



EMBARGOED UNTIL WEDNESDAY, AUGUST 13, 2014 AT 9:20 A.M. EASTERN TIME OR
UPON DELIVERY

Broker-Dealer Finance and Financial Stability

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Workshop on the Risks of Wholesale Funding
Federal Reserve Bank of New York
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bostonfed.org




Susceptibility to Runs and the Financial Crisis

- ▶ Not a new problem:
 - ▶ Policy response to Depression-era runs: limit the risk of loss for insured depositors during periods of financial turmoil
 - ▶ Many of the most significant runs that we saw in 2008 involved financial institutions *other than banks*
 - ▶ Money Market Mutual Funds – significant runs
 - ▶ Significant policy response during the crisis – insurance extended, and liquidity facilities created
 - ▶ SEC instituted reforms on liquidity and floating NAV: needed improvements, although some risks remain
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Other Run Risk Vulnerabilities Have Not Been Fully Addressed

- ▶ Dependence on short-term unstable funding (sometimes referred to as wholesale funding)
 - ▶ Particularly a problem for broker-dealers – intermediaries that effect general transactions in securities, primarily the buying and selling of securities, and are critical to market infrastructure
 - ▶ Rely on short-term unstable funding to finance securities
 - ▶ Runs have the potential to impair the ability of broker-dealers to serve as middlemen in markets, which can impair the ability of investors to buy or sell a wide variety of stocks and bonds
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Failure of Lehman Brothers a Defining Event in the Crisis

- ▶ Other broker-dealers, both domestic and foreign, had serious problems
 - ▶ Significant government support was necessary to prevent further market breakdowns and repercussions across the economy
 - ▶ There has been some reduction of risks:
 - ▶ Higher capital
 - ▶ More liquidity
 - ▶ Reduced holdings of risky assets
 - ▶ But reliance on wholesale funding model subject to runs remains surprisingly unchanged
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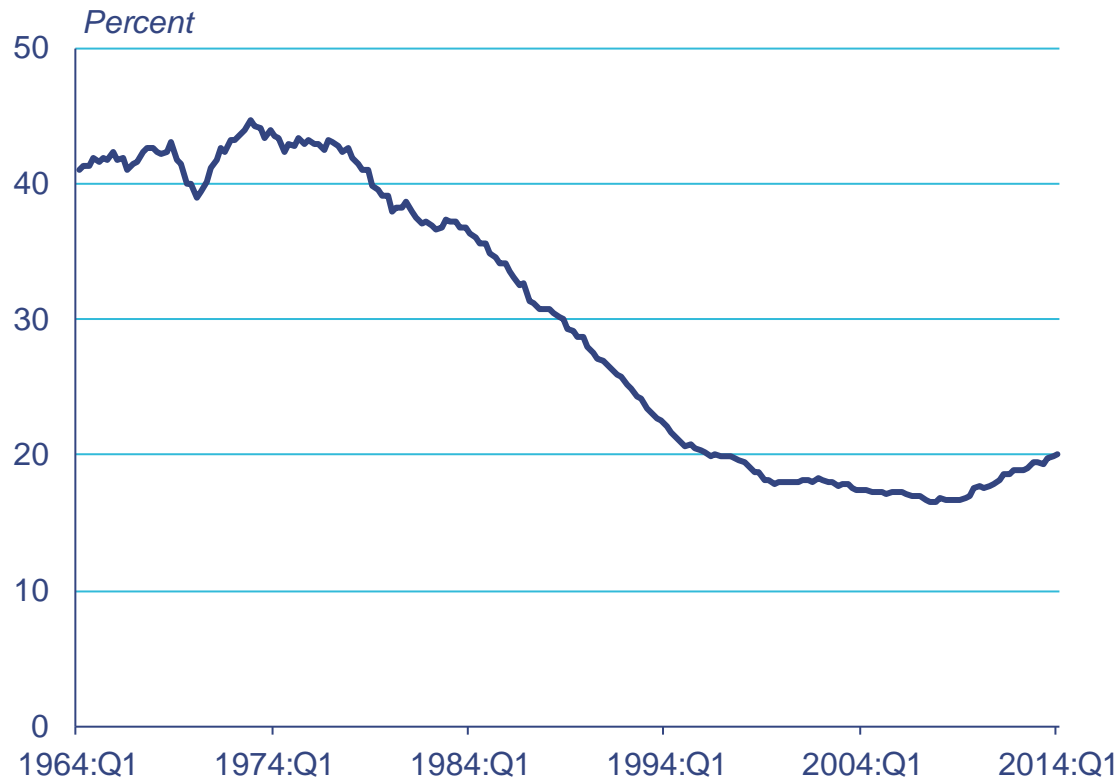


