

ECON5300 Questions for seminar on November 2

Stability

Question 1

Exercise 2.4 in Acemoglu's book.

Question 2

Consider the following model of a small open economy:

$$e_{t+1} - e_t = i_{t+1} - i_{*,t+1} \quad (1)$$

$$p_{t+1} - p_t = \gamma y_t \quad (2)$$

$$y_t = -\alpha_i i_{t+1} + \alpha_e (e_t + p_{*,t} - p_t) \quad (3)$$

$$m_t - p_t = -\eta_i i_{t+1} + \eta_y y_t \quad (4)$$

where e_t is the exchange rate, i_t the interest rate, $i_{*,t}$ the foreign interest rate, p_t the price level, $p_{*,t}$ the foreign price level, y_t the output gap and m_t the money supply. All the variables are in logs. The money supply and the foreign variables are exogenous. The initial price level is given.

Define a stationary state in the model. Discuss the stability properties of the model. How can one pin down the solution for the time path?

Overlapping generations

Do exercises 9.7, 9.10 and 9.11 and then 9.20 in Acemoglu's book.