University of California, Davis
Department of Economics
International Macroeconomics

Date: June 24, 2003
Time: 3 hours
Reading Time: 20 minutes

PRELIMINARY EXAMINATION FOR THE Ph.D. DEGREE

Please answer a total of 4 questions.

Part 1

Question 1
(a) What are the elements in the link between the domestic interest rate and the world interest rate? How does tight interest rate linkage constrain policy-making in a small open economy?

(b) Take the case of a short-term macroeconomic model. What happens if a 20 percent depreciation of the domestic currency is widely believed to occur in the next year? A diagrammatic solution would suffice.

Question 2
(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 3
(a) Evaluate the different explanations that have been advanced to explain the 1994-95 Latin American currency crises and the 1997-98 Asian currency crises. Use empirical evidence as far as possible to support your analysis.

(b) What lessons do you draw from the above crises for domestic economic management and for international monetary reforms?

Part 2

Question 4
Consider a representative agent problem for a small open economy. The country receives an exogenous endowment of the single type of good (Y), and the country can save only in the form of a real riskless bond paying a fixed return $r = \frac{1}{\beta} - 1$. Investment (I) and government purchases (G) are exogenous. Assume the usual transversality condition.

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

$$s.t. \quad B_{s+1} - B_s = Y_s + rB_s - C_s - I_s - G_s \equiv CA_s$$

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

(a) Derive first order conditions and solve for the current account as a function of current and future changes in net output ($NO = Y - I - G$).

(b) What happens to the current account in the present period under the following scenarios? Give magnitudes and directions of changes.
 (i) a permanent rise in output endowment by 1 unit beginning this period.
 (ii) a temporary rise in government purchases by 1 unit this period only.
 (iii) a permanent rise in output endowment by 1 unit that is anticipated to begin **next** period.
 (iv) a temporary rise in government purchases by 1 unit that begins this period and is expected to last for a total of two periods.

(c) In 2-3 paragraphs discuss the main results of the empirical literature testing the intertemporal approach to the current account.

Question 5
Dornbusch proposed his classic theory of **exchange rate overshooting** as an explanation for the high degree of nominal exchange rate volatility observed, in the context of monetary shocks and price rigidity.

a) To what degree is this exchange rate overshooting supported in the empirical literature using vector autoregressions?

b) To what degree do New Open Economy macro models with price stickiness replicate this phenomenon?

Question 6
 Evaluate the following as a theoretical proposition, in the context of monetary models with price stickiness and microeconomic foundations. "Fixed exchange rate regimes can be beneficial because by eliminating exchange rate volatility, they will promote international trade in goods." Be specific in your arguments.