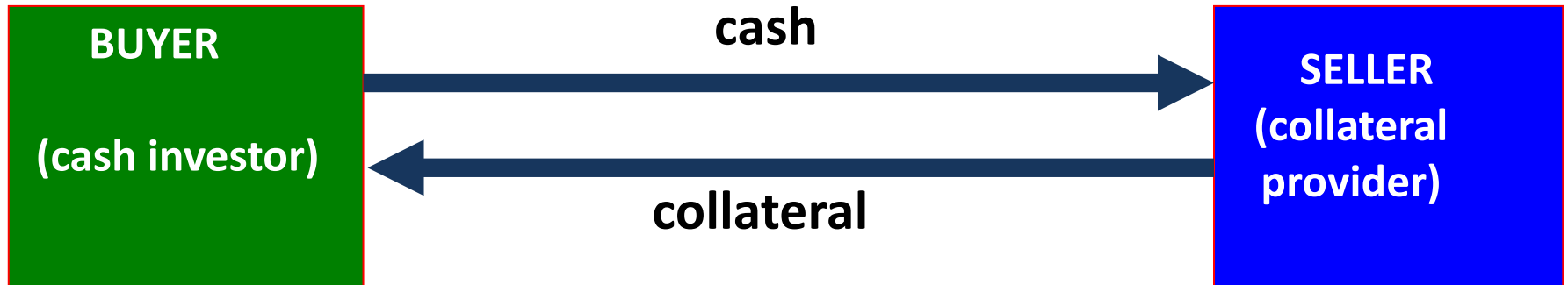


When should repos be exempt from bankruptcy and failure resolution processes?

Darrell Duffie
Stanford University

FRBB/FRBNY Conference on Risks of Wholesale Funding
August, 2014

Opening Leg of Repo



When repos are exempt

At the seller's default, the buyer may liquidate the collateral and enter a claim for the net consideration due.

A seller who needs this form of collateral can purchase it.



Safe-harbor proposals for liquid-collateral repos

Acharya and Öncü (2012)

Duffie and Skeel (2012)

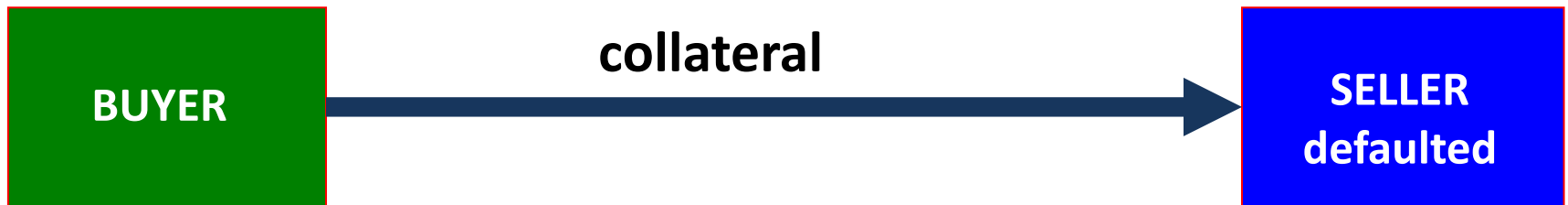
Morrison, Roe, Sontchi (2014)

Jackson and Skeel (2012)

When repos are under a stay

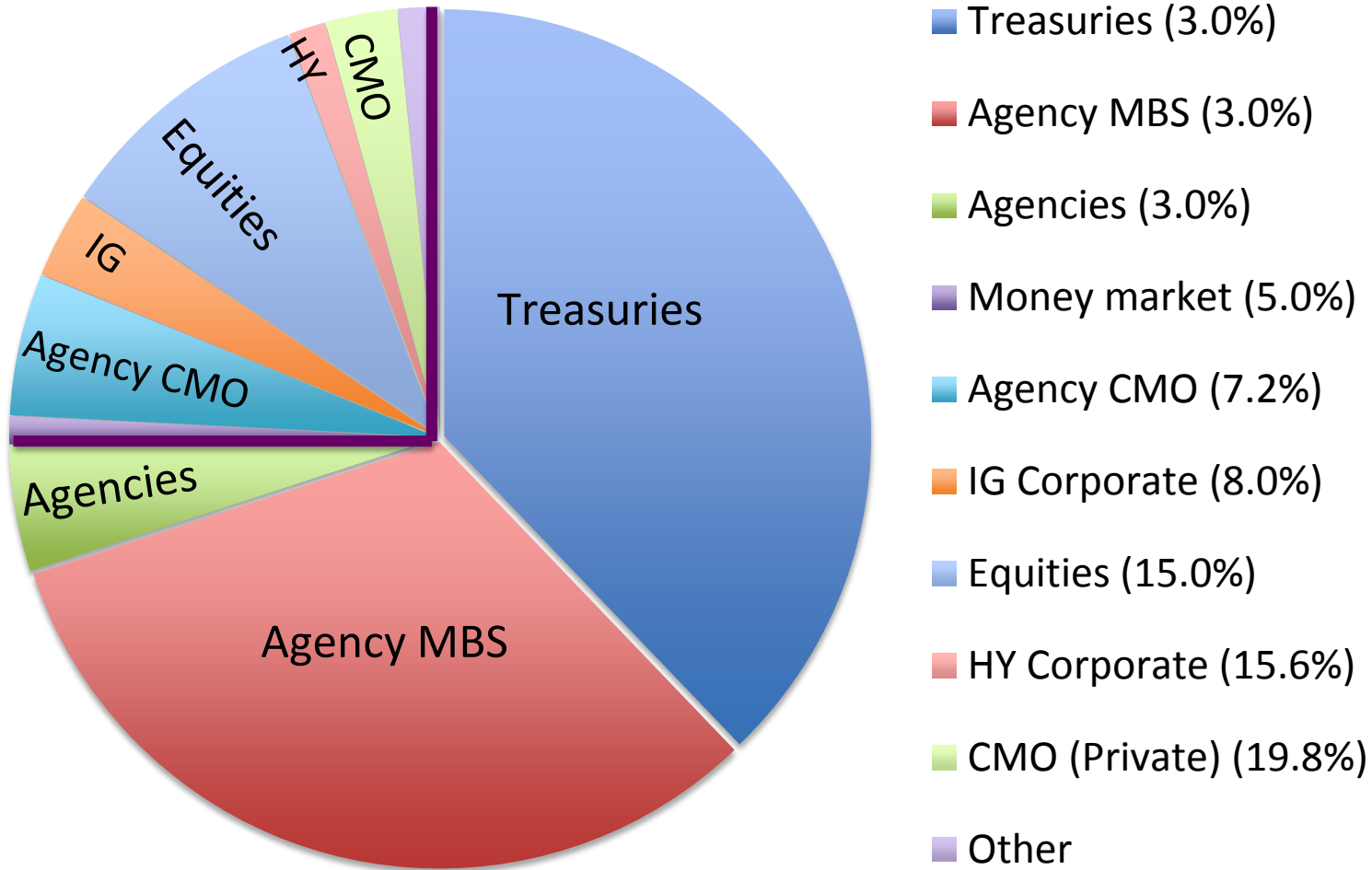
At the seller's default, the buyer could be:

