Exercise walk-through

Money Growth and Inflation ▪ 5.3

eXercise

You must be able to

- state the **quantity theory of money 货币数量论**, $MV = PQ$
- explain how excessive **money-supply growth** causes inflation in the long run
- describe the long-run **neutrality of money 货币中性**

Method — The quantity theory

$$MV = PQ,$$

money supply $\times$ velocity $=$ price level $\times$ real output.

Method — Money growth and inflation

If V and Q are roughly stable, then raising M mainly raises P — persistent excessive money growth causes **inflation**.

Method — Neutrality of money

In the **long run**, money growth changes only **prices**, not real output or employment.

Practice 2.1 ▪ 1 mark

State the equation of the quantity theory of money.

Solution 2.1

Method: The quantity theory

Worked steps

$MV = PQ$ **B1**.

Practice 2.2 ▪ 1 mark

State the long-run effect of rapid money-supply growth.

Solution 2.2

Method: Neutrality of money

Worked steps

it causes inflation (a rise in the price level) **B1**.

Practice 2.3 ▪ 2 marks

Explain what is meant by the neutrality of money.

Solution 2.3

Method: Neutrality of money

Worked steps

in the long run a change in the money supply changes the price level **B1** but not real output or employment **B1**.

Exam-style 3.1 ▪ 1 mark

The quantity theory of money is

A $MV = PQ$

B $GDP = C + I + G$

C $V = IR$

D $MPC + MPS = 1$

Solution 3.1

Method: The quantity theory

A $MV = PQ$ ✓

B $GDP = C + I + G$

C $V = IR$

D $MPC + MPS = 1$

Worked steps

A.

Exam-style 3.2 ▪ 1 mark

In the long run, an increase in the money supply mainly raises

- **A** real output
- **B** the price level
- **C** employment
- **D** productivity

Solution 3.2

Method: Money growth and inflation

A real output

B the price level ✓

C employment

D productivity

Worked steps

B.

Exam-style 3.3 ▪ 1 mark

A country doubles its money supply over a few years, while velocity and real output stay roughly constant.

(a) State the effect on the price level.

(b) Name the principle that money affects only prices, not real output, in the long run.

Solution 3.3

Method: The quantity theory

Worked steps

(a) it roughly doubles (the price level rises) **B1**. (b) the neutrality of money **B1**.