QUESTIONS - CHAPTER 24 THE MONETARY APPROACH

Question 24.1

24.1A Of which theory is the monetary approach an extension?

24.1B Look at the example of David Hume. What would happen to the British pound if the exchange rate is fully flexible and fully accommodates the described economic shock? The assumptions about price adjustments are important for exchange rate analysis. You can imagine that in practice different economies have different degrees of flexibility.

24.1C What economy would you expect to have relatively flexible prices? Which economy do you expect to have relatively sticky prices?

Question 24.2

The basic monetary model allows us to analyse money hoarding in Germany (home) and France (foreign), who have tied their currencies (the D-mark and Franc) together. Suppose at first that the equilibrium rate of money hoarding is zero.

24.2A Draw in a graph the equilibrium rate of hoarding for Germany and France as a function of money demand.

Now suppose that a new French government is elected. This government wants to improve its competitive position and devalues the Franc with respect to the D-Mark.

24.2B Draw in your graph the short run effects of this policy measure and explain the changes. What are the effects on German and French output?

24.2C Assume that the French adjustment parameter is higher than that of Germany. Show in your graph the long run effects of the French devaluation. What has happened to the price level in Germany and France? Why?

Tired of the French devaluations, the Germans belatedly accept to enter into a monetary union. This however entails a revaluation of the D-mark.

24.2D What are the eventual effects of this revaluation on the German and French price levels?

Question 24.3
24.3A Suppose you are a currency trader specializing in euros and US dollars. You believe that the asset approach to exchange rates is correct and can earn you money. What would your reaction be to the following news items (explain):

- The IMF predicts that the US economy will grow faster than the eurozone
- The ECB unexpectedly hints that it will raise interest rates
- Newly released figures indicate that money growth in the US is faster than in the eurozone
- Inflation in the US is higher than expected

24.3B What is the role of expectations in the monetary model as presented in this chapter?

24.3C What can empirical research tell us about the monetary model?

**Question 24.4**

The J-curve shows that a change in the real effective exchange rate leads on average immediately to a change in the price of imported goods. This may not be valid for every individual imported product however. What does the “J”-curve of an individual imported good look like when the foreign producer (who expresses his price in foreign currency) of that good:

24.4A Is a price taker in the domestic market

24.4B Is a monopolist in the domestic market

24.4C Uses a cost-price mark-up method to price its goods in the domestic market

**Question 24.5**

The German Centre for European Economic Research has an extensive collection of discussion papers on its website. The discussion paper “Exchange rate pass-through to consumer prices: A European perspective” by F.P Hüfner and M. Schröder discusses in a clear way the pass through from the effective nominal exchange rate of the euro to consumer prices of five European countries. Find this paper on the internet and answer the following questions.
24.5A What is the total effect of a change in the effective nominal exchange rate of the euro on the consumer price index of the EMU countries? How long does it take before the total effect on the consumer price index is felt?

24.5B Why does a 1% depreciation of the euro effective exchange rate not lead to a 1% increase of the European consumer price index?

24.5C Why does the adjustment of consumer prices take time?

24.5D How and why does the pass-through between five EMU-members differ?

24.5E Based on the information in the discussion paper, do you think the J-curve is a universal phenomenon?

Question 24.6
The Excel file for question 24.6 shows the impact of a change of the real effective exchange rate of the euro on the current account of France. In 2003 both the average monthly imports and the average monthly exports of France amounted to approximately 40 billion euro. The current account was therefore in balance. As a base scenario the simulation shows the impact on the French current account of a depreciation of the real effective exchange rate of the euro from 1.0 to 1.2 in January 2004.

24.6A Does the baseline scenario show a J-curve effect?

24.6B Explain the change in impact of a depreciation of the real effective exchange rate when export demand is more price elastic. Explain the change in impact when import demand is more elastic.

24.6C Show what would have happened to the current account of France when the Marshall-Lerner condition was not fulfilled.

Question 24.7
The Marshall-Lerner condition states that a depreciation (appreciation) of the real effective exchange rate leads to a current account improvement (deterioration) when $\varepsilon_x + \varepsilon_y > 1$. This condition is not valid however when the current account initially shows either a surplus or deficit. In this case the condition changes to $\varepsilon_x + \varepsilon_y > 1 + x$. Use the simulation of the J-curve
(Excel file for question 24.7) to analyze whether x is positive or negative when the current account initially shows a surplus. Do the same when the current account initially shows a deficit.

**Question 24.8**

Locate the St. Louis Fed working paper “How well do monetary models forecast exchange rates?” by Neely and Sarno on the web. The paper is technical (particularly section 3) but it is not important to study or understand the econometrics here. It does give you an insight into the heavy econometric requirements of empirical exchange rate research.

24.8A What general assumptions lie behind the monetary model according to the paper?

24.8B Does the monetary model forecast exchange rates well? Why (not)?

24.8C How can you reconcile the evidence of figure 24.8 and 24.9 with the forecasting track record of the monetary model?

**Question 24.9**

For answering the question below, you can use the Excel file for question 24.9. It is a simulation of the monetary approach as in figure 24.4. Suppose the domestic economy we want to analyse is China. Foreign is the rest of the world.

24.9A Does China currently have a current account surplus in this simulation? Explain.

24.9B What happens to prices if we go to a long term equilibrium? Explain

24.9C Which factors influence the long run price level? Explain.

Reset the simulation to the initial situation. China is facing pressure from other countries to revalue its exchange rate. They blame China for exporting deflation.

24.9D How does China’s response affect the long term equilibrium of domestic and foreign prices?

**Question 24.10**

The Excel file for question 24.10 contains data on exchange rates, the money stock M3, and GDP, for five countries including the US. There are two data points, 1980 and 2005. See if
you can test the monetary model graphically for these countries, analogous to figure 24.8 and 24.9. Please note that lowercase letters in the textbook represent logs.