the same job or repetitive tasks is tedious and stressful
Employees can produce more output and reduce business costs	Having specialized staff may make it difficult for other workers to cover up for those absent.
More productive employees can earn higher wages	Narrow skills. If lose job, may find it difficult to get another job.

3.4. Trade unions

- An organization which represents workers / members.

Functions of trade union

- Negotiating wages & benefits with employers
- Protect workers' right eg: compensation for injury.
- Provide better working conditions eg: improve safety
- Protect members from unfair dismissal
- Developing skills of union members by providing training and education courses
- Negotiate with government about minimum wages
- Supporting members taking industrial action

Industrial action

It is taken when collective bargaining fails to result in an agreement.

- Strike – protest outside their workplace
- Work-rule – employees do no more than the minimum required by the rules of their contract
- Go-slow – work in a leisurely way and productivity falls
- Sit-in – go to the place of work, occupy the premises but doing nothing

Influences on the strength of trade union

- Unemployment rate: if there is low unemployment, demand for workers is likely to be high
- Size of membership affects funds available for industrial action
- Skills of workers: skilled workers are harder to be replaced
- If wages are a small proportion of total costs, unions have greater bargaining strength
- Profits of firm. Trade unions are more likely to be successful in raising wage if profits of the firm is high.
- Government legislation. The more restrictions placed on trade unions, the less power they will have.

Impact of trade union

Advantages	Disadvantages
May improve working conditions → increase health and safety	May lead to more industrial disputes e.g. strikes → reduce output
May raise the wages of workers → reduce poverty,	May damage reputation of country → discourage investment/ MNCs → damage long run economic growth
Increase worker morale/ motivation → Increase labour productivity	May raise labour cost → inflation → making products less internationally competitive → worsen current account
May provide worker training → increase skills/ productivity.	Higher wage costs could reduce profits → some firms going out of business → raise unemployment

3.5. Firms

Classifications of firms

- Primary Sector - Extracting raw materials from the earth (fishing, mining, farming and more)
- Secondary Sector - Manufacturing/turning raw materials into goods (car production, house building)
- Tertiary Sector - Service Sector (Retail Shops, Banking and more)

Public and Private Sector

- Private Sector firms are owned and run by private individuals and owners. The main objective of this sector is to earn profit.
- The government owns Public Sector firms, and their main aim is to provide services for welfare motive.

Size of firms

- Size of market: the higher the demand for the product/greater the value of sales, the larger the firm is likely to be.
- Availability of finance/capital: firms that can borrow, sell shares or have high profits are able to expand
- Type of business organization: a MNC will be larger than e.g. a sole trader
- Age of firms: older firms tend to be larger than younger firms

Large firms

Advantages	Disadvantages
Benefit from economies of scale → purchasing EOS → enjoy lower average costs → lower price for consumers	May experience diseconomies of scale → e.g. communication issue → higher average costs → higher prices for consumers
Have more funds to invest → increase innovation / research → improve the quality of products and offer greater variety to consumers	Provide less of a personal service and less responsive to changes in consumer demand
Better known and have brand loyalty	May become a monopoly and charge higher price
Have more finance → enable them to purchase more on efficient capital/ technology and spend more on advertising	Lack of innovation due to less higher market power and less competition.

Small firms

Advantages	Disadvantages
Provide a personal service/ specialized service → produce unique products	Too small to take advantage of economies of scale → example → higher cost → higher price
More flexible → quick in response to changes in consumer demand	Difficulty in raising finance as banks may be reluctant to lend to them → unable to improve quality of goods
May be subsidised by the government which would reduce costs of production allowing small firms to charge lower prices	Lack variety of goods compared to large firms
Easy to set up → cater for small market (niche market)	Small firms may not be well-known → find it difficult to attract consumers

Integration

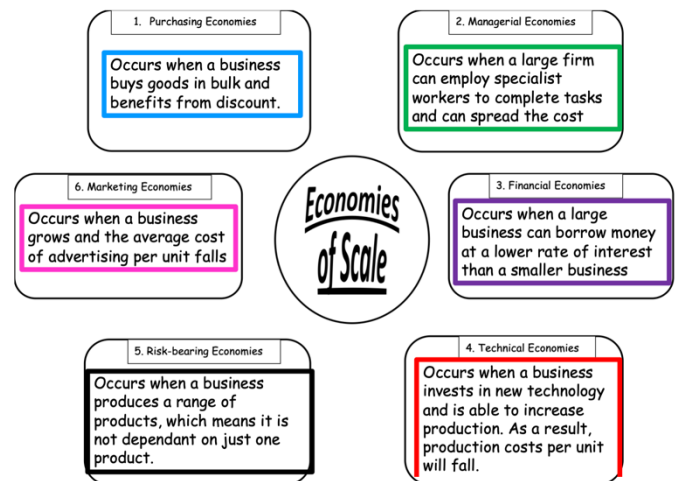
- Takeover: a company acquires ownership & control of another a company by purchasing its shares.
- Merger: two or more firms agree to form an entirely new company.

