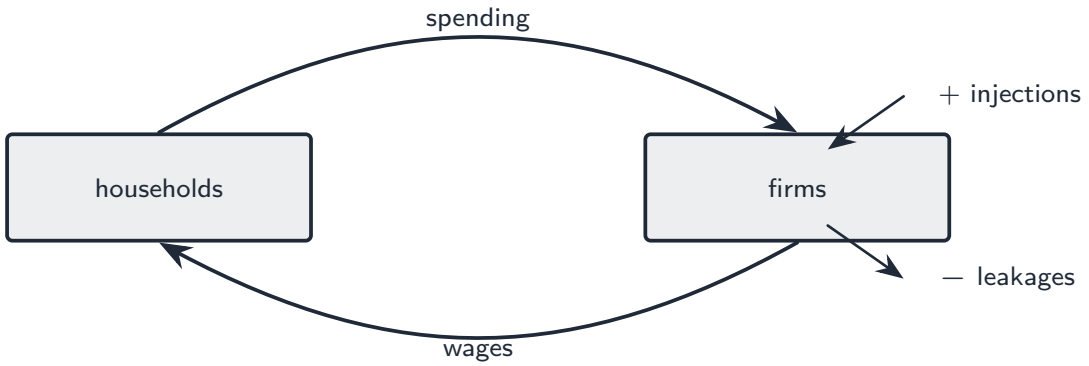
# The macroeconomy (A Level)

A-Level Economics

This topic studies the wider economy at A Level depth: how spending multiplies, how growth links to the environment, the jobs–prices link, and money.

## The circular flow and the multiplier

The **circular flow of income** 收入循环流 shows money passing between households and firms. **injections** 注入 add money to the flow (investment, government spending, exports); **leakages** 漏出 take it out (saving, taxation, imports).




*Income circulates between households and firms, with injections and leakages*

### The multiplier

An injection raises income by **more** than the first amount. This is the **multiplier** 乘数. When a firm builds a factory, the builders earn income, and they spend part of it, which becomes someone else's income, and so on.

How much is spent again depends on the **marginal propensity to consume** 边际消费倾向 (MPC) —the fraction of extra income that people spend on home goods. The rest leaks out. In a simple model:

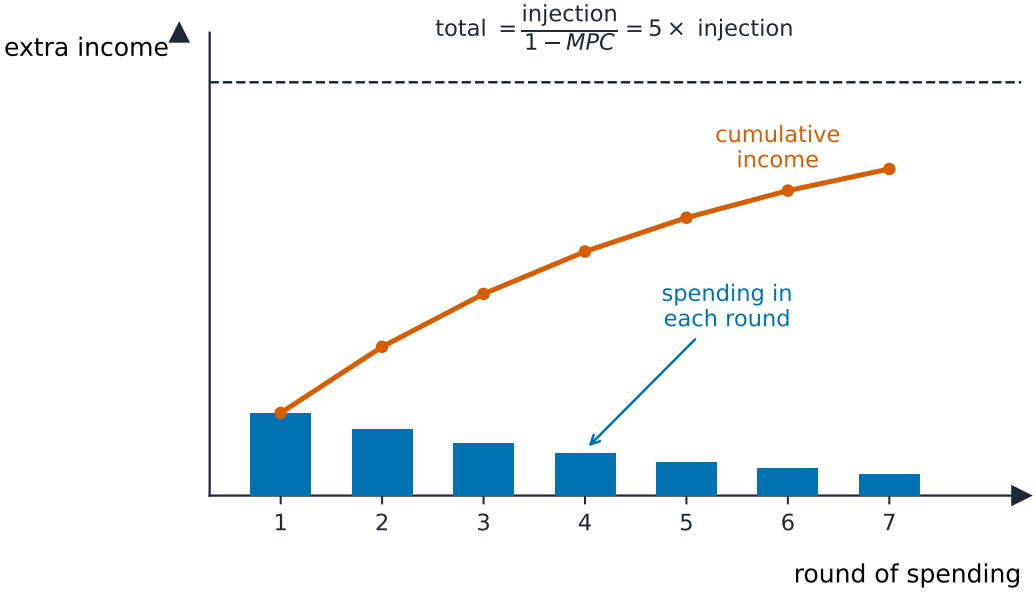
$$\text{multiplier} = \frac{1}{1 - MPC}$$

A bigger MPC (smaller leakages) gives a bigger multiplier. The main leakages are measured by the **marginal propensity to save** 边际储蓄倾向 (MPS) and the **marginal propensity to import** 边际进口倾向 (MPM).

