Goethe University of Frankfurt
IMFS
House of Finance
Department of Money and Macroeconomics
Professor Volker Wieland, Ph.D.

Summer Semester 2019

Ph.D. Program Seminar
Macro-Financial Modeling for Monetary, Fiscal and Regulatory Policy

Description:
The purpose of this seminar is to give advanced doctoral students a hands-on introduction to frontier research in structural macroeconomic analysis and the development and application of structural macroeconomic models. The seminar will consist of a combination of lectures, supervision of modeling projects, student presentations and group discussions with extensive feedback. Each project, which should ideally be pursued by a team of two students, will involve studying an existing macroeconomic model from the literature (a list of suggestions will be provided before the course starts). Students will then be guided in the development of a software implementation of the model in DYNARE with a policy application. At the end of the seminar, students should be able to start working on a dissertation project that involves structural macroeconomic modeling. Successful participation in this seminar is a precondition for the supervision of a dissertation at the chair.

Time and Location:
We will be meeting repeatedly throughout the semester for lectures and student presentations in the House of Finance. The introductory meeting will take place on Monday 15th of April 2 pm – 3 pm at HoF, room Milan 4.59.

Registration:
To register for the course, students should send an e-mail to Dr. Gregor Boehl (boehl@econ.uni-frankfurt.de). The e-mail should contain the participant's name and contact details. Registration should take place as soon as possible. The maximum number of students participating in the course for credit will need to be restricted to twelve.

Requirements:
Students will be expected to give two short presentations for group feedback. The first presentation will discuss the assigned paper from the literature and modeling project. It will take place in the middle of the semester. The second presentation will report on the implemented model and policy application. Grading for the seminar course will be based on a problem set, presentations and model implementation.

Literature:

No color: Dynare codes available
Code available, but not in Dynare
No codes publicly available, difficult model
No codes publicly available, simple model

Models with Financial Frictions

1. Villa, Stefania. (2016). "Financial Frictions in the Euro Area and the United states: A Bayesian Assessment." *Macroeconomic Dynamics*, 20(5), 1313-1340. (estimated model)
2. Martin, Philippe, and Thomas Philippon. 2017. "Inspecting the Mechanism: Leverage and the Great Recession in the Eurozone." American Economic Review, 107(7): 1904-37. (calibrated model, Dynare codes available)
3. Gomes, João, Urban Jermann, and Lukas Schmid. 2016. "Sticky Leverage." American Economic Review, 106(12): 3800-3828. (calibrated model, Dynare codes available)
4. Jakab, Zoltan & Kumhof, Michael, 2015. "Banks are not intermediaries of loanable funds – and why this matters," Bank of England working papers 529, Bank of England. (calibrated model)
5. Christiano, Lawrence J., Mathias Trabandt, and Karl Walentin (2011). "Introducing Financial Frictions and Unemployment into a Small Open Economy Model" Journal of Economic Dynamics and Control, 35: 1999-2041 (estimated model, Sweden)

Monetary Policy

6. Aruoba, S. Borağan and Frank Schorfheide (2011). "Sticky Prices versus Monetary Frictions: An Estimation of Policy Trade-Offs." *American Economic Journal: Macroeconomics*, 3(1): 60-90. (estimated models, GAUSS codes available)
7. Fiore, F. D. and Tristani, O. (2013), "Optimal Monetary Policy in a Model of the Credit Channel". The Economic Journal, 123: 906-931 (Matlab and Dynare codes available)
8. Andrés, J., López-Salido, J. D., and Vallés, J. (2006). "Money in an Estimated Business Cycle Model of the Euro Area," The Economic Journal, 116, 457–477. (estimated model)
9. Smets, Frank & Warne, Anders & Wouters, Rafael, 2014. "Professional forecasters and real-time forecasting with a DSGE model," International Journal of Forecasting, Elsevier, vol. 30(4), pages 981-995. (estimated model)
10. Anand, Rahul, Eswar S. Prawad and Boyang Zhang (2015). "What Measure of Inflation should a Developing Country Central Bank Target?" Journal of Monetary Economics, 74: 102-116

Fiscal Policy

11. Stähler, Nikolai, and Carlos Thomas (2012). "FiMod – A DSGE Model for Fiscal Policy Simulation." Economic Modelling, 29: 239-261 (calibrated model)

Unconventional Monetary Policy

12. Del Negro, Marco, Gauti Eggertsson, Andrea Ferrero, and Nobuhiro Kiyotaki. 2017. "The Great Escape? A Quantitative Evaluation of the Fed's Liquidity Facilities." American Economic Review, 107(3): 824-57. (calibrated model, Dynare codes available)

Schedule:

April 15, 14:00-15:00 (Milan 4.59)

1st meeting to discuss course plan and potential projects. Students may state preferences for projects and assignments can be made.

April 17

Last day for signing up for a particular project. Availability to be cleared with Dr. Boehl / Strobel

April 17, 14:00-16:00 (Chicago 3.36)

Lecture on Macroeconomic Modelling I (Prof. Wieland)

April 24, 14:00-16:00 (Boston 2.45)

Lecture on Macroeconomic Modelling II (Dr. Boehl)

April 25, 14:00-16:00 (Boston 2.45)

Introduction to Dynare and Macro Model Data Base. Computer Session (Macro Model Base Team).

Mai 13-14 (to be confirmed)

Student presentations explaining the model and paper chosen for the project. Time: 30 minutes for each presentation including discussion.

July 4, 5, 9 (to be confirmed)

Student presentations of model implementation. Time: 35 minutes for each presentation including discussion.

August (to be confirmed)

End of semester deadline for turning in the write-up describing model implementation (equations, data etc.), replication and comparison exercises.