

14E022

6 ECTS

Macroeconomics I

Overview and Objectives

The course focuses on models of medium- and long-run macroeconomic dynamics and their empirical implications. The first part of the course will study the analytical properties of core growth models, as well as examine empirical work testing the models' main theoretical predictions. The second part of the course will make use of the theoretical tools learned in the first part of the course to rigorously analyze important topics in macroeconomics. In particular, the students will become familiar with the frontier research on growth, with special emphasis on papers analyzing the evolution of productivity and investment both across time and space.

Course Outline

PART I: INTRODUCTION AND CORE THEORETICAL MODELS

- 1) The Solow Model
- 2) The Ramsey Model
- 3) Cross-Country Income Differences: Development Accounting
- 4) Basics of Endogenous Growth Theory
- 5) Multi-sector Growth Models

PART II: TOPICS

- 1) Structural Transformation
- 2) Models of Heterogeneous Firms
- 3) The Evolution of the Labor Share
- 5) Trade and Aggregate Productivity

Required Activities

Analytical Problem Sets

There will be **5** analytical problem sets, which will be handed out in the first lecture of the week. You have to hand in **handwritten** solutions the following week.

Please note: the problem sets are **very** necessary work. Points will be assigned according to the fraction of the problem sets that you answered in sufficient detail. Solutions must be **handwritten**.

IMPORTANT: Please be aware the probability of passing this course is almost 0 if you do not try and solve the problems yourself. You may work in groups, with a maximum size of 3.

DATA PROBLEM SETS

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Students will be required to prepare 1 data-intensive problem set over the course of the term. Format and details will be distributed in separate documents. You **must** work in groups, with a size of 2 or 3.

Evaluation

The final grade will depend on your performance in a final exam (**80%**), analytical problem sets (**10%**), and data problem set (**10%**). The final exam is at the end of the term.

Evaluation Dates

Final Exam: Friday, December 19, 2018; 10:00-13:00

Materials

An excellent book that is focused on growth economics is Charles Jones' "Introduction to Economic Growth." A more advanced analysis is in Barro and Sala-i-Martin's "Economic Growth". Most of the materials covered in this course come from the original papers, which I will mention explicitly in class.

Key References:

- Acemoglu, D., and V. Guerrieri (2008): "Capital Deepening and Non-Balanced Economic Growth," *Journal of Political Economy*, 116(3), 467–498.
- Adamopoulos, T., and D. Restuccia (2014): "The Size Distribution of Farms and International Productivity Differences," *American Economic Review*, 104(6), 1667– 1697.
- Card, D., and J. E. DiNardo (2002): "Skill-Biased Technological Change and Rising Wage Inequality: Some Problems and Puzzles," *Journal of Labor Economics*, 20(4), 733–783.
- Caselli, F., and J. Feyrer (2007): "The Marginal Product of Capital," *Quarterly Journal of Economics*, 535–568.
- Caselli, F., and W. J. C. II (2006): "The World Technology Frontier," *American Economic Review*, 96(3), 499–522.
- Greenwood, J., Z. Hercowitz, and P. Krusell (1997): "Long-Run Implications of Investment-Specific Technological Change," *American Economic Review*, 87(3), 342–362.
- Greenwood, J., and P. Krusell (2006): "Growth accounting with investment- specific technological progress: A discussion of two approaches," *Journal of Monetary Economics*, 54, 1300–1310.

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- Hall, R., and C. I. Jones (1999): “Why Do Some Countries Produce So Much More Output per Worker than Others?” *Quarterly Journal of Economics*, 114, 83–116.
- Hsieh, C.-T., and P. J. Klenow (2007): “Relative Prices and Relative Prosperity,” *American Economic Review*, 97(3), 562–585.
- Jones, C. I. (1994): “Economic Growth and the relative price of capital,” *Journal of Monetary Economics*, 34, 359–382.
- Karabarbounis, L., and B. Neiman (2014): “The Global Decline of the Labor Share,” *Quarterly Journal of Economics*, pp. 61–103.
- King, R. G., and S. T. Rebelo (1993): “Transitional Dynamics and Economic Growth in the Neoclassical Model,” *American Economic Review*, 83(4), 908– 931.
- Krusell, P., L. E. Ohanian, J.-V. Ríos-Rull, and G. L. Violante (2000): “Capital-Skill Complementarity and Inequality: A Macroeconomic Analysis,” *Econometrica*, 68(5), 1029–1053.
- Mankiw, N. (2010): *Macroeconomics*, 7th Edition. Worth Publishers, The Intermediate-Level Textbook Also available as *Macroeconomics and the Financial System*, with Laurence Ball.
- Mankiw, N. G., D. Romer, and D. N. Weil (1992): “A Contribution to the Empirics of Economic Growth,” *Quarterly Journal of Economics*, 408–437.
- Ngai, L. R., and C. A. Pissarides (2007): “Structural Change in a Multisector Model of Growth,” *American Economic Review*, 97(1), 429–443.
- Ngai, R., and R. M. Samaniego (2009): “Mapping prices into productivity in multisector growth models,” *Journal of Economic Growth*, 14, 183–204.
- Piyabha Kongsamut, S. R., and D. Xie (2001): “Beyond Balanced Growth,” *Review of Economic Studies*, 68(4), 869–882.
- Restuccia, D., D. T. Yan, and X. Zhu (2008): “Agriculture and aggregate productivity: A quantitative cross-country analysis,” *Journal of Monetary Economics*, 55, 234–250.

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Introduction to Economics of Policy
Evaluation

3 ECTS