

Money, Credit and Finance

Geld, Kredit und Finanzierung

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January 10, 2018

Overview

- comprehensive introduction to various topics in monetary macroeconomics, from both a theoretical and empirical perspective:
- first part of the course is lecture-based:
 - ▶ lectures on the theory part (taught by Katrin Rabitsch) will focus on the baseline New Keynesian model and simple extensions, as well as a short introduction into solving and analyzing DSGE models.
 - ▶ lectures on the empirical part (taught by Florian Huber) focus on the macroeconometric methods needed to analyze the conduct of monetary policy and its transmission mechanism
- important topics covered:
 - 1 Conventional monetary policy
 - 2 Unconventional monetary policy
 - 3 International spillover analysis
 - 4 Forecasting
- In the second part of the course, students gain hands-on-experience through an independent research project – includes seminar thesis and presentation

Block I: Monetary policy

- Covers everything most Central Banks did prior to 2007-2009
- Conventional monetary policy predominantly uses short-term interest rates as the main policy making tool
- In addition, we also discuss rule-based monetary policy strategies
- on the theoretical side, students will be familiarized with the baseline New Keynesian (NK) model
- on the empirical side, focus will be on small-scale vector autoregressions to analyze the impact of monetary policy shocks on the real economy

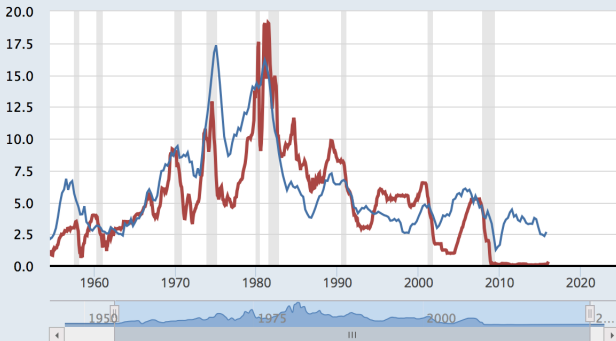
Example: Taylor rules in the US

John Taylor stated in the beginning of the nineties that past US monetary policy may be well described by the following equation:

$$i_t = \hat{\pi}_{t+1} + 0.5(\hat{\pi}_{t+1} - 2) + 0.5\hat{y}$$

This extremely simple model worked quite well until recently (zero lower bound)

- Effective Federal Funds Rate
- $\text{Gross Domestic Product: Implicit Price Deflator} + 2 + 0.5 * (\text{Gross Domestic Product: Implicit Price Deflator} - 2) + 0.5 * (\text{Real Gross Domestic Product} - \text{Real Potential Gross Domestic Product}) / \text{Real Potential Gross Domestic Product}$



Block II: Unconventional monetary policy

- Policy rates hit the zero lower bound during the last financial crisis
- Central Banks had to resort to other ways of stimulating the real economy
- Different ways of conducting unconventional monetary policy will be discussed
- on the theoretical side, will see extensions of the NK model with a ZLB; also, financial frictions macro-model with explicit credit (i.e. unconventional) policy
- on the empirical side, methodological aspects (non-linearities in the underlying transmission channels, for instance) will also be covered

Block III: International spillover analysis

- Globalization led to increased connectivity between economies
- Local shocks now spread globally (for instance, the financial crisis started on the US housing market)
- Global consequences will be investigated using large-dimensional models
- Hands-on experience using our R toolbox (Feldkircher & Huber, 2017) and the Matlab toolbox

Block IV: Forecasting

- Central Banks and other policy institutions rely on accurate predictions to guide policy making
- Modern econometric tools are increasingly adopted to achieve this goal
- We will discuss Bayesian methods that are used at the ECB, the BoE and the Fed System

Grading

- 1 Active class participation (10 %)
- 2 Final Exam after both lecture parts (30 %)
- 3 *Mid-term presentation* that covers the main research ideas, outline of the term paper and the modeling framework, and *End-term presentation* in June that should briefly summarize the main findings of the term paper (30 %)
- 4 Term paper (approximately 15 pages) (30%)
- 5 Strong term-papers can be extended to a MSc. Thesis