

1 Estimated DSGE models

The focus of this part of the macro reading group is analysing macro DSGE models which can be estimated. We will introduce basic notions about Bayesian estimation techniques and we will analyze in depth Smets and Wouters (2007) model estimation by means of Dynare. This entails to handle with time series data, add the appropriate commands for estimation, learn about the main options for estimation, analyze convergence and outcome in general. We will practice on other estimated models, using Albonico, Paccagnini and Tirelli (2019) and related papers. We will also introduce identification issues and global sensitivity analysis tool.

Then, PhD candidates are encouraged to present other papers related to the topic, which may also include issues on the estimation of models with optimal monetary (and fiscal) policy models and regime switching.

1.1 References

- Albonico, Cardani, Tirelli, 2017. "Debunking the Myth of Southern Profligacy. A DSGE Analysis of Business Cycles in the EMU's Big Four"
- Smets, Wouters, 2003. "An Estimated Dynamic Stochastic General Equilibrium Model of the Euro Area"
- Smets, Wouters, 2005. "Comparing shocks and frictions in US and euro area business cycles: a Bayesian DSGE Approach"
- Smets, Wouters, 2007. "Shocks and Frictions in US Business Cycles: A Bayesian DSGE Approach"

1.2 Tentative list of readings

- Albonico, Paccagnini, Tirelli, 2019. "Limited Asset Market Participation And The Euro Area Crisis: An Empirical DSGE Model"
- Bayer, Born, Luetticke, 2020. "Shocks, Frictions, and Inequality in US Business Cycles"
- Brzoza-Brzezina, Kolasa, 2013. "Bayesian Evaluation of DSGE Models with Financial Frictions"
- Challe, Matheron, Ragot, Rubio-Ramirez, 2017. "Precautionary saving and aggregate demand"
- Chen, Kirsanova, Leith, 2017. "An empirical assessment of Optimal Monetary Policy in the Euro area"
- Guerrieri, Iacoviello, 2017. "Collateral constraints and macroeconomic asymmetries"
- Liu, Mumtaz, 2011. "Evolving Macroeconomic Dynamics in a Small Open Economy: An Estimated Markov Switching DSGE Model for the UK"
- Gust, Herbst, López-Salido, Smith, 2017. "The Empirical Implications of the Interest-rate Lower Bound"