- (a) Prevented from early termination.
- (b) Forced to return the collateral, with a promise of adequate protection. But this is impractical.



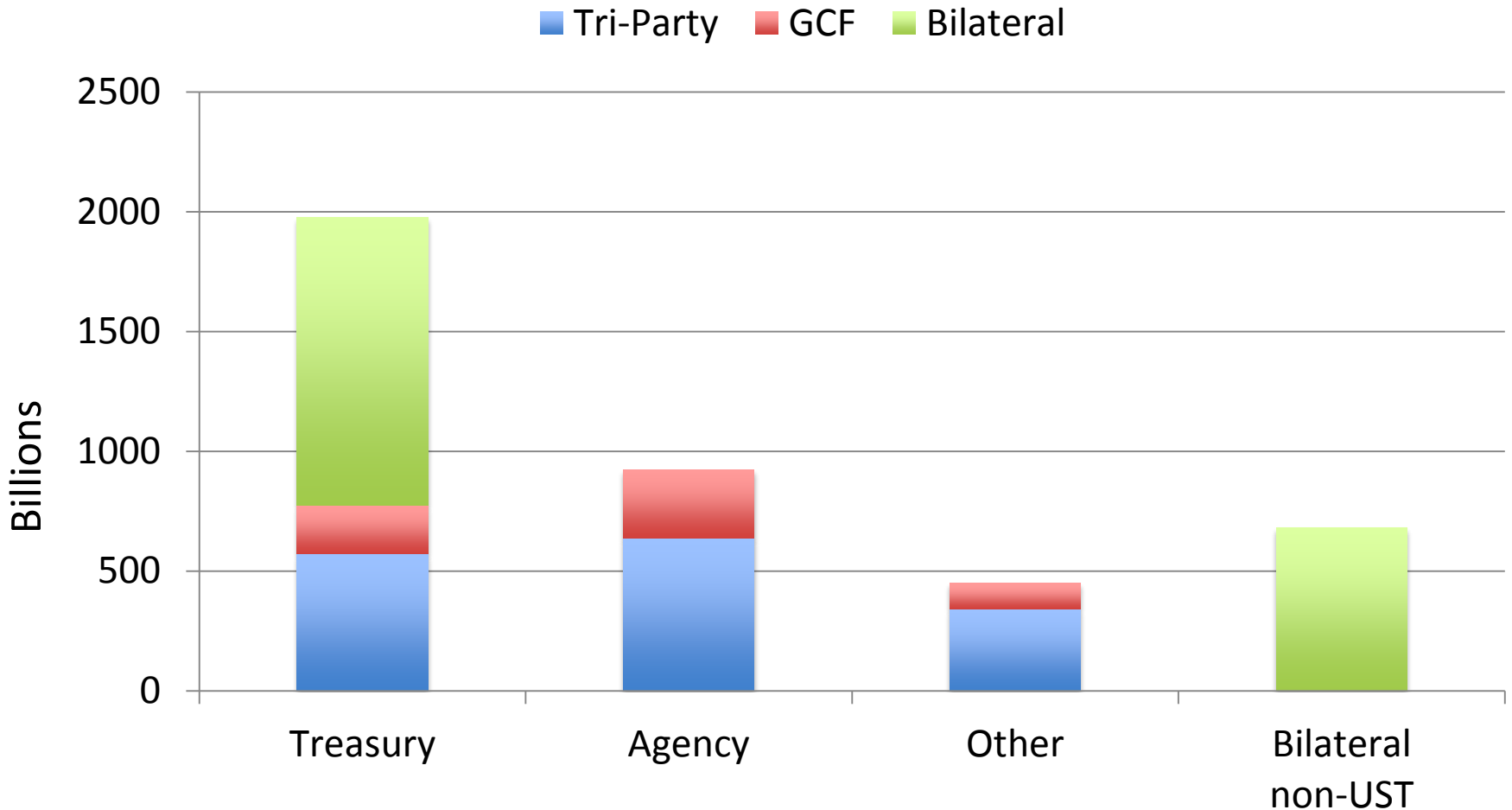
Tri-party repo collateral liquidity

Type (90th percentile haircut)



