Stability-Liquidity Tradeoffs in Post-Crisis Bond Markets

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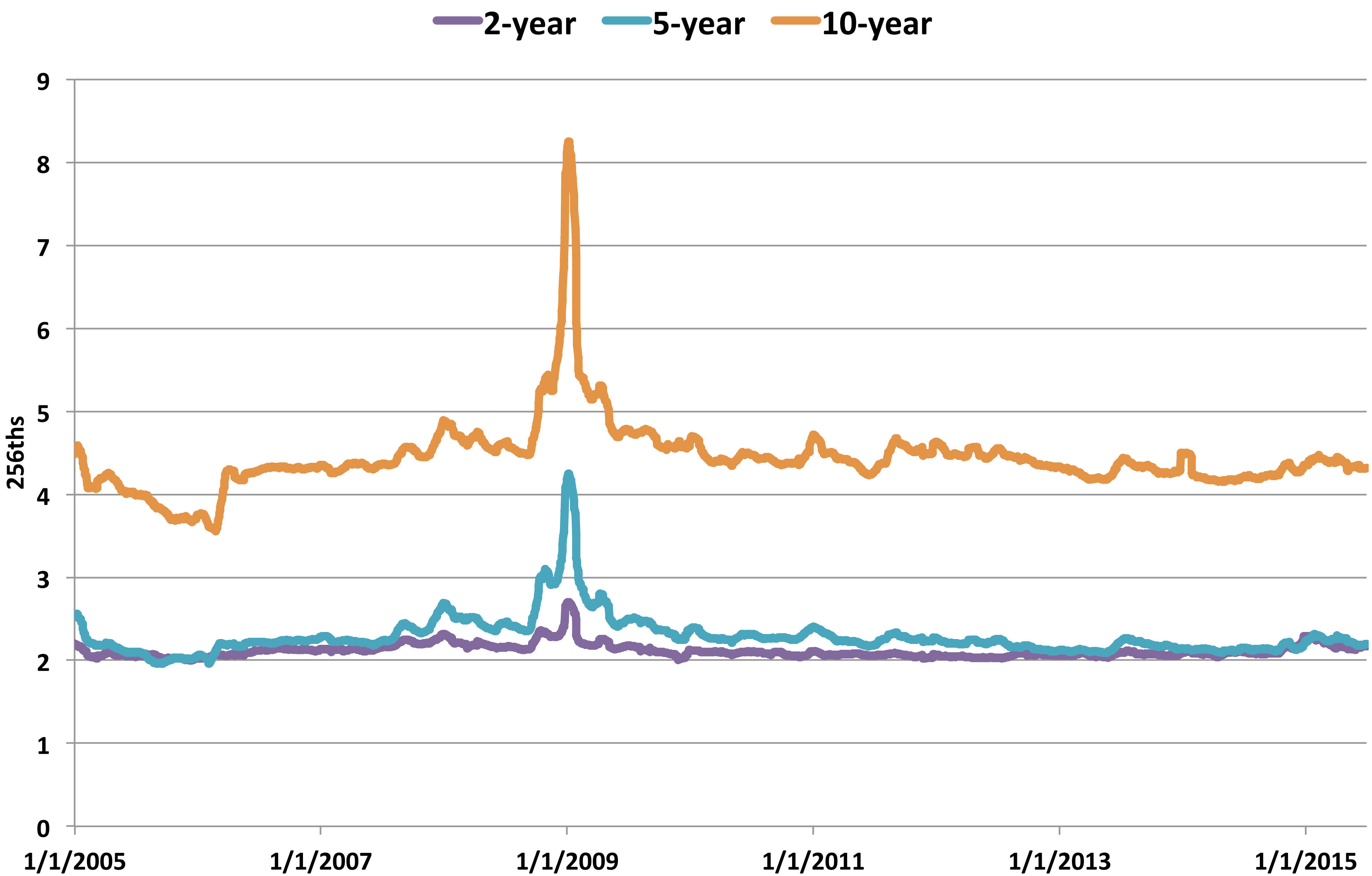
A stability-liquidity tradeoff

- Capital and activity rules have improved bank stability and reduced commitments of bank-affiliated balance sheets to financial market intermediation.

- 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.

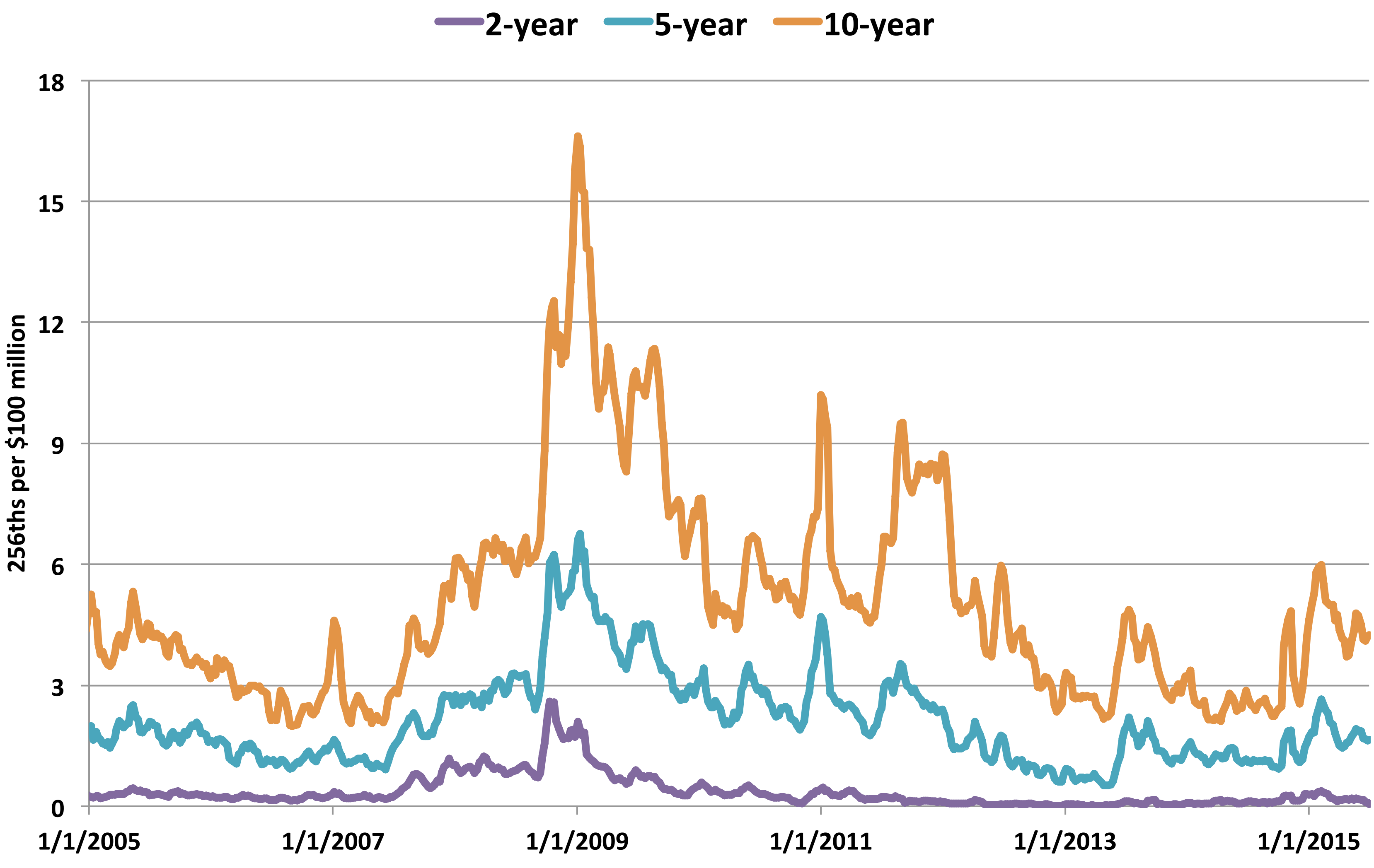
- The net impacts on market efficiency are still playing out, and depend on other factors, including monetary policy.

