

## Homework 5

due: Tuesday, December 2, in class

**Problem 1:** The monetary model of the exchange rate.

- a) Depict the uncovered interest parity and the money market equilibrium in a diagram with returns on the horizontal axis, the exchange rate to the North, and real money to the South. Define and explain all curves (and lines) in your diagram.
- b) Analyze the effects that monetary policy (say an increase in the money supply) and fiscal policy (of the expansionary type) have on the exchange rate in the short run.
- c) Suppose the central bank wants to fix the exchange rate. Explain how it needs to use monetary policy to achieve this goal. What does this imply for the availability of monetary policy for other purposes?

**Problem 2:** Exchange rate over-shooting.

- a) Suppose the central bank announces a permanent increase in the domestic money supply. Explain graphically how this policy leads to exchange rate over-shooting if prices are sticky.
- b) Depict the time paths for money supply, the interest rate, the price level, as well as the exchange rate, and explain intuitively why the exchange rate over-shoots.
- c) Suppose alternatively that the *foreign* central bank increases its money supply. Using the same diagrams as under b), describe how this affects the exchange between the two countries.