Financial Integration and Crises

Sample exam questions

Short questions

1 What are the differences and similarities between first and second generations approaches to currency crises?

2 Explain the channels through which a depreciation of the US dollar exchange rate is beneficial from the external sustainability perspective of the United States

3 Suppose a country has a fixed exchange rate, but is also pursuing expansionary monetary policy (i.e., it is expanding domestic credit). What will happen to the stock of foreign exchange reserves? Is the fixed exchange rate regime sustainable? Articulate your answer by refereeing to the Krugman's (1978) model.

4 The Swiss National Bank (SNB) introduced a pegged exchange rate between the Swiss franc and the Euro in 2011 at 1.20 Swiss francs per Euro. In January 2015, the Swiss authorities decided to abandon the peg. Which model of currency crises could be used to rationalize the SNB's decision?

5 To what extent global imbalances are relevant to understand the causes of the global financial crisis?

Long Questions

INTERTEMPORAL MODEL

Consider a small open endowment economy, which consumes a single tradable good and lasts two periods 1 and 2. The representative consumer maximises $U = u(C_1) + \beta u(C_2)$ where C_1 and C_2 are the consumption level in periods 1 and 2 respectively, and β is the subjective discount factor. The endowments of periods 1 and 2 are Y_1 and Y_2 respectively, and $u(C_i) = \ln C_i$, where i denotes the index that refers to periods 1 and 2. The real interest rate for borrowing or lending in the world capital market is r.

i) The country can borrow and lend at the world interest rate r. Write down the intertemporal budget constraint and the maximisation problem of the representative consumer. Derive the Euler equation and interpret it.

ii) From now on assume that $Y_1 = \bar{Y}$ and $Y_2 = 3\bar{Y}$. Derive the consumption levels C_1 and C_2 as a function of r, β and $\bar{Y}$.

iii) Define and compute the autarky interest rate for this economy. Suppose that the world interest rate is $1 + r = 1/\beta$ (this assumption will hold only for part iii) and iv) of this question). Is the autarky interest rate higher or lower than the world interest rate? What is the comparative advantage of our small open economy? Do you expect a current account surplus or deficit in the first period? Why?

iv) Consider now the situation in which capital markets are imperfect and foreigners are willing to lend to the home economy up to a certain limit. Suppose that $B_2 \geq -1/2(\beta Y/(1+\beta))$. Determine the level of consumption in period 1 and the current account.

v) Consider now a two-country world. Foreign consumer maximises $U = \ln(C_1^*) + \beta \ln(C_2^*)$ where C_1^* and C_2^* are the foreign consumption levels in periods 1 and 2 respectively, and β is the subjective discount factor. The endowments of periods 1 and 2 are $Y_1^* = 2\bar{Y}$ and $Y_2^* = \bar{Y}$ respectively. Foreigners do not face any borrowing limit. Compute the world interest rate.

vi) Suppose now that the home economy borrowing constraint becomes $B_2 \geq -k/2(\beta Y/(1+\beta))$ where k is a parameter such that $0<k<1$. You can think about this situation as the case in which the home economy is subject to a deleveraging process. Determine the new level of consumption for the home and foreign economy and the new equilibrium value of the real interest rate. For which value of k, the real interest rate becomes negative?