

# 1 Estimated DSGE models

The focus of this 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 also introduce identification issues and the global sensitivity analysis tool. We will also touch issues related to estimation under indeterminacy.

## 1.1 References

- Smets, Wouters, 2007. "Shocks and Frictions in US Business Cycles: A Bayesian DSGE Approach"

## 1.2 Interesting readings

- Albonico, Paccagnini, Tirelli, 2019. "Limited Asset Market Participation And The Euro Area Crisis: An Empirical Dsge Model"
- Anzoategui, D., D. Comin, M. Gertler, and J. Martinez, 2019. "Endogenous Technology Adoption and R&D as Sources of Business Cycle Persistence."
- Bayer, Born, Luetticke, 2024. "Shocks, Frictions, and Inequality in US Business Cycles"
- Bhattarai, S., J. W. Lee, and W. Y. Park, 2016. "Policy Regimes, Policy Shifts, and U.S. Business Cycles"
- Brzoza-Brzezina, Kolasa, 2013. "Bayesian Evaluation of DSGE Models with Financial Frictions"
- Cuba-Borda, P. and S. Singh, 2024. "Understanding Persistent ZLB: Theory and Assessment"
- 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"
- Lubik, T.A. and F. Schorfheide, 2004. "Testing for Indeterminacy: An Application to U.S. Monetary Policy"
- Nicolò, 2023. "U.S. Monetary Policy and Indeterminacy,".