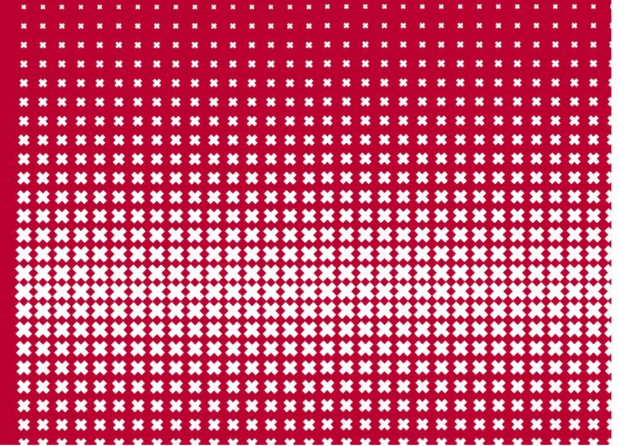
University of Amsterdam



Economics, markets and organizations

Tutorial 10

Continuous exam 1

- 1) Discuss the major differences between the New-Keynesian model and the New-Classical model.

Continuous exam 2

- **2)** Discuss the fiscal multiplier effect. According to the latter, how could an increase in government spending affect the economy in the short-run and the medium-run?

Key concepts to be understood before starting

- How is the IS curve derived?
- How is the LM curve derived?
- What do we use the IS-LM model for?
- How is the AD curve is derived?
- How is the SRAS and LRAS derived?
- What do we use the AS-AD model for?

Chapter 32

AS-AD MODEL

Questions for review page 700

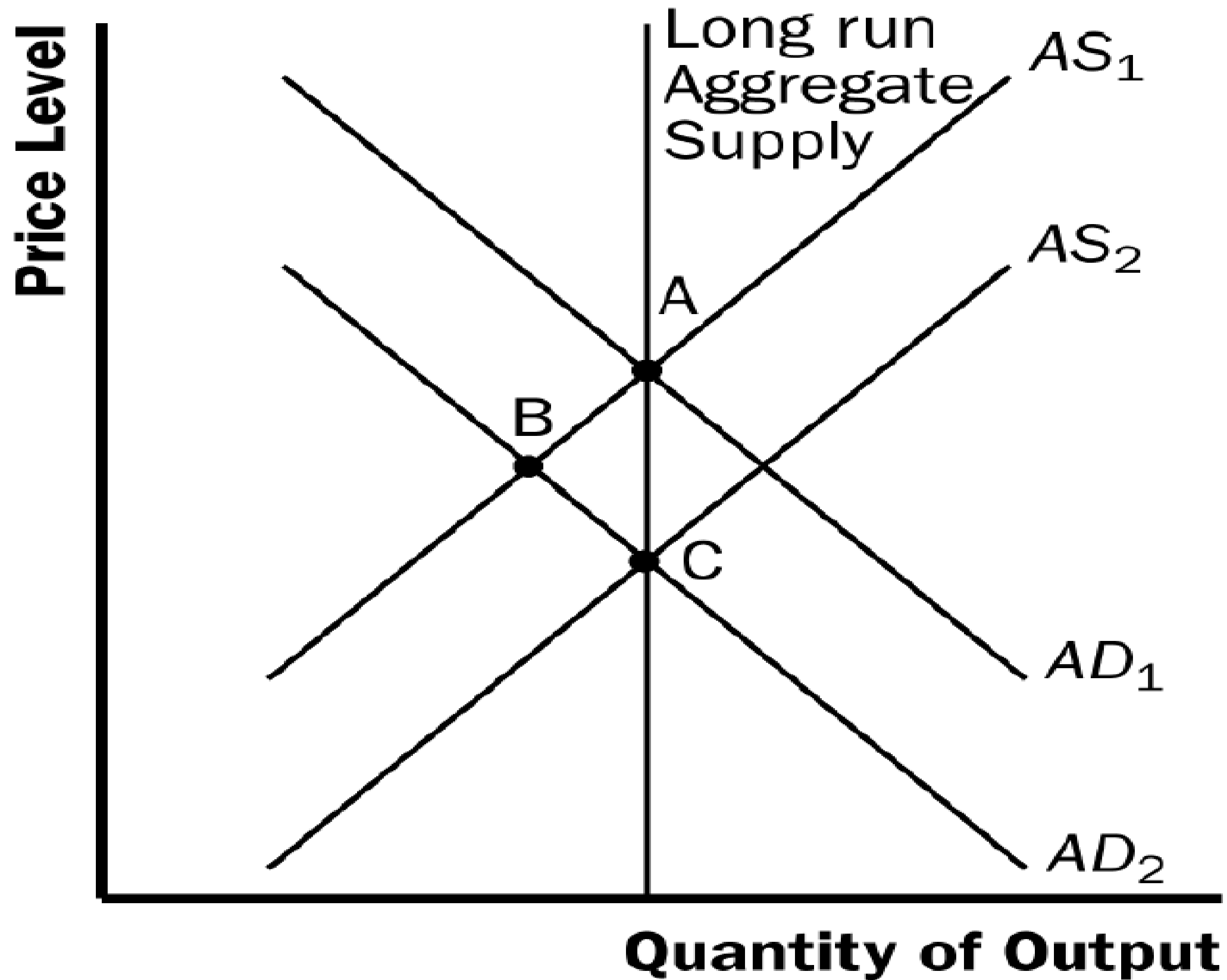
- Q4. Draw a diagram with aggregate demand, short-run aggregate supple and long-run aggregate supply. Be careful to label the axes correctly.
- Q5. List and explain three reasons why the AD has a negative slope?
- Q8. What might shift the AD curve to the left? Use the model of AD-AS to trace through the effects of such a shift.

Answer

Q5:

1. If prices decrease, the real money supply increases, which reduces interest rate and increases investments.
2. As prices reduce, the value of weatlh icnreases that may lead to increased consumption expenditure.
3. With lower prices, interest rate decreases causing domestic investors to invest aborad, leading to a depreciation of the currency. This increases export and reduces imports.

Figure for Q8.



