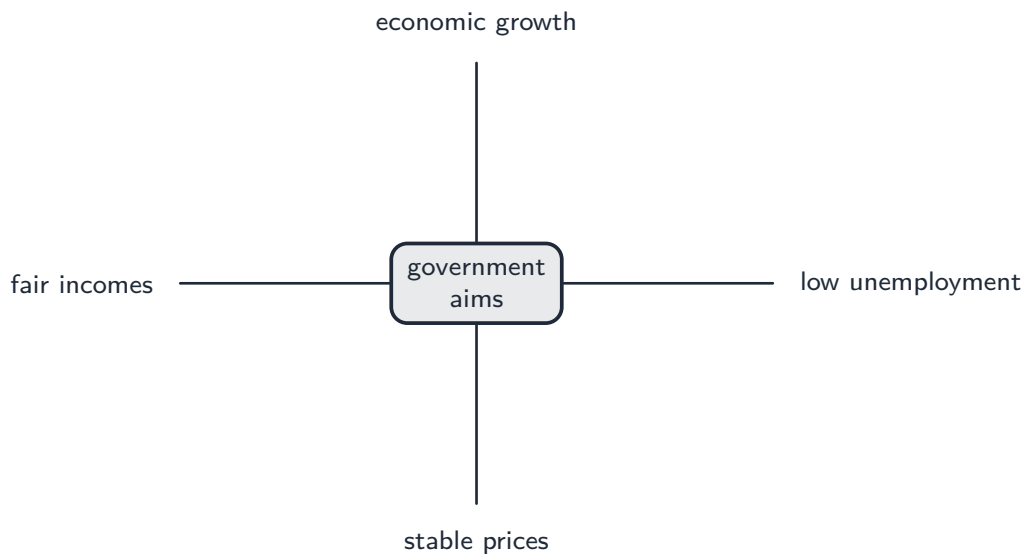


# Government and the macroeconomy

## IGCSE Economics

### Government macroeconomic aims

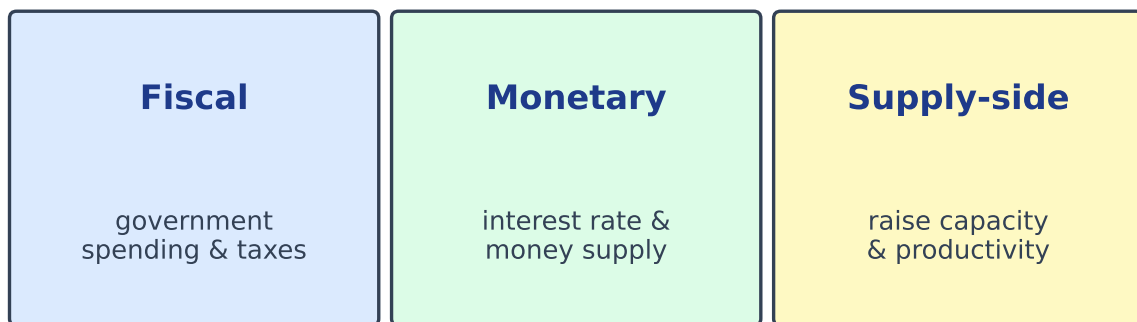
Governments try to manage the whole economy —the **macroeconomy** 宏观经济. They have five main aims:



*Four main aims: growth, low unemployment, stable prices, fair incomes*

1. **economic growth** 经济增长—the economy makes more goods and services each year.
2. **full employment** 充分就业—almost everyone who wants a job has one, so **unemployment** 失业 is low.
3. **price stability** 价格稳定—prices rise only slowly, so **inflation** 通货膨胀 is low.
4. **balance of payments** 国际收支 stability —the money flowing in and out of the country (from trade) is roughly even.
5. **redistribution of income** 收入再分配—sharing income more fairly, so the gap between rich and poor is not too wide.

These aims can **conflict** 冲突 (work against each other). For example, fast growth can pull prices up, causing inflation. Cutting unemployment can do the same. So a government must balance its aims.



