

Exercise walk-through

10.3

Effectiveness of policy options to meet all macroeconomic objectives

A-Level Economics

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** 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?

Exercises 2.1-2.3

2.1 Define the term *crowding out*.

[2]

2.2 State what the **Laffer curve** shows.

[2]

2.3 State one weakness of monetary policy.

[1]

Exercises 2.1-2.3

2.1 Define the term *crowding out*.

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- when heavy government borrowing raises interest rates and so reduces private-sector investment (2 for a clear definition; 1 for a partial idea)

2.2 State what the **Laffer curve** shows.

[2]

2.2

- that as the tax rate rises, tax revenue first rises but then falls, because very high rates discourage work and encourage avoidance (2 for a clear statement; 1 for a partial idea)

2.3 State one weakness of monetary policy.

[1]

2.3

- any one of: it works with a long time lag; it is weak in a deep slump (a liquidity trap); it cannot fix structural problems (1)

Exercises 3.1-3.2

3.1 According to the Laffer curve, raising the tax rate **above** the revenue-maximising rate will: [1]

- ☐ **A** always raise tax revenue
B lower tax revenue
C leave tax revenue unchanged
D raise the money supply

3.2 Explain how heavy government borrowing can crowd out private investment. [6]

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3.1 B

- Above the revenue-maximising rate, higher tax rates lower revenue

3.2 Explain how heavy government borrowing can crowd out private investment. [6]

3.2

- [6] AO1 1 + AO3 up to 5 – to fund a deficit the government borrows heavily
- this raises the demand for loanable funds
- the interest rate rises
- dearer borrowing means firms invest less
- public spending “crowds out” private investment, reducing the net effect on AD

Exercise 3.3

3.3 Discuss which policy a government should rely on most to achieve long-term economic growth. [12]

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3.3

- [12] AO1/AO2/AO3 up to 8 + AO4 up to 4. **Supply-side:** the only tool that raises capacity and productivity, giving growth *with* low inflation – but slow and costly. **Demand-side (fiscal/monetary):** quick to raise output but mainly short-run and inflation-prone. Judgement: for *long-term* growth supply-side policy should lead, supported by stable demand-side policy – the best mix depends on the time horizon and the economy's starting point