Treasuries bid-ask spreads are stable



Source: Adrian, Fleming, Stackman, and Vogt (2015) (BrokerTec data)

Treasury note trade price impacts

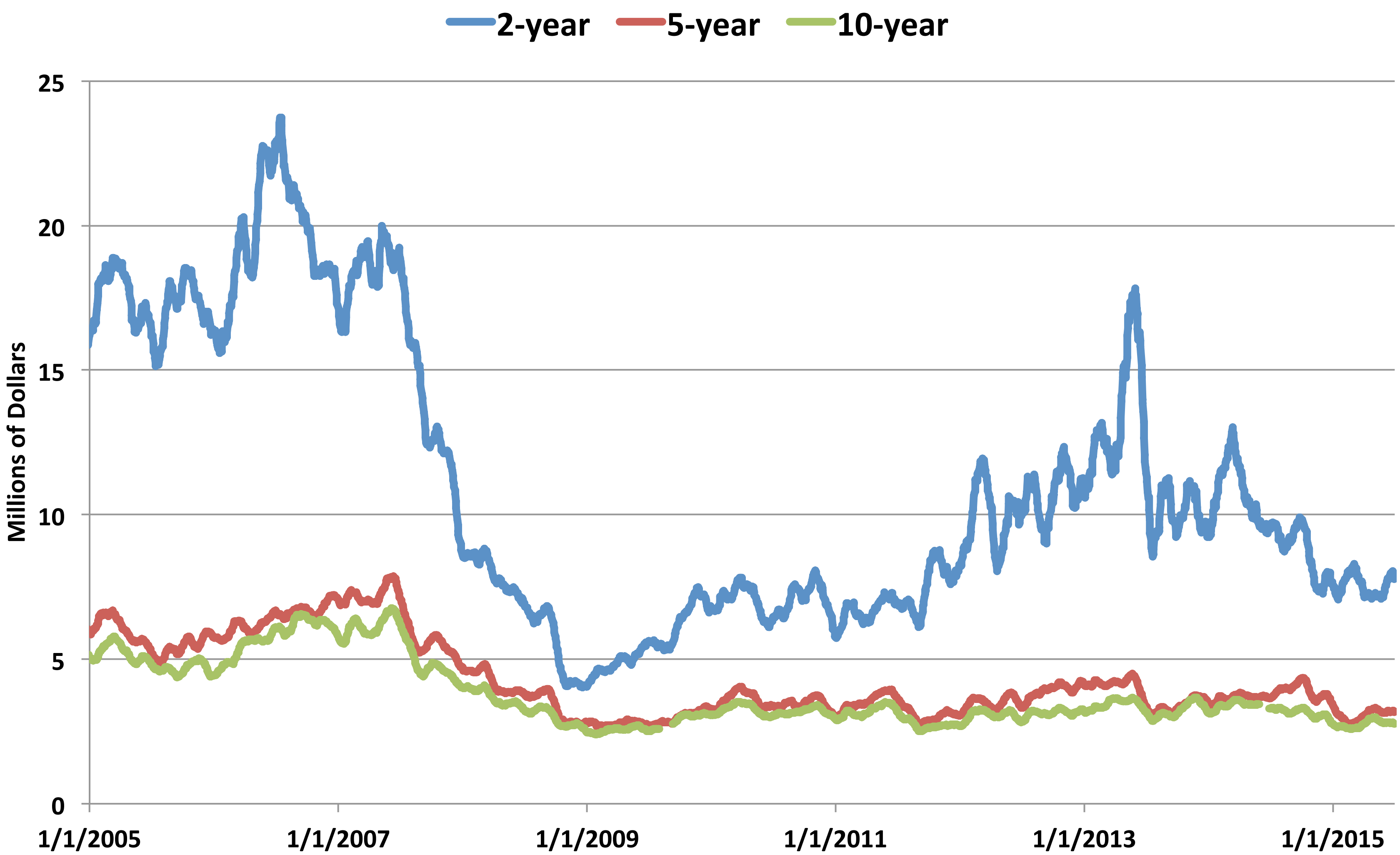


Source: Adrian, Fleming, Stackman, and Vogt (2015) (from BrokerTec data)

Symptoms of changing liquidity

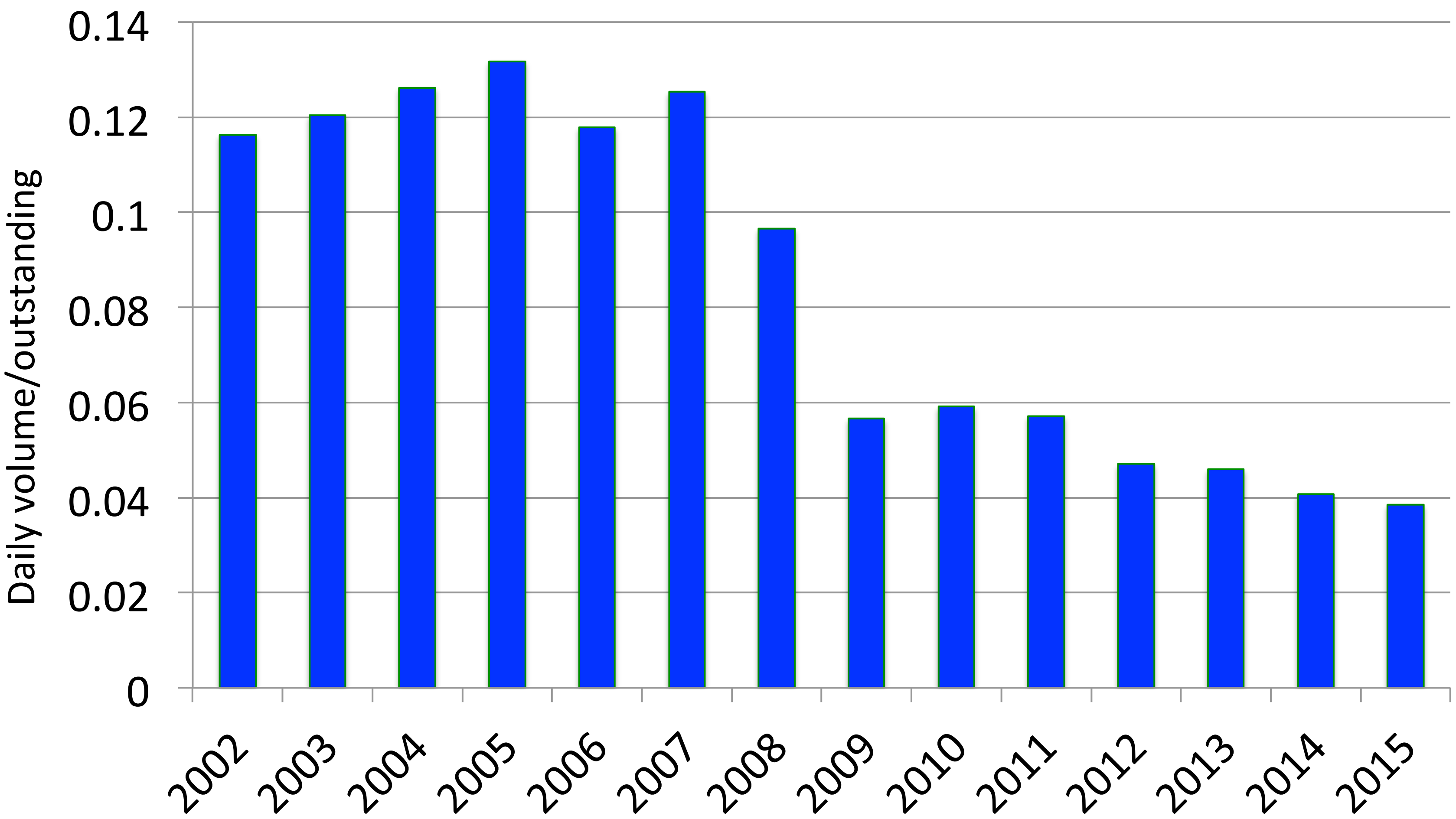
- Traditional liquidity measures such as price impact and bid-ask spread look fine.
- Turnover and trade sizes are generally down.
- Single-name CDS and matched-book repo markets are withering.
- The 10-year Treasury note "yield crash" of October 15, 2014 is a symptom of changes in the mix of intermediaries, including HFT.

Trade size has declined

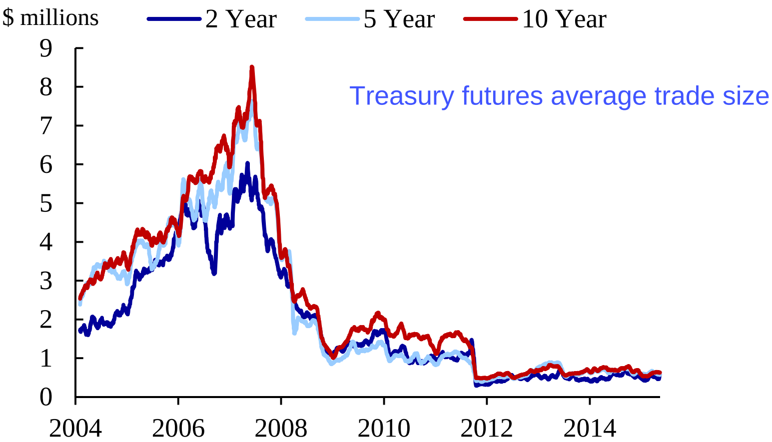


Source: Adrian, Fleming, Stackman, and Vogt (2015) (BrokerTec data)

