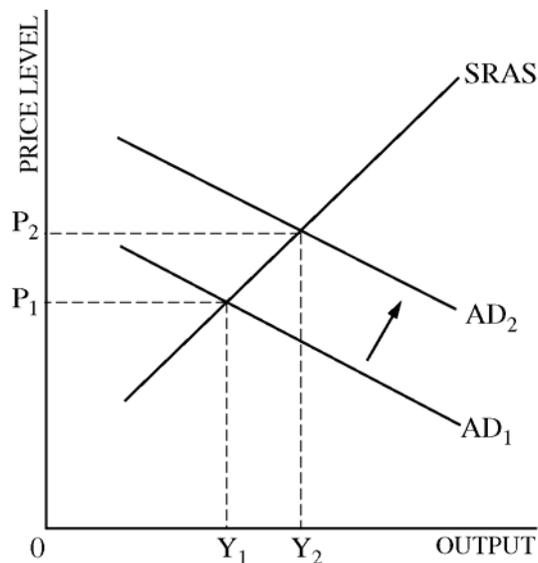


**AP<sup>®</sup> MACROECONOMICS**  
**2007 SCORING GUIDELINES (Form B)**

**Question 1**

**12 points** (4 + 4 + 2 + 2)



(a) 4 points:

One point is earned for a correctly labeled graph.

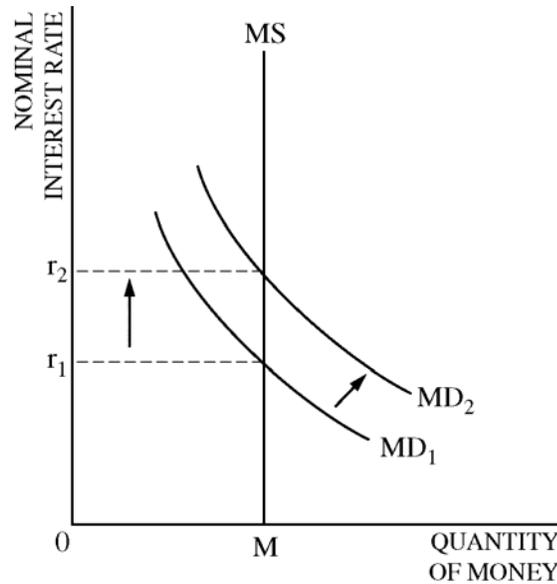
One point is earned for showing a rightward shift in New Zealand's AD curve.

One point is earned for the explanation that New Zealand's exports to Australia increase.

One point is earned for concluding that New Zealand's output increases.

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**Question 1 (continued)**



(b) 4 points:

- One point is earned for a correctly labeled graph of the money market.
- One point is earned for showing a rightward shift of the money demand curve.
- One point is earned for the explanation that higher income means more volume of transactions.
- One point is earned for concluding that the nominal interest rate increases.

(c) 2 points:

- One point is earned for stating that the real interest rate is indeterminate.
- One point is earned for the explanation that the real interest rate is eroded by inflation but increases as a result of the increase in money demand.

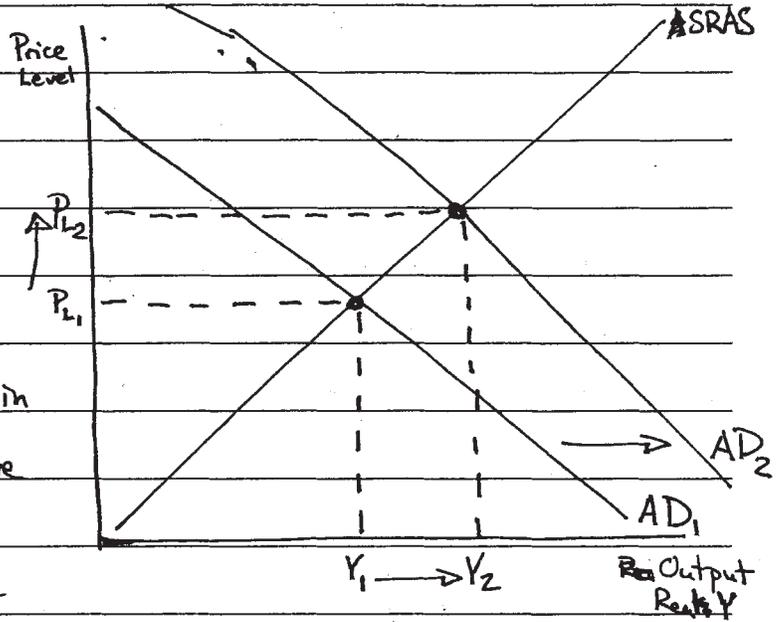
(d) 2 points:

- One point is earned for stating that the aggregate supply curve will shift to the right.
- One point is earned for stating that the aggregate demand curve is unaffected.

