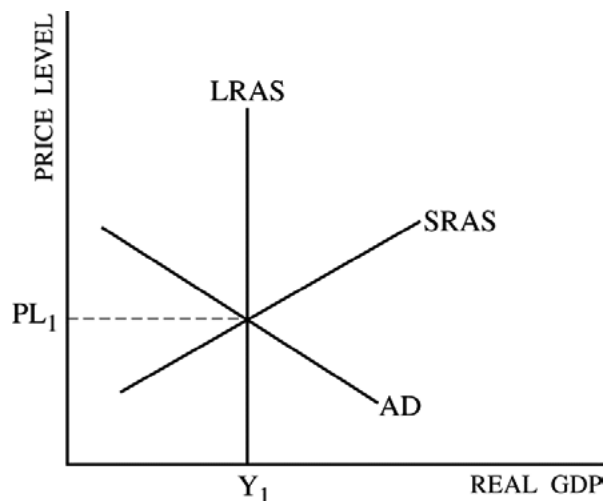


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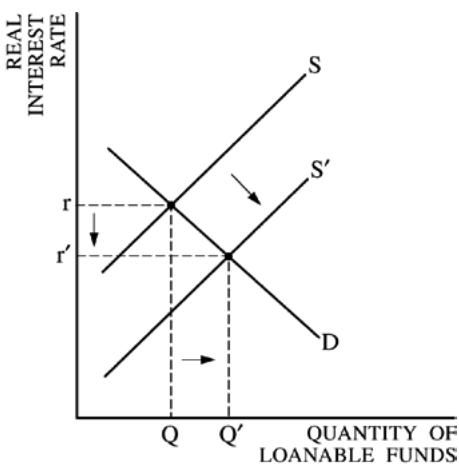
Question 1

10 Points (2 + 2 + 2 + 3 + 1)



(a) 2 points:

- One point is earned for drawing a correctly labeled graph, showing AD, SRAS, and PL_1 .
- One point is earned for drawing a vertical LRAS curve at Y_1 that is at the intersection of AD and SRAS.



(b) 2 points:

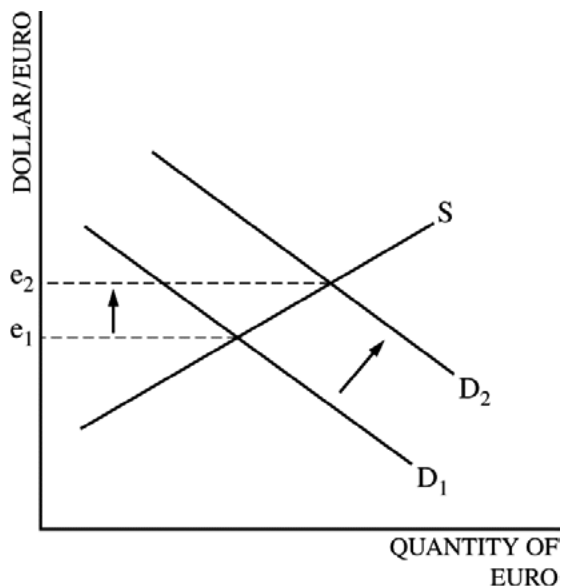
- One point is earned for drawing a correctly labeled graph of the loanable funds market.
- One point is earned for shifting the supply curve to the right and showing a decrease in real interest rate.

(c) 2 points:

- One point is earned for stating that interest-sensitive expenditures will increase.
- One point is earned for stating that the economic growth rate will increase because higher investment will increase capital formation.

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Question 1 (continued)

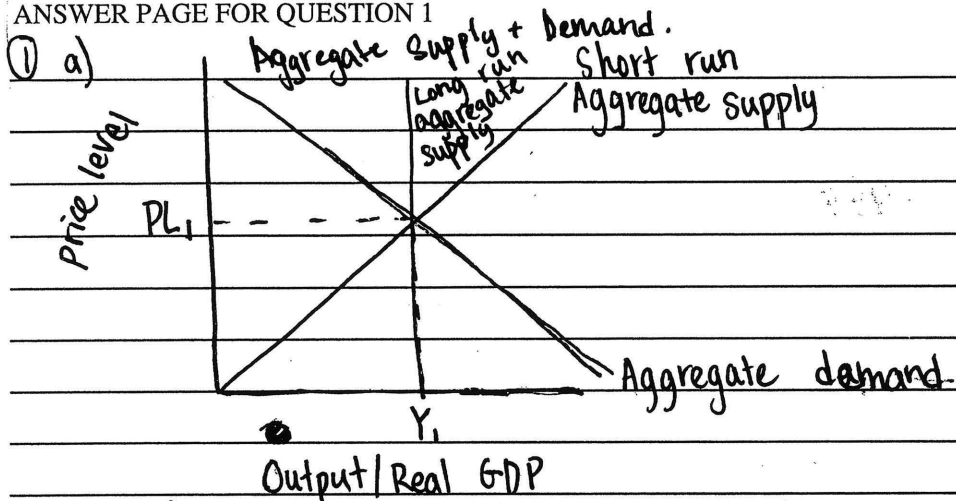


(d) 3 points:

- One point is earned for drawing a correctly labeled graph of the foreign exchange market for the euro.
- One point is earned for shifting the demand curve to the right and showing an increase in the value of the euro.
- One point is earned for explaining that the demand for the euro increases because the higher real interest rate in the euro zone leads to higher returns for financial investments in the euro zone, attracting funds from the United States to the euro zone.

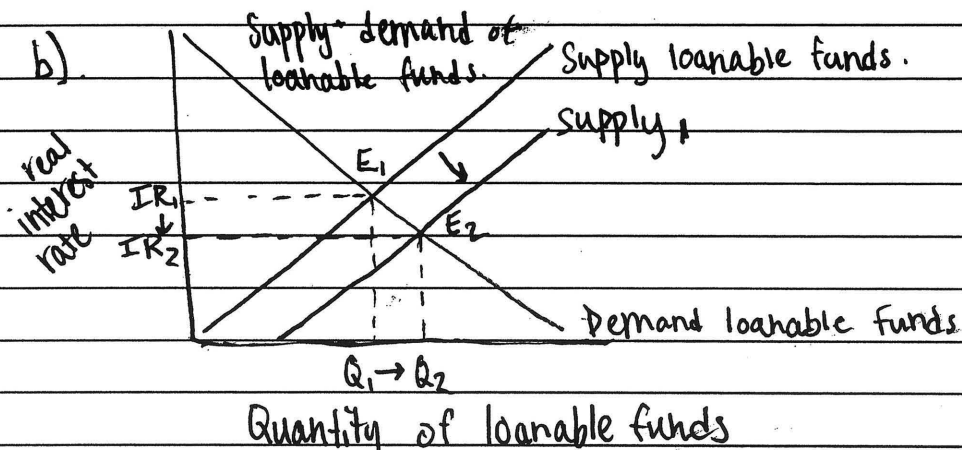
(e) 1 point:

- One point is earned for stating that United States current account will be in surplus.



i) The price level is the value on the y-axis marked PL_1 , which is the value of the price at the point of intersection between aggregate demand and long run aggregate supply.

ii) The output level is the value on the x-axis marked Y_1 , which is the value ~~at the~~ of output at the point of intersection between aggregate demand and long run aggregate supply.

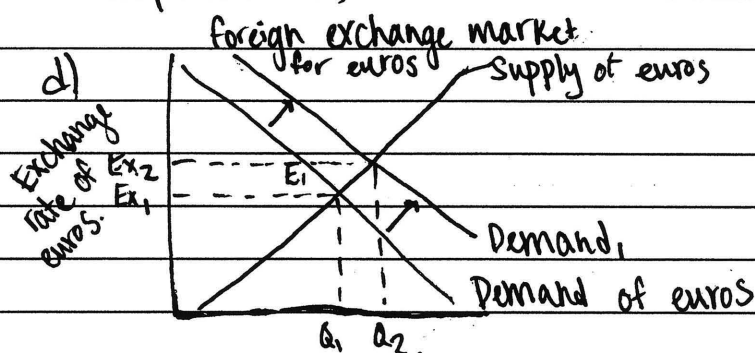


If personal savings increase, people will put their money in banks. Banks will have more money to lend, so the supply of loanable funds will shift to the right. At the new equilibrium, marked E_2 , there will be a greater quantity of loanable funds and a lower interest rate.

→
GO ON TO THE NEXT PAGE.

ADDITIONAL PAGE FOR ANSWERING QUESTION 1

- c) i) As indicated on the graph in part b, interest rates will decrease when personal savings increase. Interest-sensitive expenditures will increase because ~~the~~ households and firms can borrow money at a lower interest rate. It will be 'cheaper' to borrow money. This increase can be seen on the graph in part b, where at E_2 , ~~the~~ the equilibrium quantity is higher than it was before.
- ii) The rate of economic growth will increase because investment fuels growth. Firms will be able to purchase capital equipment, which will mean workers will be more productive, which will increase the growth rate.