*The government's three sets of policy tools for managing the macroeconomy*

## Fiscal policy

**Fiscal policy** 财政政策 means the government changing two things to manage the economy:

- **government spending** 政府支出—money the government spends, for example on schools, hospitals, and roads.
- **taxation** 税收—money the government takes from people and firms.

The government **budget** 预算 sets spending against tax. There are three outcomes:

- a **budget deficit** 预算赤字—spending is more than the tax raised, so the government must borrow.
- a **budget surplus** 预算盈余—the tax raised is more than spending.
- a **balanced budget** —the two are equal.

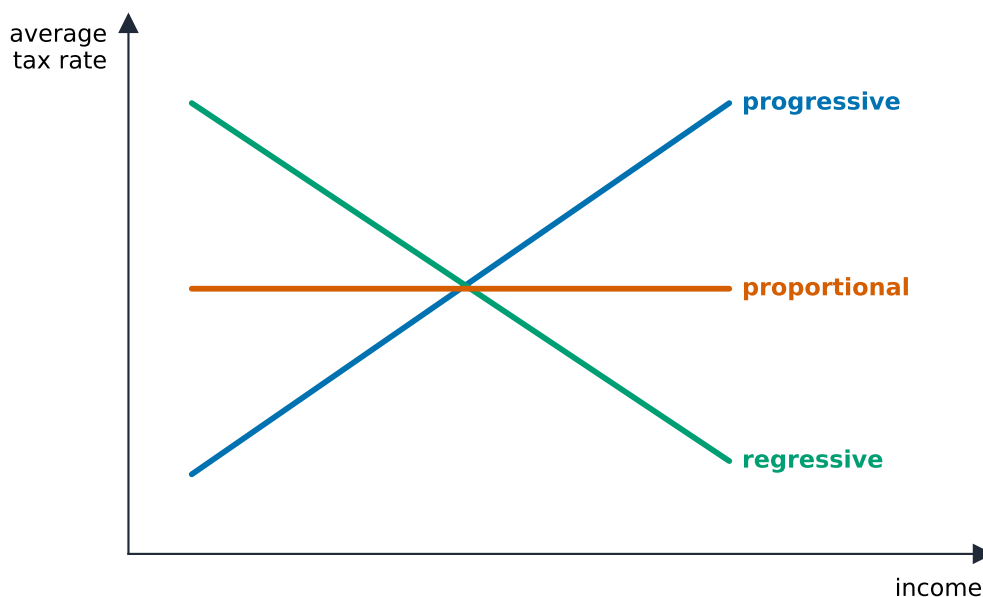
## Types of tax

Taxes are grouped in two ways. By *what* is taxed:

- a **direct tax** 直接税 is paid straight to the government from **income** 收入 or **profit** 利润 (income tax, corporation tax).
- an **indirect tax** 间接税 is added to the price of goods and paid when you spend (a sales tax).

By *how the rate changes with income*:

- a **progressive tax** 累进税 takes a *bigger* % from higher incomes. This helps redistribute income.
- a **regressive tax** 累退税 takes a *smaller* % from higher incomes, so it hits the poor harder.
- a **proportional tax** 比例税 takes the *same* % from everyone.



*Under a progressive tax the average rate rises with income; under a regressive tax it falls; under a proportional tax it stays the same.*

## What fiscal policy does

To boost the economy (raise growth and jobs), the government can spend more or cut taxes. This raises total **demand** 需求—but if demand grows too fast, it can cause inflation.

To slow the economy (fight inflation), the government can spend less or raise taxes. This lowers demand, but can raise unemployment.

## Monetary policy

**Monetary policy** 货币政策 is the **central bank** 中央银行 changing **interest rates** 利率 (and the **money supply** 货币供给) to manage the economy. The interest rate is the cost of borrowing and the reward for saving.

- **Lower** interest rates: borrowing is cheaper, so people and firms spend and **invest** 投资 more. Demand rises, giving more growth and jobs—but maybe more inflation.
- **Higher** interest rates: borrowing is dearer, so spending falls. Demand falls, giving less inflation—but maybe more unemployment.