Significant Structural Changes

- ▶ Many investment banks now in bank holding companies
 - ▶ Foreign broker-dealers now must form an intermediate holding company
 - ▶ More still needs to be done
 - ▶ Dependence on short-term unstable funding may necessitate further increases in capital requirements
 - ▶ Short-term collateralized loans (repos) represent very low cost funding in good times, but are subject to runs
 - ▶ Money market mutual funds, one of the largest sources of lending to broker-dealers, are prohibited from purchasing the kind of long-term or high-credit-risk assets that are often pledged as collateral for loans to broker-dealers
 - ▶ SEC capital and liquidity requirements for broker-dealers have not materially changed since the crisis
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Figure 1: Checkable, Time and Savings Deposits of Private Depository Institutions as a Share of Credit Market Instruments

1964:Q1 - 2014:Q1



Note: Private depository institutions include U.S.-chartered institutions, foreign banking offices in the U.S., banks in U.S.-affiliated areas, and credit unions.

Source: Federal Reserve Board, Financial Accounts of the United States, Haver Analytics

Figure 2: Assets of Security Brokers and Dealers as a Share of Credit Market Instruments

1964:Q1 - 2014:Q1

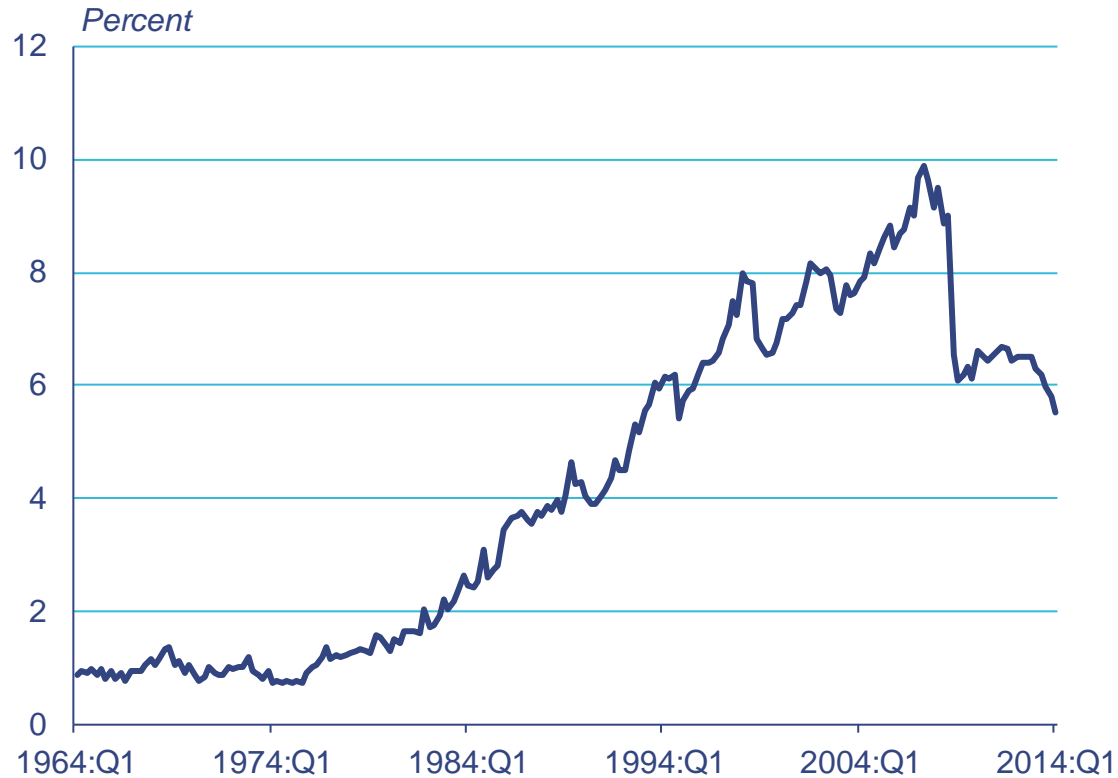




Figure 3: Assets of Security Brokers and Dealers
1964:Q1 - 2014:Q1

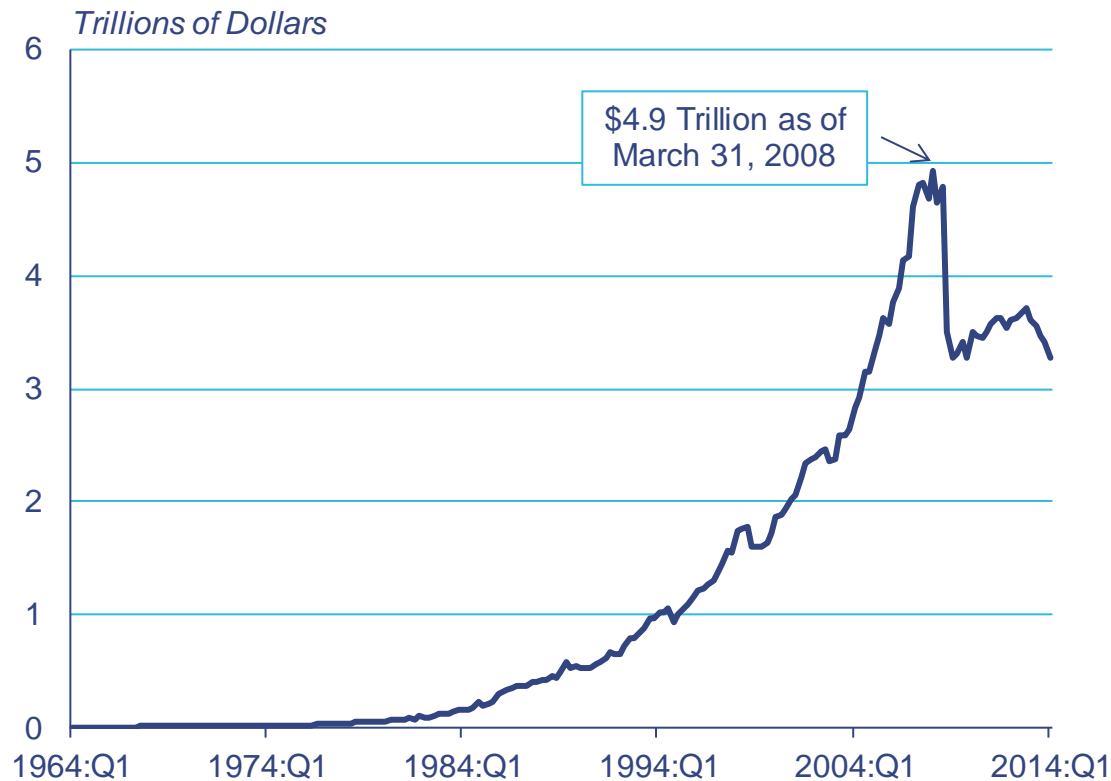
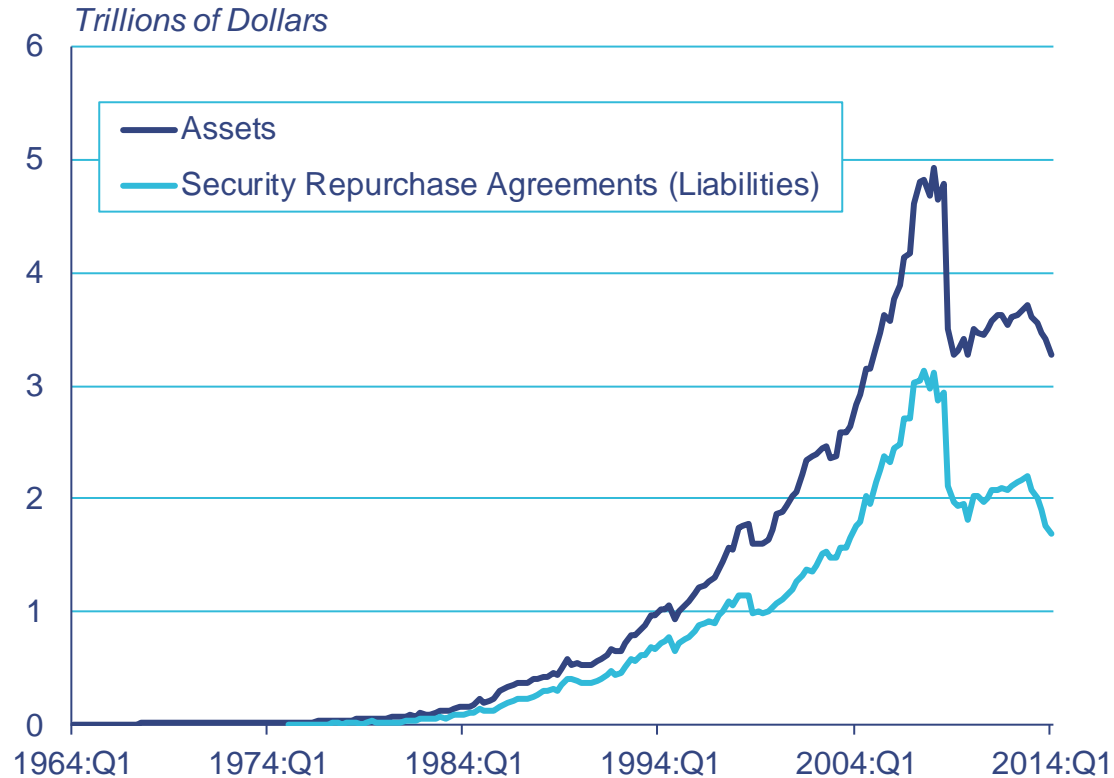




