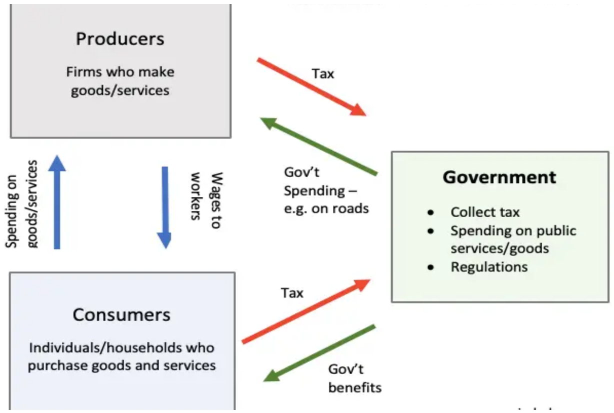
1.1.1 – The economic problem

Different groups in the economy (the 3 economic agents)



The problem of scarcity

- Scarcity refers to the shortage of resources in relation to the quantity of human wants.
- People have unlimited wants
- However, there aren't enough resources available to supply all of these wants
- This creates the economic problem of scarcity
- The 'economic problem' occurs when there are finite resources available to supply infinite or unlimited wants i.e. scarcity
- Therefore, choices have to be made about how to use these scarce resources
- For example, if you only have £1 and you go to a shop, you can buy either the chocolate bar or the packet of crisps. The scarcity of the resource (the money) means a choice must be made between the chocolate and the crisps.

Economic activity

- The central purpose of economic activity is the production of goods and services to satisfy needs and wants.
- Economic activity will improve economic welfare, the benefit gained by individuals, firms or society in the production of goods and services.
- Needs are those things required that are essential to maintain survival.
- Wants are those things that are desired but not essential to survival

- When producing goods, the economy has to consider the following questions:
  1. What to produce: determined by what the consumer prefers. Consumers tell producers what they prefer by demanding goods and using their 'spending votes' and demanding certain goods.
  2. How to produce it: producers seek profits and aim to minimize production costs.
  3. For whom to produce it: whoever has the greatest purchasing power in the economy and is therefore able to buy the good.

Renewable and non-renewable resources

- Renewable resources are ones that can be replenished e.g., trees can be used for wood to generate fuel, but they can be replanted
- Non-renewable resources are ones that are in finite supply and therefore will run out e.g., oil or natural gas
- Sustainable resources are ones that are being used for economic activities in such a manner that they will not run out
- However, they must be used sensibly e.g., not overfishing and overplanting trees

Renewable resources	Non-renewable resources
• Wind • Solar • Tidal • Geothermal • Biomass • Wood • Steam	• Oil • Natural gas • Coal • Nuclear power • Plastic • Diamonds

1.1.1 – The economic problem

Opportunity cost

- Opportunity cost can be defined as the benefit lost of the next best alternative when making a choice
- As all resources are scarce, we must make choices in order to allocate these resources
- There are always competing alternatives when making choices e.g., should I buy a Pepsi or a Fanta
- If I buy a Fanta, I have lost the benefit of the closest alternative, a Pepsi
- There is an opportunity cost for all decisions made by economic agents.
- For example, if a car was bought for £15,000 and after 5 years the value depreciates by £5,000, the opportunity cost of keeping the car is £5,000 (which could have been gained by selling the car), regardless of the starting price.

Factor	Opportunity cost
A can of Coca cola	A can of Fanta
An Economics lesson	Sitting in the common room
Getting out of bed	Lying in
Investing in capital goods	Investing in consumer goods
Consumption today	Consumption tomorrow
Going to university	Getting a job
Buying clothes from Ark	Buying clothes from Zara
Watching a live concert	Going to the theatre
Drinking tap water	Time spent
Breathing	No real opportunity cost

The importance of opportunity cost to economic agents

- What to produce?
  - Economic incentives will provide economic agents with the information required to tell them what goods and services to produce
- How to produce?
  - Firms will combine the factors of production (land, labour, capital, and entrepreneurship) in order to produce a good or a service
- For whom to produce?
  - In a free market economy, we produce according to demand and supply
  - If there is demand for a product, a firm may wish to supply it for a profit

- Economic agents are the individuals, firms and governments that partake in economic activity, the demand for and supply of goods and services.
- A free-market economy is one where firms decide what goods and services to produce with limited intervention from the government.
- There is an opportunity cost to all decisions made by economic agents.

- Opportunity cost is important to economic agents, such as consumers, producers, and governments.
- For example, producers might have to choose between hiring extra staff and investing in a new machine.
- The government might have to choose between spending more on the NHS and spending more on education. They cannot do both because of finite resources, so a choice must be made for where resources are best spent.
- Consumers might have to choose between buying a laptop or a new TV, they cannot do both because of budget, so a choice must be made.

1.1.1 – The economic problem

Trade-offs

- Trade-offs refer to the decision-making process to choose between several viable alternatives.
- In other words, it is any situation where making one choice means losing something else, usually forgoing a benefit or opportunity.

- Opportunity cost is the cost of the next best alternative foregone
- However, there may be a range of alternatives all of which have been given up
- All of these alternatives are referred to as ‘trade-offs’
- In other words, we often use the term trade-off when looking at a balance between two choices, choosing more of one and less of the other, rather than making a simple either / or choice.

Business Choice	Trade-offs
Invest in new machinery	Less workers = more unemployment
Behave in an ethical manner	Higher production costs
Remove a declining product from the product portfolio	Lower dividends
Increase expenditure on training	Less expenditure on products = lower quality
Expand business	Increase in costs and lower dividends

1.1.2 – Business objectives

The objectives of a business

Different business objectives:

- Profit maximisation
- Sales maximisation
- Satisficing

Other objectives:

- Survival
- Market share
- Cost efficiency
- Return on investment (ROI)
- Employee welfare
- Customer satisfaction
- Social objectives

How to remember the objectives

Please – profit maximisation
Make – market share
Sure – sales maximisation
Cannot – cost efficiency
Support – survival
Spurs – social objectives
So – satisficing
Cannot – customer satisfaction
Ruin – return on investment (ROI)
England – Employee welfare

Figure 2.1: Business objectives

Sales maximisation

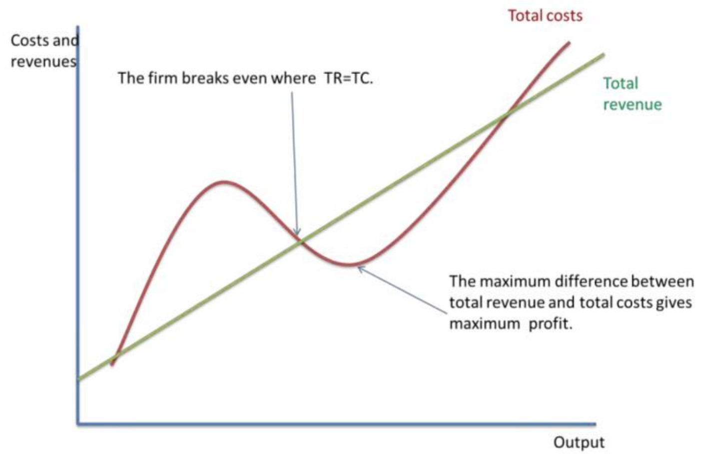
- To achieve the highest achievable amount of sales either by volume or by value
- Sales volume is the amount of sales expressed as a number of units sold e.g. 20 tonnes of wool
- Sales value is the amount of sales expressed as the total sum of money spent by consumers e.g. £3 million expenditure on clothing

Satisficing

- To make enough profit to be satisfied but not be purely motivated by profit
- May profit satisfice to maintain a work life balance
- Managers might not aim for high profits, because their personal reward from them is small compared to shareholders.
- Therefore, managers might choose to earn enough profits to keep shareholders happy, whist still meeting their other objectives.

Profit maximisation

- Profit is the difference between total revenue (TR) and total cost (TC).
- It is the reward that entrepreneurs yield when they take risks.
- Firms break even when TR = TC.
- A firm profit maximises when they are operating at the price and output which derives the greatest profit.
- Profit maximisation occurs where marginal cost (MC) = marginal revenue (MR).
- In other words, each extra unit produced gives no extra loss or no extra revenue.



- Profits increase when MR > MC. Profits decrease when MC > MR.
- Some firms choose to profit maximise because:
- It provides greater wages and dividends for entrepreneurs
- Retained profits are a cheap source of finance, which saves paying high interest rates on loans
- In the short run, the interests of the owners or shareholders are most important, since they aim to maximise their gain from the company.
- Some firms might profit maximise in the long run since consumers do not like rapid price changes in the short run, so this will provide a stable price and output.

1.1.2 – Business objectives

Survival

- To continue to exist as a business
- This may be the most important objective in the short term
- This may be the primary objective of a start-up business or one experiencing difficult trading conditions
- To achieve this a business may set a cash flow objective to ensure sufficient cash is available to meet day to day expenses
- Cash flow is the flow of cash into and out of a business over a period of time

Customer satisfaction

- To ensure that goods and services meet the needs and expectations of the customer
- Helps to build customer loyalty and repeat business maximising sales in the long run

Employee welfare

- To look after the economic and physical well being of the workforce
- A motivated workforce will increase productivity
- Helps maintain positive employer/employee relations

Market share

- Market share is the proportion of total market sales that a firm has.
- This can be calculated as:
  - $market\ share = \frac{business\ sales}{market\ sales} \times 100$
- For example, Amazon aimed to increase their market share in the e-reader market, by trying to sell as many Kindles as possible. They did this at a loss in the short run, but they gained customer loyalty and now they are a leading e-reader producer.

Return on investment (ROI)

- Entrepreneurs take risks by making investments.
- The reward for taking these risks is profit, which is the return on their investment.
- The higher the ROI, the more attractive the investment is.
- The ROI can give firms an idea of how profitable an investment is, which is important for planning.
- ROI allows for comparisons between alternative investment opportunities

Cost efficiency

- To control costs so that the maximum value of outputs is achievable with the lowest value of inputs
- This is necessary to support an objective of profit maximisation

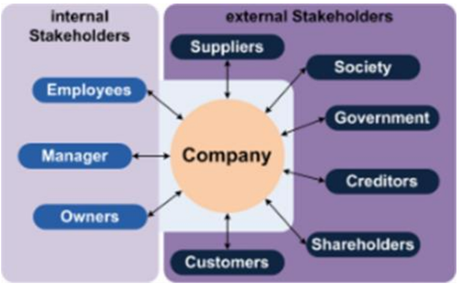
Social objectives

- To behave in a way which benefits society
- This could include to create employment, support the local community or improve educational standards
- Some firms might focus on social welfare and their Corporate Social Responsibility (CSR).
- They might take responsibility for consequences on the environment and aim to maximise social welfare.
- Firms might try and perform more ethically, especially if they have a philanthropic owner.

1.1.3 – Stakeholders and their objectives

Stakeholders

- Shareholder legally owns a share/stake in a business. They might have voting rights on how the business is run.
- Stakeholders are anyone with an interest in the actions of a business



Stakeholders can be categorised as:
  - internal or external
  - primary or secondary
- Primary stakeholders have a direct relationship with the business
- Whereas secondary stakeholders although affected by the actions of a business are not directly related to the business.

Primary

- Shareholders
- Customers
- Suppliers
- Employee
- Creditors

Secondary

- Community
- Competitors
- Media
- Society
- Government
- Banks

Stakeholder needs

- Stakeholder needs should be considered when making decisions
- This can help avoid resistance to change

Stakeholder	Examples of needs
Customers	Value for money or cheap products
Employees	Good working conditions and good pay
Shareholders	Steady flow of income, growth and continuation of the business
Government	The business provides jobs for the community and abide by health and safety laws
Community	The business is welcoming and does not cause noise or disrupt the community
Suppliers	They need to be paid on time
Financial institutions	Ability to repay the finance (firm's ability to generate money)

Stakeholders (economic agents) and their objectives

- Economic agents are the individuals, firms and governments that partake in economic activity i.e. the demand for and supply of goods and services.

Government

- Maximise the welfare of society as a whole
- However, some may act in self interest
- What is of benefit to one group of society might not be to another e.g. road building benefits commuters and firms (by providing relevant goods and service) but what about local community and environment?

Firms

- Profit maximisation
- To maximise the return for owners and other investors e.g. shareholders
- However, this may involve a strategy of cost minimisation which will conflict with the objectives of workers and suppliers

Individuals

- Maximise personal and economic well being
- Finite wants and infinite resources cause individuals with a need to make choices e.g. home improvements or a holiday
- Decisions will be made to try and achieve the maximum utility
- May put pressure on employers to increase incomes

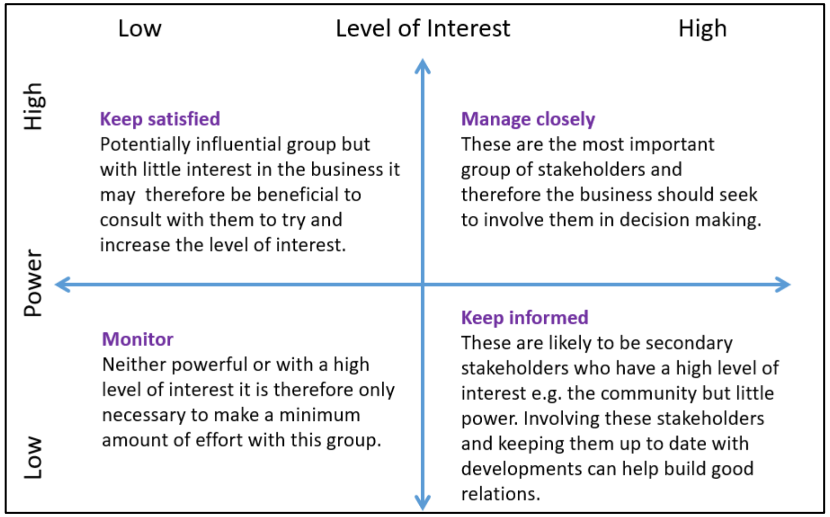
Other important notes

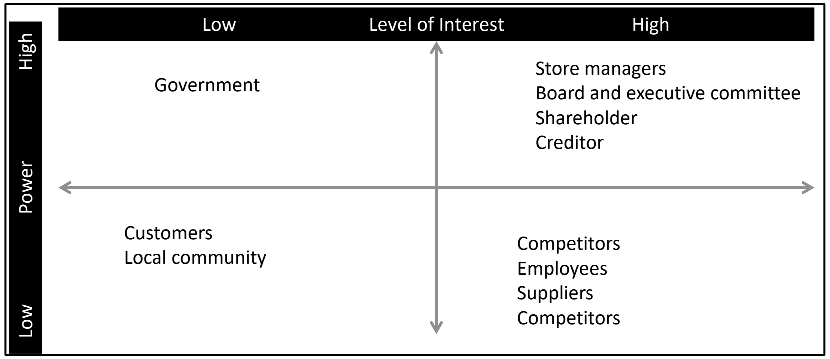
- Suppliers are firms from which the business can buy the material inputs or services that are needed in the production process
- Creditors (who may also be suppliers) are those to whom the business owes some money
- Stakeholder issues and trade-offs are often complicated:
  - Exam questions often require you to present different points of view and show how they relate to specific businesses.
  - This is a great opportunity to construct your argument, back it up with evidence and then explain why another point of view may have some validity.

1.1.3 – Stakeholders and their objectives

Stakeholder mapping

- Businesses use stakeholder mapping to help inform decision making
- Stakeholder mapping maps the relative power of each stakeholder group against the degree of interest
- This helps inform managers on how important each stakeholder group is and therefore how involved they should be in the decision-making process





Stakeholder conflict

- It is difficult to meet the needs of all stakeholders
- Stakeholder needs may overlap in which case they can join together to increase their power
  - e.g. the community may support the employees when taking industrial action in order to strengthen their voice
  - However, stakeholder needs may conflict in which case the actions of one group may weaken the power of another
  - e.g. suppliers may lower prices to try and encourage a business to stay in the UK which may reduce the power of shareholders wanting the business to relocate abroad for lower costs
- Inevitably there is a trade-off between these competing interests:
  - Shareholders want to maximise profits
  - Employees want better pay and better conditions
  - Customers want lower prices and better service
  - Government wants tax revenue
  - Local community want minimum disruption and help with local infrastructure developments
  - Environment needs protecting from excessive business activity
- In the short term, developing the interests of other stakeholders will have a negative impact on profits and dividends.
- Businesses vary in the extent to which they are prepared to consider the needs and wants of other stakeholders.
- Their attitudes depend on the corporate culture they have adopted
- Corporate culture is the set of important assumptions that are shared by people working in a particular business and influence the ways in which decisions are taken there.

Corporate social responsibility

- Corporate Social Responsibility (CSR) is the continuing commitment by business to behave ethically and contribute to economic developments while improving the quality of life of the workforce and their families as well as of the local community and society at large.
- CSR is a firm's decision to accept responsibility to its stakeholders for its social, environmental and ethical actions
- A firm will produce a Corporate Social Report to set targets that will be used to meet its social responsibilities and to assess how far it has met previous targets

1.2.1 – The role of the entrepreneur in the economy

What is an entrepreneur?

- A person who spots an opportunity and shows initiative and a willingness to take risks in order to benefit from the potential rewards
- Entrepreneurs make use of the resources available to them to set up or develop a business

Creating and setting up a business

Creating and setting up a business will involve a number of steps including:

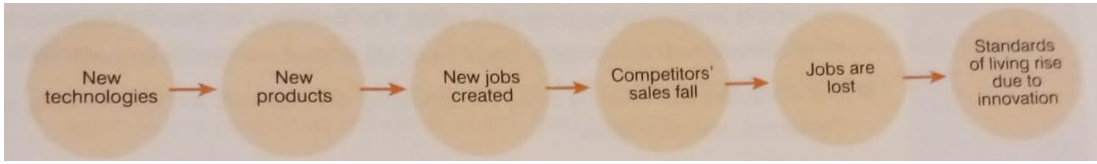
- Generating an idea
- Asking if the idea can add value
- Conducting market research
- Drawing up a business plan
- Deciding on legal structure
- Raising finance

A business plan

- A business plan is an important part of setting up a business
- A business plan will be used both internally by the entrepreneur and externally by banks, external investors or those willing to provide grants
- The contents of a business plan include:
    - The executive summary – a synopsis of the entire plan looking at the most important points
    - The business and products or services
    - The market e.g. size, share, competitors
    - The marketing strategy
    - The skills of the entrepreneur and other key employees
    - Operations
    - Financial forecasts

Creative destruction

- Innovation involves developing an idea that will generate new or improved products or production techniques.
- Creative destruction is a term introduced by Economist Joseph Schumpeter in the 1940s to mean:
    - The process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one
- When something new kills something old
- Creative destruction occurs when some businesses innovate in order to produce new, cheaper or better products, with a wider market appeal, introducing strong competition.
- This threatens established producers that have failed to adapt an innovate.
- Innovative businesses are sometimes referred to as ‘disruptors’
- An example of creative destruction is:
    - The development of DVDs, then blu-rays, and now the rise of downloadable films, has essentially destroyed the market for VHS video tapes.



Factors of production

- There are four factors of production or factor inputs:
    - Land
    - Labour
    - Capital
    - Entrepreneurial skill

The entrepreneur generates an idea and uses skill to bring the other factors together to form an enterprise.

