### Seminar "Applications in Macroeconomics and Financial Economics"

#### **Details:**

- Topics will be assigned by e-mail on a first come first serve basis.
- Please write an e-mail to the respective supervisor (in bold below).
- Choose a topic in between now and March 15 (midnight).
- You will receive an e-mail whether the topic was reserved for you. If not, you can choose a new topic.
- A topic can be assigned to up to two persons. In this case, the team has to write a joint seminar work.
- If one person writes the seminar work, you have to write 15 pages. If two persons write the seminar work, you have 20 pages (not including Appendices and the reference list).
- Important: the seminar is not a literature work. We expect you to either
  - o estimate regressions on your own,
  - o derive parts of a model analytically,
  - o and/or simulate a dynamic model.
- For details, get in touch with your supervisor.
- Seminar works have to be handed in by June 23.
- The seminar takes place on July 7 (Friday). The location will be announced in due time.

# **List of Supervisors and Topics:**

## **Britta Kohlbrecher:**

• The Financial Accelerator: Model Derivation

Literature: Bernanke, Ben S. & Gertler, Mark & Gilchrist, Simon, 1999.

"The financial accelerator in a quantitative business cycle framework," Handbook of Macroeconomics, in: J. B. Taylor & M. Woodford (ed.), Handbook of Macroeconomics, edition 1, volume 1, chapter 21, pages 1341-1393

Elsevier.

## • The Financial Accelerator: Business Cycle Simulation

Literature: Bernanke, Ben S. & Gertler, Mark & Gilchrist, Simon, 1999.

"The financial accelerator in a quantitative business cycle framework," Handbook of Macroeconomics, in: J. B. Taylor & M. Woodford (ed.), Handbook of Macroeconomics, edition 1, volume 1, chapter 21, pages 1341-1393

Elsevier.

### **Brigitte Hochmuth:**

### • The Role of financial discounts for unemployment fluctuations

Task: Derive important parts of the Hall (AER, forthcoming) model which shows that variations in the discount rates drive unemployment fluctuations. Do several simulations based on the author's code.

Required skills: Matlab

## Should you really never use the HP-filter?

Task: Take Hamilton's (2016) proposed method and compare it to the HP-Filter using German macroeconomic time series data. Discuss arising differences in the filtered data.

#### **Christian Merkl:**

## On the job search: theory

Task: Select a search and matching model with on-the-job-search. Derive important theoretical steps (and/or simulate the model). Explain key mechanisms.

### On the job search: empirics

Task: Compare important on-the-job-search models with stylized facts for Germany. Which dimensions of the data are replicated? Where do the models fail?

Literature: Bachmann et al., 2017, FAU Discussion Paper, No. 2/2017

### Heiko Stüber:

#### • The CHK Effects

Card, Heining, and Kline (2013, CHK) study the role of establishment-specific wage premiums in generating recent increases in West German wage inequality. For four subintervals covering the period from 1985 to 2009, Card et al. (2013, CHK) estimated models with additive fixed effects for workers and establishments following the estimation strategy introduced in Abowd, Kramaz, and Margolis (1999, AKM).

#### Tasks:

- 1) Introduce and explain the AKM / CHK estimation method.
- 2) There are slightly differences between the CHK estimation strategy described in the paper and the available MATLAB file. Do these differences effect the estimation results?

Required skills: econometric knowledge, MATLAB skills

#### Literature:

Card, D., J. Heining, and P. Kline. 2013. Workplace heterogeneity and the rise of West German wage inequality. Quarterly Journal of Economics, 128(3): 1-49.

Card, D., J. Heining, and P. Kline. 2015. CHK Effects. FDZ-Methodenreport, 06/2015.

# • Aggregated Statistics: SOEP vs Official Statistics

First results from Grabka, Schnitzlein, and Stüber (slides will be provided) indicate that aggregated statistics (e.g., employment) generated using the SOEP data, do deviate from official statistics (e.g., Mikrozensus).

#### Tasks:

- 1) Use the SOEP to estimate aggregated statistics (e.g., employment) and compare the results with official statistics.
- 2) Do differences exist? How can existing difference be explained.

Required skills: econometric knowledge, Stata skills

# How to Measure Aggregated Labor Market Stocks and Flows

There is an ongoing debate, on how to best measure aggregated labor market stocks and flows at the firm / establishment level. Moscarini and Postel-Vinay (2012), e.g., provide a discussion on regression bias and reclassification bias that can occur depending on the definition of stocks and flows.

### Tasks:

- 1) Provide a literature overview on different approaches to calculate stocks and flows at the firm / establishment level.
- 2) Provide a critical discussion on the pros and cons of the different approaches.

Required skills: econometric knowledge

# Literature:

Moscarini, G. and F. Postel-Vinay. 2012. The contribution of large and small employers to job creation in times of high and low unemployment. American Economic Review, 102(6): 2509-2539.