Figure 4: Selected Balance-Sheet Items of Security Brokers and Dealers

1964:Q1 - 2014:Q1



Note: Security repurchase agreements are reported beginning in 1975:Q1.

Source: Federal Reserve Board, Financial Accounts of the United States, Haver Analytics

Figure 5: Security Repurchase Agreements as a Share of Liabilities at Security Brokers and Dealers

1975:Q1 - 2014:Q1

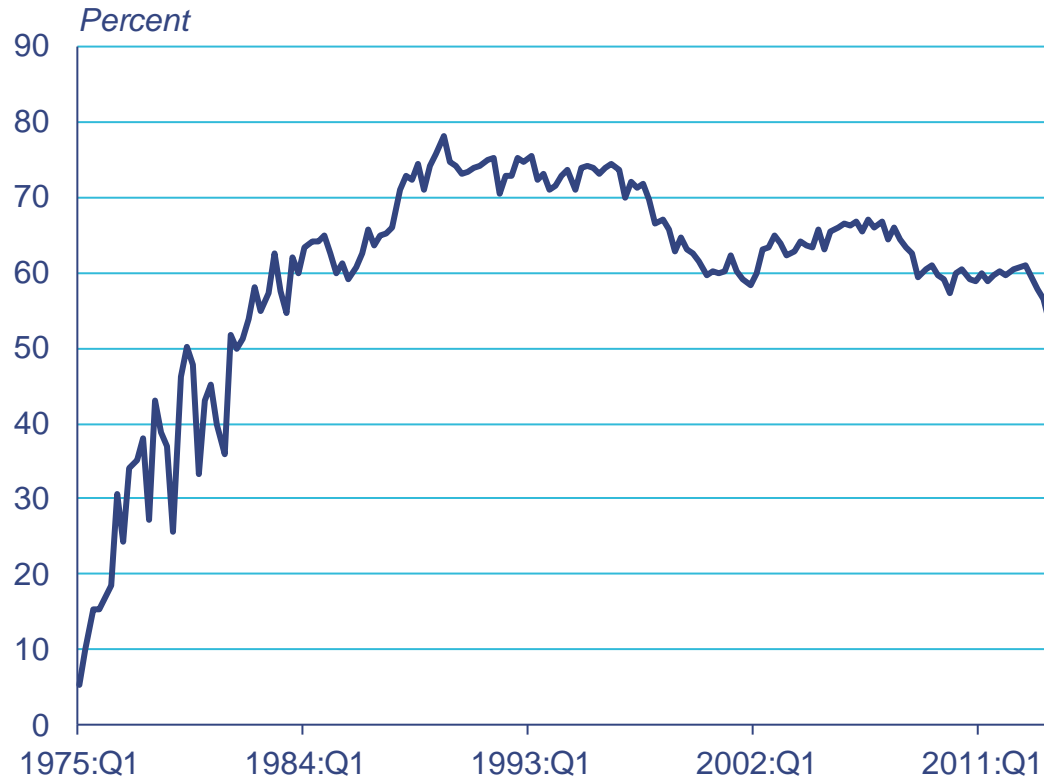
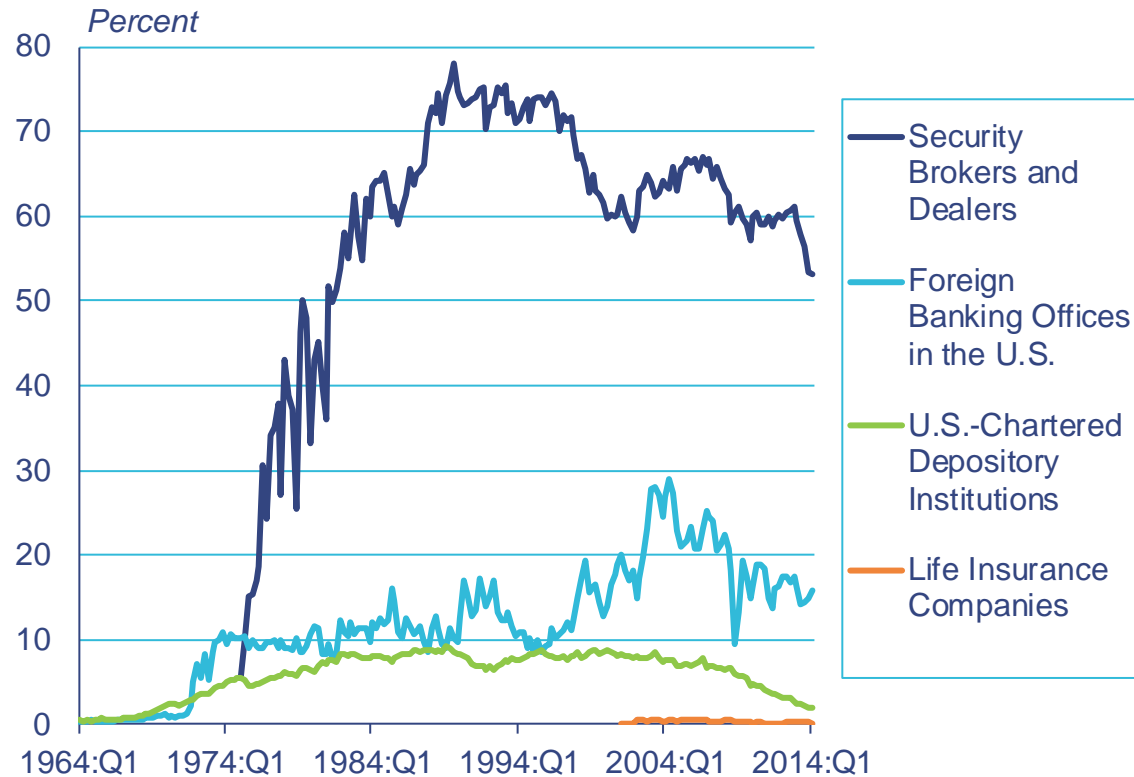


Figure 6: Security Repurchase Agreements as a Share of Liabilities at Selected Institutions

