

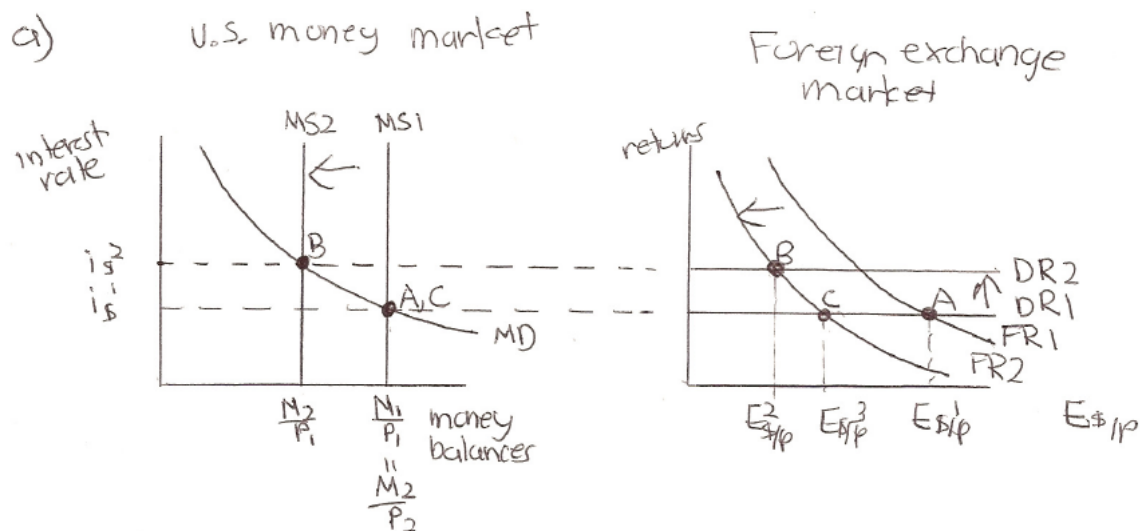
Midterm Solution Key Economics 160B (fall 2008)

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.

Multiple Choices:

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

Problem 1: Overshooting

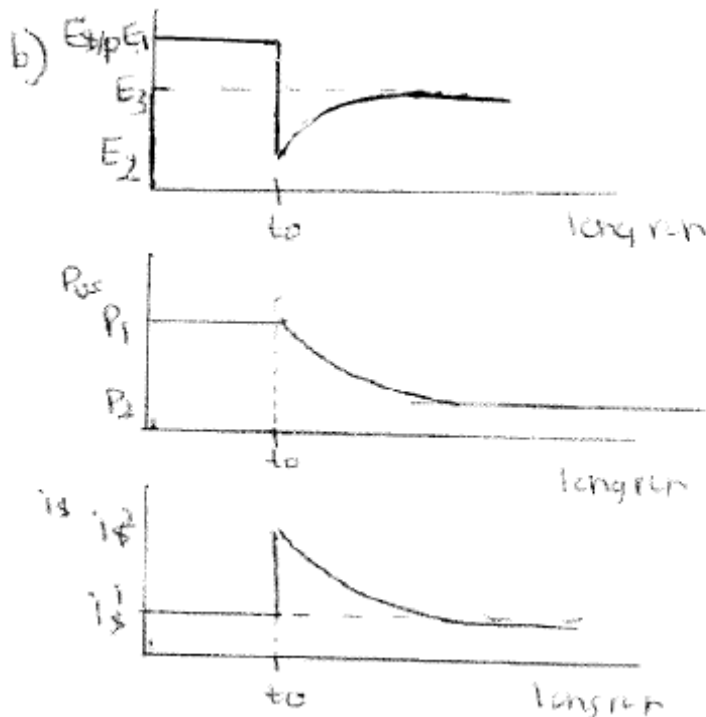


MS is U.S. money supply
 MD is U.S. money demand
 DR is domestic returns
 FR is foreign returns

The fall in nominal money supply lowers real money supply under sticky prices, so MS curve shifts left.

Since this raises the U.S. interest rate, it shifts the domestic returns curve upward.

Because the permanent fall in nominal money supply leads to a lower expected future exchange rate ($\downarrow E_{\$/p}^e$) this shifts the foreign returns curve left.



Problem 2: Interest Rate Parity and Purchasing Power Parities

a) Using relative PPP: $(E_{kr/pd}^e - E_{kr/pd}) / E_{kr/pd} = \Pi_{DK}^e - \Pi_{UK}^e =$
2% (version A), 1% (version B), 3% (version C)
 The krone is expected to fall in value.

b) Using UIP:

$$i_{DK} = i_{UK} + (E_{kr/pd}^e - E_{kr/pd}) / E_{kr/pd}$$

version A: $0.05 = i_{UK} + 0.02$, So $i_{UK} = \underline{0.03}$
 version B: $0.06 = i_{UK} + 0.01$, So $i_{UK} = \underline{0.05}$
 version C: $0.07 = i_{UK} + 0.03$, So $i_{UK} = \underline{0.04}$

It also could be possible to back this out using real interest rate parity together with the Fisher relation (you would need to show the work).

c) According to real interest rate parity, the real interest rate in the UK must equal that in Denmark, which is 1% (version A); 2% (version B); 5% (version C).

d) Not enough information.

Although we know this will equal the expected future spot rate, we cannot compute a value for this with the given information.

Problem 3: Monetary approach to exchange rates

a)

$$\underbrace{\frac{\Delta E_{\$/\text{€},t}}{E_{\$/\text{€},t}}}_{\text{rate of depreciation of the nominal exchange rate}} = \underbrace{(\mu_{US,t} - \mu_{E,t})}_{\text{differential in nominal money supply growth rates}} - \underbrace{(g_{US,t} - g_{E,t})}_{\text{differential in real output growth rates}}$$

- b) If foreign money supply is rising faster than the U.S. money supply, this could make the value of the dollar rise relative to the euro. Or if foreign income growth is even lower in Europe than in the US, that is the recession is worse in Europe than here, this would lower money demand growth more in Europe and could cause the dollar to appreciate.
- c) If either of the explanations above is the real reason the dollar is appreciating, it would imply that the inflation rate would be higher in Europe than the U.S.

Problem 4: NIA and BOP Accounts

- a) The difference between the GDP and GNI is the net factor income from abroad, NFIA. Kuwaiti citizens and government own many assets in foreign countries, and the earnings on these assets are paid to Kuwait. This raises the income that Kuwaitis can use for expenditure above the level of production within the country.
- b) $NFIA = GNI - GDP > 0$. NFIA measures the flow of income from abroad to Kuwait, arising from its holdings of foreign assets.

$TB = CA - NFIA - NUT = 0 - NFIA - 0 < 0$. If the country is running a zero current account balance, then it must be spending its net income from abroad on net imports of goods and services from abroad.

Financial account = - (current account) = 0

- c) Recall the identity $GNI = GNE + CA = (C + I + G) + (NFIA + TB) = GDP + NFIA$. The country is able to pay for more gross national expenditure (C+I+G) than its GDP can pay for, because its GNI is high and it has income from abroad. So it can afford a higher standard of living measured in terms of expenditure.