

# Macroeconomics I: Part I

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Fall 2021

## Goal

The goal of the class is to make students familiar with macroeconomic models with heterogeneous agents. The first part of the class covers methods and theory. We will also talk about how to connect economic theory to micro data. The second part will cover models with complete markets and with overlapping generations. The third part of the class will be on models with search frictions.

## Topics

In total, the first part of the Macro I class has 11 lectures and 3 TA sessions. In the 11 lectures, we are going to cover the topics from the list below where the indicated number of lectures should give a rough idea about how much time we will spend on each of the topics.

### 1. Methods

#### (a) Dynamic Programming (2 lectures)

- Stokey and Lucas (1989): Chapters 3 + 4
- Ljungqvist and Sargent (2012): Chapters 3 + 4

### 2. Complete markets and overlapping generations (3 lectures)

- Complete markets models: Ljungqvist and Sargent (2012): Chapter 8 + 9
- OLG models: Krüger (2002)

### 3. Labor markets (6 lectures)

- Pissarides (2000): Chapters 1,2,4,8
- Cahuc, Carcillo, Zylberberg (2014): Chapter 5
- Rogerson, Shimer, Wright (2005): *“Search-Theoretic Models of the Labor Market: A Survey”*

## Suggested literature

- “Recursive Methods in Economic Dynamics” , Nancy L. Stokey and Robert E. Lucas Jr with Edward C. Prescott (1989)
- “Recursive Macroeconomic Theory”, Lars Ljungqvist and Thomas J. Sargent (2012, 3rd edition)
- “Macroeconomic Theory”, Dirk Krüger, manuscript (2002)
- “Equilibrium Unemployment Theory”, Christopher Pissarides (2000)
- “Labor Economics”, Pierre Cahuc, Stéphane Carcillo, and André Zylbergery (2014)
- “Wage Dispersion”, Dale Mortensen (2005)

# BGSE Macroeconomics I - Part 2

Prof. Keith Kuester

Winter term, 2021/22

## Outline:

This is the second part of the first PhD macro sequence. The sequence aims at introducing students to basic techniques and concepts. The course is organized around the neoclassical growth model and its offspring. We discuss asset pricing in macro models and the real business cycle model. Then, we introduce money and discuss fiscal-monetary interaction. Last, we introduce nominal rigidities, using the New Keynesian business-cycle model as a backbone. Time permitting, we will delve into distributional effects of monetary policy.

For this part of the course, it is expected that students have participated actively in BGSE Macroeconomics I – Part 1 (Moritz Kuhn’s part). In particular, I expect familiarity with dynamic programming, the welfare theorems, the neoclassical growth model (as discussed by Moritz), and basic aggregation under complete markets.

## Required Reading:

Ljungqvist and Sargent (2012) will be good background reading. Consulting Walsh (2010) provides for the monetary economics part. Additional readings are assigned as the course progresses.

## Overview

Ch. 0 Preliminaries.

[On e-campus for self-study]

Ch. 1 Asset prices in macro.

[Ljungqvist and Sargent (2012), ch. 13]

Ch. 2 Real business cycle model.

[King and Rebelo (1999); Ljungqvist and Sargent (2012), ch. 12]

Ch. 3 Classical monetary model.

[Walsh (2010), ch. 10]

Ch. 4 Monetary fiscal interaction.

[Leeper and Leith (2016); Walsh (2010), ch. 4.2; Ljungqvist and Sargent (2012), ch. 26]

Ch. 5 Nominal Rigidities – New Keynesian Model.

[Walsh (2010), ch. 8]

## References

King, R. G. and Rebelo, S. T. (1999), ‘Resuscitating real business cycles,’ in: J. B. Taylor and M. Woodford (eds.), ‘Handbook of Macroeconomics,’ *Handbook of Macroeconomics, Elsevier*, volume 1, chapter 14, Elsevier, pp. 927–1007.

Leeper, E. and Leith, C. (2016), ‘Chapter 30 - Understanding Inflation as a Joint MonetaryFiscal Phenomenon,’ *Handbook of Macroeconomics*, volume 2, Elsevier, pp. 2305 – 2415.

Ljungqvist, L. and Sargent, T. J. (2012), *Recursive Macroeconomic Theory, Third Edition, MIT Press Books*, volume 1, The MIT Press.

Walsh, C. E. (2010), *Monetary Theory and Policy, Third Edition, MIT Press Books*, volume 1, The MIT Press.