*The central bank runs monetary policy: it sets the interest rate to manage demand, inflation and growth*

Image: Yongxing (Wikimedia Commons), CC BY-SA 3.0 (commons.wikimedia.org)

## Supply-side policy

**Supply-side policy** 供给侧政策 tries to raise the amount the economy *can* produce. It improves the quantity and quality of the **factors of production** 生产要素. Methods include:

- **education and training** —better skills raise **productivity** 生产率.
- **privatisation** 私有化—selling state-owned firms to private owners, who may run them better.
- **deregulation** 放松管制—removing rules that hold firms back.
- **incentives** 激励—lower taxes on income and profit, so people work harder and firms invest more.

Supply-side policy can raise growth and jobs *and* lower inflation at the same time. Its weakness is that it works slowly.

## Economic growth

Economic growth is a rise in **real GDP**.

**GDP** (gross domestic product 国内生产总值) is the total value of all goods and services a country produces in a year. **Real** 实际 GDP is GDP after the effect of rising prices is removed, so it shows the *true* change in output.

**Worked example.** A country's real GDP was £500 billion last year and £515 billion this year. Find the rate of economic growth.

- economic growth =  $(515 - 500) \div 500 \times 100 = 3\%$ .

Because this uses *real* GDP (with the effect of rising prices taken out), the 3% is a true rise in output, not just higher prices. If prices had risen but output had not, real GDP—and so growth—would be zero.



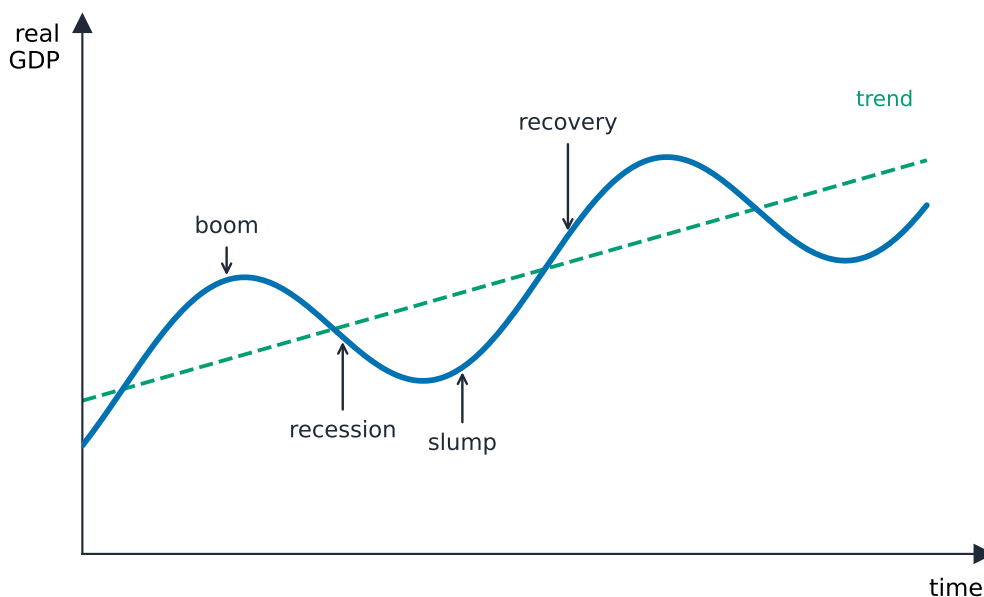
*Investment in new buildings and capital, seen in Shanghai's Pudong skyline, drives economic growth*

Image: Daniel Case, CC BY-SA 3.0 (commons.wikimedia.org)

## The business cycle

Real GDP does not rise smoothly. It moves through a **business cycle** 经济周期 with four stages:

- **boom** 繁荣—fast growth; output and jobs are high, but prices rise quickly.
- **recession** 衰退—output falls and jobs are lost. (A recession is often defined as falling real GDP for six months.)
- **slump** 萧条—the bottom of the cycle; very low output and high unemployment.
- **recovery** 复苏—output starts to rise again.