Data source: FRBNY, January 10, 2014

Broader repo market collateral composition



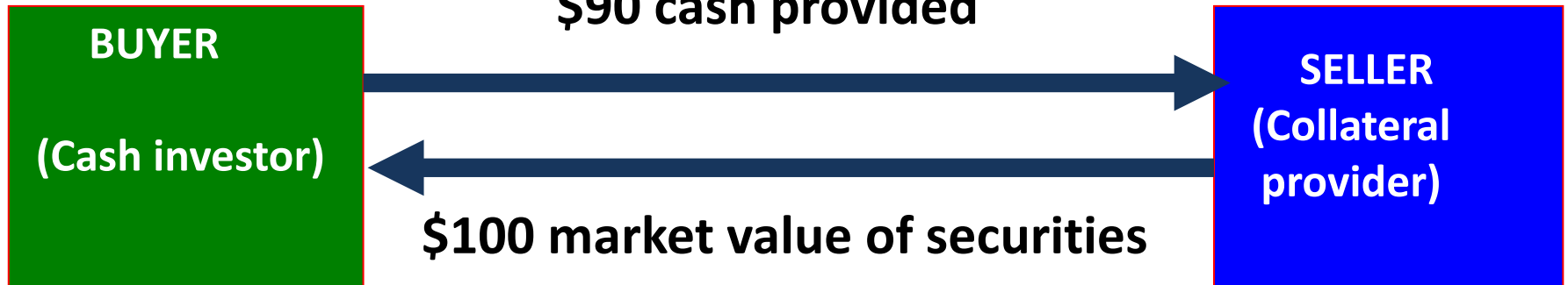
Data sources: FRBNY, FICC-GSD, Copeland-Davis-LeSueur-Martin (2014)

A typical tri-party repo collateral portfolio

Asset class	Amount (billion USD)	Daily liquidity (billion USD)	Days to liquidate
Treasuries and strips	70.6	7.5	9
Agency debt	10.6	2.0	3
Agency MBS	88.4	4.0	22
Corporate bonds	6.8	0.2	27
Equities	11.0	0.5	22
ABS	3.8	0.1	30
Other	8.8		

Data source: Begalle, Martin, McAndrews, and McLaughlin (2013)

