

Microeconomic decision-makers

IGCSE Economics

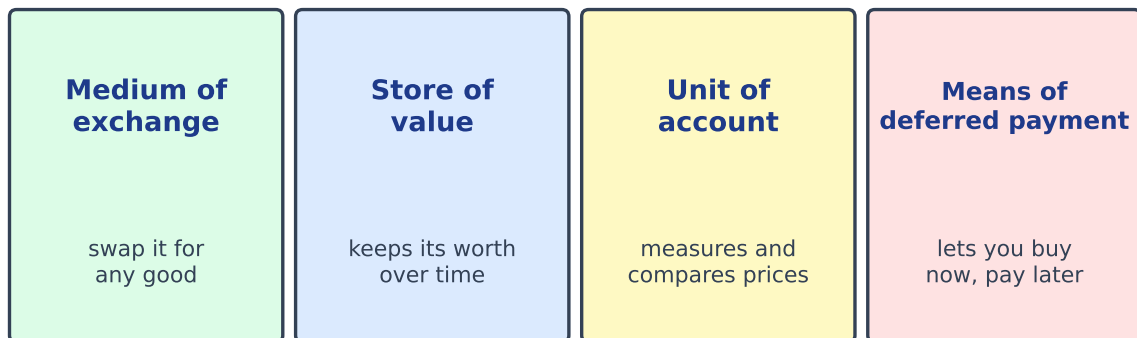
Money and banking

Long ago, people swapped goods directly. This is called **barter** 物物交换. Barter is hard: you must find someone who has what you want *and* wants what you have. **Money** 货币 solves this problem.

The functions of money

Money does four jobs:

- a **medium of exchange** 交换媒介—you swap money for goods, so you do not need barter.
- a **store of value** 价值储藏—you can hold money now and spend it later, because it keeps its value.
- a **unit of account** 记账单位—money measures and compares the value of things (this is the price).
- a **means of deferred payment** 延期支付手段—you can buy now and pay later.



Money's four functions: a medium of exchange, a store of value, a unit of account, and a means of deferred payment



Money —banknotes and coins —works as a medium of exchange, a store of value, a unit of account, and a means of deferred payment

Image: Marek Ślusarczyk (Tupungato) Photo portfolio, CC BY 3.0 (commons.wikimedia.org)

The characteristics of money

Good money must be:

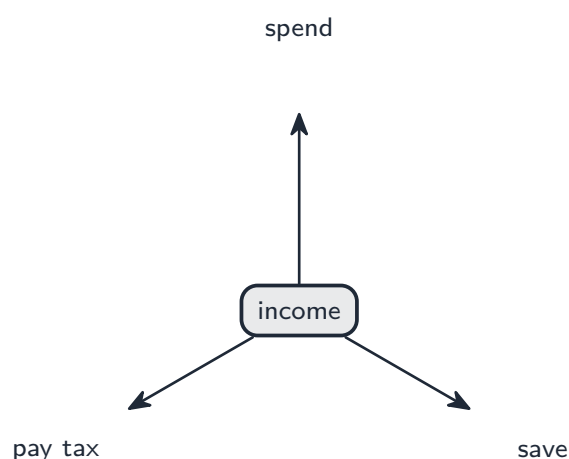
- **durable** 耐用的—it lasts a long time.
- **portable** 便于携带的—easy to carry.
- **divisible** 可分割的—can be split into small amounts for small payments.
- limited in supply, hard to copy, and accepted by everyone.

Banks

- A **central bank** 中央银行 is the government's bank. It issues notes, looks after the banking system, and sets **interest rates** 利率. There is one in each country.
- **commercial banks** 商业银行 are the ordinary banks that people and **firms** 企业 use. They keep savings safe, lend money, and let people pay each other.

Households

A **household** 家庭 is a person or group living together and making money decisions. Each household must choose how much to spend, save, and borrow.



A household can spend, save or pay tax with its income

- **saving** 储蓄 is income that is not spent now.
- **borrowing** 借贷 is spending money you do not have yet, and paying it back later (usually with an extra charge).

Three main things change these choices:

- **income** 收入—with more income, people spend and save more.
- **interest rates** —a higher interest rate makes saving more rewarding and borrowing dearer. So saving rises and borrowing falls.
- **confidence** 信心—if people feel sure about their jobs and the future, they spend and borrow more. If they are worried, they save more.

Workers

Choosing a job

When a worker chooses an **occupation** 职业 (a type of job), two kinds of factor matter:

- **wage factors** —the pay. The **wage** 工资 is the money you earn. Higher pay attracts more workers.
- **non-wage factors** —everything else: working hours, holidays, how safe or pleasant the job is, whether you enjoy the work, distance from home, and the chance to move up to a higher job.