Treasury market turnover



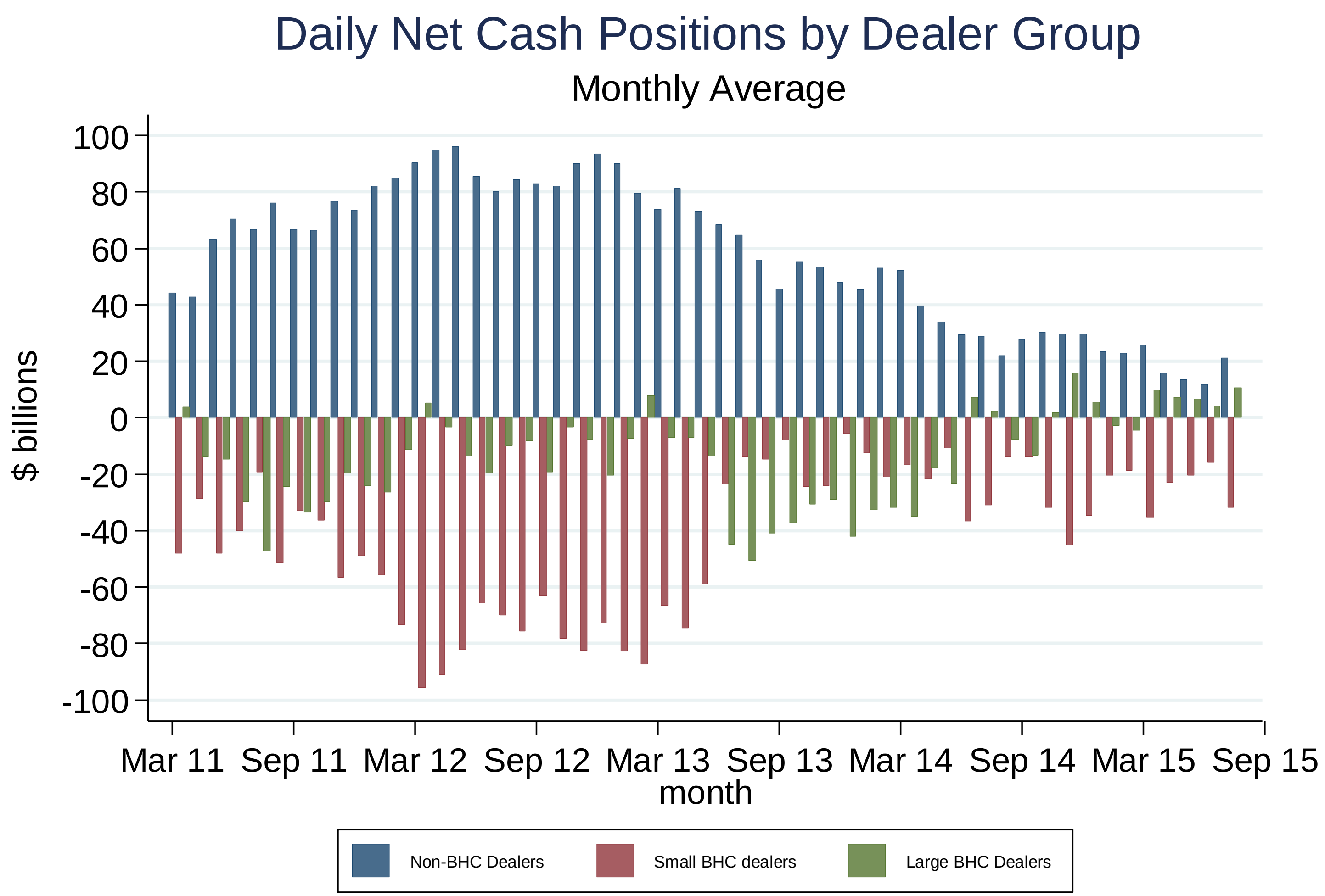
Data source: SIFMA



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

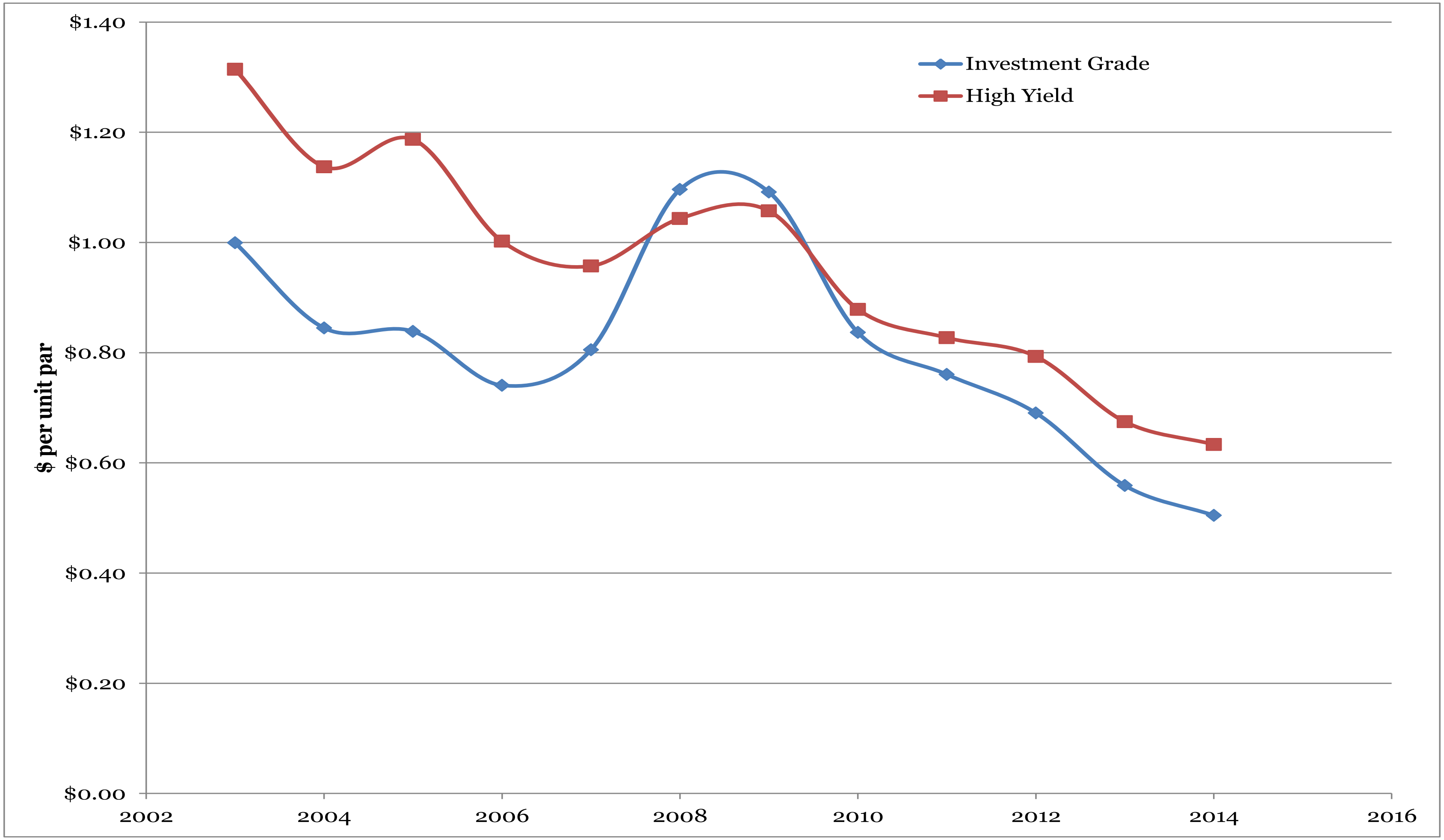
Source: Joint Staff Report, The U.S. Treasury Market (2015)

