

# 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).

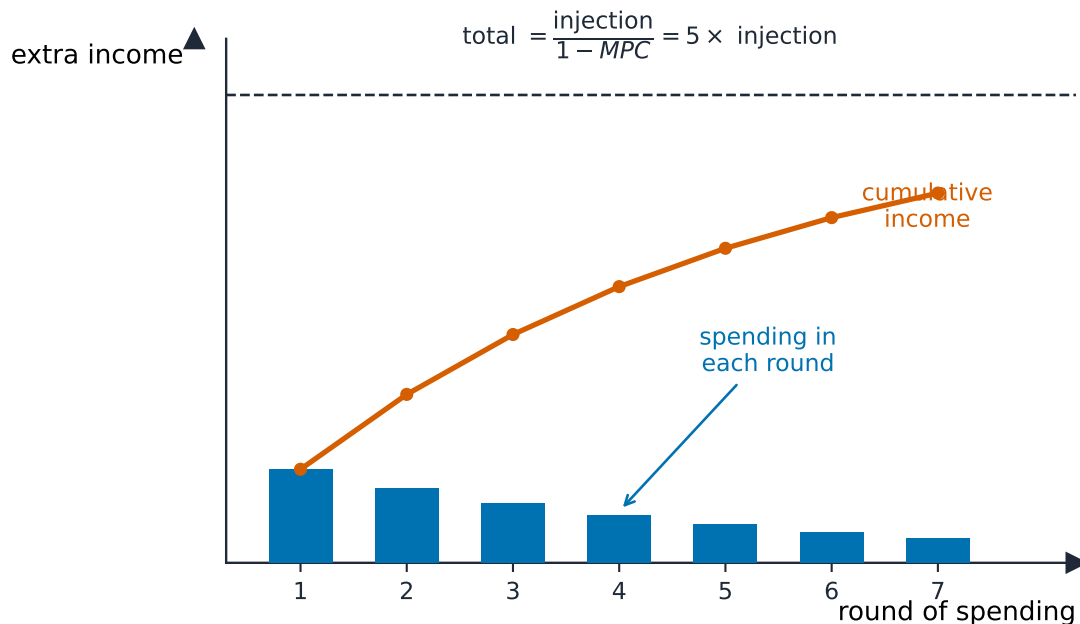
### The multiplier

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).



*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

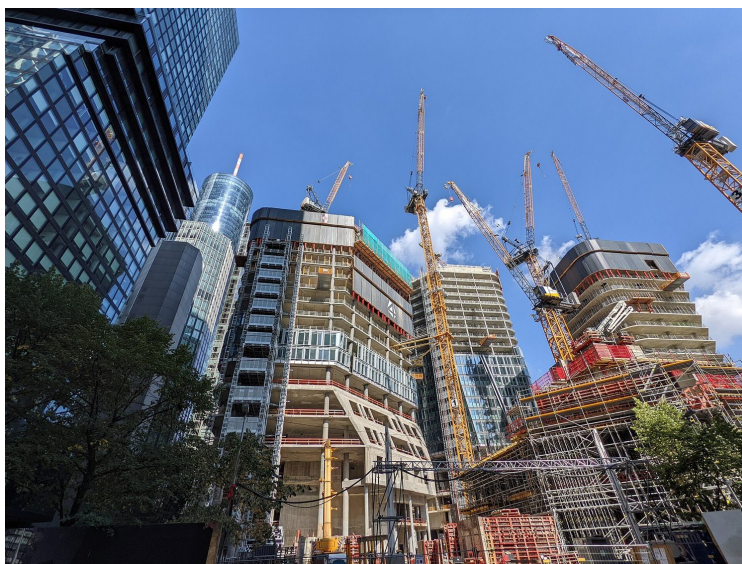
The **accelerator** 加速数 says that **investment** 投资 depends on the **rate of change** of output. When demand is rising quickly, firms need lots of new capital, so investment jumps. When demand merely stays high, investment falls back.

## 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.

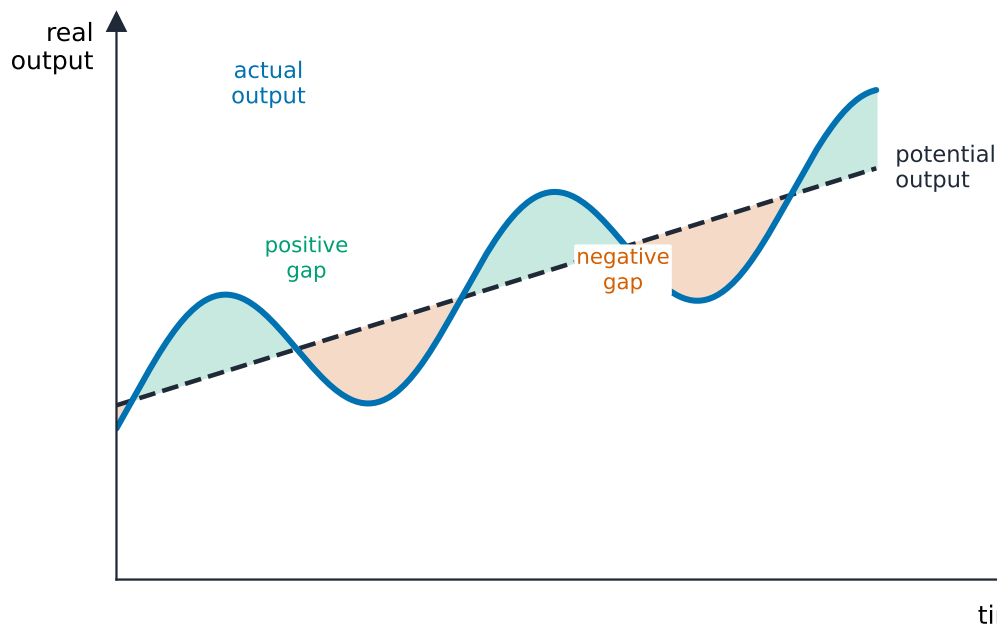


*Investment in new buildings and capital is a key driver of economic growth.*

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.