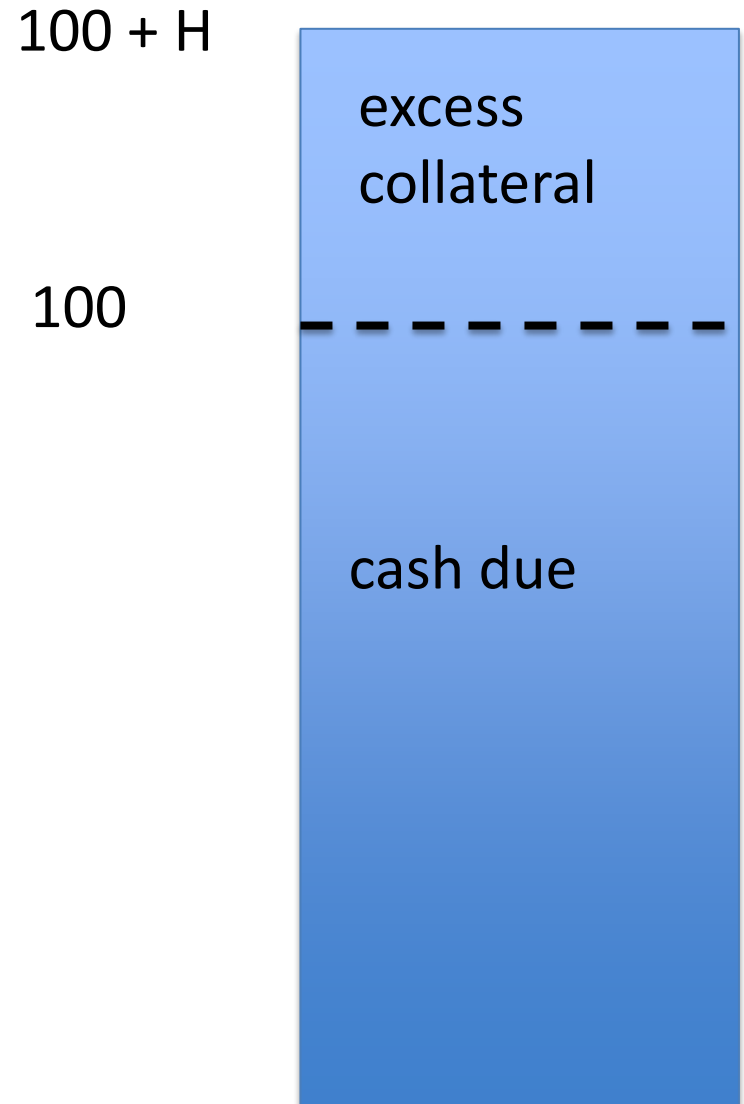
Opening leg of repo with 10% haircut

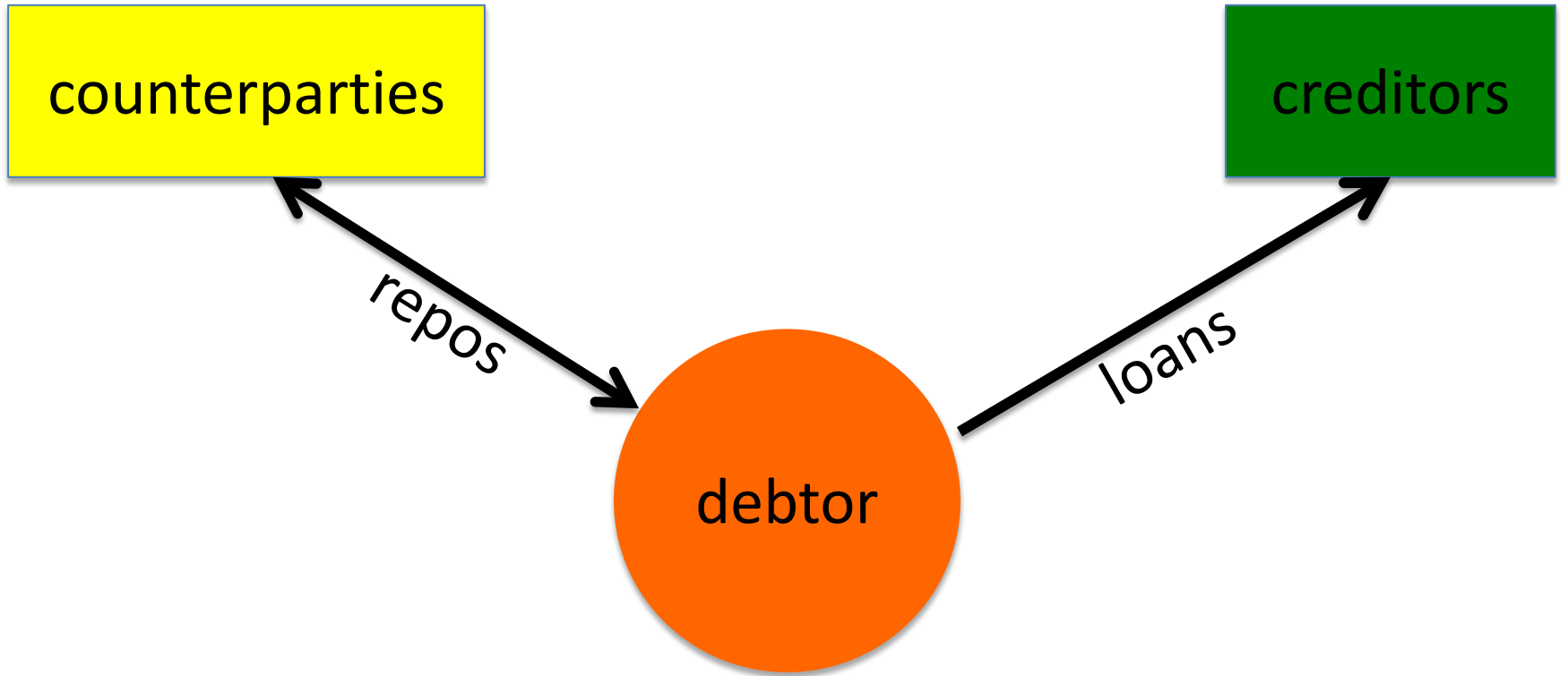


Large haircuts incite fire sales

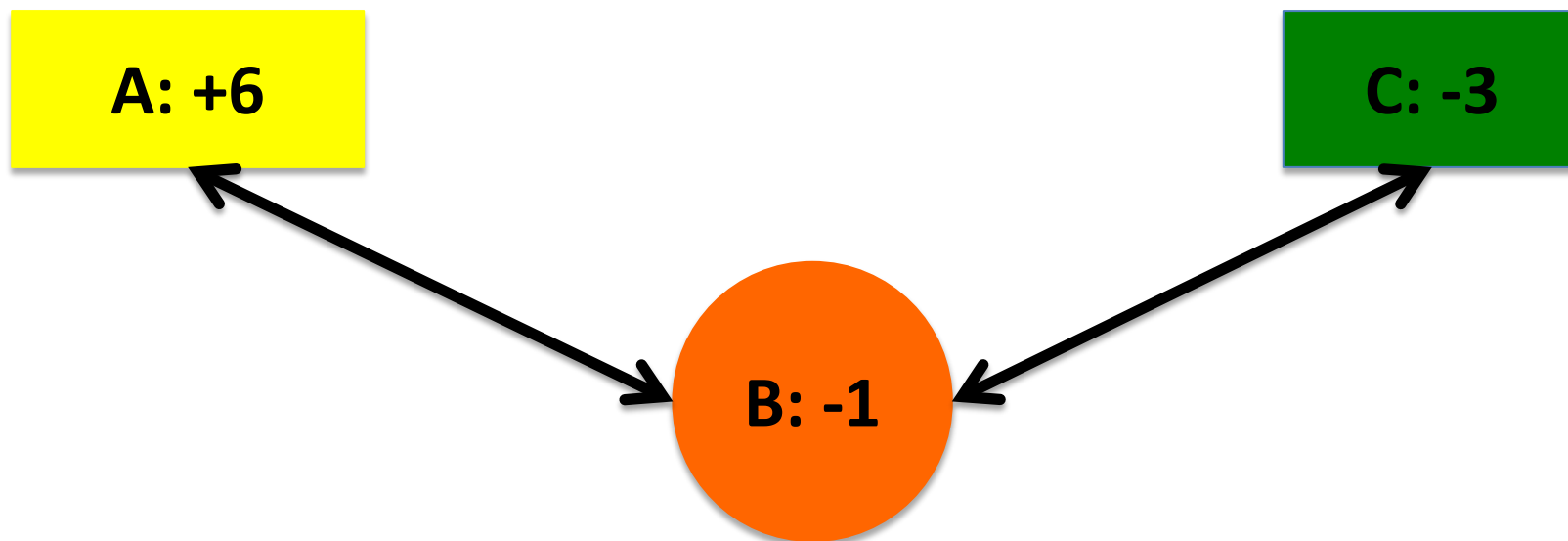
If H is large, cash investors facing an insolvent counterparty have little incentive to liquidate collateral carefully.