Decline in GCF net lending volume

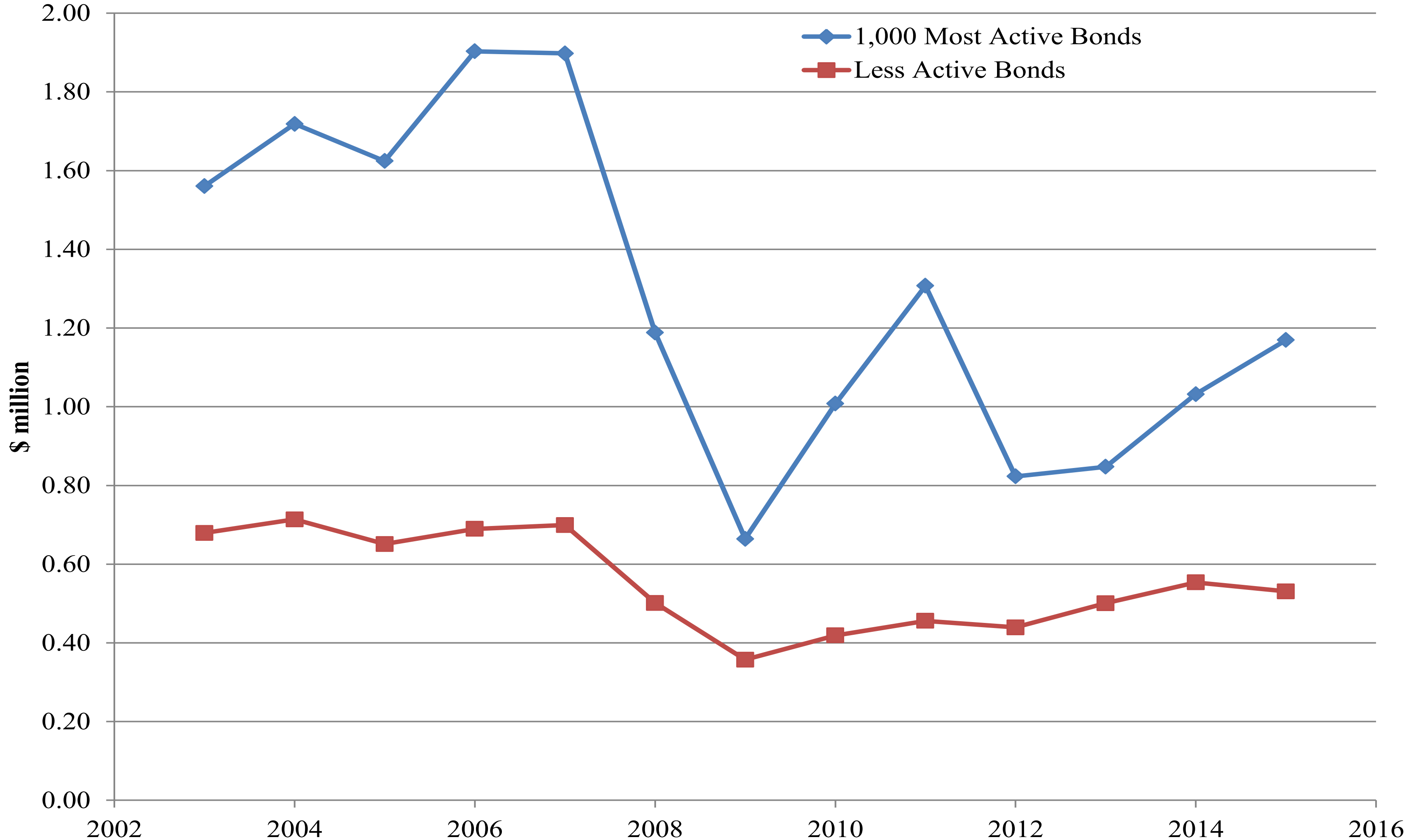


Source: Martin (2015), FRBNY.

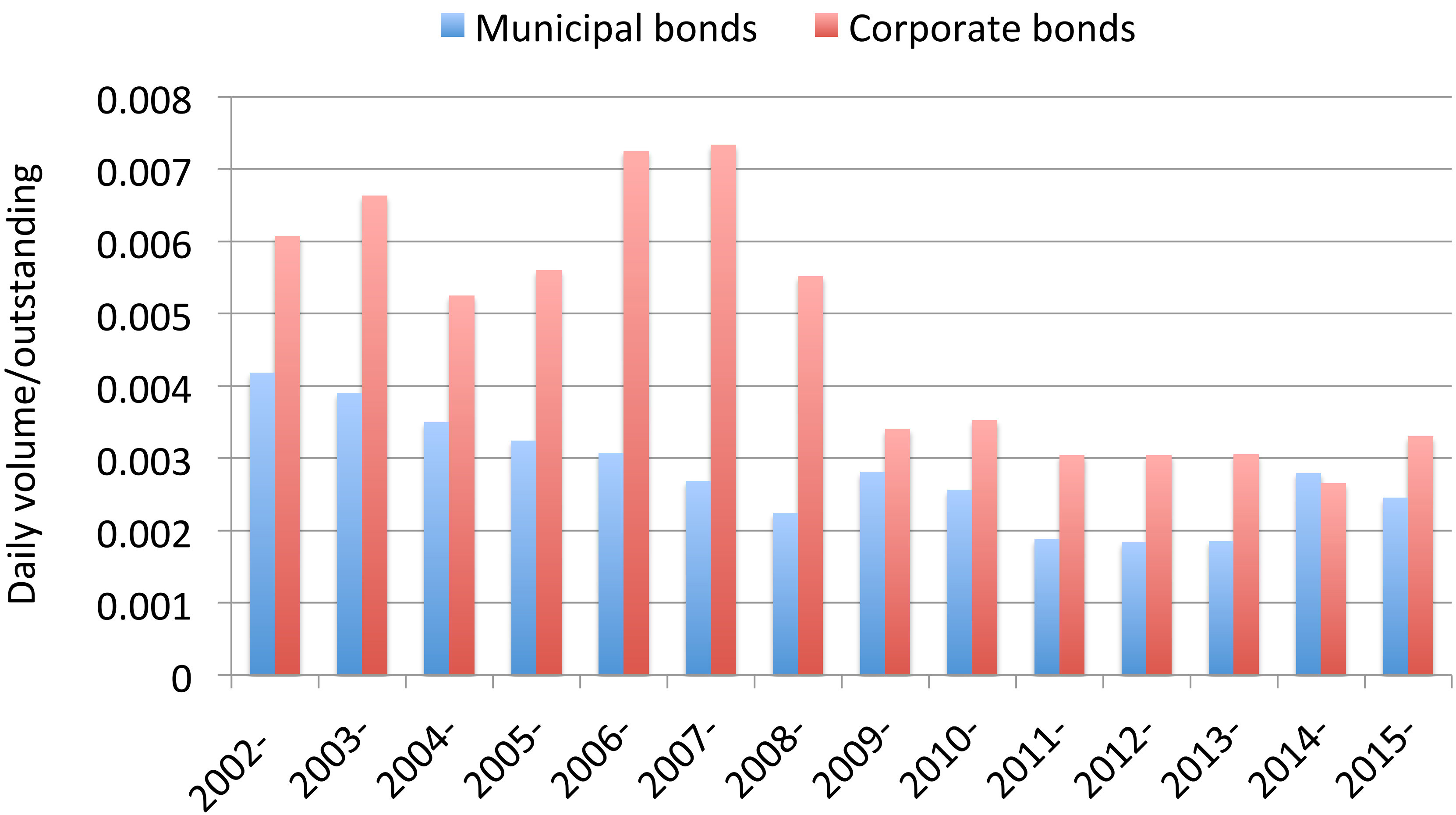
Corporate bond – average bid-ask spreads



