

Statistics and Econometrics, Block III
Winter 2012
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Outline

The course provides you with an integrated approach to solve, calibrate and estimate dynamic stochastic general equilibrium models and to compare them with VARs

The course is self-contained and only requires some knowledge of basic macroeconomic models. To be able to do well in this course it is necessary that the candidates must be willing: 1) to acquire programming skills (with Matlab and Dynare), 2) to invest time and effort, 3) to read the complementary material given in class.

Grade will be based on 3 homeworks (40 percent) plus an in-class final exam. Homework are supposed to be done in groups of max 3 people.

The main reference for the course is: Canova, Fabio (2007), *Methods for Applied Macroeconomic Research*, Princeton University Press (C-2007). An additional textbook which can help is: De Jong, D. and Dave, C. (2011) *Structural Macroeconometrics*, Princeton University Press, second edition.

Notes and sample programs will be posted at my homepage www.crei.cat/people/canova/teaching.

Program

Classes 1-2: Formulating and solving dynamics stochastic general equilibrium models. (C-2007, ch.2)

Classes 3-4: Structural VARs (C-2007, ch.4).

Classes 5-7: Calibrating and evaluating DSGE models. issues of filtering and detrending. (C-2007, ch.3-7)

Classes 8-10: Estimating DSGE models: Generalized Method of Moments and simulation estimator. (C-2007, ch. 5)

Complementary References

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