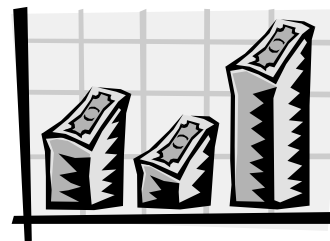


**KOFA HIGH SCHOOL SOCIAL SCIENCES DEPARTMENT**

**AP ECONOMICS**

**EXAM PREP WORKSHOP # 4 > MONEY, MONETARY POLICY,  
AND ECONOMIC STABILITY**



**NAME :**

**DATE :**

**All About The “ Ms ” :**

1. **What are the three basic functions of money ?**
2. **Why is it important for the Fed to know the size and the rate of growth of the money supply ?**
  - A. **What are the effects if the money supply grows too slowly ?**
  - B. **What are the effects if the money supply grows too rapidly ?**
3. **Calculate the “ Ms ” based on the following data :**
  - **Demand deposits = \$ 850.**
  - **Currency = \$ 200.**
  - **Large time deposits = \$ 800.**
  - **Non-demand deposit savings = \$ 300.**
  - **Institutional funds = \$ 1,210**

**M 1 =**

**M 2 =**

**M 3 =**

**The Velocity Of Money , Or The Equation Of Exchange  $MV = PQ$  :**

1. **What does each of the letters stand for in the equation of exchange ?**
2. **Suppose velocity remains constant , while the money supply increases . Explain how this would affect nominal GDP .**
3. **How has the use of debit cards and computer transactions affect the velocity of money .**
4. **If banks started paying higher interest on a significant portion of the demand deposits in the M1 definition of the money supply , how might this be expected to affect the velocity of M1 ?**
5. **Circle the correct word in parentheses > For a given money supply , a(n) ( increase / decrease ) in velocity will ( increase / decrease ) inflationary pressure ?**

**The Federal Reserve System And Its Tools :**

1. *What economic goal might the Federal Reserve try to meet by reducing the money supply ?*
2. *If the Federal Reserve wants to increase the money supply , should it raise or lower the reserve requirement ? Explain why .*
3. *If the Federal Reserve increases the reserve requirement and velocity remains stable , what will happen to nominal GDP ? Explain why .*
4. *If the required reserve ration were 0 percent , then money supply expansion would be infinite . Why don't we want an infinite growth of the money supply ?*
5. *Why might the money supply not expand by the amount predicted by the deposit expansion multiplier ?*

6. *Circle the correct symbol (  for increase ,  for decrease ) below to show the affect :*

<u>Federal Reserve Action</u>	<u>Bank Reserves</u>	<u>Money Supply</u>	<u>Fed Funds Rate</u>
-------------------------------	----------------------	---------------------	-----------------------

- A. *Sold Treasury securities on the open market*
- B. *Bought Treasury securities on the open market*
- C. *Raised the discount rate*
- D. *Lowered the discount rate*
- E. *Raised the reserve requirement*
- F. *Lowered the reserve requirement*

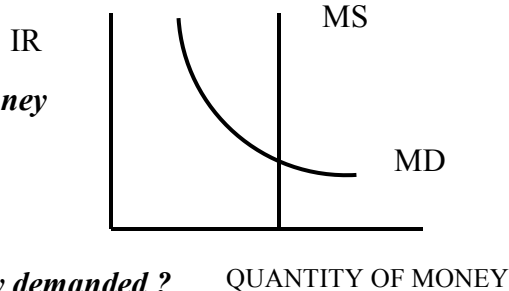
7. *Indicate in the table below how the Federal Reserve could use each of the three monetary policy tools to pursue an expansionary and a contractionary policy .*

<u>Monetary Policy</u>	<u>Expansionary Policy</u>	<u>Contractionary Policy</u>
------------------------	----------------------------	------------------------------

- A. *Open market operations*
  - B. *Discount rate*
  - C. *Reserve requirements*
8. *Why doe the Federal Reserve rarely use the reserve requirement as an instrument of monetary policy ?*

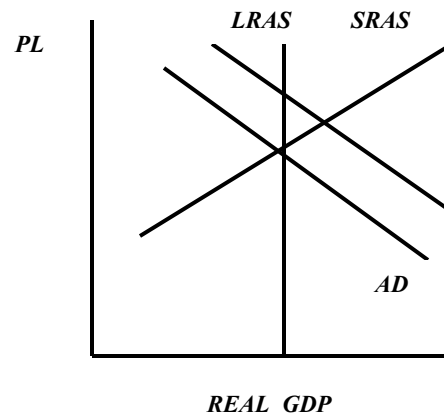
9. *What does it mean to say that the Federal Reserve changes the discount rate mostly as a signal to markets ?*
10. *Why does the Federal Reserve currently target the federal funds rate rather than the money supply ?*

