TUTORIAL 12
(Week 13)

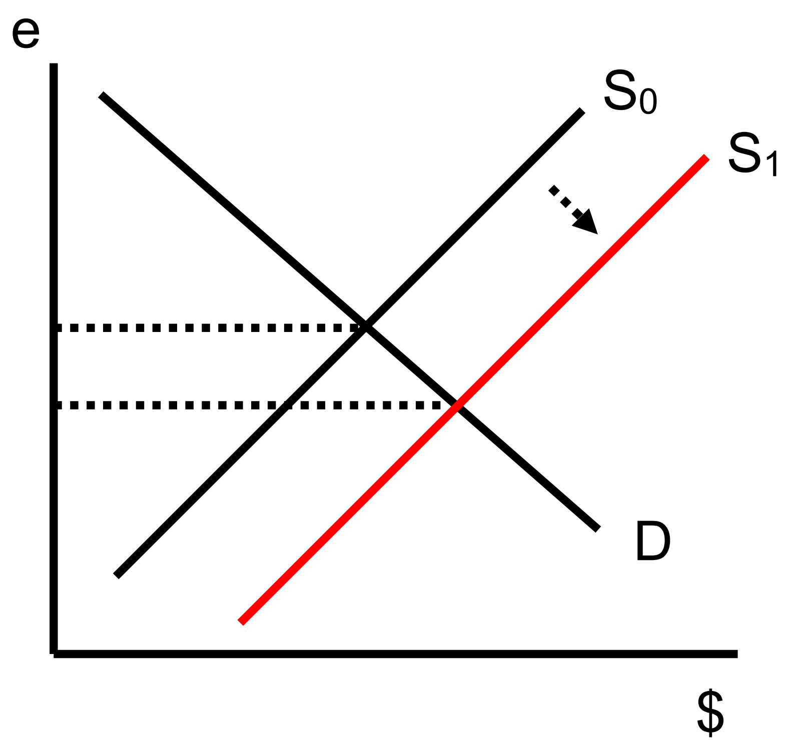
READING GUIDE: Review Chapter 18 (Chapters 16 of BOF 4e). You should also look over your lecture notes for Week 12.

KEY CONCEPTS: FIXED EXCHANGE RATE; FUNDAMENTAL VALUE OF THE EXCHANGE RATE; SPECULATIVE ATTACKS; SAVING, INVESTMENT AND THE CURRENT ACCOUNT; CAPITAL FLOWS; TWIN DEFICITS HYPOTHESIS.

PROBLEMS

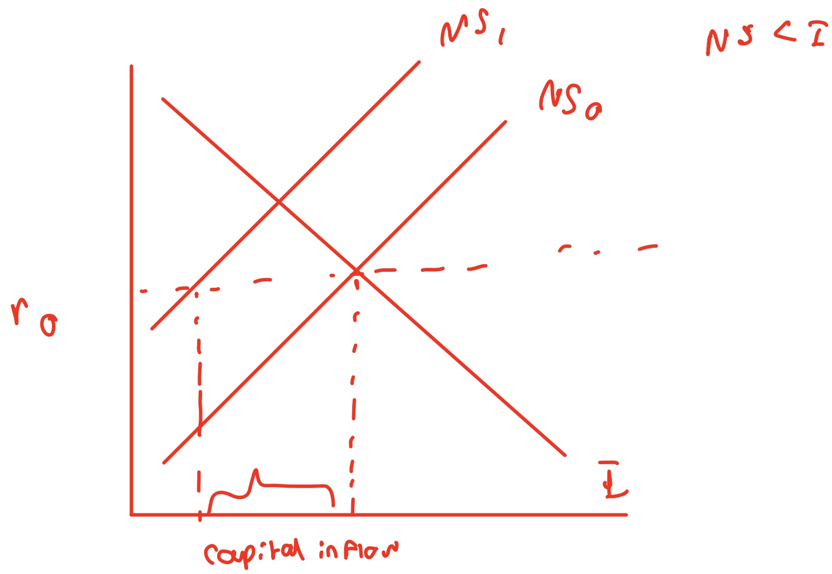
1. Use a demand and supply diagram to illustrate the effects of a speculative attack on an overvalued exchange rate.

depreciation

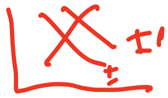


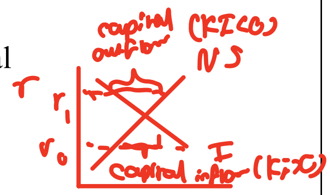
If speculators expect a deprecation next week, they can make money by selling the $ today while the price is high (after all, they can always buy it back next week at the lower price).

Ways to respond to overvaluation include devaluation, imposing restrictions on trade and capital flows, using international reserves to buy back the excess supply of domestic currency, and tightening monetary policy in order to increase the fundamental value of the exchange rate.



NS1
NS0
NS < I
r0
I
capital inflow





2. Use a diagram to illustrate the effects of each of the following on the capital investment of a country that is a net borrower from abroad.
   a. Investment opportunities improve owing to new technologies.
   b. The government budget deficit rises.
   c. Domestic citizens decide to save more
   d. Foreign investors believe that the riskiness of lending to the country has increased.

S I

a. Shifts I curve to the right, increasing capital inflows via upward pressure on the domestic real interest rate (upward movement along the KI curve). The quantity of investment rises, but the rise partially offset by a higher domestic real interest rate.

b. Shifts the NS curve to the left, increasing capital inflows via upward pressure on the domestic real interest rate (upward movement along the KI curve). The quantity of investment falls given the higher domestic real interest rate, but not by much given the increased capital inflows.

c. Opposite of the answer in b above.

d. Lowers the amount of capital inflows at any given domestic real interest rate (shift left in the KI curve), putting upward pressure on the domestic real interest rate to maintain capital inflows (upward movement along the new KI curve). The quantity of investment falls given the higher domestic real interest rate.