*Real GDP moves through boom, recession, slump and recovery around its rising trend.*

## Causes and effects

Growth comes from more or better factors of production: investment in new machines, a bigger or more skilled workforce, and new technology.

**Good effects:** higher incomes, more jobs, better **living standards** 生活水平, and more tax for the government to spend.

**Bad effects:** prices may rise (inflation); the gap between rich and poor may grow; and there may be more pollution and use of scarce resources.

A recession brings the opposite: lower incomes, more unemployment, and business failures.

## Employment and unemployment

### Measuring unemployment

Unemployment is people who can work and want to work, but cannot find a job. There are two ways to measure it:

- the **claimant count** 失业救济申领人数—it counts people who claim **unemployment benefit** 失业救济金. It misses those who want work but cannot claim.
- the **labour force survey** 劳动力调查—a survey that counts people who are not working but are looking for work and are ready to start.

The **labour force** 劳动力 is everyone who is working plus everyone who is unemployed (and looking for work).

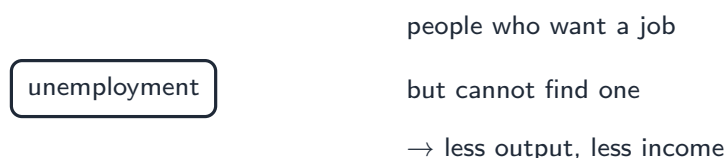
**Worked example.** A country has 24 million people in work and 2 million people who are unemployed and looking for work. Find the labour force and the unemployment rate.

- labour force =  $24 + 2 = 26$  million.
- unemployment rate =  $2 \div 26 \times 100 = 7.7\%$ .

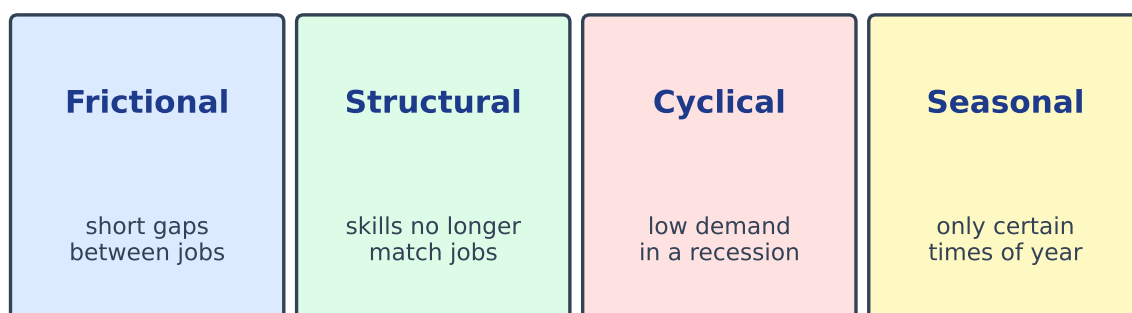
People who are not looking for work (for example retired people or full-time students) are counted in neither figure, so a fall in the rate is good news only if it means more people found jobs, not that they stopped looking.

## Types of unemployment

- **frictional unemployment** 摩擦性失业—short-term unemployment between jobs (a worker who just left one job and is looking for the next).
- **structural unemployment** 结构性失业—a whole industry shrinks and workers' skills are no longer wanted (for example, coal miners after the mines close).
- **cyclical unemployment** 周期性失业—caused by a recession, when total demand is low so firms need fewer workers. (It is also called demand-deficient unemployment.)



*Unemployment means people who want a job cannot find one*



*The four types of unemployment: frictional (between jobs), structural (skills no longer match), cyclical (low demand in a recession) and seasonal*

## Effects of unemployment

- workers lose income and may lose their skills.
- the country loses the output those workers could have made.
- the government pays more in benefits and collects less in tax.
- crime and poor health may rise.

## Sectors and the changing pattern of employment

The economy has three **sectors**:

- the **primary sector** 第一产业 extracts raw materials (farming, fishing, mining);
- the **secondary sector** 第二产业 makes things (manufacturing, construction);
- the **tertiary sector** 第三产业 provides services (banking, tourism, retail, transport).