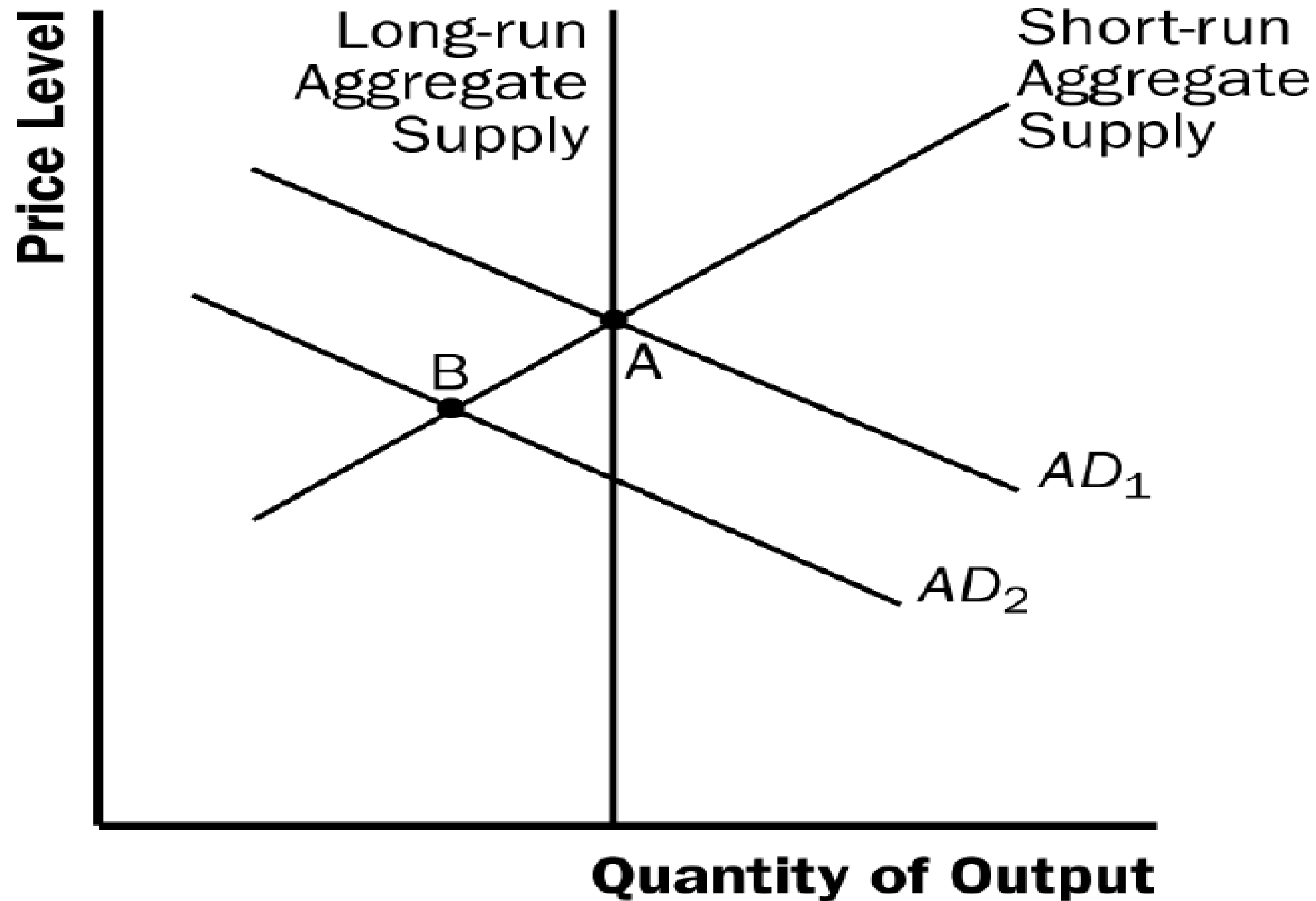
Q9. Explain whether each of the following events shifts the short-run AS curve, the AD curve, both, or neither. For each event that does shift a curve, use the AS-AD model to illustrate.

a) Households decide that they save a larger share of their income.
b) Cattle farmers suffer a prolonged period of food-and-mouth disease which cuts average cattle and herd sizes by 80 percent.
c) Increase job opportunities overseas cause many people to leave the country

Answer

a. With higher savings, consumption expenditure decreases, which is a shift of the AD to the left.

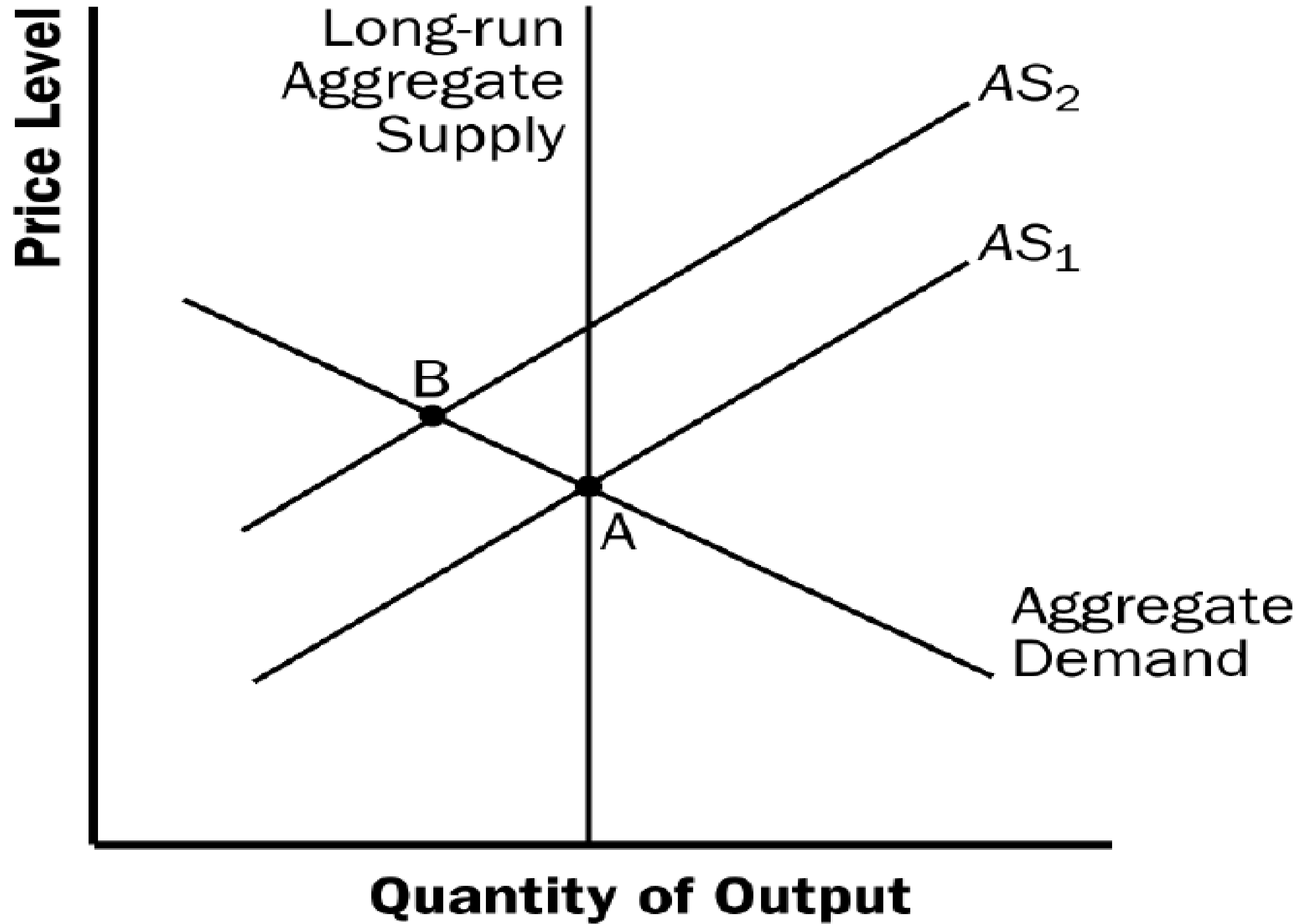
Diagram for Q9/a



Answer

- Aggregate supply shift to the left. Prices increase and output reduces in the short-run.