Question 1

a.)

i) Aggregate Demand in New Zealand will increase. Australia recovering from its recession will result in Australians demanding more goods both at home and abroad, which will result

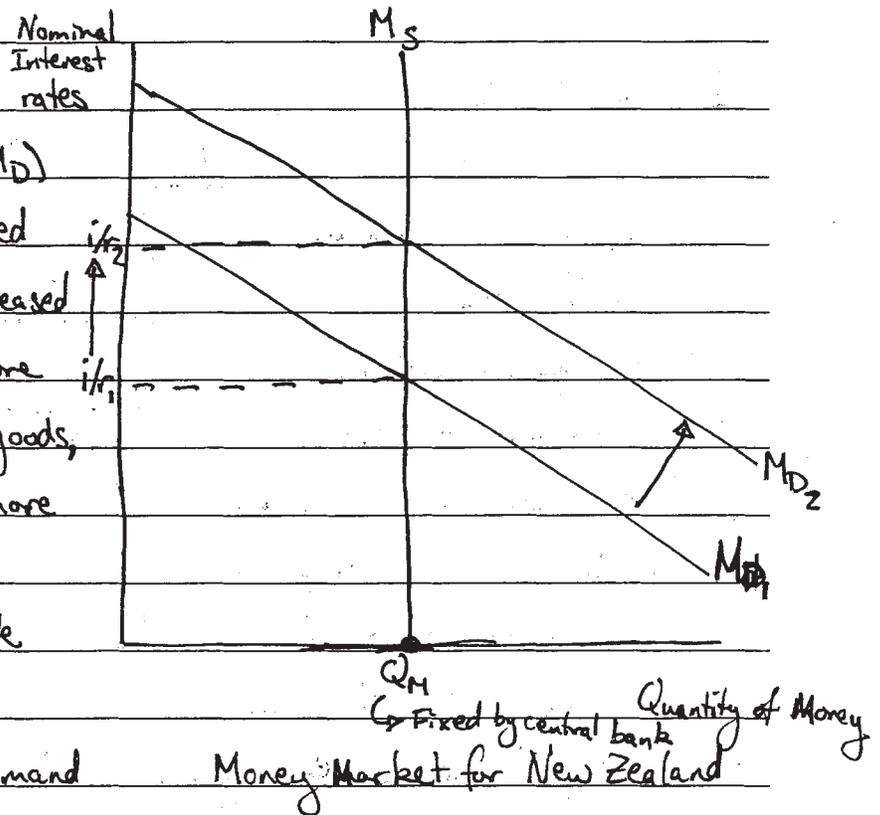


in New Zealand's net exports (NX) increasing. Since net exports are a component of aggregate demand, aggregate demand in New Zealand will in turn increase.

ii) Output in New Zealand will increase, due to an increased aggregate demand and an unchanged short-run aggregate supply.

b)

i) Demand for Money ( $M_D$ ) will increase. Increased Aggregate Demand and increased Output will result in more people wanting to buy goods, which they will require more money to do.



ii) The nominal interest rate will increase, due to an increased demand for money and a fixed supply of money.

c) Depending on how much the price level increases relative to rising nominal interest rates, real interest rates may rise, fall or remain unchanged. According to the Fisher effect real interest rates equal nominal interest rates minus inflation. If inflation, also known as the increase in the price level, is greater than the rise in the nominal interest rate, the real interest rate will actually fall. Conversely, if nominal interest rate rises are greater than inflation, then real interest rates rise. If nominal interest rate rises equal inflation, then the real interest rate is unchanged.

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

1

1A3

d)

i) In the long run,

~~short run~~ short run aggregate

supply will increase as shown.

Unemployment ~~and~~ will enable

firms to drive wages,

a cost of production, down,

which will result in  $\$$

Short run supply increasing.

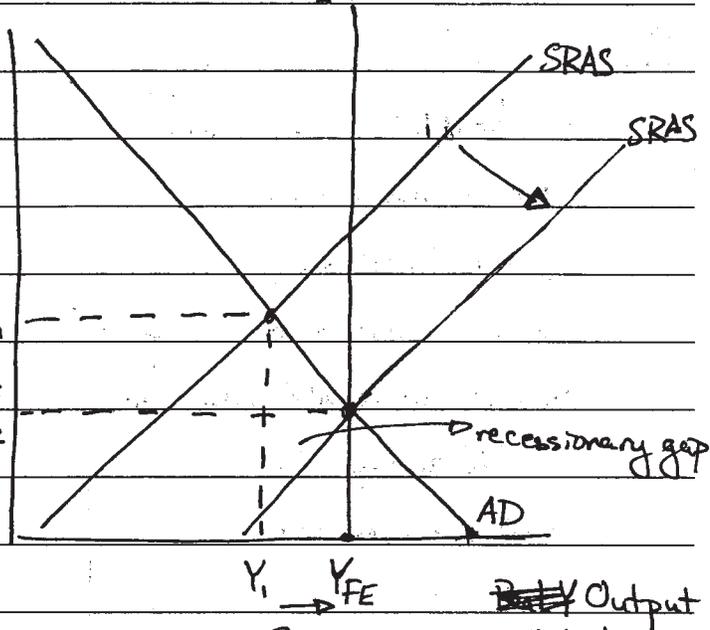
~~This is~~ This is a classical or self-correcting

view of how the market will be corrected.