- These inputs are used with entrepreneurial skill to generate new and innovative goods and services which take over form established goods and services

1.2.1 – The role of the entrepreneur in the economy

Expanding and developing a business

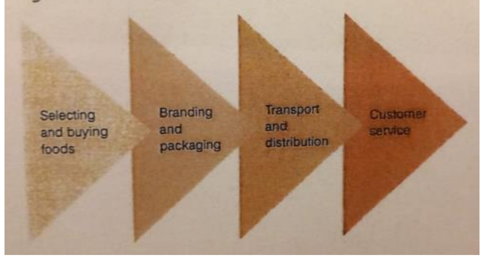
- Once a business has been set up and becomes established then it requires managing on a day-to-day basis
- The entrepreneur is often also the hands-on person making daily decisions, at least in the early years
- This involves:
    - Managing resources including stocks, personnel, and finances
    - Making marketing decisions about aspects of the marketing mix such as what price to charge and how to promote the business
    - Dealing with customers
    - Maintaining financial records

- As the business grows the entrepreneur may need to change roles:
    - Employ staff
    - Use the services of experts e.g. an accountant
    - Delegate responsibility to others
- And make other key decisions:
    - Move to bigger premises
    - Change suppliers
    - Expand product range

Added value

- Added value is the ability to ensure that the value of the output is higher than the sum of the value of all the inputs
- It is important that an entrepreneur can add value in order to make a profit and survive
- Added value can be achieved in many ways including:
- Manufacturing process to combine inputs
- Marketing to increase actual or perceived value e.g. branding or emotional advertising
- Unique selling point or product differentiation
- Enhancing the customer experience

Figure 4.1: Adding value in the supermarket



Methods of adding value

- Building a brand – a reputation for quality, value etc. that customers are prepared to pay for. Nike trainers sell for much more than Hi-tec, even though the production costs per pair are probably pretty similar!
- Delivering excellent service – high quality, attentive personal service can make the difference between achieving a high price or a medium one
- Product features and benefits – for example, additional functionality in different versions of software can enable a software seller to charge higher prices; different models of motor vehicles are designed to achieve the same effect.
- Offering convenience – customers will often pay a little more for a product that they can have straightaway, or which saves them time

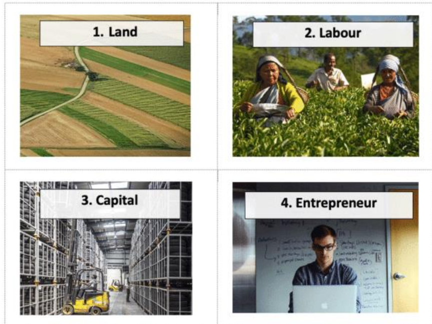
1.2.2 – Entrepreneurial motives

Characteristics of an entrepreneur	Profit as an incentive	Non-financial motives
• Opportunity spotter • Creative • Show initiative • Risk taker • Positive thinker • Hard working • Self-motivated • Decision maker • Visionary • Enthusiastic • Determined and persistent	• For the entrepreneur in a firm, the incentive for taking risks is profit. • An entrepreneur wants to avoid loss and gain profit, which makes them want to innovate. • They can reduce their production costs and improve the quality of their products. Entrepreneurs seek to maximise their profits. • Entrepreneurs bring together the factors of production (land, labour, capital, and enterprise) in order to make a profit. • Examples of profit as an incentive is when a business' objective is profit maximisation or profit satisficing	<u>Ethical stance</u> • To behave in a manner deemed to be morally correct • Provide a good or service that meets ethical beliefs e.g. cosmetics not tested on animals or clothes made from fair trade cotton <u>Social entrepreneurship</u> • Motivated by supporting a cause rather than making a profit • Any surplus revenue earned is used to further support the cause e.g. support the community or fund research <u>Independence</u> • Be own boss and make own decisions <u>Homeworking</u> • Match family commitments to work commitments • Work life balance

1.2.3 – Factors of production

Factors of production

- Inputs available in order to supply products and services.
- The factors of production are the building blocks of any economy.
- In other words, they are the inputs that we use to produce goods and services so that we can make an economic profit.



Factors of production as economic resources

- Factors of production are the resources used by firms to produce goods and services
- They are called factor inputs
- firms input these factors into the production process
- The factors of production are known as economic resources as they earn reward for their use in the form of rent, wages, interest and profit
- Firms take these resources and turn them into products that they sell for profit

Factor	Description	Reward/Incentive

Capital	• Capital has a number of meanings e.g. money
	• As a factor of production it refers to the man-made aids that are used in the production process e.g.
	  ○ Equipment – machinery and tools
	  ○ Premises - factories and offices
	• Capital goods will bring a stream of income in the future rather than being consumed today
	  ○ e.g. a car used for leisure purposes is a consumption good, but one used as a taxi is a capital good
		• Interest from the investment
		• Expand

Entrepreneurship (enterprise)	• The entrepreneur takes land, labour and capital and organises them in order to produce products that will be profitable • The skills of the entrepreneur are crucially important to the health of the UK economy • By taking risks the entrepreneur creates wealth and employment in the economy • Today's small businesses are the large businesses of tomorrow	• Profit – an incentive to take risks • More educated people/healthier people • Employ more people

Land	• Land encompasses all of the natural resources that come from the earth that are used in the production of goods or services
	• This can include resources:
	  ○ below the earth e.g. oil
	  ○ on the earth e.g. crops
	  ○ above the earth e.g. air
	  ○ in the sea e.g. fish
	• These are the raw materials used to generate goods
		• Rent
		• Expand

Labour	• Labour includes all of the workforce in an economy
	• Every worker is unique
	  ○ we all have different skills, qualifications and experience
	  ○ Job roles differ e.g. a manager or a junior employee
	• The value of a worker is called its human capital
	• A worker can be valued by the income they earn
	• Education and training are likely to increase our human capital
		• Wages
		• More educated people/healthier people
		• Employ more people
		• Make higher profits, increase wages to employees (pay less corporation tax)

1.2.4 – Specialisation

Labour productivity

- Labour productivity is concerned with the amount (volume) of output that is obtained from each employee.

Labour Productivity Formula

Labour productivity is calculated using this formula:

$$\frac{\text{Output per period (units)}}{\text{Number of employees at work}}$$

The answer from the formula is usually expressed in terms of output per employee

e.g. 1,000 units per employee per month

<u>How can a business improve its labour productivity?</u>

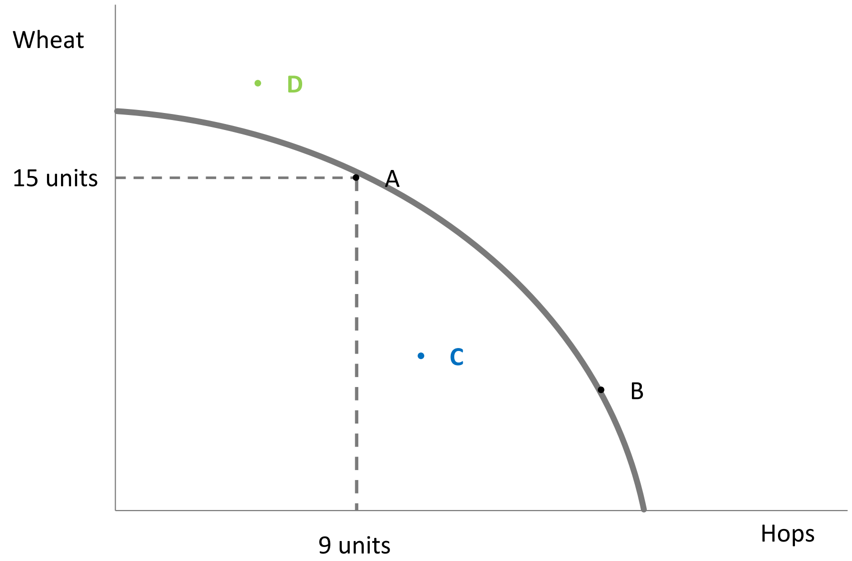
- Measure performance and set targets – it is often claimed that "what gets measured, gets done!"
- Streamline production processes
- Invest in capital equipment (automation + computerisation)
- Invest in employee training
- Make the workplace conducive to productive effort

Production efficiency

- When we produce goods and services at the lowest possible cost.
- Productive efficiency is concerned with producing goods and services with the optimal combination of inputs to produce maximum output for the minimum cost.
- To be productively efficient means the economy must be producing on its production possibility frontier (i.e. it is impossible to produce more of one good without producing less of another).

Production possibility frontiers

- A production possibility frontier (PPF) can be used to show different combinations of output for two products e.g. good x and good y given the resources available
- As the output of good x increases that of good y decreases and vice versa
- The PPF illustrates the problem of choosing how to use scarce resources when producing goods and services
- There is an opportunity cost in deciding what combinations of good x and good y to produce



- The PPF diagram shows different combinations of output for two products e.g. wheat and hops.
- At **point A** the business can produce **15 units** of wheat and **9 units** of hops.
- The business can produce a combination of wheat and hops anywhere along the PPC e.g. **point B**.
- **Point D** is **unobtainable** as there are not enough resources to produce this level of output. Production at all points on or within the frontier are **possible**.
- Producing at **point C** shows an inefficiency as not all resources are being used.

1.2.4 – Specialisation

The division of labour

- The division of labour occurs when workers are assigned specific tasks to do in the workplace
- Constantly doing the same job improves workforce performance and leads to increased efficiency
- This cuts down on production costs creating a competitive advantage
- Production or assembly lines can increase the speed and accuracy of the work even further
- Problems occur with the division of labour, particularly in low skilled jobs
- The work can become monotonous
- This leads to issues with the workforce such as high absenteeism and labour turnover
- The UK has higher wage rates than most countries so tends to be undercut by low cost foreign competition
- Therefore, UK businesses often produce highly differentiated products where quality rather than price is the main issue

Specialisation

- Specialisation occurs when economic units such as individuals, firms, regions or countries concentrate on producing specific goods or services
- Specialised use of workers within an organisation is called the division of labour
- Specialisation is likely to lead to increased output per worker (productivity) as the workforce have a better understanding of their job role
- This will help to address the problem of scarcity as there will be a greater supply of goods and services to meet unlimited wants

Division of labour		
	Advantages	**Disadvantages**
Employee	• Less responsibility and are able to work in an area which they perhaps enjoy/understand/specialised in. • Sometimes get incentives and benefits such as healthcare insurance. • More specialised = more power, they might ask for more money	• Work becomes repetitive, which could lower the motivation of workers, potentially affecting quality and productivity. Workers could become dissatisfied. • There could be higher worker turnover for firms, which means employees become dissatisfied with their jobs and leave regularly.
Employer / firm	• There could be a greater variety of goods and services produced. • There are more opportunities for economies of scale, so the size of the market increases. • There is more competition, and this gives an incentive for firms to lower their costs, which helps to keep prices down. • Higher output and potentially higher quality, since production focusses on what people and businesses are best at.	• By producing a lot of one type of good through specialisation, variety could in fact decrease for consumers. • More specialised = workers have more power over firm • Work becomes repetitive, which could lower the motivation of workers, potentially affecting quality and productivity.

1.2.4 – Specialisation

Specialisation		
	Advantages	**Disadvantages**
Firm	• Specialisation increases output as economic units become more effective and efficient in what they produce due to: • Greater understanding of the requirements of production • Each economic unit can specialise in what they are best at • Efficient use of time as there is no switching between tasks • Technical economies of scale as capital equipment is used to produce goods and services • The increased output can then be exchanged for other goods and services that the economic unit is not as good at producing • Specialisation allows for the exchange of goods and services between the economic units	• There are also disadvantages to specialisation and division of labour • Work can become monotonous • This can affect quality and productivity • Can increase absenteeism • May be limited by the size of the market • Small firms can not afford to introduce specialisation • Threat of structural unemployment if an industry goes into decline • Reduces flexibility of the workforce • Production flows may be stopped affecting the ability to meet demand
Countries	• Allows for trade • Improved national income (GDP) • Economies of scale leading to lower costs • Greater choice for consumers • Better quality goods • Interdependence leading to better relations between countries	• Over-reliance on a limited number of industries • Risk of structural unemployment • Reliance on other nations • Threat of external factors e.g. political unrest or natural disasters can cut of supplies • Less developed countries may be discouraged from moving into new industries or specialising in tertiary industries

Specialisation allows a firm to trade

- However, specialisation can have serious repercussions:
  - Economic agents that specialise are at the risk of losing their markets
  - In a competitive global market, UK economic agents can quickly lose market share
  - This means that the UK must continually strive to improve production processes
- A focus on highly differentiated products such as financial services and premium cars has allowed the UK to develop new industries whilst old ones such as textiles have declined
- New technology allows us to reinvent ourselves and develop new products based on old industries

1.2.5 – The wider economic environment

The wider economic environment

- The economic environment consists of the key economic factors that influence the behaviour of businesses and their customers
- The business cycle shows fluctuations in the level of economic activities
- Economic activity is measured by GDP (Gross Domestic Product)
- GDP is the total value of a country's output in a year
- Real GDP takes into account inflation, if GDP growth is 5% and inflation 2% real GDP growth will be 3%
- These fluctuations affect both business and consumer confidence as well as ability and willingness to spend

Interest rates

- The price of money i.e. the cost of borrowing or the reward for saving

The effect on business:

- If a firm has loans or overdrafts this will effect the amount that has to be paid in interest which is a cost to a business
- Investments either become more or less attractive influencing the ability of firms to grow by investing in new capital equipment or larger premises
- Influences the level of demand by consumers

The effect on consumers:

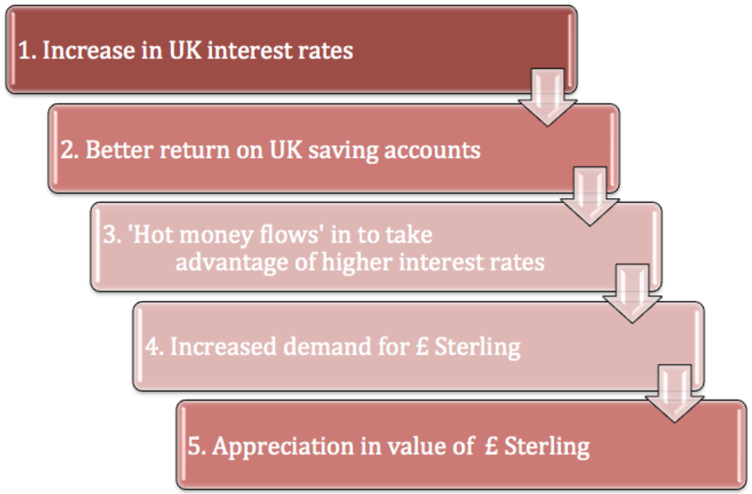
- If interest rates are high, saving is more attractive, and spending is less attractive
- Interest rates will affect customers willingness to spend on credit
- High interest rates will mean that consumers have less disposable income (e.g. higher mortgage payments) and therefore a fall in demand for other products
- Higher interest rates mean that foreign investors will invest in UK banks for higher returns and therefore an increase in demand for the £ will see its value appreciate – making exports dearer

Exchange rates

- The price of one currency in terms of another e.g. £1 = $1.50
- An increase in the value of a currency is called an appreciation this means the currency is worth more e.g. £1 = $1.50 → £1 = $1.60
- A decrease in the value of a currency is called a depreciation this means the currency is worth less e.g. £1 = $1.50 → £1 = $1.40

The effect on businesses:

- SPICED (strong pound: imports cheaper, exports dearer) – for appreciation of pound
  - Firms that import will be able to buy cheaper raw materials and finished goods
  - Firms that export will see less demand
- WPIDEC (weak pound: imports dearer, exports cheaper) – for depreciation of pound
  - There will be greater demand from abroad for UK goods
  - Input prices will increase if raw materials are imported
  - If the firm has a price inelastic product it will be able to pass the increase in costs onto the consumer
- Fluctuations in exchange rates create uncertainties
- Prices will change regularly if a firm trades with foreign businesses.
- This will impact on the competitiveness of businesses, with costs and revenues increasing or decreasing and the profitability of the business being affected favourably or adversely



1.2.5 – The wider economic environment

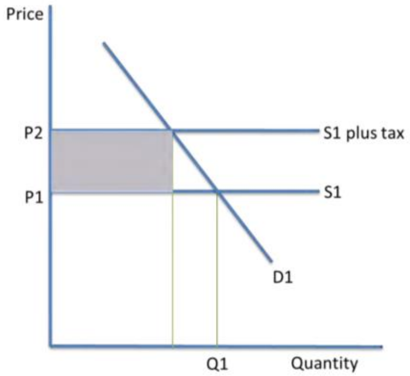
Taxation

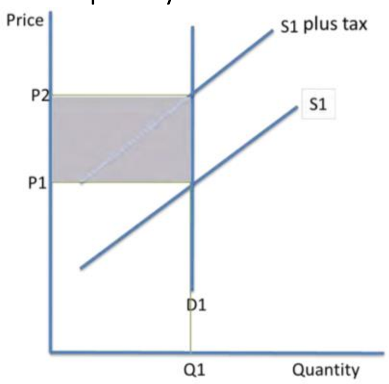
- Taxation is the process of imposing charges on business and individuals by the government
- For example:
  - Direct taxes (charged on earnings) – income tax, national insurance, corporation tax (tax on profits)
  - Indirect taxes – VAT (tax on goods and services bought), car tax, insurance tax

The effect of this on business:

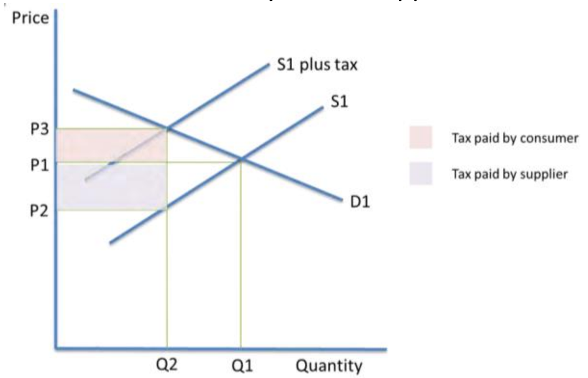
- A cut in income tax may give consumers more disposable income, thus raising consumption
- However, If income tax is raised this may discourage spending and reduce consumption
- A cut in corporation tax may increase available profits for firms which may stimulate investment
- Changes to VAT will affect the price to consumers and also the costs to a business

- Diagrammatically, it is shown by the vertical distance between two supply curves. When demand is perfectly inelastic, or supply is perfectly elastic, the incidence of the tax falls wholly on the consumer.
- The shaded area shows the size of the tax paid by the consumer:

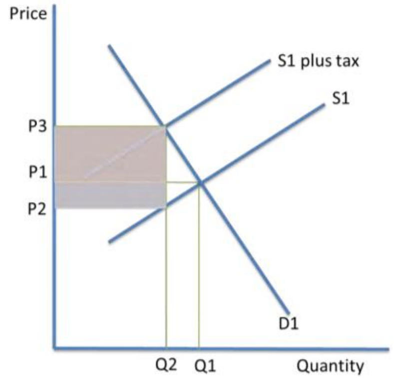




If demand is more elastic (PED>1), the incidence of the tax will fall mainly on the supplier:



If demand is more inelastic (PED>1), the incidence of the tax will fall mainly on the consumer.

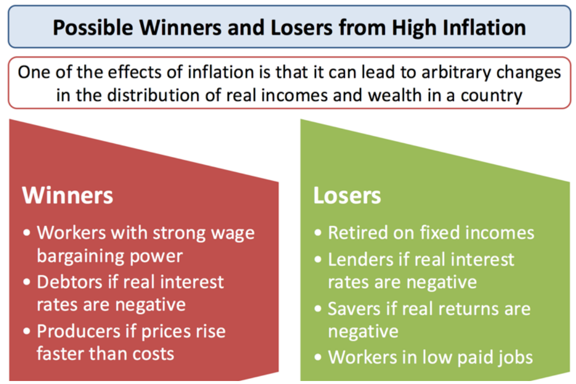


Inflation

- A general rise in prices or a fall in the value of money
- The rate of inflation shows how prices have changed based on the same period a year earlier
- It is an indication of the cost of living changing
- There are two main measurements:
  1. Retail Price Index (RPI) – a measurement of a 'basket' of goods and services representative of what people buy in the UK
  2. Consumer Price Index (CPI) – similar to RPI but mainly excluding housing costs

The effect on businesses

- Increased costs due to higher inflation
- Can be passed onto the consumer if the product is price inelastic
- If not, the firm will have to try and absorb the increased costs through lower profit margins
- This has an impact on the pricing strategy of a firm
- Some firms will reduce the supply of the product, having a major affect on operations management as capacity is reduced and the firm rationalises with a greater focus on cost minimisation
- It becomes increasingly difficult to maintain competitiveness
- Demand will fall if the firm has to raise price
- If a firm exports, then it will see customers move to companies abroad where prices are not rising as fast



1.2.5 – The wider economic environment

Unemployment

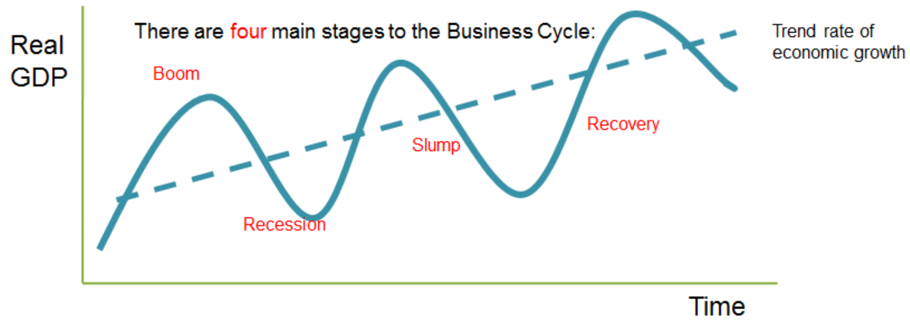
- Unemployment is the number of people looking for work but who cannot find a job at a point in time

<u>Implications to business of changing unemployment include:</u>

1. Availability of workers
    - At times of high unemployment there will be an excess of available workers which should make recruitment easy
    - Firms can attract workers often offering just the minimum wage
    - However, there may be a mismatch between the skills of those people unemployed and the skills required for job vacancies
2. Disposable income
    - At times of low unemployment most people of working age will be actively involved in economic activity
    - They will therefore be receiving an income
    - This should lead to an increase in the level of overall demand in the economy

Business cycle

- The business cycle shows fluctuations in the level of economic activities



1.3.1 - Demand

Markets

- A market is any place or process that brings together buyers and sellers to facilitate an exchange.
- Markets can be physical, or virtual locations where buyers and sellers come together to engage in a transaction.

