

European University Institute
Department of Economics
Spring 2017 (Block IV)
Wednesdays 9 – 11, Apr. 5 – May 3.

Macro-finance and policy design¹

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This half-credit course covers three broad topics on macro and finance. The first two, which can take up to four lectures, are relatively standard topics of a first year macro sequence and, therefore, complement the current compulsory macro sequence in the department. The third is relatively more advanced but also part of the current core of dynamic macro-finance economic models. Time permitting, we will also discuss how the models covered in the course can be used to assess and design policies and institutions in contemporary economies; in particular, the in Euro Area. The exact course requirements, and grading criteria, will be discussed the first day of class, but the idea is to have one or two exercises and a short -- possibly, take-home -- final exam. Active class participation will also (marginally) count for the final grade.

Provisional syllabus

1. Macro-Finance: Asset Prices, Ricardian Equivalence, Credit and Currency.

We first revise some basic elements of the inter-temporal individual agent's problem and of asset pricing accounting. Then, we move to Lucas' Asset Pricing model and the Ricardian equivalence proposition. Finally, we recall equilibrium with and without complete markets and/or participation, in order to discuss credit and currency in decentralized economies, such as Townsend's turnpike, Overlapping Generations, and Cash-in-Advance economies.

Ljungqvist & Sargent, 2012 (8.7, 10.1 – 10.3, 13.1 – 13.10 & 27.1 – 27.7)

Lucas, Robert E., Jr. 1978. "Asset Prices in an Exchange Economy," *Econometrica*, 46(6), 1429-1445.

2. Fiscal vs. Monetary Optimal Policies: Ramsey & Some Unpleasant Lessons.

We first focus on the design of Optimal Macroeconomic Policies with commitment. In particular, we show how to solve Ramsey problems using the 'primal approach' to fiscal and monetary policies. Then we study optimal fiscal policies, debt contingent policies and non-contingent debt policies. Finally, we discuss how 'the unpleasant monetarist arithmetic' is pervasive in the design of dynamic government policies.

Chari, V.V. and Patrick J. Kehoe. 1999. "Optimal Fiscal and Monetary Policy," in John B. Taylor and Michael Woodford eds. *Handbook of Macroeconomics* Volume 1, Part C, 1671-1745 (also NBER WP 6891).

¹ The materials of the course can be found in the EUI [Economics Moodle](#). In particular, the Notes corresponding to the topics, however these are supporting notes and are not substitute for class attendance and active participation.

Ljungqvist & Sargent, 2012 (16.1 – 16.8 & 26.1 – 26.3)

Lucas, Robert E. and Nacy L. Stokey, 1983. "Optimal Fiscal and Monetary Policy in an Economy without Capital," *Journal of Monetary Economics*, 12(1), 55-93.

Sargent, Thomas J., 2012. "Nobel Lecture: United States Then, Europe Now," *Journal of Political Economy*, 120(1), 1 - 40.

3. Limited enforcement and limited credibility.

We relax two classical assumptions: full enforcement and full commitment. Examples of the former are models of the 'dynasties' or of defaultable debt; of the latter the design of policies when the Ramsey policy is time-inconsistent and commitment is weak. We first look at the general issue of solving dynamic models with *forward-looking constraints* using 'recursive contracts'. We also look at these endogenous constraints as *wedges* and we discuss how to price them. We then discuss credible policies, starting by showing how the Ramsey problems can be casted in recursive form and how 'recursive contracts' can help to discuss credibility issues, we then turn to Markov perfect equilibria, revisiting the design of non-contingent debt policies with indexed and nominal debt without commitment.

Diaz-Giménez, Javier, Giorgia Giovannetti, Ramon Marimon and Pedro Teles, 2008. "Nominal Debt as a Burden to Monetary Policy," *Review of Economic Dynamics*, 11, 3, 493—514. 2008.

Ljungqvist & Sargent, 2012 (20.4 & 23.1 – 23.7)

Marcet, Albert and Ramon Marimon, 2016. "Recursive Contracts," EUI.

Book Reference

Ljungqvist, Lars and Thomas J. Sargent, 2012. *Recursive Macroeconomic Theory*, Third Edition, (or, with different Chapter numbering, 2004 Second Edition), MIT Press.