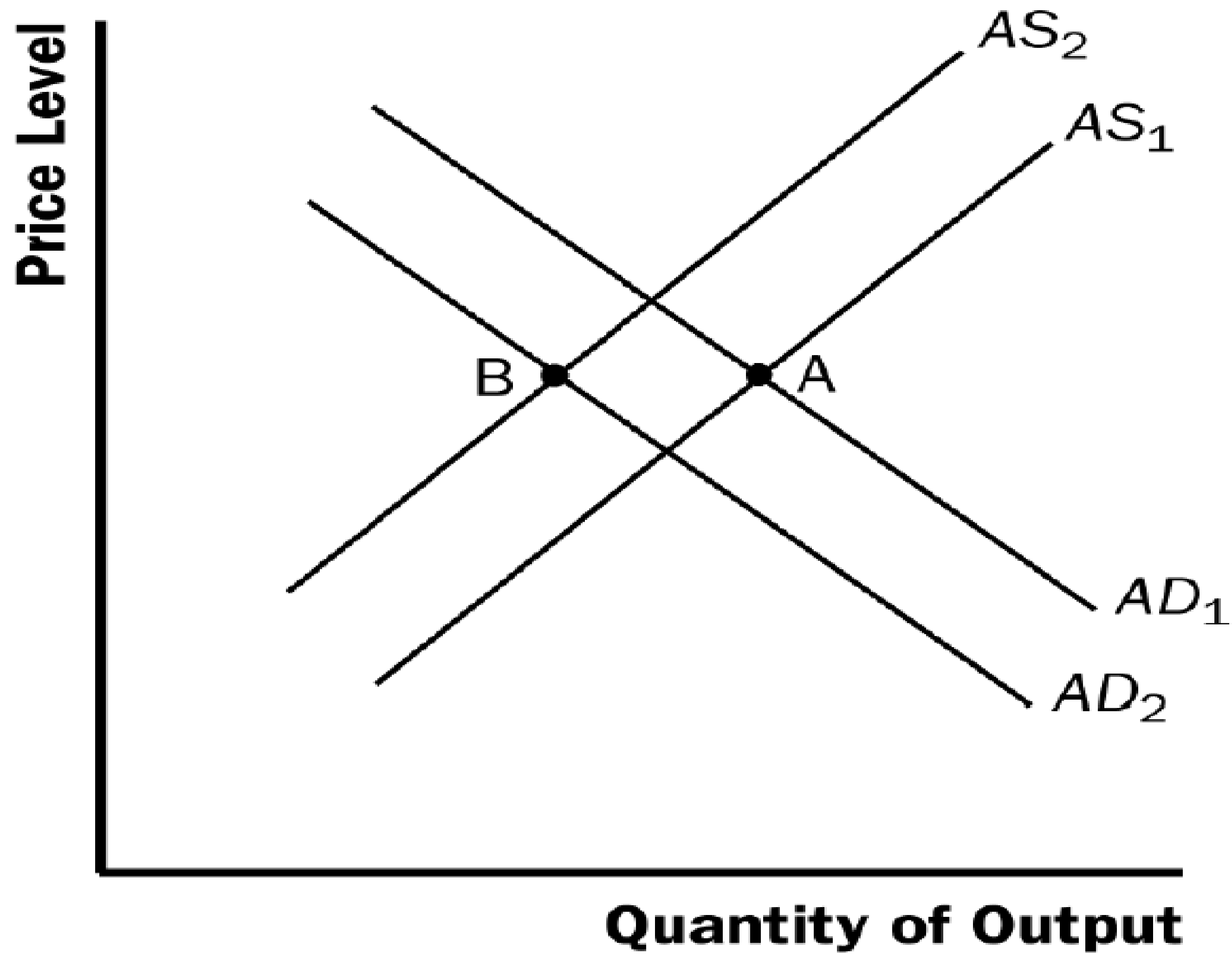
Diagram for Q9/b



Answer

- With the population falling, AD shift to the left due to reduced consumption expenditure.
- Also labor force reduces which shifts AS to the left.
- The result if lower ouput in the short-run, but the change in price level is ambigous.

Diagram for Q9/c



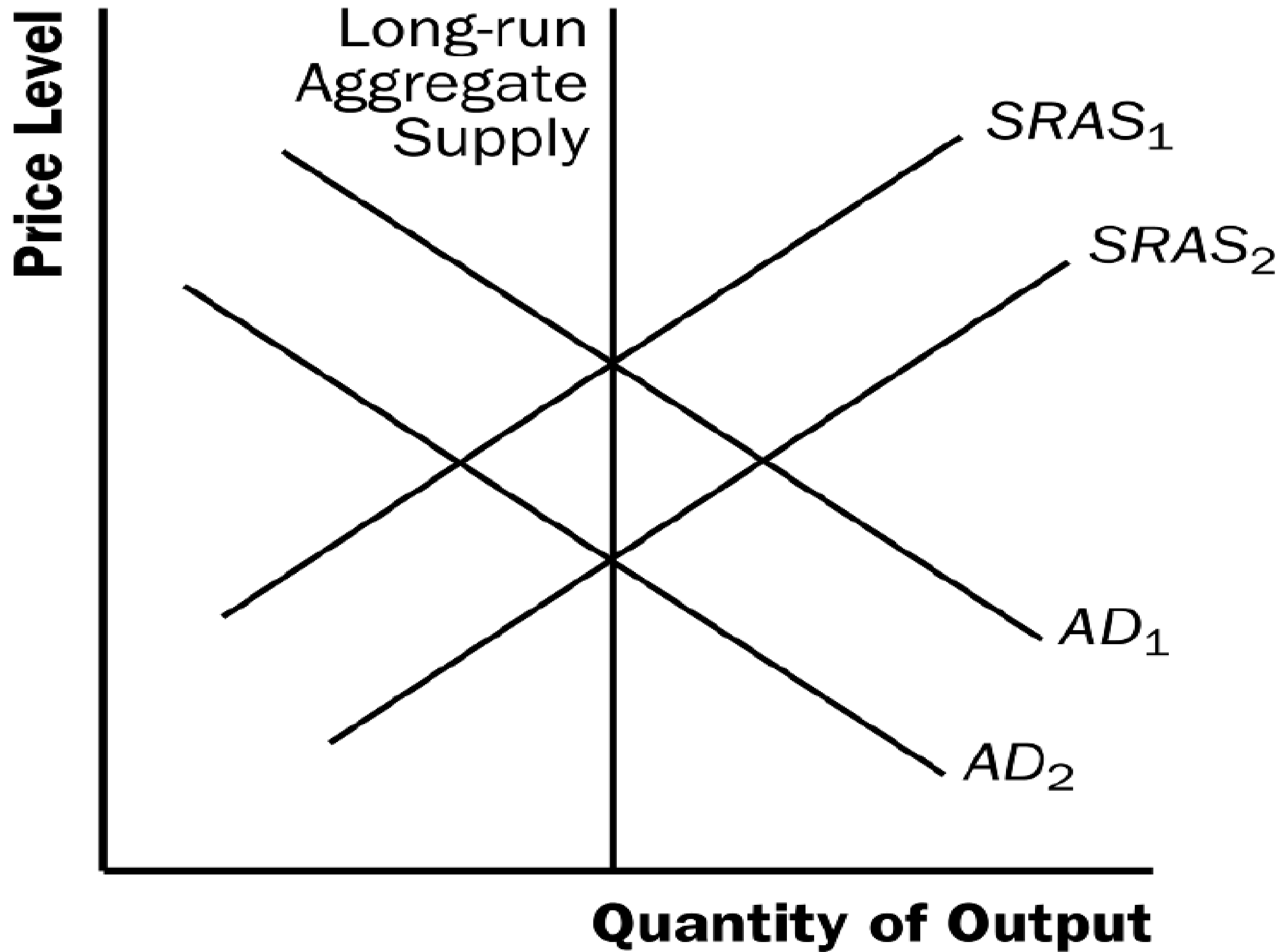
- Q2. Suppose that the economy is in a long-run equilibrium.

