

4 Banks and monetary policy – Part 2

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English

Write it 3 times (English)

fractional reserve

Monetary policy

Recall

In Part A you met money and interest rates. Now banks and the central bank:

- Banks lend out most of the money you deposit.
- The central bank can change the money supply to steer the economy.

Each idea has a worked example before the Practice.

New ideas

■ 1 How banks create money

Banks keep only a **fraction** of deposits as reserves and lend the rest – a **fractional reserve** system. The loans get re-deposited and re-lent, expanding the money supply by the **money multiplier**:

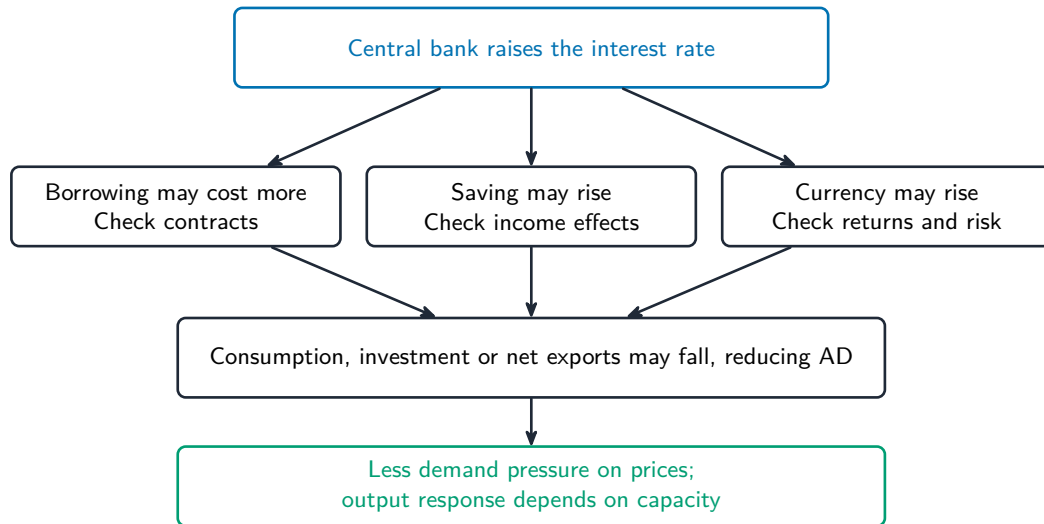
$$\text{money multiplier} = \frac{1}{rr},$$

where rr is the required reserve ratio.

Worked example. With $rr = 0.10$, a new \$1000 deposit can expand the money supply by up to $1000 \times \frac{1}{0.10} = \$10,000$.

■ 2 Monetary policy

Monetary policy is the central bank's use of the money supply to steer the economy, working through the interest rate.



- **expansionary** (more money → lower rates → more borrowing and spending) fights recession,
- **contractionary** (less money → higher rates) fights inflation.

■ 3 The chain of effects

More money supply → lower interest rate → more investment and consumption → aggregate demand shifts right → higher output.

Watch out: the money multiplier is **largest when banks keep the smallest reserves** (a low reserve ratio). A higher reserve requirement means banks lend less, so the money supply expands by a smaller factor.

Practice

Try these in order. The methods are all above.

2.1 Explain how banks create money in a fractional reserve system.

[2]

2.2 With a required reserve ratio of 0.20, find the money multiplier. [2]

2.3 A \$500 deposit is made with $rr = 0.20$. Find the maximum expansion of the money supply. [3]

2.4 State whether expansionary monetary policy raises or lowers interest rates, and what it is used to fight. [2]

2.5 Trace the chain from a rise in the money supply to a rise in output. [2]