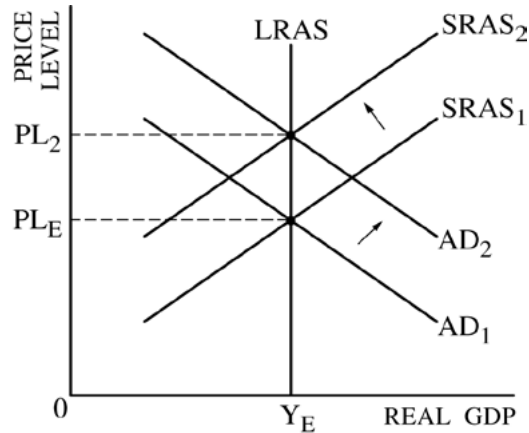


**AP[®] MACROECONOMICS
2010 SCORING GUIDELINES**

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:

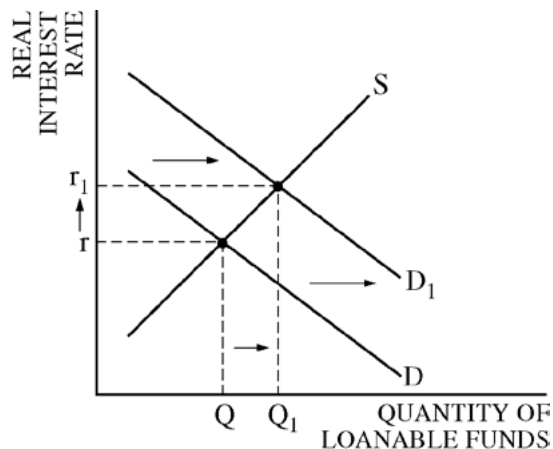
- One point is earned for showing a rightward shift of the AD curve on the graph in part (a).
- One point is earned for stating that the unemployment rate would fall and explaining that this is because real output increases.

(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.

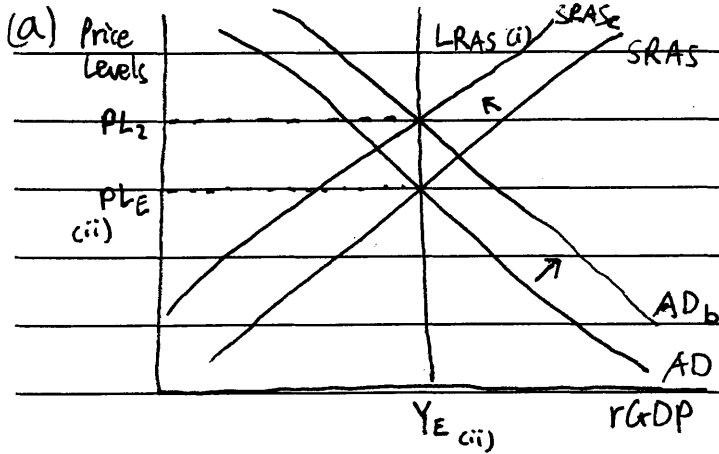
(e) 2 points:

- 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.

Write in the box the number of the question you are answering on this page as it is designated in the exam.

1

1A 1 of 2

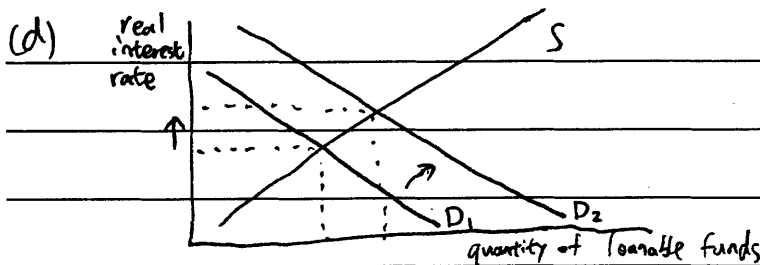


(b) (i) see graph, AD_b

(ii) The increase on government spending increases aggregate demand, establishing a new short-run equilibrium at a higher output. The increased production increases the demand for workers, thereby decreasing the unemployment rate in the short-run.

(c) (i) The short-run aggregate supply curve in the new long-run equilibrium will be to the left of the initial long run equilibrium, as the increase in price levels caused by the increase in aggregate demand makes it more expensive for firms to hire workers, increasing the costs of production.

(ii) see graph, $SRAS_c$ & PL_2



• real interest rates increase

1

Write in the box the number of the question you are answering on this page as it is designated in the exam.

