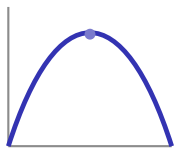
Government Macroeconomic Intervention

A-Level Economics ▪ Topic 10

A-Level Economics



What we will cover

1. Objectives & tools
2. Trade-offs between objectives
3. Fiscal policy & crowding out
4. The Laffer curve
5. Monetary & supply-side
6. Putting it together

a central bank steers policy

1 Objectives and tools

Objectives and tools

objectives

growth | price stability | full employment | balance of payments

tools

fiscal 财政政策 | **monetary** 货币政策 | **supply-side** 供给侧政策

Fiscal & monetary work on **AD** 总需求 (quick); supply-side on capacity (slow but lasting).

2

Trade-offs

Which conflicts depend on economic conditions?

these goals pull against each other

lower unemployment $\rightleftharpoons$ higher inflation

faster growth $\rightleftharpoons$ higher inflation

faster growth $\rightleftharpoons$ worse current account

faster growth $\rightleftharpoons$ more pollution

The **Phillips curve** 菲利普斯曲线 trade-off assumes unchanged expectations. Demand growth near capacity can create conflicts; productive capacity improvements may ease them.

The objectives are interrelated

trade-off 取舍	a **conflict** 冲突 in which gaining on one objective costs you on another
growth against inflation	demand-led growth pushes prices up as spare capacity runs out
growth against the current account	rising incomes suck in imports
growth against equality	growth does not always reach everyone, so the income gap can widen
unemployment against inflation	the short-run Phillips curve relationship
the consequence	a government must often accept "second best" on one aim to protect another

A clever policy mix eases a trade-off rather than pretending it is not there. Naming which aim was sacrificed is the evaluation mark.

3

Effectiveness

Trace fiscal expansion through a stated economy

An illustrative economy has unused capacity and weak private spending. Government proposes an extra £10 billion of purchases, financed by borrowing. Use a multiplier $k = 2.5$; hold taxes, exports and other spending changes constant.

Compare two conditional outcomes

Case A: private investment is unchanged. Case B: higher interest rates reduce private investment by £4 billion. Find the net autonomous spending change and the model's income change in each case. Does Case B mean fiscal expansion has no effect?

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State the mechanism before the calculation: government purchases create income; subsequent domestic spending passes part of that income onward. The multiplier is an assumption, not a guaranteed outcome.

Partial crowding out reduces the gain without cancelling it

Let ΔA be the net change in autonomous spending. All spending and income changes below are in £ billions.

$$\Delta A_A = \Delta G + \Delta I = 10 + 0 = 10$$

$$\Delta Y_A = k\Delta A_A = 2.5 \times 10 = 25$$

$$\Delta A_B = \Delta G + \Delta I = 10 + (-4) = 6$$

$$\Delta Y_B = k\Delta A_B = 2.5 \times 6 = 15$$

> In this model, crowding out reduces the income gain by £10 billion. It does not mean income falls, or that every pound of government spending replaces private spending.

Borrowing does not guarantee a fixed rise in interest rates

One **crowding out** 挤出效应 mechanism is government borrowing raising demand for loanable funds, pushing up interest rates and discouraging private investment, other things equal.

The size depends on the supply of finance, central-bank action, firms' responsiveness to interest rates and confidence. With idle resources or supportive monetary conditions, the interest-rate effect may be small. Productive public infrastructure may instead encourage some private investment.

Near capacity, public projects can compete for workers and materials even without a large interest-rate rise. That is a resource constraint; identify it rather than assuming a loan-market mechanism.

> Distinguish a proposed spending increase, its financing, the reaction of private spending and the eventual change in real output.

Evaluate fiscal policy when its effects arrive

The original forecast is not enough

Suppose a construction programme starts after the economy has already recovered. Why might the same planned £10 billion now create more inflationary pressure and less extra real output?

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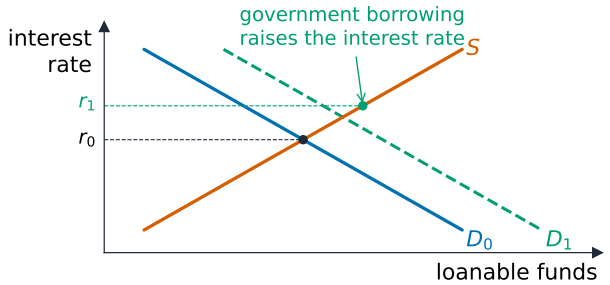
Suppose a construction programme starts after the economy has already recovered. Why might the same planned £10 billion now create more inflationary pressure and less extra real output?

Time lags 时滞 arise in diagnosis, approval, implementation and spending responses. Capacity and confidence may change before delivery. Tax cuts need not all be spent, while automatic changes in taxes and benefits can begin without a new budget decision.

A deficit is a flow over a period; the **national debt** 国债 is an outstanding stock. Additional borrowing tends to add to debt, holding other flows constant. Not every spending increase is borrowed, and some public investment can improve future capacity.