1964:Q1 - 2014:Q1

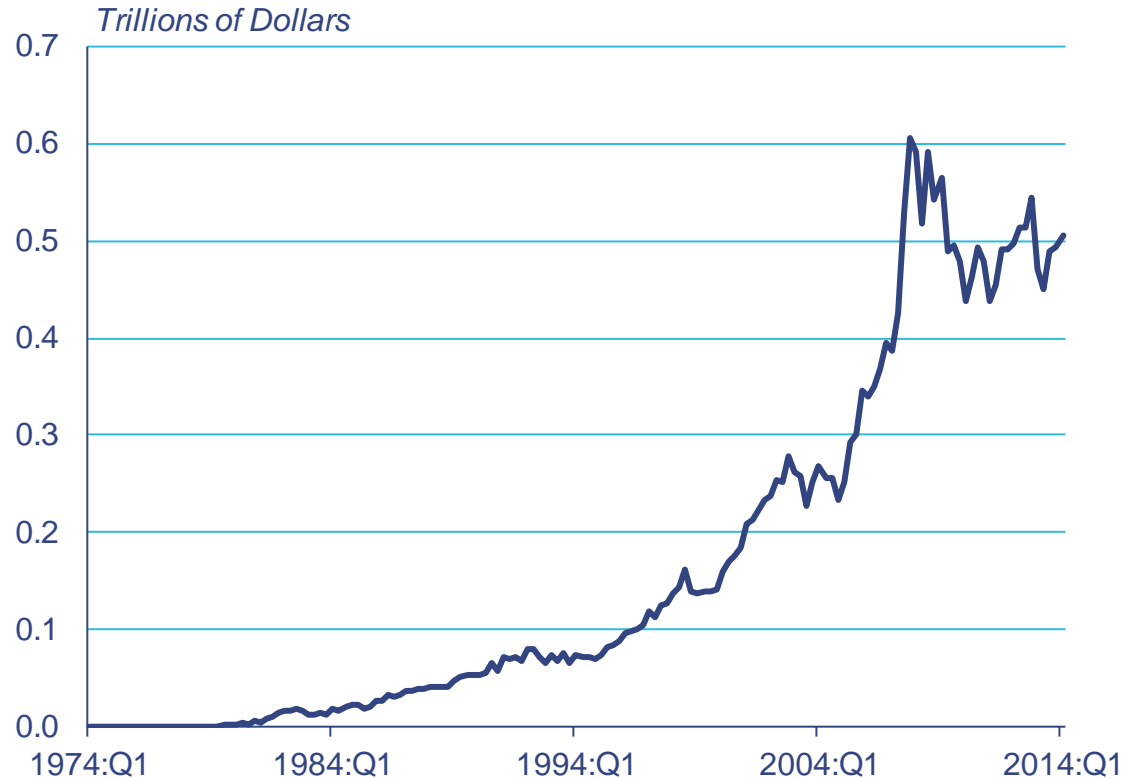



Note: Security Repurchase Agreements are reported beginning in 1975:Q1 for Brokers and Dealers and beginning in 2001:Q1 for Life Insurance Companies. For U.S.-Chartered Depository Institutions and Foreign Banking Offices in the U.S., the category also includes federal funds.

Source: Federal Reserve Board, Financial Accounts of the United States, Haver Analytics