**Worked example.** In an economy the MPC is 0.8. Find the multiplier, then the effect of a £10 billion rise in investment.

$$\text{multiplier} = \frac{1}{1 - 0.8} = \frac{1}{0.2} = 5.$$

National income therefore rises by $5 \times$ £10 billion = £50 billion —five times the original injection. (Because all income is either spent or saved, MPC + MPS = 1, so here MPS = 0.2 and the multiplier is also 1/MPS.)




*An injection is spent round after round (each smaller by the MPC), so total income rises by a multiple of the first injection.*

### The accelerator

The **accelerator** 加速数 says that **investment** 投资 depends on the **rate of change** of output. When demand is rising quickly, firms need lots of new capital, so investment jumps. When demand merely stays high, investment falls back.

### What drives consumption, saving and investment

- **consumption** 消费 and **saving** 储蓄 depend on **disposable income** 可支配收入 (income after tax), wealth, interest rates, and confidence.
- investment depends on interest rates, expected profit, technology, and business confidence.

## Economic growth and sustainability

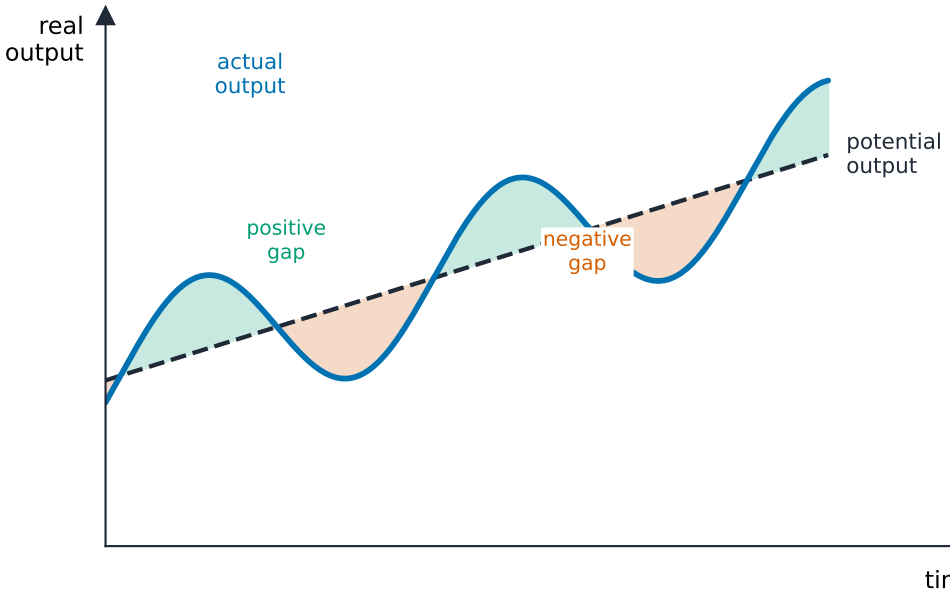
**economic growth** 经济增长 is a rise in real output.

*Investment in new buildings and capital is a key driver of economic growth.*

Image: Spinarak, CC0 (commons.wikimedia.org)

- **actual growth** 实际增长 is the real rise in output that happens.
- **potential growth** 潜在增长 is the rise in the economy's capacity.

The **output gap** 产出缺口 is the difference between actual output and potential output. A **positive** gap (actual above potential) tends to cause inflation; a **negative** gap (actual below potential) means spare capacity and unemployment.




*Actual output swings around potential output; above it is a positive (inflationary) gap, below it a negative gap with spare capacity.*

### Sustainability

**sustainable growth** 可持续增长 is growth that meets today's needs without harming the ability of future generations to meet theirs. Fast growth can use up non-renewable resources and cause pollution, which threatens **sustainability** 可持续性. So a country must weigh growth today against the environment and resources of tomorrow.

*The wind these turbines use is never used up, and they burn no fuel. Switching output from coal and oil to renewables like this lets an economy keep growing without spending the resources —or filling the air with the pollution —that would rob future generations*



## Employment and unemployment

**unemployment** 失业 is measured in two ways: the **claimant count** 申领救济人数 (people claiming benefits) and the wider **labour force survey** 劳动力调查 (a sample asked about work).