Theory of demand

- The theory of demand states that demand is the quantity of a good or service that consumers are willing and able to buy at a given price and at a given time.
- Effective demand is the quantity that consumers are willing to buy at the current market price.
- Individual demand is the demand of an individual or firm, measured by the quantity bought at a certain price at one point in time.
- Market demand is the sum of all individual demands in a market. Demand varies with price.
- Generally, the lower the price, the more affordable the good and so consumer demand increases. This can be illustrated with the demand curve.
- A normal good is one where, if price rises, demand will fall and vice versa i.e. a negative correlation.
- Rational choice theory makes the assumption that all individuals make logical decisions that will maximise their personal benefit i.e. self-interest.

The 3 economic agents

- Economic agents will come together in a market to engage in a transaction.
- An Economic Agent is simply a person, company, or organisation, that has an influence on the economy.
- Different economic agents will have varying objectives.

<u>Consumers</u>

- Consumers are traditionally assumed to want to maximise their utility (while living within their means).
- When faced with a decision about how to spend limited income, consumers will opt for the good/service that gives them the most satisfaction.

<u>Firms</u>

- We assume the objective of any firm is to maximise profit.
- A firm's profit is their total revenue minus their total costs.
- Profit means the firm can survive and reinvest in the business in the hope of making more profits in the future.

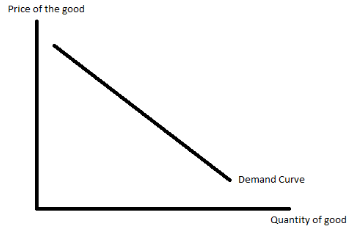
<u>Governments</u>

- Governments try to balance the resources of a country with the needs and wants of the population, i.e. economists assume governments try to maximise public interest.
- This is likely to include the following:
    - Economic Growth
    - Full employment
    - Low inflation

What is a demand curve?

- The demand curve is a graphical representation of the relationship between the price of a good or service and the quantity demanded for a given period of time.
- At any given point along the curve, it shows us the quantity of the good or service that would be bought at a particular price.

This is a basic demand curve:



1.3.1 - Demand

The determinants of demand in a market

- Demand can be defined as the amount of a good or service that consumers are willing and able to buy at any given price
- There are a number of determinants (influencing factors) of demand:
    - The price of the good
    - Consumer income
    - Prices of other goods and services
    - Consumer tastes and fashion
    - Other factors e.g. advertising
- The quantity demanded of a good or service is said to be a function of (depends upon) all the above factors. This can be shown mathematically:
    - qd = f (p, y, p of other goods/services, consumer tastes, all other factors)
        - qd = quantity demanded
        - f = is a function of
        - p = price
        - y = consumer income
- In Economics we use the term ceteris paribus meaning all other factors remain the same. The study of Economics is like working in a laboratory.
- When Economists raise the price of a good or service they make the assumption that other factors e.g. consumer incomes do not change.
- This allows us to identify the impact in changes of one factor e.g. price.

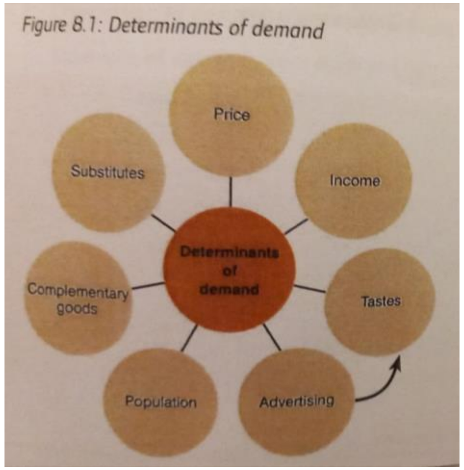
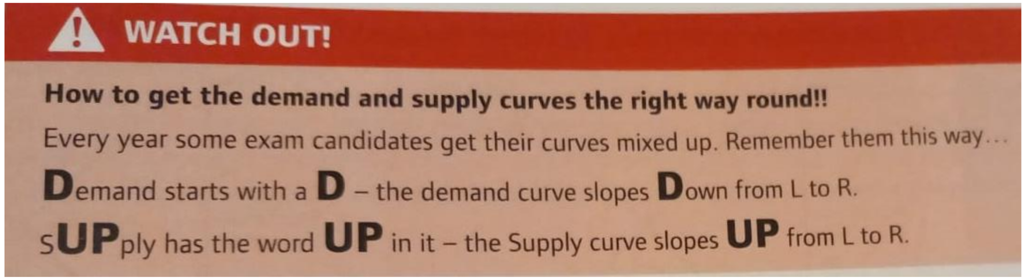


Figure 8.1: Determinants of demand

Movements in the demand curve (change in price)

- Ceteris paribus, there is an inverse relationship between price and quantity demanded.
- As price falls, we see an extension in quantity demanded.
- As price rises, we see a contraction in quantity demanded.

- At price P1, a quantity of Q1 is demanded.
- At the lower price of P2, a larger quantity of Q2 is demanded.
- This is an expansion of demand.
- At the higher price of P3, a lower quantity of Q3 is demanded.
- This is a contraction of demand.
- Only changes in price will cause these movements



WATCH OUT!

How to get the demand and supply curves the right way round!!

Every year some exam candidates get their curves mixed up. Remember them this way…

Demand starts with a **D** – the demand curve slopes **D**own from L to R.

s**UP**ply has the word **UP** in it – the Supply curve slopes **UP** from L to R.

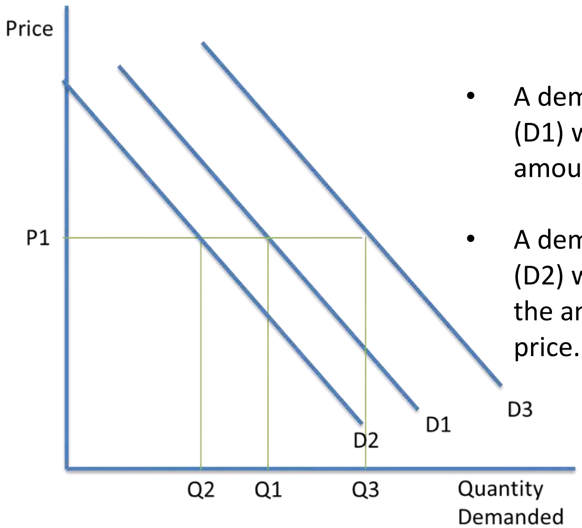
1.3.1 - Demand

Cause of a movement along a demand curve

- The price of the good (p)
- Most goods are normal goods
- If the price of a normal good or service increases demand for that good or service will decrease
- If the price of a normal good or service decreases demand for that good or service will increase
- American Economist Thorstein Veblen (1857-1929) identified a 'snob effect' where people paid more for certain products as their price increased
- He believed that this was due to the increased status that buying higher priced goods conferred on the buyer
- A normal good is one where, if price rises, demand will fall and vice versa i.e. a negative correlation.
- Veblen goods are a special type of good identified by Veblen.

Shifts in the demand curve

- The demand curve can shift up or down.
- This occurs when consumers are willing to by a higher (or lower) quantity of goods (even when the good remains at the same price).



- A demand curve shifts to the right (D1) when there is an increase in the amount demanded at every price.
- A demand curves shifts to the left (D2) when there is an decrease in the amount demanded at every price.

Why do demand curves slope down from left to right?

- Demand curves slope downwards from left to right.
- The higher the price charged for a good, the lower the quantity demanded.
- There are 3 explanations for this:
  1. Diminishing marginal utility
  2. The income effect
  3. The substitution effect

<u>Diminishing marginal utility</u>

Total Utility: Total Satisfaction from a given level of consumption.

Marginal Utility: The change in satisfaction from consuming one extra unit.

- As a person increases consumption of a product, the marginal utility to the consumer falls (i.e. diminishes).
- As a result, consumers are willing to pay less & less as consumption increases.

Consider the example below that tracks the utility from consuming extra units of a product:

Quantity Consumed	Total Utility	Marginal Utility
1	10	10
2	24	14
3	40	16
4	52	12
5	61	9
6	68	7
7	72	4
8	72	0

<u>The Income effect</u>

Assuming a fixed level of income, the income effect means that as the price of a product falls, the amount of the product that consumers can buy with their income increases, and so demand increases.

<u>The Substitution effect</u>

A fall in the price of a good makes that good appear relatively cheaper than alternative goods, ceteris paribus.

Consumers will therefore increase demand for the relatively cheaper good.

1.3.1 - Demand

Factors that cause a shift in the demand curve

Changes in Consumer Income

- When an individual's income goes up, their ability to purchase goods and services increases.
- Economists say that a rise in income will lead to an increase in demand.

Changes in the price of substitute and complementary goods

- Substitute goods are in competitive demand and act as replacements for each other e.g. beef and lamb.
- If the price of beef rises the demand for lamb would increase, ceteris paribus.
- Complementary goods are goods that are often used together, so they are in joint demand e.g. strawberries and cream.
- If the price of strawberries fell, the demand for cream would increase, ceteris paribus.

Advertising campaigns

- Advertising can be a very powerful influence on consumer demand which seeks to influence consumer choice.

Changes in tastes and fashions

- Changing consumer tastes and preferences over time and through different seasons will also have a large effect on demand.

Interest Rates and income

- Many durable goods are bought on credit using borrowed money, thus the demand for them may be sensitive to the rate of interest charged by the lender.
- Lower interest rate will increase demand.
- More income will also increase demand as people have more money to spend

Expectations

- This is of future price changes. If speculators expect the price of shares in a company to increase in the future, demand is likely to increase in the present.

Population

- The larger the population, the higher the demand. Changing the structure of the population also affects demand, such as the distribution of different age groups.

External shocks

- There are sometimes events beyond the producer's control – e.g. during Covid19, face masks became mandatory so the demand for them increased.

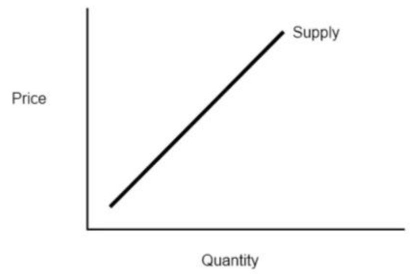
Way to remember the factors

P – population
I – income and interest rates
R – related goods (substitute/complementary)
A – advertising
T – tastes and fashions
E – expectations
S – shocks

1.3.2 – Supply

What is supply?

- Supply is the quantity of a good or service that producers are willing and able to produce at a given price and at a given time.
- Market supply is the sum of all individual supplies in a market.
- The relationship between price and quantity supplied can be shown using a supply curve
- The supply curve shows the quantity supplied for a good or service, at any given price, over a period of time:
- As price falls quantity supplied decreases
- As price rises quantity supplied increases
- This is a basic supply curve:



Types of supply

- **Joint supply:** This is when increasing the supply of one good causes an increase or decrease in the supply of another good. For example, producing more lamb will increase the supply of wool.

- **Composite supply:** This occurs when a good or service can be obtained from different sources. For example, light can be produced from candles, electricity and gas.

- **Competitive supply**: If the raw materials producing the good in composite supply are perfect substitutes of each other, the sources of supply are in competition to satisfy a particular need or want. For example, if electricity and candles were substitutes and cost the same to produce, they would compete to produce the good, light.

Why are supply curves upward sloping?

Supply curves are upward sloping because:

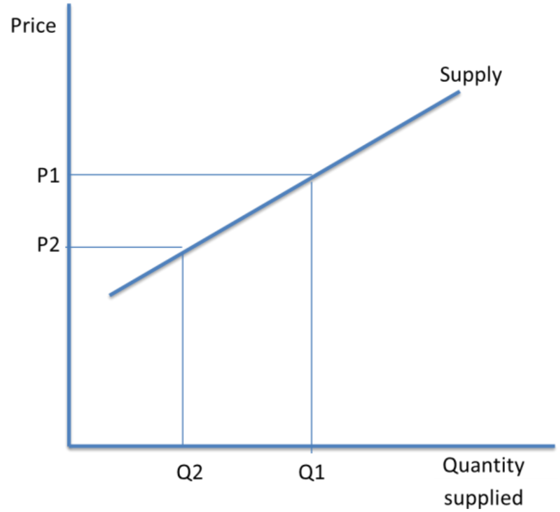
- If price increases, it is more profitable for firms to supply the good, so supply increases.
- High prices encourage new firms to enter the market, because it seems profitable, so supply increases.
- With larger outputs, firm's costs increase, so they need to charge a higher price to cover the costs.

Movements along the supply curve (change in price)

Only changes in price will cause these movements along the supply curve. This is based on the theory of the profit motive. Firms are driven by the desire to make large profits

- At price P1, a quantity of Q1 is supplied.
- At the lower price of P2, Q2 is supplied.
- This is a contraction of supply (producers have less incentive to produce at lower prices).

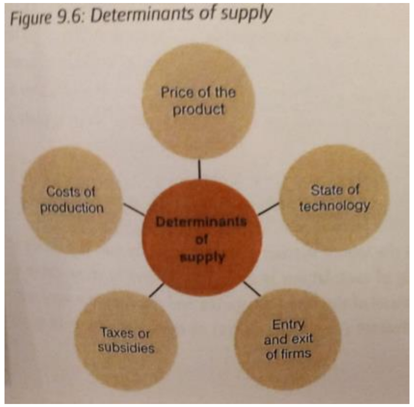
- If price increases from P2 to P1, QS increases from Q2 to Q1.
- This is an expansion of supply (producers are responding to the profit motive).



1.3.2 – Supply

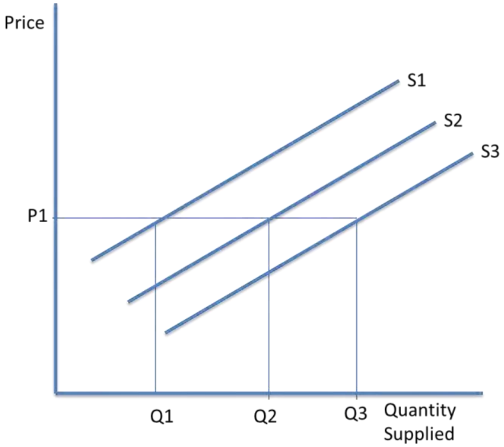
The determinants of supply in a market

- The quantity supplied of a good or service is said to be a function of (depends upon) all the below factors.
- This can be shown mathematically:
  - qs = f (p, production costs, technology, p of other goods/services, G policy, all other factors)
    - qs = quantity supplied
    - f = is a function of
    - p = price
    - G = government



Shifts on the supply curve

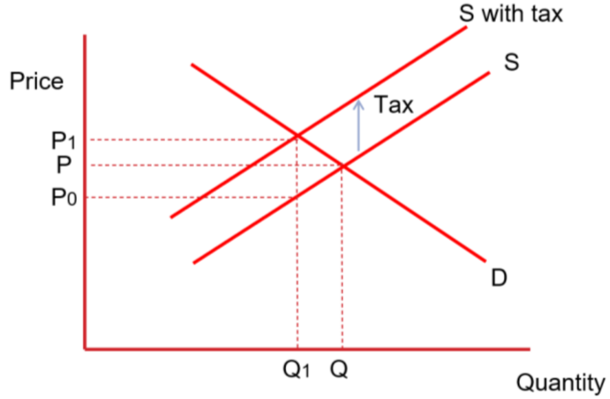
- Price changes do not shift the supply curve.
- A shift from S1 to S2 is an outward shift in supply, so a larger quantity of goods is supplied at the market price of P1.
- A shift from S3 to S1 is an inward shift in supply. More goods are supplied at the market price of P1.



Shifts on the supply curve – taxation

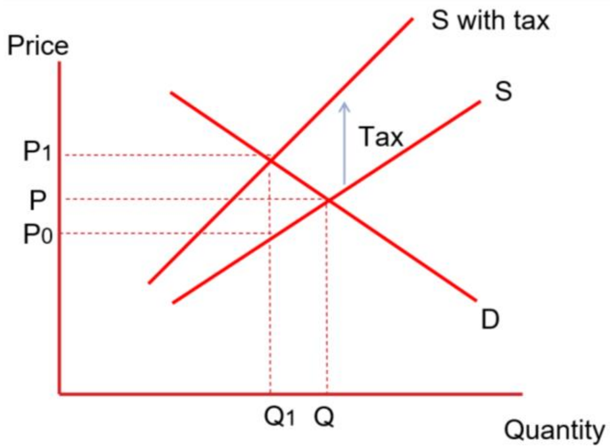
<u>Specific tax</u>

- Specific tax is a set amount per unit. For example, a tax of 50p per fizzy drink.
- A specific tax will lead to a parallel shift in the supply curve:



<u>Ad valorem tax</u>

- An ad valorem tax is a percentage of the price of the good or service. Therefore, the more expensive the product the greater the tax levied on it.
- An ad valorem tax will shift the supply curve upwards whilst also tilting it. As price increase the tax increases:



1.3.2 – Supply

Factors that could cause a shift in supply

<u>Changes in costs of production</u>

- A rise in the cost of production will shift the supply curve to the left. This could occur due to a rise in the price of raw materials, or a firm having to pay higher wages to its workers.
- A fall in the costs of production will shift the supply curve to the right.
- The business is willing and able to supply more at every price level.

<u>Changes in productivity of factors of production</u>

- Increased productivity of a factor of production means that a company will get more output from a unit of factor input.
- Improvements in technology can improve productivity and reduce costs of production.
- As a result, the supply curve will shift right.

Way to remember the factors

For – Firms
Five – Factors of production
Pounds – Production costs
Please – Price of other goods
Eat – External shocks
Some – Subsidies
Turnips – Taxes

<u>Taxes</u>

- A tax is a charged placed on the production of a good or service by the government.
- A tax will effectively increase in the cost of production for the producer. This will reduce the quantity the firm is willing and able to supply at any given price.

<u>Subsidies</u>

- A subsidy is a payment of money by the government to a producer in order to encourage them to produce or supply a certain good or service.
- A subsidy will effectively reduce costs of production for the producer, and so will increase supply.

<u>Changes to the price of other goods</u>

- If the price of **Good A** increases, then a firm may switch production from **Good B** to increase production of **Good A**.
- This will lead to a fall in supply of **Good B**, as the firm tries to take advantage of the higher price level for **Good A**.

<u>Number of firms in an industry</u>

- The more firms there are, the larger the supply.

<u>External shocks</u>

- There are sometimes events beyond the producer's control.
- Examples include; Natural disasters, a pandemic, terrorist attacks, outbreak of disease

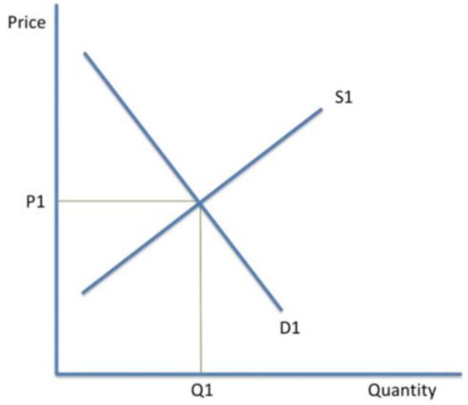
1.3.3 – Price determination

Price determination

- Price is dependent on the interaction between demand and supply components of a market
- In a free market, the forces of demand and supply determine the prices

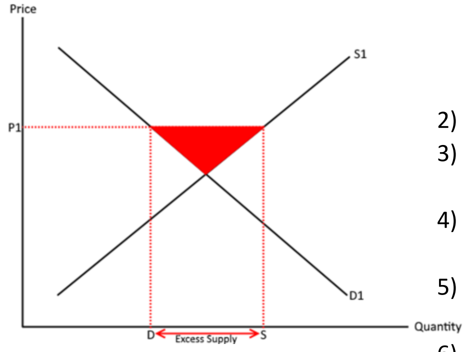
The interaction of demand and supply (equilibrium price)

- Market – any place where buyers and sellers come together to exchange goods and services
- Equilibrium – when supply and demand are equal
- People will only buy a product if they can afford it and they think it represents value for money.
- Businesses will only sell products if they can make a satisfactory profit on it, in order to cover costs.
- Thus, getting the price right is therefore a significant factor in the success of a product.
- The price at which a product is sold is therefore influenced by the demand for and supply of the product (factors such as competitors' prices also influence).
- When we put both the demand and supply curves on the same diagram, there is a point at which they cross.
- This is the equilibrium point – also known as the market price/market quantity/market clearing price.
- At this point quantity demanded is the same as the quantity supplied. At this price – there will be no unsold stocks.
- This is the price and quantity set by market forces.
- Disequilibrium occurs when there is an imbalance in the quantity demanded and quantity supplied of a product i.e. there is excess demand or excess supply.
- In a free market, disequilibrium will never last. The invisible hand of the price mechanism will guide us to equilibrium.



