IGCSE Economics CIE

YOUR NOTES

1. The Basic Economic Problem

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1.1 The Nature of the Economic Problem

1.1.1 Scarcity

Finite Resources & Unlimited Wants

- The **basic economic problem** is that resources are **scarce**
  - In economics, these resources are called the factors of production

- There are **finite resources** available in relation to the **infinite wants and needs** that humans have
  - Needs are essential to human life e.g. shelter, food, clothing
  - Wants are non-essential desires e.g. better housing, a yacht etc.

- Due to the problem of scarcity, **choices have to be made** by producers, consumers, workers and governments about the best **(most efficient)** use of these resources

- **Economics is the study of scarcity and its implications for resource allocation in society**

All Stakeholders in an Economy Face The Basic Economic Problem

Consumers	Producers	Workers	Government
• In a free market, **scarcity** has a direct **influence on prices** • The **scarcer** a resource or product, the **higher** the price consumers will pay	• Producers selling products made from **scarce resources** will find their costs of production are higher than if they were selling products made from more abundant resources	• Workers may want a more comfortable & safer working environment but their employers may not have the **resources** to create it	• Governments have to decide if they will provide certain goods/services or if they will allow private firms to provide them instead • Their decision influences the **allocation of resources** in society. E.g. If they choose to provide national healthcare, fewer Doctors will be available to work in private healthcare

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Economic & Free Goods

- **Economic goods** are **scarce** in relation to the demand for them
  - This makes them valuable
  - Due to their value, producers will attempt to supply them in order to make a profit
  - Anything that has a price tag on it is an economic good e.g. oil, corn, gold, trainers, watches and bicycles

- **Free goods** are abundant in supply
  - Due to this abundance, it is not possible to make a profit from **supplying** free goods
  - Drinking water has been a free good for thousands of years, but as the population increases & water sources become more polluted, it has become an economic good
  - E.g. sunlight, the air we breathe, sea water

Exam Tip

In Paper 1, MCQ will explore your understanding of a free good. Often you will be presented with a list of goods which have been given to you or provided to you by the government, free of charge (e.g. government education that you do not pay for). Remember to differentiate between something you have received freely - and something that is abundant in supply. Then it is easy to determine the answer

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1.2 The Factors of Production

1.2.1 The Factors & Their Rewards

The Factors of Production

- **Factors of production** are the resources used to produce goods & services
  - Land, labour, capital & enterprise

- The production of any good/service requires the use of **a combination of all four factors of production**
  - Goods are physical objects that can be touched **(tangible)** e.g. mobile phone
  - Services are actions or activities that one person performs for another **(intangible)** e.g manicure, car wash

The Four Factors of Production

Land	Labour	Capital	Enterprise
Non man-made natural resources are available for production. Some countries have a vast amount of a particular natural resource & so are able to specialise in its production e.g. oil, wood, fish, corn, iron ore	The **human input** into the production process. Labour involves mental or physical effort. Not all labour is of the same quality. It can be **skilled or unskilled**. Some workers are more productive than others because of the education, training & experience they have	Capital is any **man-made resource** that is used to produce goods/services e.g. tools, buildings, machines & computers	Enterprise involves **taking risks** in setting up or running a firm. An entrepreneur decides on the combination of the **factors of production** necessary to produce goods/services with the aim of generating profit

Some of the Factors of Production Required to Produce a Motor Car

Land	Labour	Capital	Enterprise

iron ore rubber oil sand cows	car designer production director production line staff supply chain staff	robotic arms conveyor belt rolled steel computers seats dashboards mirrors leather	CEO

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Rewards for the Factors of Production

- In a **market economic system**, the factors of production are privately owned by households or firms (The terms 'market' & 'free market' are used interchangeably)
    - They make these resources available to firms who use them to produce goods/services
    - Firms purchase land, labour, & capital from households in **factor markets**

- **Households** receive the following financial rewards for selling their **factors of production.** This reward is called **factor income**
    - The factor income for land → **rent**
    - The factor income for labour → **wages**
    - The factor income for capital → **interest**
    - The factor income for entrepreneurship → **profit**

Exam Tip

In Paper 1, MCQ frequently require you to apply your understanding of the factors of production by presenting you with a short scenario - and then asking you to identify which factors of production are mentioned in the scenario. Be careful that you do not identify man-made products as non man-made products e,g. fertiliser is a capital good (man-made) even though it is an ingredient in the production of many agricultural products.

There will often be questions in which you are asked to identify the incorrect combination of factors & their rewards.

The terms **'market'** & **'free market'** are used interchangeably. Both mean that there is no government intervention. There is no economy in the world that is a completely (free) market economy. Some are more free than others.

