

### Question 1 (40%)

The equilibrium in the money market and the foreign exchange market, respectively, is given by the following two equations:

$$(1) \frac{M^S}{P} = L(R, Y)$$

$$(2) R = R^* + \frac{E^e - E}{E}$$

The notation is as explained in the textbook and the lecture notes.

- a) Explain the two equations, show the equilibria graphically, give economic intuition behind the slopes of all curves involved, and explain how the two markets reach their equilibria.
- b) Analyze how a temporary expansionary monetary policy influences the interest rate and the exchange rate and discuss factors that affect the size of the effects.
- c) Explain how the equilibrium in the money market and the foreign exchange market generates a relationship between output and the exchange rate (known as the AA-curve). Give economic intuition behind the slope of the AA-curve.
- d) How does an increase in the expected exchange rate affect the AA-curve? Explain the economic intuition and illustrate graphically.

### Question 2 (60%)

Use a two-country model to discuss how asymmetric demand shocks can be a challenge in a monetary union.