See Infante (2013).

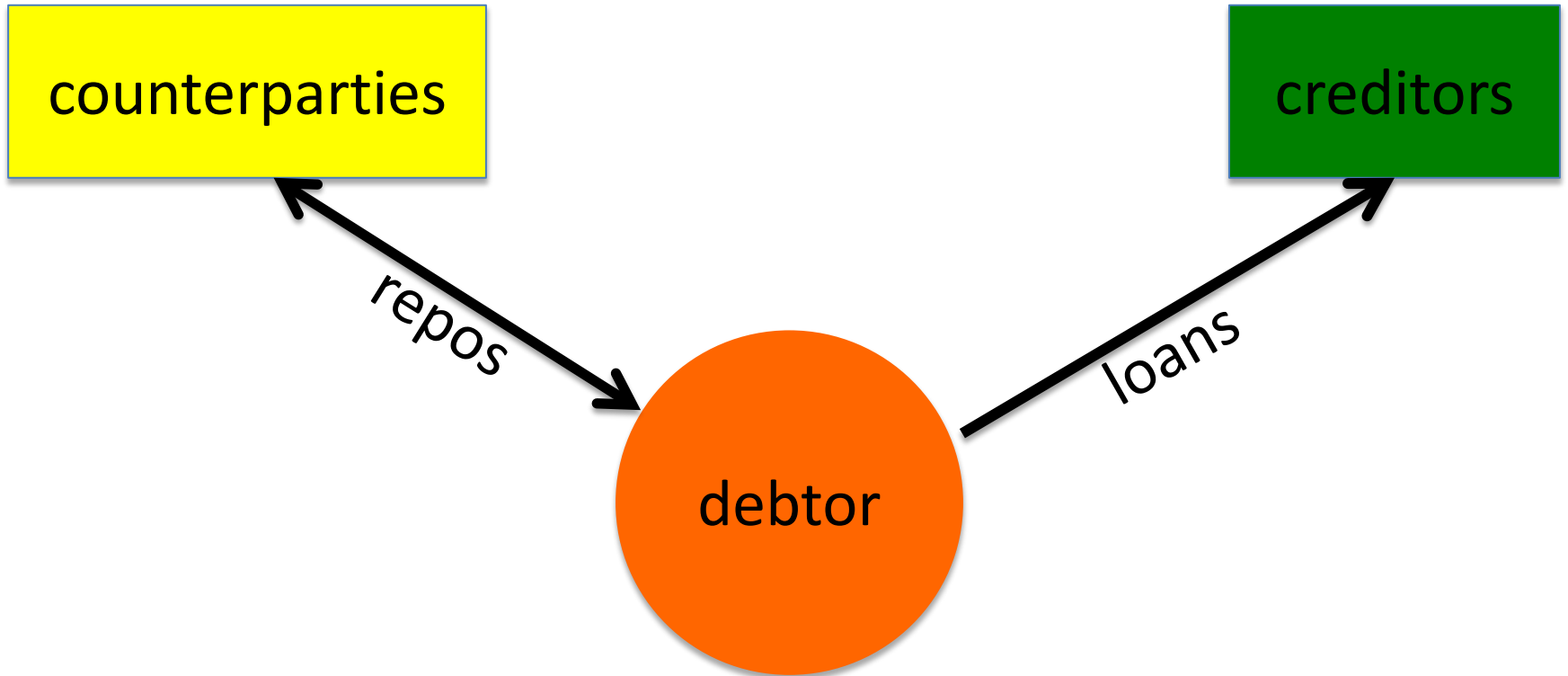




Would a change in contractual termination rights that increases aggregate benefits actually be negotiated?



