Risk of Financial Runs – Implications for Financial Stability

Eric S. Rosengren
President & CEO
Federal Reserve Bank of Boston

22nd Annual Hyman P. Minsky Conference on the State of the U.S. and World Economies
April 17, 2013
Financial Runs and Financial Stability

- Traditional focus on commercial banks
  - Deposit insurance
  - Additional post-crisis actions – higher capital, stress tests, liquidity rules, resolution plans

- Non-depository institutions also were run on during the crisis
  - MMMFs – Take credit risk with no capital and promise a fixed net asset value
  - SIVs – short-run financing for long-run assets
Broker-Dealers

- Despite broker-dealers’ collateralized borrowing, runs were a significant problem.
- Play a critical role in our financial infrastructure:
  - Brokers – effect transactions in securities for the account of others
  - Dealers – engage in the business of buying and selling securities for their own account
- Market-makers – ensure markets remain highly liquid and securities transactions can occur effectively and efficiently
Re-examine Capital for Large Broker-Dealers

- Central role in crisis
  - Bear Stearns – Significant disruption
  - Lehman Brothers – Arguably the most disruptive failure of crisis
  - Many other broker-dealers experienced financial difficulties
- Extensive liquidity support
- Too little has changed to avoid a repetition of broker-dealer problems
Broker-Dealers Continued…

- Many large broker-dealers are counterparties to the Federal Reserve when the Fed conducts monetary policy.
- Critical to providing market in U.S. Treasury securities – Fed open market operations.
- Important market makers in many other securities markets, facilitate well-functioning credit markets more generally.
# Figure 1

## Assets of Large Broker-Dealers

As of December 31, 2006

<table>
<thead>
<tr>
<th>Broker-Dealer Name</th>
<th>Home Country</th>
<th>Assets (Millions of Dollars)</th>
<th>Crisis Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morgan Stanley &amp; Co. Incorporated</td>
<td>United States</td>
<td>583,405</td>
<td>Converted to Bank Holding Company</td>
</tr>
<tr>
<td>UBS Securities LLC</td>
<td>Switzerland</td>
<td>575,359</td>
<td>Parent Received Support</td>
</tr>
<tr>
<td>Goldman, Sachs &amp; Co. and Subsidiaries</td>
<td>United States</td>
<td>509,251</td>
<td>Converted to Bank Holding Company</td>
</tr>
<tr>
<td>Lehman Brothers Inc. and Subsidiaries</td>
<td>United States</td>
<td>404,854</td>
<td>Filed for Bankruptcy</td>
</tr>
<tr>
<td>Citigroup Global Markets Inc. and Subsidiaries</td>
<td>United States</td>
<td>377,951</td>
<td>Parent Received Support</td>
</tr>
<tr>
<td>Deutsche Bank Securities Inc.</td>
<td>Germany</td>
<td>317,871</td>
<td></td>
</tr>
<tr>
<td>Credit Suisse Securities (USA) LLC and Subsidiaries</td>
<td>Switzerland</td>
<td>269,834</td>
<td></td>
</tr>
<tr>
<td>Banc of America Securities LLC</td>
<td>United States</td>
<td>251,442</td>
<td>Parent Received Support</td>
</tr>
<tr>
<td>Bear, Stearns &amp; Co. Inc. and Subsidiaries</td>
<td>United States</td>
<td>236,191</td>
<td>Assisted Merger</td>
</tr>
<tr>
<td>Barclays Capital Inc. and Subsidiaries</td>
<td>United Kingdom</td>
<td>236,023</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>3,762,181</strong></td>
<td></td>
</tr>
</tbody>
</table>

*as of November 2006

Source: SEC Focus Report Form X-17A-5 Part III
Primary Dealer Credit Facility

- Established to help stem the financial crisis by providing overnight loans to primary dealers
- Loans were fully collateralized, with “haircuts”
- Interest rate was at the primary credit rate
- Dealer was responsible for the loan beyond the collateral pledged
- Designed to ensure adequate functioning of tri-party repo market
- All loans were paid in full and returns were remitted to the U.S. Treasury
Term Securities Lending Facility