Types of Integration

- Horizontal integration: occurs between firms at the same stage of production/ producing similar products
example: two commercial banks
- Vertical integration: the merger between two firms in the same industry but producing at different stages of production example e.g. a tyre producer and a car manufacture
 - ◆ Forward: merges to its retail outlets
 - ◆ Backward: merges to another firm which is the source of supply (raw materials)
- Conglomerate merger: the merger between two firm that are involved in different industries.

Internal Economies of Scale

- Reduction in average cost resulting from the growth of a firm.



External Economies of Scale

- Reduction in average cost resulting from the growth of an industry.

Examples:

- **Joint marketing benefits:** New firms locating near to others in the same industry may collaborate on advertising campaigns or promotional activities, they can share the costs, making advertising more affordable for each individual firm.
- **Access to a skilled workforce.** Firms can recruit trained workers thus reducing cost of production.
- **Improvement in transport network:** resulting in a subsequent decrease in shipping cost for all the firms within the industry.

Diseconomies of Scale

Rising costs because a firm has become too large.

- **Managerial diseconomies:** There are more layers of management in a large firm thus may take longer to make decisions.
- **Communication diseconomies** there are more layers of communication, messages may be misinterpreted.
- **Labour diseconomies:** Workers may feel less appreciated so may become demotivated which could reduce labour productivity.

3.6. Firms and production

Capital-intensive Production

- A production method that uses a large proportion of capital relative to labour.

Labour-intensive Production

- A production method that uses a large proportion of labour relative to capital.

Labour productivity

- Output per worker in a given time period.

Causes of higher labour productivity

- Improved education/training: workers will be skilled/specialized and capable of producing a higher output per hour
- Advances in technology: better quality of capital goods so workers can produce more
- Better working conditions: contented workers may be more productive
- Better health: healthier workers can produce more
- Higher wages: may motivate workers more

Demand for Labour

- **Labor intensive industries:** An industry which employ large amounts of labor relative to capital e.g. agricultural sector
- **Increased in labour productivity:** Labour productivity is total output produced by a labor. Higher labour productivity will lead to higher demand for labor.
- **Lower wages:** Lower wages decrease cost of production thus demand for labor increases.
- **Higher price of capital:** Higher price of machinery will cause demand for labor to increase.

Demand for Capital

- **Capital intensive industries:** An industry which employ large amounts of capital (machinery) relative to labour e.g. car industry.
- **Lower interest rate:** Increase investment because cost of borrowing is lower.
- **Lower corporate tax:** firms would have more profits available for investment on capital goods.
- **Advances in technology:** increase the productivity of capital goods, thus increase output.

3.7. Firms' costs, revenue and objectives

- **Fixed Costs:** Costs that have to be paid regardless of the output, e.g. rental
- **Variable Costs:** Costs that change with the output. The higher the output, the higher the variable costs.
- **Total Revenue:** the total receipts a seller can obtain from selling goods or services to buyers
- **Average Revenue:** the revenue generated per unit of output sold

$TC = TFC + TVC$
$AFC = TFC/Q$
$AVC = TVC/Q$
$AC = TC/Q = AFC + AVC$
$TR = P \times Q$
Profit or Loss = $TR - TC$

Objectives of firms

- **Profit maximization:** making as much profit as possible / increasing the gap between revenue and cost
- **Growth / expansion:** increasing the size of the firm by e.g. merging / seeking to gain market power
- **Survival:** during difficult times such as recession / when a firm is first established
- **Profit satisficing:** achieving enough profit to keep shareholders' happy while following other objectives
- **Social welfare:** business organisations operating in the public sector/ charging a low price to help the poor (1).

3.8. Market structure

Perfect Competition vs. Monopoly

	Perfect Competition	Monopoly
Number of firms	Many buyers and sellers: all the firms are small	One single seller: 100% of market share
Price control	Price taker: price is determined by demand and supply in the market.	Price maker: price is set by the firm
Barriers to entry	Free entry and exit: firms can enter the market easily without barriers.	High barrier to entry and exit: can restrict competition
Nature of products	Homogeneous product: Identical products without branding	Unique products: no substitutes
Information	Perfect knowledge: firms and buyers aware of profits/prices.	Imperfect knowledge: Consumers may not have full information about alternative products, prices, or the costs.