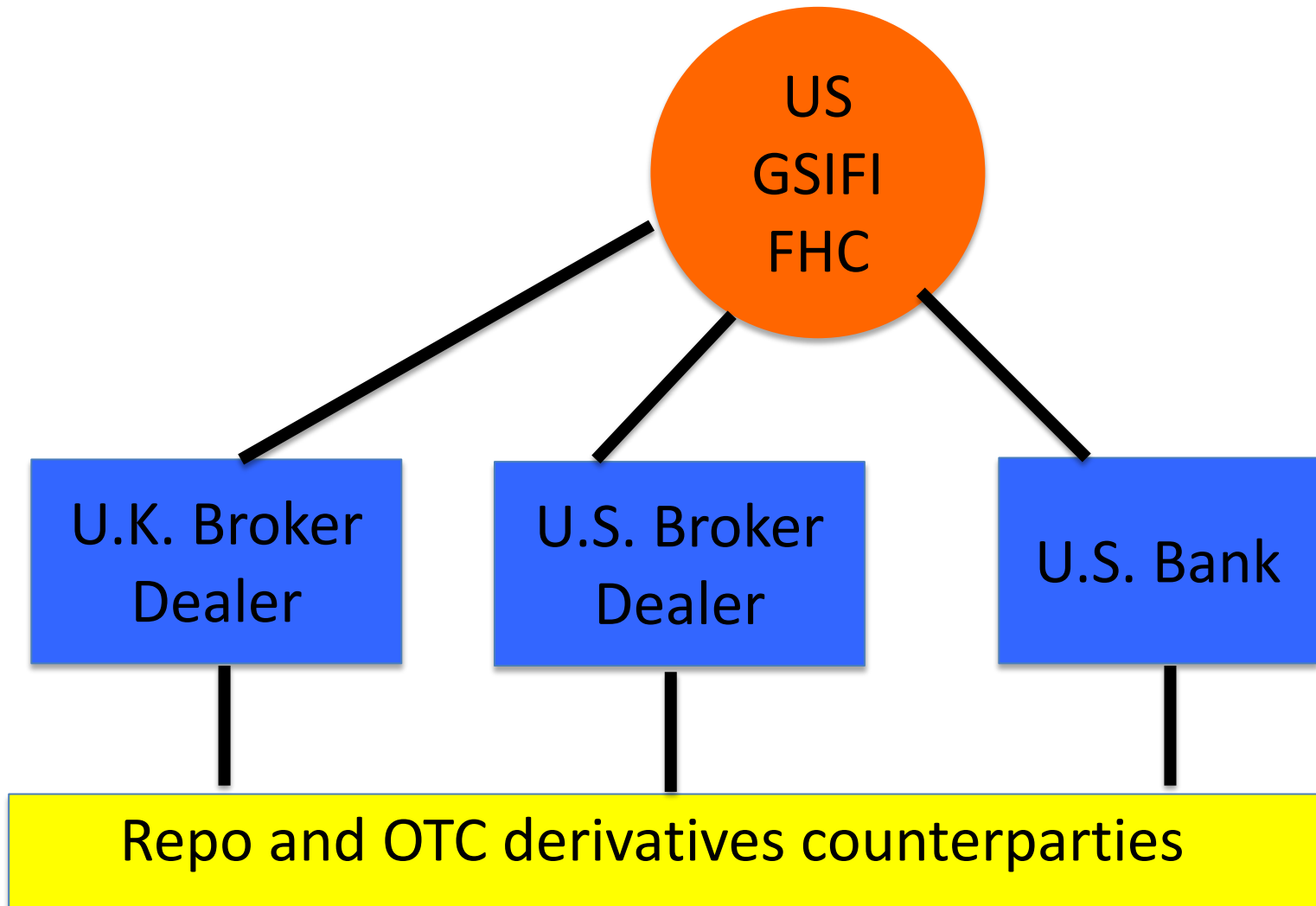
Conditions for the social efficiency of bilateral contracting in network markets: Duffie and Wang (2014).



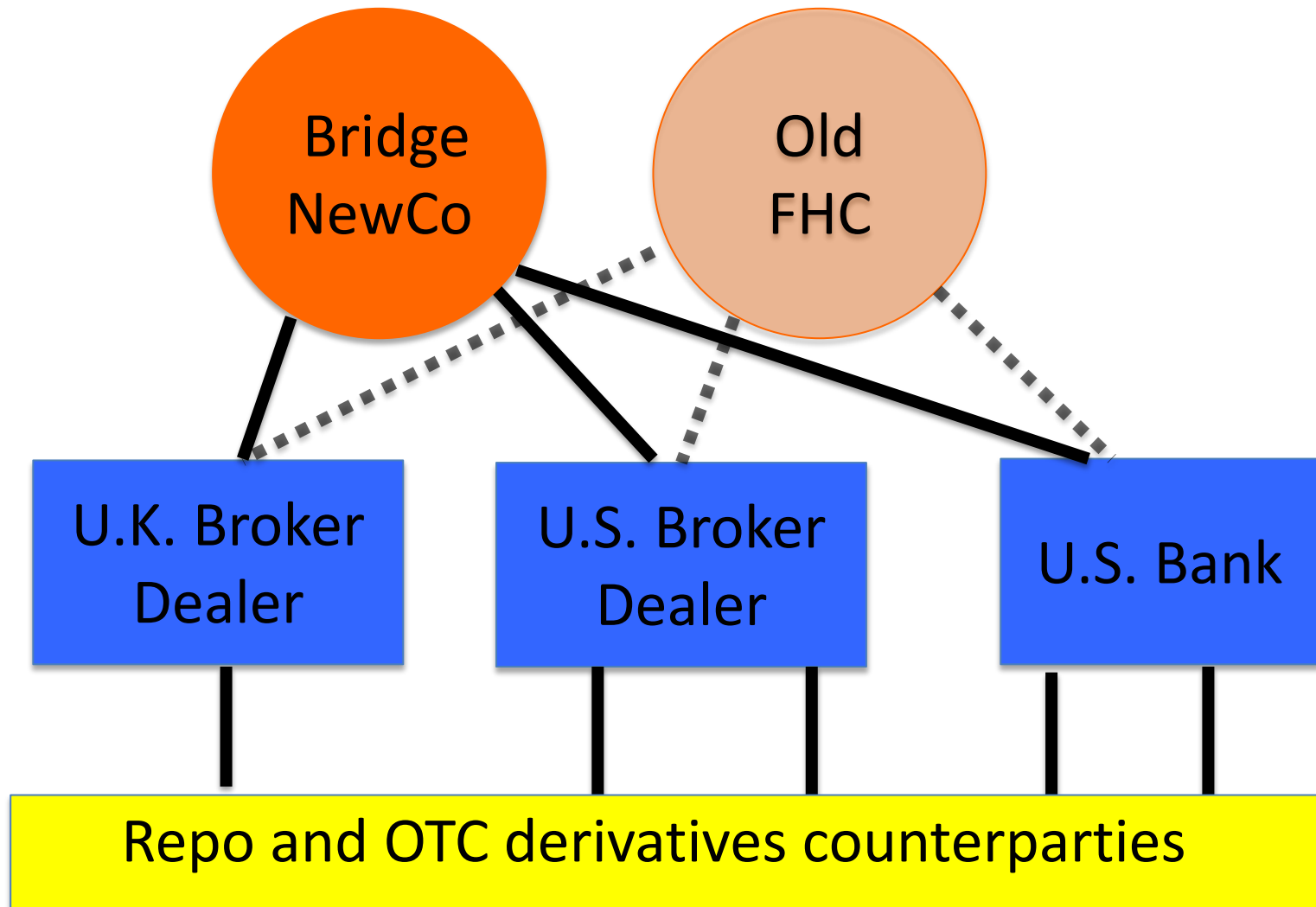
other market participants subject to spillover costs such as fire-sale risk

