

Final Exam- Solution Key

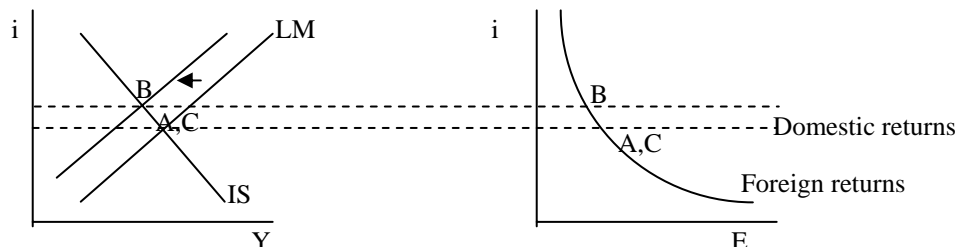
Economics 160B, Fall 2008

Multiple Choice:

Versions A,C 1) c 2) a 3) d 4) b 5) d 6) b 7) c 8) a 9) b 10) e
 Versions B,D 1) d 2) b 3) c 4) a 5) b 6) c 7) a 8) d 9) b 10) e

Question 1:

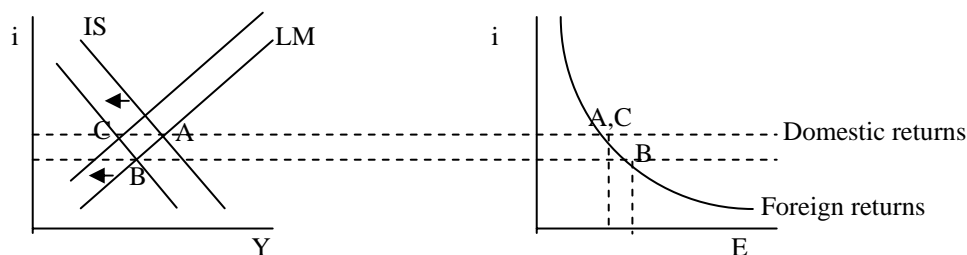
a)



The rise in money demand shifts the LM curve left. This raises the interest rate, lowers investment, and lowers output; it causes the currency to appreciate (fall in exchange rate in krona per euro).

b) To maintain the fixed exchange rate, the country must allow foreign reserves to rise, and raise the money supply. This has the side effect of preventing any fall in output (no change in output).

c) The rise in taxes shifts the IS curve left. Under a flexible exchange rate, this lowers output, lowers interest rate, raises investment, and causes the currency to depreciate (rise in krona/euro).



d) The fixed exchange rate requires a fall in money supply, which makes the fall in output worse.

e) The examples above show that a fixed exchange rate is able to deal well money market shocks, preventing a fall in output, even while it is not able to deal well with a goods market shock, making the fall in output worse.

Question 2:

a) Using uncovered interest rate parity:

$(E_{\$/\text{euro}}^e - E_{\$/\text{euro}}) / E_{\$/\text{euro}} = i_{\text{US}} - i_{\text{EU}} = 0.03 - 0.05 = -0.02$. This indicates an expected appreciation in the value of the dollar. The logic is that if the US interest rate is lower, but people are content holding dollars, they must expect the dollar to appreciate in value during the time they are holding the dollar asset.

b) Using relative PPP:

$(E_{\$/\text{euro}}^e - E_{\$/\text{euro}}) / E_{\$/\text{euro}} = \Pi_{\text{US}}^e - \Pi_{\text{EU}}^e = 0.01$. This indicates an expected depreciation in the value of the dollar. The logic is that arbitrage requires goods to have a constant relative price across countries: if the euro price is rising less than the dollar price, then the price of a euro in terms of dollars must be rising to offset this.

- c) Under the combination of uncovered and covered interest rate parity, the forward exchange rate equals the expected future spot exchange rate.

$$(E_{\$/\text{euro}}^e - E_{\$/\text{euro}}) / E_{\$/\text{euro}} = i_{\text{US}} - i_{\text{EU}} = (F_{\$/\text{euro}} - E_{\$/\text{euro}}) / E_{\$/\text{euro}}, \text{ so } E_{\$/\text{euro}}^e = F_{\$/\text{euro}}$$

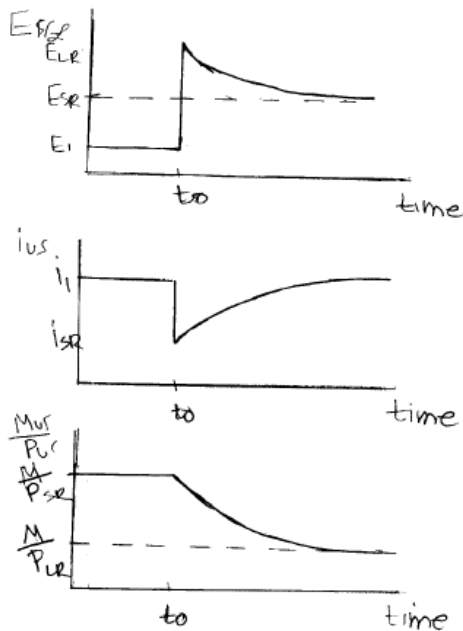
Since the forward rate is 3% higher than the current spot rate, then the expected future spot rate is 3% higher as well: the exchange rate is expected to rise (\$/euro).

- d) Because PPP holds in the long run, the real exchange rate will move from 1.1 to 1.0 over time. Because much of the adjustment takes place in the nominal exchange rate, this implies E (\$/euro) will fall over time.

Question 3:

- a) The answer is on page 41 of lecture 3.

b)



- c) If prices were less sticky, then the interest rate needs to fall less, so the exchange rate rises less in the short run. So there is less overshooting.

Question 4:

See page 1 of lecture 9 for the discussion and graph of a speculative attack.

Points to include the IMF discussion:

- 1) The IMF was first created as part of the Bretton Woods system of fixed exchange rates among developed countries. It was designed to lend reserve currencies to countries in a temporary external imbalance, to be able to defend their exchange rate commitment.
- 2) After the Bretton Woods system ended, it began lending to developing countries in external imbalance.
- 3) In the Aisa crisis in 1997, it imposed tough conditions on borrowers, including contractionary fiscal and monetary policies. These caused or contributed to the fall in output in these countries. Same is true for Argentina crisis in 2001.

Students can also talk about the role of the IMF in facilitating expectations of devaluations, and contagion to other countries.