Use a AS-AD diagram to show the state of the economy.

Now suppose that a financial crisis causes AD to fall. Use the diagram to show what happens to the output and price level in the short run. What happens to unemployment?

Use the sticky wages theory of AS to explain what will happen to the output and price level in the long-run. What does the expected price level play in this adjustment?

Figure for Q2.



Answer

- As result of the financial crisis, AD will shift to the left. This reults in lower prices.
- At the new prices real wages become higher and nominal wages do not adjust because they are sticky. As result unemployment goes above the natural rate and output goes below the natural level.
- Finally, as nominal wages can adjust (they decrease), the AS curve shifts to the right (because labor gets cheaper) and the economy returns to its original state at lower price level.

Chapter 33

THE INFLUENCE OF FISCAL AND MONETARY POLICY ON AGGREGATE DEMAND

Key objectives of the chapter

- By now we have to be familiar what the AS-AD model good for, what can shift the AD and AS curves
- Chapter 33 shows what the fiscal and monetary policy can do in order to counterbalance when something bad happens (in other words, how to stabilize the economy)
- Both fiscal and monetary policy affects through AD

33.1 from Problems and applications

Explain how each of the following developments would affect the supply of money, the demand for money, and the interest rate. Use diagrams.

a. The central bank's bond traders buy bonds in open market operations.

b. An increase in credit card availability reduces the cash people hold.

c. The central bank reduces banks' reserve requirements.

d. Households decide to hold more money to use for holiday shopping.

e. A wave of optimism boosts business investment and expands aggregate demand.

f. An increase in oil prices shifts the short-run aggregate supply curve to the left.

Answers

a. When the central bank buys bonds, then it increases the money supply in the economy. The money supply shifts to the right. Interest rate decreases.

b. The money demand shifts to the left, interest rate decreases.

c. This allows commercial banks to make more money, so this is just like point a.

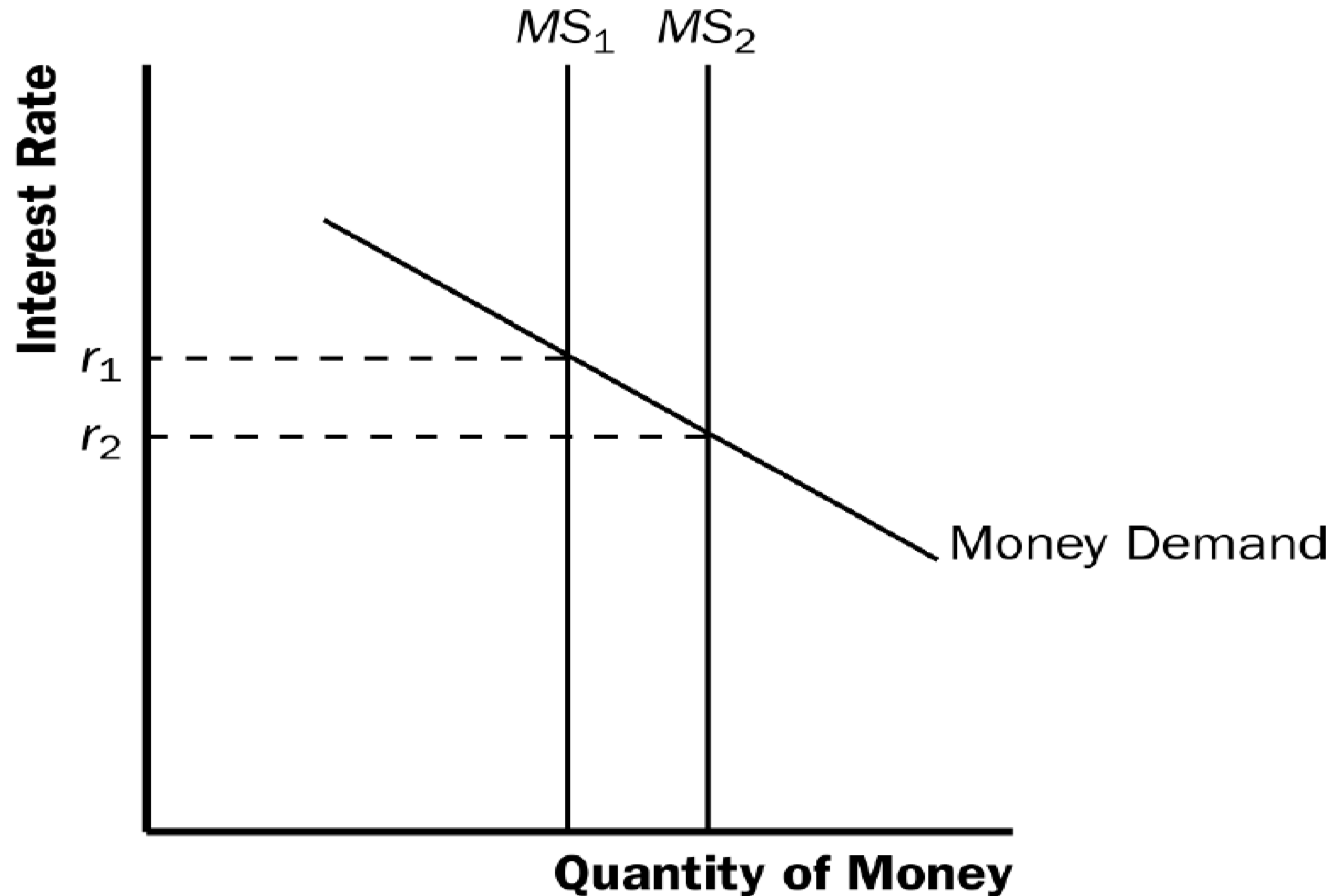
d. Money demand shifts to the right, interest rate rises.