Monopoly

Advantages	Disadvantages
A monopoly may enjoy economies of scale → lower average costs of production → lower prices	High market power → price maker → higher price and lower supply
A monopoly may reduce wasteful duplication of resources: e.g. water pipes	Innovate less → lower quality products and lack of choice for consumers
A monopoly may have more profits to invest → spend on R&D → better quality products	May experience diseconomies of scale → higher average costs → higher prices
Monopolies may compete internationally → keeping prices down	Lack of competition / inelastic demand → complacency → less efficient

Barriers to entry

- Cost savings from economies of scale
- High capital cost that other firms can't afford
- Large customer base built up over years
- Production process protected by patents
- High spending on advertisement which have built a strong brand loyalty

4. Government and the macroeconomy

4.1. The role of government

- Local Role: Fund local services (Garbage Collection, Streetlighting, Schools, Hospitals and more)
- National Role: Achieve macroeconomic goals (Economic Growth, Low unemployment, Stable Prices and more)
- International Role: Trading of goods and services

4.2. The macroeconomic aims of government

- Economic Growth
- Low Unemployment
- Low Inflation/Stable Prices
- Balance of Payment Stability/ trade balanced
- Redistribution of Income

Conflicts between the Macroeconomic Aims

Conflicts	No conflicts
Full Employment/ Economic Growth vs Stable Prices	Economic Growth vs Full Employment
Economic Growth/ Full employment vs BOP Stability	Stable Prices vs BOP Stability
Economic Growth vs Income inequality	

4.3. Fiscal policy

- It is the use of government spending and taxation to influence the economy.

	Expansionary Fiscal	Contractionary Fiscal
Tools	Increase G Decrease T	Decrease G Increase T
Effect	To boost AD, so employment and output rises. It is used to reduce recession.	To reduce AD. It is used to reduce inflation
Macro Aims	<ul style="list-style-type: none"> • Economic growth • Lower unemployment 	<ul style="list-style-type: none"> • Reduce inflation • Reduce imports to improve BOP
Limitations	Lead to inflation	Lower economic growth

- **Budget:** Financial planning of tax revenues and government expenditure
- **Budget deficit:** Government spending is greater than tax revenue
- **Budget surplus:** Tax revenue is greater than government spending

Type of taxation	Description	Examples
Direct tax	Tax on income and wealth	Income tax, corporate tax
Indirect tax	Tax on goods and services	VAT, Tariffs, GST
Progressive tax	Tax rate rises with income	Income tax, corporate tax
Proportional tax	Everyone pays same tax rate regardless of income	
Regressive tax	Tax rate falls with income	VAT, Tariffs, GST

Impact of Taxation

Advantages	Disadvantages
Increase tax revenue so can be spent on public goods such as education and health care	Higher indirect taxes increase costs of production which leads to higher price of goods and services.
Discourage consumption of demerit goods such as cigarettes and alcohol to improve people's health.	Higher tax rates could reduce consumer spending which lowers AD and economic growth
Lower disposable income reduces spending which could lead to lower inflation in the country.	Regressive tax could worsen distribution of income.
Improve distribution of income in the country through progressive tax.	Higher income tax may act as a disincentive to work thus lowering employment

Characteristics of a good tax

- Equitable
- Economic
- Efficient
- Transparent
- Convenient
- Flexible

4.4. Monetary policy

- It is the use of money supply and interest rate to influence the economy.

	Expansionary Monetary	Contractionary Monetary
Tools	Increase money supply Decrease interest rate	Decrease money supply Increase interest rate
Effect	To boost AD, so employment and output rises. It is used to reduce recession.	To reduce AD. It is used to reduce inflation
Macro Aims	<ul style="list-style-type: none"> • Economic growth • Lower unemployment 	<ul style="list-style-type: none"> • Reduce inflation • Reduce imports to improve BOP
Limitations	Lead to inflation	Lower economic growth

4.5. Supply-side policy

- Policy which is designed to increase the total supply in an economy.
- It aimed at making markets work more efficiently to encourage economic growth.

