

Government & the Macroeconomy

IGCSE Economics ■ Topic 4

IGCSE Economics



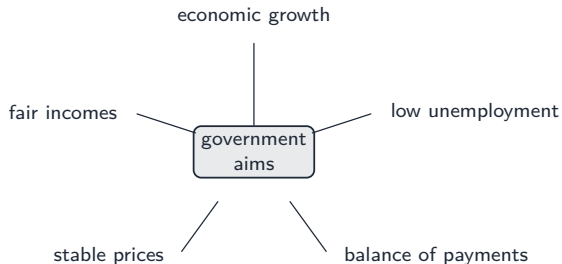
What we will cover

- 1 Government aims
- 2 Policy tools
- 3 Taxes
- 4 Inflation
- 5 Unemployment
- 6 The business cycle

1

Aims and tools

Government aims



Five **macroeconomic** 宏观经济 aims:

- **economic growth** 经济增长
- **full employment** 充分就业
- **price stability** 价格稳定
- **balance-of-payments stability & fair incomes**

Aims can **conflict**.

Policy tools

- **fiscal policy** 财政政策 – spending & tax
- **monetary policy** 货币政策 – interest rates, money supply and exchange-rate measures
- **supply-side policy** 供给侧政策 – improving the economy's capacity



Central banks set the monetary tools

Policy tools – overview

Original policy choices: identify the tool and the mechanism

A government cuts income tax during weak spending. The central bank lowers its policy interest rate. A training programme helps unemployed mechanics qualify for new jobs.

Tool	Possible mechanism	Important limit
Fiscal	Lower tax leaves households more income to spend.	Households may save the extra income.
Monetary	Cheaper borrowing may encourage spending and investment.	Firms with few orders may still avoid borrowing.
Supply-side	Relevant skills may increase employability and capacity.	Training takes time; suitable vacancies must exist.

Supply-side tools, by name

Privatisation

Privatisation 私有化: selling a state industry to private owners, which may change incentives; private ownership alone does not create competition.

Deregulation

Deregulation 放松管制: removing rules that keep new firms out, so incumbents face competition.

Incentives

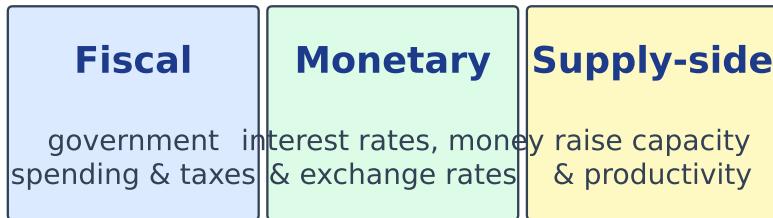
Lower marginal tax rates and targeted subsidies change the **incentives** 激励 to work, save and invest.

Training

Relevant training can raise **productivity** 生产率 and capacity when skills meet firms' needs; results take time.

Supply-side policy shifts what the economy *can* produce. Demand-supporting policy can use spare capacity; spending on training or equipment can also affect future capacity.

Policy tools – overview, in detail



Exam: fiscal = G & T; monetary = interest rate / money; supply-side = capacity & productivity

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

The budget, and the three outcomes

Official exam data: June 2025, 0455/22, Q1(a)

St. Kitts and Nevis in 2022: government spending \$310 million; tax revenue \$292 million. Calculate the budget deficit.

Try it: Give the equation and answer with a unit. What would make this a surplus instead?

The budget, and the three outcomes – worked reasoning

$$\text{Budget deficit} = \text{spending} - \text{tax revenue}$$

$$\text{Budget deficit} = \$310 \text{ million} - \$292 \text{ million} = \$18 \text{ million}$$

Spending exceeds revenue: deficit. Revenue above spending is a surplus; equality gives balance. A deficit needs financing, often borrowing. It is not the same as total accumulated government debt.