Answers

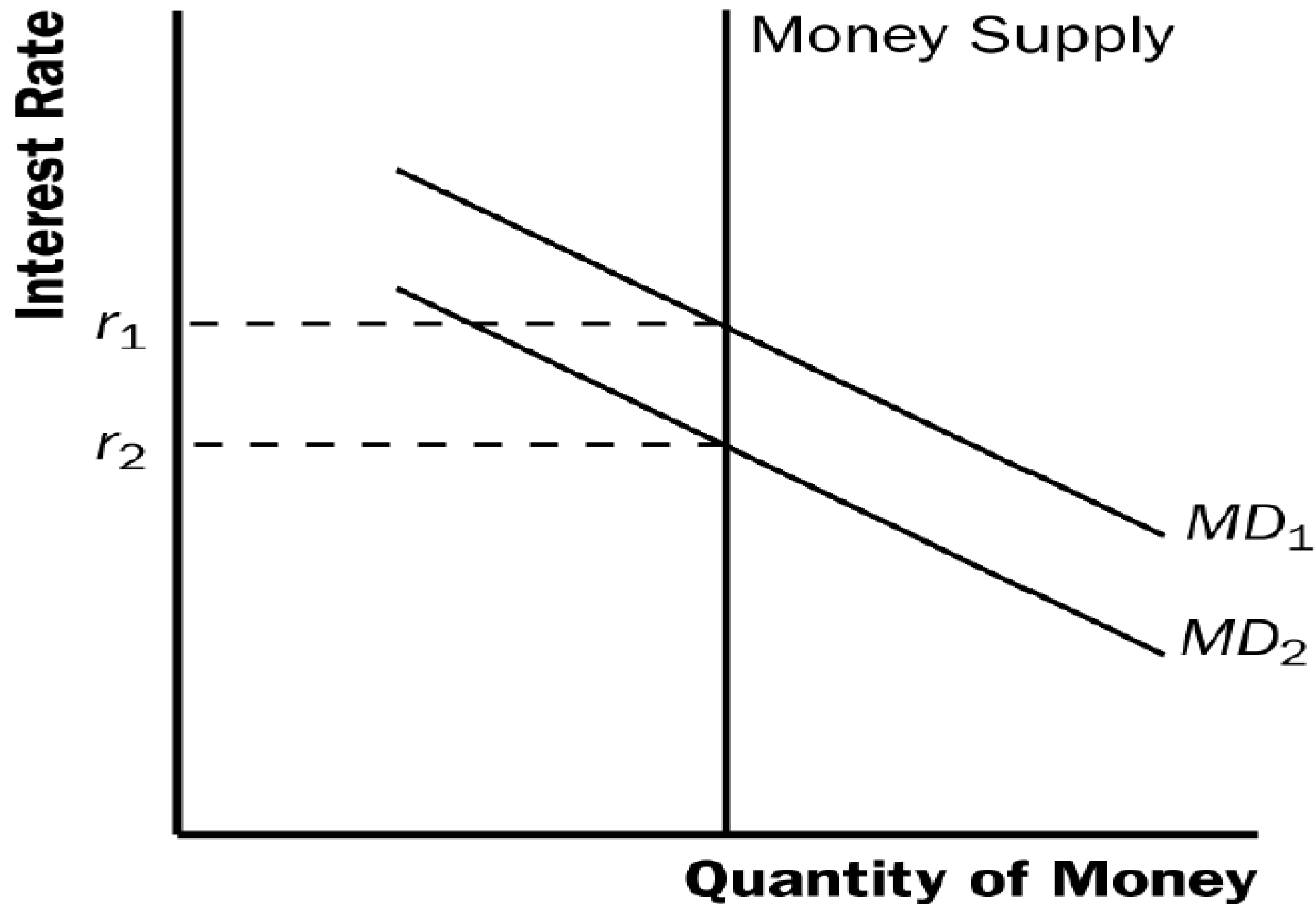
e. More demand requires more money: oney demand shifts to the right, interest rate goes up.

f. In this graph (where we have nominal money on the horizontal axis), it is demand that shifts to the right. If we had real money on the horizontal axis (like during the tutorial), then the money supply were shifting to the left. The result is a higher interest rate.

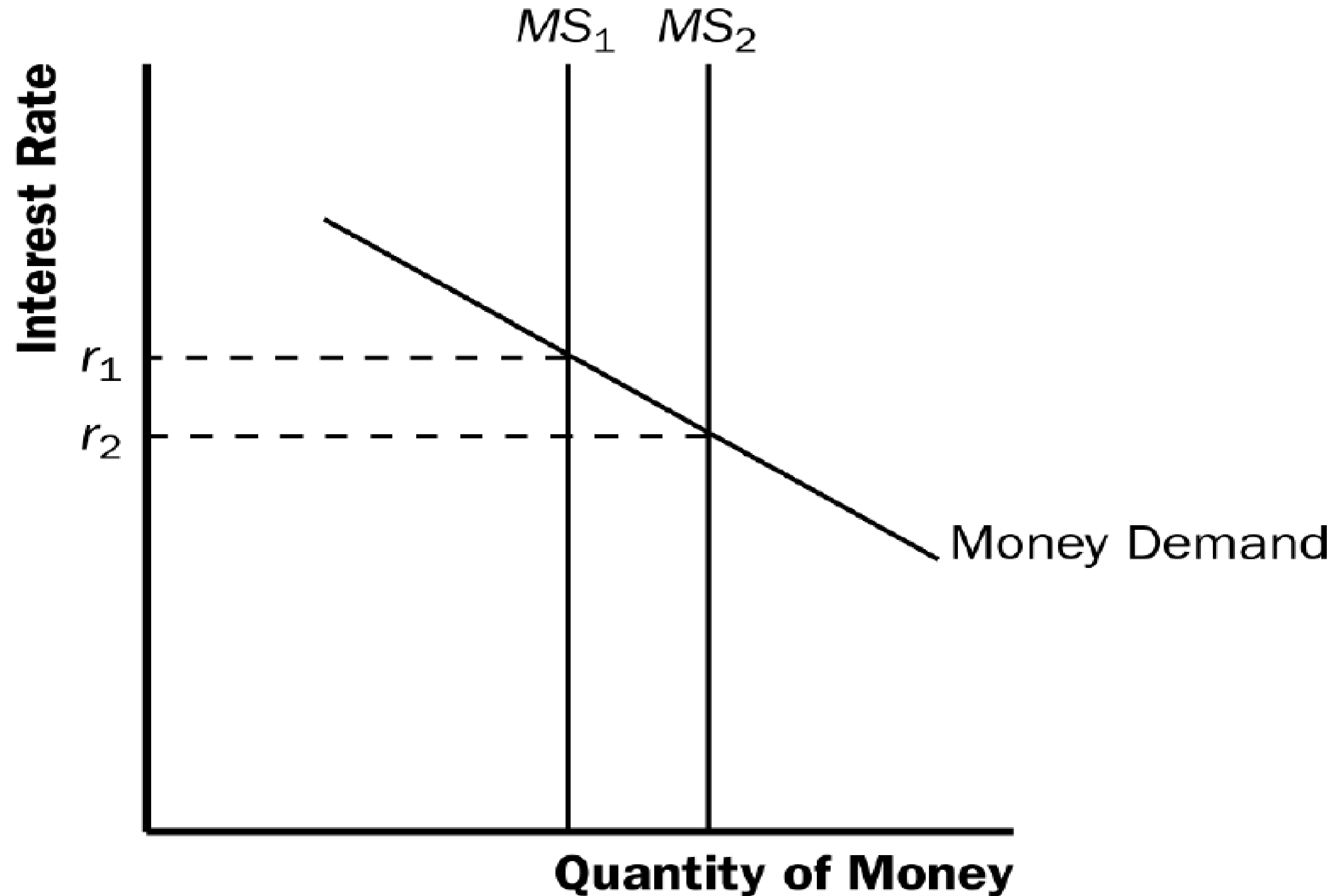
a. The central bank’s bond traders buy bonds in open market operations.