Corporate bond – average trade size

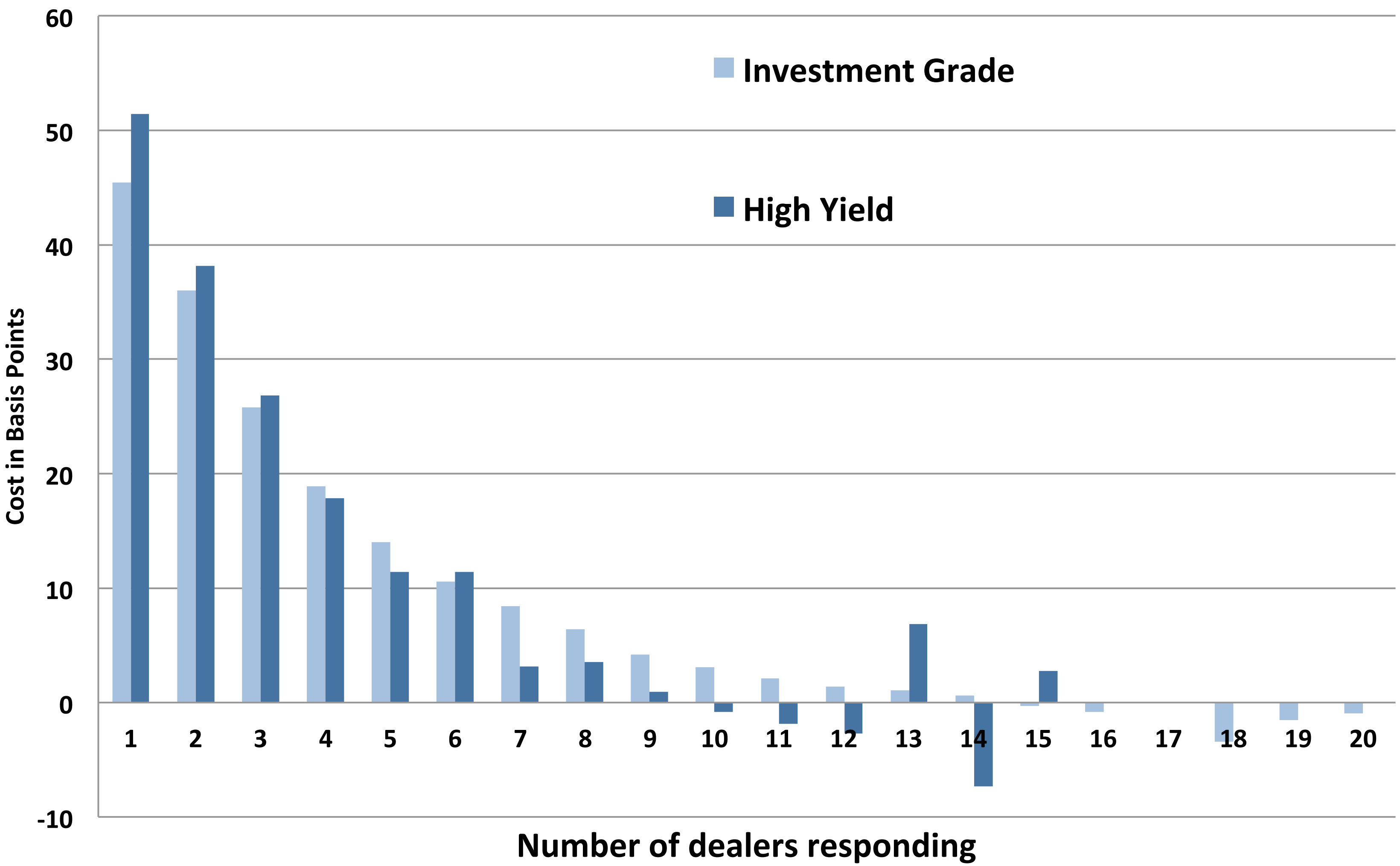


Turnover of corporate and municipal bonds



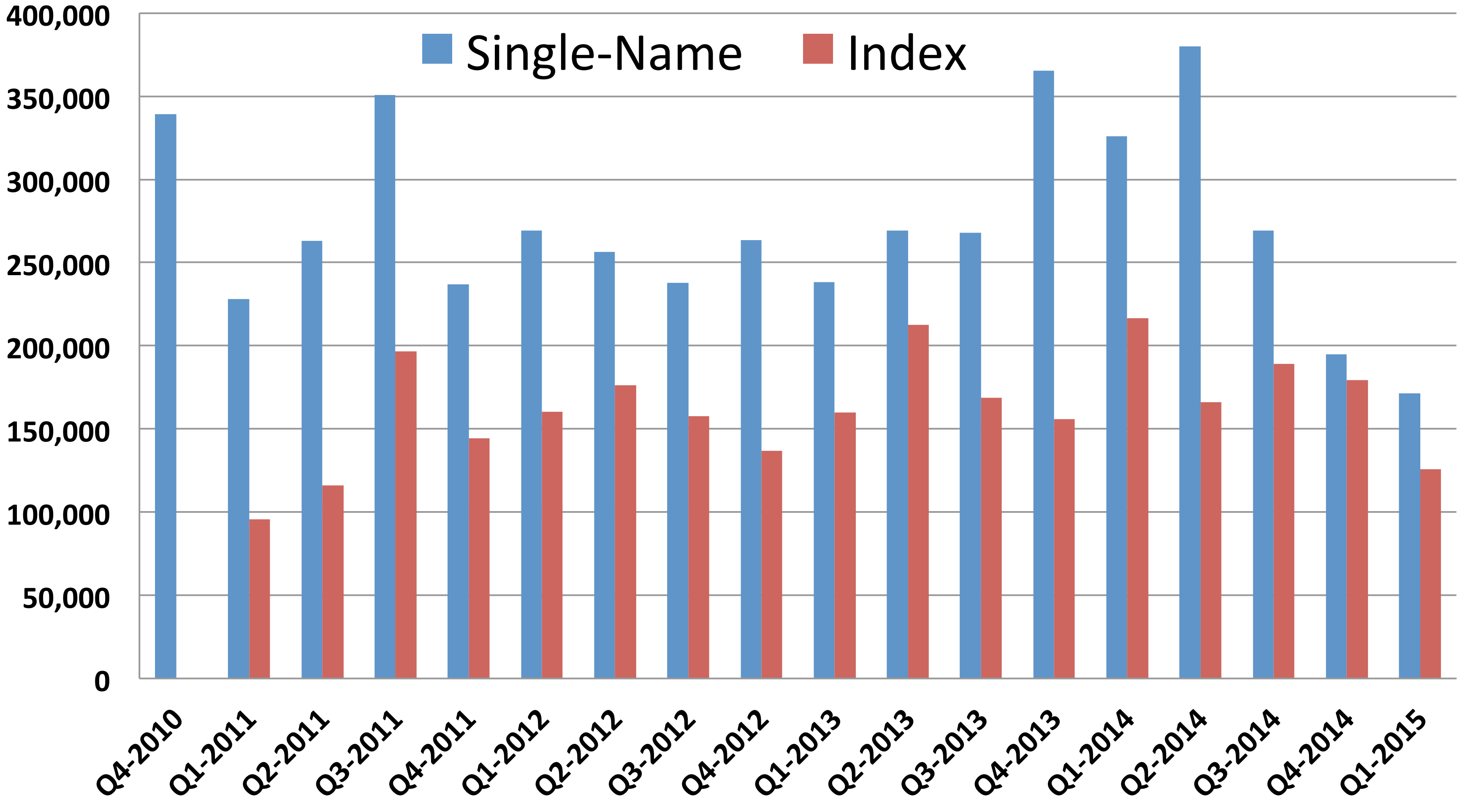
Data source: SIFMA

When more dealers compete, corporate bond trade costs go down



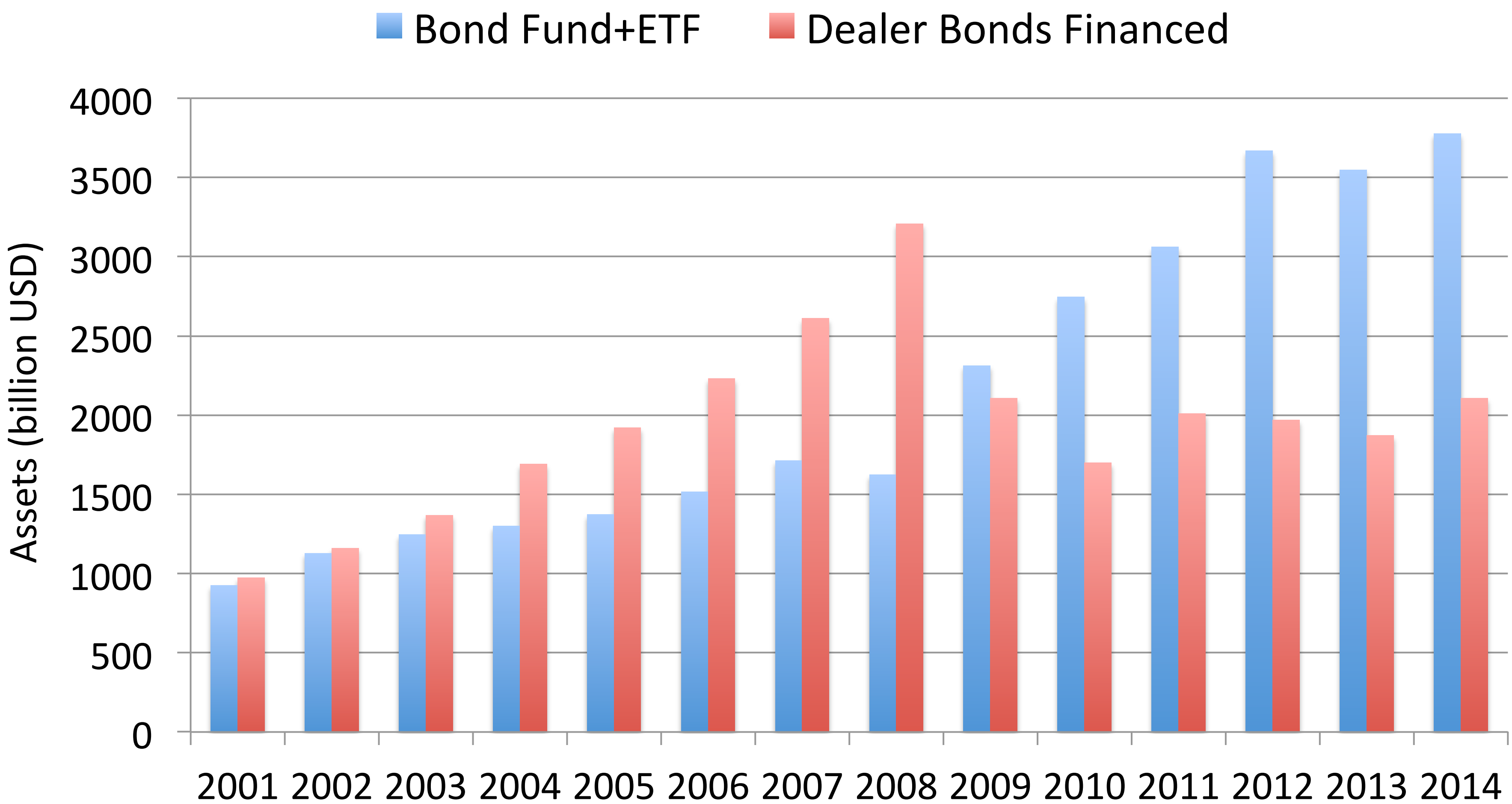
Source: Hendershott and Madhavan (2014)