Taxes

Original annual income-tax example

Person A earns £10,000 and pays £1,000 tax. Person B earns £30,000 and pays £6,000. Calculate tax as a percentage of income. Is the tax progressive?

Compare shares of income, not just the number of pounds paid.

Taxes – worked reasoning

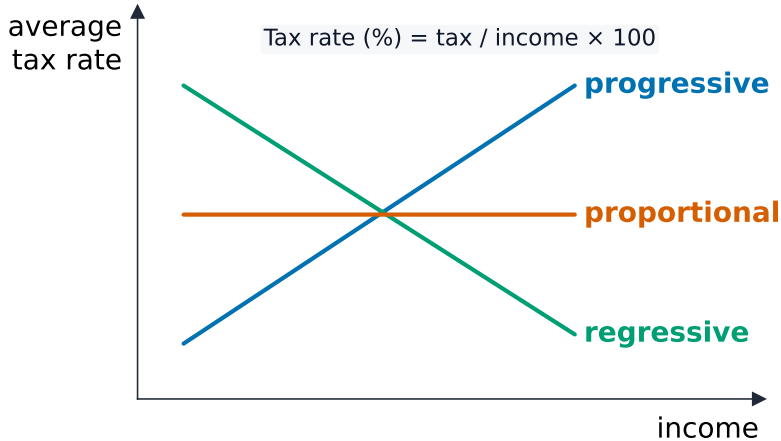
$$\text{Average tax rate} = \frac{\text{tax paid}}{\text{income}} \times 100.$$

$$\text{A's rate} = \frac{£1,000}{£10,000} \times 100 = 10\%$$

$$\text{B's rate} = \frac{£6,000}{£30,000} \times 100 = 20\%$$

The average rate rises with income: progressive tax. Direct/indirect is a separate classification; this example taxes income directly.

Taxes, in detail



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

How taxes are classified

by *what* is taxed

the first of the two groupings

a **direct tax** 直接税

paid **straight to the government** from **income** 收入 or **profit** 利润 – income tax, corporation tax

an **indirect tax** 间接税

paid on **spending**, collected by the seller – VAT, duties

by *who pays what share*

the second grouping

progressive 累进税

a **higher** percentage as income rises

regressive 累退税

a **lower** percentage as income rises – a fixed spending-tax payment can take a larger income share from poorer households

The two groupings are independent. Classify direct/indirect by what is taxed and rate structure by tax as a share of income. The groupings answer different questions.

2

Problems

Inflation

Inflation 通货膨胀 is a general rise in prices, from:

- **demand-pull** 需求拉动 – too much spending
- **cost-push** 成本推动 – rising costs

Demand-pull

total demand grows
faster than supply →
"too much money
chasing too few goods"

Cost-push

firms' costs rise
(wages, materials) →
may raise prices
to cover them

Exam: demand-pull = excess total demand; cost-push = rising costs (wages, oil, imported inputs)

Measuring inflation, and what it does

Original CPI series

A weighted price-basket index is 100 in year 1, 104 in year 2 and 107 in year 3. Calculate inflation for each interval. Are prices falling in year 3?

CPI is an index level. Inflation is its percentage change, not the index itself.

Measuring inflation, and what it does – worked reasoning

$$\text{Inflation rate} = \frac{\text{new CPI} - \text{old CPI}}{\text{old CPI}} \times 100.$$

$$\text{Year 2 inflation} = \frac{104 - 100}{100} \times 100 = 4\%$$

$$\text{Year 3 inflation} = \frac{107 - 104}{104} \times 100 \approx 2.9\%$$

Prices still rise, but more slowly. Deflation requires a falling price level. Higher inflation reduces purchasing power of unchanged money income; savers' outcomes also depend on interest.