*The Money Market And Monetary Policy :*



1. *Suppose the Federal Reserve increases the money supply by buying Treasury securities .*
  - A. *What happens to the interest rate ?*
  - B. *What happens to the quantity of money demanded ?*
  - C. *Explain what happens to loans and interest rates as the Federal Reserve increases the money supply ?*
2. *Suppose the demand for money increases .*
  - A. *What happens to the interest rate ?*
  - B. *What happens to the quantity of money supplied ?*
  - C. *If the Federal Reserve wants to maintain a constant interest rate when the demand for money increases , explain what policy the Federal Reserve needs to follow and why .*
  - D. *Why might the Federal Reserve want to maintain a constant interest rate ?*
3. *What is monetary policy ?*
4. *Why do many economists believe that central banks have more control over the price level than over real output ?*
5. *What might cause velocity to change ?*
6. *If velocity were extremely volatile , why would this complicate the job of making monetary policy ?*
7. *What role does the money multiplier play in enabling the Federal Reserve to conduct monetary policy ?*
8. *What is the Federal funds rate ?*
9. *What happens to the federal funds rate if the Federal Reserve follows a contractionary policy ? A expansionary policy ?*

10. Suppose that initially the economy is at the intersection of AD and SRAS as shown below. Now, the Federal Reserve decides to implement expansionary monetary policy to increase the level of employment.

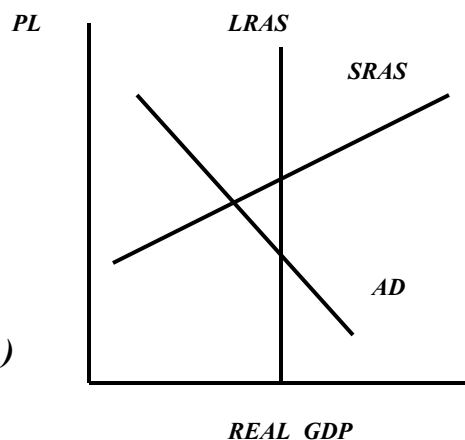


- A. In the short run, what happens to real output? Explain why.
- B. In the short run, what happens to the price level? Explain why.
- C. In the short run, what happens to employment and nominal wages? Explain why.
- D. In the short run, what happens to nominal interest rates and real interest rates?
- E. In the long run, what happens to real output? Explain why.
- F. In the long run, what happens to the price level? Explain why.
- G. In the long run, what happens to employment and nominal wages? Explain why.
- H. In the long run, what happens to the nominal interest rate and the real interest rate?

#### Short And Long Term Effects Of Monetary Policy :

We now bring together all of the pieces of the process by which monetary policy is transmitted to the economy, and we examine both the short run and the long run effect of monetary policy.

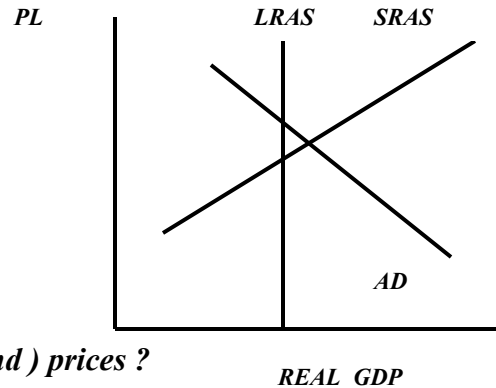
11. Suppose that initially the economy is at the intersection of AD and SRAS as shown in the graph below.



- A. What monetary policy should the Federal Reserve implement to move the economy to full employment output?
- B. If the Federal Reserve is going to use open market operations, it should do what with Treasury securities, buy or sell?
- C. What is the effect on Treasury security (bond) prices?
- D. In the short run, what is the effect on nominal rates? Explain.
- E. In the short run, what happens to real output? Explain how the Federal Reserve's action results in a change in real output.

F. In the short run, what happens to the price level? Explain how the Federal Reserve's action results in a change to the price level.

12. Suppose that initially the economy is at the intersection of AD and SRAS as shown in the graph below.



A. What monetary policy should the Federal Reserve implement to move the economy to full employment output?

B. If the Federal Reserve is going to use open market operations, it should do what with Treasury securities, buy or sell?