- i) The demand for the euro will shift to the right because people will want to invest their money in Europe, because they will get a higher rate of return on their investments. People will demand more euros so they can invest in ~~the~~ European assets.
- ii) The value of the euro relative to the dollar will rise, which means that the euro will appreciate compared to the dollar. As demand is shifted to the right, the new equilibrium has a higher exchange rate. When people exchange their euros for dollars, they are also increasing the supply

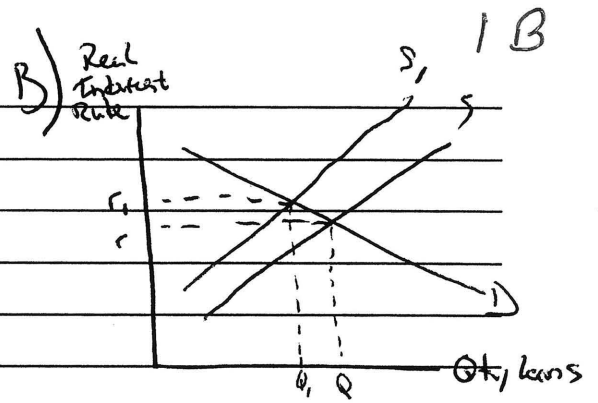
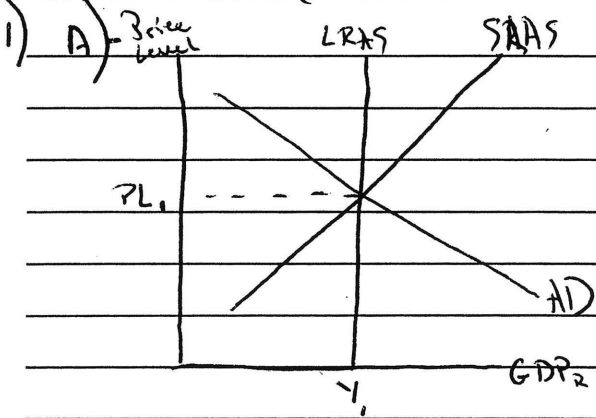
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of dollars, which will lower the exchange rate for dollars.

e) When the value of the euro appreciates compared to the dollar, the United States current account will change to a surplus. American goods will seem cheaper to Europeans, so they will buy more goods, which means that American exports will rise. We will import fewer European goods because they will seem more expensive. Therefore, the current accounts will run a surplus.

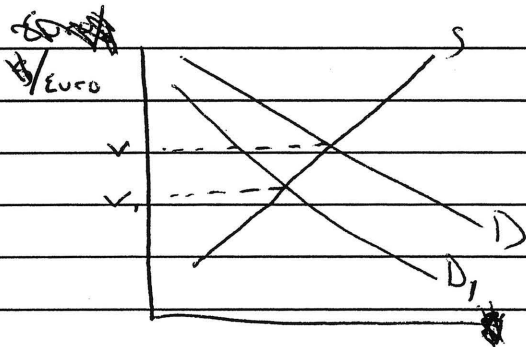
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ANSWER PAGE FOR QUESTION 1



C) i - Decrease

ii - The rate of economic growth will slow down because the increase in interest rates causes investment spending to decrease or the crowding out effect.