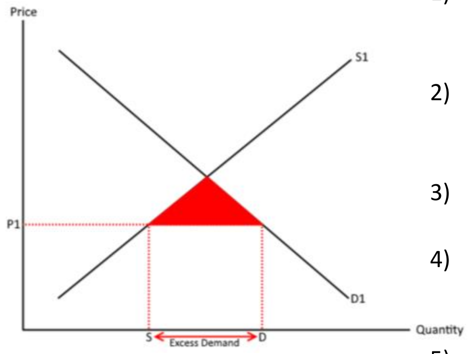
Excess supply and excess demand

<u>If there is excess supply</u>



1) Excess supply occurs when the quantity supplied is greater than the quantity demanded. The price is too high for the market.
2) This is when price is above P1.
3) A signal is sent to producers that the price is too high
4) This acts as an incentive for producers to lower the price (so they can make a profit)
5) There will be a contraction along supply and an extension of demand
6) We are back at equilibrium – excess supply has been rationed away

<u>If there is excess demand</u>



1) Excess demand occurs when the quantity demanded outstrips the quantity supplied. The price is too low for the market to clear
2) At Q2, price is at P2 which is below market equilibrium. Demand is now greater than supply, which can be calculated by Q3-Q2.
3) A signal is sent to producers that the price is too low
4) This acts as an incentive for producers to increase the price (so they can make a profit)
5) There will be an extension along supply and a contraction of demand
6) We are back at equilibrium – excess demand has been rationed away

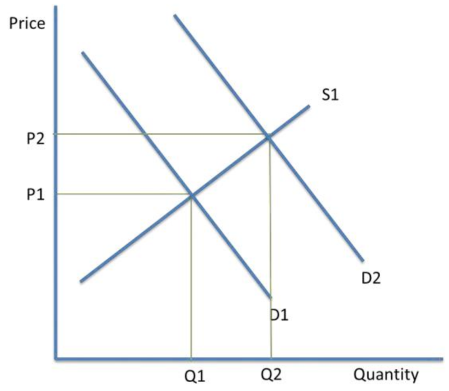
<u>The role of market forces</u>

- Market forces are always pushing prices towards market equilibrium – the price at which demand equals supply and there are no products left over in the market.
- Too much supply leads to lower prices, too much demand to higher prices.
- Where demand is equal to supply, we have the market equilibrium price.

1.3.3 – Price determination

New market equilibriums

- When the demand or supply curves shift due to a change in a factor, new market equilibriums are established.



- For example, if there was an increase in the size of the population, demand would shift from D1 to D2.
- Price would increase to P2 and suppliers would supply a larger quantity of Q2. A new market equilibrium is established at P2 Q2.

The usefulness and limitations of supply and demand in explaining real world problems

- The models of supply and demand can only show certain markets.
- The demand curve assumes that as price goes down, consumers demand more. In reality, this is not the case.
- Similarly, the supply curve assumes as price increase, suppliers produce more.
- It also assumes there is perfect information in the market. The ceteris paribus principle – in the real world other variables change in a dynamic economy
- There are limitations to the model. In real life, consumers and producers do not have perfect information, and they do not always act rationally, like the model suggests.
- However, the model is useful for competitive markets, where there are many buyers and sellers.

How shifts in demand and supply curves cause the equilibrium price and quantity to change in real-world situations

- Commodity prices are usually unstable, especially in the short run. For example, food producers face unstable prices.
- Incomes have fallen because the supply of food has increased. This is due to better technology which has increased the yield of crops, the entrance of new countries into the market and the increased buying power of supermarkets, which means they can choose how much they pay farmers.
- The changes in supply affect the price of commodities. The supply changes due to weather patterns and growing conditions.
- This can be explained using a cobweb diagram:

- In the short run, supply is at Q1. It ends up less than expected at the equilibrium point. This pushes the price up to P1.
- The following year, farmers plan the output to be Q2. But now prices have fallen to P2.
- This continues until producers are forced to leave the market.
- It is largely caused by information failure. Farmers are not aware how their decisions affect next year’s prices.
- An increase in supply can also cause a ‘cobweb’ to form.

1.3.3 – Price determination

The usefulness of supply and demand in analysing the markets of commodities, housing and transport

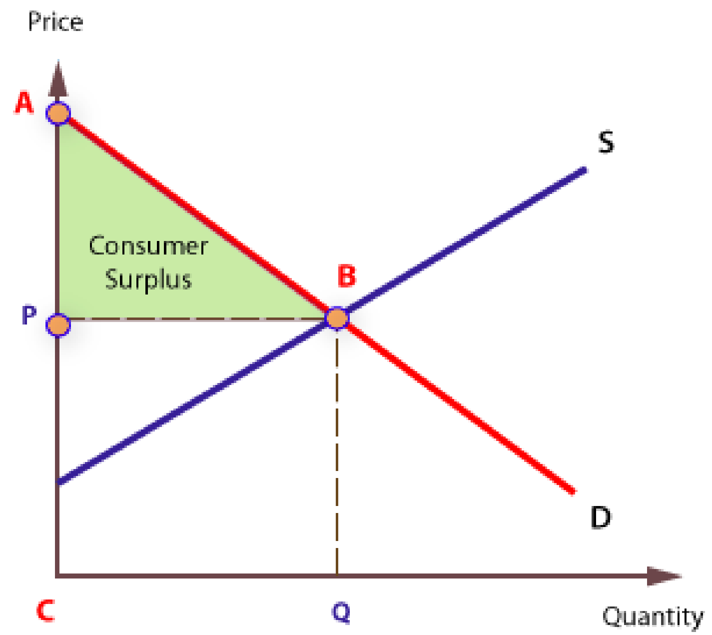
- Demand for agricultural produce tends to be stable in the long run, because the largest markets of the US and Europe tend to have stable populations.
- Since food is a necessity, demand is price inelastic, so it is not very responsive to changes in price.
- Supply tends to be unstable. This is largely due to:
  - poor technology on individual farms
  - the geographical distance between farms which makes it difficult to coordinate them
  - supply side shocks which destroy output, such as droughts
  - the price elastic nature of the supply in the long run, which encourages producers to enter the market when the price is high
  - imperfect information, linked to the cobweb theory

- In the housing market, house prices are important because they make up most of consumer wealth in the UK.
- This means that changes in house prices can significantly affect the rest of the UK.
- This is through the wealth effect and changes in interest rates.
- If house prices increase, due to the wealth effect, the ratio of the market value of the house to the mortgage increases, and consumers experience an increase in equity.
- This leads to a rise in consumer spending and a shift to the right of the demand curve.
- In the long run, house prices increase, but in the short run they are volatile.
- This can make using supply and demand diagrams less effective.

- In the transport market, demand varies with times (off peak and peak), and there is often a disequilibrium in the market. Demand exceeds supply during periods of congestion.
- The demand and supply of transport is affected by other markets, too. For example, the price of petrol, the price of train tickets, substitutes and the time of the journey all impact the mode of transport chosen.

Consumer surplus

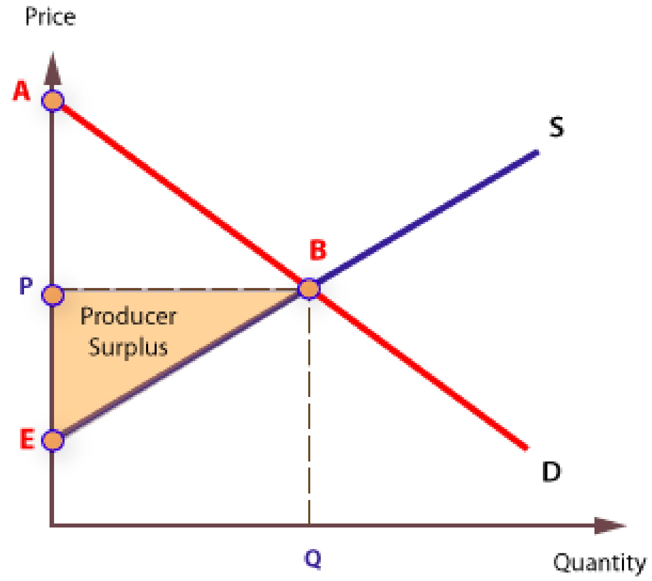
- Consumer surplus is a measure of the welfare that people gain form consuming goods and services
- It is defined as the difference between the amount that s consumer is willing and able to pay for product (indicated by the demand curve) and the total amount that they actually do pay (i.e. the market price)
- Consumer surplus is shown by the area under the demand curve and above the price.
- This represents the number of consumers that were willing and able to pay more than the equilibrium price (P).
- As price increases the consumer surplus area decreases as fewer consumers are willing and able to pay a higher price.
- This is why the consumer surplus area starts to narrow as price increases.



1.3.3 – Price determination

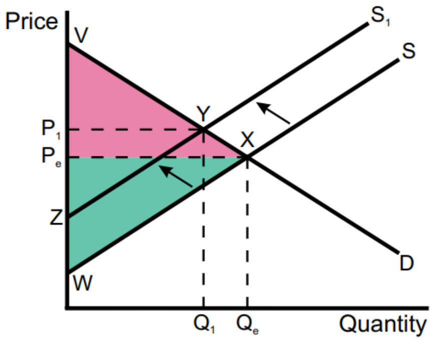
Producer surplus

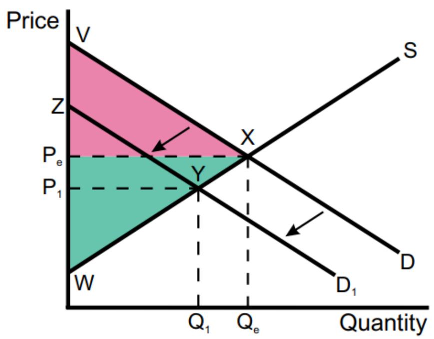
- Producer surplus is a measure of the welfare that firms gain from supplying goods and services
- Producer surplus is the difference between what producers are willing and able to supply a product for (indicated by the supply curve), and the price they actually supply it for.
- Producer surplus is the triangle below the equilibrium.
- This represents the number of producers that were willing and able to supply the good/service for less than the equilibrium price (P).
- As price decreases the producer surplus area decreases as fewer producers are willing and able to supply the good/service at the lower price.
- As the price decreases it will only be the more efficient producers that will be able to continue supplying the good/service at a profit or breakeven point.



Changes in Supply and Demand affect Consumer and Producer Surplus

1) Anything that causes a **shift** in the **supply** or **demand curve** can lead to a **change** in the **price** of a good.
2) A change in price will bring a good **closer to** or **further away from** the **amount** the **buyer** was **willing** to **pay** or the **supplier** was **willing** to **sell** for — and this will **change** the **consumer** and **producer surpluses**.





A shift in the **supply curve** from **S** to **S_1** means the **price** will **increase** from **P_e** to **P_1** and **quantity** will **decrease** from **Q_e** to **Q_1**. The **consumer surplus changes** from **VP_eX** to **VP_1Y** and the **producer surplus changes** from **P_eWX** to **P_1ZY**.

A shift in the **demand curve** from **D** to **D_1** mea the **price** and **quantity** will **decrease** from **P_e** to **P_1** and **Q_e** to **Q_1** respectively. The **consumer surplus changes** from **VP_eX** to **ZP_1Y** and the **producer surplus changes** from **P_eWX** to **P_1WY**

1.3.4 – Price mechanism

Price mechanism

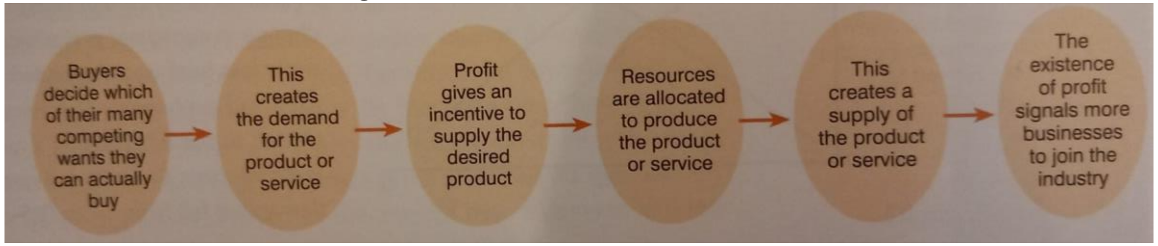
- Price mechanism is an economic model that helps to explain the allocation of resources between different possible uses.
- Rationing, incentives, and signalling are the three types of price mechanisms
- The price mechanism determines the market price. Adam Smith called this 'the invisible hand of the market'.
    - The invisible hand guides resources towards goods/services that consumers want. The invisible hand is an unobservable market force that helps the demand and supply of goods in a free-market reach equilibrium automatically.
- Resources are allocated through the price mechanism in a free market economy.
- The economic problem of scarce resources is solved through this mechanism. The price moves resources to where they are demanded or where there is a shortage and removes resources from where there is a surplus.

<u>The role of economic incentives</u>

- Economic incentives provide the reasons for economic agents to provide goods and services
- These are based on the price mechanism, the method by which prices for goods and services are achieved

The incentive function

- The incentive function occurs because a consumer or producer is motivated to a course of action e.g. higher prices will incentivise a producer to supply more of a good or service
- Higher prices act as a motivator for producers to increase the supply of a good or service
- This is due to greater contribution per unit, i.e. the difference between selling price and variable cost
- As prices rise so due revenue and profit
- There will be a movement along the supply curve, showing an increase in quantity supplied and a decrease in price
- Contribution per unit of a product is the difference between the selling price of a product and the variable cost.
- The variable costs of a product are the costs that change as output increases e.g. the cost of the raw materials used to make a good.



The signalling function

- The signalling function occurs because changing prices give a signal to consumers and producers as to whether to leave or enter a market e.g. higher prices suggests that consumers should buy less
- Prices act as market signals; a high price attracts new firms to the market and guides resources to production as it is profitable.
- E.g. if a product is in high demand, it is a signal to suppliers to expand production and that it is a profitable venture and they should produce it.
- However high prices can also deter customers.
- If there is excess supply (surplus) in the market, the price mechanism will eliminate it by allowing the market price to fall.
- Prices rise and fall to reflect scarcities and surpluses.
- This shifts the demand and supply curves.

The rationing function

- The rationing function occurs because increased demand or reduced supply of a product will lead to a price rise
- Excess demand for a good or service will lead to a rise in the price of a good or service
- This is due to the scarcity of the product
- The price rise will lead to a reduction in demand
- The scarcer a product, the higher the price
- This leads to a rationing of the product as its use is restricted
- There will be a movement along the demand curve showing a decrease in quantity demanded and a decrease in price

1.3.4 – Price mechanism

How firms respond to a change in demand

- Allocative efficiency occurs when society is producing goods to match the needs of consumers.
- Allocative efficiency occurs where consumer satisfaction is maximised in the production of goods and services
- At this point quantity supplied will equal quantity demanded
- Therefore, firms will respond to a change in demand
- This occurs because firms profit maximise
- When demand increases, prices rise, signaling to firms that they should increase supply to maximise profit
- Rising prices indicate rising demand → so firms increase output therefore increasing profits
- Falling prices indicate falling demand → so firms should cut prices and reduce output or create new product

The price mechanism in the context of different types of markets

	DEFINITION	BENEFITS	DRAWBACKS
MASS MARKET	When a business sells into the largest part of a market where there are many similar products on offer. The largest group of consumers for a product	• Large market lending to large revenues • Economies of scale • Less risky as business is dependent on larger section of market • Profit is high due to the high volume of sales	• Strong competition drives down market price, lowering profits. • Branding/advertising to large groups is expensive and difficult. • Competitors can enter the market and reduce business' market share
NICHE MARKET	When a business targets a smaller segment of a larger market where consumers have specific needs and wants	• Clearly focused customers who are easier to target and reach. • Low competition so premium prices can be charged so increased revenue and profit	• Dependent on a small group of customers so vulnerable to market change. • Overdependence on one market/product

- A niche market is generally better at allocating resources to where consumers want, since niche markets are closer to the consumer.
- It could be argued that it is more profitable to be in a niche market, since the consumers are targeted directly, rather than generally. This makes the allocation of resources more efficient.

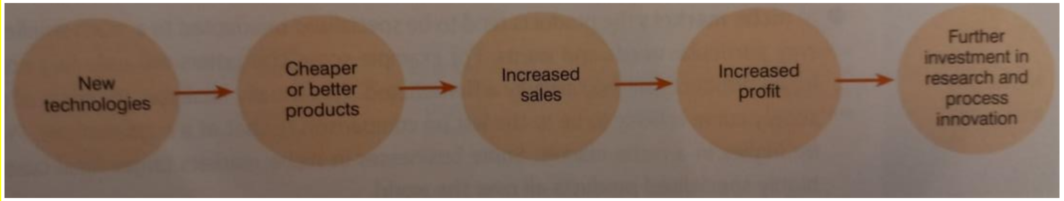
Consumer sovereignty

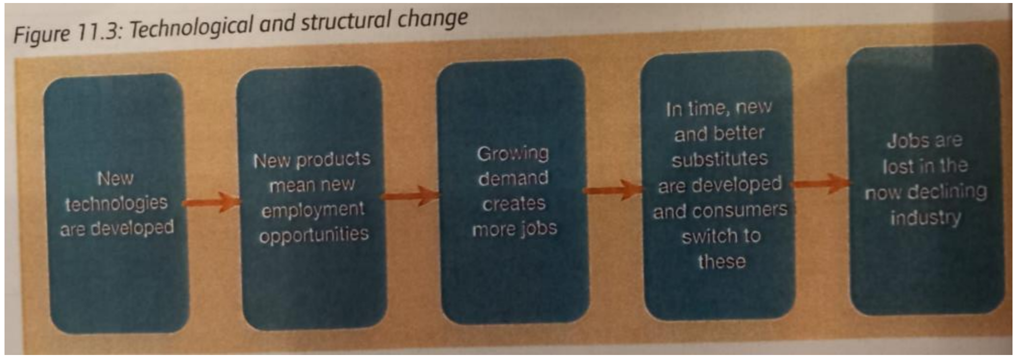
- Consumer sovereignty describes the role of the consumer in determining the allocation of resources. By buying what they want, most consumers send a signal to producers about their preferences.
- The profit-signalling mechanism ensures that businesses do not for long produce goods and services that do not sell and instead follow the incentive to focus on products that will generate profit customers want to buy them.
- It all sounds very neat and plausible, but like many economic models it does not always work in real life. It assumes rather optimistically that:
  - buyers and sellers know what is happening in the market.
  - buyers make informed and rational decisions.
  - resources are easily transferred from producing non-profitable goods to profitable ones
  - markets are competitive.
  - if there is a demand for something, the market will provide it.
- In reality, there are all sorts of things that interfere with the profit-signalling mechanism.
- The most problematic of the assumptions above is that markets are competitive. People in business think a lot about competition and most of their thoughts focus on how to avoid it.
- Creating a distinctive product, hardly hinders competition — in fact, it often provides consumers with more choices.
- But very big businesses may use their power in the marketplace to raise prices, or just get careless about keeping costs down to a minimum. Higher prices eat into real incomes.
- The market will become less competitive, and consumer sovereignty may be threatened. Only through competition can prices be kept down to the lowest possible level.

