

EC1B5 | Chapter 15

Open Economy Macroeconomics

Additional Practice Questions:

Book Question 1

Suppose that the European Union follows a flexible exchange rate regime. The exchange rate between the euro (EUR) and the U.S. dollar (USD) is currently 1 EUR = 1.17 USD.

- Use a graph to show the equilibrium in the foreign exchange market with the U.S.-dollar-per-euro exchange rate on the y -axis and the quantity of euros on the x -axis.
- Suppose that due to challenges in the eurozone economic environment, the cost of producing goods in the Eurozone increases sharply. What effect will this have on the exchange rate? Use a graph to explain.

Book Question 4

Using the net exports curve and the labor demand and labor supply curve, explain how a rise in the real exchange rate can lead to a decrease in employment in a country.

Book Question 5

Econia trades with its neighbors, the countries of Governmentia and Sociologia. In Econia, the currency is called the econ; in Governmentia, the currency is called the gov; and in Sociologia, the currency is the soc.

Nominal exchange rates follow:

$$200 \text{ econ} = 1 \text{ gov},$$

$$4 \text{ socs} = 1 \text{ gov},$$

$$100 \text{ econ} = 1 \text{ soc}$$

A good that is produced and consumed in all three countries is the Mack Burger. The price of Macks in the three countries is as follows: one Mack costs 2 govs in Governmentia, 16 socs in Sociologia, and 600 econs in Econia.

- From the perspective of Governmentia, calculate the real exchange rate in Mack between Governmentia and Sociologia, using the nominal exchange rate (4 socs per gov) and prices listed above. Explain in words what the number you calculated means.
- If these three currencies can be freely traded so that their exchange rates are flexible or floating, can the nominal exchange rates listed above persist over time? Why or why not? (Hint: Show that currency traders could make unlimited profits if they could persistently trade at these exchange rates.)

Book Question 8

Since 2008, the dollar has generally appreciated against the euro.

- a. Suppose that in the short run the Fed wanted both to weaken the dollar (that is, stop its appreciation and/or cause it to depreciate) and stimulate investment. Based on what you have learned in this chapter and in Chapter 13, discuss whether the Fed can achieve both of these goals simultaneously through monetary policy.
- b. Suppose instead that the European Central Bank conducts contractionary monetary policy. What is the short-run effect, if any, of this policy on the euro-per-dollar nominal exchange rate and on the real exchange rate between the United States and the eurozone? In your answer regarding the real exchange rate, state any assumptions you are making.

Book Question 9

Thailand and Taiwan are both rapidly growing Asian economies that trade actively with other countries.

- a. Suppose a computer circuit board is the only good produced in Thailand and Taiwan. The circuit board costs 100 baht in Thailand and 200 NT (New Taiwan dollars) in Taiwan. The nominal exchange rate is 2 NT per baht. Calculate the real exchange rate from Thailand's perspective (that is, using Thailand as the domestic economy, so the nominal exchange rate is 2 NT per baht). Show your work. Intuitively, what does this number represent?
- b. The Taiwanese current account with the rest of the world is initially balanced—in other words, it is running neither a deficit nor a surplus. Taiwan alone experiences an economic boom and its real interest rate rises at the same time. Explain the mechanisms by which the Taiwanese current account is affected by its boom and the increase in its real interest rate.
- c. Assume that the change in the value of the NT-per-baht exchange rate was 50 percent, which, depending on your answer in part (b), was either appreciation or depreciation. What is the current nominal exchange rate expressed in NT per baht? Show your work.