Basic economic ideas and resource allocation (AS)

Scarcity, choice and opportunity cost, positive and normative statements and economic methodology, the factors of production, economic systems, production possibility curves and the classification of goods.

Economics is the study of how **scarce resources** are used to satisfy **unlimited wants**. It asks **what, how and for whom** to produce.

1.1 Scarcity, choice and opportunity cost

Scarcity is the **fundamental economic problem**: **limited resources** cannot satisfy **unlimited wants**, so **choices** must be made. **Needs** are essential for survival; **wants** are desires beyond that.

> **Opportunity cost is the value of the next best alternative given up when a choice is made. If a government spends $10m on a hospital instead of a school, the school is the opportunity cost.**

Choices are made by **consumers** (maximising satisfaction), **producers** (maximising profit) and **governments** (improving welfare). **Economic agents** are consumers, producers and the government.

Basic questions: what to produce, **how** to produce it and **for whom**.

1.2 Economic methodology

Statement	Meaning	Example
Positive	**can be tested** against facts	"A rise in income tax cuts hours worked."
Normative	involves **value judgements** and opinion	"Income tax should be cut."

Economists build **models** using ***ceteris paribus*** (**all other things being equal**), to **isolate** one relationship. Models are **simplifications**; they use **assumptions** that may not hold. Economics uses **data** and **theory**, and **economic policy** involves **trade-offs** and **value judgements**; economists often **disagree**.

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Is "Inflation is too high" positive or normative?

Normative: "too high" is a judgement. "Inflation rose to 6%" is **positive**.

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Economics is a **social science**: it studies human behaviour using evidence and models but cannot run perfectly controlled experiments. The **time period** matters: in the **short run** at least one factor is fixed; in the **long run** all factors can vary; in the **very long run** technology and the structure of the economy can change too.

1.3 Factors of production

Factor	Reward	Examples
Land	**rent**	all natural resources: soil, oil, water, forests
Labour	**wages**	human effort, mental and physical
Capital	**interest**	man-made goods used to produce others: **machinery, factories**
Enterprise	**profit**	organising the other factors and **taking risk**

Quantity and **quality** of each factor affect **output**; **education** raises the quality of labour; **technology** raises the quality of capital. **Mobility** of factors (how easily they move between uses) matters for **adjustment**: **geographical** and **occupational** mobility of labour.

Division of labour is breaking production into **separate tasks**, each done by a different worker; **specialisation** is a worker, firm or region concentrating on what it does best. Together they raise **productivity and output** (workers get skilled, less time is lost switching tasks), but work can become **boring**, workers **less flexible**, and the whole process depends on **every link**. **Human capital** is the **skills, knowledge and health of workers**, built up by education and training; **physical capital** is **man-made equipment and buildings**.

1.4 Resource allocation in different economic systems

System	Who decides	Features
Market economy	**individuals and firms** through the **price mechanism**	**private ownership**, **profit motive**, competition
Planned (command) economy	**the state**	**public ownership**, central plans
Mixed economy	**both**	private and public sectors; the state provides some goods and **regulates**

The price mechanism

Prices signal **scarcity**: a **rise** shows a good is scarce, **encouraging producers** to supply more and **consumers** to buy less; a **fall** does the reverse. It **rations** goods and **allocates** resources to the most

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valued uses. **Advantages of a market: efficiency**, **consumer sovereignty**, **choice**, **incentives** and **innovation**. **Disadvantages: market failure**, **inequality**, **no provision of public goods**, **short-termism**.

Planned systems: can **direct resources to priorities** and reduce inequality, but lack **price signals**, **incentives**, **efficiency** and **choice**, and need much **information**.

Mixed economies try to combine **efficiency** with **equity**; the **balance** between market and state differs across countries.

1.5 Production possibility curves

A **production possibility curve (PPC)** shows the **maximum combinations of two goods (or goods and services)** that can be produced with **all resources fully and efficiently employed**.

- A point **on** the curve: **productive efficiency**, **full use** of resources.
- A point **inside**: **unemployed or inefficiently used** resources.
- A point **outside**: **unattainable** now.
- The **slope** measures **opportunity cost**: moving along the curve means **giving up** one good for the other.
- A **bowed-out (concave)** curve shows **increasing opportunity cost** because resources are **not equally suited** to both goods; a **straight line** shows **constant** opportunity cost.

Shifts: the PPC shifts **outwards** with **more or better resources**, **technology** or **education** (**economic growth**) and **inwards** with **war, disaster or resource depletion**.

> **Opportunity cost along a PPC: if moving from 20 units of food to 25 reduces cloth from 40 to 30, the opportunity cost of 5 more food is 10 cloth, or 2 cloth per unit of food.**

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1.6 Classification of goods and services

Classification	Meaning
Free goods	**no opportunity cost**: unlimited (air)
Economic goods	**scarce**, with an opportunity cost
Private goods	**rivalrous** (use stops others) and **excludable**
Public goods	**non-rival** and **non-excludable**: street lighting, defence: the **free-rider problem** means the **market does not provide** them, so the **state** does
Merit goods	**under-consumed** by the market because people **undervalue the benefits**: education, healthcare
Demerit goods	**over-consumed** because people **undervalue the costs**: tobacco, alcohol

> **Public goods are non-rival and non-excludable. Because people can free ride, private firms cannot make a profit from them, so the government provides them, paid for by taxes.**

Consumer and capital goods: consumer goods satisfy wants directly; **capital goods** are used to **produce** other goods. **Durable** and **non-durable** goods differ by lifespan. **Goods** are **tangible**; **services** are **intangible**.

Merit and demerit goods arise partly because of **imperfect information**: consumers **do not know or ignore the full benefits** of a merit good (such as the long-term gain from education) so they **under-consume** it, and do not appreciate the full **harm** from a demerit good (such as smoking) so they **over-consume** it.

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