

Final Exam- Solution Key

Economics 160B, Spring 2007

Multiple Choice:

1) c 2) a 3) c 4) d 5) b 6) d 7) c 8) d 9) a 10) b

Question 1:

a) Using covered interest rate parity:

$$i_{UK} = i_{EU} + (F_{\pounds/\text{€}} - E_{\pounds/\text{€}}) / E_{\pounds/\text{€}}$$

$$0.02 = 0.12 + (0.9 - E_{\pounds/\text{€}}) / E_{\pounds/\text{€}}$$

$$-0.1 E_{\pounds/\text{€}} = 0.9 - E_{\pounds/\text{€}}$$

$$0.9 E_{\pounds/\text{€}} = 0.9$$

$$E_{\pounds/\text{€}} = 1$$

b) Using UIP: $(E^e_{\pounds/\text{€}} - E_{\pounds/\text{€}}) / E_{\pounds/\text{€}} = i_{UK} - i_{EU}$

$$(E^e_{\pounds/\text{€}} - 1) / 1 = 0.02 - 0.12$$

$$E^e_{\pounds/\text{€}} - 1 = -0.10 + 1 = 0.9$$

This is a pound appreciation.

c) using relative PPP: $\Pi^e_{UK} - \Pi^e_{EU} = (E^e_{\pounds/\text{€}} - E_{\pounds/\text{€}}) / E_{\pounds/\text{€}} = (0.9 - 1) / 1 = -0.1$

$$\text{so } \Pi^e_{UK} = \Pi^e_{EU} - 0.1 = 0$$

d) Using real interest rate parity:

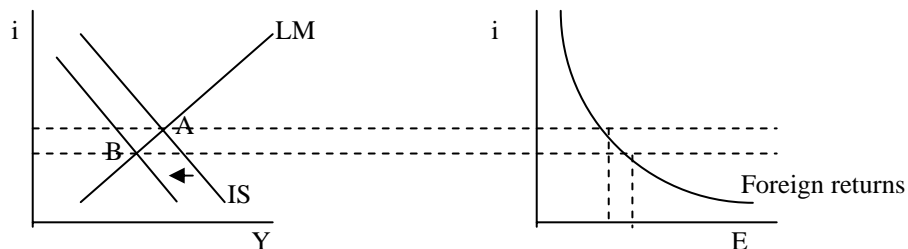
$$r_{UK} = r_{EU} = i_{EU} - \Pi^e_{EU} = 0.12 - 0.10 = 0.02$$

or just use the fisher relation:

$$r_{UK} = i_{UK} - \Pi^e_{UK} = 0.02 - 0 = 0.02$$

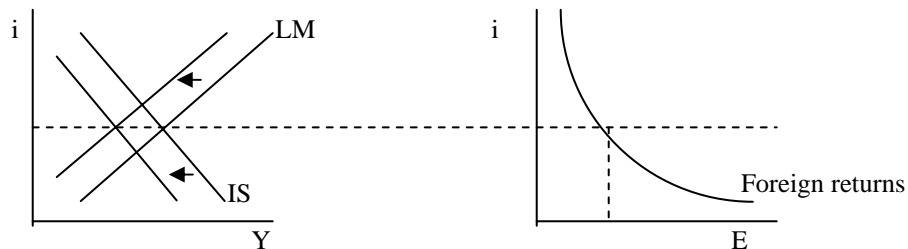
Question 2:

a)



The fall in investment shifts the IS curve left. This lowers the interest rate, which raises the exchange rate (pound depreciation). The current account rises, since the currency depreciation makes home goods cheaper and the fall in output lowers imports.

b)



To maintain the fixed exchange rate, the UK must contract money supply to keep the interest rate unaffected. This shifts the LM curve left.

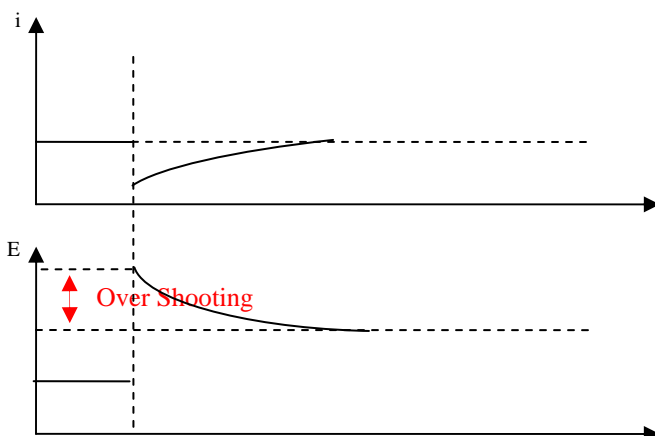
Output falls even more than before, because there is no change in the exchange rate to encourage foreign demand for home goods. There is no change in the interest rate. The trade balance still improves, because the fall in income lowers imports.

c) In the EMS crisis of 1992, the UK eventually exited the EMS system and allowed its exchange rate to float. This eliminated the recession that it was experiencing at the time. The UK seemed to have learned its lesson.

Question 3:

a) The answer is the same as homework #2.

b) Time path:



c) If the money supply increase also raises output, this will raise money demand. This shifts the MD curve right in the graph of the money market. As a result, the US interest rate will fall less, and the exchange rate will move less in the short run. So there is less exchange rate overshooting.

Question 4:

The main points:

Benefits of financial globalization: consumption smoothing, efficient investment, risk diversification (each should be explained as in lecture 5).

Some countries retain capital controls due to the trilemma problem, where they want fixed exchange rates but also some independence in their monetary policies.

Asian crisis: first, financial openness is what allows currency speculators to attack a fixed exchange rate regime. Second, many Asian banks had borrowed in dollars, so currency devaluation led to bankruptcies and disruption of the domestic banking system, resulting in severe recession. Lesson: financial market openness needs to be combined with development of the domestic banking system.

6/07/07