Figure 7: Security Repurchase Agreements Held by Money Market Mutual Funds

1974:Q1 - 2014:Q1

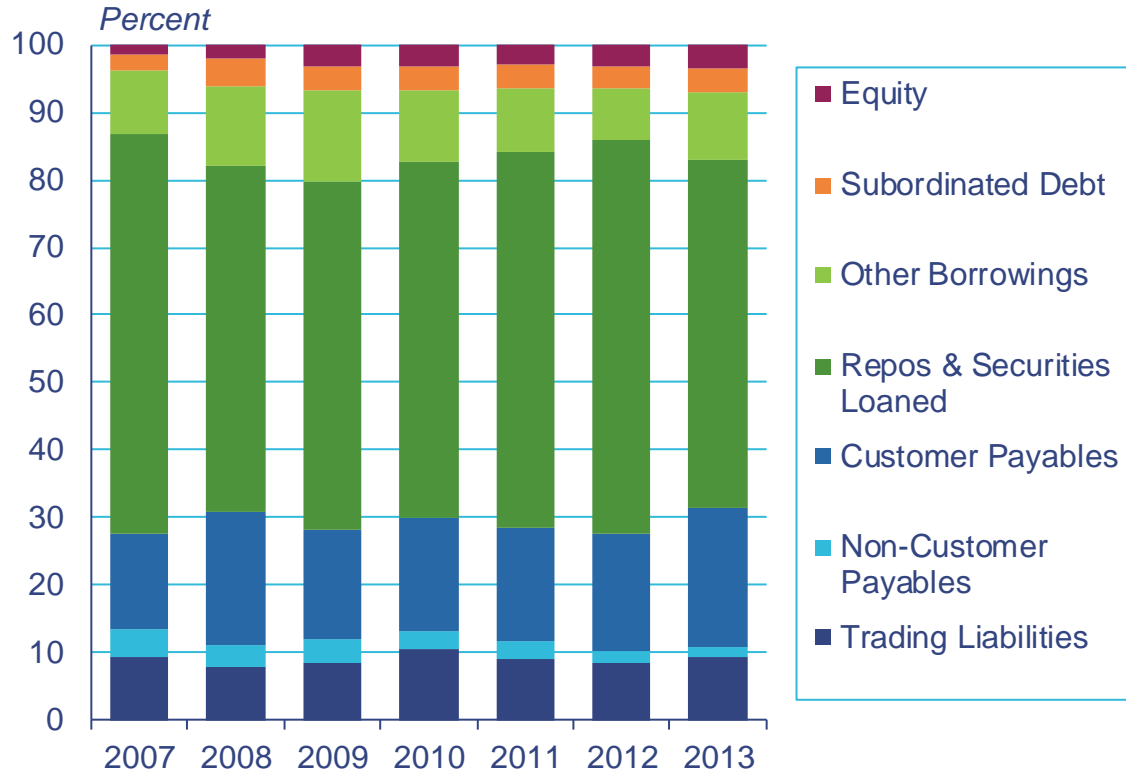




Problems With Broker-Dealer Funding Model

- ▶ Very low cost way to finance securities when confidence is high
 - ▶ Investors flee repurchase agreements when confidence is lost in broker-dealers
 - ▶ Particularly a problem for investors that cannot normally hold long-term risky securities (e.g., MMMFs and other cash management products with similar investment mandates)
 - ▶ Structural problem with runs remains
 - ▶ Reliance on repurchase agreements
 - ▶ Liability structure looks surprisingly similar to before the crisis
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Figure 8: Broker-Dealer Liabilities and Capital Structure 2007 - 2013



