## **Exercise Session 5**

## Monetary policy rules, the complete IS-MP-PC Model

TASK 1: Monetary policy rules

- a) Explain the general intuition behind the Taylor Rule.
- b) What arguments speak in favor of interest rate smoothing?
- c) What is the challenge in estimating monetary policy rules?
- d) How is econometrically still possible to estimate monetary policy rules?

TASK 2: Monetary policy rule in the IS-MP-PC model

- a) Derive the IS-MP curve based on the IS curve and the simplified monetary policy rule.
- b) Show algebraically that there is a negative relationship between output and inflation.What is the intuition behind this negative relationship?

TASK 3: Graphical representation and shocks

- a) Draw the movements of/along the IS curve and the real interest rate following a temporary, positive demand shock assuming adaptive inflation expectations. Use the extended graphical representation of the IS-MP-PC model.
- b) Redo exercise 3a) but assume anchored inflation expectations.
- c) Draw the movements of/along the IS curve and the real interest rate following a temporary, negative supply shock assuming adaptive inflation expectations. Use the extended graphical representation of the IS-MP-PC model.
- d) Redo exercise 3a) but assume anchored inflation expectations.