3. How does each of the following transactions affect (1) the current account balance and (2) the capital account balance for Australia? Show that in each case the identity that the trade balance plus net capital inflows equals zero applies.
   a. An Australian exporter sells software to Israel. She uses the Israeli shekels received to buy stock in an Israeli company.
   b. An East Timorese firm uses proceeds from its sale of oil to Australia to buy Australian government bonds
   c. An East Timorese firm uses proceeds from its sale of oil to Australia to buy oil-drilling equipment from an Australian firm
   d. An East Timorese firm receives Australian dollars from selling oil to Australia. A French firm accepts the dollars as payment for drilling equipment. The French firm uses the dollars to buy Australian government bonds.
   e. A British financial investor writes a cheque on his bank account in New York to purchase AMP shares.

a. software sale to Israel => current a/c credit
purchase of Israeli shares => capital account debit

b. oil purchase => current account debit
bond purchase => capital account credit

c. oil purchase => current account debit
sale of drilling equipment => current account credit

d. oil purchase => current account debit
bond sale => capital account credit

increased.

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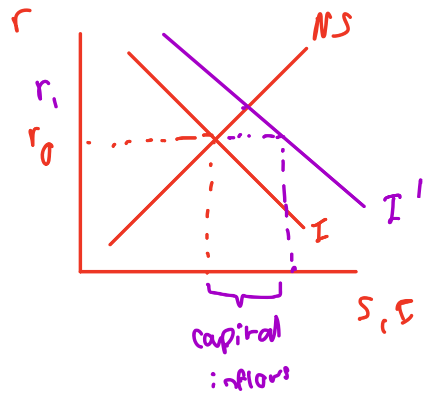
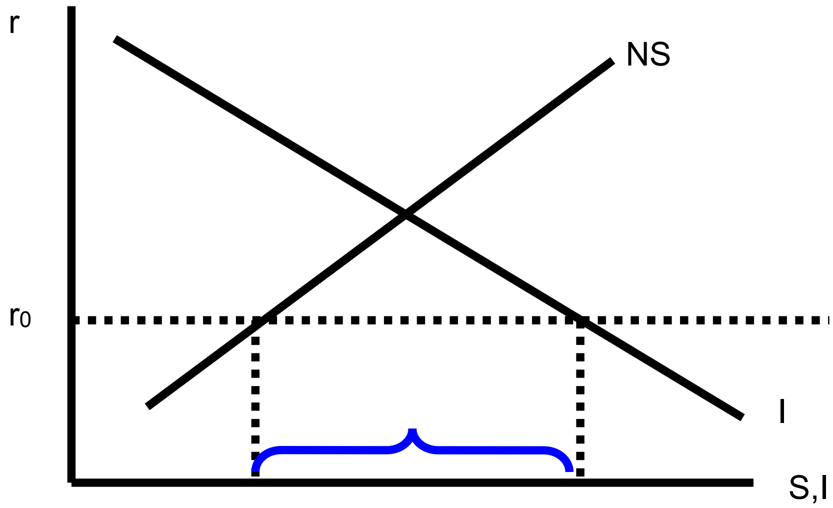
3. How does each of the following transactions affect (1) the current account balance



NS < I

e. shares bought => capital account credit
shares move overseas => capital account debit

4. Explain why "a low-saving, high-spending country is likely to import more than a high-saving country".



Capital Inflow: Capital a/c surplus & current account deficit

As shown in the diagram above, such a country (a small open economy) has a higher level of domestic interest rates than the world rate, and hence causes a divergence between I and NS (national savings), reflecting current account deficits.

5. What are the advantages and disadvantages of flexible vs. fixed exchange rate system? Is one exchange rate system superior to the other? Discuss.

CASES FOR FLEXIBLE E.R. SYSTEM

- **In the medium and the long run, insulates the economy from external shocks (e.g. foreign inflation shocks) as the flexible exchange rate absorbs such shocks. This can be seen from the equation that changes in e = the differential between foreign and domestic inflation.**
- **monetary authorities are free to pursue other goals, e.g. inflation or full employment.**

CASES FOR FIXED E.R. SYSTEM

- **minimise exchange rate uncertainty and lowers transaction costs by promoting certainty.**
- **advocates are of belief that exchange rate markets are frequently subject to *destabilising speculation*. That is, demand and supply forces reflect speculative forces, rather than fundamentals.**
- **Some benefits of a "common currency" if every country follows.**

In general, flexible exchange rates are preferable <u>except</u> when:

- ▲ **A group of countries is tightly integrated, they experience similar real shocks, and/or there is high factor mobility between them.**
- ▲ **A central bank (or policymakers lacking internal discipline) cannot be trusted.**

Note that advantages of flexible ER system are disadvantages of a fixed ER system and vice versa.

Extension Problems:

BOF Chapter 18 page (Chapter 16 page 469 of BOF 4e). Problems 3 and 4.

3. a. The I line shifts to the right, raising the equilibrium real interest and level of investment.

b. The S + KI line shifts to the left, raising the equilibrium real interest rate and lowering the level of investment.

c. The S + KI line shifts to the right, lowering the equilibrium real interest rate and raising the level of investment.

d. The S + KI line shifts to the left, raising the equilibrium real interest rate and lowering the level of investment.

4. a. Set S + KI + I => r = 0.05, S = 1600, KI = 200, I = 1800

b. r = 0.06, S = 1500, KI = 260, I = 1760

c. r = 0.10, S = 1700, KI = –100, I = 1600