Masters Macroeconomics Fall 2015

Homework Assignment #8 Due: 2 December

1. The open-economy *IS** and *LM** curves (assuming zero expected inflation) are given by

$$IS^*: \quad Y = C(Y-T) + I(r^*) + G + NX(eP/P^*)$$
$$LM^*: \quad M/P = L(r^*, Y)$$

a. If the exchange rate floats, what effect will an increase in the domestic price level (all other things equal) have on the *IS** and *LM** curves?
b. What will be the effect on Y, r, C, I, e, and NX?
c. How, if at all, would your answer be different if the exchange rate were fixed?
d. Does the implied aggregate-demand curve slope downward in both cases?

2. In troubled times, the exchange rate of "safe-haven" currencies such as the Swiss franc can rise sharply (if they are allowed to float). Worried international investors seem to be willing to accept a lower rate of return in such countries than in others. Evaluate the impact of being a safe-haven small open economy with a floating exchange rate. What problems might arise for the domestic economy when a world-wide crisis causes money to flow into the country? Switzerland switched from a floating to a fixed exchange rate in 2010. Would this improve the prospects for the Swiss economy? Explain.

3. In the section on "Differentials in the Mundell-Fleming Model," Mankiw introduces a risk premium θ on the domestic interest rate so that the interest-rate parity condition becomes $r = r^* + \theta$. Greece has been close to default on its government debt several times in recent years, leading to a high value of θ.

a. Use the *IS*/LM** model to show the effects of an increase in the risk premium on Greek output and interest rate, given that as a member of the Euro Zone Greece has a fixed exchange rate.
b. The rise in θ affects the Greek government's budget in two ways: directly by changing the interest rate on government bonds and indirectly by the effect that changing Y will have on T. Is the increase in the risk premium causing larger or smaller government deficits for Greece? Why?
c. Calls for austerity by international lenders have forced Greece to raise taxes and curtail government spending. Use the model to show the effects that these changes in fiscal policy will have on the Greek economy if there is no change in the risk premium.
d. Now suppose that austerity succeeds in restoring confidence in the Greek economy so that the risk premium falls. In this case, is it possible that austerity could stimulate the economy? Explain.

4. Use the Mundell-Fleming model to analyze the effect of an increase in trade barriers such as tariffs on output, the exchange rate, imports, and exports in the short run when prices are assumed to be constant …

a. … if the exchange rate floats.
b. … if the exchange rate is fixed.