As a country develops, jobs shift **primary** → **secondary** → **tertiary**. Early on most work is farming; industrialisation moves workers into factories; then **deindustrialisation** 去工业化 and rising incomes grow the service sector, so most jobs end up tertiary. Modern economies also see more **part-time and flexible** work.

## Inflation

Inflation is a rise in the *average* level of prices over time. The opposite —falling prices —is **deflation** 通货紧缩.

### Measuring inflation

Inflation is measured by the **Consumer Prices Index** 消费者价格指数 (CPI). We pick a "basket" of goods a typical family buys, give each good a **weight** 权重 (a bigger weight for things people spend more on), and track how the price of the whole basket changes each year.

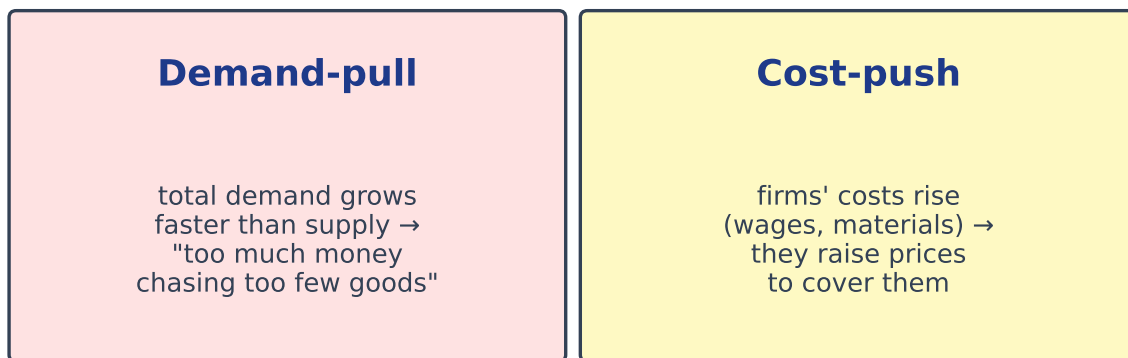
**Worked example.** A country's Consumer Prices Index (CPI) was 100 last year and 104 this year. Find the rate of inflation.

- inflation rate =  $(104 - 100) \div 100 \times 100 = 4\%$ .

Prices rose by 4% on average. If next year the index reaches 107, the inflation rate is  $(107 - 104) \div 104 \times 100 = 2.9\%$ . Prices are still rising, but more slowly —a smaller inflation rate is *not* the same as deflation, because for deflation the index itself would have to fall.

### Causes

- **demand-pull** 需求拉动 inflation —total demand grows faster than the economy can supply, so prices are pulled up.
- **cost-push** 成本推动 inflation —firms' costs rise (wages, materials), so they raise prices to cover them.



*The two causes of inflation: demand-pull (excess demand) and cost-push (rising costs)*

## Effects of inflation

- money loses **purchasing power** 购买力—each unit of money buys less.
- savings become worth less.
- firms must keep changing prices on labels and lists, which costs time and money.
- the country's goods become dearer than other countries' goods, which hurts exports.

## Deflation

Falling prices sound good, but deflation can be harmful. People put off buying, hoping for lower prices later. So demand falls, firms cut output, and unemployment rises.

## Exam tips

- Learn the government's five aims (growth, low unemployment, low inflation, balance of payments, fair incomes) —they can **conflict**, e.g. fast growth can pull up inflation.
- **Fiscal policy** = government spending and taxes; **monetary policy** = the central bank changing interest rates; **supply-side policy** = raising what the economy *can* produce.
- Key rates: unemployment rate =  $\text{unemployed} \div \text{labour force} \times 100$ ; inflation rate =  $\text{change in CPI} \div \text{old CPI} \times 100$ ; growth =  $\text{change in real GDP} \div \text{old real GDP} \times 100$ .
- **Deflation** (falling prices) can be harmful, because people delay buying, so demand and jobs fall.