University of California, Davis
Department of Economics
International Macroeconomics

Date: July 5, 2007
Time: 3 hours
Reading Time 20 minutes

PRELIMINARY EXAMINATION FOR THE Ph.D. DEGREE

Instructions: Answer question 1 and any 2 of the remaining 3 questions (so answer 3 questions total).

Question 1: Intertemporal Current Account and International Comovement

Suppose a symmetric two-country, two-period world economy. There is one perishable good used for consumption, and each country receives an endowment of this good each period. The two-period utility function of the representative home household is:

$$U = \log C_1 + \beta \log C_2$$

where C_1 represents consumption in period 1 and C_2 represents consumption in period 2. The foreign utility function is identical, where foreign variables are indicated by a *. Home endowment is Y_1 in period 1 and Y_2 in period 2; foreign endowment is Y_1^* in period 1 and Y_2^* in period 2. Assume that both countries have identical constant endowments $Y_1 = Y_2 = Y_1^* = Y_2^*$ unless told otherwise. Households can trade goods freely across borders, and they can also trade a one-period non-contingent bond, purchased in period 1 for 1 unit of the consumption good, which pays off 1 + *r* units of the good in period 2. There is no government spending or investment. Assume there is no bond holding prior to period 1. Assume perfect foresight.

(a) Find the intertemporal first order condition for the home country, and solve for the consumption function, as a function of the home endowments and the world real interest rate (r).

(b) Solve for an expression for the equilibrium world real interest rate, as a function of endowment levels.

(c) For each of the following shocks, state whether it will cause the equilibrium values of the following four variables to be higher relative to the case of no shocks, be lower, or not change: $r, C_1, C_1^*,$ and the current account of the home country in period 1.
   i) home output in period 1 rises
   ii) home output in periods 1 and 2 rise by the same amount
   iii) foreign output in period 2 rises

(d) Does the rise in foreign output in part (iii) above raise or lower home country welfare as measured by utility? Discuss how you know.

(e) Define the Consumption Correlation Puzzle. Discuss the ability of the model above to address it.

Question 2: Purchasing Power Parity

(a) In 3-4 paragraphs, summarize the main methods and conclusions of the literature testing purchasing power parity (PPP). Cite key papers in this literature.

(b) Why do you think many open economy macroeconomists want to believe in Purchasing Power Parity (PPP)? Describe the role that PPP plays in at least two prominent open economy models. (For example, choose a model of exchange rate determination and a model of monetary policy transmission, both of which rely on PPP.)

(c) Explain in detail the Balassa-Samuelson theory for why PPP might fail in the data.

Question 3: Currency Crisis

The Asian financial crisis caused (almost) all currencies in East Asia to depreciate significantly against the US $, and output growth in 1998 to be mostly negative.

(a) Explain the mechanics of the collapse according to the competing explanations of the crisis. (Hint: If the system had collapsed because of internal weaknesses, what were the first components that cracked? If the system had collapsed because of external shock, then what was the exogenous shock and the propagation mechanism?)

(b) Evaluate the merits and weaknesses of two competing explanations of the crisis.

(c) Propose eight specific steps that would prevent, or reduce the blunt of, future crises.

Question 4: Choice of Exchange Rates and Exchange Rate Regime

(a) Robert Mundell, a recent Nobel Prize winner in Economics, advocates that the world returns to the gold standard that existed before World War I. What do you think?

(b) Were the defects of the Bretton Woods System of Pegged Exchange Rates identified by Milton Friedman in 1950 the primary reasons why the system ended in 1973?

(c) The bilateral DM-US$ exchange rate and the bilateral Yen-US$ exchange rate have behaved like random-walks for most of the period after 1973. Does such randomness indicate that the foreign exchange markets are inefficient processors of information, and that we ought to return to some kind of fixed exchange rate system?