Department of Economics Spring 2005
University of California, Berkeley Econ 182

Economics 182-INTERNATIONAL MONETARY ECONOMICS
Problem Set IV

Due in class on Tuesday, March 29.
To be handed directly to your GSI.

1. *(fixed exchange rates)* Suppose the central bank of a small open economy has foreign government bond holdings worth 1600 and domestic government bond holdings worth 2400. Assume the central bank maintains a fixed exchange rate of E_0 and wants to maintain the peg. If the country has been running persistent official-settlements-balance deficits (i.e., "balance-of-payments" deficits), explain what kind of pressure would mount on the currency. How does the central bank respond to this situation? After taking action, will its reserves be greater, less than, or equal to 1600? What would be the effect on the money supply, output, and domestic interest rates? If the economy is in a mild recession, do policymakers face any problems in implementing their response to the balance-of-payments deficit? Explain.

2. *(sterilization)* Suppose the central bank decides to *sterilize* its foreign-exchange intervention. Answer question 1 once more. Also, will the central bank's domestic assets be greater, less than, or equal to 2400?

3. Discuss the following statement: *Balance-of-payments crises are the fault of the government. Irresponsible politicians routinely neglect external constraints and engage in reckless policies that undermine the commitment to fix the currency's value.*

4. *(thought question)* Venezuela has had its government debt rating downgraded. The following is an excerpt from the Financial Times, Feb. 6, 2002.

Venezuela's current macroeconomic policy framework – characterized by policy stimulus in the context of a crawling-peg exchange rate – is hitting its limits, as lower oil prices and capital flight (resulting from concerns about domestic politics and economic policy) pressure reserves. In 2001, in spite of a current account surplus of US$ 4.4 billion (which Fitch believes will move to deficit in 2002), foreign exchange reserves fell by US$ 1.9 billion. Nevertheless, Fitch Rating's " external liquidity ratio", which measures a country's foreign exchange reserves relative to its needs, reached an estimated 228% at the end of 2001, one of the strongest ratios among Latin American and other sub-investment grade credits. Yet if oil prices remain low, the government's access to domestic and international capital markets remains constrained, and if capital flight continues at the present rate, then the liquidity ratio could fall to as low as 97% at year's end. In this environment, the government's willingness to service debt would be tested.

What does the journalist imply might occur by stating that "the government's willingness to service debt would be tested"? In your view, should Venezuela abandon the currency peg? How might abandoning the exchange parity help or hurt?

5. (*floating rates revisited*) You read the following statement in the newspaper. Explain whether you agree and why or why not.

> (a) "The Federal Reserve Board left interest rates unchanged at its last meeting. However, the members of the Fed Open Market Committee indicated a bias towards easing monetary policy in the future. The dollar depreciated against the euro."
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> (b) "If the United States wages a short but expensive abroad, fiscal expenditures will run high. We should expect an appreciation of the dollar, but no change in output."

6. (*exchange-rate bands and the interest rate*) We observed in the class that "fixed" exchange-rate systems can result, not in absolutely fixed exchange rates, but in narrow bands within which the exchange rate can move. For example, the gold points under the gold standard produce such bands. (Typically those bands were on the order of plus or minus 1 percent of the "central" exchange parity.) The Bretton Woods system also had such bands. To what extent would narrow bands for the exchange rate allow the domestic interest rate to move independently of a foreign rate? Show that the answer depends on the maturity or *term* of the interest rate. To make your argument, assume plus or minus 1 percent bands for the exchange rate and consider, alternatively, rates on three-month deposits, on six-month deposits, and on one-year deposits. With such narrow bands, would there be much scope for independence in 10-year interest rates?