**frictional** – between jobs

**cyclical** – low demand in a slump

**structural** – skills no longer fit

**seasonal** – only at certain times

*Four types of unemployment: frictional, structural, cyclical and seasonal*

### Types

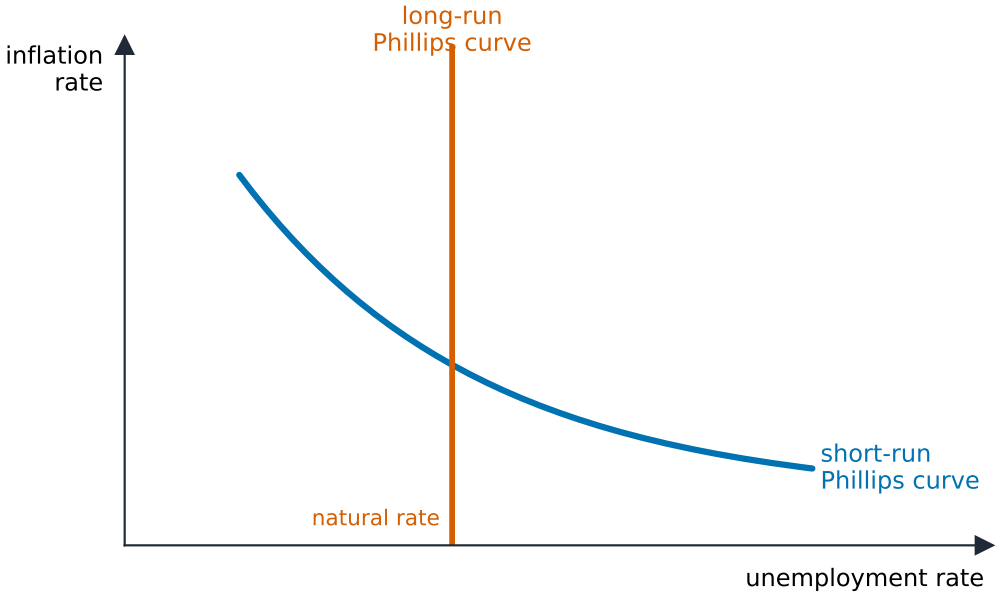
- **frictional unemployment** 摩擦性失业—short spells between jobs.
- **structural unemployment** 结构性失业—skills no longer match the jobs, as industries decline.
- **cyclical unemployment** 周期性失业—caused by low demand in a recession.
- **seasonal unemployment** 季节性失业—work only at certain times of year.

### The natural rate and the Phillips curve

The **natural rate of unemployment** 自然失业率 is the unemployment left when the labour market is in balance (mainly frictional and structural). It cannot be removed just by raising demand.

The **Phillips curve** 菲利普斯曲线 shows the link between unemployment and inflation:

- in the **short run**, there is a trade-off: lower unemployment comes with higher inflation, because strong demand pushes up wages and prices.
- in the **long run**, the curve is vertical at the natural rate. Once people expect inflation, there is no lasting trade-off —pushing unemployment below the natural rate only speeds up inflation.




*The short-run Phillips curve shows a trade-off between unemployment and inflation; the long-run curve is vertical at the natural rate.*

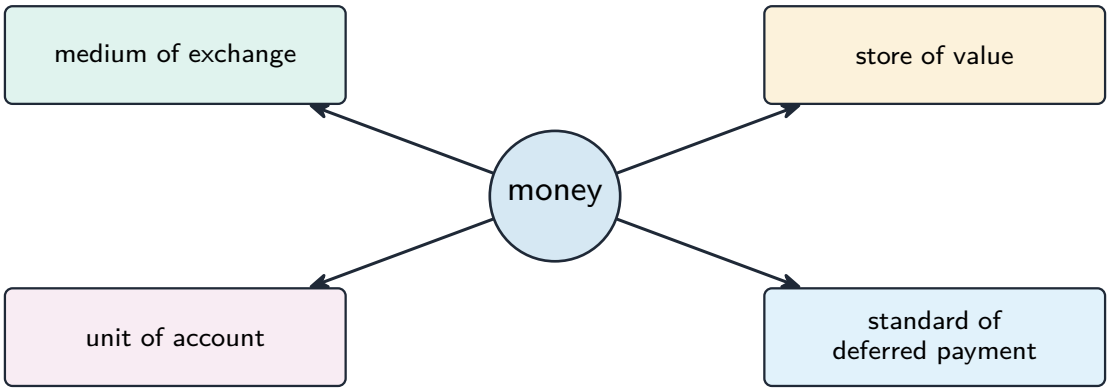
## Money and banking

### What money does

**money** 货币 is anything widely accepted in payment. It has four jobs:

- a **medium of exchange** 交换媒介—used to buy and sell, avoiding barter.

