

Exercise Session 7

Monetary Policy Transmission, Zero Lower Bound, Natural Interest Rate

TASK 1: Term structure theory

- a) Explain the three stylized facts on the term structure of interest rates.
- b) Which of the theories mentioned in the lecture can and which cannot explain the three stylized facts on the term structure of interest rates? Which assumptions do the theories require?

TASK 2: Monetary Policy Transmission

- a) Show that a monetary policy shock affects inflation and output negatively by calculating partial derivatives of the IS-MP-PC model incl. a monetary policy shock.
- b) What are the four transmission channels of monetary policy?

TASK 3: The Zero Lower Bound

- a) Why is it impossible for the central bank to levy an interest rate below the effective lower bound?
- b) Consider a negative demand shock in the IS-PC model. Does the result change when we account for the zero lower bound on the nominal interest rate?
- c) Show graphically in the example of 3b), how a deflationary spiral might arise if the negative demand shock does not fade out.