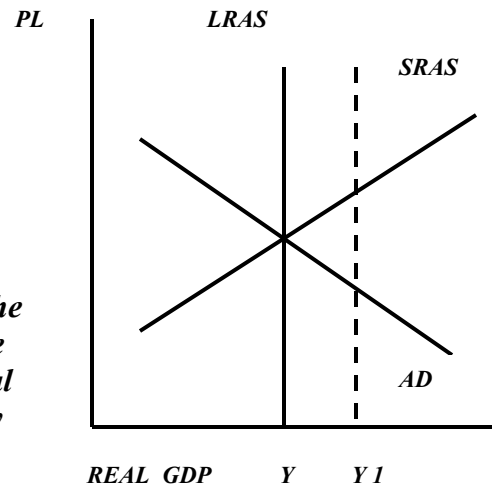
C. What is the effect on Treasury security (bond) prices?

D. In the short run, what is the effect on nominal interest rates?

E. In the short run, what happens to real output? Explain how the Federal Reserve's action results in a change in real output.

F. In the short run, what happens to the price level? Explain how the Federal Reserve's action results in a change to the price level.

13. Suppose that in the situation shown in the graph below, the aggregate supply and demand curves are represented by LRAS, SRAS, and AD. The monetary authorities decide to maintain the level of employment represented by the output level  $Y_1$  by using expansionary monetary policy.



A. Explain the effect of the expansionary monetary policy on the price level and output in the short run.

B. Explain the effect on the price level and output in the long run.

C. Explain what you think will happen to the nominal rate of interest and the real rate of interest in the short run as the Federal Reserve continues to increase the money supply. Explain why.

D. Explain what you think will happen to the nominal rate of interest and the real rate of interest in the long run.

14. List at least three reasons why the economy might not immediately move to long run equilibrium?

15. In a short paragraph, summarize the long run impact of an expansionary monetary policy on the economy.

**REAL AP MACRO FRQs (07 B)**

**Section II Planning Time—10 minutes Writing Time—40 minutes each section**

**Directions:** You have fifty minutes to answer the three questions. It is suggested that you spend approximately half your time on the first question and divide the remaining time equally between the next two questions. In answering the questions, you should emphasize the line of reasoning that generated your results; it is not enough to list the results of your analysis. Include correctly labeled diagrams, if useful or required, in explaining your answers. A correctly labeled diagram must have all axes and curves clearly labeled and must show directional changes.

**1. Assume that Australia and New Zealand are trading partners. Australia's economy is currently in recession.**

**(a) Now assume that Australia begins to recover from its recession. Using a correctly labeled graph of aggregate demand and aggregate supply for New Zealand, show the impact of Australia's rising income on each of the following in the short run :**

- (i) Aggregate demand in New Zealand. Explain.**
- (ii) Output in New Zealand**

**(b) Using a correctly labeled graph of the money market for New Zealand, show the effect of the output change in part (a)(ii) on the following :**

- (i) Demand for money. Explain.**
- (ii) The nominal interest rate**

**(c) Assume that the price level in New Zealand rises. Given your answer to part (b)(ii), explain what will happen to real interest rates.**

**(d) Although recovering, Australia remains in recession and its government takes no action. Indicate whether each of the following curves will shift to the left, shift to the right, or remain unchanged in the long run in Australia :**

- (i) Aggregate supply**
- (ii) Aggregate demand**

**2. (a) Assume that businesses are granted a tax credit on spending for machinery. Using a correctly labeled graph of the loanable funds market, show the effect of the business sector's response on the real interest rate.**

**(b) Now assume instead that the tax rate on interest income from household savings is lowered and there is no change in government budget deficit. Using a second correctly labeled graph of the loanable funds market, show the effect of the households' response on the real interest rate.**

**(c) Given your answer to part (b), explain what will happen to the country's production possibilities curve in the long run.**

**3. Assume that the real interest rate in both the United States and the European Union equals 4.5 percent.**

**(a) Assume that the real interest rate in the United States falls to 3.75 percent :**

**(i) How will the flow of financial capital between the United States and the European Union be affected? Explain.**

**(ii) Using a correctly labeled graph of the foreign exchange market for the euro, show how the value of the euro would change relative to the United States dollar in a flexible exchange rate system.**

**(b) Explain how the change in the value of the euro in part (a)(ii) would affect the European Union's net exports.**