Examples of supply-side policies

- Improvements in education/training to raise skills/labour productivity
- Cutting income tax to encourage the reward for working
- Cutting corporation tax to encourage enterprise/increase investment
- Privatisation: transferring assets from the public to the private sector/to stimulate competition/improve efficiency
- Deregulation: removing rules and restrictions/increase competition/lower costs of production
- Subsidies to reduce costs of production/stimulate output

4.6. Economic growth

- Economic growth is an increase in **real GDP** over time.
- **Gross Domestic Product (GDP)** is the total output/income/ expenditure of a country.
- **Real GDP** is the total income after inflation is adjusted.

$$Real\ GDP = \frac{Nominal}{CPI} \times 100$$

$$Real\ GDP\ Per\ Capita = \frac{Real\ GDP}{Number\ of\ Population}$$

Nominal GDP	Price Level	Real GDP
↑5%	↑5%	unchanged
↑5%	↑3%	↑2%
↑5%	↑8%	↓3%
↓5%	↓3%	↓2%
↓5%	↑3%	↓8%
↓5%	↓8%	↑3%

Causes of economic growth

- An increase in the quantity of resources: e.g. the size of the labour force may grow.
- An increase in the quality of resources: e.g. labour or technology which raises productivity of resources.
- Expansionary fiscal /monetary policy: increasing total demand which may encourage firms to increase employment (1).
- Supply-side policy: e.g. privatisation to increase efficiency.
- More MNCs setting up in the country adding to the country's output.
- Discovery of resources e.g. newly found oil or gas reserves increase s output.

Recession

- A fall in GDP / negative economic growth for two successive quarters / 6 months or more.

Consequences of economic growth

Advantages	Disadvantages
Higher income → higher standard of living	Higher AD → Demand-pull inflation
Can afford necessities → reduce poverty	Spend more on imports → Worsen current account of BOP
More jobs are created → reduce unemployment	Benefits the rich more than the poor → worsen distribution if income
Increase government tax revenue → can spend more on public goods	Higher income tax may act as a disincentive to work thus lowering employment
Higher confidence of firms → higher investment	More output generates external cost → pollution

4.7. Employment and unemployment

- **Labour force:** Those who are willing and able to work.
- **Unemployment:** People without jobs who are willing and able to work.

$$Unemployment\ rate = \frac{\text{no. of unemployed}}{\text{labour force}} \times 100\%$$

Type of unemployment

- **Frictional unemployment:** occurs when people are moving between jobs.
- **Cyclical unemployment:** workers lose their job during recession
- **Structural unemployment:** due to industrial change in economy therefore mismatching of skill
- **Seasonal unemployment:** occurs because consumer demand for goods/services change with seasons
- **Technological unemployment:** Workers lose their jobs due to firms opting to use capital-intensive technologies.

Measurement of unemployment

- **Labour force survey:** measures a country's unemployment based on the number of people who are willing to work but unable to find it.
- **Claimant count:** measure of unemployment, in which the number of people claiming unemployment benefits.

Consequences of unemployment

Costs to individuals	Costs to economy
Lower income/ higher poverty → reduces standard of living	Loss of tax revenue → the government earns less money from income tax and corporation tax → this means the govt has less money to spend on and health care
Loss of self esteems → depression	Increased benefits payments → will involve an opportunity cost and may result in a budget deficit.
Loss of skills & training → long term unemployment can make people loss skills makes it even harder to find a job in the future	Increased crime → people who cant find a job may feel more tempted to earn an income through illegal means
Family break-up → divorce rates increase during periods of unemployment	Lower demand for businesses → could lead to lower profits and higher unemployment

Policies to reduce unemployment

- **Expansionary Fiscal policy** eg: lower income tax → increase disposable income → increase consumer spending → raise AD → reduce cyclical unemployment
- **Expansionary monetary policy** eg: cut interest rate → increase borrowing → increase consumer spending → increase AD → reduce cyclical unemployment
- **Supply-side policy** eg: education and training → can raise labour productivity increase labour productivity → reduce structural unemployment
- **Better job information** → help to reduce frictional unemployment
- **Lower unemployment benefits** → create incentive to work → reduce voluntary unemployment

4.8. Inflation and deflation

- **Inflation:** A sustained increase in the negeal price level of goods and services in an economy over a period of time.
- **Deflation:** decrease in the general price level of goods and services and occurs when the inflation rate falls below 0%
- **Consumer Price Index (CPI):** A measure of inflation which takes into account the different proportions spent on items in a basket of goods and services.

$$Inflation\ rate = \frac{CPI_t - CPI_{t-1}}{CPI_{t-1}} \times 100\%$$

Causes of inflation

Demand-pull inflation	Cost-push inflation
<p>Demand-pull is caused by aggregate demand increasing more rapidly than aggregate supply.</p> <p>Higher demand may be the result of higher consumer spending/ higher government spending/ higher investment/ higher net exports.</p>	<p>Cost-push inflation is caused by increases in the costs of production e.g. higher wages/ higher raw material costs/higher import costs/ higher indirect taxes.</p> <p>Firms pass on higher costs in the form of higher prices to maintain profit levels/margins.</p>

Causes of deflation

- fall in total demand
- rise in unemployment
- drop in consumer confidence
- drop in business confidence
- an increase in total (aggregate) supply
- fall in costs of production
- advances in technology.