1.3.4 – Price mechanism

Potential market growth

- Market size is the total sales volume of a given market (i.e. in 2016 the UK grocery market was £179.1 billion). This informs supermarkets of potential future sales.
- The price mechanism gives an indication to firms of what goods and services to supply
- Firms will follow trends in different markets in order to decide what to produce in the future
- As some markets die others grow meaning that firms are constantly using market research to inform them regarding production decisions
- If a market shows potential for growth a firm might reallocate its resources to maximise profits in the future
- There is an opportunity cost to all production decisions





Costs and profits

Sales Revenue Formula = Number of Units Sold x Average Sales Price per Unit

Total Cost = Fixed Cost + Variable Cost
Total Cost = Sales Revenue – Operating profit
Total Cost = Cost Per Unit x Total Quantity Produced

Profit = Total Sales - Total Expenses

Profit Per Unit = Selling Price - Cost Price

FIXED COSTS
A cost which doesn't change with output e.g. rent, advertising, salaries

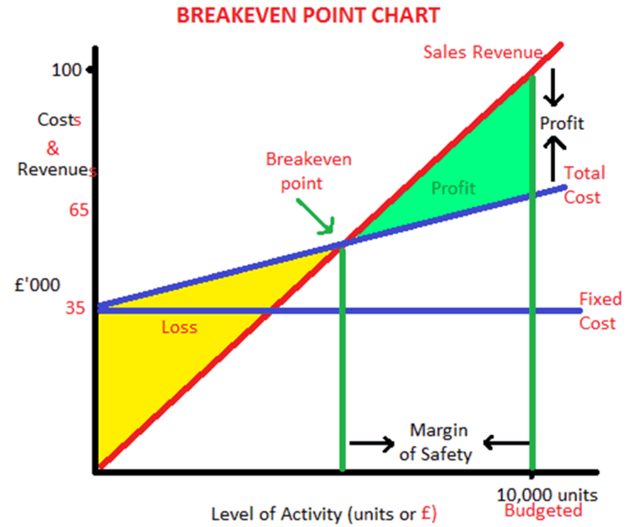
VARIABLE
A cost which changes with output e.g. raw materials, wages, packaging

SEMI-VARIABLE
A part fixed and a part variable cost e.g. electricity bill, gas bill, water bill, phone bill

Breakeven

- Breakeven is the point at which revenue meets total costs. Therefore, no profit or no loss is made. The unit for breakeven is *units*.

Break Even Point = $\frac{\text{Fixed Cost}}{\text{Selling Price Per Unit – Variable Cost Per Unit}}$



1.3.5 – Understanding the consumer

Market research

- Market research is the collection and analysis of data and information to inform a business about its market.
- Data collected and analysed is used to:
  - identify and anticipate customer needs and wants
  - quantify likely demand
  - gain insight into consumer behaviour
- Primary market research (field research) involves the collection of first-hand data that did not exist before and therefore it is original data
- Secondary market research (desk research) is research that has already been undertaken by another organisation and therefore already exists.

Pros and cons of market research

	ADVANTAGES	DISADVANTAGES
PRIMARY RESEARCH	• Can be tailored to the specific need of the company. • Can produce information that rivals do not have access to. • Data is up to date as it is conducted as required.	• Can be expensive. • Can be time-consuming and difficult to collect data. • Methods such as focus groups can require specialists/ specialist knowledge.
SECONDARY RESEARCH	• Very easy to access (internet so immediate knowledge). • Inexpensive or free. • Provides information on market share and market size.	• Might be out of date. • Rivals can also access the data. • Difficult to confirm accuracy. • Can be expensive.

Ways of conducting primary research

Questionnaire

- Asking pre-planned and closed questions which can involve the use of visual evidence.
- Carried by the business itself or by an agency on its behalf.
- Advantages: reactions can be analysed, misunderstandings can be clarified, visual material can be used.
- Disadvantages: time consuming, false answers may be given under pressure, too many closed questions will not give good overall response.

Focus group

- Group of consumers brought together by business or agency to discuss and test products.
- Can be certain social groups specific to product or mixed for general public.
- Advantages: realistic and detailed answers can be gained, taste pf a product can be analysed.
- Disadvantages: only possible to have small sample so opinions may not be representative, expensive if done on a large scale.

Observation

- Watching consumers in stores or going past stores to analyse patterns/ general reactions.
- Advantages: fairly cheap and easy, can reveal useful information.
- Disadvantages: only observation so reason cannot truly be determined.

Ways of conducting secondary research

Market reports	Organisations such as Mintel and Key Note produce reports on trends in the market, which are sold to businesses.
Government data	Local and national government provide data on population demographics. The age, gender, and income distribution in an area are available.
Economic historic and forecast data	Trends in unemployment, growth, inflation, and consumer spending can be useful.
Internet	Search engines offer data on competitors in the relevant market
Trade publications	Many industries have specialist magazines reporting on market trends. For example, the *Grocer* reports on trends in the grocery market.

1.3.5 – Understanding the consumer

Qualitative data

- Qualitative research is the gathering of non-statistical information that gives a company in depth insight into the reasons for human behaviour.

Quantitative data

- Quantitative research is the gathering of statistical data to inform the company about people's behaviour but does not identify the reasons.

Limitations of market research

- Past data and trends may not be a fair indication of the future
- Accuracy of research findings
- Dependent upon ability to correctly analyse findings
- Financial and opportunity costs
- Bias:
  - Questionnaire bias
  - Sampling bias
  - Respondent bias e.g. exaggerating or not telling truth

Random sampling

- A sample is selected for study from a population where each individual is chosen entirely by chance and has an equal chance of being selected.

Quota sampling

- The population is first segmented into subgroups before a judgement is made in selecting respondents that are representative of that subgroup.
  - e.g. within a sub group of women 60% may be aged 20-40, 20% 41-60 and 20% 61+, the sample should represent this

Stratified sampling

- The population is first segmented into subgroups before respondents are randomly selected from within that subgroup.
  - e.g. within a subgroup of 16-18 year olds any member of the population has an equal chance of being selected

Value of sampling

- Businesses cannot ask for the opinions of all potential customers and therefore try to choose a representative sample.
- A sample is a group of subjects that has been chosen from a larger group, the population, for investigation.
- The value of sampling will depend upon:
  - The sample technique used
  - How the sample was carried out
  - The size of the sample
- The size of a sample will depend upon a number of factors including:
  - The budget available
  - The importance of accuracy
  - Degree of confidence in results

Pros and cons of sampling

SAMPLING TECHNIQUE	ADVANTAGES	DISADVANTAGES
Random sampling	• Can be effective and accurate	• Hard to be genuinely random • Needs large sample sizes to be free from bias • Can be expensive
Stratified sampling	• Targets the market effectively	• May be hard to identify appropriate strata • More complex to organise and analyse results
Quota sampling	• Cheap and effective	• Need to be careful in drawing up quotas to avoid bias

1.3.5 – Understanding the consumer

Product orientation

- When a business takes a product orientation approach, it focuses on its product or service's quality and performance.
- When businesses take this approach, their goals are product innovation and improvement. They might create high-quality new products to solve existing customer problems, or regularly survey customers to identify improvement areas.

Market orientation

- This approach prioritises identifying consumers' needs and delivering products and services to satisfy them.
- The primary focus of sales orientation is on pleasing existing customers and generating sales, and a marketing orientation aims to promote products to attract new customers.
- A market-oriented business is outward-looking. It focuses on fulfilling its target markets' wants and needs to achieve success.

Market segmentation

- Market segmentation occurs when the market is split into subgroups of consumers with similar characteristics.
- This helps to identify different types of consumer and different wants and needs.
- Segmentation methods include:
  - Demographic
  - Geographic
  - Income
  - Behavioural

Geographic segmentation

- Geographic segmentation defines market categories based on where people live e.g. regions, cities or neighbourhoods.
- People in different geographical areas display different characteristics and needs. For example:
  - The South East of England is generally warmer than Scotland
  - Tastes and traditions vary between countries
  - Infrastructure in rural areas will differ from that of cities

Income segmentation

- Identifying subgroups of the market based on their levels of income and profession
- A common method uses socio-economic groupings
  - **A** – Higher managerial such as chief executives and directors
  - **B** – Intermediate managerial such as solicitors, accountants and doctors
  - **C1** – Supervisory, clerical or junior professional such as teachers and junior managers
  - **C2** – Skilled manual such as plumbers, electricians and carpenters
  - **D** – Semi and unskilled workers such as refuse collectors and window cleaners
  - **E** – Pensioners, casual workers, students and unemployed

Demographic segmentation

- Identifies subgroups of the population based on their demographic profile or characteristics:
  - Age
  - Gender
  - Level of education
  - Race
  - Religion
  - Family size
  - Stage in life
- Demographics looks at the social and economic characteristics of individuals and households.

Behavioural segmentation

- Characterises subgroups based on the behavioural patterns of the consumer rather than their characteristics. Behavioural patterns include:
  - Reasons for making purchases e.g. needs, emotional, rewards
  - Frequency of purchase e.g. heavy user or light user
  - Time of purchase e.g. seasonal, weekly, late at night
  - Brand loyalty
  - Method of purchase e.g. online
  - Triggers e.g. response to digital marketing

1.3.5 – Understanding the consumer

Pros and cons of segmentation

BENEFITS	DRAWBACKS
• The more precisely a segment can be identified, the more likely a sale will be made • Particular products are targeted at particular people so reduced waste of time/resources • Helps select appropriate pricing and advertising • Encourages the development of brand loyalty and the business can develop a USP to specifically suit its buyers. • Least profitable markets can be avoided • It helps the firm improve existing products and customer service	• Segmentation is very stereotypical – not everyone in the segment will behave the same way. • Can be costly and time consuming to research different segments • Targeting one segment may be at the cost of another • More costly to develop and market different products for different people rather than having standardised products.

1.3.6 – The competition

Market positioning

- Market positioning is where a product is placed in the market relative to its competitors
- Positioning can be achieved by changing elements of the marketing mix to meet the needs of the target market
- Influences on positioning include:
  - Internal constraints e.g. budgets
  - Internal strengths e.g. creativity and innovation
  - Market conditions e.g. degree of competition
  - External environment e.g. state of the economy

Competitive advantage of a product or service

- Competitive advantage is a feature of a business that allows it to perform more successfully than others in the market
  - Same quality of product at a lower price
  - Superior product achieved through differentiation
- Factors contributing to a competitive advantage include:
  - Product differentiation
  - Ability to add value
  - Operational efficiency
  - Position relative to competitors

Product differentiation

- Product differentiation is having a unique feature that makes a product stand out from other products in the marketplace
- A Unique selling point (USP) is a feature that distinguishes a firm's product from those of its competitors
  - Firms try to make their product different to the competition by adapting the actual product in some way or by distinguishing the product through advertising and branding
- Product differentiation allows a firm to:
  - Charge a premium price
  - Gain brand loyalty
  - Add value

Market mapping

- A market map is a diagrammatic technique that enables businesses to display the perceptions of customers
- Compares different variables regarding products and consumers
- It can be used to analyse consumer buying habits and preferences
  - For example it may compare the price of a good with the quality of that good
- It can be used to identify what segment of the market is underprovided for and look at producing a product to fill that gap
- Typically, products are compared between all competitors within a market
- Gives a firm real insight into the competition within the same market as its own product
- The market map shows that there are plenty of high quality, high priced products and plenty of low price, low quality products.
- Therefore, there might be a gap for:
  - high quality, low price
  - low quality, high price
  - very high quality, high price
  - very low quality, low price

- A market map doesn't always have to show quality or price. For example, it could show:
  - Large vs small volume
  - Light vs heavy
  - Good vs lesser quality
  - Young vs old
  - Necessity vs luxury

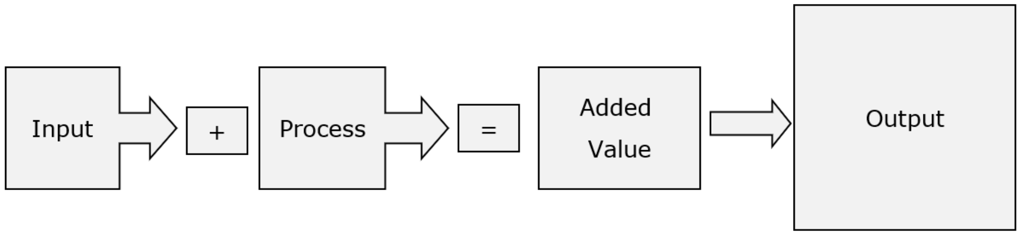
1.3.6 – The competition

Michael Porter's Competitive advantage

- Michael Porter's generic strategy states that a firm can enjoy a competitive advantage if it is either:
    - Lowest cost
    - Highest differentiated
- Porter's basic premise is to be one thing or the other and not stuck in the middle
- He emphasises the danger of the middle ground, almost as if it is a "no mans' land" where there is little protection
- He believes that firms must put their flag in one camp and remain clearly focused on this
- Marketing messages must be clear and non contradictory
    - Tesco – "Good food that costs less"
    - M&S – "It's not just food its M&S food"
- This diagram shows Porter's generic strategy:

Adding value

- Added value is the value of the finished good or service over and above the cost of achieving it
- This is achieved when a business increases the worth of its factor inputs by creating new output
- Factor inputs are the 4 factors of production:
    - Land
    - Labour
    - Capital
    - Enterprise
- Value can be added in many ways including:
    - Manufacturing
    - Marketing
    - Technology
    - Customer service
    - A unique selling point
- Added value can be measured in terms of financial worth
    - The total value of inputs to a car might be worth £6000 in terms of metal, wages etc.
    - The firm sell the car for £10000
    - Adding value of £4000



1.3.6 – The competition

How firms decide on price and level of output

- Firms will have different methods of deciding what price to charge and how much to produce
- Market research is likely to inform the firm
- By testing the market firms will get an idea of what price they can charge
- Many firms are constrained in how much they can produce, particularly in the short run when it is difficult to change factor inputs

Nature and range of markets

- A market is any place that buyers and sellers will come together to exchange goods or services. There will normally be an exchange of money at a set price.
- Nature of the market – Today, markets take numerous forms e.g. local, national, physical or electronic. Examples include the corner shop, the Stock Exchange, the housing market and the Internet for online retailing e.g. eBay or ASOS.
- Markets, for example, can be mass or niche, stable or dynamic.

Mass markets

- A product is targeted at a wide range of people
- The market is not segmented i.e. the characteristics of types of customers are not an important factor
- Products appeal to a wide range of customers
- Products are widely available through a range of markets
- Mass media is used to advertise the products

Niche markets

- Identifying small, currently unsatisfied, gaps in the market
- The target market is well defined with distinct characteristics
- Promotional activities will be targeted at just a small subsection of the whole market
- Can often charge higher prices

Dynamic markets

- Markets are always changing
- The environment is dynamic
    - Social trends
    - Changes in technology
    - Competitive environment
    - Consumer tastes
- Businesses have to adapt their marketing in response to these changes
- A business that fails to keep up with trends in the market will soon lose competitiveness
- Online retailing is the process of buying and selling goods and services over the internet (Also known as e-commerce or e-tail)
    - Offers greater convenience to the consumer
        - Can shop 24/7
        - Breaks down geographical barriers
    - Offers opportunities to businesses
        - Lower overhead costs
        - Access to a wider market
    - Maybe used as part of a multi-channel distribution strategy

Dynamic market – innovation and market growth

- Market growth is the percentage increase in the size of the market

$$\boldsymbol{market\ growth = \frac{change\ in\ size\ of\ market}{origional\ size} \times 100}$$

- Innovation is when a new idea or invention is launched onto the market normally with a view to financial gains

Stable markets

- A stable market is one where there are not major fluctuations in supply and demand resulting in a relatively consistent price of goods and services
- Exists when a market is operating at equilibrium

1.4.1 – The role of banks in the economy

Commercial and investment banks

*Learn the **Difference** between **Commercial** and **Investment Banks***

Commercial Banks

1) Commercial banks (e.g. TSB and NatWest) have these **main roles**:
   - To **accept savings**.
   - To **lend** to individuals and firms.
   - To be **financial intermediaries** (i.e. move funds from lenders to borrowers).
   - To allow **payments** from one person or firm to another.
2) Commercial banks also provide **other financial services** to customers, such as **insurance** and **financial advice**.
3) Commercial banking is split into **two areas**:
   - **Retail banking** — providing services for **individuals** and **smaller firms** (e.g. savings accounts and mortgages). Retail banks are often called 'High Street banks'.
   - **Wholesale banking** — dealing with **larger firms'** banking needs.
4) Commercial banks help **firms grow** by providing **loans** and **financial advice**, and by facilitating **overseas trade**.

The term 'commercial banking' is sometimes used to mean just wholesale banking.

Investment Banks

1) Investment banks **don't** take deposits from customers. Instead, their role is to:
   - Arrange **share** and **bond issues**.
   - Offer advice on **raising finance**, and on **mergers and acquisitions**.
   - **Buy and sell securities** (e.g. shares and bonds) on behalf of their clients.
   - Act as **market makers** to make trading in securities easier.
2) Investment banks also engage in **higher risk** (but potentially very **profitable**) activities. For example, **proprietary trading** involves a bank buying and selling shares using its **own money**.

A market maker for a security allows companies and individuals to buy and sell that security without the need to use a stock exchange.

Commercial Banks can also Operate as Investment Banks

- Many large banks operate as **both** commercial **and** investment banks (e.g. Barclays and HSBC).
- Allowing banks to operate as **both commercial banks** and **investment banks** creates a **systemic risk** (i.e. a risk that a **whole market** or even the **whole financial system** might collapse), because banks may wish to **use deposits** from the **commercial banking side** of their business to **fund investment banking activity**. If they **lose money** in **bad investments** then **their depositors' money** could be at risk.

Channeling savings towards investment

- Commercial banks distribute funds from savers to borrowers in an efficient manner.
  - This provides liquidity in an economy.
    - Liquidity refers to the efficiency or ease with which an asset or security can be converted into ready cash without affecting its market price.
- Consumers use banks as a safe store for theory money and earn interest on their deposits
  - Banks lend this money to other consumers and firms.
  - This created demand in the economy.
  - It also provides firms with the finance required for capital investment.
- Banks can manipulate the interest rate to discourage saving and encourage investment.
  - When interest rates are low, the reward for saving is low.
  - If the inflation rate is higher than the interest rate, the real value of savings falls.
  - This discourages people from saving, since their money loses its purchasing power.
  - Low interest rates also make it cheaper to take out loans, so it encourages spending and investment.

The role of banks

- A bank is a financial institution that accepts deposits from the public and creates a demand deposit while simultaneously making loans.
- Savings refers to any income that we do not spend and put aside – we put the money away. it is the portion of our disposable income that we do not spend on consumer goods but accumulate or invest.
- Investment is the action or process of investing money for profit.
- Credit is the ability of a customer to obtain goods or services before payment, based on the trust that payment will be made in the future.
- Banks play a large role in the economy in many ways listed here:
  - Providing mortgages for house purchases (in exchange for interest)
  - Provide loans for businesses to expand (in return for interest)
  - Provide accounts for savers who earn interest and keep their money safe.
  - Invest money (risky) in hopes of making a return on investment (this helps fund money for the interest in savers' accounts)
  - Give business advice.
  - Exchange currency

1.4.1 – The role of banks in the economy

Role of banks in providing credit

- Credit is the creation of money by banks that can be used to buy goods and services by households and provide goods and services from firms.
- Banks lend to individuals, businesses, and the government.
- One of the main roles of banks is to provide credit
- Banks create money by making loans to households and firms.
- Households and firms are then charged interest as the cost of borrowing this money.
- It is important to note that the act of lending creates deposits, rather than deposits creating lending
- When a bank provides a loan it credits an account with the amount of the loan. It electronically creates money that did not previously exit.
- It is important to understand that this is brand new money, not the money deposited by savers.
- The bank could provide a loan to individuals so they can afford to buy homes that are worth several times their annual income, and still have enough disposable income to meet all their needs.
- The bank could provide a business with a loan to help them fund big investment projects. This process is vital to the health of the economy.
- Banks also provide businesses with working capital – funds needed to finance day-to-day payments
    - Working capital is the money needed by businesses to cover cost of production until the sales revenue comes in.
- Banks may also help the government to cover deficits.

Interest rates

- The interest rate is the price of money
    - The cost of borrowing or the reward for saving money
- The central bank manages the currency, money supply and interest rates in an economy. For example, the European Central Bank (ECB), the Bank of England and the People's Bank of China are central banks.
- The central bank takes action to influence the manipulation of interest rates, the supply of money and credit, and the exchange rate.
- Interest rates are used to help meet the government target of price stability, since it alters the cost of borrowing and reward for saving.
- The bank controls the base rate, which ultimately controls the interest rates across the economy.
    - A base rate is the interest that a central bank (e.g. Bank of England) will charge commercial banks for loans.
- Changes to interest rates will affect the demand for goods and services.
    - Consumers may buy on credit e.g. hire purchase, loan or credit card
    - Interest rates will affect the attractiveness of borrowing money > change in demand.
- Consumers will receive interest on their savings.
    - If interest rates are high consumers may be tempted to save rather than spend
- Higher interest rates will mean that consumers who already have loans will have less disposable income.

Collateral

- Collateral is anything of value that can be seized by a lender if a loan is not repaid.
- Collateral is often property (sometimes called security).
- The collateral for mortgage loans will be the property itself, which can be sold to pay the bank.
    - A mortgage is a loan taken out to pay for a house. The loan is secured against the house, so if the loan cannot be repaid, the bank can repossess the house. The loan usually covers a long period, often around 25 years and the money is repaid on a monthly basis.
- Similarly, if a business owns its premises, this will serve as collateral.
- Banks seek to minimise risks in this way.