Number of CDS trades per quarter



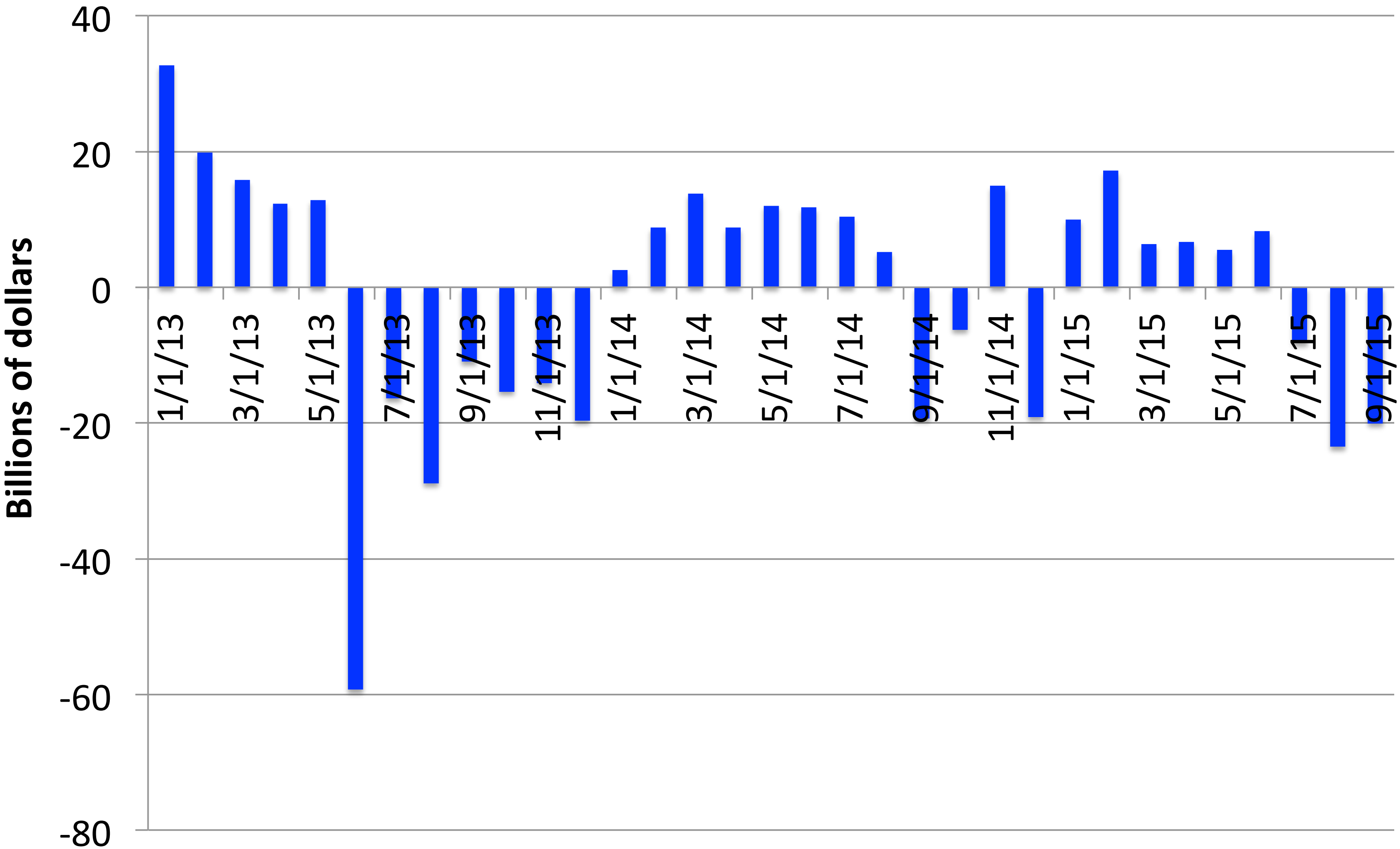
Data source: DTCC

Who handles U.S. bonds?

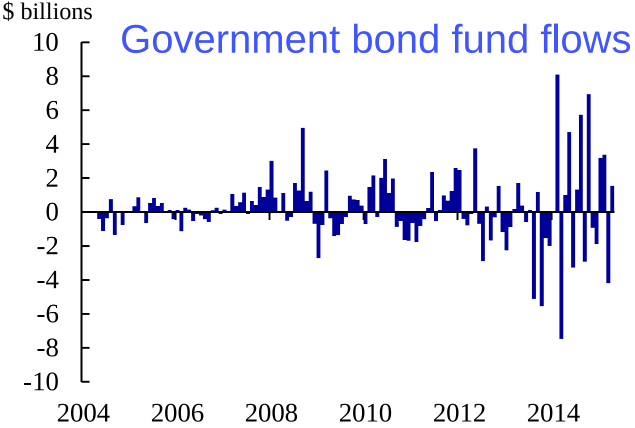


Data sources. ICI: AUM, bond mutual funds + ETFs. FRBNY: primary dealer daily financing (securities out) of UST + agencies + MBS + corporate bonds.

Net monthly cash inflows to bond funds



Data source: Investment Company Institute



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.

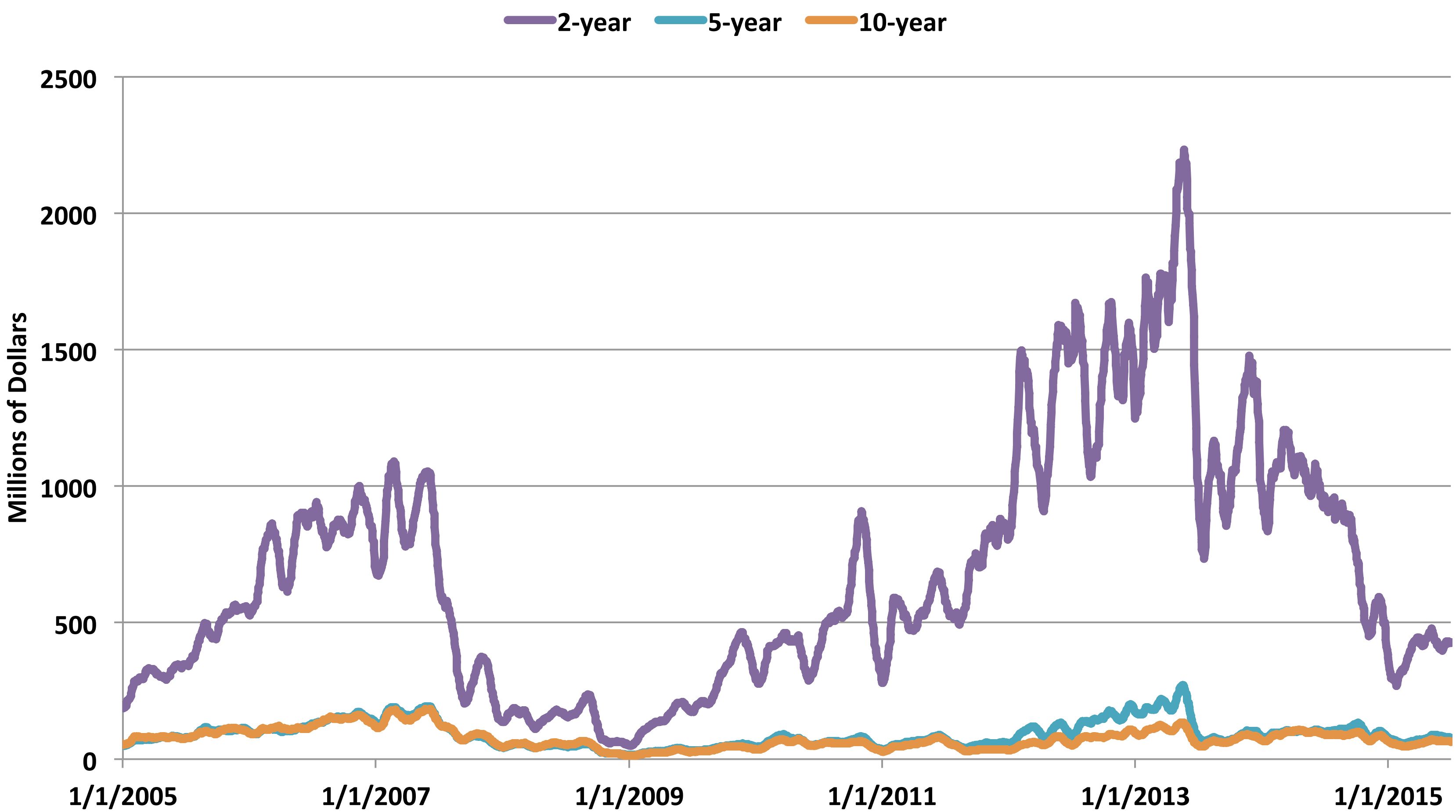
Source: Joint Staff Report: The U.S. Treasury Market

