Chapter 26 Expectations and Sticky Prices

Question 26.4

Assume that there is no inflation, in the euro area and the US, both currently and in the (expected) future. Furthermore, interest rates in the euro area and the US are equal to each other.

26.4A What is the expected path of the euro-dollar exchange rate?

Suppose now that the US Federal Reserve announces an interest rate rise of 1%, for the coming four years, after which the interest rate will revert to its present rate. The outlook for euro area interest rates remains unchanged.

26.4B What is the percentage change in the euro-dollar exchange rate at the time of the announcement?

In the 1970s, when countries moved from fixed to flexible rate, many economists were surprised by the large fluctuations in exchange rates that followed. Many attributed these fluctuations to irrational financial markets.

26.4C How does the numerical exercise done at B shed light on this issue? Explain.

Question 26.5

You can use the simulation file Question 26-5 for this question. The simulation shows the monetary and goods market equilibria for the euro area.

26.5A What is the interest rate differential between the euro area (home) and the rest of the world (foreign)?

The European central bank is worried that inflationary pressures are increasing. Retail sales have recently been strong and consumer and producer confidence have held up well. Financial markets do not believe that an interest rate rise is necessary, as consensus growth forecasts for the euro area are not that good. The monetary policy committee of the ECB meets and, after intense discussions, decides by a narrow margin that monetary conditions should be tightened, as the narrow majority believes that the risk of inflation is increasing. The money stock therefore goes down.

26.5B What happens immediately after the euro exchange rate after the announcement? Explain.

26.5C What happens to euro area prices immediately after the announcement? Explain.

The central bank decision's impact on the exchange rate causes an outrage among politicians and business leaders. They feel that there is no need for a "strong" euro. Moreover, the unpredictability of the central bank actions has given markets a jolt.

26.5D What lessons can the central bank draw from this critique?

Question 26.6

26.6A How does the Dornbusch model (and other exchange rate models) perform when predicting exchange rates out-of-sample?

26.6B Is it surprising that exchange rates exhibit a random walk?

26.6C Can "rational bubbles" form part of the explanation for the performance power of exchange rate models?

Suppose you are an investor in a currency and in principle trade purely on fundamentals. However, the market is currently experiencing a rational bubble.

26.5D Would it be rational for you to invest as if the future exchange rate will revert to its fundamental level?

Question 26.7

26.7A Calculate the equation for the $\dot{s} = 0$ curve in terms of s(p_h)

26.7B Calculate the equation for the $\dot{p}_h = 0$ curve in terms of s(p_h)

26.7C Calculate the long run equilibrium domestic price p_h and exchange rate s for the Dornbusch model.

26.7D Calculate the exchange rate s_1, which is the exchange rate directly after a monetary disturbance to the Dornbusch model. (Hint: define as s_2 the new long-run equilibrium exchange rate and note that $s_1 + \dot{s} = s_2$)