Problem set 8

1) A classical model of balance of payment crisis

Consider a small open economy which is pegging its exchange rate to the foreign currency at the level $\overline{e}$. There is perfect foresight. Assume that the domestic central bank allows the amount of domestic credit DC to expand steadily and that it will let the exchange rate float freely forever if its foreign reserves FX falls to zero. Assume also that the central bank will defend the peg by selling reserves as long as it has any to sell.

a) If the domestic credit is expanding constantly at rate μ, what is the time path of the stock of foreign reserves held by the Central Bank?

Can the peg be sustained forever?

b) Give the definition of shadow exchange rate. By using uncovered interest parity condition and purchasing power parity express the shadow exchange rate as a function of domestic monetary stances. Derive the time path of the shadow exchange rate and graph it.

c) Explain why the speculative attack will occur when the shadow exchange rate is equal to $\overline{e}$.

d) What happens to the money market at the time of the attack? Explain carefully.

e) Is this a good model for explaining the Asian Crisis? Why not?