Econ 434 Professor Ickes

Fall 2009

Homework Assignment #3: Answer Sheet

This assignment is due on Thursday, December 10, 2009, at the beginning of class (or sooner).

1. Consider the graphical model of the gold standard. Analyze graphically (be sure to distinguish impact effects from long-run effects. Assume the economy started in full equilibrium) what happens to the price level and the stock of gold if:

   (a) there is a rise in foreign income.

   (b) credit cards reduce the need for money in making transactions

   (c) technological progress in foreign lands increases productivity in the rest of the world

   (d) a tariff on imported goods is imposed.

   (e) silver is to be coined at a rate of ϕ per unit of gold (that is one ounce of silver is now worth ϕ ounces of gold).

2. Suppose that an economy deliberately fixes its exchange rate at a value that gives it a competitive advantage in world markets (whatever this means). What would you expect would happen to the demand for its currency in world markets? Explain.

   (a) Can the economy maintain a permanent competitive advantage? To answer this, you may use the gold standard model to fix ideas.

   (b) If the economy is open to capital flows does this make it easier or more difficult to maintain a competitive advantage? Explain.

3. In spite of the flaws of the pre-1914 gold standard, exchange rates crises were rare for major European powers, the U.S., and Japan. In contrast, such changes became quite frequent in the interwar period. Can you think of reasons for this contrast?

4. Under a gold standard, countries may adopt excessively contractionary monetary policies as all countries compete for a larger share of the limited supply of world gold reserves.

   (a) What happens if a country tries to do this in isolation? What happens if all countries try to do this?

   (b) Can the same problem arise under a reserve currency standard (that is, where countries fix their currencies relative to a reserve currency like the pound or dollar) when bonds denominated in different currencies are all perfect substitutes?

5. Suppose that Caledonia is on the gold standard and that interest rates suddenly fall below the world rate (perhaps the economy has gone into recession). What would happen to the stock of gold in Caledonia in the short run?
    (a) If Caledonia operates according to the rules of the classical gold standard what happens to the price level? How does Caledonia adjust to a new full equilibrium?
    (b) Now suppose that the Central Bank of Caledonia reacts to offset the immediate impact on stock of gold (they like their initial stock). What would they do? What happens to the domestic economy? Explain.
6. Consider a small open economy with a flexible exchange rate. Explain what happens to the exchange rate, and if it will overshoot or not if:
    (a) the money supply contracts
    (b) there is a fiscal expansion
    (c) the world interest rate decreases
    (d) the foreign price level rises
7. Compare and contrast the effectiveness of fiscal policy to stabilize output if:
    (a) the exchange rate is fixed and there is no zero capital mobility
    (b) the exchange rate is fixed and there is perfect capital mobility
    (c) the exchange rate is flexible and there is perfect capital mobility
    (d) Re-do a-c but consider the effectiveness of monetary policy.