- **Municipal Volume Moderates**
- **Variable Rate Market Update**
- **Fed Rule Change Brings Muni Liquidity to Forefront**

Municipal Volume Moderates

Municipal bond issuance rose only 14.5% in the month of May, with $31.86 billion issued, compared to $27.82 billion in May 2014, according to Thomson Reuters data. Although this is the tenth consecutive increase in municipal volume, May issuance did not post well above average volume, as it has in prior months this year. Monthly year-over-year gains January through April 2015 have ranged from approximately 38% – 78%.

The Municipal Market Data ("MMD") 'AAA' Muni Market 10 year yield ended May at 2.19%, an increase of 7 bps from 2.12% at the end of April. The 30 year yield also increased, ending May at 3.16%, an 11 bps rise from the end of April.

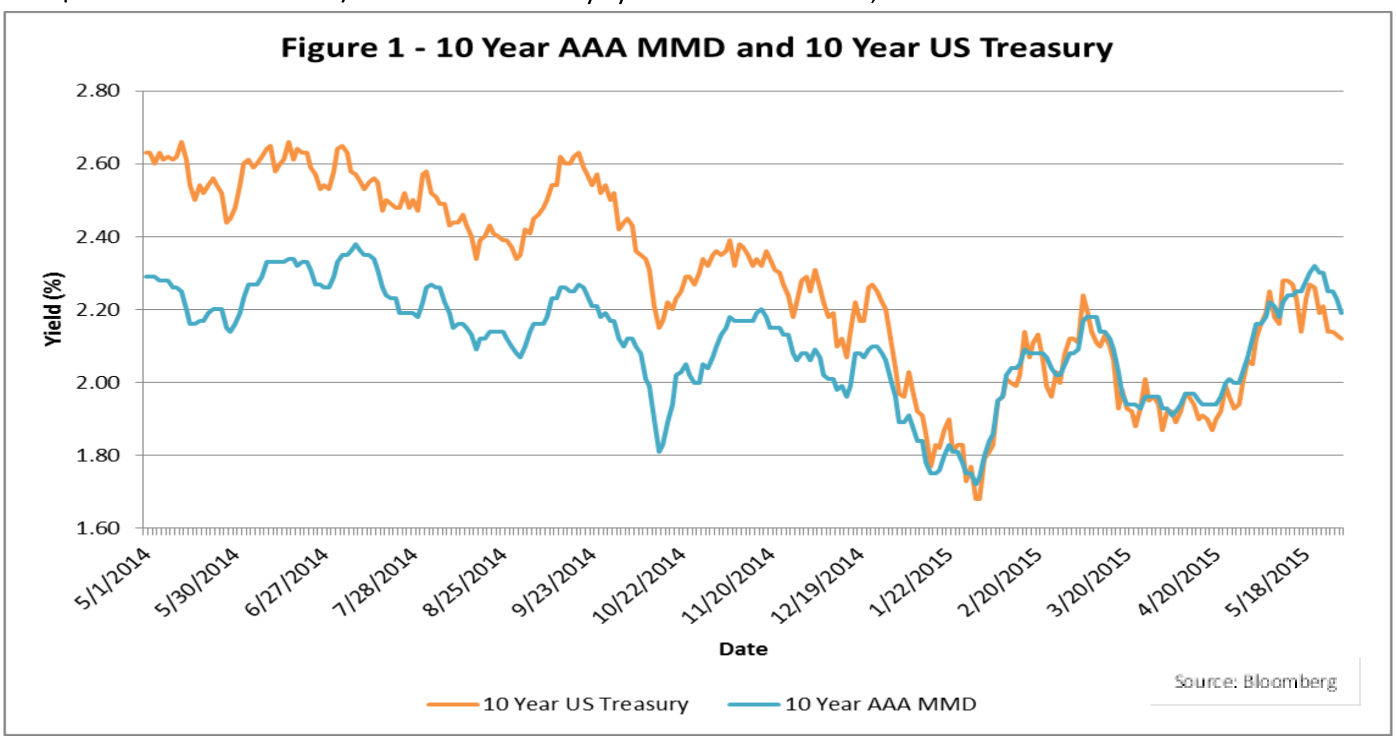
The 10-year US Treasury yield ended May at 2.12%, up 7 bps from 2.05% at the end of the prior month. The 30-year Treasury yield also increased, ending May at 2.88%, up from 2.754% at the end of April. As of May 29th, the ratios of 'AAA' General Obligation municipal yields to Treasury yields were:

Year	Yield	% Yield
1-Year	0.22 / 0.26	84.62%
5-Year	1.41 / 1.49	94.63%
10-Year	2.19 / 2.12	103.30%
30-Year	3.16 / 2.88	109.72%

Sources: The Bond Buyer, Bloomberg, US Department of Treasury, US Federal Reserve

Variable Rate Market Update

The SIFMA Municipal Swap Index, an average of high-grade,

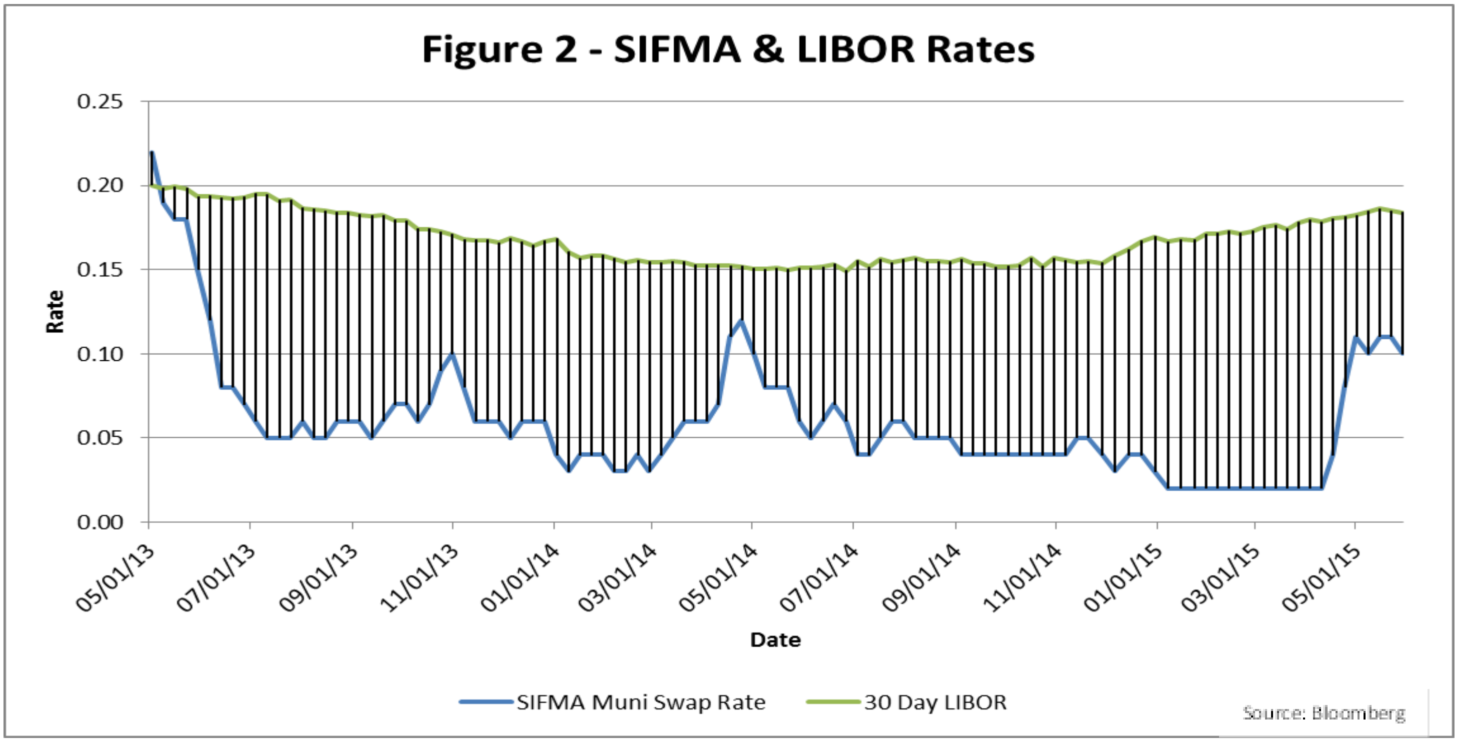


tax-exempt, variable rate bonds, ended May at .10%, a single basis point decrease from the end of April. The 30-day LIBOR increased in May, ending the month at .1840%, up from .1815% at the end of April. Please refer to Figure 2 below for historical SIFMA and LIBOR rates.

Fed Rule Change Brings Muni Liquidity to Forefront

The aftermath of the financial crisis brought about many new laws and regulations, both national and international, designed to keep banks from needing bailouts again should there be, shall we say, troubles again, like those in 2008. Like the parent who impounds all of the balls and gloves after the picture window gets broken, the various legal and regulatory authorities in the U.S. decided to start at the draconian and then work their way back to the merely onerous. Or at least that appears to be their strategy.