Consequences of inflation

Problems	Advantages
<p>Inflation reduces the value of money/spending power → increasing the cost of living.</p> <p>Creating uncertainty → discourage consumption and investment.</p>	<p>Borrowers gain from inflation which reduces the burden of debts</p>
<p>Real income will fall if price increase exceeds wage increase</p> <p>Reduce international competitiveness → → lower demand for exports → worsening the current account position</p>	
<p>Redistribution of income → e.g. lenders may lose and borrowers may gain</p>	<p>Increased investment: low stable inflation (2%) caused by increase demand may make firms optimistic about the future</p> <p>Profits: if prices rise more than costs, profits increase, which can be reinvested</p>
<p>Menu costs: the cost of changing prices e.g. price tags, menus/</p>	
<p>Shoe leather costs: costs of moving money around in search of the highest interest rate</p> <p>Fixed income earners are disadvantaged e.g. pensions</p>	<p>Fiscal drag - inflation moves taxpayers into higher tax brackets. This in effect increases government tax revenue without actually increasing tax rates.</p>

Policies to reduce inflation

Demand-pull inflation	Cost-push inflation
<p>Contractionary monetary policy: Increase interest rate → borrowing becomes more expensive → less borrowing → less C and I → lower AD</p> <p>Contractionary fiscal policy: Increase income tax → less disposable income → lower C → lower AD Increase corporate tax → lower I → lower AD</p>	<p>Supply-side policies: Increase spending on training/ education → increase efficiency → lower cost-push inflation</p> <p>Subsidies to encourage production → lower cost of production → lower cost-push inflation</p>

Consequences of deflation

Advantages	Disadvantages
Value of savings increases due to the value of money increasing	Increases the real burden of debt as the real value of debt rises.
Increased exports revenue, as exports become cheaper	Consumers postpone purchase – This means a reduction in AD and further deflationary pressure in the economy
Costs of production decrease, firms can earn more profits	Fall in economic output/GDP due to decreased demand
Deflation due to technology advancement → increases GDP and decreases unemployment	Rise in unemployment due to decreased demand and output

5. Economic development

5.1. Living standards

- Standard of Living refers to the social and economic well-being of the individuals in a country.

$$Real\ GDP = \frac{Nominal}{CPI} \times 100$$

$$Real\ GDP\ Per\ Capita = \frac{Real\ GDP}{Number\ of\ Population}$$

Measure of Living Standards

- **GDP per head:** total income divided by population
- **Human Development Index (HDI):** A measure of living standards/quality of life includes income per head, years of schooling and life expectancy.

Limitations of GDP per head as a measure of living standards

- It does not consider distribution of income
- GDP per head does not consider leisure time
- GDP per head may be high but if people are working long hours the quality of their lives may be low
- Increases in output may increase pollution e.g. lower air quality may reduce living standards
- GDP per head may not fully reflect the quality of products produced which may increase even if GDP per head does not change
- GDP per head may not fully reflect the quantity of goods produced due to the existence of the informal economy
- GDP per head does not include safe drinking water which has a significant influence on health

Reasons for low living standards in a country

- Low national income
- Over-dependence on agriculture
- Lack of capital
- Insufficient investment in education, skills & Healthcare
- Low levels of investment in infrastructure
- High population growth
- Other factors like a corrupt govt. or war

5.2. Poverty

Absolute Poverty	Relative Poverty
Absolute poverty is where people are unable to meet basic needs e.g. food and shelter / less than \$1.90 per day.	Relative poverty is where people have lower income than the average in the country. There is inequality

Causes of poverty

- Unemployment
- Low wages
- Illness
- Age

Policies to reduce poverty / reduce income inequality

Policies	Drawbacks
Expansionary fiscal policy → Increase G/ reduce tax → higher AD → increase GDP per head	cause inflation → reduce ability poor to purchase basic necessities
Expansionary monetary policy → lower interest rate → lower cost of borrowing → encourage borrowing and consumer spending → AD → raise income	It might not work consumer confidence is low → not increasing AD

