

Repo Runs

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Contributions

Major

- Paper provides a potential explanation for differences in haircuts in tri-party and bilateral repo markets.
- Provides an explanation for why trilateral repo w/unwind is vulnerable to sunspot runs, while bilateral repo is less vulnerable.
- Shows trilateral repo w/o unwind is less vulnerable to runs.

Other

- Interesting Dynamic Diamond Dybvig extension.
- Dealers profits are not competed away in equilibrium.
- Many more.

With Unwind

- 1 Each morning the clearing bank unwinds investors previous days repos.
- 2 The clearing bank finances the dealers intraday.
- 3 In the afternoon, investors decide whether to reinvest overnight.
 - Middle-aged investors own no collateral when deciding to reinvest. \Rightarrow if they run, they are not stuck with the collateral if the dealer fails.
 - If one reinvests while the others do not, the reinvesting investor is stuck.

Without Unwind

- 1 Middle-aged investors own collateral when deciding whether to reinvest.
- 2 If they don't reinvest, they are stuck with collateral if dealer fails.

Middle Aged Investors Investment Decision

		Others	
		Invest	Don't
Invest		\hat{r}	κ_i
Don't		\bar{r}	\bar{r}

- If $\bar{r} \geq \kappa_i$ (Don't, Don't) is an equilibrium.
- If $\hat{r} \geq \bar{r}$ (Invest, Invest) is an equilibrium.
- If dealer does not have sufficient liquidity to survive a run **and** collateral constraint is violated, then in the run equilibrium dealer will fail.

Middle Aged Investors Investment Decision

		Others	
		Invest	Don't
Invest		\hat{r}	κ_j
Don't		\bar{r}	κ_j

- In (Don't,Don't) the dealer is assumed to fail.
- With failure, middle-aged investors only get κ_j .
- (Don't,Don't) is weakly dominated.
- Removing unwind stops runs in the model.

Middle Aged Investors Investment Decision

		Others	
		Invest	Don't
			Dealer Survives Dealer Fails
Invest	\hat{r}	\tilde{r}	κ_j
Don't	\bar{r}	\bar{r}	κ_j

- If a run occurs investors are not sure whether the dealer can survive (they are unsure if dealer can satisfy liquidity constraint)
- If $\tilde{r} \leq \bar{r}$, i.e. investors perceive that a weakened dealer cannot credibly offer a better deal than outsiders, (Don't, Don't) is not weakly dominated anymore.
- If investors perceive a run is occurring and that they might get out, then running can still be dominant.

- Differences in haircuts between tri-party and bilateral haircuts is huge.

Lending in bilateral markets against collateral (with high haircut) and then use the collateral in tri-party markets to borrow the money to lend generates large amounts of money (w/some risk).

I am not convinced the paper explains such a large difference.

- How should we interpret high haircuts in bilateral markets.

If one borrower experiences a run in bilateral markets and raises haircuts, and other borrowers investors are not sure why haircuts increased, then other borrowers may have to raise haircuts, spreading funding difficulties across borrowers in bilateral market.

Bilateral market may be subject to different types of runs than trilateral market.

Suggestions

- Talk about the informational assumptions used in the analysis and the robustness of the results to the informational assumptions.
- Discuss other theories for the runs.
- Fully develop the repo-haircut analysis for bilateral market.