A brief discussion of Emergence and Fragility of Repo Markets

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What is the broad agenda?

- We want to understand the Repo market because

  1. It is a flexible funding source and allows rehypothecation (–> it is here to stay)
  2. It (Triparty system) broke down

- Need to understand micro-foundations of trade if we want to “design” a better market and/or regulate.

The Question in this paper

- Why would two period investors prefer collateralized short term lending over buying long term bonds and then selling them next period?

- No uncertainty about the economy etc. to drive the choice —> trading frictions.
- Part of a bigger set of questions in finance: e.g. questions of what causes the term structure.

The Model

- Cash investors are born today and endowed with $; they eat this tomorrow.
  —> Only care about tomorrow's consumption.
- Riskless technology (1+r) or one unit of bond which pays off *d* each period.
  —> these real cash flows have to be split between the agents.
- Solution describes various ways in which these cash flows can be allocated using market instruments:
- Choices: invest in T-bills or buy the (bond) and sell it tomorrow or buy a bond from a specific dealer and enter into a repo with him.
  –> Would also work with options etc. etc.

The model delivers

- Dealers enter into repos — they will buy them at a low price tomorrow, so they sell them at a low price today.
  –> Repo is a commitment to deliver cash tomorrow.
- Markets are only viable if other people participate: Multiple equilibria
  –> interpreted as fragility
  –> Policy implications

Why the model Works

- Prices are set by Nash bargaining, so the outside option for each of these types is important.
- The type of the cash seller (who has long term bonds) is known in the bond market.
  – In particular, he cannot hire an intermediary to trade on his behalf, or even take out a loan against his bond collateral.

Policy implications are not unique

1. Enforce anonymity in markets
2. Allow intermediaries to manage portfolios/provide annuities.
3. Hire traders of last resort.
4. Design a centralized bond market.

Overall

- Sensible framework
  (outside option intuition is elegant.)
- Might need a bit more before we start redesigning trading systems
- Might be useful to think about what is different about triparty repo (i.e., what happens if the clearing bank goes bankrupt.)