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Advanced Macroeconomic Analysis II

Part 1 - Monetary Economics

Aim

The economy spend most of the last decade at the zero lower bound of nominal interest rates. Fears of a deflationary spiral were looming and monetary policy started to purchase assets in order to influence the economy. These days are over. Inflation is back! Monetary policy is now faced with a task to bring inflation down again.

In this class, we will study how to analyze the effects of monetary policy on the economy. First, we look at it from an empirical point of view. Questions include: How can one measure monetary policy surprises? Can monetary policy fight inflation given that it is driven by energy supply shocks? Second, we will look at the distributional effects of inflation and monetary policy. To this end, we will study heterogeneous-agent New Keynesian ("HANK") models.

This course aims at enabling students to analyze the effects of monetary policy using empirical models (SVAR models and LP models) as well as theoretical models (RANK and HANK models). Therefore, a focus of the class will be the hands-on part. In these parts, students will implement the tools themselves in Matlab.

Time and Venue

April 19th, April 26th, May 3rd, May 10th, May 17th, May 24th; 8 am - 12 am, Venue Karl-Popper room at the DIW Berlin

Grading

The grade in the class consists to 30 % of presentation of homework in the class and to 20 % of class participation. In the end, every student is asked to write a term paper. The term paper should address a research question with one of the methods we have covered in the class. It does not have to be very innovative, e.g. it could be to redo an existing paper with another dataset or an updated data set. The term paper will count for 50 %.

Overview

Lecture 1

Identification of monetary policy shocks

- Narrative identification of monetary policy shocks: Romer & Romer (2004); Coibion (2012); Ettmeier & Kriwoluzky (2019)
- High-frequency shocks - conventional and unconventional monetary policy: Gertler & Karadi (2015); Altavilla et al. (2019); Swanson (2021)
- Central Bank Information shocks: Jarociński & Karadi (2020); Miranda-Agrippino & Ricco (2020); Bauer & Swanson (2023)

Lecture 2

Estimating the effects of monetary policy shocks: (Bayesian) local projections

- Chan (2017), Chapter 1 & 2
- Jordà (2005)
- Miranda-Agrippino et al. (2021)

Lecture 3

Estimating the effects of monetary policy shocks: (Bayesian) proxy SVARs

- Chan (2017), Chapter 8
- Caldara & Herbst (2019)
- Miranda-Agrippino & Ricco (2021)

Lecture 4

Monetary policy: from RANK to HANK

- Werning (2015)
- Kaplan et al. (2018), Kaplan & Violante (2018)
- Bilbiie (2019)
- McKay & Wolf (2023)

Lecture 5

The backbone of HANK: The Bewley-Huggett-Aiyagari incomplete markets model

- Ljungqvist & Sargent (2018), Chapter 17 & 18
- Bewley (1976)
- Huggett (1993)
- Aiyagari (1994)

Lecture 6

Solving the incomplete markets model and first steps in HANK

- Carroll (2006)
- Young (2010)

References

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