Microeconomic decision-makers

Money and banking, what influences household spending and saving, workers' choices and wages, different kinds of firms and mergers, economies of scale, production and productivity, costs and revenue, firms' objectives, and competitive and monopoly markets.

Microeconomics looks at the decisions of **individual decision-makers**: households, workers and firms, and how they interact in markets.

3.1 Money and banking

Money

Money is anything **generally accepted as payment for goods and services**. It exists to solve the problems of **barter** (swapping goods directly needs a "double coincidence of wants").

Forms: **coins and notes** (cash), **bank deposits** (money in accounts, used with cards and transfers), **digital money** (mobile wallets and electronic transfers).

Functions of money:

1. **Medium of exchange**: accepted in payment.
2. **Measure of value (unit of account)**: prices are stated in money, so goods can be compared.
3. **Store of value**: money can be saved and spent later (though inflation reduces its value).
4. **Method of deferred payment**: allows buying now and paying later (credit and loans).

Characteristics of good money: **acceptable**, **durable**, **portable**, **divisible** (into small amounts), **uniform**, **limited in supply** (scarce, so it keeps its value), and hard to **counterfeit**.

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Banks

Central bank (for example the State Bank of Pakistan or the Bank of England): the **government's bank**; **issues** notes and coins; manages the **country's money supply and interest rates (monetary policy)**; acts as **banker to the government and to commercial banks**; **lender of last resort** to banks in difficulty; **regulates** the banking system; manages the country's **foreign currency reserves**.

Commercial banks: provide **accounts** (savings and current), **loans and overdrafts**, **mortgages**, **currency exchange**, safe storage and **payment services**. They **make a profit** by charging a higher interest rate on loans than they pay on deposits. They are important because they **channel savings into investment**, **create credit**, and make payments easy.

3.2 Households

A **household** is a person or group living together who make spending decisions. Households can **spend**, **save** or **borrow**.

Influence	Effect
Income	higher income means more spending and more saving; lower income may mean borrowing
Rate of interest	**higher** rate: saving more attractive, **borrowing costlier**, so **less spending**; **lower** rate: more borrowing and spending, less saving
Confidence	if households expect a secure job and rising income, they spend and borrow more; when confidence falls (fear of unemployment) they save more
Age	young people spend and borrow (education, housing); middle-aged people may save for retirement; the elderly spend savings
Culture	traditions and attitudes towards saving, debt and spending vary (some cultures save more, some religions discourage interest)

3.3 Workers

Choice of occupation

People choose jobs for **wage factors** (pay, bonuses, overtime) and **non-wage factors**: **job satisfaction**, **hours and holidays**, **job security**, **working conditions**, **promotion prospects**, **location**, **qualifications needed**, **status**, **fringe benefits** (pension, healthcare).

Wage determination

The wage in a labour market is set by the **demand for labour** (from firms) and the **supply of labour** (from workers), as in any market:

- **Demand for labour** is a **derived demand**: firms demand workers because of the demand for the product they make. It depends on **productivity** and the **price of the good** (higher demand for the product raises demand for labour).
- **Supply of labour** depends on the **wage offered**, **qualifications and training needed**, **working conditions**, and **population**.

> **Wage = where the demand for labour meets the supply of labour. A higher demand for labour (D shifts right) raises the wage and employment; a higher supply of labour (S shifts right)**

Note Academy

lowers the wage.

- **Trade unions** negotiate pay and conditions for members (**collective bargaining**). Their **bargaining power** is greater when the workers are **skilled and scarce**, **membership is high**, and the demand for the product is strong. They can raise wages above equilibrium, but may reduce employment.
- **Government policy** affects wages: the **national minimum wage (NMW)** is a **legal minimum** set **above the equilibrium wage** for low-paid jobs. **Advantages**: raises the income of the low paid, reduces poverty and encourages work. **Disadvantages**: may cause **unemployment** (a surplus of labour, since firms want fewer workers at the higher wage), higher costs and prices.

Diagram: for the NMW draw the labour market with **wage on the vertical axis and quantity of labour on the horizontal**. Draw the NMW as a **horizontal line above equilibrium**; the gap between supply and demand at that wage is the **surplus of labour (unemployment)**.

Differences in wages

Reason	Effect
Demand and supply of labour	scarce skills in high demand earn more (surgeons); jobs many people can do earn less
Relative bargaining strengths	strong unions or powerful professional bodies raise pay
Discrimination	unequal pay for equal work (for example between **men and women**, or between ethnic groups) lowers some workers' pay
Government policy	the NMW, public sector pay, taxes

These influence wages depending on the **level of skills** (skilled workers earn more), the **economic sector** (primary workers in agriculture are often lower paid than tertiary sector professionals), and **discrimination**.