ii) Aggregate Demand will remain unchanged,

but the quantity of goods demanded

will increase with the falling price level, due to the wealth, and net export ~~and~~ effects. effects



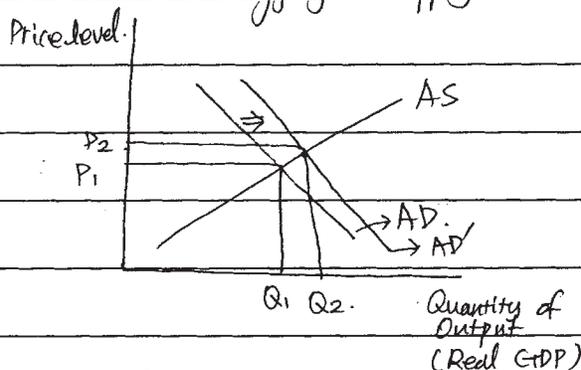
Write in the box the number of the question you are answering on this page as it is designated in the exam.

1-(a).

1B<sub>1</sub>

1-(a)

Aggregate demand and aggregate supply in New Zealand. (short run)



(i) As Australia's income is rising, now Australians can afford more imports from their trade partner New Zealand. Because the ~~share~~ import of Australia from New Zealand increases exports ~~of New Zealand~~ ~~and~~ in New Zealand, AD curve shifts to the right in the place of AD' curve. ~~The AD curve will~~ <sup>That is</sup> AD curve will definitely shift to the right because there's no reason for the imports of New Zealand to increase in this situation, whereas exports rise. This change, in turn, result in surplus in Net exports of AD curve.

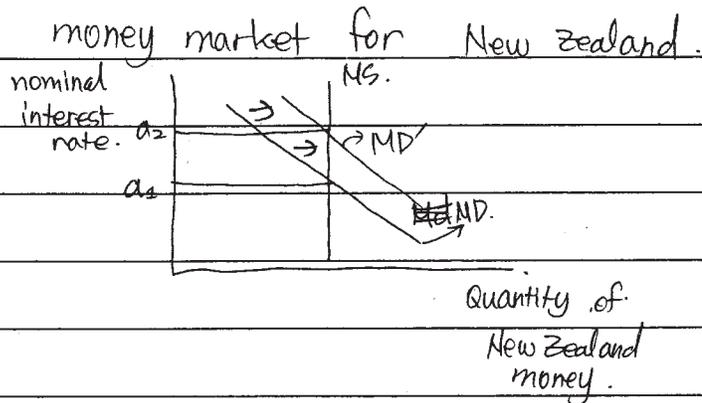
(ii). Because AD curve shifts to AD' due to rising income in Australia, output in New Zealand will change from  $Q_1$  to  $Q_2$  as indicated in the graph above. Thus, output in New Zealand increases.

1-(b)

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

1B<sub>2</sub>

1-(b)



(i) Demand for money in New Zealand will increase.

This is because Australians ~~no~~ now need more New Zealand money to afford buying <sup>more</sup> New Zealand's products. Moreover as the output in ~~New Zealand rises~~, or <sup>the</sup> real GDP rises, people of New Zealand have more incomes than before. Then, they'll be likely to spend more than before, boosting demand for money.

(ii) As the demand for money is increased due to increased output, the MD curve will shift to the right to MD' curve. Thus, <sup>the</sup> nominal interest rate ~~goes~~ rises to  $a_2$  from  $a_1$ . In short, the nominal interest rate increases.

