4.6 Demand management: monetary policy

Name: _____ Class: _____ Date: _____ **Total: 16 marks**

KEY WORDS central bank • monetary policy • policy interest rate • open market operations • quantitative easing • real interest rate

Objective

Build the skills to answer exam questions on **monetary policy** : the goals and tools of central banks, the money market, how interest rate changes affect the economy, and the strengths and limits of the policy.

You must be able to:

- outline the goals of central banks and the tools of monetary policy
- explain how interest rates are set in the money market
- explain how expansionary and contractionary monetary policy affect AD, output and inflation
- evaluate monetary policy, including its limits in a deep recession

1 Key knowledge and worked examples

■ Monetary policy

Central banks (e.g. the European Central Bank, the US Federal Reserve) usually aim for **low and stable inflation** (often about 2%), plus low unemployment, stable growth and a stable financial system. Many are **independent** of the government, so decisions are not driven by elections.

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Tools:

tool	how it works
policy interest rate (the rate the central bank charges commercial banks)	changes all borrowing and saving rates
open market operations	buying government bonds adds money to banks; selling bonds removes it
minimum reserve requirements	the share of deposits banks must keep; lower reserves allow more lending
quantitative easing (QE)	large-scale buying of bonds to push long-term interest rates down when the policy rate is already near zero

Money market: the interest rate is set where the **demand for money** (downward sloping) meets the **supply of money** (vertical, fixed by the central bank). More money supply lowers the interest rate.

Expansionary (easy) policy cuts interest rates → borrowing is cheaper and saving less attractive → **consumption and investment rise**; the currency may fall, so **net exports rise** → **AD shifts right** → higher real GDP, lower unemployment, some inflation. **Contractionary** (tight) policy does the opposite to fight inflation.

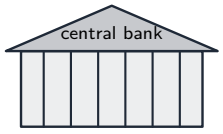
Strengths: small, quick, step-by-step changes; independent central bank; no direct effect on the budget.

Limits: **time lags** (often 1–2 years for the full effect); in a deep recession low confidence means people do not borrow even at very low rates (rates cannot go much below **zero**); it cannot fix **cost-push** inflation without hurting output; high rates hurt borrowers and can push up the exchange rate.

Answer shapes: money market diagram → interest rate change → the transmission to C, I and $(X - M)$ → AD/AS result → evaluation.

2 Practice

2.1 Outline **two** tools of monetary policy. [2]



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2.2 Explain why many central banks are made independent of government. [2]



2.3 Using a money market diagram, explain how an increase in the money supply affects the interest rate. [4]

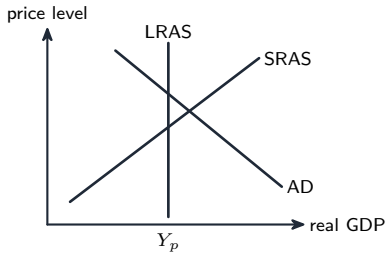


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3 Exam-style questions

3.1 Inflation has risen to 7%, well above the central bank's target of 2%.

(a) Define **contractionary monetary policy**. [2]



(b) Using an AD/AS diagram, explain how raising interest rates could bring inflation down. [6]

[[drawlines:6]]

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Solutions

Marking: **M1** a correct method, **A1** the correct answer, **B1** an independent mark.

Each answer shows the steps, then the **result**.

2.1

any two: changing the policy interest rate; open market operations: buying or selling government bonds; changing minimum reserve requirements; quantitative easing

2.2

governments may want lower interest rates before elections, even if this causes inflation; an independent bank can take unpopular decisions to keep inflation low, so its targets are more credible

2.3

diagram: interest rate on the vertical axis, quantity of money on the horizontal; downward-sloping D_m and vertical S_m; the central bank increases the money supply: S_m shifts right; at the old rate there is excess money supply, so people buy bonds and the interest rate falls; new equilibrium at a lower interest rate

3.1

(a) action by the central bank to reduce aggregate demand; e.g. raising interest rates / reducing the money supply

(b) higher rates make borrowing dearer and saving more attractive; consumption and investment fall; the currency may rise, so net exports fall; AD shifts left; the price level rises more slowly / inflation falls, but real GDP falls too; correctly labelled diagram showing $\mathrm{AD}_1 \rightarrow \mathrm{AD}_2$ with lower P and Y