

Monetary Economics – Master

Prof. Dr. Keith Kuester

Summer term 2018

Outline:

Modern central banks fulfill several roles at once.¹ They formulate and implement monetary policy, often quite independent of other economic policies. Central banks are the monopoly issuer of a safe medium of exchange, a country's monetary base. They have a financial stability mandate, being involved in financial supervision and regulation. They serve as a lender of last resort, the bank of banks. Last, they support the functioning of the payments system. We will discuss these dimensions of central banking. First, we introduce stylized dynamic equilibrium models that will help us assess how central bank actions affect the economy (the “monetary transmission mechanism”) and how central banks themselves are constrained by the state of the economy. We will use the results that emerge to discuss central bank policy during the financial and sovereign debt crises.

Lectures:

Th. and Fr. 10.15-12.00, HS-N (Th), HS-K (Fr)

First lecture: April 12th, 2018. Last lecture: July 13th, 2018.

Exceptions:

May 10 public holiday (Ascension day).

May 17/18 conference Konstanz Seminar on Monetary Theory and Policy.

May 23/24 lecture break.

May 31 public holiday (Corpus Christi).

Make-up sessions, all of this to be discussed:

We have to discuss the timing of make-up sessions. I definitely want to hold one on Mo May 14th (time and room to be determined). The reason is that otherwise there will be too much time between lectures. The other lecture, I propose to make up for by adding roughly 15 minutes to each of the regular lectures during the semester (we go from 10.15 a.m. to roughly noon sharp).

¹Not all central banks, though, will have a mandate to fulfill all these functions. I do not wish to imply that they are not “modern.”

Last, we have to discuss what to do with the lecture on Friday May 11th (the day after the Ascension Day holiday). We can hold the lecture on May 11th, or we could move the lecture to Mo May 7th (time and room to be determined). Otherwise, again, there would be too much time between lectures.

Exercises:

We will have an exercise session roughly every two weeks (at the time of the lecture). Please try and solve the exercises yourself at home. They will be valuable practice for the exam.

Office hours:

After the course or upon appointment (email: keith.kuester@uni-bonn.de).

Course materials:

The slides for the course are meant to be self-contained. If you would like to consult a textbook, the main text for the course is Walsh (2010) (WALSH). This material will be complemented by papers.

Grades:

Grades will be based on a final exam.

Plan of the lecture

1. A first classical monetary model.

- Definitions.
- Review: choice under risk.
- Models of money demand.
- Money-in-the utility function model.
- Linearization.
- Classical dichotomy.
- Method of undetermined coefficients.
- Money-supply and interest-rate rules.
- Planner's problem and decentralization.
- Friedman rule.

2. Nominal rigidities: Monetary stabilization policy in the New Keynesian Model

- Setup of the New Keynesian model.
- Welfare cost of inflation.
- Linearized model.
- (In)determinacy.
- Transmission of shocks.
- Zero lower bound.
- Fiscal-monetary interaction: government spending and the lower bound.
- Natural output and efficient output.
- Optimal monetary policy.
- Divine coincidence.

3. **Fiscal and monetary interaction.**

- Seignorage and “unpleasant monetarist arithmetic.”
- Fiscal theory of the price level.
- Optimal fiscal and monetary policy mix.

4. **The overlapping-generations model of money.**

- Monetary equilibria.
- Commodity money vs. fiat money.
- Inside vs. outside money.
- Money and liquidity.
- Intermediation and fragility.

5. **Monetary policy implementation.**

- Open market operations.
- Channel system.
- Floor system.

References

Walsh, C. E. (2010), *Monetary Theory and Policy, Third Edition, MIT Press Books*, volume 1, The MIT Press.

Plan of lectures – rough plan, may change

- Th. April 12: Introduction, review: choice under risk
- Fr. April 13: MIU model.
- Th. April 19: Linearization.
- Fr. April 20: Solving the model.
- Th. April 26: Friedman rule.
- Fr. April 27: New Keynesian model setup.
- Th. May 3: Yao exercise. no lecture (talk in Oslo).
- Fr. May 4: Yao exercise. no lecture (talk in Oslo)
- Mo. May 7: make-up lecture (time tbc)? Topic see May 11.
- Th. May 10: no lecture (public holiday)
- Fr. May 11: Linearized model.
- Mo. May 14: make-up lecture: Transmission of shocks
- Th. May 17 and Fr. May 18: no lectures (Konstanz Seminar)
- Th. May 24 and Fr. May 25: no lectures (Pentecost break)
- Th. May 31: no lecture (public holiday)
- Fr. Jun 1: The zero lower bound.
- Th. Jun 7: Exercises.
- Fr. Jun 8: Optimal monetary policy.
- Th. Jun 14: Seignorage and unpleasant monetarist arithmetic.
- Fr. Jun 15: Fiscal theory of the price level.
- Th. Jun 21: Optimal fiscal and monetary policy mix.
- Th. Jun 28: Exercises.
- Fr. Jun 29: OLG model of money.
- Th. Jul 5: Inside money/outside money. Fragility.
- Fr. Jul 6: Monetary policy implementation.
- Th. Jul 12: Exercises.
- Fr. Jul 13: Summary, questions.