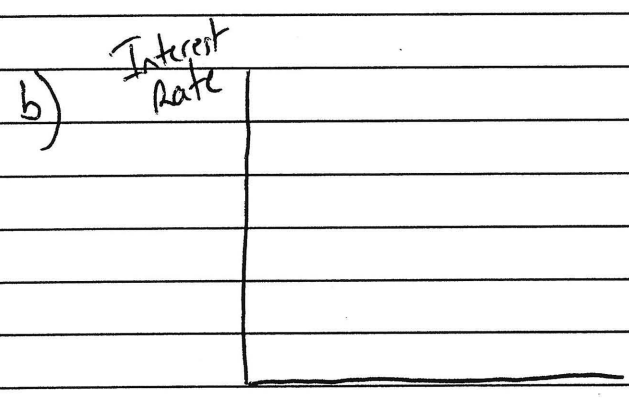
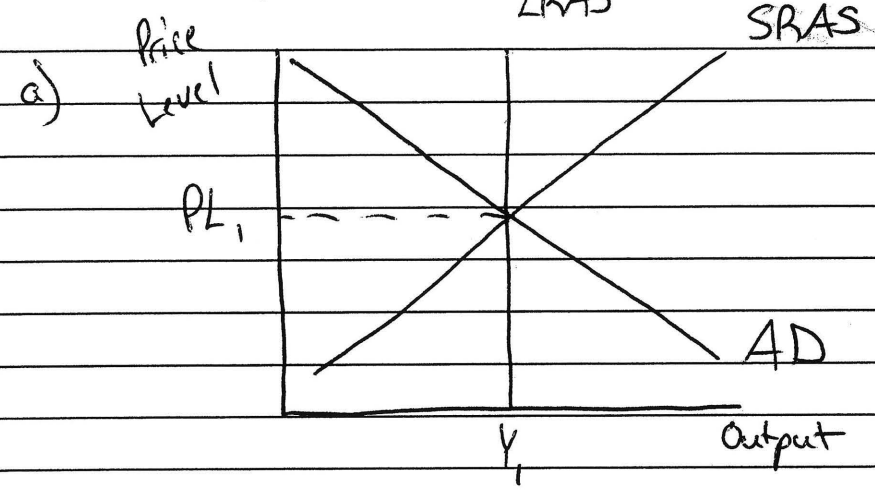
i - Demand for Euro will decrease because with higher interest rates consumers look to invest ~~more~~ money in another country

ii - Value of Euro is less

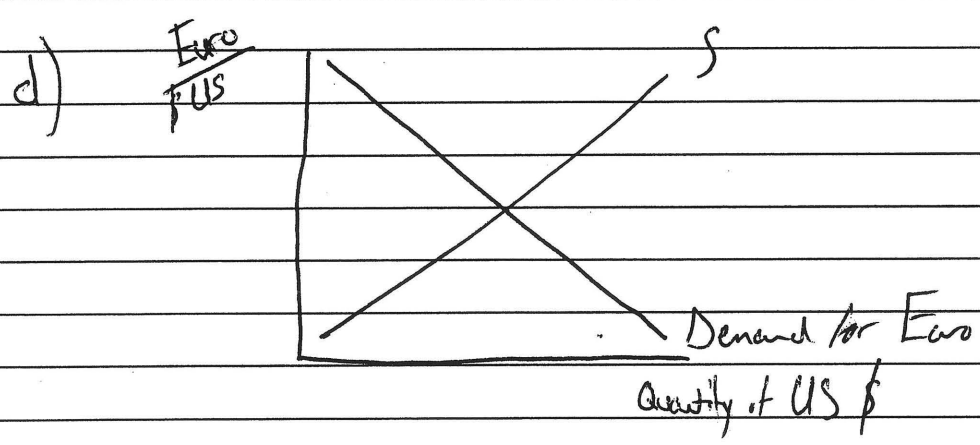
E) Surplus

GO ON TO THE NEXT PAGE.

ANSWER PAGE FOR QUESTION 1



c) i) decrease
ii)



GO ON TO THE NEXT PAGE.

1C2

ADDITIONAL PAGE FOR ANSWERING QUESTION 1

d) demand for the euro will increase

e) deficit

GO ON TO THE NEXT PAGE.

AP[®] MACROECONOMICS 2013 SCORING COMMENTARY

Question 1

Overview

Part (a) asked the students to draw a correctly labeled graph of the Aggregate Demand/Aggregate Supply model, test their ability to determine and show the full employment level of output. Part (b) asked the students to draw a correctly labeled graph of the loanable funds market and to show the impact of increased savings on the real interest rate. Part (c) tests the students' ability to determine the impact of a change in the real interest rate on interest-sensitive expenditures and economic growth. Part (d) asked the students to draw a correctly labeled graph of the foreign exchange market and to show the impact of higher real interest rates on the exchange rate. Part (e) tests the students' ability to determine the impact of a change in the exchange rate on the current account.

Sample: 1A

Score: 10

The student answers all parts of the question correctly and so earned 10 points.

Sample: 1B

Score: 5

The student earned 2 points in part (a) for drawing a correctly labeled AD/AS graph. The student earned 1 point in part (b) for drawing a correctly labeled graph of the loanable funds market. Since the student's conclusion of "decrease" in part (c)(i) is consistent with the real interest rate change in part (b)(ii), the student earned 1 point. The student earned 1 point in part (d) for drawing a correctly labeled graph of the foreign exchange market for the euro. The student's answer to part (e) is inconsistent with the exchange rate change in part (d) and therefore did not earn the point.

Sample: 1C

Score: 2

The student earned 2 points in part (a) for drawing a correctly labeled AD/AS graph.