Dynamic Stochastic General Equilibrium Models

Dr. Andrea Beccarini Willi Mutschler

Summer 2012

Topics of the course

1. Introduction:
    1. New Keynesian Theory and its main counterparts;
    2. Dynamic Porgramming;
2. Main theoretical features of the Smets-Wouters model:
    1. Household, Firms, Central Bank, Government.
    2. Approximation, structural and reduced forms.
3. Estimation methods:
    1. Calibration.
    2. Generalized Method of Moments.
    3. Maximum Likelihood.
    4. Univariate analysis and VAR analysis.
    5. Indirect Inference: Impulse-Response-Matching.
    6. Bayesian VAR analysis and Bayesian methods.

About the course

- Begin of the course: 16.04.12
- Timetable: Mondays 16.00h-18.00h. Thursdays, 14.00h-16.00h. Room: CAWM 3.
- Objective of the course: provide students a broad introduction of the DSGE models in the context of the New-Keynesian framework and in particular of the Smets-Wouters model for the Euro area.
- Note: in the course there is no distinct separation between lectures and classes. The responsible of the course is Andrea Beccarini. The course is co-taught by Willi Mutschler

Bibliography

1. Canova F., (2007). Methods for Applied Macroeconomic Research. Princeton University Press.
2. Carlin W., Soskice, D., (2006). Macroeconomics, imperfections, institutions et policies. Oxford University Press.
3. DeJong, D. N. Dave C. (2007), Structural Macroeconometrics. Princeton University Press.
4. Gong G., Semmler W., (2004). Stochastic Dynamic Macroeconomics: Theory, Numerics and Empirical Evidence.
5. Sargent T. (1987). Dynamic Macroeconomic Theory. Harvard.
6. Smets F., Wouters R., (2002). "An Estimated Stochastic Dynamic General Equilibrium Model of the Euro Area". ECB working paper No. 171. And references therein.