- a **store of value** 价值储藏—it keeps its worth over time, so you can save it.
- a **unit of account** 记账单位—a common way to measure and compare prices.
- a **standard of deferred payment** 延期支付标准—it lets people borrow and repay later.




*Money does four jobs at once —without it, trade would fall back on slow, awkward barter*

Good money is durable, easy to carry, easy to divide, hard to fake, and limited in supply.

## Banks

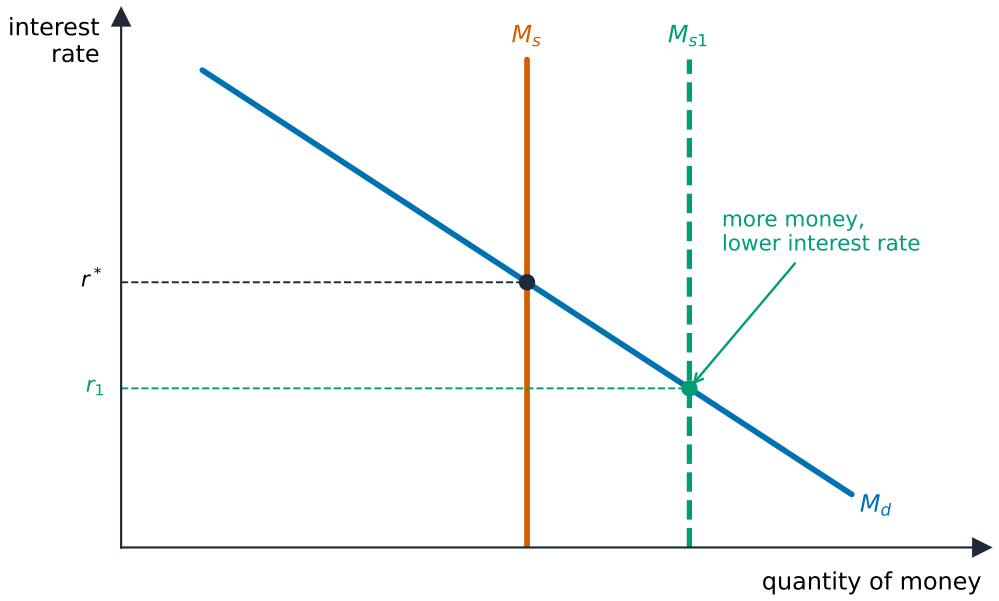
- the **central bank** 中央银行 issues notes, runs monetary policy, holds the country's reserves, and acts as **lender of last resort** 最后贷款人 to banks in trouble.
- **commercial banks** 商业银行 take deposits and make loans. By lending out most of what is deposited, the banking system creates money.


*Commercial banks take deposits and make loans —and by lending, the banking system creates most of the money in the economy.*

### The demand for money and interest rates

People hold money rather than other assets for its **liquidity** 流动性 (it can be spent at once). The **demand for money** 货币需求—also called **liquidity preference** 流动性偏好—comes from the need to make everyday payments, to keep a safety buffer, and to be ready to buy assets.

The **interest rate** 利率 is the price of borrowing money. It is set where the demand for money meets the **money supply** 货币供给. A larger money supply tends to lower the interest rate.




*The interest rate is set where the demand for money meets the money supply; a larger money supply lowers it.*

### Moral hazard

**moral hazard** 道德风险 is the danger that banks take bigger risks because they expect to be rescued if things go wrong. If a bank believes the government will bail it out, it may lend recklessly —knowing it keeps the gains but passes losses to others.

## Exam tips

- Calculate the **multiplier** $= 1 \div (1 - MPC) = 1 \div MPS$ and apply it to an injection.
- Distinguish **actual from potential** growth and link sustainability to long-run capacity.
- Explain the **functions of money** and the role of banks and the central bank.
- Explain the **Phillips curve** trade-off (unemployment vs inflation) and why it may not hold in the long run.