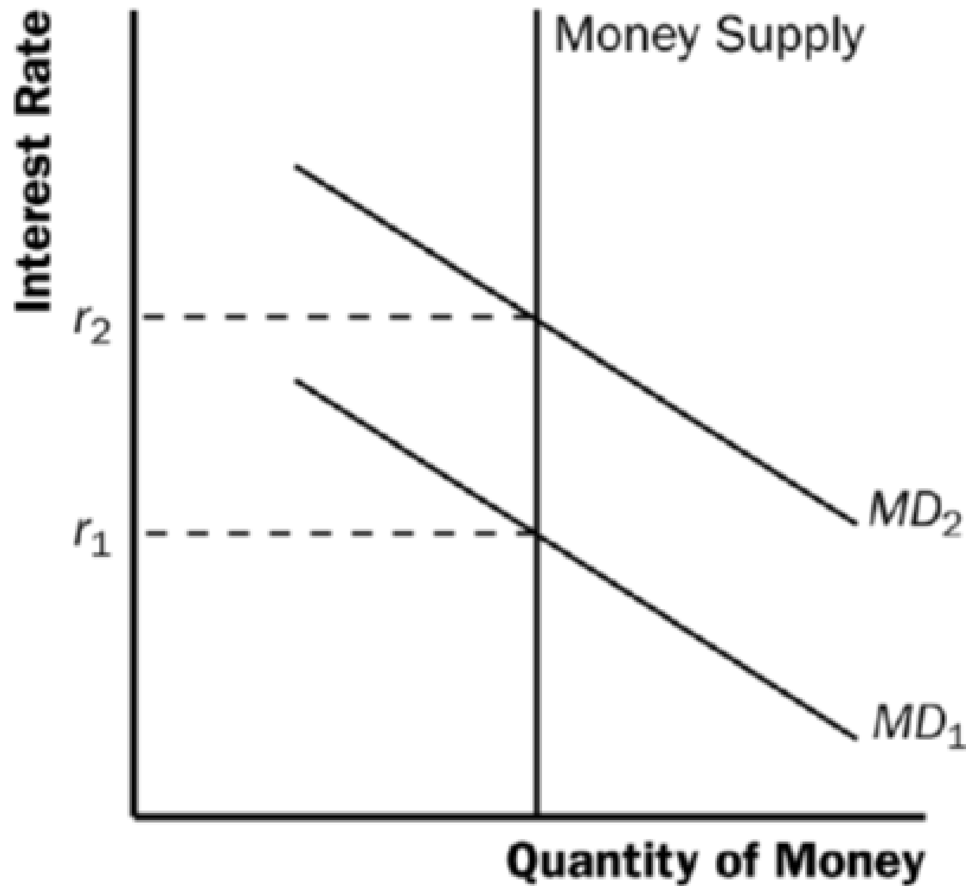
b. An increase in credit card availability reduces the cash people hold



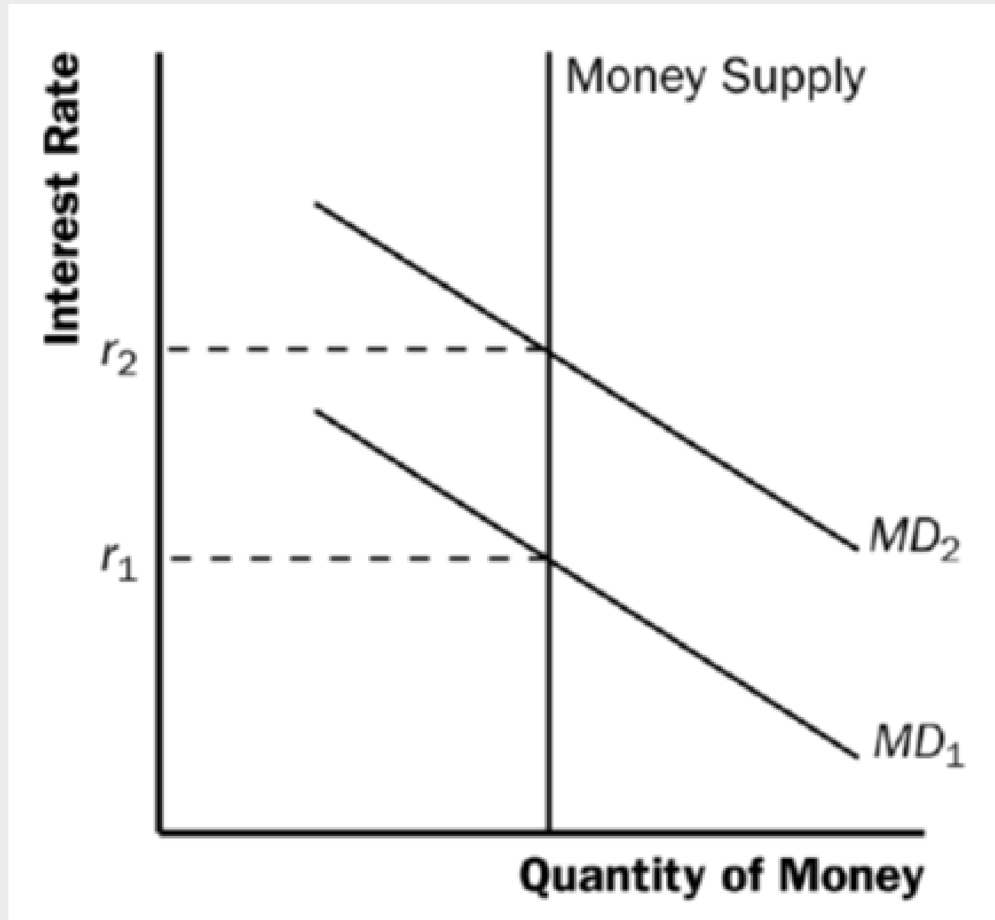
c. The central bank reduces banks' reserve requirements.



