

Advanced Topics in Macro: Financial Frictions

Econ 8200

Prof. Harold Cole
Ronald O. Perelman Center
colehl@upenn.edu

Spring 2025
MW 1:45-3:15 pm
WILL 306

Aim: The aim and manner of the course will depend upon the composition of the students taking it or sitting in. If the majority are second-year students I will orient the course more towards standard lectures. If there are more advance graduate students then I will tilt the orientation the course more towards presenting interesting recent papers, discussing research ideas and presenting preliminary work. In any case the course will feature some of both.

The following is preliminary and based upon last year's version.

Coverage: This course studies the role that frictions, particularly financial frictions, play in resource allocation. I am going to suggest some material to cover, based on topics I am currently or have recently worked on. But I am open to your suggestions as well.

Recently, I have been working on:

- i Sovereign Default- e.g. Aguiar, Mark, et al. "Self-fulfilling debt crises, revisited." *Journal of Political Economy* (2022),
- ii Sovereign Debt Auctions - e.g. Cole, Harold, Daniel Neuhann, and Guillermo Ordonez. "Asymmetric Information and Sovereign Debt: Theory Meets Mexican Data." *Journal of Political Economy* (2022), or Cole, Harold L., Daniel Neuhann, and Guillermo Ordonez. *Information Spillovers and Sovereign Debt: Theory Meets the Eurozone Crisis*, forthcoming *ReStud*.
- iii Computational models of asset prices and the macroeconomy - e.g. Azinovic, Marlon, Harold L. Cole, and Felix Kubler. "Asset Pricing in a Low Rate Environment." *Swiss Finance Institute Research Paper 23-31 (2023)*., and Chien, YiLi, Harold Cole, and Hanno Lustig. "A multiplier approach to understanding the macro implications of household finance." *The Review of Economic Studies* (2011),
- iv Sustaining cooperative arrangements when the deviating coalitions have symmetric contracting opportunities; e.g. Cole, Harold L., et al. "Trust in Risk Sharing: A Double-Edged Sword." forthcoming *ReStud*.
- v Information frictions and financial markets - e.g. Cole, Harold, and Thomas F. Cooley. "Information acquisition and rating agencies." forthcoming *RED*.

Textbook: The main textbook is Ljungqvist and Sargent, *Recursive Macroeconomic Theory*. But this is just for background reading, and I will also suggest some other readings below.

Tentative Syllabus

1. Preferences - review several preference models which are heavily used

- Backus, David K., Bryan R. Routledge, and Stanley E. Zin. "Exotic preferences for macroeconomists." NBER Macroeconomics Annual 19 (2004): 319-390.

2. Asset Pricing - cover essentials

- Cochrane *Asset Pricing*
- Guiro - rare disasters
- Bansal-Yaron - Long Run Risks
- Cambell-Cochrane - habits

3. Incomplete Market Models + Default

- Sovereign debt with default - additional readings Aguiar and Amador *Sovereign Debt: A Review*
- **Arellano - sort out code in https://julia.quantecon.org/multi_agent_models/arellano.ht**
- Aguiar, Chatterjee, Cole and Stangebye
- Morelli, Juan M., Pablo Ottonello, and Diego J. Perez. "Global banks and systemic debt crises." *Econometrica* 90.2 (2022): 749-798.
- World Financial Cycles, Bai et al

4. Models with Private Information

- Grossman-Stiglitz
- **Cole-Cooley Model** of signal buying and credit rating agencies
- Auction models: Cole, Neuhan, and Ordonez

5. Limited Commitment Models

- Standard Model
- Kehoe-Levine Eq. and Alvarez-Jermann decentralization
- Hellwig-Lorenzoni
- International RBC with limited commitment
- Group deviations - Cole, Krueger, Mailath and Park.

6. Asset trading technologies and the macroeconomy

- Optimal Taxation w/out State Contingent Debt - AMSS
- Chien-Cole-Lustig Model

7. Using ML for asset pricing models

- ML examples
- Azinovic-Cole-Kubler