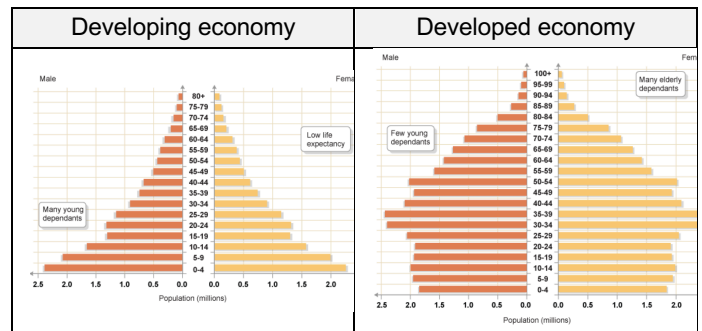
Increase minimum wage	Higher wages → increase cost of labour → demand for labour decreases → unemployment rises
Increase unemployment benefits	disincentive to find employment → people may become dependent on benefits
Progressive tax	Higher income tax creates disincentive to work → reduce income
Improve education	It may involve opportunity cost → spending on health care reduced

5.3. Population

Factors that affect population growth

Birth rate	Death rate	Net migration
The number of births per 1000 of the country's population per year/time period.	The number of deaths per 1000 of the country's population per year/time period.	The number of immigrants exceeding emigrants.
<ul style="list-style-type: none"> • education levels • income levels • availability of contraceptives / family planning • proportion of women in the labour force • infant mortality rate • state support for families. • availability of healthcare • availability of maternity/paternity leave • availability of child benefit payments 	<ul style="list-style-type: none"> • Health care • Sanitation • Housing • Nutrition • War 	<ul style="list-style-type: none"> • Job opportunities • Income • Living standards • Immigration control • Inflation • War

Population structure



Reasons for different population growth rates

- Different birth rates due to different levels of income/ education/awareness of contraception / family planning
- Different death rates because of different healthcare standards/ diseases/availability of hospitals/doctors
- Different levels of immigration / emigration due to better standards of living/job opportunities to attract more immigrants/prevent emigrants
- Different government regulations / incentives / disincentives (1) e.g. one-child policy reducing population growth rates/tax breaks or allowances for couples with children

Dependency ratio

- The dependency ratio tells us how many young people (under 16) and older people (over 65) depend on people of working age (16 to 65).

Problems of high population

- may deplete resources more quickly → reducing the country's ability to grow in the future / reduce the sustainability of growth
- overpopulated → reducing GDP per head and may cause overcrowding
- May be pressure on food supplies / pollution may increase
- may put pressure for government spending to rise → more spending on pensions/ healthcare
- increase dependents → increase dependency ratio

Ageing population

Advantages	Disadvantages
<ul style="list-style-type: none"> • older people may be an economic asset through their knowledge and experience 	<ul style="list-style-type: none"> • may be an increase in the dependency ratio with a smaller proportion of workers to support a higher proportion of retired
<ul style="list-style-type: none"> • the labour force may increase and may reduce the dependency ratio if the retirement age is raised 	<ul style="list-style-type: none"> • any increased spending on healthcare and pensions involve an opportunity cost, less money spent on other public goods
<ul style="list-style-type: none"> • may indicate a good standard of living increasing life expectancy 	<ul style="list-style-type: none"> • older workers may not be up to date with new technology and new ideas

5.4. Differences in economic development between countries

- Resources: land/labour/capital/enterprise affect productive capacity of a country
- Income: enabling people to consume more goods and services.
- Productivity: making better use of resources
- Higher international trade / exports: results in higher output
- Size of primary sector: larger primary sectors may mean lower incomes / hard working conditions
- Saving: which can influence the proportion of capital goods produced/the extent to which people have a safety net
- Investment: which may influence economic growth / make work less physically demanding
- Education: which influence choices/income/health
- Healthcare: which affects life expectancy / quality of life

6. International trade and globalization

6.1. International specialization

Specialisation at a national level

- A country has an **absolute advantage** if it can produce a given amount of a good or service with fewer resources and, therefore at an absolute cost advantage over any country.
- A country has a **comparative advantage** in the production of a good or service if it can be produced it at a lower opportunity cost relative to other countries.

