The PP542 midterm exam will consist of two questions. The first question will be chosen from among the three listed below; the second question will not be available in advance. The midterm exam will be offered on Wednesday, February 17th, during our regularly scheduled class. Please come to the exam with only a pen or pencil. Students are not permitted to consult notes, books or any other materials during the exam.

You are welcome to work with other members of the class on pre-exam preparation. Effective answers will be concise, well-organized and focused.

1. Public sector borrowers, from the State of Michigan to the World Bank, face the choice of borrowing in many international centers (New York, London, Tokyo for example) and in many combinations of currencies. Recently a controversy has arisen within the World Bank's investment department between two positions, whose extremes can be stated as follows:

   Position 1: Borrow in the currency where the nominal interest rate is lowest.
   Position 2: It doesn't matter which currency you borrow in because the exchange markets are efficient.

   Explain the logic behind each position and present your own advice to the Bank.

2. Assume that the Bank of Japan (BOJ) announces a permanent increase in the Japanese money supply. Assume also that the Japanese real national income is unchanged and that Japanese prices are slow to adjust to changes in monetary policy.

   a) Describe the likely short-run effects of the permanent expansion in the money supply on the nominal interest rate in Japan and the value of the yen relative to the dollar.
   b) Describe the likely long-run effects of the permanent expansion in the money supply on the nominal interest rate, the real money supply, the price level, and the nominal value of the currency.
   c) What is likely to happen to the expected real interest rate (which is approximately the nominal interest rate minus expected inflation) in the transition to the long-run?
   d) In reality, the BOJ has been expanding the Japanese money supply almost continuously for a number of years, yet the value of the yen has not always changed in the expected direction. What might explain why the model has not worked well for Japan?
   e) How would your answers to parts (a) and (b) change if instead of Japan we were analyzing a country with a history of high inflation, (so that prices quickly adjust to changes in monetary policy)?

3. In our discussion of short-run exchange rate overshooting, we assumed that real output was given. Assume instead that an increase in the money supply raises real output in the short run.

   a) How does this affect the extent to which the exchange rate overshoots when the money supply first increases?
   b) Under what circumstances (if any) is it likely that the exchange rate undershoots when the money supply first increases?