Why workers earn different amounts

Workers are not all paid the same. The reasons include:

- skills & qualifications
- danger / difficulty of the job
- demand for the job

all affect a worker's wage

Wages depend on skills, the difficulty of the job, and demand

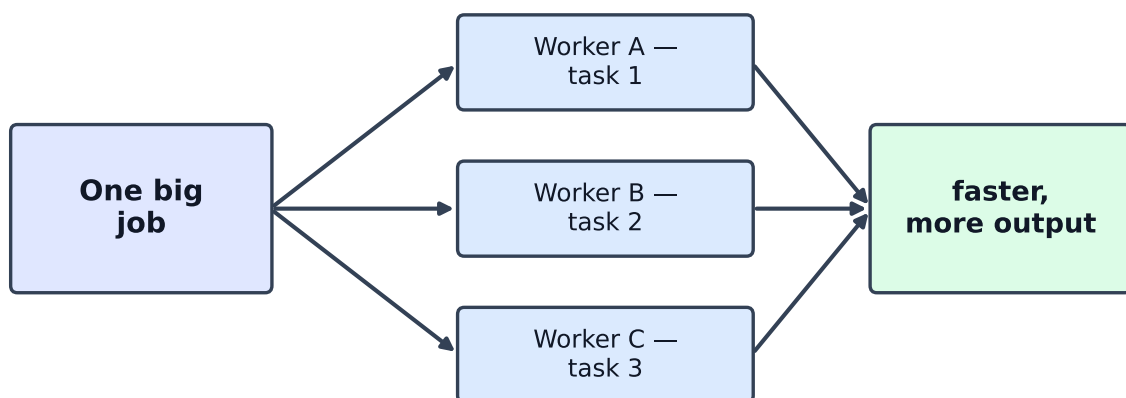
- **skill** 技能 and **qualifications** 资格—workers who are hard to replace, or who studied for years, earn more.
- **danger** —risky or dirty jobs may pay more to attract workers.
- **trade unions** 工会—a trade union is a group of workers who join together to bargain for better pay and conditions. Strong unions can raise pay.
- **discrimination** 歧视—unfair treatment because of gender, race, or age can cause unfair pay gaps.

Division of labour

Division of labour 劳动分工 (also called **specialisation** 专业化) means splitting a job into small tasks, with each worker doing one task again and again.

Advantages: workers get faster and better at their one task; less time is wasted moving between tasks; this raises output.

Disadvantages: doing one task is boring, so workers may make mistakes or leave; if one worker is absent, the whole line can stop; each worker learns only one skill.



Division of labour: splitting a job into small repeated tasks raises output per worker

Firms

The size of firms

Firms come in many sizes, from one person to huge companies. We can measure size by the number of workers, the amount of **capital** 资本 used, or the output.

Some firms stay small because: the **market** 市场 is small; the product is personal (like a hairdresser); the owner wants to stay in control; or there is little money to grow.

How firms grow

Firms grow by selling more, or by joining with other firms. When two firms join, it is a **merger** 合并 (or takeover). There are three types:

- **horizontal merger** 横向合并—two firms at the *same* stage of the *same* industry join (two car makers).
- **vertical merger** 纵向合并—two firms at *different* stages of the same industry join (a car maker and a tyre maker). "Backward" is towards the supplier; "forward" is towards the seller.
- **conglomerate merger** 混合合并—two firms in *different* industries join (a car maker and a food company).

Horizontal

same stage, same industry



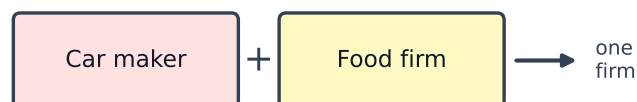
Vertical

different stages, same industry



Conglomerate

different industries



The three types of integration: horizontal (same stage), vertical (different stages of one industry), and conglomerate (different industries)

Business failure

Firms can suffer **business failure** 企业倒闭 (they close down) for many reasons: costs too high, too few sales, poor management, too many rivals, not enough cash, or a fall in **demand** 需求.

Firms and production

Labour-intensive and capital-intensive

- **labour-intensive** 劳动密集型 production uses a lot of **labour** 劳动 (many workers) and little machinery—for example, hand-made crafts.
- **capital-intensive** 资本密集型 production uses a lot of capital (machines) and few workers—for example, a modern car factory.



A car assembly line is capital-intensive (many machines, few workers) and uses the division of labour —each worker repeats one task

Image: Marek Ślusarczyk (Tupungato) Photo portfolio, CC BY 3.0 (commons.wikimedia.org)

Productivity

Productivity 生产率 means output per worker (or per machine) in a set time. Higher productivity means each worker makes more, so the cost of each unit falls. Training, better machines, and good management all raise productivity.