1.4.2 – Risk and liability

The meaning of risk

- Risk is the probability of damage, loss or injury occurring. Banks face risks when lending capital.
- The capital might not be paid back, which would result in a loss for the bank.
- There is also a risk that the return on an investment will be less than the expected return.
- The market imposes a risk, since general trade can influence interest rates and exchange rates, which then impacts several countries across the globe.
- Credit cards have the highest rate of risk as they are used by people who cannot get other types of loans. There is a high chance that they will not be repaid. A higher rate of interest is charged to compensate.
- There is a trade-off between risk and safety. Risky loans can be more profitable as more interest can be charged whilst safer loans ensure a constant supply of funds.

Limited liability

- Limited liability means that the owner of the business has no personal liability for business debts.
- The owner has a separate legal identify from the business and is not liable for payment of the debts from their own personal funds.

Unlimited liability

- If a business gains debts, goes bust or is sued this could be a problem for the owner.
- If there is no money in the business then the owner would need to pay using their own savings, and finances, they may even have to re-mortgage their home or even sell their car to pay the debts.
- This is unlimited liability.

Business forms

- A business form is the legal structure that it takes (in the UK). It could be a sole trader, a partnership, a private limited company (Ltd), a public limited company (PLC), or a franchise.
- Most but not all businesses in the UK are a Ltd – this is so that they can sell shares to friends and family to raise money and expand and they get the benefit of limited liability.

How banks deal with risks

1. Banks have a range of borrowers
   - → Some borrowers will not repay but other borrowers will.
   - → This means safer borrowers will compensate for the riskier ones.
2. Banks ask for collateral
   - → In order to reduce the risk of non-payment as people will have more incentive to pay.
   - → Also, they gain value from the item they can repossess so less risk for them.
3. Take care who to lend to
   - → They use credit scores to see who is more likely to pay back their loans.
   - → They give the safer buyers lower interest rates, so they will continue to borrow and give riskier businesses higher interest rates to reduce risk of non-payment.
4. Specialise in particular types of lending
   - → They will give out similar loans i.e. investment banks give out big loans.
   - → It makes assessing a loan easier as they know more about who/what type of person they are lending to as they know the markets better.
5. Monitor their (own) accounts
   - → By using their credit score and their previous credit history banks can tell who will back and who won't.
   - → They can charge different interest rates to each business depending on their credit history.
   - → They will need to check that withdrawals are not more than deposits.
   - → Then if they are they will borrow from other banks (inter-bank lending is used to cover short term debts that result from day-to-day trading).
6. Keep careful track of risks
   - → Some risks can be quantified which allows them to judge borrowers and investments against each other.
   - → They can get a safer return on investment or more money on it.

1.4.2 – Risk and liability

Sole trader

- Business owned by one owner, but they can take on staff
- Also known as a sole proprietor
- Can employ people but they will not be involved in the control of the business
- Tend to be small businesses
- Has unlimited liability
- Examples include; small shops, accountants that work from home, online traders, plumbers etc.

Private limited company (Ltd)

- LTDs can expand and grow by selling more shares, giving the business more capital
- Friends and family can buy shares in the business, this will make them part owners
- Shares cannot be bought by the public
- LTDs owners have full control of who buys the shares
- LTDs have the benefit of limited liability, those that own or buy shares in the business can only lose their original investment, their private assets remain safe

Franchise

- Franchisee: This is the business owner who is buying the rights e.g. Gurdeep
- Franchisor: this is the business that is selling the rights e.g. Subway
- Imaging a company has a great and successful business. It wants to expand but it doesn't want the problems and expense of opening more stores, so it sells the business idea.
- If an entrepreneur buys a franchise, it is a 'business in a box' – as well as signage and training they will get support of a notional company and a brand that customers already know.

Partnerships

- 2-20 partners share the risks, costs and responsibilities of being in a business
- The profits and gains of the partnership are shared among the partners, unless the partnership agreement states otherwise.
- Each partner is responsible for paying tax on their share of the profuts and gains
- Partners raise finance for the business out of their own assets, cash, or with loans
- The partners themselves usually manage the business, although they can delegate certain responsibilities to employees
- It is possible to have 'sleeping' partners who contribute capital investment to the business but are not involved in running the business.

Public limited company (PLC)

- Once a limited (LTD) company has grown in size and needs further investment, which it cannot get from its current pool of owners, it may consider becoming a PLC.
- If it intends to float shares on the stock market, so they can be bought by anyone, it will need to first issue a prospectus where potential investors are invited to purchase share before flotation (called an IPO)
- Going public is expensive:
    - Lawyers to draw up legal paperwork
    - Publications
    - Advertising and admin
    - Company must have £50,000 in share capital

1.4.2 – Risk and liability

Pros and cons of different business forms

BUSINESS FORM	ADVANTAGES	DISADVANTAGES
Sole trader	• Easy to set up – no complicated forms • Make decisions quickly • Less capital needed • All profits are kept by the owner • Can offer personal attention to customers • Don't have to make any information about the company public • They are their own boss	• Unlimited liability, this means thar if the business has financial difficulties the sole trader could lose their own assets like their savings, house, or car. • Difficult to raise money – seen as risk • Don't have the economies of scale (bulk buying) • No one to take over for ill-health or holidays
Partnerships	• Easier than a sole trader to raise extra capital, as partners all have their own sources of finance e.g. savings • Profits go to the partners which is very motivating • Smaller businesses means good working relationships • No need to make public any information • Partners contribute with range of skills • Shared problems and decisions	• Unlimited liability • Partners may have disagreements about: o Control of business o Sharing of profits o Withdrawal from the partnership o Inviting new partners into the business
Private limited companies (ltd)	• Limited liability • Can raise extra capital by selling more shares, to friends and family, making it easier to expand • Can employ managers to run the business if the owners don't want to do it themselves • Has its own legal status, separate from the shareholders	• Accounts of the company cannot be kept private; they have to be available for the public to see • More complex and expensive to set up – more administration • Cannot sell shares on stock exchange, which limits the amount of capital that it can raise
Public limited company (PLC)	• Limited liability • Better access to capital – i.e. raising share capital from existing and new investors • Liquidity – shareholders are able to buy and sell their shares (if they are quoted on a stock exchange • Value of shares – the value of the firm is shown by the market capitalisation (based on the share price) • The opportunity to more easily make acquisitions – e.g. by offering shares to the shareholders of the target firm • To give a company a more prestigious profile	• Once listed on a stock exchange, the company is likely to have a much larger number of external shareholders, to whom company directors will be accountable • Financial markets will govern the value of the company through the trading of the company's shares, and will represent the market's view of the company's performance over time • Greater public scrutiny of the company's financial performance and actions
Franchise	• Limited liability • Less investment is required at the start-up stage since the franchise business idea has already been developed • A franchise allows people to start and run their own business with less risk. The chance of failure among new franchises is lower as their product is a proven success and has a secure place in the market	• Cost to buy franchise – can be very expensive (hundreds of thousands of pounds). • Have to pay a percentage of your revenue to the business you have bought the franchise from. • Have to follow the franchise model, so less flexible. You would probably be told what prices to set, what advertising to use and what type of staff to employ.

1.4.3 – Types and sources of credit and the impact of credit within the economy

Types of capital

- Capital is the money invested in a business.
- There are 3 types of capital a business might need:
  - **START UP CAPITAL** – Capital a business needs to 'get off the ground'. For example, the owner of any new business must be able to buy or rent premises, buy necessary equipment and to buy stock to trade.
  - **ADDITIONAL CAPITAL (expansion) –** This type of capital is used to expand a successful business into a new market or to buy a new piece of machinery. Another reason maybe the rebuilding or refurbishment of premises.
  - **WORKING CAPITAL (day to day) –** Used to pay for the day-to-day running expenses and to pay urgent bills such as electric and telephone. Working capital comes from money in the bank and sales. A lack of working capital will result in cash-flow problems which could cause a businesses downfall.

Sources of finance

- We can use the word 'finance' for 'capital'.
- Finance is available from a number sources.
- If the finance comes from inside the business it is internal.
- If it comes from outside the business it is external.
- The time for which the finance is needed may be:
  - Short term - up to 1 year
  - Medium term - 1 to 5 years
  - Long term - over 5 years

Internal sources of finance

SOURCE	DEFINITION	ADVANTAGES	DISADVANTAGES
OWNER'S CAPITAL/ PERSONAL SAVINGS	The personal savings of the business's owner	• **No debt** – By using owner's capital as a source of finance it means that the business does not have to take out any loans. As a result of this they will not have any debt that will need to be paid off. • **Quick** – No approval is needed in order to use owner's capital to invest in the business. This allows the business to re-invest the capital quickly and therefore may be useful when operating in a dynamic market.	• **Limited funds available** – The Capital that the owner has available to invest in the business is likely to be limited. As a result of this, owner's capital would be an unsuitable for activities such as expansion which would require a much larger amount of capital • **Risk of losing savings** – If the business fails and goes bankrupt then the owner will lose any capital that they have put into the business. • Not all business owners have that additional capital to call on
RETAINED PROFIT	The profit that the business has made so far through trade	• **No debt** – By using this source of finance it means that the business may not have to use loan capital. As a result of this, no interest has to be paid. • **Flexible** – They will also decide where to invest the profits which can be in contrast to some of the other types of finance. • **Retain control** – Owners are able to raise finance without having to dilute some of the power that they have in the business as they will not have to sell any shares.	• **Reduce dividends for shareholders** – there will be less profit left to give to shareholders, dividends will be lower. This may result in shareholders becoming unhappy. • **Slow process** – It can take a long time for a business to gain enough profit that is substantial enough in order to reinvest in the business, especially for new businesses. Furthermore, by the time that the business has made enough profit to reinvest, competitors may have done so a long time ago. Therefore the business risks losing market share if they wait to make a substantial amount of profit. This is especially the case in dynamic markets. • **Limited profits** – Most businesses are unlikely to have the retained profit required in order to fund big investments in their business e.g. expansion. Therefore, the source of finance is unlikely to be suitable when making big investments in the business.
SALE OF ASSETS	The sale of business assets such as machinery	• **Assets depreciate in value** – the business will be able to get the money from the assets before they depreciates in price. • **Poor quality assets can be sold to buy better quality assets** – e.g. newer machinery. This means that they are able to do the same job but more efficiently. This is likely to save the business lots of money in the long term.	• **Lose benefit from the asset** –the business can no longer benefit from the function of the asset. For example, if a business were to sell some machinery then it means that the machinery could no longer be used in order to produce goods. Therefore, by selling assets it may result in a decrease in productivity and therefore output if it is not replaced. • **Asset no longer on the balance sheet** – By selling business's assets it will result in a reduction in the value of the non-current assets. As a result of this, the value of a business's total assets will be reduced and therefore the overall valuation of the business will be reduced also.

1.4.3 – Types and sources of credit and the impact of credit within the economy

What internal source of finance are businesses likely to use?

- **Sole Trader** – A sole trader is likely to use owner's capital as an internal source of financing. This is due to the fact that they are unlikely to be able to use retained profits as they are unlikely to have a substantial amount. Furthermore, they are unlikely to have very many assets and therefore won't be able to raise sufficient funds. This is especially the case if the business has just started up.
- **Partnership** – A partnership may be able to use retained profit depending on how successful the business is. Furthermore, they could also use sale of assets and owners' capital.
- **LTD and PLC** – Both types of business are most likely to use retained profits as they are likely to be much more profitable than sole traders and partnerships. Therefore, it would be unnecessary for them to use owner's capital. However, they could use sale of assets as a means of raising finance. However, if the business is run efficiently then they are unlikely to have a surplus of assets available to them that they can sell.

Sources of external finance

- External sources of finance are defined as funds coming from sources outside of the company, e.g. banks, investors, financial institutions, or other individual lenders.

<table>
<tr><th>SOURCE</th><th colspan="2">INFORMATION</th></tr>
<tr><td>FAMILY AND FRIENDS</td><td colspan="2">• This is only likely to be suitable for sole traders. This is due to the fact that the money that friends and family will be able to loan the business will be limited.</td></tr>
<tr><td>BANKS</td><td>Loans:
• A medium to long-term source of finance
• The bank agrees to lend the business a set sum of money for an agreed period of time and it is paid back in regular instalments
• Loans are likely to be used for big re-investments in the business such as expansion
• It can be hard for smaller businesses to get a loan due to the fact that they are seen as more of a risk
• More suitable option for bigger businesses as PLC's and LTD's are already established and banks likely to offer them bigger loans at a much lower interest rate (economies of scale)</td><td>Overdrafts:
• This allows the business to go over their available cash balance.
• The overdraft limit is agreed by the bank.
• The interest charge on the overdraft is usually at a higher rate than loans.
• There can also be big fines for a business if they go over the overdraft limit
• An overdraft is suitable for all types of businesses but should only be used as a source of short-term finance
• It is not suitable as a permanent source of finance or for funding big investment projects such as expansion.</td></tr>
<tr><td>ISSUING SHARES / SHARE CAPITAL</td><td colspan="2">• Businesses may raise finance through selling some of their shares.
• The people who buy these shares are known as shareholders, and after having bought the shares, they are entitled to a part of the business.
• Dividends will have to be paid to shareholders
• This method of finance is only available to LTD's and PLC's
• The amount of shares that LTD's sell will be limited due to the fact that they are only able to sell shares to friends and family.
• As the owners will have to give up a percentage of shares in their business, there is a risk that someone may attempt to make an aggressive takeover of the business
• Companies benefit from issuing shares, as they can raise money without paying interest
• However, this comes at the cost of giving some company ownership away</td></tr>
</table>

1.4.3 – Types and sources of credit and the impact of credit within the economy

Sources of external finance (continued)

SOURCE	INFORMATION		
TRADE CREDIT	• This is when a business receives the good (e.g. stock) but pays the suppliers at a later date. • This helps the business get going by driving initial sales and then paying the supplier later. • Suitable for all types of business • A short-term means of finance • Helps the working capital of a small shop • Added advantage of being free - no interest charged • However, you miss out on discounts available for immediate payment • If your suppliers are unhappy, they may refuse to let you have supplies in the future • You still have to pay the money at some point		
GOVERNMENT GRANTS	• Government grants refer to money given by governments to new entrepreneurs. • The purpose of government grants is to incentivize people to open new start-ups. • There are certain conditions that a new business has to meet to receive funds from the UK government. One of their main conditions is whether the business will create new jobs in the economy – if the business locates in an area of high unemployment, then they may be given a grant due to the fact that they will be employing staff thus bringing down the local unemployment figure • The European Union also provides grants for businesses and councils in areas of high unemployment. • Government grants are not usually repaid, and even if you had to pay them back, they don't come with interest payments. • This source of finance is suitable for all types of businesses.		
LEASING ASSETS	• If an expensive new piece of machinery is needed the firm could decide to lease it out (i.e. hire it) rather than buy it. • The lease is arranged by a finance company and the business makes regular payments to it for the use of the asset. • The business will never own the asset; it is simply paying for its use.	**Pros:** • You don't need to find so much money immediately and convenient if you only need the machine for a short period of time, better to lease computers as software and hardware might go out-of-date in 2-3 years.	**Cons:** • In long-term more expensive (end up paying far more in rent than cost of machine), can't resell it for quick money or secure a loan on it.
VENTURE CAPITAL	• This is when venture capitalists invest in the business in return for a percentage of shares in the business in an attempt to make a high rate of return on their initial investment. • This is usually a source of finance that is used by start-up businesses. • Venture capitalist prefer to invest in "entrepreneurial businesses" - such businesses are aiming to grow rapidly to a significant size • Although it is a risky investment for venture capitalists, the potential for an above average rate of return is higher • Venture capital is invested in exchange for an equity stake in the business. As a shareholder, the venture capitalist's return is dependent on the growth and profitability of the business. This return is generally earned when the venture capitalist "exits" by selling its shareholding when the business is sold to another owner.		

1.4.3 – Types and sources of credit and the impact of credit within the economy

Other sources of external finance

SOURCE	INFORMATION
PEER-TO-PEER FUNDING	• This is when a business able to take out a loan from a group of individuals or an institution. • The loan will then be paid back after a certain amount of time. • However, there is a risk to the borrower due to the fact that it is an unsecured loan. • Therefore, they are only likely to lend to relatively established businesses.
BUSINESS ANGELS	• This is when a group of business experts invest in the business in exchange for a percentage share in the business. • This can be beneficial to the business due to the fact that the investors are able to help the business in the decision-making process. E.g. Dragons Den. • This would usually be a source of finance used by businesses that are starting up.
ONLINE COLLABORATIVE FUNDING / CROWD FUNDING	• This is when individuals are able to invest in a business in return for a share of their business. • This would usually be used by businesses that are starting up. • This involves raising funds from several people, or a crowd, and it is usually conducted through the internet. **Advantages:** • Firms can raise finance quickly and at a low cost • By raising funds through the internet, the firm is also advertising their business, which can help raise awareness and widen their consumer base • Especially useful for firms which cannot access credit otherwise. **Disadvantages:** • Firms have to raise funds to a certain target. Otherwise, they do not get to receive anything. • If the investment is unsuccessful, the firm risks building a bad reputation, which could make it hard to raise funding through crowdfunding in the future. • By advertising an idea on the internet with the intention of raising funds, the firm risks having their ideas stolen, if they are not protected with a copyright.
OTHER BUSINESSES	• Business may get finance through other businesses that are looking to invest in the business in return for a percentage of their shares.
HIRE PURCHASE	• Hire purchase is a mixture of purchasing the asset as well as leasing it. The business pays a deposit on the asset and agrees to pay off the balance in equal instalments over an agreed period of time. • The difference between hire purchase and leasing is that the business eventually becomes the owner of the asset once it has paid off all the instalments • It is a popular method of finance as the business can have modern equipment (though it maybe dated in the end-up) without having to part with a large sum of money at the outset, and it will eventually own the asset. • The major disadvantage is that the total cost of the asset is much higher than if it were bought for cash. A medium-term source of finance. Example: • If a machine costs £10,000, the firm might pay £2000 of a down payment and then pay £200 a month for 4 years. In the long run, the firm will pay: • £2000 + (12 x 4 x £200) = £11,600 for the same £10,000 machine.
FACTORING	• A business will sell its debt (outstanding money owed by customers (debtors) to a Factor. The Factor collects all the payments due and pays the firm the amount owed, less charges for the factoring service. Although these factoring services can be high, the firm saves money by not having to employ its own staff/time for debt collection and it also benefits by getting the money faster. However customers may resent being chased up for their debt and do their business elsewhere in the future Example: • A firm is owed £20,000 by its debtors but does not have the time to phone up its customers and chase the debt. • So it approaches a factoring firm who takes over the debt. • They take a 5% commission (so the firm receives £19,000 immediately) and then the firm tries to get £20,000 from the debtors. Anything > £19,000 is a profit to them. • The original firm gets most (but not all) of its money immediately.

1.4.3 – Types and sources of credit and the impact of credit within the economy

Challenges in obtaining credit

- Accessing credit is not always easy
- Individuals and firms have credit ratings which have been built up over time
- These provide information to banks as to how risky the loan is
- The greater the risk the higher the amount of interest that has to be repaid
- Using collateral will make it easier to obtain a loan

1.5.1 – Market failure and externalities

Private costs

- Private costs are the costs to producers or consumers involved directly in an economic transaction.
- Private costs for a producer of a good or service include the costs the firm pays in order to produce that good or service.
- Private cost for a consumer involves giving up some income in order to consume the product.

Private benefits

- Private benefits are the benefits derived from consuming a good i.e. The satisfaction of eating a chocolate.
- Private benefits for a producer of a good or service include the profits made and the fulfilment of entrepreneurial and business objectives.
- Private benefit for a consumer is the satisfaction gained by consuming goods and services that satisfy needs and wants.

External costs

- External costs are costs or negative side-effects imposed on a third party who is neither the producer nor the consumer.

External benefits

- External benefits are benefits or positive side-effects that benefit a third party who is neither the producer nor the consumer.

Social costs

- Social costs are the total costs of producing goods and services and are calculated by adding together the private and external costs.

Social benefits

- Social benefits are the total benefits of producing goods and services and are calculated by adding together the private and external benefits.

Examples

Private costs	Private benefits	External costs
Price of car and depreciation	Independence	Pollution may cause illness
Running costs	Convenience	Congestion increases costs of transportation
Tax	Access to work	Accidents may happen
Insurance	Access to leisure	Impact on infrastructure

Externalities

- Externalities are the costs and benefits to a third party created by economic agents when understanding their activities.
- These costs and benefits can be negative or positive:
  - Negative externalities are those costs to a third party that are not included in the price of the economic activity. (e.g. They are the effects of environmental pollution) causing the social cost of production to exceed the private costs.
  - Positive externalities are those benefits to a third party that are not included in the price of the economic activity. (e.g. The provision of education and health care) causing the social benefit of consumption to exceed the private benefit.