Unemployment

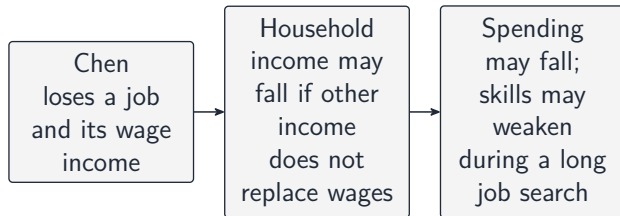
Who counts as unemployed? Original survey cases

Dana has no job, is actively seeking work and can start. Eli studies full time and is not seeking work. Farah studies full time and also has a paid part-time job.

Classify first: Unemployed, outside the labour force, or employed? Dana is unemployed; Eli is outside the labour force; Farah is employed.

Classify by work, search and availability, not by the label “student”. Wanting a job alone does not establish survey unemployment.

Consequences of unemployment



Government may collect less income tax and spend more on support.

Unused labour can mean lost potential output.

Apply the chain to Chen's job loss. Income support or a new job can change the effect; unemployment is not proof of crime or poor health in an individual.

Sectors and the changing pattern of employment

Original classification task

A worker grows vegetables, another cans them, and a third serves them in a museum café. Classify each activity.

Growing: primary; canning: secondary; café service: tertiary.

A rising service-sector share is a common development pattern, not an inevitable route for every economy.



Museum visitors illustrate demand for tourism services. This is not a photograph of jobseekers.

Unemployment – types

Original worker cases: identify the cause

Asha left a job and is searching for another. Ben's factory closed; local vacancies need skills he lacks. Chen lost a job after falling spending reduced orders across the economy.

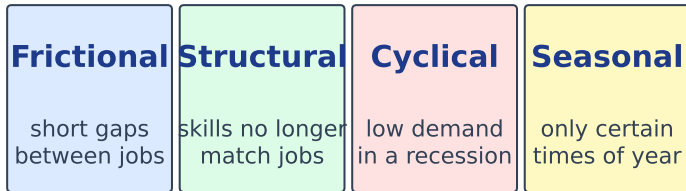
Try it: Classify each case, explain the evidence and suggest a relevant policy. Is one policy best for all three?

Unemployment – types – worked reasoning

Worker	Type	Mechanism and possible response
Asha	Frictional	Time between jobs; better vacancy information may shorten the search.
Ben	Structural	Skills do not match vacancies; relevant retraining may help, but takes time.
Chen	Cyclical	Weak spending lowers firms' demand for workers; demand-supporting policy may help if spare capacity exists.

Explain the cause before choosing a remedy. More spending alone does not give Ben the missing skills.

Unemployment – types, in detail



Exam: name the type + cause — match policy to cause; results depend on vacancies and spare capacity

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

The two ways unemployment is measured

Original labour-force example

There are 24 million employed and 2 million unemployed, all actively seeking work and available. Later, 0.5 million of the unemployed stop seeking work; employment is unchanged.

Calculate first: The initial and later unemployment rates. Does the fall show that jobs were created?

The two ways unemployment is measured – worked reasoning

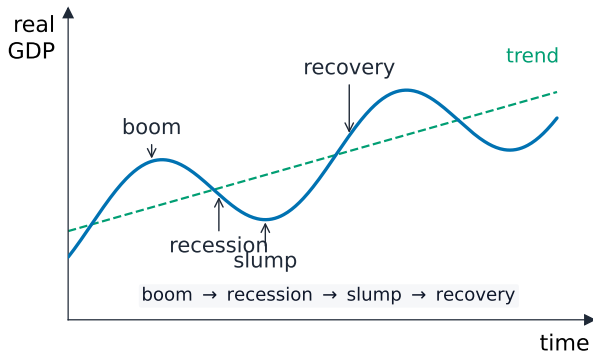
Labour force = employed + unemployed.

$$\text{Initial rate} = \frac{2}{24 + 2} \times 100 = 7.7\% \quad (\text{rounded})$$

$$\text{Later rate} = \frac{1.5}{24 + 1.5} \times 100 = 5.9\% \quad (\text{rounded})$$

No new jobs were created: the measured labour force shrank. A claimant count records benefit claims; a labour-force survey applies work/search/availability criteria and includes eligible non-claimants.