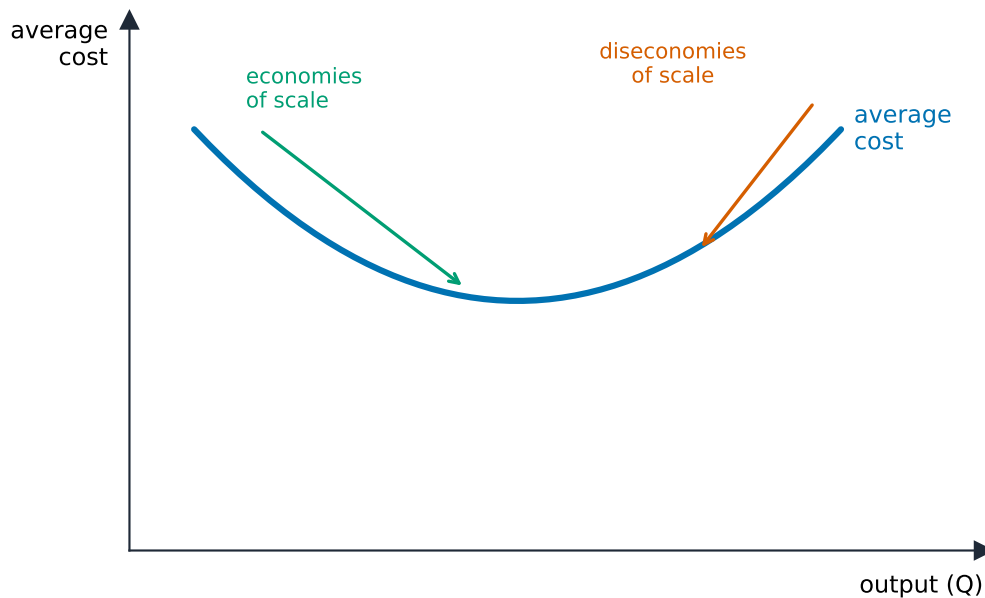
Demand for and supply of factors

Firms buy **factors of production** 生产要素 (**land** 土地, labour, capital, and **enterprise** 企业家才能). The price and amount of each factor are set by its own demand and supply, just like any market. For example, if many firms want skilled workers, the wage for those workers rises.

Economies and diseconomies of scale

As a firm grows and makes more, the cost of each unit can change:

- **economies of scale** 规模经济—as output rises, the average cost of each unit *falls*. Reasons: buying materials in bulk is cheaper, big machines work more efficiently, and large firms borrow money cheaply.
- **diseconomies of scale** 规模不经济—if a firm grows *too* big, the average cost of each unit starts to *rise*. Reasons: a huge firm is hard to manage, messages travel slowly, and workers may feel less important.



Average cost falls as a firm grows (economies of scale), reaches a low point, then rises if it grows too big (diseconomies of scale).

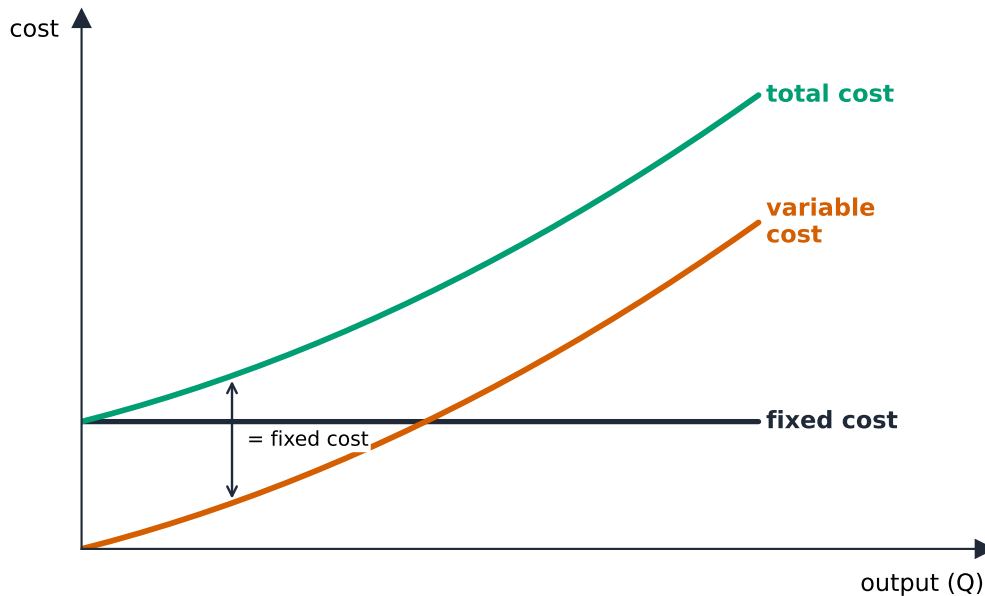
These can be *internal* (caused by the firm's own size) or *external* (caused by the whole industry growing).