Mobility of labour

- **Occupational mobility**: ability to **change jobs or skills**. Improved by **training and education**; reduced by lack of skills and age.
- **Geographical mobility**: ability to **move to where the work is**. Helped by **transport, information, cheaper housing**; reduced by **family ties**, **high housing costs** and **language and culture**.

Consequences of greater mobility: **lower unemployment** (workers move to jobs), **more efficient use of labour** and higher output, **wages evened out**, but may cause **depopulation** of some regions and pressure on housing and services in others.

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Division of labour

Division of labour (worker specialisation) is the **splitting of production into separate tasks**, each done by a specialist worker.

Advantages	Disadvantages
workers become **skilled and faster**, so **productivity rises**	**boring and repetitive** work, so low motivation
saves time moving between tasks	workers' skills become **narrow**, so they find it harder to change job
lower costs and prices, higher output	**dependence**: one stage's delay stops the whole process
use of **machines** is easier	may cause **unemployment** if the task is replaced by a machine

3.4 Trade unions

A **trade union** is an organisation of **workers** that works to protect and improve its members' **pay and working conditions**.

What unions do:

- **Collective bargaining**: they negotiate with employers for all their members at once, which gives workers more bargaining power than they would have alone.
- **Representation**: they help a member who is in a dispute or who is being treated unfairly.
- **Industrial action**: if talks fail they may use strikes, a work-to-rule or an overtime ban.

Possible benefits for workers: higher wages, better conditions and job security.

Possible drawbacks: higher wages raise a firm's **costs**, which can lead to higher prices or fewer workers being employed, and strikes cost both workers and the firm.

> **A trade union negotiates for workers together, so its members can win better pay and conditions than each could win alone.**

3.5 Firms

Different types of firms

- **By sector**: **primary** (extracts natural resources: farming, mining), **secondary** (manufacturing and construction), **tertiary** (services: banking, education, transport).

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- **Private-sector firms** are **privately owned** and aim to make **profit**. **Public-sector firms** are **owned by the government** (state-owned) and often aim to provide a **service** or protect jobs.

Small and large firms

	Small firms	Large firms
Advantages	personal service, flexible, quick decisions, **close to customers**, can serve **niche** markets	**economies of scale**, can **afford new technology and research**, more **market power**, can **raise finance** more easily
Disadvantages	**higher average costs**, difficult to raise finance, **more likely to fail**, little market power	**diseconomies of scale**, may be **impersonal**, slow to change, may **abuse market power**

Mergers

A **merger** is when **two firms join to form one**.

Type	Meaning	Example	Advantages	Disadvantages
Horizontal	firms at the **same stage** of production in the **same industry**	two supermarkets	economies of scale, **more market share, less competition**	may create a **monopoly** with higher prices, job losses
Vertical	firms at **different stages** of production in the **same industry**	a car maker and a tyre maker, or a supermarket with a farm	**secure supplies or outlets**, **lower costs**	integration problems, reduces suppliers' independence
Conglomerate	firms in **different industries**	a food company and a telecom company	**spreads risk** (diversification)	managers may lack **knowledge** of the new industry, may be inefficient

Economies and diseconomies of scale

- **Internal economies of scale** arise **within the firm** as it grows: **purchasing** (bulk discounts), **technical** (larger machines), **managerial** (specialist managers), **financial** (cheaper loans), **marketing** (advertising costs spread) and **risk-bearing**.

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- **External economies of scale** arise from the **growth of the whole industry in an area**: a **skilled labour force**, **specialist suppliers**, **better infrastructure**, and **shared research and training**.
- **Internal diseconomies of scale** arise when a firm becomes **too large**: **poor communication and coordination**, **low morale** and slow decision-making. **External diseconomies**: when an industry becomes too concentrated in one area: **congestion**, higher **wages and rents**, **pollution**.

ATC diagram: **average total cost (ATC)** is drawn as a **U-shaped curve** with **output on the horizontal axis** and **cost per unit on the vertical axis**. As output increases, ATC **falls** (economies of scale) to a **lowest point**, then **rises** (diseconomies of scale). The **bottom of the U** is the most efficient output.