Impact of Safe Harbor

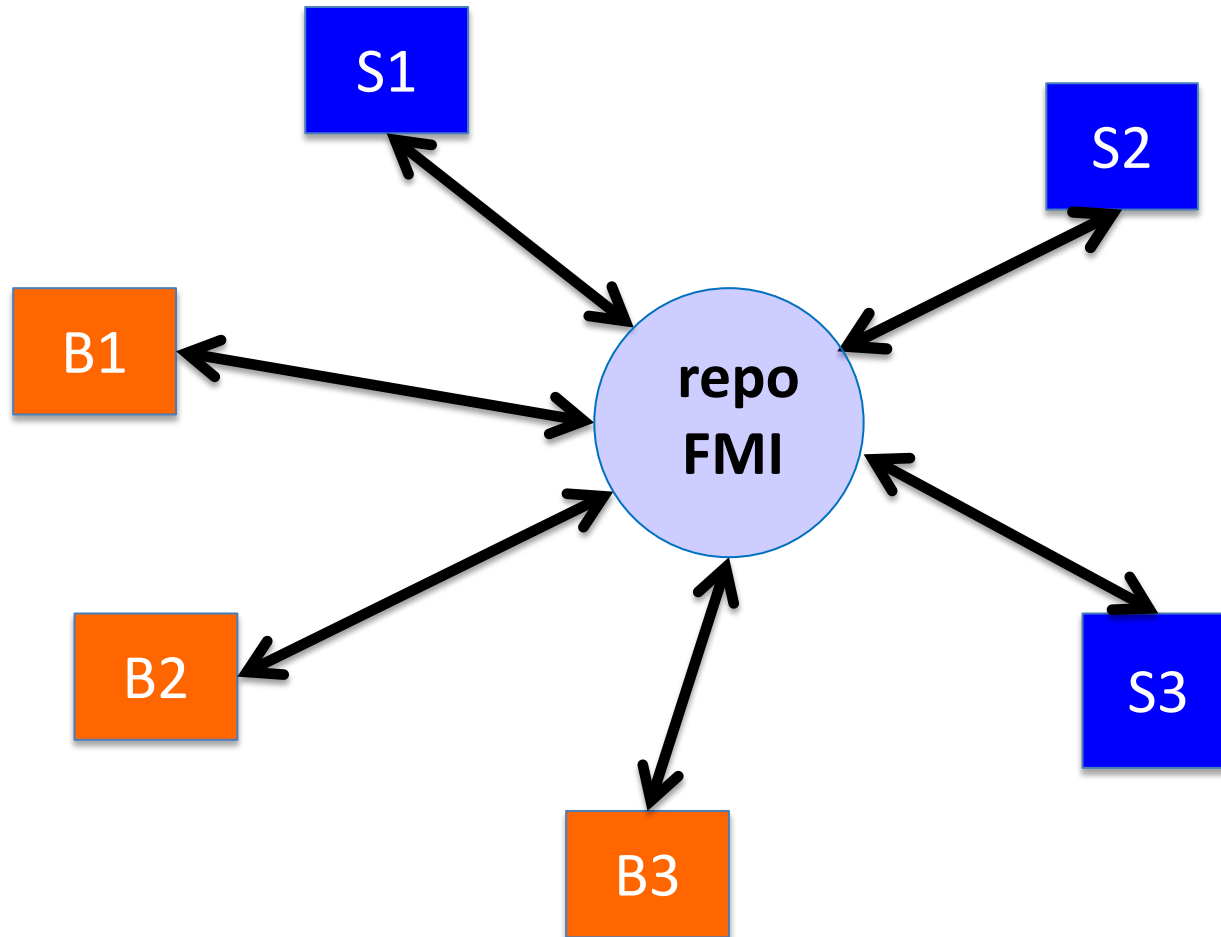
- Lowers surviving counterparty distress costs.
- Increases stock of attractive money-like assets.
- Increases market access to failed collateral.
- Reduces access of defaulter to specific collateral.
- Increases fire-sale risk.
- Inhibits single-point-of-entry failure resolution.