Firms' costs, revenue and objectives

Costs

A **cost** 成本 is money a firm spends to produce. Costs split into:

- **fixed costs** 固定成本—costs that do *not* change with output, such as rent and insurance. You pay them even if you make nothing.
- **variable costs** 可变成本—costs that *change* with output, such as materials and power. More output means more variable cost.
- **total cost** 总成本—fixed cost plus variable cost.
- **average cost** 平均成本—the cost of *each* unit: total cost divided by the number of units made.



Fixed cost stays the same as output rises; variable cost rises; total cost is fixed plus variable, so the gap between total and variable cost is the fixed cost.

Revenue

Revenue 收益 is the money a firm gets from selling its goods.

- **total revenue** 总收益—the price multiplied by the quantity sold.
- **average revenue** 平均收益—total revenue divided by the quantity sold (this is the same as the price).

Profit and other objectives

Profit 利润 is what is left after costs:

$$\text{profit} = \text{total revenue} - \text{total cost}$$

Worked example. A firm has fixed costs of £2,000 and variable costs of £3 per unit. It makes 500 units and sells them at £10 each. Find its total cost, total revenue, profit and average cost.

- variable cost = $3 \times 500 = \text{£}1,500$, so total cost = $2,000 + 1,500 = \text{£}3,500$.
- total revenue = $10 \times 500 = \text{£}5,000$.
- profit = $5,000 - 3,500 = \text{£}1,500$.
- average cost = total cost $\div$ units = $3,500 \div 500 = \text{£}7$ per unit.

The firm makes a profit because the price (£10) is above the average cost (£7).

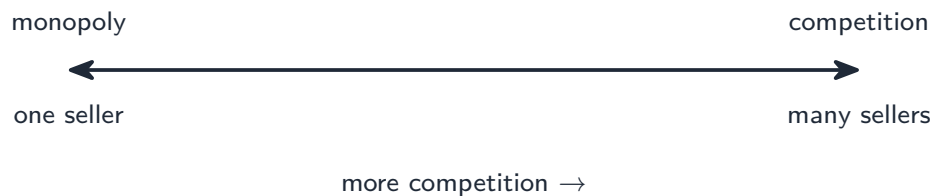
Most firms want as much profit as possible. But firms can have other **objectives** 目标:

- **survival** 生存—a new firm first just wants to stay open.
- **growth** 增长—getting bigger, to gain economies of scale and market power.

- social objectives —some firms aim to help people or protect the environment, not only to earn profit.

Types of markets

Markets differ by how many firms there are and how hard it is for new firms to join.



Markets range from monopoly (one seller) to perfect competition (many)

Competitive markets

A competitive market has many firms selling similar goods, and it is easy for new firms to enter. This is strong **competition** 竞争. In such a market:

- firms must keep prices low and quality high, or buyers go elsewhere.
- firms work hard to cut costs and make new products.

This is good for consumers: low prices, wide choice, and good quality.



In a competitive market many firms sell similar goods, so each must keep prices low and quality high to win customers

Image: Wolfmann, CC BY-SA 4.0 (commons.wikimedia.org)

Monopoly

A **monopoly** 垄断 is a market with only *one* firm, or one firm that controls most of it. New firms find it hard to enter because of **barriers to entry** 进入壁垒—for example, very high start-up costs, or the one firm controlling key supplies.

In a monopoly:

- the firm can charge high prices, because buyers have no other choice.
- there is little pressure to improve quality or cut costs.
- but a large monopoly may gain economies of scale, and may use its profit to pay for research.

Competition versus monopoly

	Consumers	Firms
competition	lower prices, more choice, better quality	lower profit; must work hard to survive
monopoly	higher prices, less choice	higher profit and an easy life, but may grow lazy

Exam tips

- Money's four functions: a **medium of exchange**, a **store of value**, a **unit of account**, and a **means of deferred payment**.
- Key formulas: $\text{profit} = \text{total revenue} - \text{total cost}$; $\text{total revenue} = \text{price} \times \text{quantity}$; $\text{average cost} = \text{total cost} \div \text{number of units}$.
- **Fixed costs** do not change with output (rent, insurance); **variable costs** do (materials, power). $\text{Total cost} = \text{fixed} + \text{variable}$.
- **Economies of scale** make average cost *fall* as a firm grows; growing *too* big brings diseconomies of scale (average cost rises).
- Know the merger types: **horizontal** (same stage of the same industry), **vertical** (different stages of one industry), **conglomerate** (different industries).