1.2.2 Changes to the Factors of Production

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The Mobility of the Factors of Production

- The **mobility of the factors of production** refers to how easily firms can **switch between different factors of production** during the production process
  - The more mobile the factors, the more **flexibility** there will be in production
  - E.g. if a firm can produce both cars & trucks on its production line & switching from one to the other only requires a few simple changes to some robotic arm extensions, then its **capital** is very mobile
  - This means that the firm can be very **responsive to changes in demand** for cars & trucks & is likely to make more profit

- **Labour** is often one of the most expensive **costs of production**
  - If firms can substitute capital (machinery) for labour, **productivity** often increases & costs decrease

- Many firms rely heavily on labour & ensuring **labour mobility** helps to lower unemployment & reduce worker shortages in an economy

Two Factors That Cause Labour To Be Less Mobile

Geographical Immobility of Labour	Occupational Immobility of Labour
• This occurs when workers find it **difficult to move** from one geographical area to another in order to secure employment • **Barriers to mobility** may include family ties, **lack of information** about possible jobs in different parts of the country, & the challenges in **securing/affording accommodation** in an unknown location	• This refers to the ability of a worker to **change occupations** when they lose a job • If their **skill base is transferable** between different occupations, then their **occupational mobility is high** • In reality, many workers are not able to easily transfer between occupations & this is a particular issue when an economy is faced with **structural unemployment**

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Changes in the Quantity & Quality of the Various Factors

- If the quantity or quality of a country's **factors of production** change, then the productive potential of the country also changes
  - If the quantity or quality increases, this corresponds to an **outward shift** of the potential output of an economy as shown on a **production possibilities curve** model (see Subtopic 1.4.1). The country is able to produce more
  - If the quantity or quality decreases, this corresponds to an **inward shift** of the potential output of an economy as shown on a production possibilities curve model. The country now cannot produce as much as it used to

Influences On The Quality Or Quantity Of Factors Of Production Available To An Economy

Influence	Explanation
Technological advances	These can often improve the quality of the factors of production e.g. development of metal alloys
Changes in the costs of production	Changes in the costs of factors of production (for example, higher energy costs caused by the war in the Ukraine) reduce the output of a nation as the input prices are now more expensive
Changes in relative productivity	**Process innovation** often results in **productivity improvement** e.g. moving from labour intensive car production to automated car production
Changes in education and skills	Over time this increases the **quality of labour** in an economy
Changes in government regulations	These can improve the **quantity of the factors of production**. e.g. deregulation of fracking (extracting oil from shale deposits) in the USA increased useable oil reserves
Demographic changes and migration	A positive **net birth rate** or positive **net migration rate** will increase the quantity of labour available

Competition policy	**Preventing monopoly power** results in more firms supplying goods/services in an economy and this **increases the potential output** of an economy

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1.3 Opportunity Cost

1.3.1 Opportunity Cost in Decision Making

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Definition of Opportunity Cost

- **Opportunity cost is the loss of the next best alternative when making a decision**

- Due to the **problem of scarcity**, **choices have to be made** about how to best **allocate limited resources** amongst competing wants and needs

- There is an **opportunity cost** in the allocation of resources
  - When a **consumer** chooses to purchase a **new phone**, they may be **unable to purchase new jeans**. The jeans represent the loss of the next best alternative **(the opportunity cost)**
  - When a **producer** decides to allocate all of their resources to **producing electric vehicles**, they may be **unable to produce petrol vehicles**. The petrol vehicles represent the **loss of the next best alternative** (the opportunity cost)
  - When a **government** decides to **provide free school meals** to all primary students in the country, they may be **unable to fund some rural libraries** which may have to close. The libraries represent the loss of the next best alternative **(the opportunity cost)**

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The Influence of Opportunity Cost on Decision Making

- An understanding of opportunity cost may **change many decisions** made by consumers, workers, firms & governments
- Factoring the opportunity cost into a decision often results in different outcomes & so a different **allocation of resources**

Examples of How The Consideration of Opportunity Costs Can Change Decisions

Stakeholder	Example
Consumer	• Ashika is wanting to visit her best friend in Iceland • She looks at flight prices from London to Reykjavík • On Friday night it costs £120 whereas Thursday night is only £50 • She is about to book the Thursday flight but then realises that the **opportunity cost** of saving £60 on a flight is the **inability to work on Friday** (loss of £130 income) • Ashika books the more expensive flight. If she had booked the cheaper flight, it would have cost her the income from the missed day of work (£130) + £50 for the ticket
Worker	• Ric has been offered two jobs & is deciding which one to accept • Job A offers £400 a month more in **salary** than Job B, but Job B offers the flexibility of working from home • Most people would only consider the **actual cost** of commuting before they make a decision, which in Ric's case is £40 a week or £160 a month • Ric values his free time & decides that each hour he can save in commuting is worth £20 to him (£180 a week) - he is considering the **opportunity cost of commuting** • Ric decides to take Job B as the **cost of monthly travel (4 x £40) and value of the lost hours spent commuting (4 x £180)** adds up to £880 a month
Firm	• A firm selling organic avocados is offered a **supply contract** by a large supermarket who wants to buy all of their stock each month, but at a low price • The supermarket is a **prestigious** customer • The firm decides to not accept the contract as the **opportunity cost** (loss of prestigious customer) is worth less than the lost revenue to existing customers

