University of California, Davis
Department of Economics
International Macroeconomics

Date: July 7, 2005
Time: 3 hours
Reading Time 20 minutes

**PRELIMINARY EXAMINATION FOR THE Ph.D. DEGREE**

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Instructions: Answer 3 of the following 4 questions.

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**Question 1:**

(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?

**Question 2:**

Consider a representative agent problem for a small open economy. The household receives an exogenous endowment of the single type of good ($Y$). It can save only in the form of a real riskless bond paying a fixed return $r = 1/\beta - 1$. The government finances exogenous purchases ($G$) out of exogenous lump sum taxes ($T$) and issuing debt ($D$) for which it pays interest rate $r$. Assume the usual transversality and no Ponzi conditions. Here is the household problem:

$$\textbf{Max} \quad E_t \sum_{s=t}^{\infty} \beta^{s-t} U(C_s)$$

$$\textbf{s.t.} \quad B_{s+1} - B_s = Y_s + rB_s - C_s - T_s$$

$$\textbf{where} \quad U(C_s) = C_s - \frac{1}{2} C_s^2 \qquad 0 < C_s < 1$$

Here is the government budget constraint:

$$T_t = G_t + rD_t - (D_{t+1} - D_t)$$

(a) Derive first order conditions for the household problem and solve for consumption and current account as functions of current and future changes in the exogenous variables.

(b) What happens to **consumption** and the **current account** in the present period under the following scenarios? Give magnitudes and directions of changes.
   i) a temporary rise in output endowment by 100 units this period only.
   ii) a permanent rise in government purchases and taxes by 100 units beginning this period.
   iii) a temporary cut in taxes by 100 units this period, with a rise in taxes two periods in the future to pay off the additional government debt with interest.
   iv) a temporary cut in taxes this period by 100 units, with a fall in government purchases next period sufficient to pay off the additional government debt with interest.

(c) i) Explain the "twin deficits hypothesis." Under which scenarios above (i-iv) is it satisfied?
   ii) Suppose there were a temporary rise in the exogenous world interest rate ($r$). Explain the effect this would have on the current account (rise, fall, ambiguous), assuming that the government is a net debtor, but the country has a positive net foreign asset position. Could this scenario satisfy the twin deficits hypothesis?

**Question 3:**

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 six specific steps that would prevent, or reduce the blunt of, future crises.

**Question 4:**

(a) List briefly the main stylized facts on quantities characterizing the international comovement in business cycles (output, productivity, employment, consumption…).

(b) Discuss as many of the theoretical explanations for the "consumption correlation puzzle" as you can (one paragraph each). Note any special assumptions the explanation depends upon.

(c) In 2-3 paragraphs, use the quantity facts above and other facts you may know (such as facts about prices) to draw a conclusion about the degree of international integration in goods markets.