Macroeconomics Analysis II, Part 1
Prof. Cosmin ILUT, Spring 2016

Course description

Purpose: In the first half of the Macroeconomics Analysis II class, we will cover three important topics in macro: Real Business Cycle models, Asset Pricing and Fiscal-Monetary Theories of Inflation. We will mainly focus on the theoretical aspects of these issues so in general only analytical derivation is required. One exception is the first topic for which besides analytics we will also make use of some numerical simulations.

Grading: There will be one exam for this part of the course. Assignments will be given out approximately weekly during the course. Estimates for the grading weights for this half of the class in the overall grade for the course are 5% for assignments and 45% for the exam. The second part of the course will be taught by Professor Pietro Peretto.

Assignments: Students are encouraged to work together in groups of up to 3 people.

Required textbook: Ljungqvist, Lars and Thomas J. Sargent. Recursive Macroeconomic Theory. Cambridge: MIT Press, 2013, third edition. (referred to below as LS).

Administrative information: Lectures: Mon, Wed 10.05am-11.20am (Gross Hall 103).

Office hours: Wed 1-2 pm.

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Teaching assistants: Hasan Arik and Eugene Tan. E-mails: hasansadikarik@gmail.com and jun.jie.eugene.tan@duke.edu

TA's office hours: Hasan: Monday, 5-6.30 pm; Eugene: Monday 6.30-7.30 pm

"Final" exam: Wed March 2, Time: 10-12

Syllabus:

1. *Real Business Cycle Models*

   - King, Robert G. and Sergio T. Rebelo (1999), "Resuscitating Real Business Cycles" in: John B. Taylor and Michael Woodford, Eds. Handbook of Macroeconomics. Amsterdam: Elsevier, 1999. Vol. 1B, 927-1007
   - here we will briefly make use of Dynare v4 for simulating the model.

2. Asset Pricing

   - Cochrane, John H., Asset Pricing, Revised ed. Princeton, 2005. Ch. 1.
   - LS, Chapter 8: sections 8.1:8.10 (including)
   - Chapter 13: sections 13.1:13.9 (including)
   - Chapter 14: sections 14.1:14.8 (including)

3. Ramsey problems and Fiscal-Monetary Theories of Inflation.

   - LS, Chapter 26

Concepts

1. *RBC model*

   - Business cycle research.
   - Study RBC methodology: at the heart of dynamic stochastic general equilibrium macro models (DSGE)
     - Basic optimality conditions.
     - Linearization.
   - Dynamics.

2. *Asset Pricing*

   - Stochastic discount factors.
     - Risk and uncertainty corrections.
     - Puzzles.
   - Asset pricing with complete markets.
     - Equivalences of different market structures.
     - Notions of competitive equilibrium.
     - Recursiveness.
   - Incomplete markets

3. *Ramsey problems and Fiscal-Monetary Theories of Inflation.*

   - Models of money.
     - Classical monetary doctrines.
     - Time consistency.