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Government	• The Australian Government has entered into a contract with France to **supply** them with 8 submarines valued at $70bn • The USA hears about it & pressurises Australia to buy the submarines from them instead • The Australian Government considers the **opportunity cost** of denying the USA which includes **less preferential deals** on other military hardware & general trade agreements • They decide to break the contract with France & view this as the approach that carries the lowest opportunity cost

Exam Tip

Opportunity cost is about the loss of the next best alternative. It is not a monetary amount. MCQ will frequently include a monetary amount as one of the options & it is never the answer! Always look at the options presented and identify the next best alternative

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1.4 Production Possibility Curves

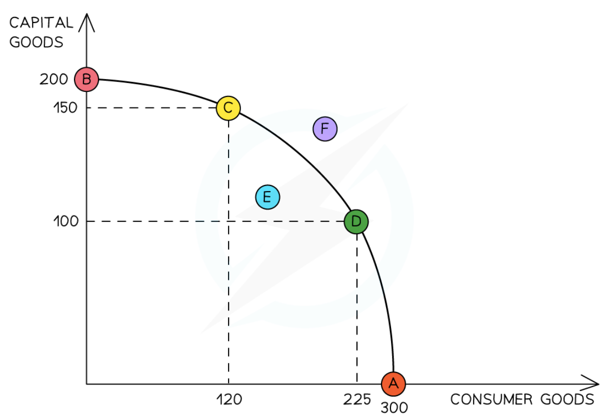
1.4.1 PPC & Economic Growth

Production Possibility Curves (PPC)

- The **Production Possibility Curve (PPC)** is an economic model that considers the **maximum possible production** (output) that a country can generate if it uses all of its factors of production to produce **only two** goods/services

- **Any two** goods/services can be used to demonstrate this model

- Many PPC diagrams show **capital goods** & **consumer goods** on the axes
  - **Capital goods are assets** that help a firm or nation t**o produce output** (manufacturing). For example, a robotic arm in a car manufacturing company is a **capital good**
  - **Consumer goods are end products** & have **no future productive use**. For example, a watch



A PPC for an economy demonstrating the use of its resources to produce capital or consumer goods

Diagram Explanation

- **The use of PPC to depict the maximum productive potential of an economy**
  - The curve demonstrates the **possible combinations of the maximum output** this economy can produce **using all of its resources** (factors of production)
  - At A, its resources are used to produce **only consumer goods** (300)
  - At B, its resources are used to produce **only capital goods** (200)
  - Points C & D both represent **full** (efficient) use of an economy's resources as these points **fall on the curve**. At C, 150 capital goods and 120 consumer goods are produced

- **The use of PPC to depict opportunity cost**

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- To produce one more unit of capital goods, this economy must give up production of some units of consumer goods (limited resources)
- If this economy moves from point **C (120, 150)** to **D (225, 100)**, the **opportunity cos**t of producing **an additional** 105 units of consumer goods is 50 capital goods
- A **movement in the PPC** occurs when there is any change in the **allocation of existing resources** within an economy such as the **movement** from point C to D

- **The use of PPC to depict efficiency, inefficiency, attainable and unattainable production**
  - Producing at any point on the curve represents productive efficiency
  - Any point inside the curve represents **inefficiency** (point E)
  - Using the current level of resources available, **attainable production** is any point on or inside the curve and any point outside the curve is unattainable (point F)

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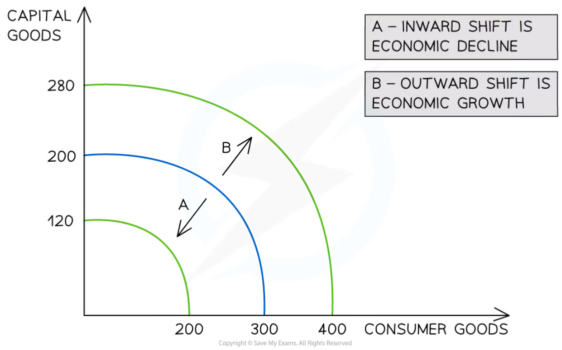
Shifts in a PPC

- As opposed to a movement along the PPC described above, the **entire PPC of an economy can shift** inwards or outwards



Outward shifts of a PPC show economic growth & inward shifts show economic decline

Diagram Explanation

- **Economic growth** occurs when there is an increase in the **productive potential of an economy**
  - This is demonstrated by an **outward shift** of the entire curve. **More consumer goods** and **more capital goods** can now be produced using all of the **available resources**
  - This shift is caused by an increase in the **quality or quantity of the available factors of production**
    - One example of how the **quality** of a factor of production can be **improved** is through the impact of **training and education on labour**. An educated workforce is a **more productive workforce** and the **production possibilities increase**
    - One example of how the **quantity** of a factor of production can be **increased** is through a change in migration policies. If an economy allows **more foreign workers** to work productively in the economy, then the **production possibilities increase**

- **Economic decline** occurs when there is any impact on an economy that **reduces the quantity or quality** of the available factors of production
  - One example of how this may happen is to consider how the Japanese tsunami of 2011 devastated the **production possibilities** of Japan for many years. It **shifted their PPC inwards** and resulted in **economic decline**