Fiscal policy and crowding out, in detail



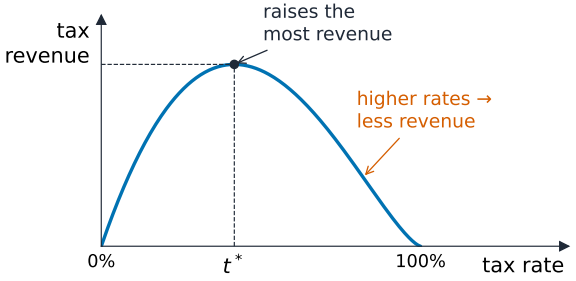
govt borrow $\Rightarrow r \uparrow \Rightarrow$ private $I \downarrow$

In this loanable-funds diagram, extra borrowing raises interest rates and may reduce private investment, holding the supply of finance and monetary conditions constant.

The Laffer curve

The **Laffer curve** 拉弗曲线: as the tax rate rises, **tax revenue** 税收收入 first rises, then falls.

> Very high rates discourage work & invite avoidance – above t^*, raising the rate *lowers* revenue.



peak revenue at t^* · beyond t^*: rate ↑ revenue ↓

Monetary and supply-side policy

monetary

flexible (change anytime), but a long lag – low rates may not revive borrowing

supply-side

may expand capacity and ease inflation pressure; costs, delays and distribution matter

Putting it together

No single policy hits every target – goals conflict and effects come with delays.

> Governments combine **demand-side** 需求侧政策 policy for the short term with supply-side for the long term, and accept trade-offs.

Which tool acts on what

Demand-side policies	**Demand-side policies** 需求管理政策 – fiscal and monetary – shift **aggregate demand** 总需求. Their timing varies. Public capital spending can also improve future capacity.
Supply-side policy	Acts on capacity: skills, infrastructure, competition, incentives. Timing varies. It may ease inflation pressure, but can have fiscal, environmental or distributional costs.
The headline target	**Economic growth** 经济增长 is measured as the percentage change in real GDP – so it is an *actual* growth figure, whatever caused it.
The combination	Governments usually pair demand-side policy for the short term with supply-side for the long, and accept that some goals must be traded off.

Match the tool to the diagnosis and state of capacity. Demand and supply effects can overlap; policy labels alone do not establish effectiveness.

The four objectives, and how each is measured

economic growth

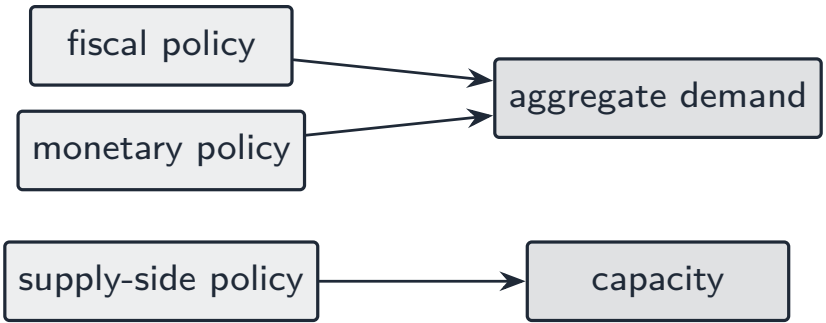
low inflation

full employment

balance of payments

Growth: % change in real GDP. Price stability: % change in the CPI. Full employment: the unemployment rate. Balance of payments: the current account balance.

The tools: demand-side and supply-side policy



Fiscal and monetary policy act on demand; supply-side on capacity

Exam tips

- Show the **trade-offs between objectives** (for example growth versus inflation, unemployment versus inflation).
- Evaluate **policy effectiveness** using time lags, expectations and the state of the economy.
- Match the tool (fiscal, monetary, supply-side, exchange rate) to the target, and judge the conflicts.

4 Recap

Worked example – a policy trade-off

A government uses expansionary policy to cut unemployment. What is the trade-off?

- Higher AD ⇒ firms hire more ⇒ unemployment falls.
- But nearer full capacity, scarce labour bids wages up and firms pass costs on ⇒ inflation rises.
- That is the short-run **Phillips curve** 菲利普斯曲线 trade-off.
- Higher incomes also pull in imports ⇒ the current account may worsen if imports rise more than exports.

Macro objectives conflict: growth and employment pull against inflation and the current account. Capacity improvements may ease the conflict; demand stimulus with spare capacity can also raise output without strong inflation pressure.

Topic 10 – key takeaways

1 Trade-offs

objectives may conflict; explain the conditions

2 Crowding out

borrowing may raise rates and reduce private investment

3 Laffer curve

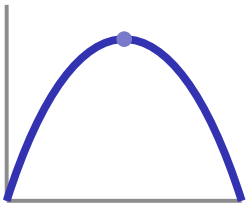
above t^* a higher rate cuts revenue

4 Policy mix

demand-side short term, supply-side long term

Check yourself

1. Which curve shows the unemployment–inflation trade-off?
2. Crowding out raises what, cutting investment?
3. Above t^*, a higher tax rate does what to revenue?
4. Which policy may expand capacity and ease inflation pressure?



Answers **1.** the Phillips curve **2.** the interest rate **3.** lowers it **4.** supply-side policy