Advantages	Disadvantages
Generates economies of scale → enabling a country to be more internationally price competitive	may becoming over dependent on one particular commodity → exposes the economy to a far higher degree of risk. e.g. effected by bad weather conditions
Improves productivity / efficiency by producing what the country is best at	Taste may change → fall in demand → fall in income
Increases GDP by making better use of scarce resources → allowing country to export more	If demand suddenly falls, structural unemployment may increase if labour is occupationally immobile.
Increases purchasing power of consumers who through trade can purchase goods and services from the most efficient producers	Higher transport costs may offset any cost advantage of specialisation.

6.2. Globalisation, free trade and protection

Globalisation

- The process by which businesses or other organizations develop international influence or start operating on an international scale.

Multinational Company

- A firm that produces / operates in more than one country.

Costs and benefits of MNCs to host country

Advantages	Disadvantages
Create job opportunities → employment may rise → economic growth may rise → higher living standards	The MNC may deplete the country's resources → reducing its ability to grow in the future (1).
Exports increases → The current account position may improve	The MNC have been sending profits home → so worsen current account of host country
Wages may rise if the MNC was paying above wages paid by domestic employers.	Keeping top jobs for workers from own country → may have not have created much employment
Government tax revenues may rise → increasing its ability to spend on e.g. education	May drive some domestic firms of business → increase unemployment
More variety of products may be available to consumers → improvement in quality due to competition	May generate external costs including pollution which may reduce the health of workers.

Trade protectionism

- Protectionism is the deliberate attempt to limit imports or promote exports/ make foreign products less competitive.

Methods of protectionism

- Tariffs:** tax on imports that would increase the price of imports
- Quotas:** limit on the volume of imported goods allowed into the country
- Subsidies:** to reduce the costs of domestic firms / reduce the price of domestic goods and services
- Embargoes:** ban on imported goods
- Exchange controls:** limit on the amount of foreign currency that can be purchased

Reasons for	Reasons against
To protect infant, declining & Strategic industries: infant industries are not able to compete on price.	Import price higher → lower purchasing power of consumers
To protect employment: demand for local goods decreases → lower output → unemployment increases	Imported raw materials more expensive → cost-push inflation
To prevent dumping practice: foreign producers selling at below cost price → which will make it difficult for firms to compete.	Reduce efficiency of domestic firms due to lack of competition → lower quality
To prevent currency depreciation: higher imports will increase supply of currency → currency depreciates	Provoke retaliation → reduce exports
To improve current account: imports exceeding exports → current account deficit	Less variety of goods and services for consumers → lower living standards

Free Trade

- Trade without restrictions/having no barriers for example tariff / quota.

Advantages	Disadvantages
Lower import price → greater variety for consumers → Increase living standards	Domestic firms may go out of business if cannot compete → Increase unemployment
Increase competition → promotes efficiency → Increases quality →	Unsafe/ demerit goods may be imported → increase external cost
Producers expand business → higher exports → higher AD → Economic growth	Imports increases → Worsen current account
Take advantage of EOS / Imported raw materials cheaper → Lower cost of production	Currency depreciates due to high level of imports

6.3. Foreign exchange rates

Floating exchange rate

- The price of a currency determined by market forces.

Currency appreciation

- A rise in value of a floating exchange rate compared to another currency

Higher demand for currency	Lower supply for currency
<ul style="list-style-type: none"> Higher exports Higher interest rate → hot money inflow Inward foreign direct investment People speculate that the currency will rise in value, and they buy more of the currency 	<ul style="list-style-type: none"> Lower imports Higher interest rate → less hot money outflow Less outward foreign direct investment

Currency depreciation

- A fall in value of a floating exchange rate compared to another currency

Lower demand for currency	Higher supply for currency
<ul style="list-style-type: none"> Lower exports Lower interest rate → less hot money inflow Less inward foreign direct investment 	<ul style="list-style-type: none"> Higher imports Lower interest rate → hot money outflow Outward foreign direct investment People speculate that the currency will fall in value, and they sell their holdings of the currency

Consequences of Exchange Rate Fluctuations

Currency Appreciation	
Advantages	Disadvantages
<p>Currency appreciation → higher export prices → reduce demand for exports → lower AD → reduce demand-pull inflation</p> <p>Lower import prices will lower price of raw materials → lower costs of production → reduce cost-push inflation</p>	<p>higher price of exports → lower the price of imports → net exports may fall / exports may fall / imports may rise → worsen current account</p>
<p>If the demand for both exports and imports is inelastic, the rise in the exchange rate can improve the current account balance.</p>	<p>A stronger currency can lead to job losses in export-oriented sectors as demand for the country's goods and services abroad decreases.</p>
<p>Cheaper imports can provide consumers with a larger variety of goods, enhancing their standard of living.</p>	<p>Lower exports and higher imports → lower AD → lower economic growth</p>

