Macroeconomic I (Ph.D.)

Introduction:

In macro 1 we will learn how to employ tools and techniques to study macro questions. We will work with fundamental optimization theories including dynamic programming, recursive methods, and Hamiltonian in both discrete and continuous environment. We also focus on main setups widely used in macro literature including Overlapping Generation Models, Infinite Horizon framework. We will see how these tools and frameworks will be employed to address different macro questions like the consumption behavior, investment decision, firm dynamics among others. Later on we will add money to our basic exercise and study the real impact of money. The deeper study of markets with detail micro foundations is left for Macro 2.

Textbooks:

You may find the following text books useful to read (Krusell note will be used substantially in the first section of the course)
* Per Krusell, Lecture notes for Macroeconomics I, 2004 (K)
* Jerome Adda and Russell Cooper, MIT Press, 2003 (AC)
Andreu Mas-Colell, Michael Whinston and Jerry Green, Microeconomic Theory, Oxford University Press, 1995.

I. Overview of Macroeconomics

- Prescott, "Nobel Lecture: The Transformation of Macroeconomic Policy and Research"
- Kydland, "Nobel Lecture: QUANTITATIVE AGGREGATE THEORY"
- BF, Ch. 1
• Tobin, James, Asset Accumulation and Economic Activity, University of Chicago Press, 1980.
• *N. Kocherlakota "Some Thoughts on the State of Macro"


  o A. Theory (Deterministic)
  • AC, Ch. 2,3,5
  • * Krusell, Ch2,3,4,5
  • Harris, M. Dynamic Economic Analysis, Oxford Univ. Press, 1987. Ch1,2
  • LS, Ch. 2,3,4
  • Azariadis, Ch. 7,13.
  • BF Ch. 2
  o B. Applications (Household Decisions: Consumption and Labor Supply)
  • * AC, Ch. 6
  • BF Ch. 6
  • Friedman, M. A Theory of The Consumption Function.
  • * Sargent, T. Dynamic Macroeconomic Theory, Ch.3.
  o C. Applications (Firm Decisions: Capital Accumulation)
  • * AC, Ch. 8
  • BF Ch. 6

**D. Application (Health Economy)**

* Hall, Jones (2007) "The Value of Life and The Rise in Health Spending", QJE


**E. Theory (Stochastic)**

* Krusell, Ch 6

SL, Chp 8

**F. Idiosyncratic Shock (Application: Inequality-Advanced)**

SL Chp 16

**III. Overlapping Generations Model**

Azariadis, Ch. 7,9,11,12,13

BF Ch. 3,4,5


LS, Ch. 8.


**Application**

Hansen, Prescott, "Malthus to Solow", AER, 2002, September (Impact of Land in growth, simple two period OLG model, technology with Land, two sector model, competitive equilibrium)

**IV. Aggregate Fluctuations**

**A. Money and Aggregate Fluctuations**

**1. Imperfect Information**


2. Sticky Prices


B. Expectations and Aggregate Fluctuations


V- Dynamic Optimization: Continuous Time

- Acemoglu Chp. 7
  - Application - Health and Longevity
- * Murphy, Topel, (2006), 'The Value of Health and Longevity", JPE


Macroeconomic II (Ph.D.)

In this course we will ask fundamental questions regarding the macro aspect of the economy. We will use the simple benchmark models and tools, learned in Macro I, to address the basic trade-offs and frictions in the economy. The goal of the course is to familiarize students to start their own paper by asking an interesting macro question and knowing how to employ a relevant framework to come up with answer. In Advanced Macro, we will study the estimation methods and investigate more on empirical papers.

This course consists of three parts. The first part discuss how the aggregate economy works. It distinguishes between long run and short run framework and try to evaluate the change in GDP over time and counties (Section I & II). Second part focuses on markets. Four markets that will be discussed are labor market (III), asset market (IV), insurance market (V) and banking (VIII). Third part in about government policies, fiscal and monetary policy (VI, VII).

The following books are useful during the course:


(S) Sargent. T 1987

I.Growth (Monopolistic Competition, Human Capital, Technology Revolution)

II. Real Business Cycles (Data, Linearizing Necessary Conditions, Method of Undetermined Coefficients, Indivisible Labor, Business Cycle Accounting)

- * Prescott, "Theory Ahead of Real Business Measurement" 1987
- D. Krueger, Quantitative Macroeconomics: An Introduction, 2007
- Lucas, "Macroeconomic Priorities" AER, 2003
- Krusell, Mukuyama, Smith, Sahin, "Revisiting the welfare effects of eliminating business cycles", 2009, RED
- The Great Diversification and its Undoing Carvalho, Vasco; Gabaix, Xavier The American Economic Review, Volume 103, Number 5, August 2013, pp. 1697-1727(31)

III. Labor Market (s,s), search, bargaining, estimation)

- Pissarides, Christopher; Equilibrium Unemployment Theory, MIT Press, 2000
• * Wolpin, 1987, "Estimating a Structural Search Model" Econometrica

Policy Analysis

• Aiyagari, J Greenwood, N Guner -"On The State of Union" Journal of Political Economy, 2000, (This paper concern on matching from other point of view and nice application and policy analysis of matching in marriage and divorce)
• Galemianos, Pacula, Persico, " A Search Theoric Model of the Retail Market for Illicit Drugs", 2009

IV.Asset Market ( Lucas Tree, Risk Premium Puzzle)


V.Insurance Market

VI.Fiscal Policy and Optimal Taxation ( Time consistency, Implementability Constraints )

VII. Monetary Policy and Money (Cash in Advanced, Friedman Rule, Money in Utility, Spatial Model, Search)


VIII. Banking (Classic Model of Banking, Commitment)
• L-S, Ch. 18, 19, 20.
• He, Xiong, "Dynamic Debt Runs", 2009