The business cycle



The **business cycle** 经济周期 swings between **boom** & **recession**. In a recession the government can boost spending or cut interest rates.

Around the business cycle

Boom

High output and strong demand; inflationary pressure may increase if capacity is stretched.

Slump

A deep **slump** 萧条: output low, unemployment high, and investment may be postponed.

Recovery

Recovery 复苏: output starts rising again; confidence and employment may improve at different times.

How it is measured

By **gross domestic product** 国内生产总值, in real terms for output; the **consumer prices index** 消费者价格指数 separately tracks the price level.

Policy may counter demand fluctuations; the choice depends on causes, spare capacity and conflicting aims. **Redistribution of income** 收入再分配 runs through both.

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.

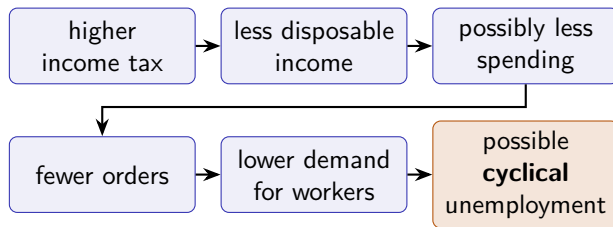
Types of unemployment

Exam connection: June 2025, 0455/22, Q4(c)

Explain a chain through which higher direct taxation could increase unemployment. Begin with personal income tax and household spending.

Try it: Link tax, income available to spend, product demand and demand for workers. Identify an important condition.

Types of unemployment – worked reasoning



This chain assumes spending falls and is not offset elsewhere. Government use of the extra tax revenue can affect the result. A list of “tax, demand, unemployment” leaves the mechanism unexplained.

Economic growth



Investment can expand capacity; a skyline photograph cannot measure real GDP growth

Deflation: causes and consequences

Original comparison; exam connection: 0455/22 Q1(h)

In economy A, falling confidence reduces spending and output. In economy B, better technology lowers production costs while output rises. Both experience falling average prices.

Discuss first: Would deflation necessarily harm both economies in the same way?

Deflation – worked reasoning

Weak demand in A

Falling sales may reduce output and jobs; expected further price falls may delay purchases.

Fixed money debts become harder to repay if incomes fall.

Improved supply in B

Lower costs may allow lower prices with greater output and purchasing power.

Benefits depend on income, employment and how cost savings reach customers.

Judge the cause and affected groups. A falling price level alone does not prove falling output or universal harm.

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** = interest rates, money supply and exchange-rate measures; **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.

3

Recap

Worked example – economic growth

Real GDP was £500bn last year and £515bn this year. Find the growth rate.

- $\text{Growth} = \frac{\text{change in real GDP}}{\text{original real GDP}} \times 100$
- $\text{Growth} = \frac{515 - 500}{500} \times 100$
- $\text{Growth} = \frac{15}{500} \times 100 = 3\%$
- **Real** GDP already has inflation removed, so this is a genuine rise in output.

Use **real** GDP to measure output growth; nominal GDP can rise because prices rise. Two quarters of **negative** growth is the usual definition of a recession.

Topic 4 – key takeaways

1

Aims

growth, jobs, stable prices,
external stability, fair incomes

2

Tools

fiscal, monetary & supply-side
policy

3

Taxes

direct vs indirect; progressive vs
regressive

4

Problems

inflation & unemployment

Check yourself

- 1 What does fiscal policy change?
- 2 Which policy uses interest rates?
- 3 Which tax takes a bigger % from the rich?
- 4 Name one cause of inflation.



Answers 1. government spending & taxation 2. monetary policy 3. a progressive tax 4. demand-pull or cost-push