

European University Institute
Department of Economics
Winter 2010.
Villa San Paolo, Priests' room
Fridays 8:45 – 10:45, January 21 – March 26*

**Advanced Macroeconomics Course:
Recursive Contracts: Theory, Applications and Beyond**

Ramon Marimon

This is a course for second year and more advanced researchers or post-docs in economics. The course is divided in two parts. The first part is the main part of the course and goes in some detail into “Recursive Contract” theory and a few of its applications. The second part develops few additional related topics, the extent that will be covered will depend on time and on participants interest.

All students are expected to actively participate and, possibly, give a short presentation of one paper (from the reading list or related). For students taking the course for credit, this will be based on a mid-term exercise (February 26), a final take-home exercise and - on a voluntary basis - a term paper.

Syllabus

Part I. Theory and Applications

1. Recursive Contracts: The basic theory with exogenous constraints (1st generation)

Abreu D., D. Pearce and E. Stachetti. 1990. ”Towards a Theory of Discounted Repeated Games with Imperfect Monitoring”, *Econometrica*, 58.

* The course starts on Thursday January 21, same hour (no class on January 22). Participants in the course must register to the MWP Moodle (if you do not have it, request an username to Ognjen.Aleksic@EUI.eu) and then they can sign up for appointments during my office hours; usually the same day of the class.

Ljungqvist, Lars and Sargent, Thomas J. 2004. *Recursive Macroeconomic Theory* (Second Edition, MIT Press) Chs. 19 & 20.

Luenberger, D. G.: 1969, *Optimization by Vector Space Methods*, John Wiley & Sons, Inc., New York.

Marcet, Albert and Ramon Marimon. 2010. "Recursive Contracts." EUI.

Phelan, Christopher and Ennio Stacchetti. 2001. Sequential Equilibria in a Ramsey Tax Model. *Econometrica* 69.

2. Risk sharing, social insurance, and distribution of consumption with limited enforcement.

Broer, Tobias, 2009. "Stationary equilibrium distributions in economies with limited commitment," IIES, U. of Stockholm.

Kehoe, Patrick J. and Fabrizio Perri. 2002. "International business cycles with endogenous incomplete markets", *Econometrica*, 70.

Kocherlakota, Narayana. 1996. "Implications of Efficient Risk Sharing without Commitment", *Review of Economic Studies*, 63.

Krueger, Dirk and Fabrizio Perri. 2005. "Public versus private risk sharing" U. of Pennsylvania.

Krueger, Dirk and Uhlig, Harald, 2006. "Competitive risk sharing contracts with one-sided commitment," *Journal of Monetary Economics*, Elsevier, 53.

Ljungqvist, Lars and Sargent, Thomas J. 2004. *Recursive Macroeconomic Theory* (Second Edition, MIT Press) Ch. 21.

Marcet Albert, and Ramon Marimon. 1992. "Communication, Commitment and Growth", *Journal of Economic Theory*, 58.

Perry, Fabrizio. 2007. "Default and enforcement constraints" "The New Palgrave Dictionary of Economics", 2nd edition, edited by S. Durlauf and L. Blume, Palgrave Macmillan (Basingstoke and New York)

3. Asset Prices, lending and firm dynamics.

Albuquerque, Rui and Hugo A. Hopenhayn. 2004. "Optimal Lending Contracts and Firm Dynamics" *Review of Economic Studies*, 71(2), 285-315.

Alvarez, Fernando and Urban J. Jermann. 2000. "Efficiency, Equilibrium, and Asset Pricing with Risk of Default", *Econometrica*, 68.

Cooley, Thomas and Vincenzo Quadrini. 2001. "Financial Markets and Firm Dynamics", *American Economic Review*, 91.

4. Dynamic contracts with private information

Hopenhayn, Hugo and Iván Werning. 2008. "Equilibrium Default".

Kocherlakota, Narayana and Luigi Pistaferri. 2009. "Asset Pricing Implications of Pareto Optimality with Private Information." *Journal of Political Economy*, 117.

Mele, Antonio. 2008. "Repeated Moral Hazard and Recursive Lagrangeans," *Univertat Pompeu Fabra*.

5. Labor contracts, human capital accumulation. Non-exclusive participation constraints. (2nd generation)

Rudanko, Leena. 2008. "Labor Market Dynamics under Long Term Wage Contracting," *Brown University*

Cooley, Thomas, Ramon Marimon and Vincenzo Quadrini. 2004. "Aggregate Consequences of Limited Contract Enforceability", *Journal of Political Economy*, v.112(4), 817—847.

Marimon, Ramon and Vincenzo Quadrini. 2008. "Competition, human capital and income inequality with limited commitment"

6. Endogenous threats (3rd generation contracts) and applications: Hold-ups, asset ownership, and on-the-job search

Che, Y.K. and J. Sakovics. 2004. A dynamic theory of holdup," *Econometrica*, 72.

de Meza, D. and Lockwood, B.: 2007, Too much investment? a problem of endogenous outside options, *Mimeo, University of Warwick*.

Hart, Oliver and John Moore. 1990. "Incomplete contracts and renegotiation." *Journal of Political Economy*, 98.

MacLeod, W.B. and J.M. Malcomeson. 1993. "Investments, holdup, and the form of market contracts," *American Economic Review*, 83.

Marimon, Ramon and Pontus Rendahl. 2010. "Recursive Bargaining and Endogenous Threats," EUI.

Postel-Vinay, F. and J-M. Robin. 2004. "Too much or not too much?: Optimal wage policy with endogenous worker intensity," *Review of Economic Dynamics* 7

Shimer, Robert. 2006. "On-the-job search and strategic bargaining," *European Economic Review*, 50.

Part II. Beyond

7. Contracts, expectations and self-confirming equilibrium

Fudenberg, Drew and David K. Levine. 2006. "Superstition and Rational Learning," *American Economic Review* 96: 630-651.

Fudenberg, Drew and David K. Levine. 2007. Self-Confirming and the Lucas Critique," Harvard University and Washington University.

Sargent, Thomas J. 1999. *The Conquest of American Inflation*. Princeton University Press.

Sargent, Thomas J. 2007. "Evolution and Intelligent Design" *2008 American Economic Association presidential address*

8. Limited commitment and liquidity

Kiyotaki, Nobuhiro and John Moore. 2008. *Liquidity, Business Cycles, and Monetary Policy*. Princeton University.

9. Understanding contracts, expectations, competition and trust in macroeconomics: Arrow-Debreu, Ayagari-Bewley, matches and holdups, competition for promises, Hayek.