Currency Depreciation	
Advantages	Disadvantages
<p>Reduce price of exports → raise the price of imports → net exports may rise / exports may rise / imports may fall → current account may improve</p>	<p>Exchange rate depreciation can introduce uncertainty in financial markets, affecting investor confidence and potentially leading to capital outflows.</p>
<p>Higher exports and lower imports → increase AD → real GDP → economic growth</p>	<p>imported raw material costs may rise → causing cost-push inflation</p> <p>rise in net exports may cause demand-pull inflation</p>
<p>The growth in export demand can lead to job creation in industries that heavily rely on international trade.</p>	<p>Domestic citizens may be able to purchase fewer imports → lower living standards</p>

Fixed exchange rate

- The value of a fixed exchange rate is set by the government using purchases and sales of foreign currency/changes in interest rates.
- Devaluation:** A fall in the value (of the currency in the case of a fixed exchange rate).

Floating exchange rate system	
Advantages	Disadvantages
It should automatically eliminate current account imbalances E.g. Current account deficit → currency depreciation → exports cheaper → demand for exports higher → improve current account	Fluctuations in the exchange rate may create uncertainty → discourage trade and investment → reduce economic growth
There will be no need to keep foreign reserves so can spend foreign reserves on something else to stimulate economic activity	Lower exchange rate may cause imported raw materials more expensive → cost-push inflation
Country can easily change monetary policy changing interest rate without being worried. It can concentrate on other aims and not the exchange rate.	A higher exchange rate could reduce exports and harm the current account position.

Fixed exchange rate system	
Advantages	Disadvantages
Provide stability for firms and households → this encourages investment and trade	A Government must have sufficient reserves to intervene to maintain the price of its currency.
Stable inflation rate since exchange rate is stable	If the exchange rate is fixed too high a rate, causing current account imbalances.
Prevent speculation, as there is no point because the value of the exchange rate is fixed.	Government must devote time and attention to maintain the exchange rate so cannot use monetary policy to control inflation

6.4. Current account balance of payments

Balance of payment

- Record of economic transactions with other countries.

Components of current account

- Trade in goods:** exports and imports of goods e.g., cars, wheat
- Trade in services:** exports and imports of services e.g. banking, tourism
- Primary income:** wages, interest, profit and dividends flowing in and out of the country
- Secondary income:** government donation/ foreign aid

Causes of current account deficit

- Current account deficit:** When the import spending of goods and services exceeds the export revenue of goods and services.

Reasons of high imports	Reasons of low exports
Imports are cheaper & better quality	Inflation → Decline in competitiveness
Strong exchange rate → imports cheaper	Strong exchange rate → exports more expensive
High economic growth → Higher purchasing power	Fall in quality of export products
Products are not available in local economy	Recession in foreign countries → lower income

Causes of current account surplus

- Current account surplus:** When the revenue from exports of goods and services exceeds the imports of goods and services.

Reasons of high exports	Reasons of low imports
Higher productivity → rise in competitiveness → Lower price	Imports are expensive & poor quality
Weak exchange rate → exports are cheaper	Weak exchange rate → imports more expensive
Rise in quality of export products	Recession → Lower purchasing power
Economic growth in foreign countries → higher income	High tariff (import tax) → increase price of imports

Impact of current account deficit

Problem	Might not be a problem
Imports exceeding exports → lower AD → lower GDP → increase unemployment	If the country has a floating exchange rate. a fall in the exchange rate resulting from the deficit will lower export prices and raise import prices → improve current account
High level of imports will increase supply of currency & low level of exports will decrease demand for currency → depreciate the currency → causing inflation	more raw materials capital goods maybe imported → in the longer run these may be turned into exports

May indicate a lack of international competitiveness → may suggest that the quality of domestically produced	Deficit may only be temporary → the deficit may have been caused by a fall in incomes abroad → these may rise in the future, increasing exports
Need to cover the deficit with e.g. borrowing/ attracting investment from Abroad.	A deficit reduces total demand and this can reduce demand-pull inflation

Policies to reduce current account deficit

- **Contractionary Fiscal Policy** - increase tax rate → reduce disposable income → spend less on imports
- **Contractionary Monetary Policy** - increase interest rate → reduce borrowing and spending on imports
- **Supply side Policies** - education and training → higher productivity → lower cost of production → exports cheaper → increase demand for exports → increase exports revenue
- **Protectionism policy** - eg: tariff, increase price of imports or quota reduce the amount of imports allowed



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