Positive externalities

- This occurs when the consumption or production of a good causes a benefit to a third party. For example:
  - When you consume education, you get a private benefit. But there are also benefits to the rest of society. E.g. you are able to educate other people and therefore they benefit as a result of your education. (Positive consumption externality)
  - A farmer who grows apple trees provides a benefit to a beekeeper. The beekeeper gets a good source of nectar to help make more honey. (Positive production externality)
  - If you walk to work, it will reduce congestion and pollution; this will benefit everyone else in the city.

1.5.1 – Market failure and externalities

Negative externalities

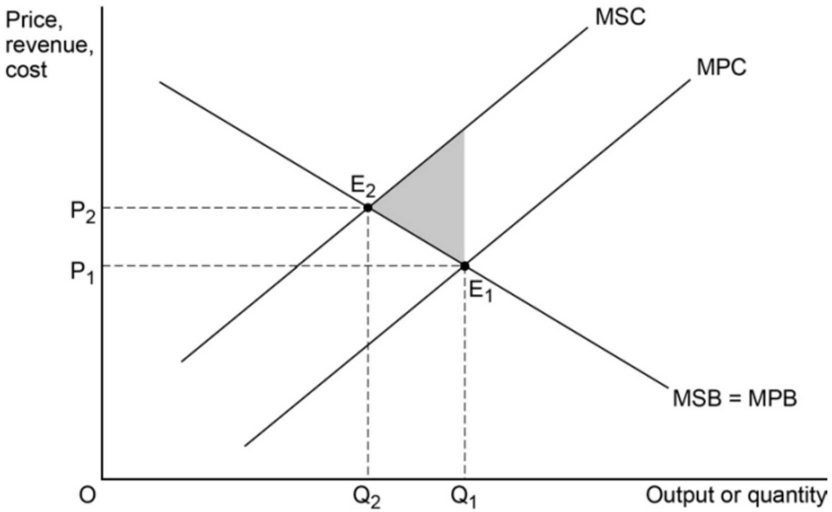
- Negative externalities are regarded as being undesirable, but this does not necessarily mean that there is a case for banning the product that gives rise to them.
- Only a few people are willing to do without a car because of the negative externalities involved with car production and driving.
- On the other hand, too many cars and excessive traffic clearly create a problem that we do not want.
- So how many cars should we allow? Some of you reading this guide will be the proud owners of your first car — are you willing to give it up for the good of the environment?

Notation

- MPC = Marginal Private Costs
- MPB = Marginal Private Benefits
- MSC = Marginal Social Costs
- MSB = Marginal Social Benefits

Negative externalities in production

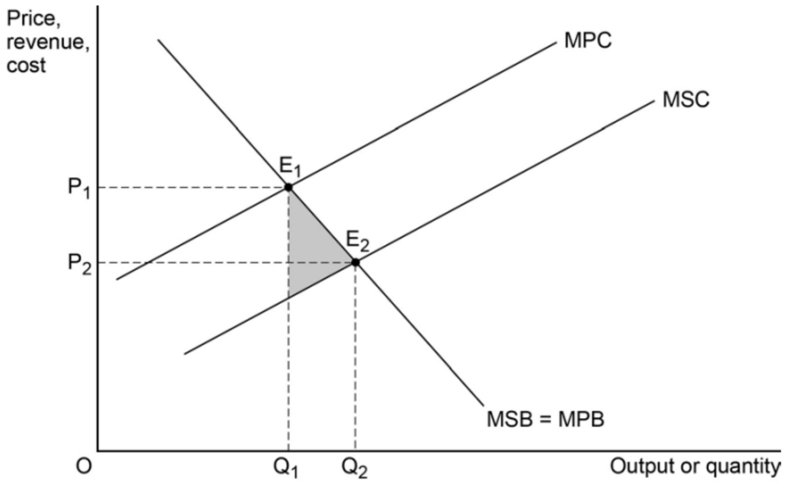
Example:
Pollution generated by a factory that imposes costs on others.



The shaded area illustrates the 'loss' of welfare or deadweight welfare loss (DWL), which exists at the free market output, Q_1 (where MPC = MPB). The socially optimum output is Q_2 (where MSC = MSB). At outputs between Q_1 and Q_2, the MSC is greater than MSB and hence there is a net welfare loss on each of these items. Social welfare would be higher if these items weren't produced and resources were reallocated to producing other goods and services.
When production takes place at the socially optimal output, ie where MSB = MSC, the DWL is eliminated.

Positive externalities in production

Example:
When producing goods and services, companies may develop new technologies that benefit other companies, leading to lower costs for other firms. These spillover effects are not taken into account by the firms who develop the new technologies.

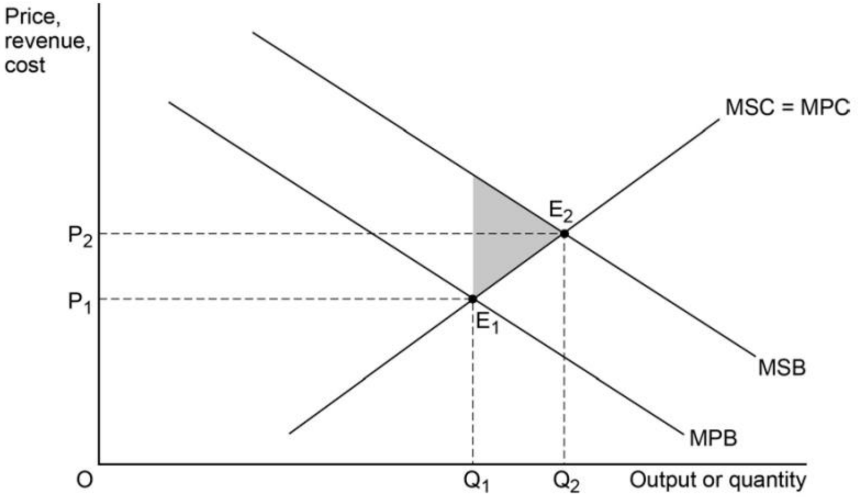


The shaded area illustrates the 'loss' of welfare or deadweight welfare loss (DWL), which exists at the free market output, Q1 (where MPC = MPB). When production takes place at the socially optimal output, ie where MSB = MSC, the DWL is eliminated. This is sometimes referred to as a 'welfare gain'. Increasing output from Q_1 to Q_2 increases social welfare because the MSB derived from consuming each of these items is greater than the MSC.

1.5.1 – Market failure and externalities

Positive externalities in consumption

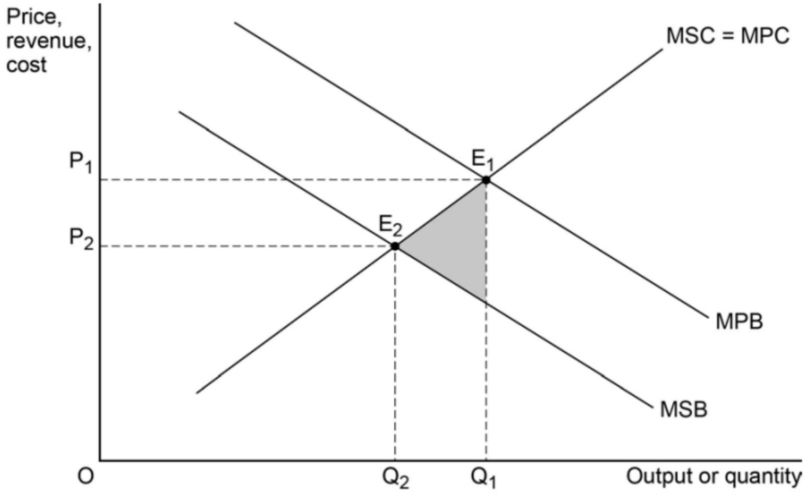
Example
Where the consumption of a merit good generates benefits for third parties, eg vaccinations



The shaded area illustrates the 'loss' of welfare or deadweight welfare loss (DWL), which exists at the free market output, Q1 (where MPC = MPB). When consumption takes place at the socially optimal output, ie where MSB = MSC, the DWL is eliminated. This is sometimes referred to as a welfare gain.

Negative externalities in consumption

Example:
Where the consumption of a demerit good leads to adverse consequences for third parties, eg smoking.



The shaded area illustrates the 'loss' of welfare or deadweight welfare loss (DWL), which exists at the free market output, Q1 (where MPC = MPB). When consumption takes place at the socially optimal output, ie where MSB=MSC, the DWL is eliminated.

Strengths of the market economy

- Markets are working well when social costs are equal to social benefits.
- This is when the resources chosen to produce what we consume is equal to the value of the products we choose.
- This happens especially when there are few externalities and impacts are on the producer and consumer.
- Strengths:
  - They mostly work as the profit signalling mechanism leads to an efficient allocation of resources.
  - The market forces respond to changes in the factors of demand and supply, adjusting output accordingly to the needs of the consumers.
  - Competition is good as it drives does costs and increases efficiency. This drives down prices and encourages companies to make better, more innovative products to attract sales.
  - The allocation of resources reflects both consumers' choices and production costs.

Market failure

- Allocation of resources refers to the way resources are used and shared out (distributed) within the economic system.
- Market failure occurs when the market is unable to efficiently allocate scarce resources to meet the needs of society. This can be caused by:
  - Externalities
  - Under-provision of public goods
  - Information gaps
- This can lead to undesirable outcomes such as underproduction, overproduction, inequality and externalities.
- In practice, there will always be market failure, also known as allocative inefficiency.
- It is the role of the government to try to eliminate market failure – they do this by intervening in markets (government intervention).

1.5.1 – Market failure and externalities

Weaknesses of the market economy

- Negative externalities create spill-over effects e.g. pollution, which are not included on the price of the product. If the price that was charged was the full social cost, then demand would be lower; there is over-consumption and over-production of these products.
    - Over-consumption occurs when social costs exceed private costs, as in the case of petrol and diesel. If the consumer had to pay the external costs as well as the private costs, the private cost would equal the social cost and demand would decrease.
- Some very desirable products such as healthcare and education will not be provided in a market economy. Such products will be under-produced and under-consumed. This is market failure because it cuts out potential benefits to society as a whole.
    - Under-consumption occurs when products that are socially desirable are too expensive for everyone to cover the costs themselves. The social benefits to society of healthcare and education are very great because respectively, they reduce infectious diseases and create a skilled labour force.
- Some firms will gain market power and some markets will become less competitive than others and prices will become higher than necessary. The price mechanism is no longer efficient.
- Market forces do not guarantee a standard of living and will likely lead to inequality.
- Private goods are rival and excludable. For example, a chocolate bar can only be consumed by one consumer. Moreover, private property rights can be used to prevent others from consuming the good.
- Information gaps - It is assumed that consumers and producers have perfect information when making economic decisions. However, this is rarely the case, and this imperfect information leads to a misallocation of resources.

1.5.2 – Government intervention and failure

Government intervention

- Government intervention in the context of the UK, refers to the involvement of the Government in the economy to achieve certain goals or address specific issues.
- The government takes various actions and implements policies to influence how businesses operate, how resources are allocated, and how certain social and economic problems are addressed.
- There are 6 types of government intervention
  - Legislation
  - Regulation
  - Subsidies
  - Voluntary agreements
  - Indirect taxation (green tax)
  - Tradable permits

Regulation

- Regulation is when the government establishes rules and regulations that businesses and individuals must follow.
- Regulation is undertaken by government to create competitive markets
- The government believes that this will protect the interests of consumers so that they are not exploited by firms
- Effective regulation will lead to greater choice and lower prices
- Regulation takes place in a number of industries such as telecoms, water and energy
- A key reason for regulation is to create conditions for continued investment in infrastructure in important areas of the economy

Tradable permits

- Firms are given pollution permits which they can trade
- Sets a limit on external costs
- Incentives for firm to trade permit and produce cleaner
- Expensive/difficult to implement

Voluntary agreements

- Government tries to persuade businesses to adopt their own code of ethics to reduce externalities
- Keeps producers on side
- Not all businesses will sign up due to the extra cost

The purpose of intervention

- Reducing impact of external costs such as pollution.
- Ensuring that under-produced products are available to all.
- Ensuring that over-consumed products such as tobacco are discouraged and prevented.
- Reduce anti-competitive behaviour to ensure fair prices for the consumer.

Legislation

- New laws change the behaviour of both individuals and businesses. Failure to comply will result in the imposition of a penalty.
- The government decides on the extent to which externalities will be permitted and the appropriate penalty for non-compliance.
- For example, governments make drug trading illegal. All children must be educated by law.

ADVANTAGES	DISADVANTAGES
• Expected standards are clear • Failure to comply has consequences • The consequences are known	• Law may be difficult to enforce • Enforcement can be expensive • Penalties may not deter behaviour

Examples of government failure

- Tax leads to fly-tipping.
  - A tax on rubbish is a policy to overcome market failure. To try and include the external cost of rubbish in the price. However, a tax on rubbish can lead to illegal dumping of rubbish on the roads. This creates a different problem of fly-tipping.
- Common Agricultural Policy.
  - The CAP was intended to solve market failure in agriculture and protect farmers incomes, but the EU didn't take into account minimum prices would lead to over-supply; there were also unintended consequences of trade wars and environmental problems from farmers trying to supply as much as they could.
- Prohibition strengthened the mafia.
  - When the government banned alcohol in the US, it caused the mafia to supply alcohol, leading to a rise in organised crime.

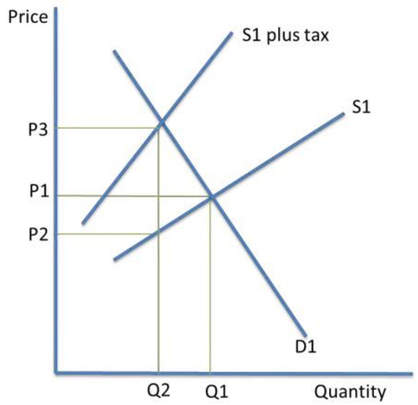
1.5.2 – Government intervention and failure

Indirect taxation

- Taxation is the medium through which governments finance their spending and control the economy. It is a charge imposed on products, individuals, and businesses.
- Indirect taxes are taxes on expenditure. A direct tax is a tax on an individual or an organisation.
- They increase production costs for producers, so producers supply less. This increases market price and demand contracts.
- They could be used to discourage the production or consumption of a demerit good or service.
    - For example, the government could impose a £1 tax per packet of cigarettes.
- Reduces externalities
- Raises money for the government
- May not stop consumption
- Indirect taxes could reduce the quantity of demerit goods consumed, by increasing the price of the good. If the tax is equal to the external cost of each unit, then the supply curve becomes MSC rather than MPC, so the free market equilibrium becomes the socially optimum equilibrium. This internalises the externality. In other words, the polluter pays for the damage.
- There are two types of indirect taxes as shown below

Ad valorem

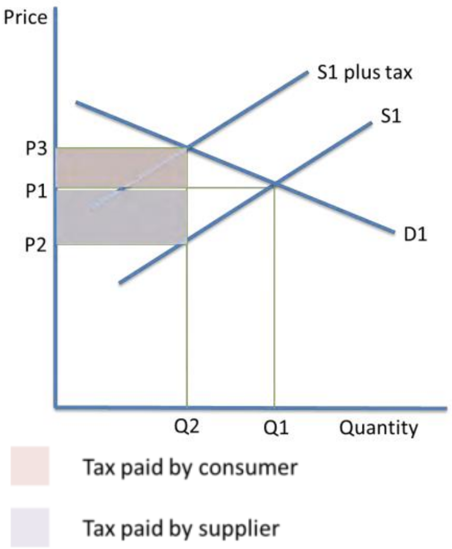
- Ad valorem taxes are percentages, such as VAT, which adds 20% of the unit price. This is the main indirect tax in the UK.



- The incidence of tax might fall differently on consumers and producers. Producers could make consumers pay the whole tax (P3 – P2), or if they feel this would lower sales and lose them revenue, they could choose to pay part of the tax. Producers might pay P1 – P2, whilst consumers might pay P3 – P1.
- The incidence of the tax depends on the price elasticity of demand of the good. For cigarettes, since the demand is fairly price inelastic, consumers might have the larger burden of tax.
- This should, in theory, discourage consumption of the demerit good and reduce negative externalities.
- Government revenue from ad valorem taxes is larger if demand is price inelastic. This is because demand falls only slightly with the tax.

Specific taxes

- Specific taxes are a set tax per unit, such as the 58p per litre fuel duty on unleaded petrol.



- The more inelastic the demand, the higher the tax burden for the consumer, and the lower the burden of tax for the producer.

1.5.2 – Government intervention and failure

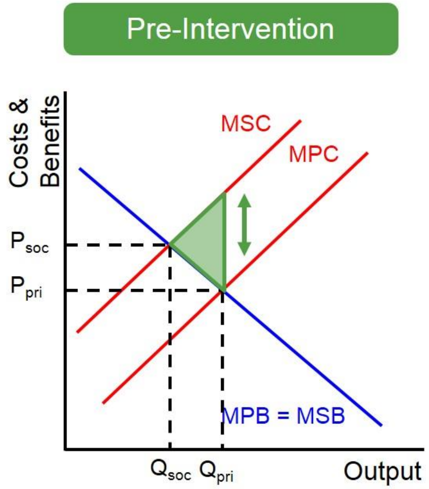
Grants and subsidies

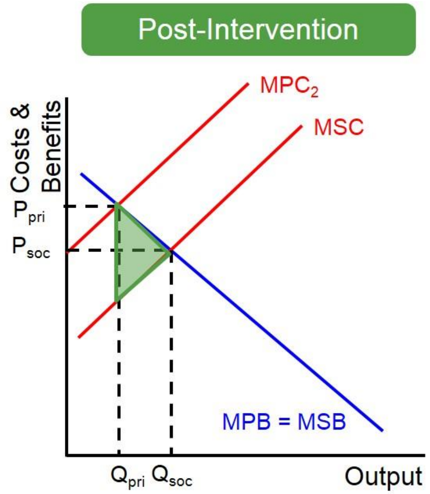
- A subsidy is a payment from the government to a producer to lower their costs of production and encourage them to produce more.
- Subsidies encourage the consumption of merit goods. This includes the full social benefit in the market price of the good. Therefore, the external benefit is internalised.
- For example, the government might subsidise recycling schemes so it is cheaper for consumers to recycle waste, which will yield positive externalities for the environment.
- The supply curve shifts to the left. More of the merit good is produced and the price falls from P1 to P2.
- The vertical distance between the supply curves shows the value of the subsidy per unit.

- Consumers gain more from the subsidy when demand is price inelastic, whilst producers supply more when demand is price elastic.
- The disadvantages of subsidies include the opportunity cost to the government and potential higher taxes, the potential for firms to become inefficient if they rely on the subsidy and government failure, if they subsidise less efficient industries.

Other ways of correcting market failure

EDUCATION	• Charges in consumer behaviour can be brought about by either direct education in schools or by campaigns to raise awareness of issues. • For example, people are much more aware of the need to conserve energy and the environment than they were 20 to 30 years ago.
FREE PROVISION	• Whilst most countries legislate against illegal drug use, many also provide a range of schemes to minimise its negative externalities. Needle exchanges, provision of methadone, hostels and rehabilitation facilities all help. Many countries provide free condoms and contraception to reduce population growth and the spread of STDs.
ADVERTISING	• Examples include the campaigns to reduce drink driving, to encourage safe sex and reduce HIV/AIDS and the promotion of healthy eating. All are designed to change behaviour and reduce negative externalities.





1.5.2 – Government intervention and failure

Causes of government failure

DISTORTION OF PRICE SIGNALS	• Government subsidies could distort price signals by distorting the free market mechanism. A free-market economist would argue that this could lead to government failure. There could be an inefficient allocation of resources because the market mechanism is not able to act freely. • For example, the government might end up subsidising an industry which is failing or has few prospects.
UNINTENDED CONSEQUENCES	• This is when the actions of producers and consumers have unexpected, or unintended, consequences. • With government policies, consumers react in unexpected ways. A policy could be undermined, which could make government policies expensive to implement, since it is harder to achieve their original goals.
EXCESSIVE ADMINISTRATIVE COSTS	• The social benefits of a policy might not be worth the financial cost of administering the policy. It might cost more than the government anticipated. The government has to consider whether the policy is good value for money.
INFORMATION GAPS	• Some policies might be decided without perfect information. This might require a full cost-benefit analysis, and it could be time-consuming and expensive. • For example, government housing policies are long term, and have failed several times in the past. • However, it is impractical for governments to gain every bit of information they need, so assumptions are made.

