Advanced Topics in Finance: Financial Market Frictions and Capital Misallocation

Instructor: Hengjie Ai

I. Overview:

What is this course about?
The main purpose of this course is to discuss capital misallocation and financial market frictions. The main financial market friction that we focus on is borrowing constraints motivated by limited commitment. If we have time, we will also discuss learning and information frictions.

Who should take this class?
Ph.d. students who are interested in this topic and who have some previous exposure to both continuous time and discrete dynamic models.

Several important papers on this topic are written in continuous-time Brownian motion setting. Therefore it is important that the students have seen continuous time models somewhere else.

II. Course Outline:

Lecture 1: Modeling and measuring capital misallocation (Sep 7)
- Hsieh and Klenow (2009)
- Moll (2014)

Lecture 2: Two-period Gertler-Kiyotaki model and variations (Sep 14)
Hengjie's notes

Lecture 3: Macro models with financial market frictions (Sep 21)
- Brunnermeier and Sannikov (2014)
- Gertler and Kiyotaki (2010); Ai, Li, and Yang (2018)

Lecture 4: Debt contracts in macro and corporate finance (Sep 28)
- Hengjie's notes

Lecture 5: Dynamic contracting with limited commitment (Oct 5)

- Albuquequi Hopenhayn (2014), Ai and Li (2018)
- Gertler and Kiyotaki in continuous time: Maggiori (2017)

Lecture 6: Price rigidity and financial market frictions (Oct 10 2:30-5:00)
- Lecture borrowed from Anmol Bhandari, *location to be announced*.

Lecture 7: Limited commitment and capital misallocation (Oct 26)

Topic for write-ups

1) Give an example of a non-Walrasian equilibrium in which Hsieh and Klenow measure would misclassify perfect capital reallocation as capital misallocation.

2) Formulate a continuous-time version of the Gertler-Kiyotaki model.
   Reference: Maggiori, Matteo. "Financial Intermediation, International Risk Sharing, and Reserve Currencies."

3) Develop a model with exogenous debt contract and multiple equilibrium. Analyze the nature of the equilibriums.
   Reference: Nick Crouzet: Default, Debt Maturity and Investment Dynamics

4) To be added.