- Allowed primary dealers to lend less-liquid securities to the Fed for one month, for a fee, in return for highly liquid Treasury securities
- Provided liquidity in market when trading was impaired
- Like PDCF, started in March 2008 and ended in February 2010
- No losses, and revenue generated was returned to the U.S. Treasury
Figure 2
Primary Dealer Credit Facility and Term Securities Lending Facility Summary Statistics

### Peak Outstanding Balances (in Millions)

<table>
<thead>
<tr>
<th>Facility</th>
<th>Peak</th>
<th>Peak Outstanding Balance</th>
<th>Outstanding Balance of Domestic Borrowers on Peak Date</th>
<th>Share</th>
<th>Outstanding Balance of Foreign Borrowers on Peak Date</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Dealer Credit Facility</td>
<td>September 29, 2008</td>
<td>$155,768</td>
<td>$136,325</td>
<td>87.5%</td>
<td>$19,443</td>
<td>12.5%</td>
</tr>
<tr>
<td>Term Securities Lending Facility</td>
<td>September 26, 2008</td>
<td>$245,567</td>
<td>$123,507</td>
<td>50.3%</td>
<td>$122,060</td>
<td>49.7%</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>$401,335</td>
<td>$259,832</td>
<td>64.7%</td>
<td>$141,503</td>
<td>35.3%</td>
</tr>
</tbody>
</table>

### Originations (in Millions)

<table>
<thead>
<tr>
<th>Facility</th>
<th>Total Originations</th>
<th>Originations by Domestic Borrowers</th>
<th>Share</th>
<th>Originations by Foreign Borrowers</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Dealer Credit Facility</td>
<td>$8,950,992</td>
<td>$8,393,935</td>
<td>93.8%</td>
<td>$557,057</td>
<td>6.2%</td>
</tr>
<tr>
<td>Term Securities Lending Facility</td>
<td>$2,005,697</td>
<td>$984,152</td>
<td>49.1%</td>
<td>$1,021,545</td>
<td>50.9%</td>
</tr>
<tr>
<td>Totals</td>
<td>$10,956,689</td>
<td>$9,378,087</td>
<td>85.6%</td>
<td>$1,578,602</td>
<td>14.4%</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Board
Figure 3
Primary Dealer Credit Facility Loans Outstanding

Daily, March 17, 2008 - May 12, 2009

Source: Federal Reserve Board
Figure 4
Term Securities Lending Facility Loans Outstanding
Weekly, March 28, 2008 - August 14, 2009

Source: Federal Reserve Board
Broker-Dealer Regulation by SEC Remains Largely Unchanged

- BHCs with large broker-dealer operations are more sensitive to market volatility
  - Stock price movement
  - Credit default swap (CDS) spreads
- Government liquidity facilities, while critical, created moral hazard
- Actions needed to reduce the need for a government backstop
BHCs and Broker-Dealers

- Many large broker-dealers are now in bank holding companies (BHCs)
- Limitations on funding, to protect insured depositories
- Capital should reflect liability structure as well as risks in assets – deposits with FDIC insurance have lower run risk than other liabilities
- BHCs with large broker-dealer should need more, not less, capital
Figure 5
Tier 1 Common Equity Capital Ratio of Large Bank Holding Companies by Broker-Dealer Activity Concentration

2009:Q1 - 2012:Q4

Note: Tier 1 Common Equity Capital Relative to Basel II Risk-Weighted Assets

Source: Consolidated Financial Statements for Bank Holding Companies (FR Y-9C)
Figure 6
Leverage Ratio of Large Bank Holding Companies by Broker-Dealer Activity Concentration

2009:Q1 - 2012:Q4

Source: Consolidated Financial Statements for Bank Holding Companies (FR Y-9C)
Concluding Observations

- Broker-dealers did not perform well in the crisis
- Significant government intervention was necessary to maintain market functioning and liquidity
- Little has changed regarding solvency requirements of broker-dealers
- The status quo represents a significant financial stability risk