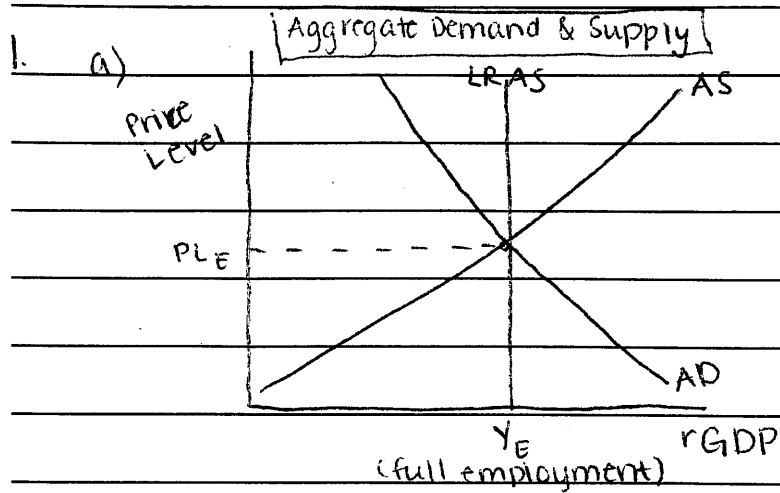
(e) (i) As real interest rates increase, investment decreases as it is more expensive to take out loans.

(ii) As real interest rates increase, firms are less willing to take out loans and to invest in goods that will increase production because the opportunity costs of those loans have increased. Because of the reduced investment, the economic growth rate is sure to decrease as well, as firms are no longer expanding production as quickly.

Write in the box the number of the question you are answering on this page as it is designated in the exam.

1

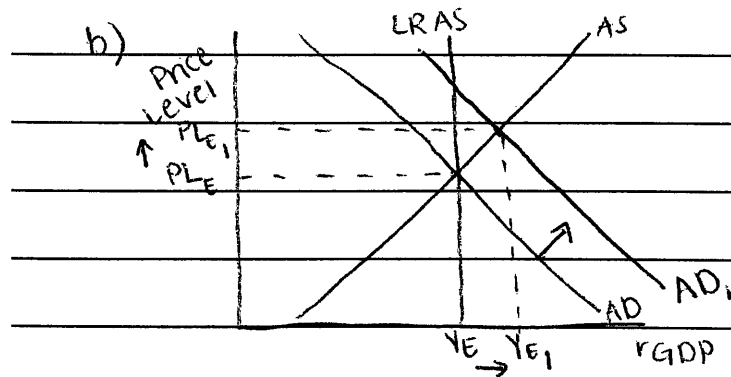
1B_{1 of 2}



LRAS = long-run aggregate supply

AS = aggregate supply

AD = aggregate demand

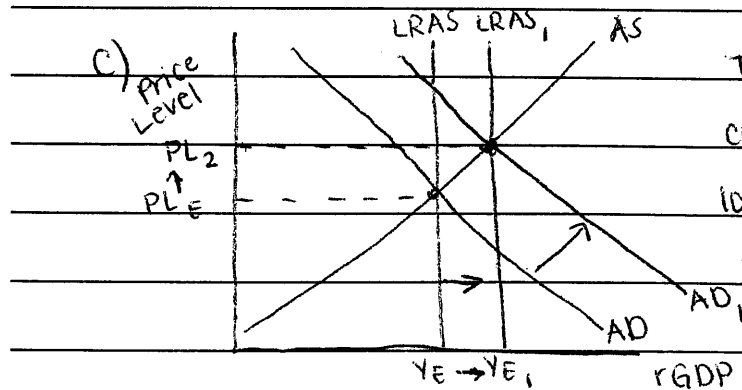


Employment increases

due to the increase in

real output, so the

unemployment rate decreases.



