

Final Exam- Solution Key

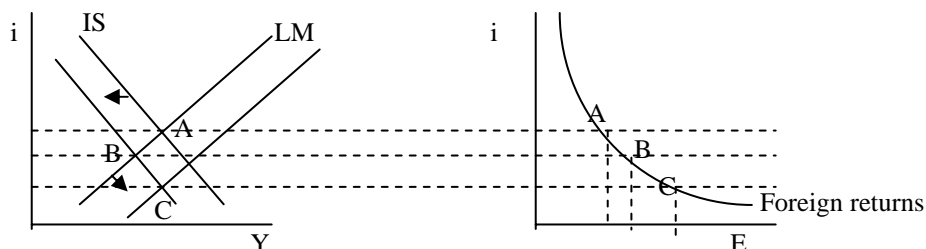
Economics 160B, Winter 2008

Multiple Choice:

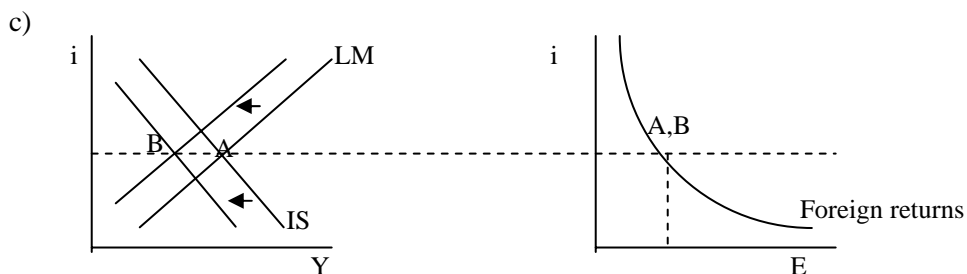
Versions A,C 1)b 2) d 3) c 4) c 5) a 6) a 7) c 8) b 9)b 10) d
 Versions B,D 1) a 2) c 3) b 4)b 5) d 6)b 7) d 8) c 9) c 10) a

Question 1:

a) The fall in investment demand shifts the IS curve left. This lowers output. It also lower U.S. interest rates, which causes the dollar to depreciate (rise in $E(\$/\text{foreign})$). This in turn raises the trade balance, which helps offset part of the fall in investment demand.



b) The expansionary monetary policy shifts the LM curve right, This make the interest rate fall more, dollar depreciate more, and trade balance rise more.



The fall in investment demand shifts the IS curve left. To maintain the fixed exchange rate, the U.S. would have to let the money supply fall, shifting the LM curve left. So output falls even more, there is no change in interest rate, exchange rate, or trade balance.

Question 2:

a) Using real interest rate parity:

$$r_J = r_{US} = 0.01$$

b) using the Fisher relation:

$$\Pi_{US}^e = i_{\$} - r_{US} = 0.05 - 0.01 = 0.04.$$

c) Using relative PPP:

$$(E_{\text{yen}/\$}^e - E_{\text{yen}/\$}) / E_{\text{yen}/\$} = \Pi_J^e = \Pi_{US}^e = 0.02 - 0.04 = -0.02. \text{ This is an appreciation in the value of the yen.}$$

It is also possible, but more complicated, to show that this can be solved using UIP.

- d) The combination of uncovered and covered interest rate parities together imply that
- $$E_{\text{yen}/\$}^e = F_{\text{yen}/\$}$$
- $$\text{So } (E_{\text{yen}/\$}^e - E_{\text{yen}/\$}) / E_{\text{yen}/\$} = -0.02$$
- $$\text{So } (98 - E_{\text{yen}/\$}) / E_{\text{yen}/\$} = -0.02$$
- $$E_{\text{yen}/\$} = 100$$
- e) If you combine UIP with relative PPP you get real interest rate parity. The logic relies upon the logic of each of these underlying conditions: failure in UIP means there is a profit opportunity not taken advantage of in the asset markets; failure in relative PPP means that goods price differences are not arbitrated.
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Question 3:

- a) The answer is the same as homework #2 problem #4 part b.
- b) The answer is the same as homework #2 problem #4 part c.
- c) If money demand responded less to interest rates, then interest rates would need to rise more in order to clear the money market, where money demand equals the constant money supply. So the exchange rate would overshoot more.
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Question 4:

- a) rise in money demand: No, this would cause the currency to appreciate and trade balance to worsen.
- b) rise in taxes: yes
- c) fall in money supply: No, this would cause the currency to appreciate and trade balance to worsen.
- d) taste shock raising foreign demand for this country's exports: No this would cause the trade balance to worsen
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Question 5:

Items that could be included in the discussion:

- 1) Devaluation led to falling output in Asia, but a recovery in output in the UK.
- 2) Devaluation disrupted the financial system in Asia, not in UK, due to poor bankruptcy laws and moral hazard/poor banking regulation.
- 3) The currency devaluation was larger in Asia.
- 4) The IMF intervened in Asia
- 5) The UK did not run out of reserves, but devalued because of the recession induced by high interest rates

Reserves are necessary to defend a peg against currency speculators. But the EMS and Argentinian experience showed when a country uses its reserves to defend a fixed exchange rate it implies a shrinking money supply and higher interest rates that can create a painful recession. Both countries chose to abandon their pegs even though they had enough reserves.

3/17/08