Financial Stability Retrospective

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Some remaining systemic vulnerabilities

- Improving but still fragile design of tri-party repo leaves the potential for repo fire sales.
- Lending of last resort is overly limited by Dodd-Frank.
- SIFI failure resolution plans are incomplete (e.g. QFC terminations, no CCP plan).
- Potential for pro-cyclical margins, pending new FSB standards (more research needed).
- The global risk network is still too opaque.
U.S. tri-party repo collateral and liquidity

**Type (90th percentile haircut)**

- **Treasuries** (2.0%)
- **Agency MBS** (3.0%)
- **Agencies** (3.0%)
- **Money market** (5.0%)
- **Agency CMO** (11%)
- **IG Corporate** (9.0%)
- **Equities** (15.0%)
- **HY Corporate** (15%)  
- **CMO (Private)** (20%)
- **Other**

Data source: FRBNY, November, 2015  
Zone of stays on failure termination of swaps, repos, sec-lending

Counterparty

U.K. Broker Dealer

U.S. Broker Dealer

U.S. Bank
Stability-liquidity tradeoffs

• Bank capital and activity rules have improved bank stability and reduced commitments of balance sheet to financial market intermediation by banks and their affiliates.

• This raises incentives for agency intermediation, CCPs, all-to-all trade, shadow-bank intermediation, and a shift by banks away from low-risk standardized (low-margin) products.

• The net impacts on market efficiency are still playing out.

• By most measures, bond-market liquidity looks fine, but turnover and average trade sizes are down.

• Some markets (e.g. single-name CDS, matched-book repo) are withering.

• The 10-year treasury “yield crash” of October 15, 2014 is a symptom of change in the mix of intermediaries.
Treasuries bid-ask spreads are stable.
Treasury note trade price impacts

Source: Adrian, Fleming, Stackman, and Vogt (2015) (from BrokerTec data)
Treasury market turnover

Underlying source: SIFMA
Figure 4.13: Benchmark Price Impact (Cash)

Note: Slope coefficients from weekly regressions of 5" price changes on 5" net order flow for the on-the-run notes
Source: Staff calculations, based on data from BrokerTec.

Figure 4.14: Benchmark Trade Size (Cash)

Note: 21-day moving average; Average trade size; On-the-run notes
Source: Staff calculations, based on data from BrokerTec.

Figure 4.15: Treasury Active Contract Trade Size (Futures)

Note: 21-day moving average; 8:20 - 15:00 ET
Source: Staff calculations, based on data from CME Group.

Decline in GCF net lending volume

Daily Net Cash Positions by Dealer Group

Monthly Average

Source: Martin (2015), FRBNY.
Corporate bond – average bid-ask spreads

![Graph showing the average bid-ask spreads for corporate bonds from 2002 to 2016. The graph compares Investment Grade (blue line) and High Yield (red line) bonds. The average bid-ask spreads are shown in dollars per unit par.]
Corporate and municipal bond turnover

Data source: SIFMA
Corporate bond – average trade size

$ million

- 1,000 Most Active Bonds
- Less Active Bonds

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Number of CDS trades per quarter

Data source: DTCC
Who handles U.S. bonds?

Data sources. ICI: AUM, bond mutual funds + ETFs. FRBNY: primary dealer daily financing (securities out) of UST + agencies + MBS + corporate bonds.
Asset management stability issues

• Comments on the risk of a crisis arising from sudden bond fund redemptions seem exaggerated.
• A rush for the exits would impact prices, but bids will likely arrive before a crisis is triggered. Who exactly would “fail”? 
• Large hedge funds present a potential for unwind risk, given their reliance on leverage and expert portfolio managers.
• Large agency-based managers seem more benign, and have not been designated as SIFIs.
• Regulators also focus on insurance firms that are active in financial markets. Some have been designated.
• Money-market funds are migrating to government securities
Net monthly cash inflows to bond funds

Data source: Investment Company Institute
Section 4 Figures

Figure 4.1: Financial Assets of Security Brokers and Dealers

$ trillions

Note: Quarterly observations; Total financial assets of security brokers and dealers as reported in the financial accounts of the United States
Source: Staff calculations, based on data from Federal Reserve Board.

Figure 4.2: Net Treasury Positions of Primary Dealers

$billions

Note: 4-week moving average
Source: Staff calculations, based on data from FRBNY.

Figure 4.3: Gross Treasury Positions of Primary Dealers

$billions

Note: 4-week moving average; Sum of dealers’ short and long positions
Source: Staff calculations, based on data from FRBNY.

Figure 4.4: Estimated Treasury Market-Making Positions of Primary Dealers

$billions

Note: 4-week moving average; Smaller of each dealer’s short and long position in each reporting bucket, aggregated across dealers and buckets
Source: Staff calculations, based on data from FRBNY.

Figure 4.5: Ownership of Treasury Debt by Investor Group

Note: Mutual funds includes closed-end funds and exchange-traded funds; Pension funds includes government retirement funds
Source: Staff calculations, based on data from Federal Reserve Board.

Figure 4.6: Government Bond Fund Flows

$ billions

Note: Total net monthly flows; Some funds own agency debt securities and MBS in addition to Treasury securities
Source: Staff calculations, based on data from Morningstar.

Source: Joint Staff Report: The U.S. Treasury Market