3.6 Firms and production

Demand for factors of production

Firms demand factors of production because they are **needed to produce goods**; the demand is **derived**. It depends on:

- **demand for the product** (higher demand for the product raises the demand for the factors)
- **price of the factors** (if labour becomes costly, firms may use more machines)
- **availability** of the factors
- **productivity** of the factors (more productive factors are in greater demand).

Labour-intensive and capital-intensive production

	Labour-intensive	Capital-intensive
Meaning	uses **more workers than machines** (for example a hand-made furniture shop)	uses **more machinery** (a car factory)
Reasons for	cheap labour, a personal or skilled service, small market	**high wages**, large-scale production, repetitive tasks, **modern technology** is available
Advantages	**flexible**, personal touch, lower set-up cost, creates jobs	**high output**, consistent quality, lower **unit costs** in the long run
Disadvantages	**lower output**, higher wage costs, more mistakes	**high set-up cost**, **job losses**, breakdowns, needs skilled technicians

Production and productivity

- **Production** is the **total output** produced.

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- **Productivity** is **output per unit of input** (for example output per worker per hour).

Labour productivity = output ÷ number of workers. A firm can increase production by employing more workers without increasing productivity.

Influences on production and productivity: **skills and training**, **technology** and capital, **motivation and working conditions**, **management**, and **division of labour**.

Effects of investment: **investment in capital** (machines and technology) usually **raises productivity** (and then production and potential income); in the short run it **costs** money and in the long run **lowers unit costs**.

3.7 Firms' costs, revenue and objectives

Costs of production

Term	Definition
Fixed cost (FC)	costs that **do not change with output** (rent, insurance)
Variable cost (VC)	costs that **change with output** (raw materials, piece-rate wages)
Total cost (TC)	**FC + VC**
Average fixed cost (AFC)	**FC ÷ output**
Average variable cost (AVC)	**VC ÷ output**
Average total cost (ATC)	**TC ÷ output** (= AFC + AVC)

> **TRY IT**
>
> A firm has fixed costs of $2,000 and variable costs of $3,000 when it produces 500 units. **TC = $5,000. ATC = 5,000 ÷ 500 = $10. AFC = 2,000 ÷ 500 = $4. AVC = 3,000 ÷ 500 = $6.**

Diagram: **fixed costs** are a **horizontal line** (the same at all outputs). **Variable cost and total cost slope upward** as output increases; the **total cost line starts at the fixed-cost level** (it is the fixed cost plus the variable). **AFC falls continuously** as output rises (the cost is spread over more units); **ATC and AVC are U-shaped**.

Note Academy

Revenue

Term	Definition
Total revenue (TR)	**price × quantity sold**
Average revenue (AR)	**TR ÷ quantity** (= price)

> TRY IT
>
> A firm sells 400 units at $15. **TR = 400 × 15 = $6,000. AR = 6,000 ÷ 400 = $15.**

Sales and revenue: more sales raise revenue **if price stays the same**; the effect of a price change depends on **PED** (see chapter 2).

> **Profit = total revenue – total cost.**

Objectives of firms

Objective	Meaning
Survival	staying in business (typical for new firms or in a recession)
Profit maximisation	making the greatest possible profit (typical of private firms)
Growth	increasing size or market share (for economies of scale and power)
Social welfare	aims for society's benefit (public-sector firms, charities and social enterprises)

3.8 Market structure

Competitive markets

Characteristics: **many firms**, **many buyers**, **similar products**, **easy entry and exit**, and **full information**. (Diagrams and perfect or imperfect competition theory are not required.)

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Advantages	Disadvantages
lower prices and **more choice** for consumers	firms may have **low profits**, so less to spend on research
higher **quality** and **efficiency** because firms must compete	some firms **fail**, causing job losses
firms respond to consumers' wants	**waste** through duplicated advertising and small-scale production

Effect of having many firms: **lower price**, **better quality**, **greater choice**, **lower profit** for each firm.

Monopoly markets

Characteristics: **one firm** (or one that dominates) with **significant market power**, **barriers to entry** (high start-up costs, patents, control of resources, legal protection). (Diagrams are not required.)

Advantages	Disadvantages
economies of scale so costs and perhaps prices could be low	**higher prices**, **restricted output** and **less choice**
high profits can fund **research and development**	**less incentive** to be efficient or improve quality
useful for **natural monopolies** (water, electricity networks) where competition would be wasteful	may **exploit consumers** and workers

Effect of having only one firm: **higher price**, **less choice**, quality may be **lower**, **higher profit**.

Note Academy