Economics 304 Fall 2017

Homework Set #5 Due: 9am, Friday, November 3

Part A.

Exercises 4, the first two sentences of exercise 5 (which should be part of 4), 6, 11, and 12 from B&W's Chapter 11, pp. 300–301.

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 (shortage of reserves to accommodate withdrawals) and in some cases solvency problems (banks' capital or net worth approaching zero or becoming negative). In the United States, illiquid banks can borrow from the Federal Reserve to obtain reserves. Explain why the currency-board arrangement made it impossible for the Argentine central bank to provide lender-of-last-resort services to illiquid banks.

B-2. Under the gold standard, central banks are supposed to keep a fixed reserve of gold to back each unit of currency, buying and selling gold to keep the price of currency in terms of gold (or the price of gold in terms of the currency) fixed. This arrangement ties the amount of monetary base the central bank can issue to its stock of gold.

During World War I, both France and England used a large part of their gold reserves to finance war payments, but did not reduce the outstanding monetary base accordingly. Thus, at the end of the war, both lacked sufficient gold to back the outstanding amounts of their currencies at the pre-war gold price (currency value).

Two choices were possible in this situation: (1) Change the official price of gold, effectively devaluing the currency in terms of gold so that the available gold stock was sufficient to support the devalued monetary base. (2) Maintain the value of the currency (and price of gold) and reduce the monetary base to the appropriate level. 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 monetary base. In the 1920s, England suffered a great depression before the Great Depression, while France was relatively prosperous. Explain this outcome in terms of macroeconomic models.