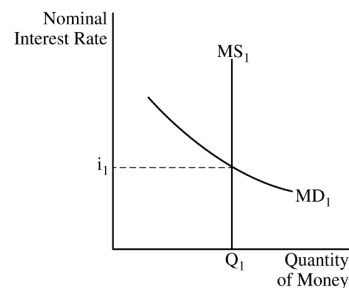


Question 2: Short**5 points**

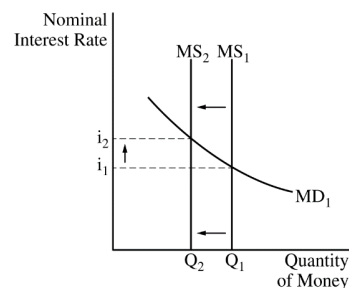
- (a) Calculate the maximum change in the money supply as a decrease of \$500,000 and show your work. **1 point**

$$\text{Change in MS} = \text{Bond Sale} \times \text{Money Multiplier} = -\$100,000 \times \frac{1}{0.2} = -\$500,000$$

- (b) Draw a correctly labeled graph of the money market. **1 point**



- For the second point, the graph must show a leftward shift in the money supply curve, resulting in a higher nominal interest rate. **1 point**

**Total for part (b) 2 points**

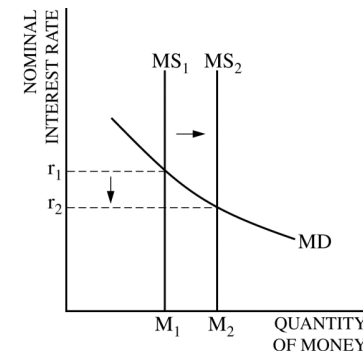
- (c) State that nominal gross domestic product will decrease and explain that according to the quantity theory of money ($MV=PY$), a decrease in the money supply will decrease nominal gross domestic product for a given velocity. **1 point**

- (d) State that the price level decreases. **1 point**

Total for question 2 5 points**AP® MACROECONOMICS
2014 SCORING GUIDELINES****Question 2****6 points** (2+2+1+1)

- (a) 2 points:

- One point is earned for stating that the Federal Reserve will buy government bonds.
- One point is earned for stating that the price of government bonds will increase.



- (b) 2 points:

- One point is earned for drawing a correctly labeled graph of the money market.
- One point is earned for shifting the money supply curve to the right and showing a decrease in the nominal interest rate.

- (c) 1 point:

- One point is earned for stating that the Federal Reserve purchase will not initially affect commercial banks' required reserves.

- (d) 1 point:

- One point is earned for defining the discount rate as the interest rate that the Federal Reserve charges banks for borrowing from its discount window.

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