The short-run aggregate supply

curve is the same in the new

long-run equilibrium as it

was in the initial long-run

equilibrium, however the

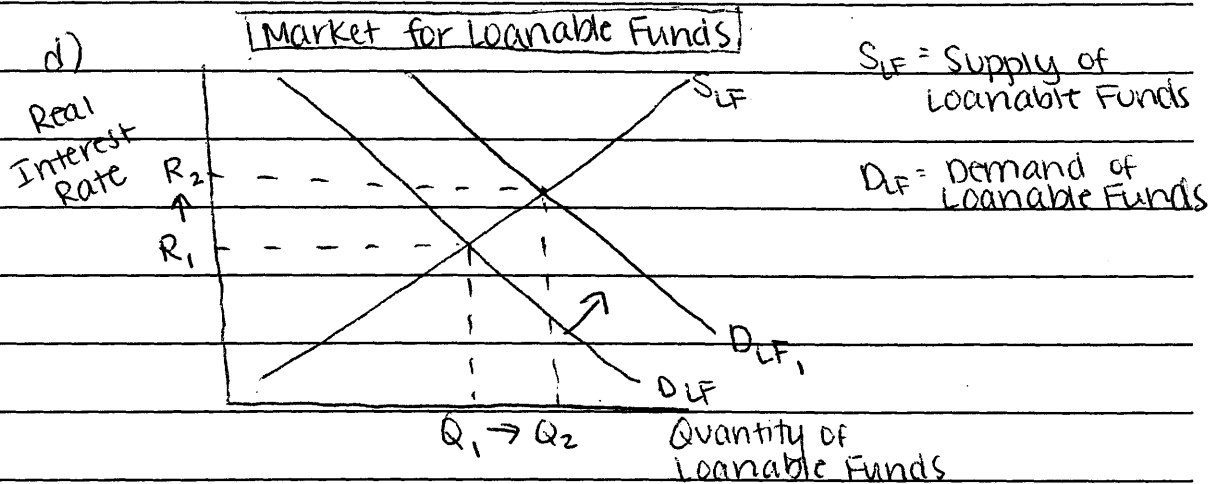
equilibrium point for

the price level and real output has moved up the line, if no

action was taken, normally the AS curve would have shifted

left back to the original long-run equilibrium due to

a demand ~~for~~ for higher wages. However, because the long-run aggregate supply curve shifted to the right (growth occurred), the short-run AS curve stays in the same position.



*real interest rates increase.

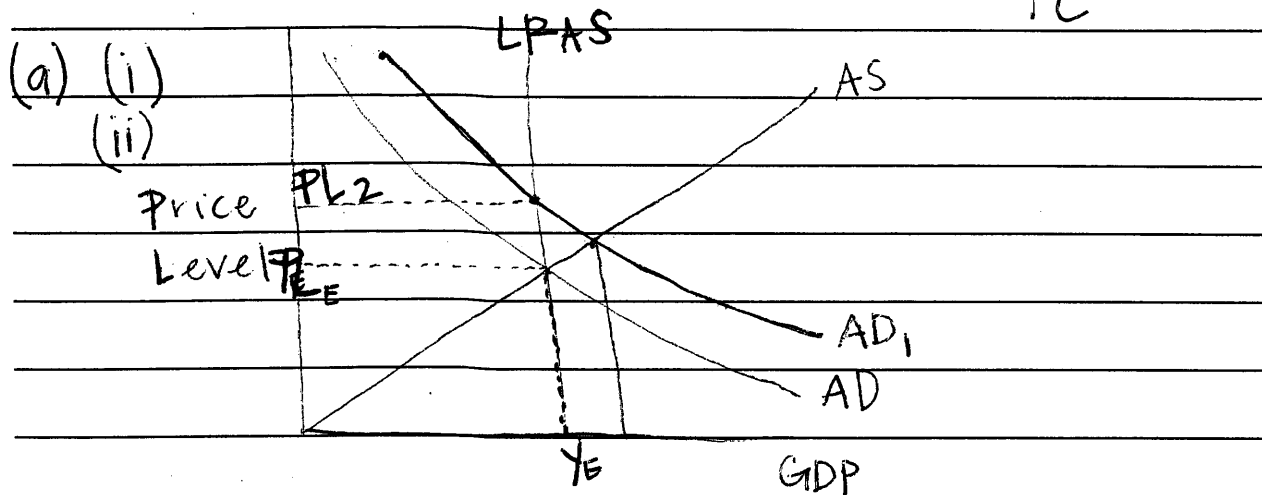
e) (i) - investment decreases (crowding-out effect).

(ii) - The economic growth rate decreases. This is because investment is very important in the potential for economic growth, because investment decreases, the economic growth rate decreases as well.

Write in the box the number of the question you are answering on this page as it is designated in the exam.

1

1C



(b) (ii) It will decrease the unemployment rate in the short run because when aggregate demand increases more jobs are available

(c) (i) There is a movement along the SPAS curve to the right. So in comparison in terms of the ^{initial} ~~initial~~ long-run equilibrium there has been an increase. This affects price level and output.

AP[®] MACROECONOMICS 2010 SCORING COMMENTARY

Question 1

Overview

This question determined students' ability to work with models of aggregate demand–aggregate supply and loanable funds. Part (a) asked students to draw an aggregate demand–aggregate supply diagram to show an economy in long-run equilibrium. Part (b) determined whether students knew the effect of an increase in government spending on aggregate demand and the unemployment rate. Part (c) tested for understanding of the self-adjustment process for aggregate supply. Part (d) asked students to draw and manipulate a graph of the loanable funds market. Part (e) required students to identify the relationship between real interest rates, investment and economic growth.

Sample: 1A

Score: 10

The student earned all 10 points for this question.

Sample: 1B

Score: 7

The student earned 2 points in part (a) for a correctly labeled graph showing long-run equilibrium and current equilibrium output and price levels. The student earned 2 points in part (b) for a correctly labeled graph showing the aggregate demand curve shifting to the right (with an explanation that unemployment decreases because real output increases), and 2 points in part (d) for a correctly labeled graph of the loanable funds market showing an increase in demand and higher interest rate. The student earned 1 point in part (e) for stating that investment decreases.

Sample: 1C

Score: 3

The student earned 2 points in part (a) for a correctly labeled graph showing the long-run aggregate supply curve and the current equilibrium output and price levels. The student earned 1 point in part (b) for showing an increase in aggregate demand.