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

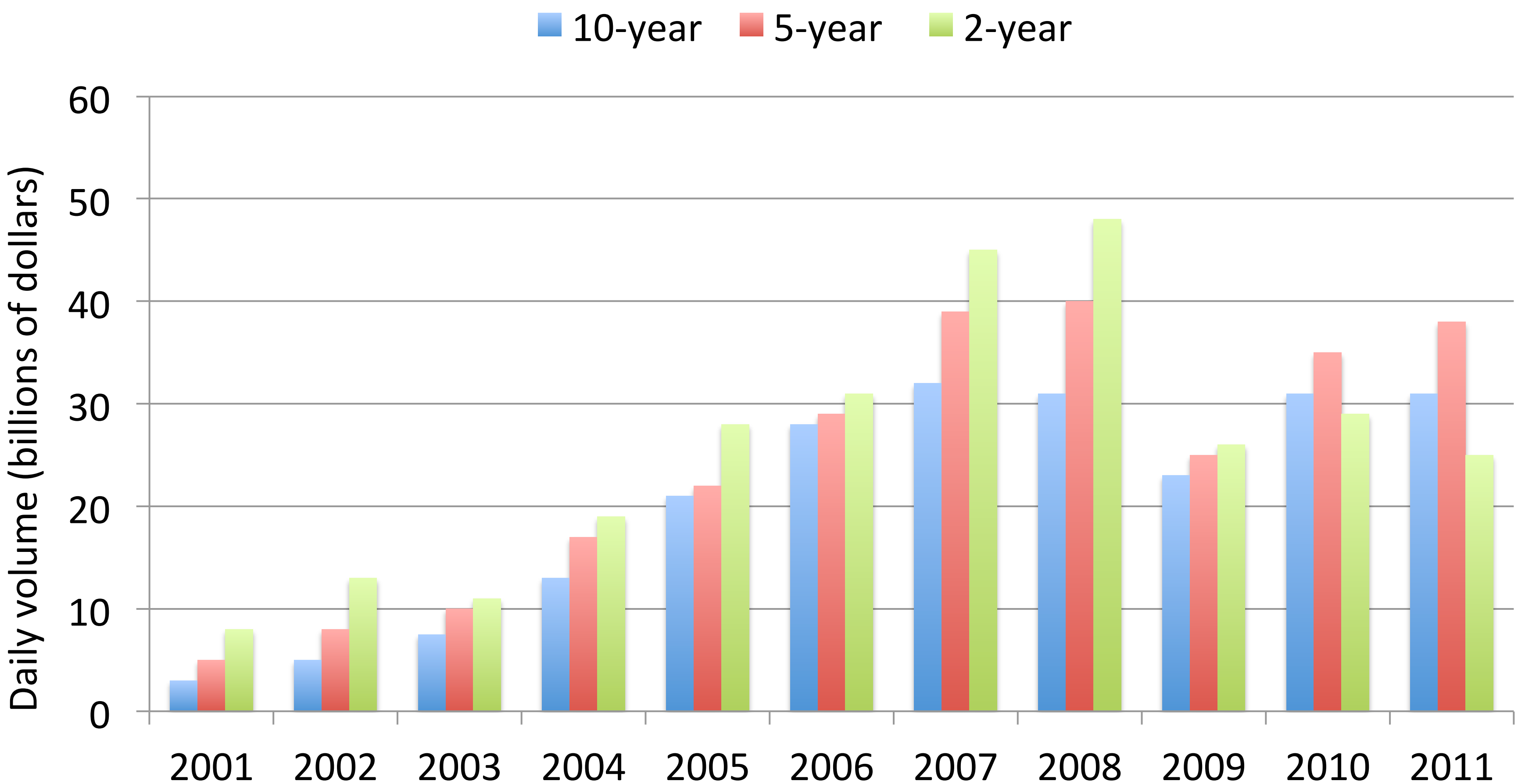
Supplementary content

Depth has declined from recent highs



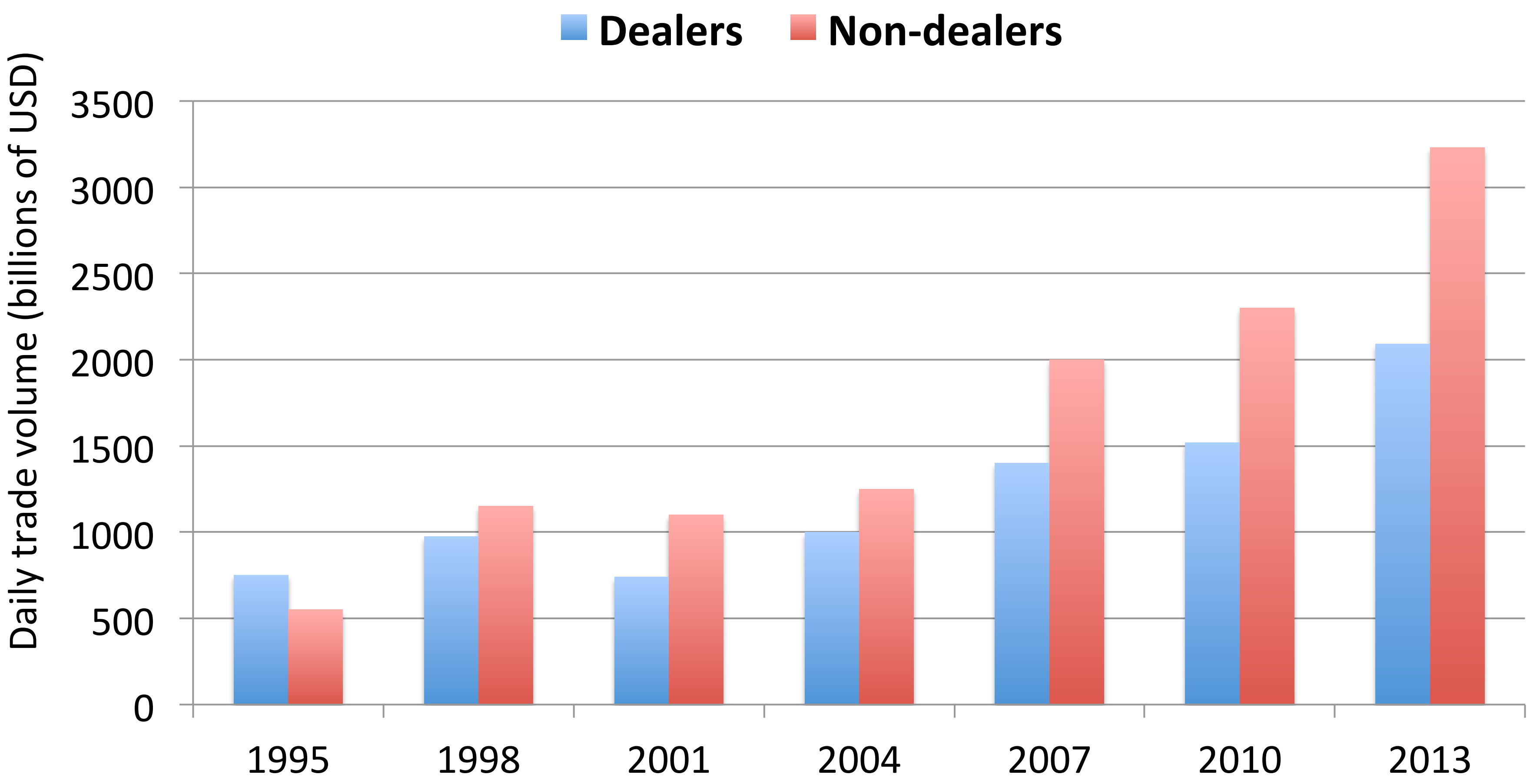
Source: Adrian, Fleming, Stackman, and Vogt (2015) (from BrokerTec data)

T-note multilateral platform volumes



Source: Fleming (2014) (BrokerTec data)

FX dealer versus non-dealer volumes



Source: Rime and Schrimpf (2014) (BIS data)

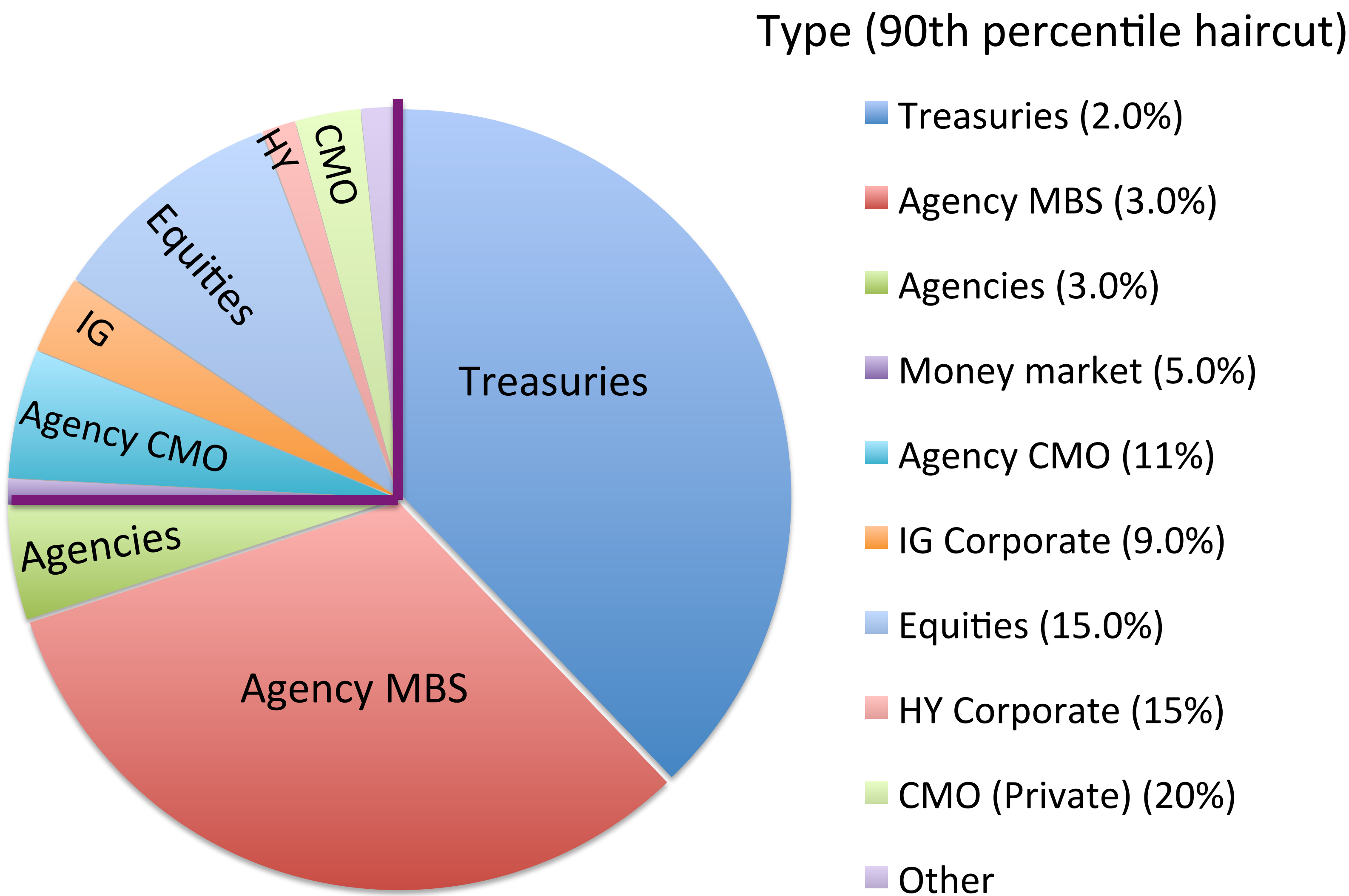
Some remaining system vulnerabilities

- Improving but still fragile design of tri-party repo leaves the potential for repo fire sales.

