

2010 AP® MACROECONOMICS FREE-RESPONSE QUESTIONS

MACROECONOMICS

Section II

Planning Time—10 minutes

Writing Time—50 minutes

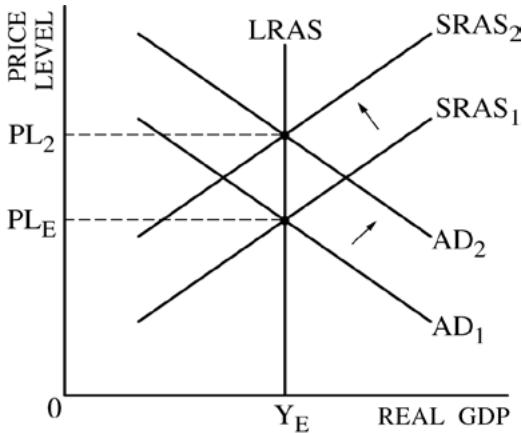
Directions: You have 50 minutes to answer all three of the following questions. It is suggested that you spend approximately half your time on the first question and divide the remaining time equally between the next two questions. In answering the questions, you should emphasize the line of reasoning 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. Use a pen with black or dark blue ink.

1. Assume that the United States economy is currently in long-run equilibrium.
 - (a) Draw a correctly labeled graph of aggregate demand and aggregate supply and show each of the following.
 - (i) The long-run aggregate supply curve
 - (ii) The current equilibrium output and price levels, labeled as Y_E and PL_E , respectively
 - (b) Assume that the government increases spending on national defense without raising taxes.
 - (i) On your graph in part (a), show how the government action affects aggregate demand.
 - (ii) How will this government action affect the unemployment rate in the short run? Explain.
 - (c) Assume that the economy adjusts to a new long-run equilibrium after the increase in government spending.
 - (i) How will the short-run aggregate supply curve in the new long-run equilibrium compare with that in the initial long-run equilibrium in part (a)? Explain.
 - (ii) On your graph in part (a), label the new long-run equilibrium price level as PL_2 .
 - (d) In order to finance the increase in government spending on national defense from part (b), the government borrows funds from the public. Using a correctly labeled graph of the loanable funds market, show the effect of the government's borrowing on the real interest rate.
 - (e) Given the change in the real interest rate in part (d), what is the impact on each of the following?
 - (i) Investment
 - (ii) Economic growth rate. Explain.
2. A drop in credit card fees causes people to use credit cards more often for transactions and demand less money.
 - (a) Using a correctly labeled graph of the money market, show how the nominal interest rate will be affected.
 - (b) Given the interest rate change in part (a), what will happen to bond prices in the short run?
 - (c) Given the interest rate change in part (a), what will happen to the price level in the short run? Explain.
 - (d) Identify an open-market operation the Federal Reserve could use to keep the nominal interest rate constant at the level that existed before the drop in credit card fees. Explain.

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Question 1

10 Points ($2 + 2 + 2 + 2 + 2$)



(a) 2 points:

- One point is earned for a correctly labeled graph with a downward-sloping AD curve, an upward-sloping SRAS curve, and the points PL_E and Y_E on the vertical and horizontal axes.
- One point is earned for showing a vertical LRAS curve at Y_E .

(b) 2 points:

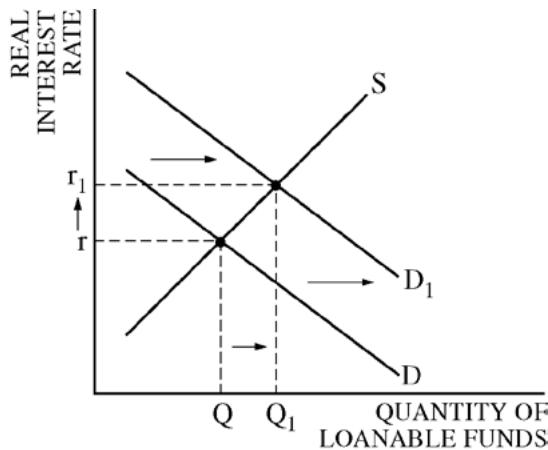
- One point is earned for showing a rightward shift of the AD curve on the graph in part (a).
- One point is earned for stating that the unemployment rate would fall and explaining that this is because real output increases.

(c) 2 points:

- One point is earned for stating that the short-run aggregate supply curve will shift to the left and showing PL_2 correctly on the graph in part (a).
- One point is earned for explaining that the actual price level is higher than was expected or that wages and commodity prices adjust to the higher price level, causing the SRAS curve to shift to the left.

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Question 1 (continued)



(d) 2 points:

- One point is earned for a correctly labeled graph of the loanable funds market.
- One point is earned for showing a rightward shift of the demand curve, resulting in a higher interest rate OR a leftward shift of the supply curve, resulting in a higher interest rate.

(e) 2 points:

- One point is earned for stating that investment spending will decrease.
- One point is earned for explaining that the decrease in investment slows down capital formation, leading to a reduction in the economic growth rate.