
AP[®] Macroeconomics

Sample Student Responses and Scoring Commentary Set 2

Inside:

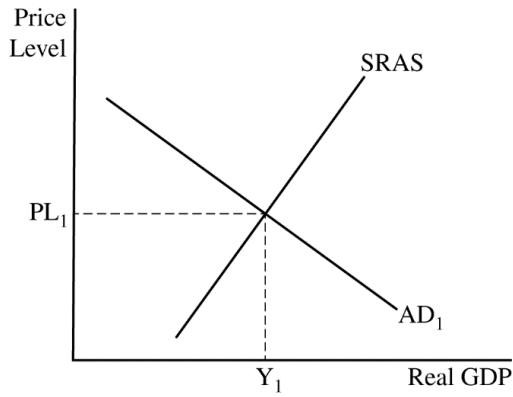
Free-Response Question 1

- Scoring Guidelines
- Student Samples
- Scoring Commentary

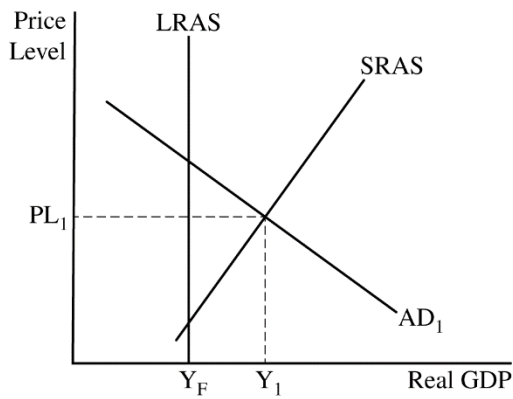
Question 1: Long

10 points

- (a) Draw a correctly labeled aggregate demand-aggregate supply graph that shows PL_1 and Y_1 at the intersection of aggregate demand and short-run aggregate supply. **1 point**

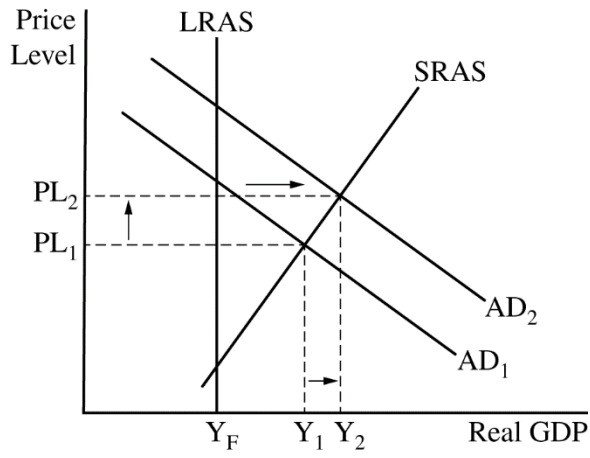


- For the second point, the graph must show a vertical long-run aggregate supply curve to the left of Y_1 and label the full-employment output Y_F . **1 point**



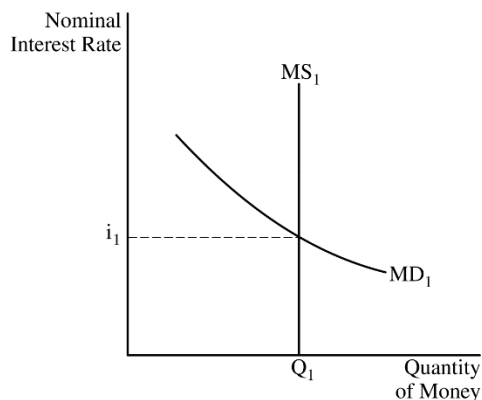
Total for part (a) 2 points

- (b)** On the graph from part (a), show the short-run effect of the increase in government spending as a rightward shift of the aggregate demand curve, resulting in an increase in equilibrium real output and an increase in the equilibrium price level, labeled Y_2 and PL_2 respectively. **1 point**

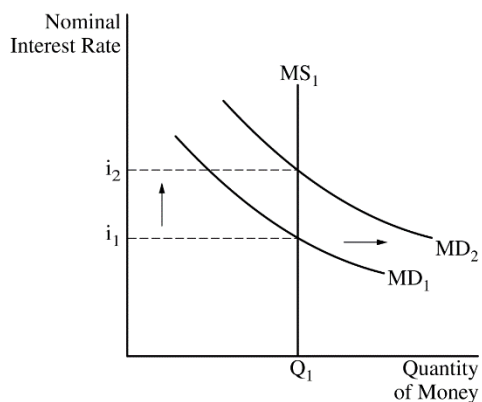


- (c)** State that the maximum increase in real output is \$500 billion, and the maximum increase in household savings is \$100 billion. **1 point**

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



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



Total for part (d) 2 points

(e) State that the price of previously issued bonds will decrease. **1 point**

(f) (i) State that the demand for dollars will decrease and explain that United States goods are relatively more expensive than European goods as a result of the increase in the inflation rate in the United States. **1 point**

(ii) State that the dollar will depreciate. **1 point**

Total for part (f) 2 points

(g) State that the Federal Reserve should sell the euro and buy the dollar. **1 point**

Total for question 1 10 points

Important: Completely fill in the circle that corresponds to the question you are answering on this page.

