Ph.D. Program Seminar
Macro-Financial Modeling: Economic Frictions, Monetary and Fiscal Policy

Description:
The purpose of this seminar is to give advanced doctoral students a hands-on introduction to frontier research in empirical macroeconomics 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. 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 9th of April 2-3 pm at HoF, room Milan 4.59.

Registration:
To register for the course, students should send an e-mail to 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:

Models with Financial Frictions

1. Nuño, Galo, and Carlos Thomas. 2017. "Bank Leverage Cycles." American Economic Journal: Macroeconomics, 9(2): 32-72. (calibrated model, Dynare codes available)
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. Gilchrist, Simon, Raphael Schoenle, Jae Sim, and Egon Zakrajšek. 2017. "Inflation Dynamics during the Financial Crisis." American Economic Review, 107(3): 785-823. (calibrated model, Dynare codes available)
4. Gomes, João, Urban Jermann, and Lukas Schmid. 2016. "Sticky Leverage." American Economic Review, 106(12): 3800-3828. (calibrated model, Dynare codes available)
5. Chang, Roberto, Andrés Fernandez, and Adam Gulan (2017): "Bond Finance, Bank Credit and Aggregate Fluctuations." Journal of Monetary Economics, 85: 90-109 (no codes available)

Monetary Policy

1. Collard, Fabrice, Harris Dellas, Behzad Diba, and Olivier Loisel. 2017. "Optimal Monetary and Prudential Policies." American Economic Journal: Macroeconomics, 9(1): 40-87. (calibrated model, Dynare codes available)
2. Krause, Michael U., and Stéphane Moyen. 2016. "Public Debt and Changing Inflation Targets." American Economic Journal: Macroeconomics, 8(4): 142-76. (calibrated model, Dynare codes available)
3. Lubik, T. A. and Schorfheide, F. (2007). "Do Central Banks Respond to Exchange Rate Movements? A Structural Investigation," Journal of Monetary Economics, 54, 1069–1087. (estimated model, simpler version of Gali and Monacelli, 2005, which is in MMB)
4. 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, no codes)
5. 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, no codes)
6. Kriwoluzky, Alexander, Christian A. Stoltenberg, 2014. "Monetary Policy and the Transaction Role of Money in the US," The Economic Journal, 125: 1452-1473 (estimated model, no codes)

Fiscal Policy

1. Michaillat, Pascal. 2014. "A Theory of Countercyclical Government Multiplier." American Economic Journal: Macroeconomics, 6(1): 190-217. (calibrated model, Dynare codes available)
2. Furceri, Davide and Annabelle Mourougane (2010). "The Effects of Fiscal Policy on Output: A DSGE Analysis." OECD WP 770
3. Gnocci, Stefano, Daniela Hauser and Evi Pappa (2016). "Housework and Fiscal Expansions." Journal of Monetary Economics, 79: 94-108 (calibrated model, no codes)

Term-Structure in DSGE Models

1. Rudebusch, Glenn D. and Eric T. Swanson (2012). "The Bond Premium in a DSGE Model with Long-Run Real and Nominal Risks." *American Economic Journal: Macroeconomics,* 4(1): 105-43. (Mathematica codes available, implementable with Dynare, 3rd order perturbation)

Labor Market Frictions in DSGE

7. Krause, Michael U. and Lubik, T. A. (2007). "The irrelevance of real wage rigidity in the New Keynesian Model with Search Frictions." Journal of Monetary Economics, 54: 706-727 (calibrated model, no codes)
8. Trigari, Antonella (2007). "Equilibrium Unemployment, Job Flows, and Inflation Dynamics." Journal of Money, Credit and Banking, 41(1): 1-33 (calibrated model, no codes)
9. Sveen, Tommy and Lutz Weinke (2009), "Inflation and Labor Market Dynamics Revisited" Journal of Monetary Economics, 56: 1096-1100 (calibrated model, no codes)
10. Campolmi, Alessia and Ester Faia, (2011). "Labor Market Institutions and Inflation Volatility in the Euro Area", Journal of Economic Dynamics and Control, 35: 793-812 (calibrated model, no codes)
11. Gali, Jordi and Tommaso Monacelli (2016). "Understanding the Gains from Wage Flexibility: The Exchange Rate Connection." American Economic Review, 106(12): 3829-3868 (calibrated model, no codes)
12. Campolmi, Alessia and Stefano Gnocci (2016). "Labor Market Participation, Unemployment and Monetary Policy." Journal of Monetary Economics, 79: 17-29 (calibrated model, no codes)
13. Ravn, Morten O. and Vincent Sterk (2017). "Job Uncertainty and Deep Recessions." Journal of Monetary Economics, 90: 125-141 (calibrated model, no codes)

Schedule:

April 9, 14:00-15:00 Room Milan 4.59

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

April 15

> Last day for signing up for a particular project. Availability to be cleared with Gregor Boehl

April 11, 14:00-16:00 Room Chicago 3.36

> Lecture on Macroeconomic Modelling I (Prof. Wieland)

April 18, 14:00-16:00 Room Milan 4.59

> Lecture on Macroeconomic Modelling II (Gregor Böhl)

April 25, 14:00-16:00 Room Sydney 3.45

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

Mai 8-9 (to be confirmed) – Room Milan 4.59

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

July 16-17 (to be confirmed) – Room Milan 4.59

> 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.