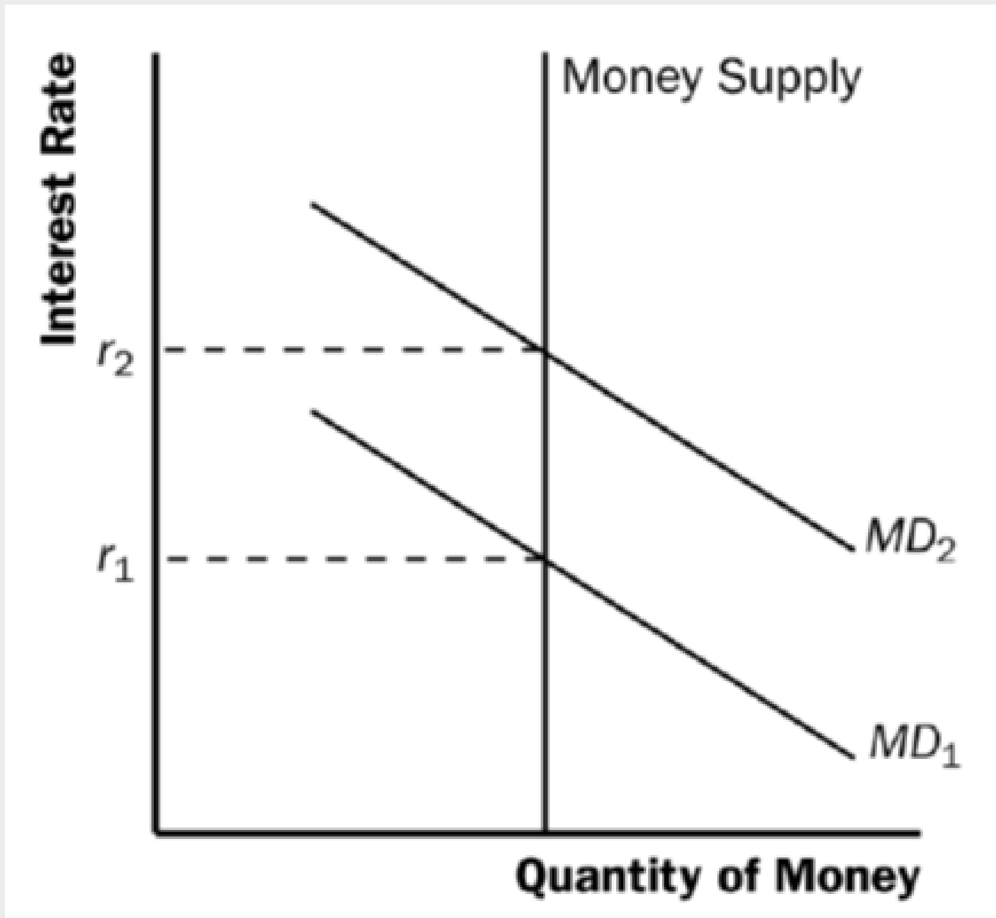
d. Households decide to hold more money to use for holiday shopping.



e. A wave of optimism boosts business investment and expands aggregate demand.



f. An increase in oil prices shifts the short-run aggregate supply curve to the left.



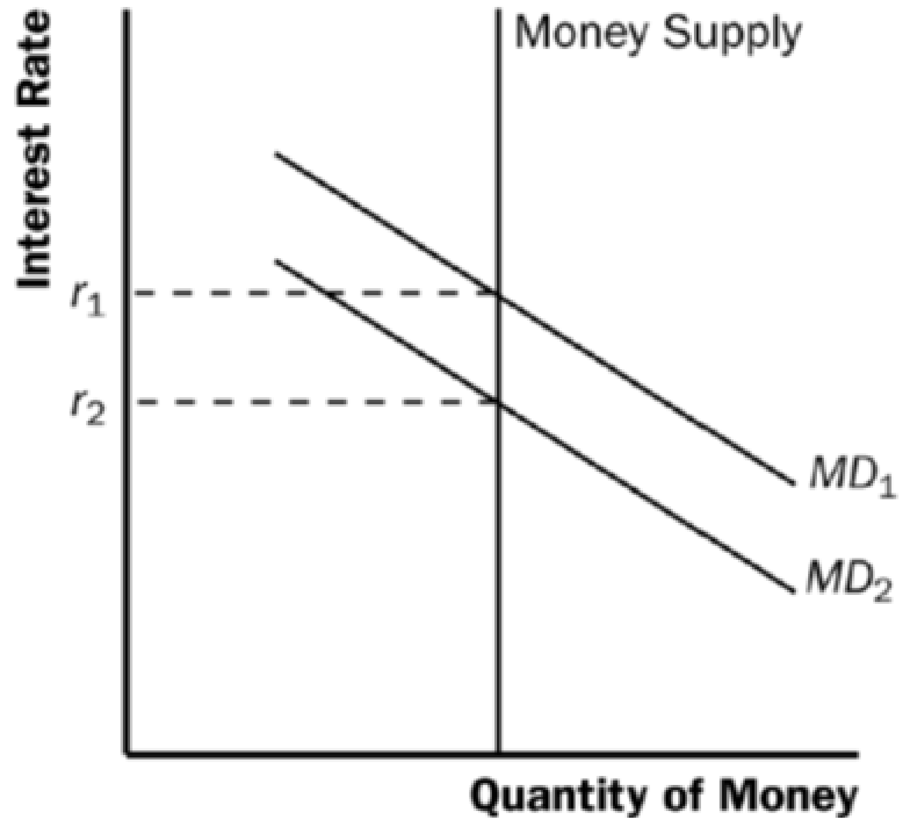
Higher prices lead to more money demand. (Be aware we have nominal money on the horizontal axis, that is why it is not the money supply that shifts.)

33.2

- Suppose banks install automatic teller machines on every street corner and, by making cash readily available, reduce the amount of money people want to hold.
  a. Assume the central bank does not change the money supply. According to the theory of liquidity preference, what happens to the interest rate? What happens to aggregate demand?
  b. If the central bank wants to stabilize aggregate demand, how should it respond?

