

Syllabus

Organization and Overview

This course provides an introduction to modern macroeconomics. The first two days introduce a number of essential tools for macroeconomic research, in particular dynamic programming and dynamic stochastic general equilibrium theory. On Wednesday, we focus on applied topics, namely income and wealth heterogeneity as well as asset pricing. On Thursday, we explore how recursive methods and dynamic programming can be used to handle economic environments that are characterized by private information or limited commitment. The final day of the course provides an introduction to political economy in a macroeconomic setting.

The daily schedule will be:

9:00–10:30 First Lecture

11:00–12:30 Second Lecture

14:00–16:30 Problem Sets

17:00–18:30 Discussion of Problem Sets and Review

On Friday, instead of problem sets there will be a final review session from 14:00 to 15:00.

Textbooks

Ljungquist and Sargent is the main (i.e., required) text.

LS: Lars Ljungqvist and Thomas J. Sargent (2004), *Recursive Macroeconomic Theory*, 2nd edition, MIT Press.

SLP: Nancy L. Stokey and Robert E. Lucas (1989), *Recursive Methods in Economic Dynamics*, Harvard University Press.

Preliminary Course Outline and Reading List

Monday: Introduction to Dynamic Stochastic Macroeconomics I

Dynamic stochastic general equilibrium; the recursive approach; applications to business cycle theory.

- LS, chapters 3, 4, 7, 8.
- SLP, chapters 3, 4, 5, 9, 10.
- Thomas F. Cooley and Edward C. Prescott (1995), "Economic Growth and Business Cycles", in *Frontiers of Business Cycle Research*, Thomas F. Cooley, ed., Princeton University Press.
- Edward C. Prescott and Rajnish Mehra (1980), "Recursive Competitive Equilibrium: the Case of Homogeneous Households," *Econometrica* 48(6):1356–79.

Tuesday: Introduction to Dynamic Stochastic Macroeconomics II

Alternative market structures; lottery spaces; life-cycle economies.

- LS, chapters 9, 12.
- SLP, chapter 15.
- David de la Croix and Philippe Michel (2002), *A Theory of Economic Growth: Dynamics and Policy in Overlapping Generations*, Cambridge University Press.
- Timothy J. Kehoe, (1989), "Intertemporal General Equilibrium Models," in F. Hahn (ed.), *The Economics of Missing Markets, Information and Games*, Clarendon Press.

Wednesday: Further Topics in Dynamic Stochastic General Equilibrium

Income and wealth heterogeneity; incomplete markets; asset pricing.

- LS, chapters 13, 16, 17.
- Rajnish Mehra and Edward Prescott (2005), "The Equity Premium: A Puzzle," *Journal of Monetary Economics* 15(2): 145–61.

- Rao Aiyagari (1994), “Uninsured Risk and Aggregate Saving,” *Quarterly Journal of Economics* 109: 659–84.
- Per Krusell and Anthony Smith (1998), “Income and Wealth Heterogeneity in the Macroeconomy,” *Journal of Political Economy* 106:867–96.
- Dirk Krueger and Fabrizio Perri (2006), “Does Income Inequality Lead to Consumption Inequality: Evidence and Theory,” *Review of Economic Studies* 73:163–193.
- Jonathan Heathcote, Kjetil Storesletten, and Gianluca Violante (2006), “The Macroeconomic Implications of Rising Wage Inequality in the U.S.,” Unpublished Manuscript, NYU.
- Per Krusell, Lee Ohanian, Jose-Victor Rios-Rull, and Gianluca Violante (2000), “Capital-Skill Complementarity and Inequality: A Macroeconomic Analysis,” *Econometrica* 68(5): 1029–54.

Thursday: Recursive Methods for Environments with Private Information and Limited Commitment

Moral hazard; adverse selection; limited commitment.

- LS, chapters 18, 19, 20.
- Stephen Spear and Sanjay Srivastava (1987), “On Repeated Moral Hazard with Discounting,” *Review of Economic Studies* 54(4): 599–617.
- Christopher Phelan and Robert Townsend (1991), “Computing Multi-period, Information-Constrained Optima,” *Review of Economic Studies* 58(5): 853–81.
- Andrew Atkeson and Robert Lucas (1992), “On Efficient Distribution with Private Information,” *Review of Economic Studies* 59(3): 427–53.
- Narayana Kocherlakota (1996), “Implications of Efficient Risk Sharing without Commitment,” *Review of Economic Studies* 63(4): 595–609.

Friday: Introduction to Political Economy in Macroeconomics

Majority voting; probabilistic voting; macroeconomic applications.

- Torsten Persson and Guido Tabellini (2002), *Political Economics*, MIT Press.

- Hassler, John, and Jose V. Rodriguez Mora, Kjetil Storesletten, and Fabrizio Zilibotti. 2005. "A Positive Theory of Geographic Mobility and Social Insurance." *International Economic Review* 46(1):263–303.
- Hassler, John, and Jose V. Rodriguez Mora, Kjetil Storesletten, and Fabrizio Zilibotti. 2003. "The Survival of the Welfare State." *American Economic Review* 93(1):87–112.
- Acemoglu, Daron and James A. Robinson. 2000. "Why Did the West Extend the Franchise? Democracy, Inequality, and Growth in Historical Perspective." *Quarterly Journal of Economics* 115(4):1167–99.
- Doepke, Matthias and Fabrizio Zilibotti. 2005. "The Macroeconomics of Child Labor Regulation." *American Economic Review* 95(5), 1492-1524.