Single Point of Entry Failure Resolution

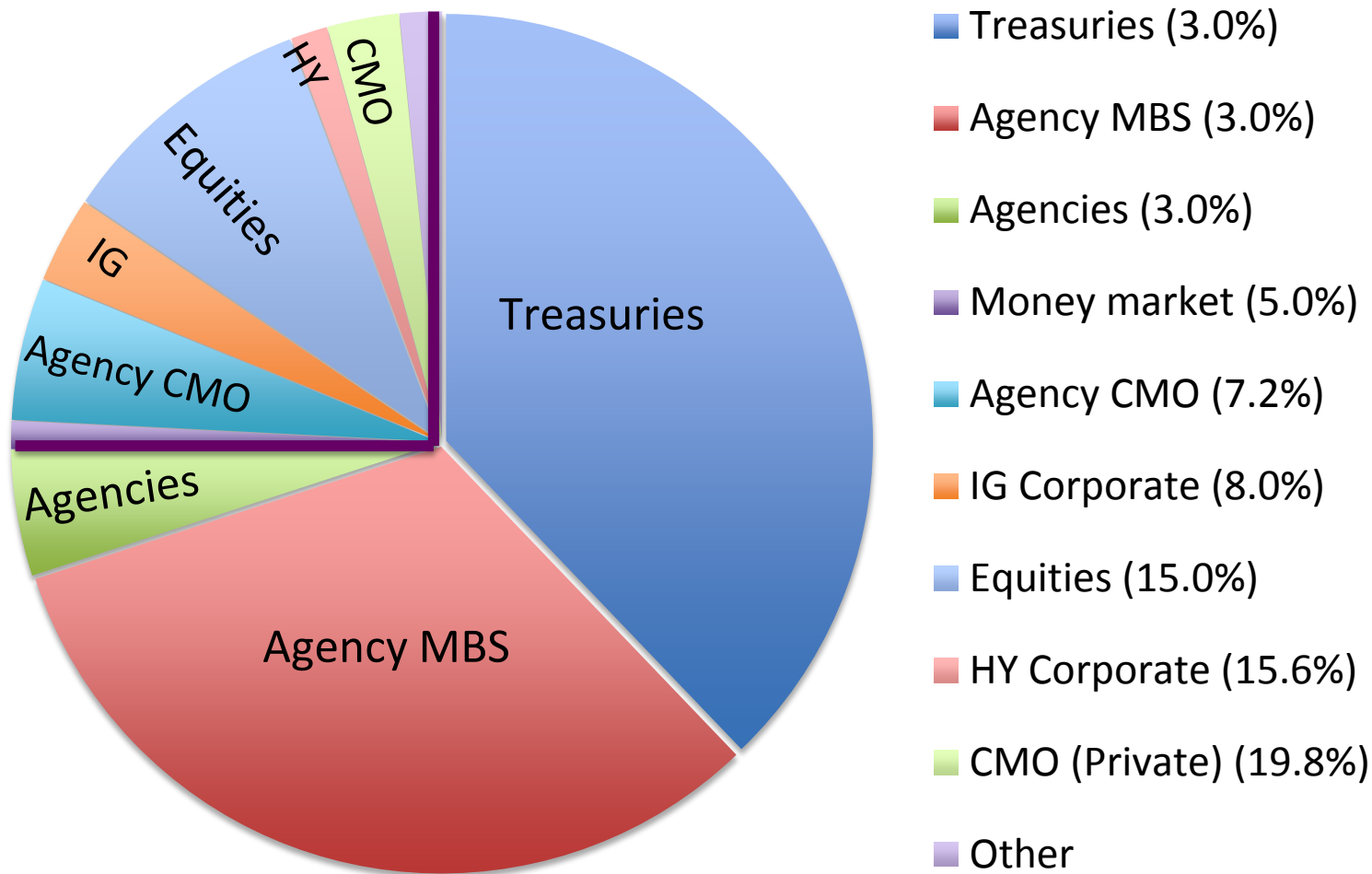


Resolution risk for CCP or tri-party agent



Tri-party repo collateral liquidity

Type (90th percentile haircut)



Data source: FRBNY, January 10, 2014

Preliminary policy suggestions

- A safe harbor for repos of the most liquid collateral (at least treasuries, agencies, and agency MBS), except for specified SIFI failure resolution scenarios.
- Reduce or eliminate the safe harbor for repos of the most customized and least liquid collateral.
- Use Title-II or Chapter 14 stays to transfer term repos to the bridge, overriding the contractual right to early termination, provided the bridge is safe and repo margins are maintained.

Additional Reading

- [“A Dialogue on the Costs and Benefits of Automatic Stays for Derivatives and Repurchase Agreements”](#), Darrell Duffie and David A. Skeel Jr., In [Bankruptcy Not Bailout: A Special Chapter 14](#), edited by Kenneth E. Scott and John B. Taylor, Hoover Press, 2012.
- “Efficient Contracting in Network Markets,” Darrell Duffie and Chaojun Wang, Working paper, Stanford University, 2014.
- Standard Master Repo Agreement <http://www.sifma.org/services/standard-forms-and-documentation/mra,-gmra,-msla-and-msftas/>
- “Transaction Consistency and the New Finance in Bankruptcy,” David A. Skeel Jr. and Thomas H. Jackson, *Columbia Law Review*, Volume 112 (2012), pp. 152-202. http://columbialawreview.org/wp-content/uploads/2012/07/112-1_Skeel_Jackson.pdf
- “Financial Market Infrastructure: Too Important to Fail,” Darrell Duffie, in *The U.S. Financial System – Five Years After the Crisis*, edited by Martin Bailey and John Taylor, Hoover Institution and Brookings Institute, 2014. <http://darrellduffie.com/uploads/policy/DuffieTooImportantToFail2014.pdf>
- “Rolling Back the Repo Safe Harbors,” Edward R. Morrison, Mark J. Roe, and Hon. Christopher S. Sontchi, *Business Lawyer*, forthcoming http://www.newyorkfed.org/research/conference/2014/wholesalefunding/RollingBacktheRepoSafeHarbors_Roe.pdf
- “A Proposal for the Resolution of Systemically Important Assets and Liabilities: The Case of the Repo Market,” Viral Acharya and Sabri Oncu. *International Journal of Central Banking*, January, 2013. <http://www.ijcb.org/journal/ijcb13q0a14.pdf>
- “Repo Collateral Fire Sales: The Effects of Exemption from Automatic Stay,” Sebastian Infante, Finance and Economics Discussion Series 2013-83. Board of Governors of the Federal Reserve System (U.S.), 2013. <http://www.federalreserve.gov/pubs/feds/2013/201383/201383abs.html>

When repos are exempt

At the *buyer's* default, a safe-harbored seller may purchase the collateral and enter a claim for the net consideration.

**BUYER
defaulted**

SELLER

collateral
↑