Meeting between Federal Reserve Board Staff and Representatives of the Credit Roundtable and the Fixed Income Forum
February 10, 2012

Participants: Cherie Schaible (AIG Asset Management); Louis Zahpral (CalPERS); Adam Rubinson (Dodge & Cox); Carolyn Perlmuth (Institutional Investor); Christopher Gootkind (Loomis, Sayles & Company, LP); Jonathan Rosenthal (Metropolitan Life Insurance Co.); Patrick Cassidy (Nationwide Investments); Michael Lilliard (Prudential); David Knutson (Senior Research Analyst); Robert Auwaerter (The Vanguard Group); and Matthew Abbott (Wellington Management Co.)

Scott Alvarez, Anna Harrington, David Lynch, and Jeremy Newell (Federal Reserve Board)

Summary: Staff of the Federal Reserve Board met with representatives of the Credit Roundtable and the Fixed Income Forum to discuss the restrictions on proprietary trading and hedge fund and private equity fund activities under section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (also known as the “Volcker Rule”).

Among matters discussed in the meeting were the representatives’ views regarding: historical market performance of investment grade corporate bond liquidity and volatility; the approach to distinguishing market-making from prohibited proprietary trading in light of the special nature of the corporate bond market and the need to maintain liquidity in such markets; the strong preference for a portfolio-based approach rather than a trade-by-trade based approach to trading activity; and particular metrics and language of the proposed rule that causes concern, particularly the criteria related to revenue generation and taking positions in securities in anticipation of customer demand.

The representatives provided the attached charts on investment grade corporate bond liquidity and volume. The representative from The Vanguard Group also provided the attached handout entitled “Volcker Rule Discussion on Proprietary Trading in the Bond Markets” which recommends certain approaches to proprietary trading in light of risk mitigation policy implications and an aging securities inventory.
Investment Grade Corporate Bond Liquidity

Size of the Investment Grade Corporate Market

Source: Barclay's Capital Investment Grade Corporate Index

Primary Dealer Corporate Bond Positions

Source: Federal Reserve Bank of New York

Primary Dealer Corporate Positions as a Percentage of the Investment Grade Corporate Market

Source: Barclay's Capital Investment Grade Corporate Index & Federal Reserve Bank of New York
Investment Grade Corporate Bond Trading Volume

**Historical Daily IG Corp Trading Volume**

Five Day Rolling Averages

- On 3/11/2005, it was about $11 billion.
- It goes down to about $9 billion in June and stays between 6 and $9 billion until January 2006 when it jumps down to about $4 billion.
- On 3/11/2006, it is about $9 billion and stays between 6 and $11 billion until January 2007 when it jumps down to about $3.2 billion.
- On 3/11/2007, it is about $11 billion and stays between about 5 and $10 billion until January 2008 when it moves down to about $2 billion.
- On 3/11/2008, it is about $8.5 billion and stays between about 5 and $10 billion until January 2009 when it goes down to about $3.5 billion.
- On 3/11/2009, it is about $12 billion and about June 2009 peaks at about $16.5 billion.
- Then it stays mostly between 10 and $14 billion until January of 2010 when it drops to about $4 billion.
- On 3/11/2010, it is about $13 billion and stays mostly between 8 and $13 billion until January 2011 when it drops to about $4 billion.
- 3/11/2011, it is about $13 billion and stays mostly between about 8 and $13 billion until January 2012 when it drops to about $4 billion.
- It ends February 2011 at about $14 billion.

Source: FINRA TRACE

**Corporate Bond Market Turnover**

**Trading Volume / Market Size**

- On 4/6/2005, it was about 0.65%.
- Around October 2005, it was down to about 0.4%.
- It stayed between about 0.38 and 0.5% until early 2008 when it reached about 0.3%.
- It hit a low of about 0.25% in mid to late 2008 then was up to about 0.48% in mid 2009.
- It stayed between about 0.45 and 0.35% for the rest of the graph, hitting about 0.33% in early 2012.

Source: JP Morgan

**Corporate Bond Market Turnover**

**Market Size / Trading Volume**

- It starts 3/23/2005 at about 150 days.
- Then it stays between about 175 and 225 days until about early 2007, when it starts heading up and reaches about 325 days in late 2007/early 2008.
- Down to about 240 days in March 2008, then back up to about 340 in mid to late 2008.
- Then down again, hitting about 170 days in July 2009.
- Up again until early 2011, hitting about 300 days.
- March 2011, it is down to about 210 days.
- Then heads up, ending in early 2012 at about 370 days.

Source: FINRA TRACE & Barclays Capital Investment Grade Corporate Index

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Average Daily Trading Volume ($bn)</th>
<th>Amount Outstanding ($tn)</th>
<th>Turnover in Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equities</td>
<td>4,200</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Treasuries</td>
<td>580</td>
<td>9.9</td>
<td>17</td>
</tr>
<tr>
<td>Investment Grade Bonds</td>
<td>11.8</td>
<td>3.2</td>
<td>270</td>
</tr>
<tr>
<td>HY Bonds</td>
<td>4.4</td>
<td>1.2</td>
<td>270</td>
</tr>
</tbody>
</table>

Source: JP Morgan

As of: November 2011
Rule Objective: Avoid putting taxpayer money at risk to pay out depositors in the event of a bank failure due to “proprietary trading”

One Potential Approach:

1. Do not focus on a legalistic definition of a “proprietary trade”, which is very hard to define in the bond markets where securities dealers have to hold bond inventories on their books due to the fragmented, over the counter nature of the market.
2. Instead, focus on broader measures of risk of the banks’ security trading portfolio
3. Example below:

Aging Securities Inventory

1. A general principle of trading is that the longer you hold a trading position, the greater the potential for it to generate a loss
2. Trading firms with good risk management functions put each security held in inventory into time held buckets (such as 0-45 days, 46-90, 91-180, 181-365) and charge the trader a carrying cost that increases as the security moves into the longer dated buckets. This directly negatively impacts the profit and loss of the trader’s trading book. This makes it more costly for a trader who is trying to “hide” a prop trade in his book.
3. Different types of securities have different carrying costs (the more illiquid the security, usually the higher the carrying charge)
4. Regulators could assess the bank’s Aged Inventory Policy relative to other firms for the appropriate level of rigor.