Note: Data reflect broker-dealer entity only. 2007 includes BARC, BS, C, DB, GS, JPM, LEH, ML, MS, and UBS. Subsequent years exclude LEH and BS.

Source: SEC FOCUS Reports, Part III



Reducing the Risk of Runs

- ▶ Highly capitalized institutions are much less likely to be subject to runs
 - ▶ The risks inherent in the broker-dealer funding model should result in higher capital requirements than would be the case if they, like domestic depository institutions, could fund their assets with stable sources of funding like insured deposits
 - ▶ Higher capital needed
 - ▶ Large independent broker-dealers
 - ▶ Foreign broker-dealers now required to form intermediate holding companies
 - ▶ Bank holding companies where the broker-dealer is a significant component of the holding company
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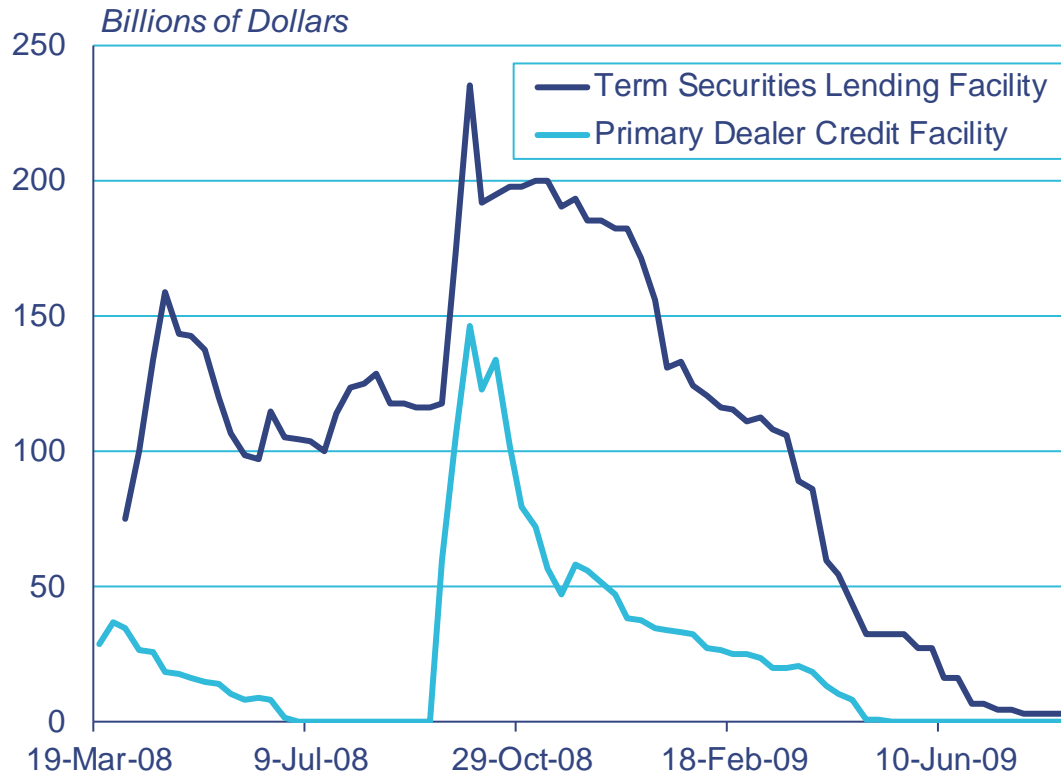


