

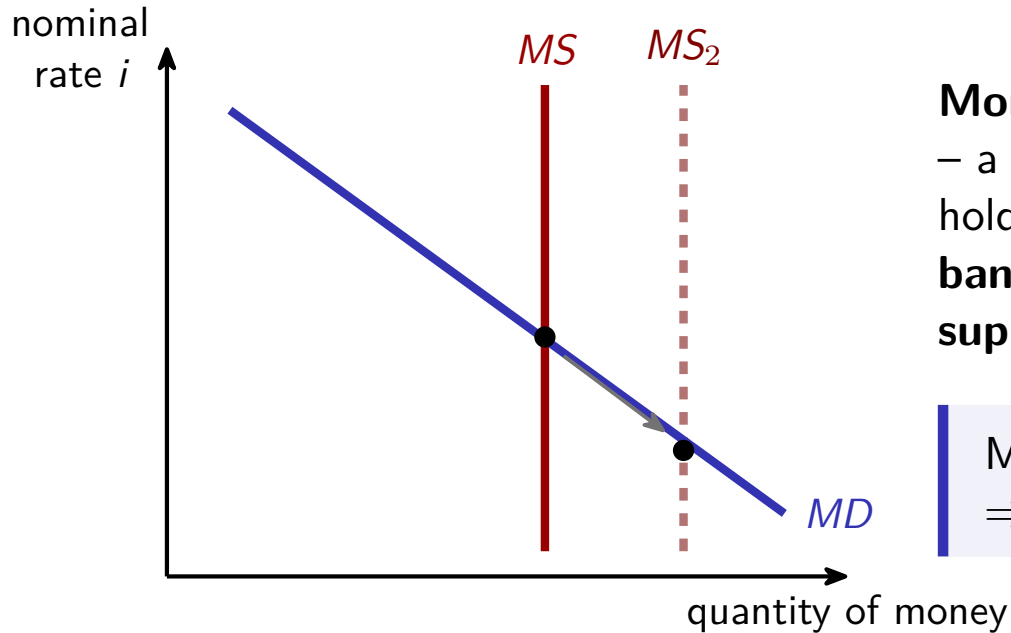
Exercise walk-through

4.4

Banking and the Expansion of the Money Supply

AP Macroeconomics

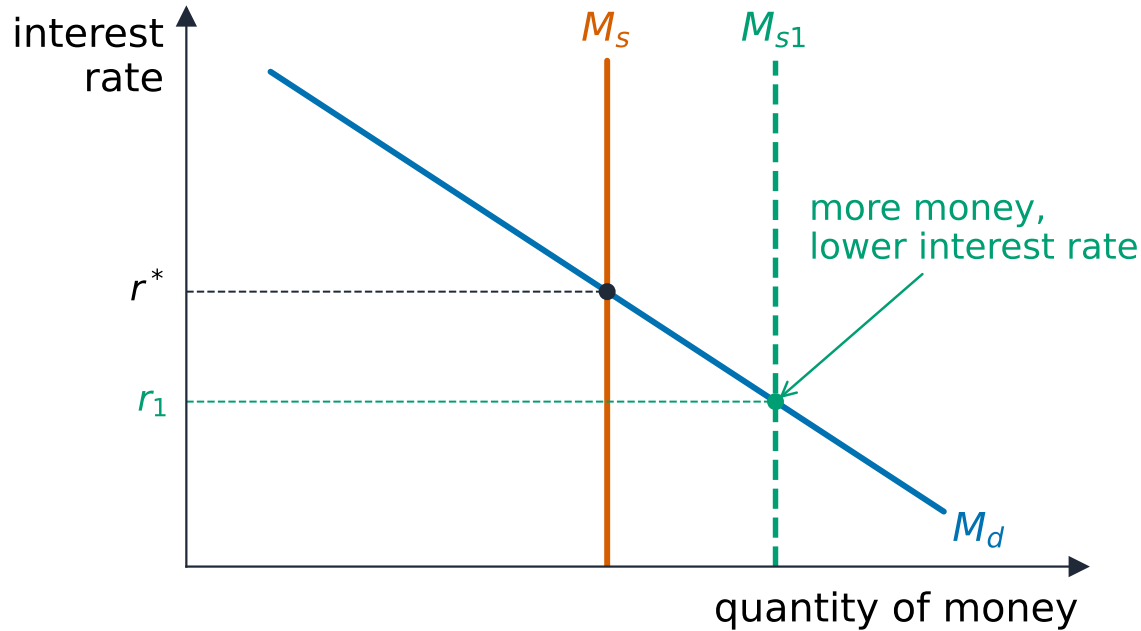
The money market



Money demand slopes **down**
– a high rate is the opportunity cost of holding cash. The **central bank** sets **money supply** : a **vertical** line.

More money supply ($MS \rightarrow MS_2$)
 $\Rightarrow$ the interest rate **falls**.

The interest rate is set by the money market



The interest rate is set by the demand for and supply of money

Exercises 2.1-2.3

2.1 State what fractional reserve banking means.

[1]

2.2 The reserve ratio is 0.20. Find the money multiplier.

[2]

2.3 State what happens to the money supply when a bank lends out its excess reserves.[1]

Exercises 2.1-2.3

2.1 State what fractional reserve banking means.

[1]

2.1

- banks keep only a fraction of deposits as reserves and lend the rest
-

2.2 The reserve ratio is 0.20. Find the money multiplier.

[2]

2.2

- $\frac{1}{0.20} = 5$
-

2.3 State what happens to the money supply when a bank lends out its excess reserves.[1]

2.3

- it increases (the loans become new deposits elsewhere)

Exercises 3.1-3.2

3.1 The money multiplier is

[1]

☐

A the reserve ratio

B $\frac{1}{\text{reserve ratio}}$

C $1 - \text{reserve ratio}$

D $(\text{reserve ratio})^2$

3.2 A lower reserve requirement makes the money multiplier

[1]

☐

A smaller

B larger

C zero

D negative

Exercises 3.1-3.2

3.1 The money multiplier is

[1]

☐

A the reserve ratio

B $\frac{1}{\text{reserve ratio}}$

C $1 - \text{reserve ratio}$

D $(\text{reserve ratio})^2$

3.1 B

- $\frac{1}{\text{reserve ratio}}$.

3.2 A lower reserve requirement makes the money multiplier

[1]

☐

A smaller

B larger

C zero

D negative

3.2 B

- larger.

Exercise 3.3 (a)

3.3 The reserve ratio is 0.10 and a new \$2000 deposit is made.

(a) Find the money multiplier.

[1]

Exercise 3.3 (a)

3.3 The reserve ratio is 0.10 and a new \$2000 deposit is made.

(a) Find the money multiplier.

[1]

(a)

- $\frac{1}{0.10} = 10$

Exercise 3.3 (b)

3.3 The reserve ratio is 0.10 and a new \$2000 deposit is made.

(b) Find the maximum increase in the money supply.

[2]

Exercise 3.3 (b)

3.3 The reserve ratio is 0.10 and a new \$2000 deposit is made.

(b) Find the maximum increase in the money supply.

[2]

(b)

- $2000 \times 10 = \$20\,000$