Problem Set #5: Due end of class December 4, 2018

You may discuss this problem set with your classmates, but everything you turn in must be your own work.

1. This question deals with liquidity traps.
   (a) What set of circumstances causes a liquidity trap?
   (b) On an IS-LM figure, demonstrate the liquidity trap.
   (c) Why can't the nominal interest rate be negative?
   (d) What can policy makers do to end a liquidity trap?

2. How do economic integration and economic similarity shape the costs and benefits of a fixed exchange rate?

3. Suppose Latvia and Denmark both peg their exchange rates to the Euro.
   (a) Denmark is in an equilibrium in which $Y = \bar{Y}$, where $\bar{Y}$ is the target output level. Latvia is suffering from leftward shift in IS which puts its equilibrium output below its target output level. Use an IS-LM figure for each country to show this situation.
   (b) Suppose Latvia chooses to devalue its exchange rate against the Euro. Show the effect on your figures from part (a).
   (c) How is Denmark affected by Latvia's choice? Explain your answer.

4. Why did the gold standard collapse during World Wars I and II? Use your answer from question 2 to help shape your answer.

5. The home country unilaterally fixes its exchange rate to the dollar. The home central bank holds domestic bonds and dollars, lends to domestic banks, and issues the foreign currency.
   (a) Suppose that home country political uncertainty has led to an increase in the odds that the country will default. What is the effect of this change on the central bank's balance sheet? Use the appropriate diagrams to support your answer.
   (b) Define the backing ratio. Has it increased or decreased?

6. We often see banking crises and currency crises occurring together. How might a banking crisis (many illiquid or insolvent banks) increase the likelihood of a currency crisis occurring?