# Macroeconomic Theory II

## Bo Zhao CCER, PKU

# 1 Introduction

This course introduces the modern Macroeconomics Theory. In the first half of the course, we begin with the classical Arrow-Debreu general equilibrium framework and then study its applications: aggregation and asset pricing. We then study two workhorse models of business cycles, the Real Business Cycle model and the New Keynesian model. In the second half the course, we departure from the complete market economy and study incomplete market models. We study the classical Bewley-Huggett-Aiyagari model and their applications. In the end, we cover a few topics on Chinese economy.

#### 1.1 Time

- Teaching: Monday 15:10-18:00, 2#515.
- Office hour: by appointment, zhaobo@nsd.pku.edu.cn, 62758375, office 625

### 1.2 TA

Han Xuan, nsdhanxuan@163.com

### 1.3 Requirement

- Computation: Students should have basic knowledge about Bellman Equation and the basic numerical methods to solve it, e.g., value function iteration, numerical integration, root finding, etc.
- Software: Matlab (with Dynare)/IVF/C++

#### 1.4 Evaluation

The final score consists of four parts: homework (20%), mid-term (April 25th, 30%), final (June 15th, 30%), and term paper (20%).

### 1.5 Main Reference

- RMT: Recursive Macroeconomic Theory by Ljungqvist and Sargent. 2nd/3rd edition.
- DK: Macroeconomic Theory by Dirk Krueger
- FBCR: Cooley, Frontiers of Business Cycle Research.
- MIB: Gali, J., Monetary policy, Inflation, and the Business Cycle: An introduction to the new Keynesian Framework.

### 2 Road Map

- L1: AD Equilibrium: DK #2,#3
- L2: SM Equilibrium: DK #2,#3
- L3: Neoclassical growth model revisited: DK #2,#3
- L4: Uncertainty and Full Insurance in the Complete Market Model. DK,#3,#6, RMT #8.
- L5: Aggregation: Chatterjee (1994, JPubE), Constantinides (1982, JB), Ogaki (2003, RED)
- L6: RBC. RBCR #1
- L7: Indivisible Labor. Rogerson (1988, JME), Rogerson and Wallenius (2009, JET)
- L8: New Keynesian. MIB #3, Christiano, Eichenbaum, Evans (1999, Handbook of Macroeconomics), Christiano (2011, Handbook of Monetary Economics)
- L9: PIH and income fluctuation problem. RMT #13
- L10: Analytical incomplete market model. Wang (2003, AER)
- L11: Huggett and Aiyagari Model, RMT #17
- L12: Transitional dynamics and aggregate risks in Bewley model. Krusell and Smith (1998, JPE), Floden (2001, JME)
- L13: Topics in incomplete market model. Quadrini (2000, RED), Floden and Linde (2001, RED), Kitao (2009, RED), Krusell and Simith (1997, MD), Huggett (1996, JME)
- L14: Chinese Economy, Song, Storesletten, Zilibotti (2011, AER).
- L15: Firm Dynamics. Hopenhayn (1992, Econometrica)
- L16: Asset Bubbles. Zhao (2015, ET)