Question 1

Correct Answer:

(a) Draw a correctly labeled AS/AD graph illustrating an economy operating below full employment and showing current price level and output as shown below in the rubrics section.

(b) The Fed should purchase government bonds to move the economy towards full employment

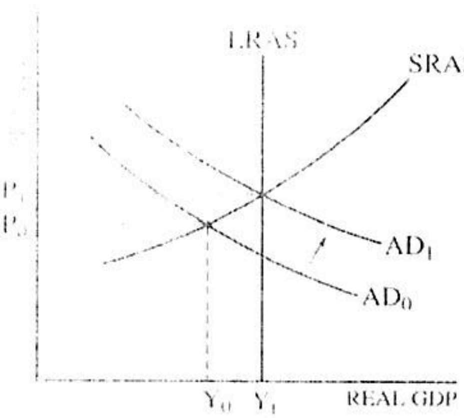
(c) A correctly labeled money market graph is shown in the rubrics section. The purchase of bonds by the Fed would increase the money supply, shifting the money supply curve to the right and resulting in a decrease in the interest rate.

(d) The resulting decrease in the interest rate would cause interest-sensitive expenditures (consumption and investment) to increase. Aggregate demand would increase, resulting in an increase in output and price level.

(e) The increase in AD should be shown as a rightward shift of the AD curve toward full-employment GDP on the original AS/AD graph in part (a).

(f) According to classical economic theory, if no action were taken by the Fed to mitigate the recession, wages or other production costs would eventually fall. As a result, the SRAS curve would shift to the right resulting in an increase in output and a decrease in the price level.

Scoring Guidelines: 13 points (3+1+3+2+1+3)



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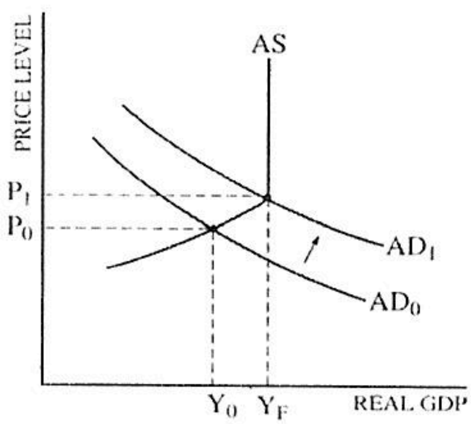


(a) 3 points:

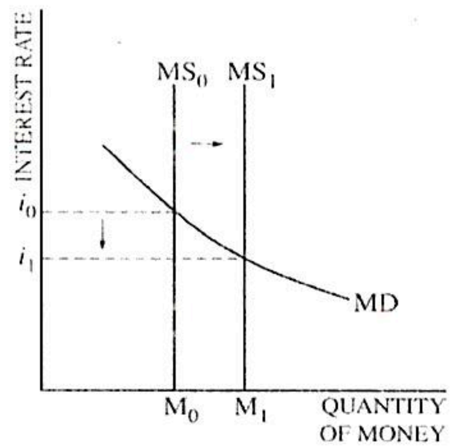
1 - AD/AS graph with full-employment output shown

1 - showing below full-employment equilibrium

1 - current price level and output

Question 1 (cont'd.)

(b) 1 point: for identifying correct monetary policy: buy bonds



(c) 3 points:

1 - correct graph of the money market

1 - for the rightward shift of the money supply curve

1 - for showing the resulting decrease in the interest rate

(d) 2 points:

1- the decrease in the interest rate causes an increase in I and/or C

1- AD increases as a result of change in C and/or I with a link to the interest-rate change in (c)

(e) 1 point: for the increase in the price level and real output as a result of the AD shift

(f) 3 points:

1 - wages or other production costs would fall

1 - AS curve would shift to the right

1 - price level would fall and real output would rise

Question 3

Correct Answer:

(a) Since the required reserve ratio is 100%, the increase in the money supply is limited to the $5,000 increase in deposits and reserves that results from the Federal Reserve's purchase of $5,000 of bonds.

(b) If the required reserve ratio is reduced to 10 percent, this bank may now make new loans of $4,500 (or .9 x $5,000 = $4,500). With a required reserve ratio of 10 percent, the money-supply multiplier is equal to 10; thus, the maximum increase in the money supply would be $50,000 (or $5,000 x 10 = $50,000).

(c) If banks maintain excess reserves, the money supply will not increase by the full-multiplied amount or the $50,000 maximum. Banks will not lend out the full amount of those reserves that may legally be lent.

(d) If the public holds some currency rather than demand deposits, the money supply will not increase by the full-multiplied amount or the $50,000 maximum. Banks will not receive the maximum amount of new deposits and reserves from which they would be making loans.

