

Chapter 18 The Money Market

Question 18.4

- 18.4A What are the primary functions of money?
- 18.4B Can you give some examples of assets that to some extent perform each of these functions?
- 18.4C The attractiveness of 'money' depends on the extent to which it is successfully able to perform the three primary functions. This also holds in an international context. Can you explain the popularity of the US dollar for international transactions by looking at the primary functions of money?
- 18.4D In times of great economic uncertainty the demand for gold tends to increase. Which aspect of gold (in terms of primary functions of money) makes it especially attractive at periods of great uncertainty?

Question 18.5

- 18.5A What are the three motives for holding money according to Keynes' theory of liquidity preference? Give a real-life example of each of the motives.
- 18.5B What is the opportunity cost of holding money?
- 18.5C In most theoretic models, money demand depends positively on income and negatively on the interest rate. See for example equation (18.2): $M^d / P = M^d(i, Y)$. Can you explain the economic intuition behind this relationship?
- 18.5D Milton Friedman emphasizes the role of different components of wealth. How will the introduction of these components change the money demand function 18.2. What is the economic rationale behind this change?

Question 18.6

- 18.6A Go to the website of the Federal Reserve board (www.federalreserve.gov). Retrieve the monthly historical time series on monetary aggregates M1, M2, M3 and the monetary base. Draw a graph of the outstanding volume and money multipliers of the aggregates. Which monetary aggregate expanded most in volume terms? What can you conclude about the money multiplier for the various aggregates?
- 18.6B If the Federal Reserve would target some monetary aggregate, how would the historical development of the money multiplier impact on its monetary operations?

18.6C Check whether money growth leads to price inflation in the United States. What do you conclude? What can you conclude about the velocity of money?

Question 18.7

Empirical file 18-7 contains data on monetary aggregates and prices for a group of industrial countries.

18.7A Make a scatter plot with on the axes the growth rate of money and consumer prices for all countries in the sample.

18.7B What is the correlation between money growth and consumer price inflation over this period? What do you conclude about the quantity theory of money? What does this tell us about the causality between money growth and prices?

Question 18.8

The **Excel file 18-8** on the website contains a basic simulation of the money market. The implicit money demand function $M^d / P = M^d(i, Y)$ and the implicit money supply function

$M^s / P = M^s(i, i_{res}, Y)$ of chapter 18 have been modeled explicitly. These are (in logarithmic form)

$m^d = \alpha y - \beta i$ for real money demand and $m^s = \partial i - \gamma i_{res} + \eta y$ for real money supply.

18.8A Suppose that the economy is expanding at ten percent annually. What happens to the money demand and money supply curves?

18.8B How does this affect the interest rate in the simulation? And how does this affect the money stock? Why is this so?

18.8C The central bank believes that the economic expansion is too rapid and that the money stock has increased too much. What policy instrument will it use and how does this affect the monetary equilibrium?