

# The US Tri-party Repo Market Reforms

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# The crisis experience

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- The tri-party repo market was a locus of stress and a channel of risk transmission during the crisis
- In response, the Federal Reserve intervened to stabilize the market, establishing the primary dealer credit facility (PDCF) as a liquidity backstop to promote investor confidence and mitigate run risk
  - March 16, 2008 – backstop established for all investment grade fixed income assets financed in tri-party
  - September 14, 2008 – expanded to all assets funded in tri-party, including equities and noninvestment grade fixed income
  - September 21, 2008 – expanded to the tri-party repo operations of London broker-dealer subs of Morgan Stanley, Goldman Sachs and Merrill Lynch (“transitional credit”)
    - Included non-USD securities and discount window pledges of loans
  - November 23, 2008 – expanded to the tri-party repo operations of London broker-dealer sub of Citigroup (“transitional credit”)

# Reforms

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A NY Fed white paper on the tri-party repo market identified three weaknesses:

- Excessive reliance by market participants on massive extensions of intraday credit by the clearing banks
  - 8:30 am - all repos were unwound by clearing banks (including nonmaturing trades) – funds returned to lenders
  - 6:30 pm – all new and continuing trades were “rewound” with lenders’ funds credited to borrowers, and collateral pledged to lenders
  - Clearing banks funded borrowers during this time gap every day – and market participants assumed they would always do so
- Inadequacy, and pro-cyclicality, of market participants’ risk management practices
- Lack of plans or mechanisms to facilitate the orderly liquidation of a large dealer’s tri-party repo collateral and avoid fire sales of assets

# Market dependence on intraday credit

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- The transfer of risk between lenders and clearing bank each day introduced instability – each has incentives to run first from a troubled dealer
- Failure of a large dealer could destabilize a clearing bank, if exposure to that dealer is large relative to capital level
- Destabilization of a clearing bank could cause broader pullback by lenders – impeding surviving dealers' access to funding
- Destabilization of a clearing bank could impair its conduct of securities and payment clearing activities that are critical to broader fixed-income market liquidity and functioning

# Inadequacy of risk management practices

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- Some lenders accept assets as collateral that they may not hold in their investment portfolios
  - Creates strong incentive to withdraw funding if a borrower is troubled
  - Intensifies run risk – many lenders are themselves subject to runs
  - Disincentivizes prudent collateral risk management measures – lender acts like an unsecured lender, doesn't look to collateral
- Dealers' reliance on short-term funding creates high rollover risk, and heightens their vulnerability to runs
  - Dealers relied too heavily on the clearing bank's uninterrupted provision of intraday credit

# Dealer default as a systemic risk event

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- A default of a large dealer could spark a number of problems as lenders try to liquidate its collateral
  - Fire sales of assets
  - Run on one or more investors (headline risk) which accelerates withdrawals of funding from surviving dealers
  - Destabilization of clearing bank if capital is insufficient to absorb losses
- During the recent crisis, the need to liquidate a large dealer's tri-party repo collateral was averted
  - JPMC's purchase of Bear Stearns, with the help of a Fed loan
  - PDCF funding was provided to bridge Lehman's U.S. broker-dealer subsidiary to acquisition by Barclay's

# Tri-party Repo Task Force

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- Established September 2009, with diverse membership
  - All large dealers
  - Both clearing banks
  - Representatives of large investors: Money market funds, securities lending operations
  - Fed and SEC staff serve as technical advisors, observers
- Formed to identify one or more paths to reduce sources of systemic risk inherent in this market's processes and practices

# May 2010 Task Force Recommendations

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- Eliminate reliance on intraday credit
  - Reduce demand by
    - Ceasing daily unwind for non-maturing repos
    - Implementing automated collateral substitution to allow dealer access to collateral for other market making activities while keeping investor fully collateralized
    - Eliminating the time period between maturity of old repos and settlement of new repos
  - Reduce supply by requiring clearing banks to provide credit only on a capped and pre-committed basis
- Strengthen risk management practices
  - Reduce dealer reliance on overnight funding
  - Improve investor margining practices
  - Improve investors' planning and readiness to liquidate collateral in an orderly manner, in event of dealer default
- Disclose aggregate market data to public (began in fall 2010)



# Foundation for future risk reduction is being built...

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- Auto-substitution of collateral within repo shells began 6/27
  - Needed to allow dealers access to securities in their box for market making activities once the daily unwind process ceases
- Move to 3:30 pm settlement time began 8/22 for all but interbank GCF repo trades
  - Technology to support later unwind for interbank GCF under development
  - Move is precursor for a shorter, more streamlined end-of-day settlement process that ensures timely return of cash to lenders
- 3-way deal confirmation between borrower, lender and tri-party agent began to be phased in on 10/3
  - Will ensure trade maturities are accurately reflected
  - Critical prerequisite to identifying which trades remained locked up on a given day

## ...but risk reduction has not yet been achieved

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- Reforms will not be completed by October 2011, as planned
- Several key goals still need to be achieved, as pointed out in the Task Force progress report:
  - Practical elimination of intraday credit by the clearing banks (reduces demand for intraday credit). Requires:
    - Not unwinding non-maturing trades
    - Simultaneous settlement of new and maturing trades
  - Better integration of interaction of the tri-party repo market with the GCF platform (reduces demand for intraday credit)
  - Clearing banks to provide intraday credit only on a capped and pre-committed basis (reduces supply of intraday credit)

# What is needed to achieve the goals

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- Some major infrastructure builds are required from the clearing banks and FICC
  - They must communicate in real time with each other to allow collateral substitution
  - The clearing banks must integrate, streamline and automate the allocation of collateral for both GCF and tri-party
  - The clearing banks must provide better collateral management tools to dealers so that manual intervention is no longer necessary to optimize collateral usage
- Business practices will need to change for dealers and investors
  - Dealers may see an increase in price of funding
  - Dealers cannot rely just on clearing bank credit to support settlement
  - Some investors may find a more robust tri-party market less attractive and withdraw some or all of their funds
  - Reforms should strengthen incentives for investors and dealers to appropriately assess and price risk in tri-party repo transactions

# Conclusion

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- Successful reforms will require a fundamental reengineering of the end-of-day settlement process
  - More standardized, centralized, straight-through-processing for collateral management
  - Better integration of GCF repo settlement with triparty settlement
  - Implementation of a “simultaneous” unwind and rewind for repos
- All market participants will bear some of the costs of reform
  - Clearing banks need to invest in infrastructure improvements
  - Dealers must rely more on term funding, and will need to upgrade their trade execution and settlement systems
  - Investors no longer get access to their cash early, and will need to upgrade their processes for trade execution and settlement
- Reforms could lead to a smaller and more conservatively collateralized market