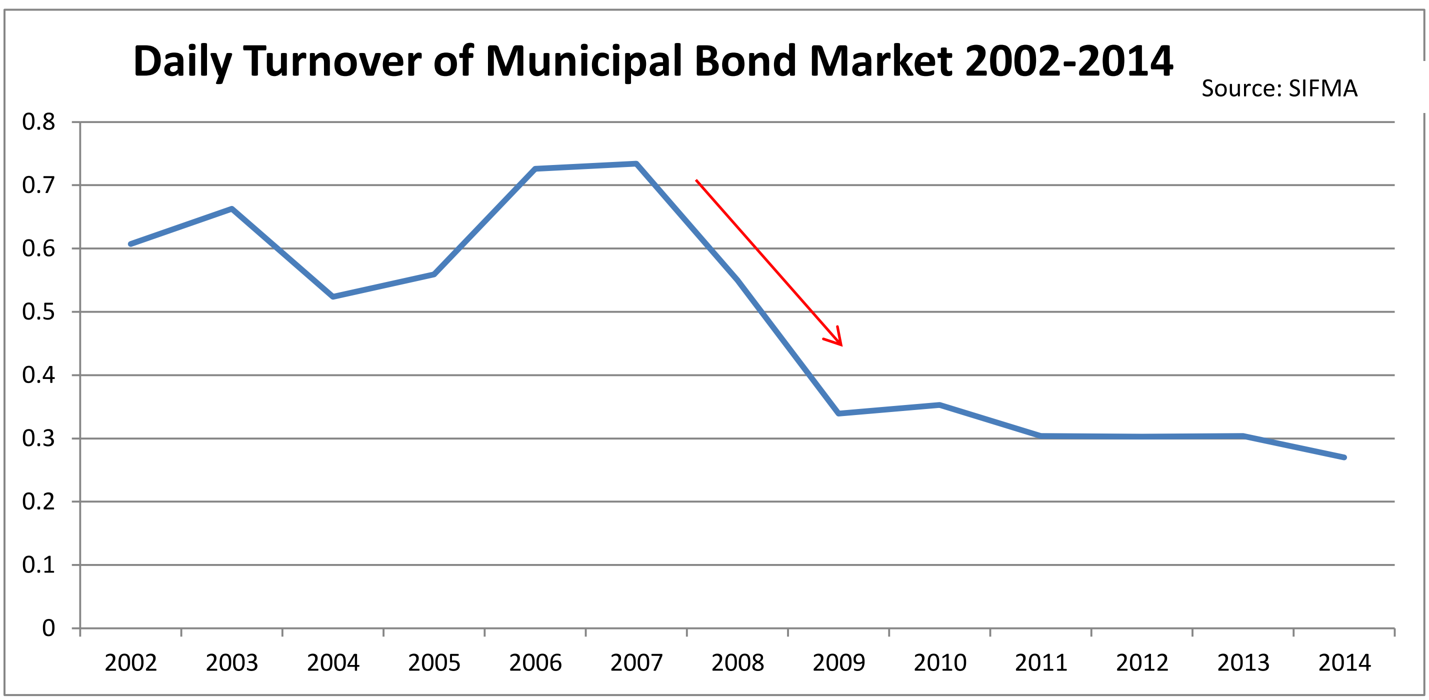
The Fed appears to be on course to relaxing the rules regarding banks' ability to count municipal bonds towards their new liquidity requirements. A new proposal would treat investment grade general obligation backed Munis the same as investment grade corporate bonds; i.e., 50% of their value could be included in their liquidity requirement. The rule requires banks to hold a certain level of what the regulators term "high-quality liquid assets" to fund their operations for at least 30 days in the event of a 2008 style donnybrook, with the hope being that this would obviate the need for a federal bailout in



the short term. On the surface, it appeared that the original decision appeared to be reasonable. The muni market is much more fragmented than the corporate, agency, or Treasury markets, so the municipal bond market should not be as liquid as those markets. This is assuming that bank regulators were aware of the relative default statistics among corporate and municipal bonds and how substantially more safe munis are than corporates and that the overall safety wasn't their hang-up in this instance.