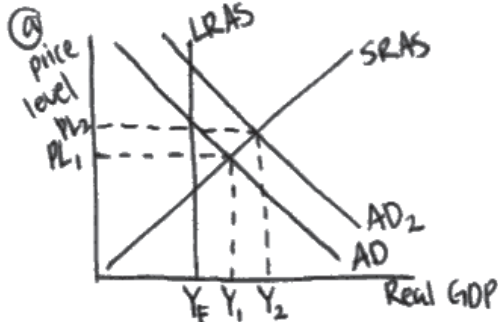
Question 1

Question 2

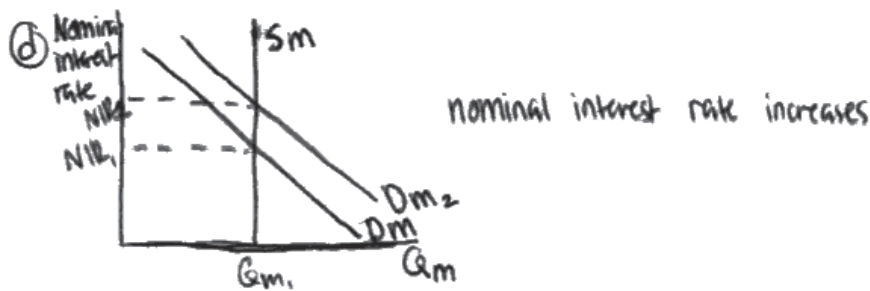
Question 3



Begin your response to each question at the top of a new page.



- Ⓒ Real output will increase by \$500 billion. ①
 Household savings will increase by \$100 billion. ②



- Ⓔ Because nominal interest rates increased, price of previously issued bonds will decrease.
- Ⓕ Because of the inflation of the dollar, its value depreciates. And because the dollar depreciates, the demand for it will decrease. ①

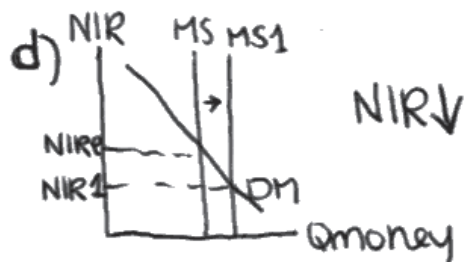
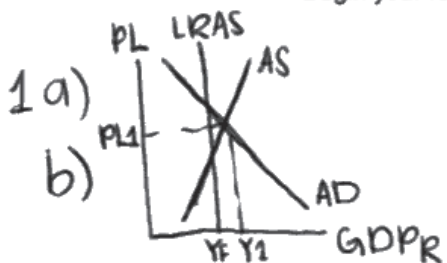
The international value of the dollar will decrease. ②

- Ⓙ sell euro ①
 buy dollar ②

Important: Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1 Question 2 Question 3

Begin your response to each question at the top of a new page.



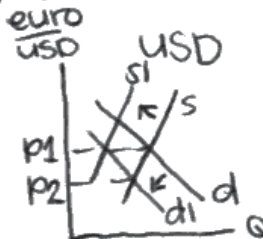
e) mps .2 mpc .8

i) $\frac{1}{.2}(100) = 5(100) = 500 \uparrow \$$
 real output

ii) $\frac{1}{.8}(100) = 1\frac{1}{4}(100) = 125 \uparrow \$$
 Δ to house hold saving

e) because they are previously issued bonds the price won't change, but when bought and sold they will now have a \downarrow NIR making them less desirable since the int paid to the owner is lower

f) $PL \uparrow$ in US



g) i) sell euros to \uparrow \$ and cause depreciation

ii) buy USD to \downarrow \$ and cause appreciation

i) the demand for dollars will decrease because US goods are more expensive vs European goods

ii) as a result of the demand shift the USD will depreciate

Important: Completely fill in the circle that corresponds to the question you are answering on this page.

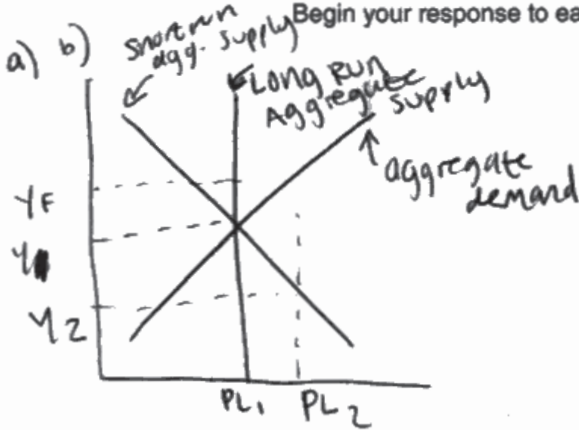
Question 1

Question 2

Question 3



Begin your response to each question at the top of a new page.



