Midterm 1 Solutions - Economics 160B - Fall 2012

Regrade policy: If you would like your test regraded, please submit a written statement to explain why. Your entire test will be regraded, so there is a possibility that points could be lost not gained. All regrade requests must be submitted within one week of exams first being returned.

Multiple Choice:
Version A  1) a  2) c  3) d  4) e  5) a  6) b  7) c  8) b
Version B  1) c  2) e  3) b  4) b  5) e  6) a  7) a  8) d

Problem 1:
a) Using CIP: \( i_{Aus} = i_{Mal} + (F_{Aus/Mal} - E_{Aus/Mal})/ E_{Aus/Mal} \)
   Version A : 0.02 = 0.12 + (F_{Aus/Mal} - 1)/ 1, so \( F_{Aus/Mal} = 0.9 \)
   Version B: 0.03 = 0.23 + (F_{Aus/Mal} - 1)/ 1, so \( F_{Aus/Mal} = 0.8 \)

b) Using UIP: \( i_{Aus} = i_{Mal} + (E^e_{Aus/Mal} - E_{Aus/Mal})/ E_{Aus/Mal} \)
   or use UIP with CIP to say \( E^e_{Aus/Mal} = F_{Aus/Mal} \)
   Version A : 0.02 = 0.12 + (E^e_{Aus/Mal} - 1)/ 1, so \( E^e_{Aus/Mal} = 0.9 \)
   Version B: 0.03 = 0.23 + (E^e_{Aus/Mal} - 1)/ 1, so \( E^e_{Aus/Mal} = 0.8 \)

c) Using relative PPP: \( (\Pi^e_{Aus} - \Pi^e_{Mal}) = (E^e_{Aus/Mal} - E_{Aus/Mal})/ E_{Aus/Mal} \)
   Version A: (0.01 - \Pi^e_{Mal}) = (0.9 -1)/1 = -0.10, \( \Pi^e_{Mal} =0.11 \) (11%)
   Version B: (0.01 - \Pi^e_{Mal}) = (0.8 -1)/1 = -0.20, \( \Pi^e_{Mal} =0.21 \) (21%)

d) Using RIP: \( r^e_{Mal} = r^e_{Aus} = i_{Aus} - \Pi^e_{Aus} \)
   Version A: \( r^e_{Mal} = r^e_{Aus} = 0.02 – 0.01 = 0.01 \) (1%)
   Version B: \( r^e_{Mal} = r^e_{Aus} = 0.03 – 0.01 = 0.02 \) (2%)

Problem 2:
a) This is the same problem as homework #2 problem #3 (where Indonesia replaces India, and Britain replaces China). The graph is the same as in the homework solution key.

b)
c) Since PPP fails in the short run while prices are sticky, there is a profit opportunity in the goods market. In the short run after the money supply decreases and the Indonesia currency appreciates, use pounds to purchase goods in the U.K., sell them in Indonesia for rupiah, and go immediately to the foreign exchange market to exchange for pounds. Since goods are temporarily expensive in Indonesia, you will make a profit.

(Since UIP holds at all times here, there is no profit opportunity in the asset market.)