Using trading and market size data compiled by SIFMA, we've compared the daily turnover rates for both the municipal and corporate bond markets to see how they stack up. It turns out that the regulators first instinct about munis being less liquid was correct. Or at least now it is; but it wasn't always that way. Average trading volume for municipal bonds in 2014 was 0.27% of the bonds outstanding, compared to 0.34% of the corporate bond market. That's nearly a 25% difference; a variation that most would agree could be considered major enough to warrant differing treatment. Yet in 2010, well after the recovery began, the difference between muni and corporate turnover were miniscule with munis turning over .007% and .017% less than corporates in 2011 and 2012, respectively. In 2002, munis traded .608% of their market every day compared to just .442% for corporates.

Still, there may appear to be something to the regulators line of thinking. Reviewing the daily turnover of the municipal bond market from 2002 through 2014 (in percent, %, below), it



becomes apparent that 2008-2009 was a demarcation between the old and new municipal bond markets. Anyone who was around at the time could tell you that the difference is that the bond insurers disappeared. The pre-2008 municipal bond market was not fragmented; in fact it was a lot more unified than the corporate bond market because bond insurance market penetration was exceeding 50%. Participants didn't have to evaluate 10,000 different credits like they do today; they had four or five major bond insurers wrapping most of them.

Interestingly, although the Federal Reserve appears to have come around to municipal bonds, other major regulators including the OCC and FDIC, have not as of yet, so the impact on banks and the muni market may be limited. It still strikes us as a not altogether necessary rule, even if technically the municipal bond market is the laggards of the fixed income world. Municipal bond default rates are much lower and average ratings are much higher than those of corporate bonds. And the kindest thing we can say about the notion that corporations and municipalities will be affected similarly by another 2008 credit freeze is that it was thought up by someone who did not work in finance in 2008. Still, at least munis have gotten this far, and if the OCC and FDIC play ball they may yet get a little further.

Sources: Wall Street Journal, SIFMA, Thomson-Reuters

May 2015 Selected Bond Issues

Sale Date	Par ($ mil)	Issuer	Project	Ratings	Final Maturity	Yield	Spread to MMD	Notes
General Obligation and Essential Service Revenue								
5/6/2015	$5.70	City of Cottage Grove, MN	General Obligation Improvement Bonds	/ AA+/	2/1/2031	2.800%	-2	Fed BQ
5/5/2015	$11.50	City of Annapolis, MD	General Obligation Bonds	/AA+/AA+	8/1/2035	3.540%	59	Series A
5/4/2015	$7.05	City of Augusta, KS	General Obligation Bonds	/AA-/	9/1/2045	3.750%	66	Fed BQ
Education Sector								
Sale Date	**Par ($ mil)**	**Issuer**	**Project**	**Ratings**	**Final Maturity**	**Yield**	**Spread to MMD**	**Notes**
5/4/2015	$16.61	Clackamas, OR Community College District	General Obligation Refunding Bonds	Aa1/AA+/	6/15/2027	2.810%	40	Insured; Series A
5/4/2015	$21.50	Board of Trustees for the University of Northern Colorado	Institutional Enterprise Revenue Refunding Bonds	Aa2/ /	6/1/2040	4.200%	116	Insured
5/11/2015	$38.27	University of South Carolina	Athletics Facilities Revenue Bonds	Aa3/ /	5/1/2045	4.090%	91	

Source: Bloomberg

Sale Date	Par ($ mil)	Issuer	Project	Ratings	Final Maturity	Yield	Spread to MMD	Notes
Water/Utility Sector								
5/4/2015	$4.89	Mukilteo Water and Wastewater District (Snohomish County, WA)	Water and Wastewater Revenue Refunding Bonds	/AA+/	10/1/2028	2.500%	-3	Fed BQ
5/4/2015	$25.00	City of Gallatin, TN	Water and Sewer Revenue Refunding and Improvement Bonds	/AA/	1/1/2040	3.800%	76	
5/12/2015	$28.04	City of Aurora, IL	Waterworks and Sewerage Revenue Refunding Bonds	/AA+/	12/1/2036	4.100%	106	Series B
5/13/2015	$30.22	City of Mesa, AZ	Utility Systems Revenue Bonds	/AA-/	7/1/2039	4.250%	112	
Healthcare Sector								
Sale Date	**Par ($ mil)**	**Issuer**	**Project**	**Ratings**	**Final Maturity**	**Yield**	**Spread to MMD**	**Notes**
5/4/2015	$75.00	County of Franklin, OH	Hospital Improvement Revenue Bonds (Nationwide Children's Hospital Project)	Aa2/AA/	11/1/2045	4.200%	111	
5/4/2015	$18.28	State of Connecticut Health and Educational Facilities Bonds	Revenue Bonds, Middlesex Hospital Issue	A2/ /	7/1/2036	3.800%	85	

Source: Bloomberg