Government failure in various markets

AGRICULTURAL MARKET	• In the agriculture market, governments might intervene with a buffer stock system to reduce price volatility. • However, historically, these have been unsuccessful. Governments buy up harvests during surpluses, then sell the goods onto the market when supplies are low.	**Advantages:** • Farmer incomes remain stable, because fluctuations in the market are reduced. This will be particularly beneficial in rural areas, where farming is a main source of income. • It also increases consumer welfare by ensuring prices are not in excess.	**Disadvantages:** • Governments might not have the financial resources to buy up the stock. By guaranteeing farmers a minimum price, they might overproduce. This could be expensive and damaging to the environment. • Storage is difficult and expensive, since agricultural goods do not last long, and there are administrative costs.
HOUSING MARKET	• In the housing market, house prices are important because they make up most of consumer wealth in the UK. This means that changes in house prices can significantly affect the rest of the UK economy, due to the wealth effect and changes in interest rates. If house prices increase, the ratio of the market value of the house to the mortgage increases, and consumers experience an increase in equity. • Due to the wealth effect, there is a rise in consumer spending and a shift to the right of the demand curve. In the long run, house prices increase, but in the short run they are volatile. This can make using supply and demand diagrams less effective. • In the UK housing market, there is failure due to the housing shortage, which means resources are not being allocated efficiently. This shortage affects the mobility of labour. It is partially caused by information asymmetry, where sellers know more than buyers.		
LABOUR MARKET	• In the labour market, market failure is caused by immobility, skills gaps and discrimination within the market. The government might intervene by implementing a National Minimum Wage or having an Equal Pay Act. • There is also a minimum school leaving age, to ensure workers have a sufficient basic education. The NMW could lead to government failure if instead of raising living standards, people become unemployed. However, there has been no evidence of this in the UK.		

1.6.1 – Revenue and costs

Sales volume and sales revenue

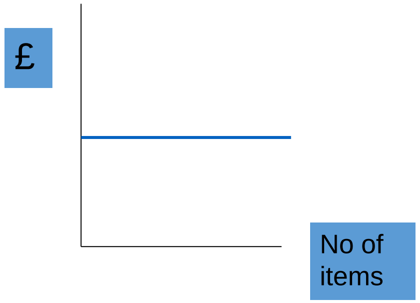
- Sales volume is the amount of sales expressed as a number of units sold
    - e.g. 20 tonnes of wool
- Sales revenue is the amount of sales expressed as the total sum of money spent by consumers
    - e.g. £3 million expenditure on clothing

$$sales\ volume = \frac{sales\ revenue}{selling\ price}$$

$$\textbf{Marginal Revenue (MR) Formula} = \frac{\text{Change in Revenue}}{\text{Change in Quantity}}$$

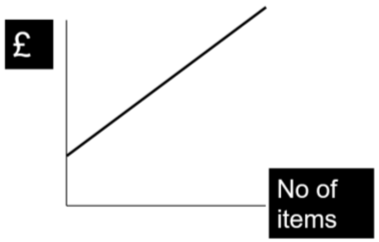
Fixed costs

- Fixed costs stay the same regardless of output e.g. rent and manager's salaries
- Fixed costs also include interest on bank loans
    - A business borrows £30 000
    - The annual rate of interest is 7.5%
    - £30 000 x 0. 075 = £2250
- The business has a fixed interest payment of £2250 per annum
- Fixed costs are shown as a straight horizontal line when shown on a graph



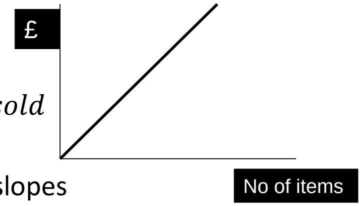
Total costs

- $Total\ costs = fixed\ costs + total\ variable\ costs$
- Total costs start at the fixed cost point on the y axis and slope upwards parallel to the variable cost line.



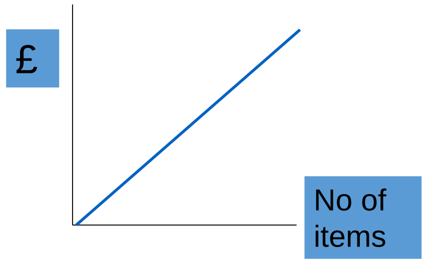
Revenue

- Revenue is the money coming in from the sale of goods and services
- $revenue = selling\ price \times quantity\ sold$
- Revenue increases with the amount of units sold and therefore starts at 0 and slopes upwards when shown on a graph



Variable costs

- Variable costs change in relation to the number of items produced e.g. raw materials
- Variable costs per unit or average variable costs (AVC) are multiplied by the number of units to calculate total variable costs (TVC)
    - $Total\ variable\ costs = quantity \times average\ variable\ costs$
- Variable costs start at zero and slope upwards when shown on a graph.



Liquidity

- Liquidity is the ability to use fixed/current assets to meet liabilities (what you owe). In other words, the assets are sold to pay off debts.
- $net\ assets = total\ assets - total\ liabilities$
- Working capital is the money available to use on a day-to-day basis.
- $working\ capital = current\ assets - current\ liabilities$
- $current\ ratio = \frac{current\ assets}{current\ liabilities}$
- Current ratio can also be written as a ratio
    - e.g: $£1.65 : £1 = current\ assets : current\ liabilities$
- $acid\ test\ ratio = \frac{(current\ assets - inventory)}{current\ liabilities}$

1.6.1 – Revenue and costs

Average costs

- Average cost (AC) or Average Total Cost (ATC) is the average cost of producing a unit of output
- Calculated as:
  - Total Cost/Output
- As output rises average costs will fall because fixed costs are being divided by a higher level of output

Percentage change

$$\text{Percentage Change Formula} = \frac{\text{New Value - Original Value}}{\text{Original Value}} \times 100$$

Summary of cost formulas

$$\text{Average Cost Formula} = \frac{\text{Total Cost of Production}}{\text{Number of Units Produced}}$$

Fixed Cost Formula = Total Cost of Production – Variable Cost Per Unit x No. of Units Produced

Profit = Total Sales - Total Expenses

Profit Per Unit = Selling Price - Cost Price

Total Cost = Fixed Cost + Variable Cost

Total Cost = Sales Revenue – Operating profit

Total Cost = Cost Per Unit x Total Quantity Produced

Total Variable Cost Formula = Number of Units Produced x Variable Cost Per Unit.

1.6.2 – The relationship between revenue and costs

Contribution

- What does the word contribution mean?
  - When we contribute we give towards something
- In business each time a product is sold or service provided what does the money generated contribute towards?
  - It has to firstly pay for its own variable costs and then contribute towards the fixed costs
  - Until there are enough contributions to cover all the fixed costs the business can not start to make a profit
- Each time an item is sold the difference between the selling price and the variable cost is contributed towards the fixed cost
- The business has to keep putting this excess, the contribution, towards fixed costs until they are all paid off
- Contribution per unit is the difference between selling price per unit and variable cost per unit i.e. how much is left to contribute
  - Firstly, to fixed costs and secondly to profit

$$\text{Contribution Margin} = \text{Price Per Unit} - \text{Variable Cost Per Unit}$$

- Total contribution is the difference between total sales revenue and total variable costs.

Margin of safety

- Margin of safety is how much actual output is above the break-even level of output

Margin of Safety				
Margin of Safety	=	Actual Sales	-	BreakEven Point

Break-even analysis

- Break-even is the point at which a business is not making a profit or a loss i.e. it is just breaking even
- At this point total costs must be the same as total revenue
  - TR = TC
- Break-even output is the number of items that a business must sell to reach this point
- Before reaching break-even a business is operating at a loss
- After reaching break-even each additional unit sold will contribute towards profit

Break-even point calculations

Break Even Point Formula

$$\text{Break Even Point} = \frac{\text{Fixed Cost}}{\text{Selling Price Per Unit} - \text{Variable Cost Per Unit}}$$

$$\text{Break Even Point} = \frac{\text{Fixed Cost}}{\text{Contribution Margin Per Unit}}$$

$$total\ sales\ revenue = total\ fixed\ costs + total\ variable\ costs$$

1.6.2 – The relationship between revenue and costs

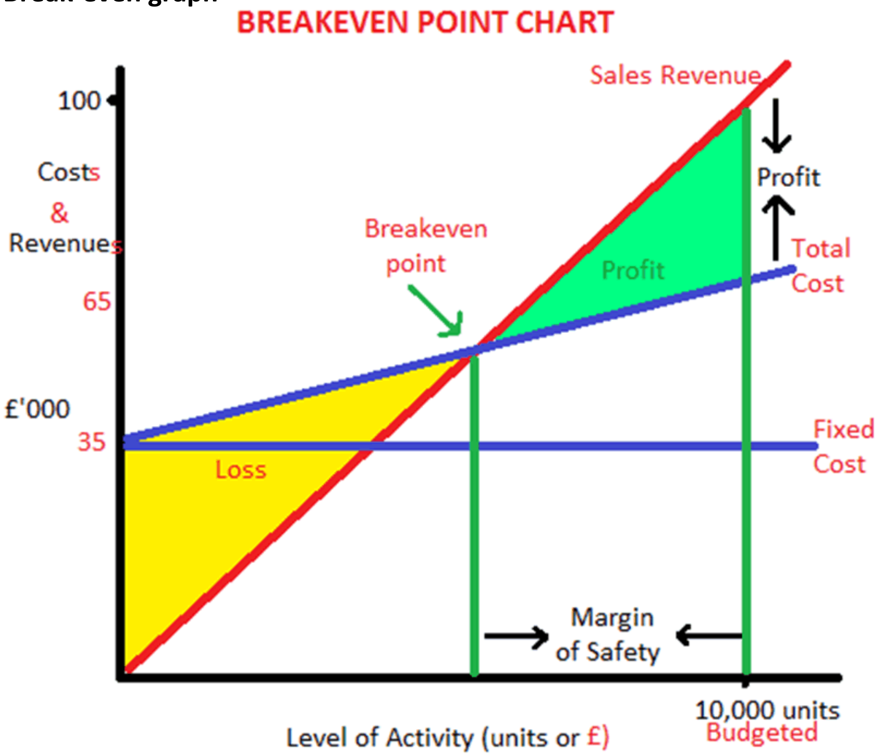
Changing variables

- Businesses should treat break-even with a degree of caution
- It is based on the assumption that costs and revenues will be static, in reality this is not true
- Businesses are advised to consider the variables that might change and possibly look at a number of scenarios
- Variables can change for the better or worse
- What variables might change?
  - Fixed costs
    - Landlord puts rent up
    - Bank changes interest rates
    - Management want pay increase
  - Variable costs
    - Raw materials change in price
    - Minimum wage is increased
    - Utility companies change price
  - Selling price
    - New competition enters the market
    - Positive word of mouth puts demand up

Limitations of break-even analysis

Strengths	Weaknesses
• Allows businesses to calculate the minimum number of sales needed before starting to make a profit and therefore for see if a venture is viable • Can calculate the level of profit or loss at different levels • Can predict the outcome of changing variables • Provides a target • An integral part of a business plan when seeking to secure finance • Aids decision making	• Is based on predicted costs and revenues • Even fixed costs can vary in reality, especially in the long run • Ignores changes in variable costs or selling price as items are bought or sold in larger quantities • Only indicates the number of sales needed does not ensure actual sales will materialise

Break-even graph



1.6.3 – Profit and loss

Profit

- Profits are the surplus of revenue over costs.
- There are 3 types of profit:
  - Gross profit
  - Operating profit
  - Profit for the year (net profit)

Profit Formula

Profit = Total Sales - Total Expenses

Profit Per Unit = Selling Price - Cost Price

Operating profit

Operating Income Formula = Total Revenue – Cost of Goods Sold – Operating Expenses

Gross profit

Gross Profit Formula = Net Revenue – Cost of Goods Sold

Profit as an incentive

- Profit is the reward for enterprise.
- It acts as an incentive in a competitive market.
  - Businesses will be attracted to enter markets where they see an opportunity to make a profit.
  - If a business cannot make a profit in the medium to long run it is likely to leave a market

Profit for the year (net profit)

Net Profit Formulas

$$net\ profit = total\ revenue\ - total\ expenses$$

$$net\ profit = operating\ profit\ - interest - taxation$$

Statement of comprehensive income (profit and loss account)

- It is a formal financial document that summarises a business' trading activities and expenses to show whether it has made a profit or loss.
- The statement of comprehensive income (profit and loss account) shows the revenue and expenses of a firm. It gives an overview of the firm's financial position.
- Net income is also known as profit or loss. This can be used as a measure of a firm's performance. The components of this are income and expenses.
- An increase in income increases the inflow of money to the firm. If a firm has larger expenses, there will be more outflows. This would worsen the firm's financial position.
- Below is an example:

Statement of comprehensive income for Skiprigg Ltd. Year ending 31st March 2013

Turnover	950,000	*(Total revenue gained from all sales)*
Cost of sales	(600,000)	*(The variable costs of producing the goods e.g. materials, power)*
Gross profit	350,000	
Expenses	(170,000)	*(Overheads, costs not involved in production e.g. rent, advertising)*
Operating profit	180,000	
Interest and taxation	(30,000)	*(This depends on current interest rates and tax policy)*
Profit for the year	150,000	
Dividends	(70,000)	*(Payments to shareholders)*
Retained profit	80,000	*(Funds available for the firm to invest)*

1.6.3 – Profit and loss

Profitability
- Profitability measures the financial performance of a business by comparing profits achieved to a second variable e.g. revenue
- There are 3 profitability ratios
  - Gross profit margin
  - Operating profit margin
  - Profit for the year (net profit) margin

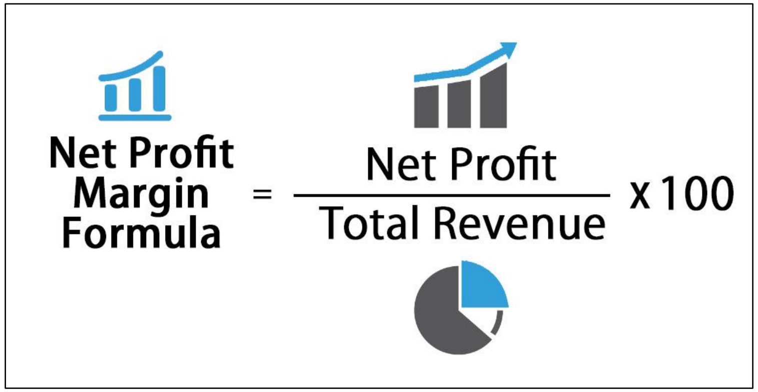
Operating profit margin
- Operating profit margin (OPM) is a measure of a firm's profitability by looking at the relationship between net profit and sales revenue
- If OPM is low or falling this may indicate that a firm's:
  - is not managing its expenses effectively e.g. wages are increasing or overheads are going up
  - sales are in decline

$$\text{Operating profit margin} = \frac{\text{Operating profit}}{\text{Sales (or revenues)}} \times 100$$

Methods of improving profits and profitability
- Increasing profitability is often a major aim for growing businesses.
- There are several ways in which this can be achieved.
  - Sell the same quantity but at a higher price.
  - Sell more at the current price.
  - Sell the same at the same price but reduce costs.
    - Businesses are not limited to one of these options but must realise each option has knock on implications.
  - Sell the same amount at a higher price.
  - Sell more at the current price.
  - Sell the same at the same price but cut costs.

Gross profit margin
- Gross profit margin (GPM) is a measure of a firm's profitability by looking at the relationship between gross profit and sales revenue.
- If GPM is low or falling this may indicate that a firm's:
  - is not managing its cost of sales effectively e.g. are the cost of raw materials increasing?
  - sales are in decline

Profit for the year (net profit) margin
- Profit for the year (net profit) margin is a measure of a firm's profitability by looking at the relationship between profit for the year and sales revenue
- If the profit for the year margin is low or falling this may indicate that a firm's:
  - gross profit or operating profit are in decline
  - interest rates have changed
  - taxation rates have changed



1.6.4 – Business survival and cash flow

Distinction between profit and cash flow

- Profit only considers income and expenses at one point in time.
- Cash flow considers the movement of money into and out of the business. It is more in line with reality than profit, because it considers cash flow at the time the movement of money takes place.
- Some businesses do not have money available immediately, so their cash flow has dried up.
  - This causes some firms to close down, even if they are making large profits, because of their lack of available cash.
  - Therefore, cash-flow management is an important skill.
- There is no correlation between profit and cash flow.
  - A firm might have a negative cash flow where profits are high and a positive cash flow when profits are low (or even with a loss).
- Profits are not spent in a firm, whereas cash is.
  - Firms making a lot of profit might be forced to close because they could not afford to cover their expenses, since all of their cash was tied up in assets.
- When firms need to make a payment, such as for wages, bills and raw materials, they need liquid cash.
  - This is a positive cash flow.
- In the short to medium term, firms might still trade if they are making a loss.
  - This could be by delaying payments to creditors.
  - However, to survive in the long term, firms need to be able to cover their variable and immediate costs.

Importance of cash flow for business survival

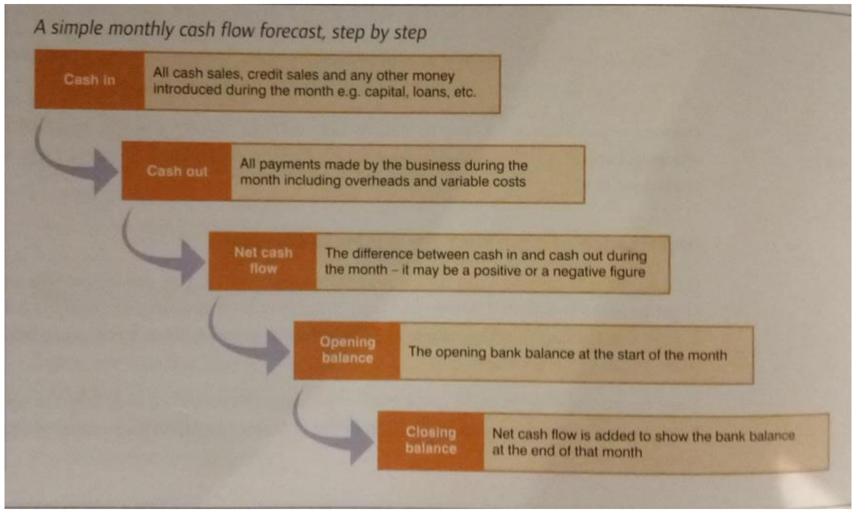
- Cash is crucial to cash flow and working capital management. It does not matter how profitable a business might be in the long term if, in the short term, it does not have enough cash to pay the bills.
  - This can happen if there is not enough working capital to keep the business going when it has to pay bills ahead of the time when its sales revenue comes in.
- Many businesses need to make considerable cash expenditures before they begin to see any reward in the form of profit.
- Many businesses face cash flow problems and need to find some additional finance from time to time.
- Very often profit is a long-term prospect.
  - When all the up-front costs of a new business must be paid before sales can take place, significant working capital will be required.
- Cash can be a short-term problem even where the prospects of long-term profitability are good.
- If profits do not materialise even in the long run, the business is doomed because no sane lender will keep on supplying more and more working capital.

Forecasting and interpreting cash flow

- A cash flow forecast can predict the net cash flow over a future period of time.
- It estimates the money which will enter and leave the bank account.
- This aims to estimate the net balance at the end of each period of time, such as per month.

Example of a Simple Cash Flow Forecast

#'000	January	February	March
Sales Receipts	50	55	60
Payments to suppliers	(10)	(15)	(20)
Wages and salaries	(15)	(15)	(15)
Purchase of fixed assets	0	(40)	0
Net Cash Flow	25	(15)	25
Opening Balance	10	35	20
Closing Balance	35	20	45



1.6.4 – Business survival and cash flow

Use of a cash flow forecast to identify credit requirements and minimise risk

- By monitoring the closing balance, the business can see how much cash they have at the bank on a monthly basis.
- If the closing balance is a negative figure, then that is a prompt to seek extra finance, either in the form of an overdraft or a loan.
    - An overdraft allows a business to spend more than it has in its account, up to an agreed limit. This is a flexible and useful form of finance that is particularly suited to cash flow problems. Interest is only paid on the amount borrowed, for the time it is used.
    - A loan will be a fixed amount with a lower interest rate than the overdraft, but if the business has insufficient working capital it may be the best approach.
- If a cash flow problem can be foreseen then it may be possible to plan ahead and reduce the payments going out, perhaps by asking creditors (to whom money is owed) to wait another month or so before payment.
- Items such as advertising could be postponed.
- It may also be possible to persuade debtors (who owe the business money) to pay up early to increase cash coming in.