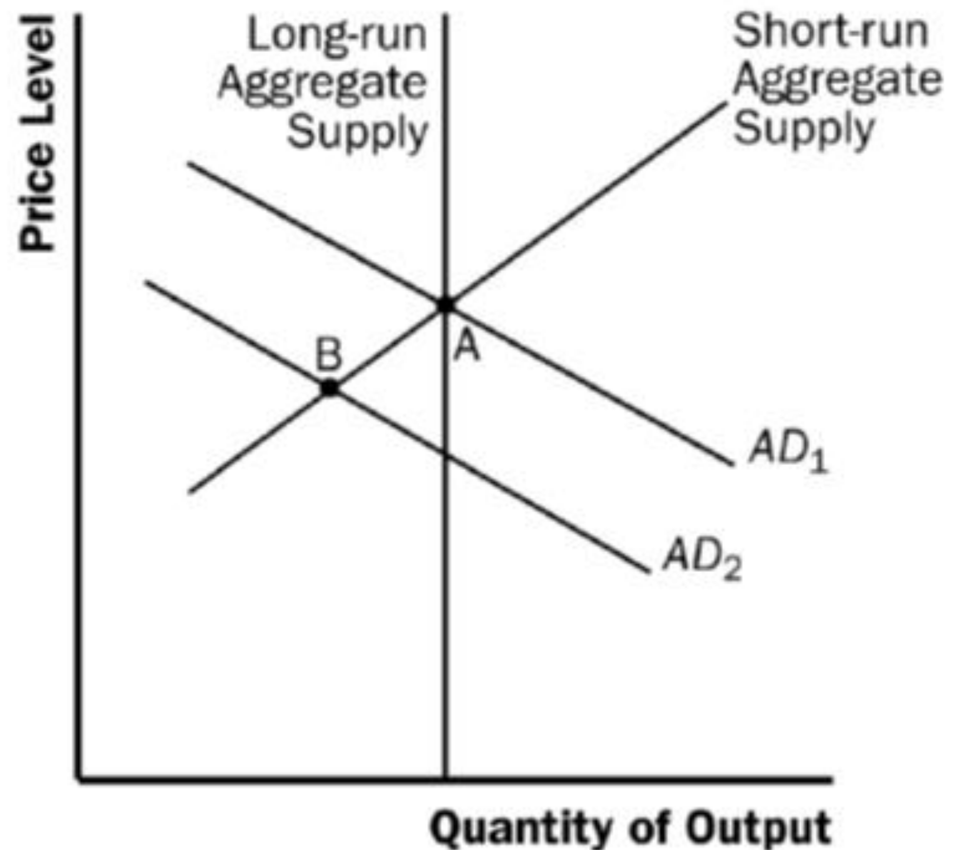
Answer

Money demand shfts to the left, as a result interest rate decreases.



Answer

With lower interest rate, investment expenditure reduces, which shifts the AD curve to the left. This could be countered by reducing money supply.

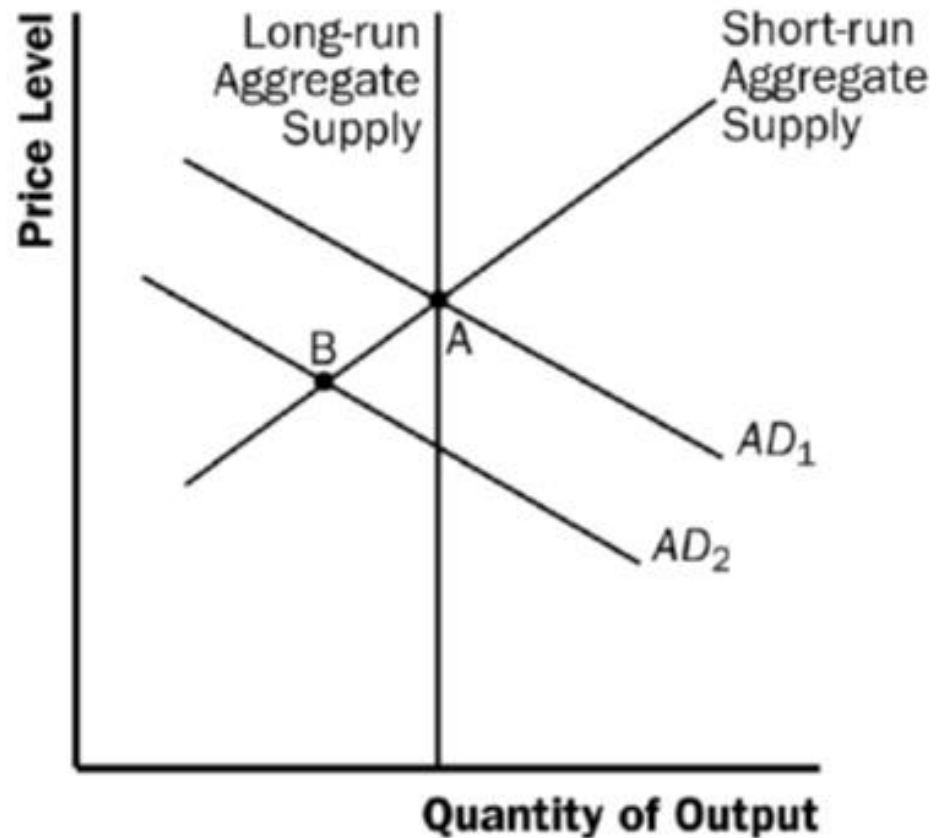


33.3. The economy is in recession with high unemployment and low output.

- Use an AS-AD diagram to illustrate the situation.
- Identify and open market operation that would restore the economy to its natural rate.
- Use a diagram to show the effect of such an intervention on the money market.
- Show the effect of the intervention in the AS-AD model.

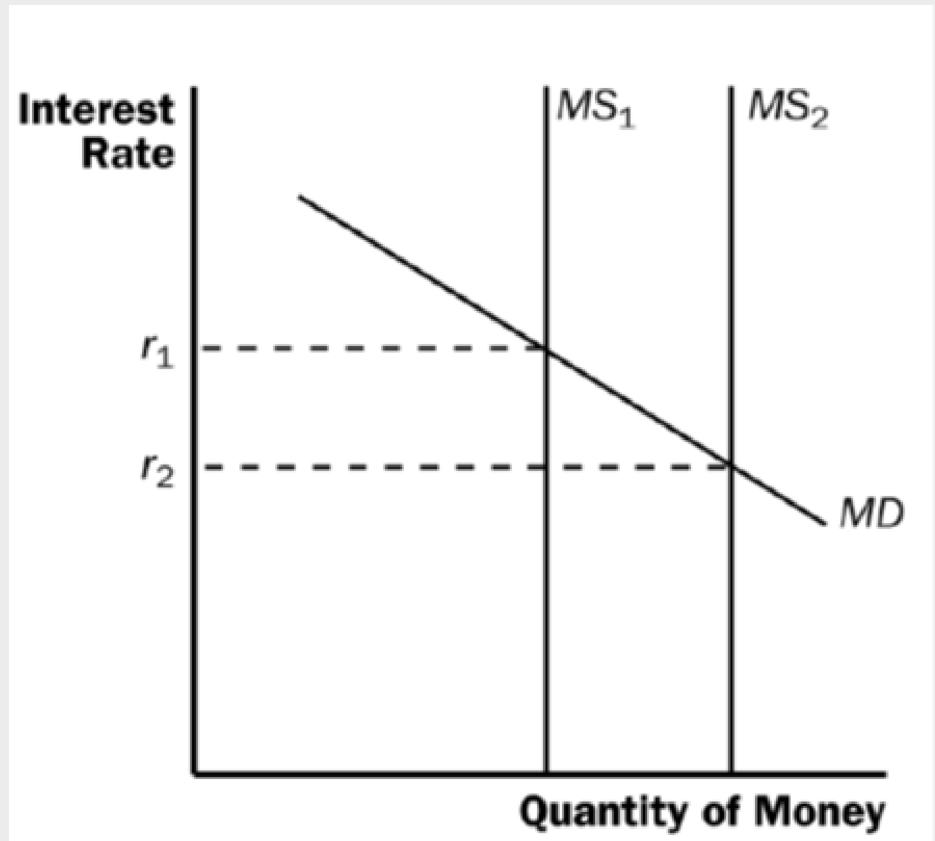
Answer

The economy is currently at point B. It is in recession, since it produces below its potential, and the unemployment is above its natural level.



Answer

- Buying government bonds on the market would increase money supply, this would reduce interest rates and encourage investments.



Answer

As a result, with more investments, AD shifts to the right, and the economy returns to its potential outut and natural rate of unemployment, but at a higher price level.