- c) i) 0.8
ii) 0



e) increase

- f) i) demand will decrease, since inflation causes depreciation of the US dollar, because there are more dollars
ii) value will also decrease. When there's more dollars, they aren't worth as much

- g) (i) sell
(ii) buy

Question 1

Note: Student samples are quoted verbatim and may contain spelling and grammatical errors.

Overview

The question examined students' understanding of the aggregate demand–aggregate supply (AD–AS) model in an inflationary gap, the effects of fiscal policy, the money market, and the foreign exchange market. Part (a) required students to draw a correctly labeled graph of aggregate demand, short-run aggregate supply, and long-run aggregate supply and show the current equilibrium and the full-employment output. In part (b) students were asked to show the short-run effect of an increase in government spending on their AD–AS graph. In part (c) students were asked to provide the numerical value of the maximum change in real output and household savings as a result of a given increase in government spending. In part (d) students were asked to draw a correctly labeled graph of the money market and show the effect of the change in real output on the nominal interest rate. In part (e), students were asked what will happen to the price of previously issued bonds as a result of the change in the nominal interest rate. In part (f) students were told that the inflation rate in the United States increases relative to the inflation rate in the European Union and were asked to identify and explain what will happen to the demand for dollars and to identify what will happen to the international value of the dollar. In part (g) students were asked whether the Federal Reserve should buy or sell euros and dollars in order to keep the value of the dollar constant in the foreign exchange market.

Sample: 1A

Score: 9

The response earned the first point in part (a) for drawing a correctly labeled aggregate demand–aggregate supply graph showing Y_1 and PL_1 at the intersection of AD and SRAS. The response earned the second point in part (a) for correctly showing a vertical LRAS curve to the left of Y_1 and labelling the full-employment output Y_F . The response earned 1 point in part (b) for showing the short-run effect of the increase in government spending as a rightward shift of the aggregate demand curve, resulting in an increase in equilibrium real output and an increase in the equilibrium price level, labeled Y_2 and PL_2 , respectively. The response earned 1 point in part (c) for stating the maximum change in real output is \$500 billion and the maximum change in household saving is \$100 billion. The response earned the first point in part (d) for drawing a correctly labeled graph of the money market. The response earned the second point in part (d) for correctly showing a rightward shift in the money demand curve, resulting in a higher nominal interest rate. The response earned 1 point in part (e) for stating that the price of previously issued bonds will decrease. The response did not earn the point in part (f)(i) because it does not explain why the demand for dollars decreases. The response earned 1 point in part (f)(ii) for stating that the international value of the dollar decreases. The response earned 1 point in part (g) for stating that the Federal Reserve should sell the euro and buy the dollar.

Sample: 1B

Score: 6

The response earned the first point in part (a) for drawing a correctly labeled aggregate demand–aggregate supply graph showing Y_1 and PL_1 at the intersection of AD and SRAS. The response earned the second point in part (a) for correctly showing a vertical LRAS curve to the left of Y_1 and

Question 1 (continued)

labelling the full-employment output Y_F . The response did not earn the point in part (b) because it does not show an increase in aggregate demand. The response did not earn the point in part (c) because it does not state that the maximum increase in household savings is \$100 billion. The response earned the first point in part (d) for drawing a correctly labeled graph of the money market. The response did not earn the second point in part (d) because it shows an increase in the money supply curve. The response did not earn the point in part (e) because it states that the price of bonds will not change. The response earned 1 point in part (f)(i) for stating that the demand for dollars will decrease and for explaining that United States goods are relatively more expensive than European goods. The response earned 1 point in part (f)(ii) for stating that the dollar depreciates. The response earned 1 point in part (g) for stating that the Federal Reserve should sell the euro and buy the dollar.

Sample: 1C**Score: 2**

The response did not earn the first point in part (a) because it does not have a correctly labeled aggregate demand–aggregate supply graph. The response did not earn the second point in part (a) because it does not show a vertical LRAS curve to the left of Y_1 . The response did not earn the point in part (b) because it does not show a rightward shift of the aggregate demand curve. The response did not earn the point in part (c) because it does not correctly state the maximum increase in real output and household savings. The response did not earn the first point in part (d) because it does not show a correctly labeled graph of the money market. The response did not earn the second point in part (d) because it does not show a rightward shift in the money demand curve. The response did not earn the point in part (e) because it states that the price of previously issued bonds will increase. The response did not earn the point in part (f)(i) because it does not correctly explain why the demand for dollars decreases. The response earned 1 point in part (f)(ii) for stating that the dollar depreciates. The response earned 1 point in part (g) for stating that the Federal Reserve should sell the euro and buy the dollar.