Economics 304 — Fall 2013

Homework Set #5 — Due: 9am, Friday, November 15

Part A.

Exercises 4, 5, 6, 7, and 10 from B&W's Chapter 11, pp. 284–285.

Part B.

B-1. One of the roles of a central bank is to act as a lender of last resort. During the 1990s, Argentina followed an exchange-rate policy called a currency board, in which each Argentine peso was explicitly backed by one dollar of foreign exchange reserves held by the central bank. In the late 1990s, Argentina's banks began to experience liquidity difficulties (and in some cases solvency problems). Explain why the currency board arrangement made it impossible for the Argentine central bank to provide lender-of-last-resort services to banks.

B-2. Following World War I, both France and England had insufficient gold reserves to back the outstanding amounts of their currencies at the pre-war gold parity. France chose to devalue the franc relative to gold; England chose to restore the pre-war parity between the pound and gold by contracting its money supply. In the 1920s, England suffered a great depression before the Great Depression, while France was relatively prosperous. Explain this outcome in terms of open-economy macroeconomic models.

B-3. One of the difficulties of conducting countercyclical monetary policy is knowing the current value of the natural rate of unemployment. Suppose that the natural rate is initially 4% and the economy is in long-run equilibrium with 1% inflation.

a. Draw a Phillips curve for this economy and show the initial equilibrium point.
b. Suppose that the natural rate of unemployment rises to 5%. Show how the Phillips curve would be affected by this change. Can inflation remain at 1% in the short run and/or long run if there is no change in inflation expectations? What will the unemployment rate be?
c. Now suppose that the central bank mistakenly believes that the natural rate is still 4% and pursues expansionary monetary policy to bring unemployment down to 4%. What will happen to inflation and unemployment in the short run and the long run?
d. If the central bank continues to pursue policies that would drive unemployment down to 4%, what will happen in the long run? Is there an equilibrium inflation rate?
e. The United States is thought to have experienced an increase in the natural unemployment rate in the early 1970s. Can the policy behavior discussed in this problem explain the rise of U.S. inflation during this period? Explain.

B-4. Evaluate the following statement: "The modern theory of the Phillips curve shows that it is possible to reduce inflation without a recession."