14.462 Advanced Macroeconomics II
Spring 2017

Robert M. Townsend

March 30, 2017

Topics

Measurement, Analysis, and Design of Financial Systems - First Principles as a Foundation for Policy.

Course Logistics

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Lectures: TuTh 1:00-2:30 pm E51-372
Recitations: Fr 1:00-2:30 pm E51-376
Office hours: Fr 5:00-6:30 pm E52-314

Course Overview

This course will cover several topics related to liquidity and financial intermediation. The focus of the course is on the design of financial contracts and markets, efficiency and policy interventions in a general equilibrium context. Special topics include innovations made possible by new technology, e-money and e-platforms.

A. Liquidity Payments and Monetary policy

- **Topic 1:** Risk in liquidity and clearing
  - Deferred payment and credit, trade fails and penalties, and systemic risk

- **Topic 2:** Innovations in financial systems, e-payments, and monetary policy
  - Limited communication and record keeping, distributed ledger technology, the emergence of private and public e-money, implementation of monetary policy
• **Topic 3:** Segmentation, high-velocity debt and coordination  
  – Spatially separated agents or equivalent segmentation, high velocity circulating private and public debt as money, coordination problems and financial crashes

• **Topic 4:** Financial fragmentation and centrality  
  – Fragmentation by market, asset, and/or trader; key marginal values in liquidity provision; notions of financial centrality

• **Topic 5:** Monetary models  
  – Bubbles, efficiency, models of monetary economies with alternative obstacles to trade

**B. Financial Intermediation, e-platforms, and Regulation**

• **Topic 1:** Good and bad forms of competition  
  – Trading rules with a general equilibrium focus, here, initially, without obstacles

• **Topic 2:** Platforms with private information  
  – Optimal contracts and ideal operation of exchanges with private information

• **Topic 3:** Broker dealers as platforms in competition  
  – Implementation of contracts with private Information and other obstacles as general equilibrium competitive outcome

• **Topic 4:** Financial platforms: one, many, or tiered and how they ought to function  
  – Identifying key obstacles and features of the environment

**Requirements**

The grade will be based on class participation (15%), three problem sets (40%) and a discussion of a paper in class with write up due on June 18 (45%).

The discussion should consist of a summary of the key contribution of the paper and a critical assessment of its strengths or shortcomings. The critical assessment might include preliminary robustness checks, improvements or extensions. The summary of the paper should be less than a third of the presentation.

The discussions will take place during the recitations of Friday, April 28, and Friday, May 5. Each discussion will be allocated a 30-min slot. The time constraint will be strictly enforced. The write up should extend the discussion and be 10 to 12-page long. Students are encouraged to discuss possible avenues for further research.
Reading List

A. Liquidity

A.0 Motivation (half a lecture)


### A.1 Risk in Liquidity and Clearing (half a lecture)


### A.2 Innovations in Financial Systems, E-Payments and Monetary Policy (half a lecture)

• Raskin, Max and David Yermack (2016). "Digital Currencies, Decentralized


A.3 Segmentation, High Velocity Debt, and Coordination (half a lecture)


A.4 Financial Fragmentation and Centrality (one lecture)


• Jaramillo et al. (2012), An Empirical Study of the Mexican Banking System Network and Its Implications for Systemetic Risk


**A.5 Monetary Models (two lectures)**

**Money aggregates and some counterarguments**


**Bubbles and Obstacles to Trade**


• *Geerolf, François (2013). “Reassessing Dynamic Efficiency,” mimeo UCLA.


• Santos, Manuel S. and Woodford, Michael (1997). "Rational Asset Pricing Bub-
B. Platforms

B.0 Motivation (one lecture)

B.1 Good and Bad Forms of Competition (one lecture)


- Makowski, Louis (1980). “Perfect Competition, the Profit Criterion, and the Or-


Other:

- Chicago Board of Trade (1982). “Grains, Production, Processing, Marketing.”

**B.2 Platforms with Private Information (one lecture)**


B.3 Broker Dealers as Platforms and Competition (one lecture)


B.4 Financial Platforms: One, Many or Tiered (two lectures)

of Political Economy, vol. 100(1) pp. 41-61.


