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# AP Macroeconomics

## Sample Student Responses and Scoring Commentary

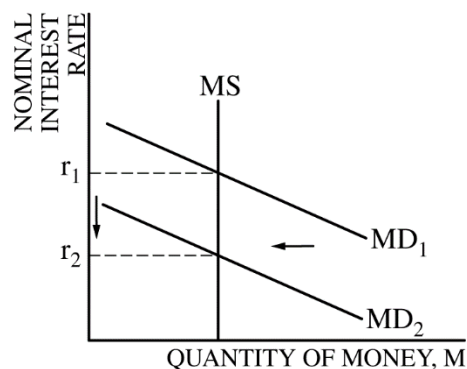
### Inside:

- ✓ Free Response Question 2
- ✓ Scoring Guideline
- ✓ Student Samples
- ✓ Scoring Commentary

**AP<sup>®</sup> MACROECONOMICS  
2017 SCORING GUIDELINES**

**Question 2**

**6 points** (2 + 2 + 1 + 1)



(a) 2 points:

- One point is earned for drawing a correctly labeled graph of the money market.
- One point is earned for showing a leftward shift in the money demand curve, resulting in a lower nominal interest rate.

(b) 2 points:

- One point is earned for stating that the price of previously issued bonds will increase.
- One point is earned for stating that both the price level and real income will increase and for explaining that the lower interest rate will increase consumption, investment, and/or net exports (interest-sensitive spending), which increases aggregate demand.

(c) 1 point:

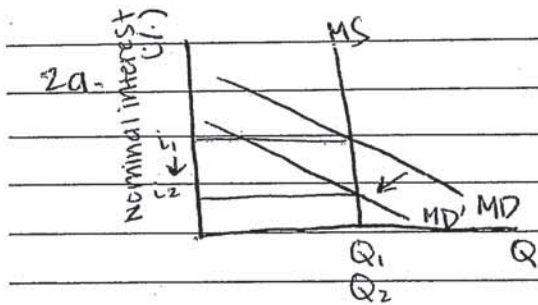
- One point is earned for stating that the velocity of money will increase.

(d) 1 point:

- One point is earned for stating that the central bank would sell bonds.

2 A

ANSWER PAGE FOR QUESTION 2



b.i. increase

b.ii. Price level and real income will both increase

because a lower interest rate will attract investors. People will also hold more cash because their savings account no longer earns as much money.

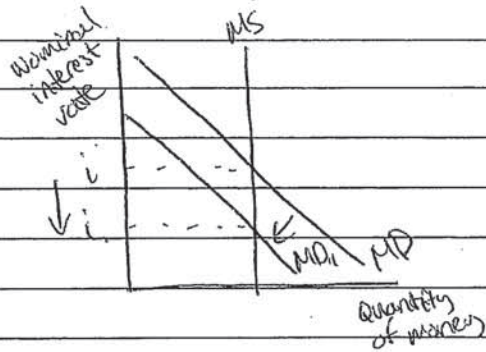
Therefore, consumption and investment will increase, increasing aggregate demand and shifting it to the right.

c. increase

d. sell bonds

GO ON TO THE NEXT PAGE.

2) a) Money Market



b) i) Previously issued bond prices will increase

ii) Price level will decrease while real income increases.

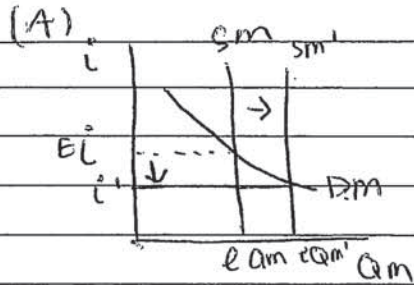
If price levels are low & wages are stuck, then workers feel more wealthy relative to the prices so real income is up.

c) Decrease

d) Sell government bonds

GO ON TO THE NEXT PAGE.

2c



(i) price of previously issued bonds will decrease

(ii) Price level  $\downarrow$  real income  $\uparrow$

(C) velocity of money will decrease

D. Sell Bonds/Securities

# AP<sup>®</sup> MACROECONOMICS 2017 SCORING COMMENTARY

## Question 2

### Overview

The question examined students' knowledge and understanding of the impact of a change in the demand for money on the nominal interest rate and the effect of the change in interest rate on bond prices, the price level, real gross domestic product, and the velocity of money, including identifying a specific monetary policy to reverse the change in the interest rate. In part (a) students were required to draw a money market graph and show the effect of reduced holdings of money on the nominal interest rate. In part (b) students were asked to identify the impact of the change in the interest rate on the prices of previously issued bonds and to explain the effect of the change in the nominal interest rate on the price level and real income. In part (c) students were required to use the equation of exchange to determine what happens to the velocity of money, based on the price level and real income change identified in part (b). In part (d) students were asked to identify the open-market operation the central bank would use to reverse the change in the interest rate identified in part (a).

### Sample: 2A

#### Score: 6

The student answers all parts of the question correctly and earned all 6 points.

### Sample: 2B

#### Score: 4

The student did not earn 1 point in part (b)(ii) because the response does not state and explain why both the price level and real income will increase. The student did not earn 1 point in part (c) because the response does not state the velocity of money will increase.

### Sample: 2C

#### Score: 2

The student earned the first point in part (a) for drawing a correctly labeled graph of the money market. The student earned 1 point in part (d) for correctly stating the central bank will sell bonds.