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

1-(c), (d)

1B<sub>3</sub>

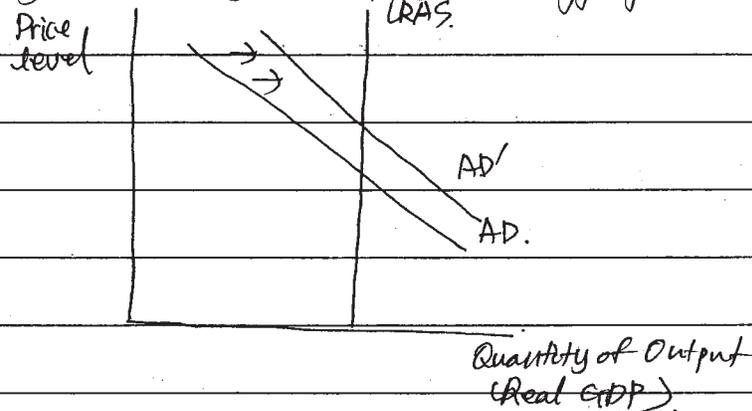
1-(c)

~~the~~ ~~to~~ The equation below should be considered in this case.

$$\therefore \begin{array}{l} \text{the nominal} \\ \text{interest rate} \end{array} = \begin{array}{l} \text{the real interest} \\ \text{rate} \end{array} - \text{inflation rate.}$$

Therefore, if the price level in New Zealand rises, which indicates inflation, the real interest rate will increase <sup>as well</sup>. This is because according to the equation above (Fisher's hypothesis), the real interest rate equals the nominal interest rate plus inflation rate.

1-(d). Longrun Aggregate supply and aggregate demand in Australia.



(i). Aggregate supply in the long run in Australia will remain still.

This is because long run aggregate supply curve is only affected by two channels; availability of resources and technology (productivity). As long as these two are not changed aggregate supply curve doesn't move.

(ii). Aggregate demand curve will move to the right to AD' curve.

In recession, inventories are likely to bulge, so suppliers will start to cut off prices of their products. ~~Then~~ then, this lower price level will encourage more demand, shifting AD curve to the right.

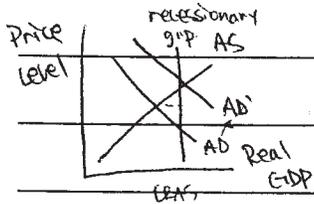
Write in the box the number of the question you are answering on this page as it is designated in the exam.

1

10.

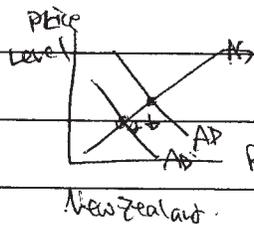
1. (a)

Assuming that Australia's economy is in recession, and begins to recover from it, we could have a graph looking like this.

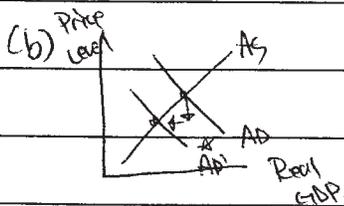


Recovering from the recession the price level rises and so do the incomes.

(i) Aggregate demand in New Zealand decreases.



As the Aggregate demand increases for Australia the opposite happens for New Zealand decreasing the aggregate demand (ii) and therefore decreasing in the total output and price level as well.

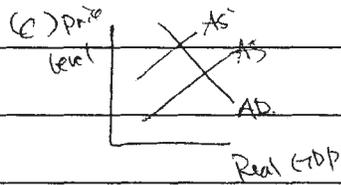


(i) (ii) The recovering of Australia from the recession leads the aggregate demand curve to shift to the left meaning the

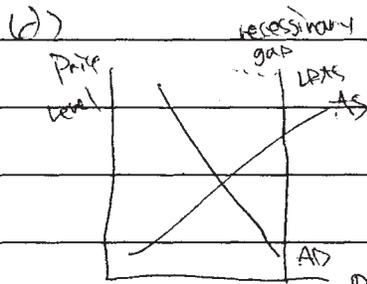
aggregate supply and demand decreasing. Since the supply of money decreases, the demand for money will increase because there is not as much money from the past and the people would know that the purchase power of money has increased.

The <sup>nominal</sup> interest rate will increase because it is the same for the

government. The government also needs money, but the supply has decreased so the government wants people to put their money in banks so the government and business can use it for investment and getting help by the money multiplier.



Prices have risen. The ~~real~~ <sup>nominal</sup> interest rates would seem like they have risen but the real interest rate would decrease. The purchase power of the same money would have decreased.



Shown in the graph, to cure the recession, the AD curve can shift to the right, or the AS curve can also shift to the right giving an equilibrium point ~~at~~ <sup>with</sup> the long run Aggregate Supply curve.

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**2007 SCORING COMMENTARY (Form B)**

**Question 1**

**Sample: 1A**

**Score: 12**

The student earned all points in this question.

**Sample: 1B**

**Score: 8**

The student earned all points in parts (a) and (b) and lost all points in parts (c) and (d).

**Sample: 1C**

**Score: 3**

In part (a) the student earned 1 point for the correctly labeled graph and 1 point for the assertion that output decreases, which is consistent with a leftward aggregate demand shift. The student earned 1 point in part (d) for recognizing that aggregate supply increases.