Other Remedies to be Discussed at this Conference

- ▶ Larger shares of subordinated debt
 - ▶ Restrictions on repurchase agreements
 - ▶ Collateral limitations
 - ▶ Restrictions on MMMF investments
 - ▶ Mandatory haircuts
 - ▶ All suggestions have costs, but remain necessary to reduce run risk
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Figure 9: Loans Outstanding at the Primary Dealer Credit and Term Securities Lending Facilities

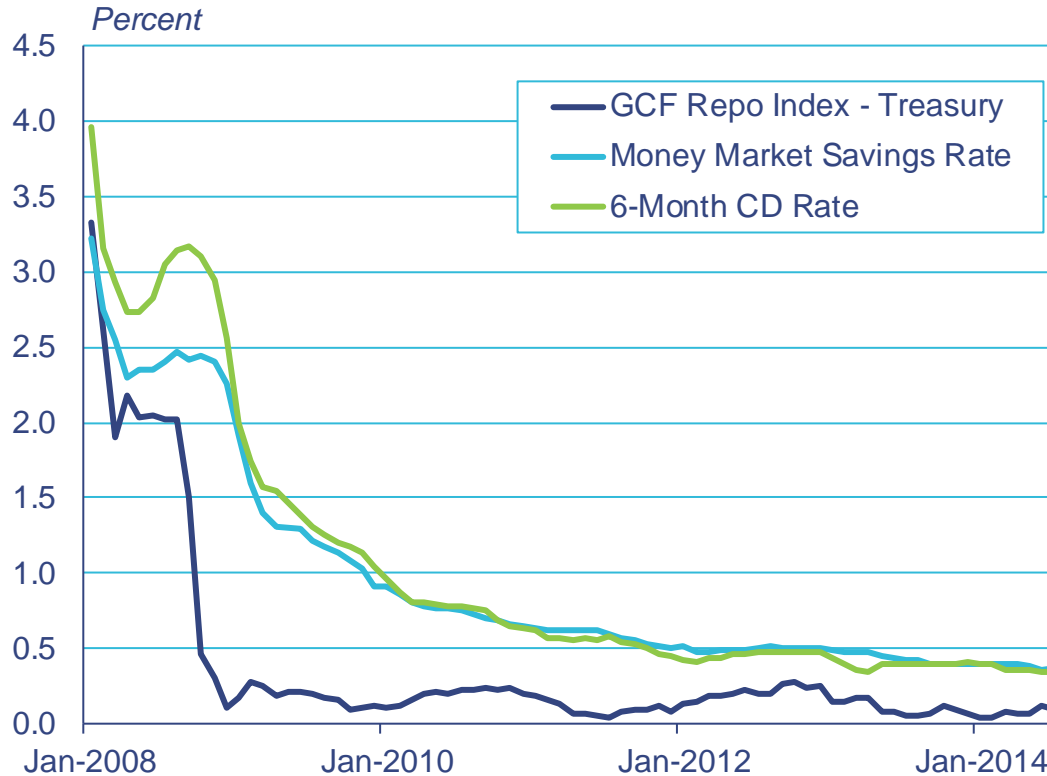
Weekly, March 19, 2008 - August 12, 2009



Note: The Primary Dealer Credit Facility was announced on March 16, 2008 and operational on March 17, 2008. The Term Securities Lending Facility was announced on March 11, 2008 and operational on March 27, 2008. While the facilities did not expire until February 1, 2010, there were no loans outstanding after mid August 2009.

Source: Federal Reserve Board, Haver Analytics

Figure 10: Rates on General Collateral Finance (GCF) Repurchase Agreements and Deposits
 Monthly, January 2008 - July 2014





Concluding Observations

- ▶ Broker-dealers were at the epicenter of crisis
 - ▶ Funding of broker-dealers proved to be unstable
 - ▶ Impacted broader market functioning and liquidity
 - ▶ Substantial government support was provided to broker-dealers to avoid even greater economic losses
 - ▶ Given the widespread government support provided to broker-dealers and the difficulties they encountered during the crisis, a comprehensive re-evaluation of broker-dealer regulation is overdue
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