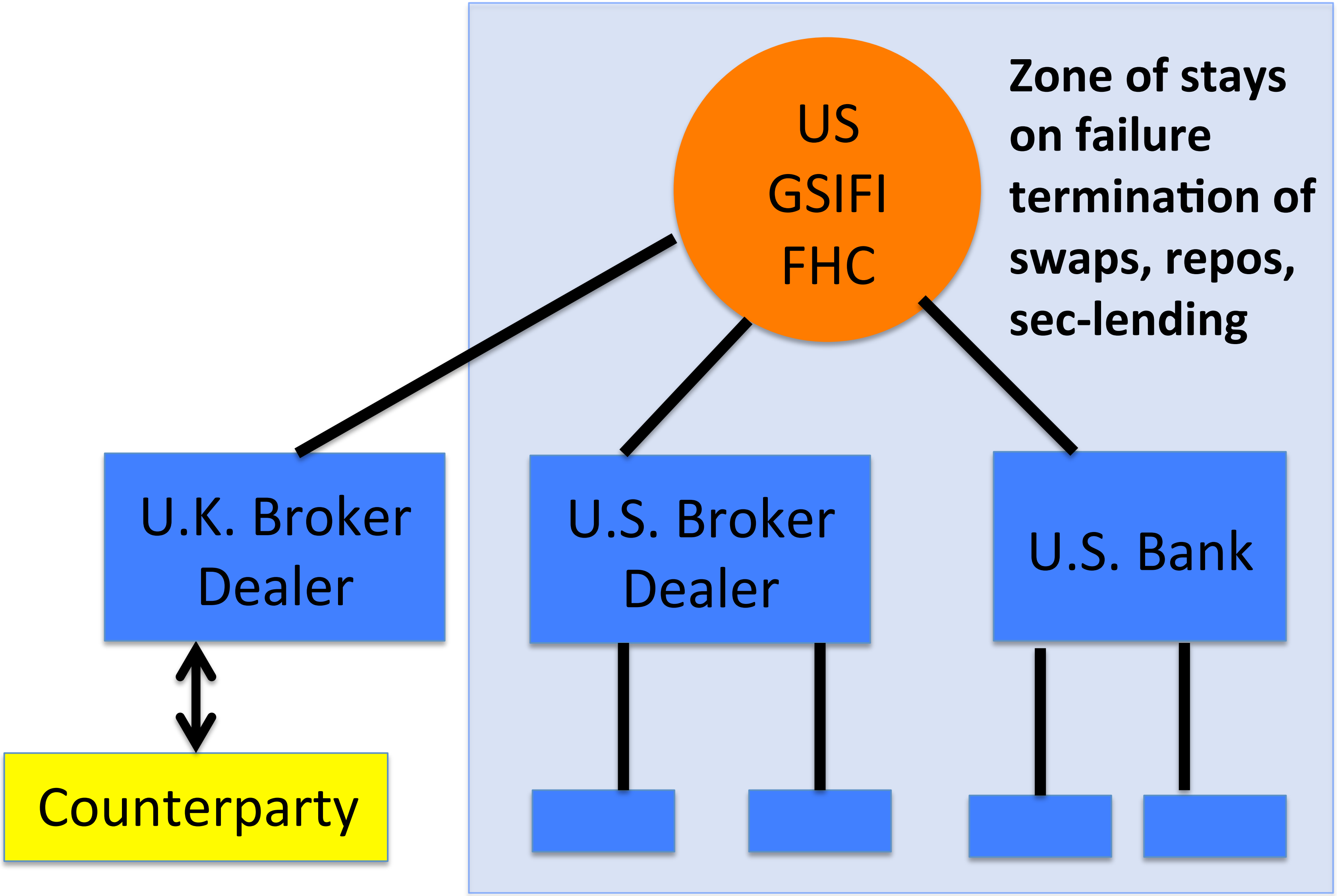
- Lending of last resort is overly limited by Dodd-Frank.

- Potential for pro-cyclical margins, pending new FSB standards (more research needed).

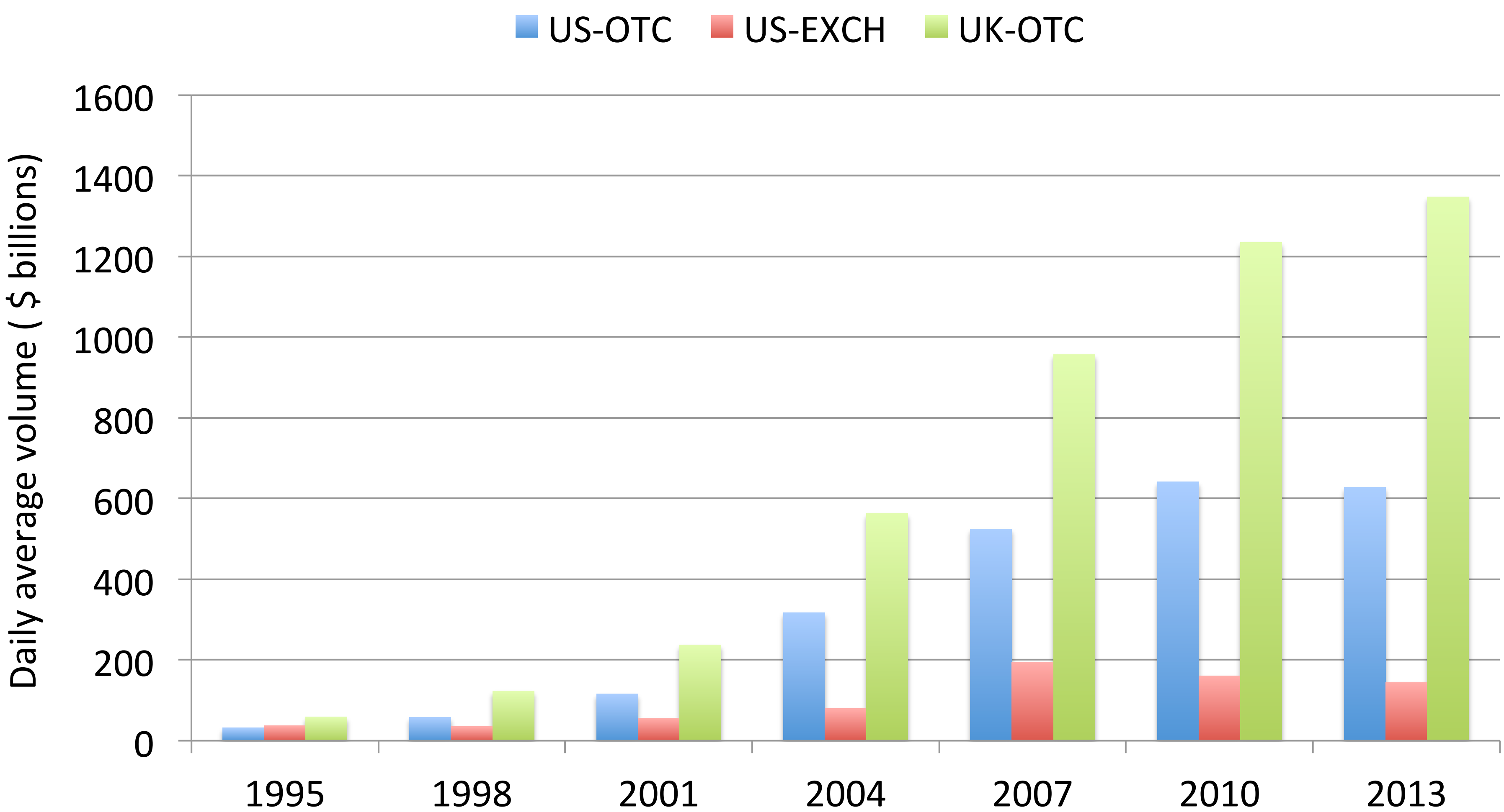
U.S. tri-party repo collateral and liquidity



Data source: FRBNY, November, 2015
http://newyorkfed.org/data-and-statistics/data-visualization/tri-party-repo/#interactive/volume


US
GSIFI
FHC
Zone of stays on failure termination of swaps, repos, sec-lending
U.K. Broker Dealer
U.S. Broker Dealer
U.S. Bank
Counterparty

Daily average volume of interest rate derivatives



Data sources. BIS: OTC Triennial (April), U.S. exchanges Table 23A (March).