## 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).

### Types

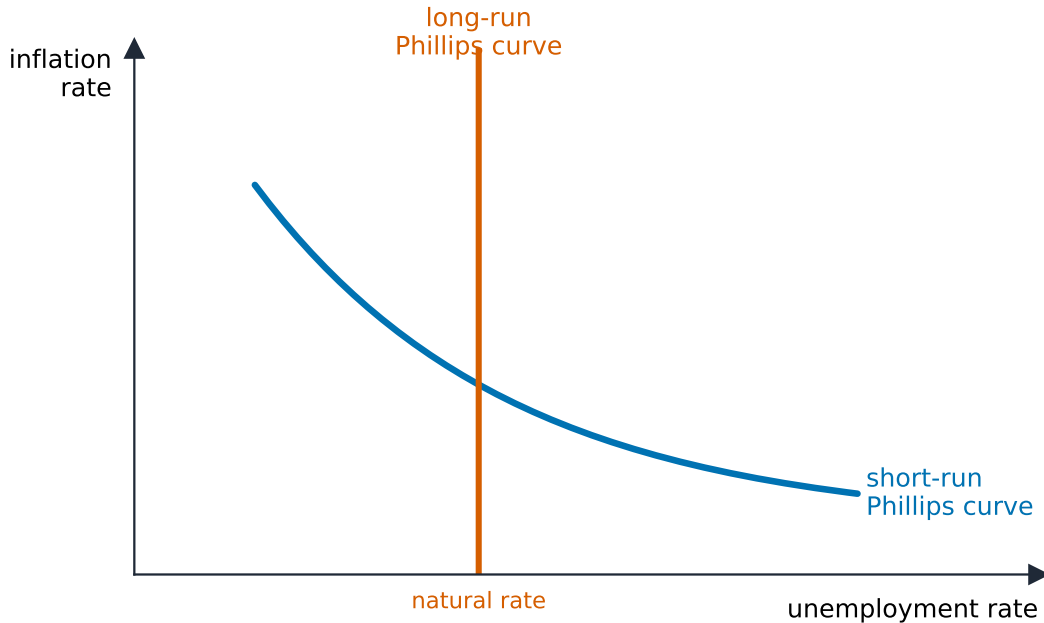
- **frictional unemployment** 摩擦性失业—short spells between jobs.
- **structural unemployment** 结构性失业—skills no longer match the jobs, as industries decline.
- **cyclical unemployment** 周期性失业—caused by low demand in a recession.
- **seasonal unemployment** 季节性失业—work only at certain times of year.

## 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.

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.



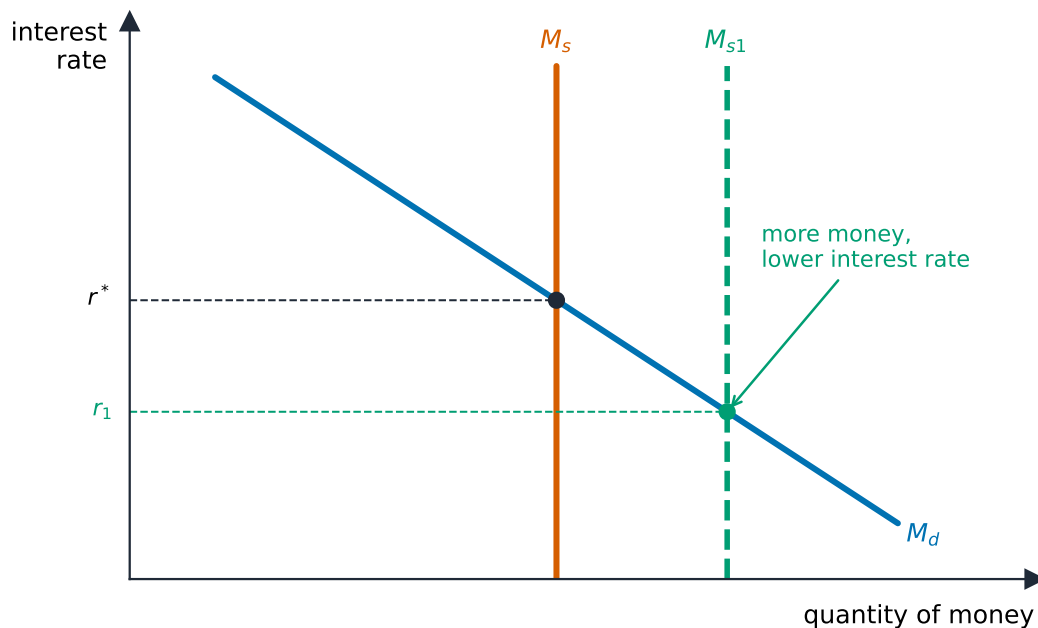
*Commercial banks take deposits and make loans —and by lending, the banking system creates most of the money in the economy.*

Image: Michael Garlick, CC BY-SA 2.0 (commons.wikimedia.org)

## 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.