Scoring Guideline: 7 points (1+2+2+2)

(a) 1 point: the money supply would increase by $5,000

(b) 2 points:

- 1 - for the correct amount, $4,500 (= 0.9 x 5,000)
- 1 - for the correct amount from the Fed's action, $50,000 (= 10 x $5,000)

(c) 2 points:

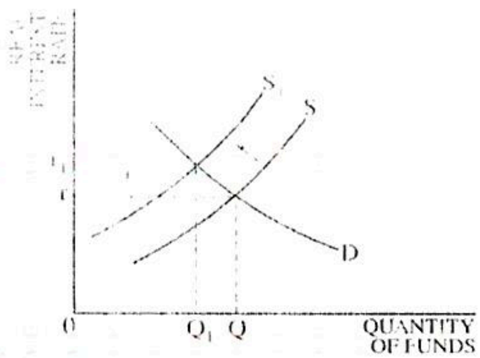
- 1 - the increase in the money supply would be less than $50,000
- 1 - Maximum expansion assumes that banks use all of their excess reserves. Now banks make fewer loans and create less than the maximum possible.

(d) 2 points:

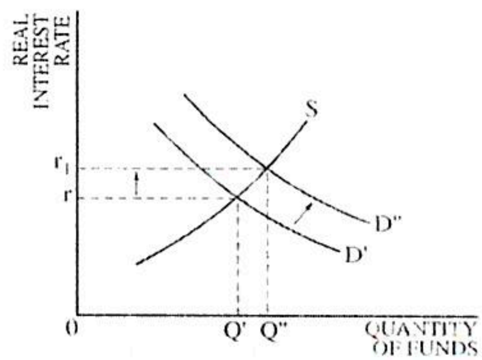
- 1 - the increase in the money supply would be less than $50,000
- 1 - increased cash holdings by the public reduce bank deposits, resulting in fewer reserves for the banks.

Question 2

8 points (2 + 1 + 2 + 3)



OR



(a) 2 points:

- One point is earned for indicating that the demand-for-funds curve shifts to the right or that the supply-of-funds curve shifts to the left.
- One point is earned for concluding that the real interest rate will increase.

(b) 1 point:

- One point is earned for indicating that the investment in plant and equipment will decrease because of the higher real interest rate.

(c) 2 points:

- One point is earned for stating that the decrease in investment in plant and equipment will decrease the growth of the capital stock (or reduce capital stock).
- One point is earned for concluding that long-term economic growth will decrease.

(d) 3 points:

- One point is earned for indicating that the real interest-rate increase from part (a) will increase the demand for the country's financial assets.
- One point is earned for stating that the demand for the country's currency will increase.
- One point is earned for stating that the country's currency will appreciate.

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Question 2

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

(a) 1 point
- One point is earned for stating that the federal funds rate is the interest rate on short-term loans between banks.

(b) 1 point
- One point is earned for stating that the Fed should buy bonds.

(c) 1 point
- One point is earned for calculating the maximum change in loans, which is $40 million.

(d) 1 point
- One point is earned for stating that the nominal interest rate will fall.

(e) 2 points
- One point is earned for stating that the real interest rate will fall.
- One point is earned for explaining that the real rate falls because the nominal rate has decreased and inflation has increased.

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Question 3

8 points (2 + 2 + 2 + 2)

(a) 2 points
- One point is earned for stating that the value of the textbook is not included.
- One point is earned for explaining that a used item has already been counted in a previous year, or is not part of 2006 production.

(b) 2 points
- One point is earned for stating that the rent payment is included.
- One point is earned for explaining that the payment is for service provided in 2006.

(c) 2 points
- One point is earned for stating that the commissions are included.
- One point is earned for explaining that the commissions represent income for providing service in 2006.

(d) 2 points
- One point is earned for stating that the value is not included in the U.S. GDP.
- One point is earned for explaining that U.S. GDP does not include production outside of the U.S.

FRQ AS/AD---Interest Rates---Fiscal Policy

Part (a) 2 points Earned ___

1 Point for:

- an acceptable AS-AD graph with full employment shown either as: vertical portion of AS or a clear notion of capacity constraint, such as a SRAS and a LRAS.

½ point for

- an increase in the price level (must show AD shift)

½ point for

- either no increase in real output if full employment is on the vertical portion of AS
- or an increase above the full-employment output level if the SRAS is upward sloping

Part (b): 2 Points Earned ___

1 point for nominal interest rises with any of the following reasons:

- nominal rate = real rate + expected inflation rate; price level goes up thus inflationary expectations increase
- increased transactions demand for money
- increased demand for loanable funds (supply of government bonds), and thus lower price of bonds and higher interest rates
- higher inflationary expectations (or higher inflation).

1 point for

- real interest rate change being uncertain because the nominal interest rate increases while the price level rises. [If the student declares that one change is larger than the other (nominal interest rate change vs. inflation rate) a specific conclusion is acceptable.]

Part (c): 2 Points Earned ___

- 1 Point Deficit = difference between inflows (taxes) and outflows (spending) within a given time period
- 1 Point Debt = sum of accumulated deficits/,surpluses (at some point in time)

Part (d): 3 Points Earned ___