Municipal Market
UPDATE

StemBrothers&Co.
INVESTMENT BANKING SINCE 1917

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- **New Money Issuance Revives Municipal Volume**
- **Variable Rate Market Update**
- **Private Colleges Show Signs of Stabilizing**

New Money Issuance Revives Municipal Volume

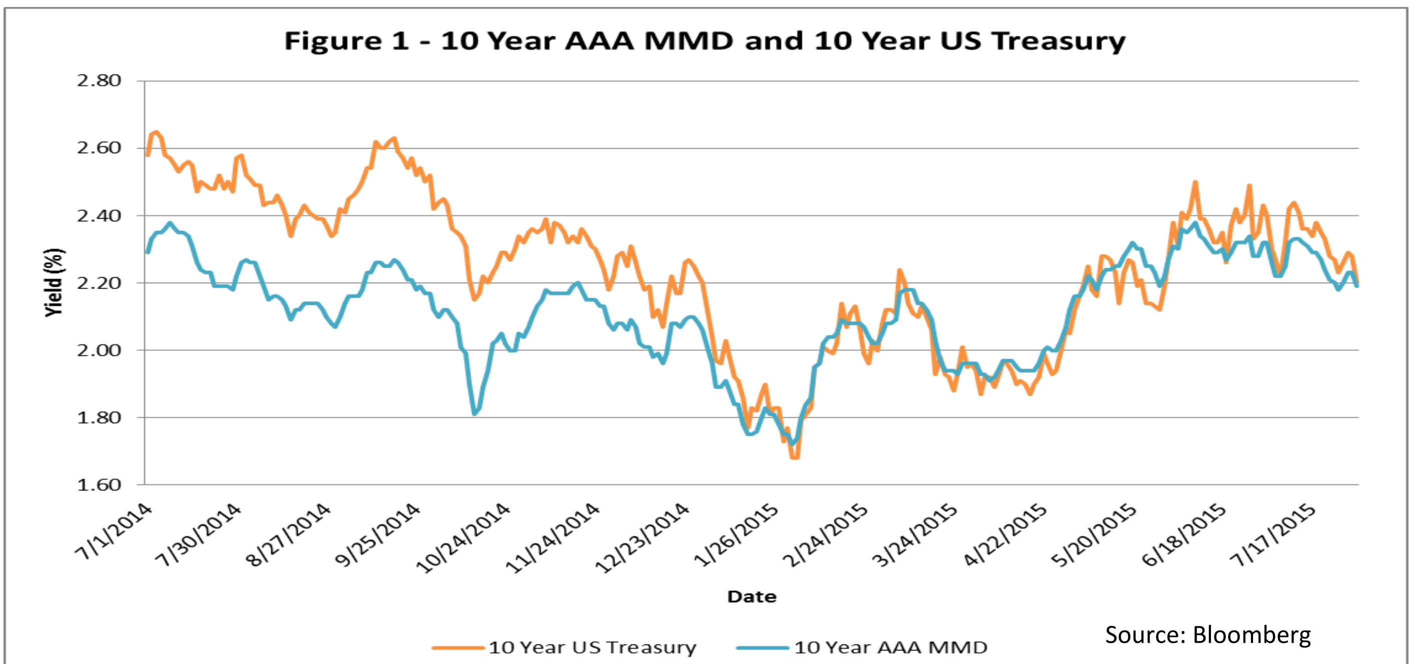
While June marked first time in the past 10 months that municipal volume fell below its year-over-year level, volume bounced back in July due to a surge in new money issuance. In July, according to Thomson Reuter's data, long-term municipal bond issuance increased by more than 10% to $30.75 billion from $27.73 billion in July 2014. Refunding volume was down in July, declining slightly from $10.98 billion in July 2014 to only $10.36 billion this month. In other months this year, refundings have largely driven issuance. This month, however, the driver was new money issuance, which rose 26.6% to $15.5 billion in 553 issues, compared to $11.88 billion in 446 transactions the same month last year.

The Municipal Market Data ("MMD") 'AAA' Muni Market 10 year yield ended July at 2.19%, a 9 bps decrease from 2.28% at the end of June. The 30 year yield also decreased, ending July at 3.12%, a 16 bps fall from rates at the end of June.

The 10-year US Treasury yield ended July at 2.20%, down 15 bps from 2.35% at the end of the prior month. The 30-year Treasury yield also decreased, ending July at 2.92%, a fall from 3.11% at the end of June. As of July 31st, the ratios of 'AAA' General Obligation municipal yields to Treasury yields were:

Year	Yield	% Yield
1-Year	0.27 / 0.33	81.82%
5-Year	1.3 / 1.54	84.42%
10-Year	2.19 / 2.2	99.55%
30-Year	3.12 / 2.92	106.85%

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

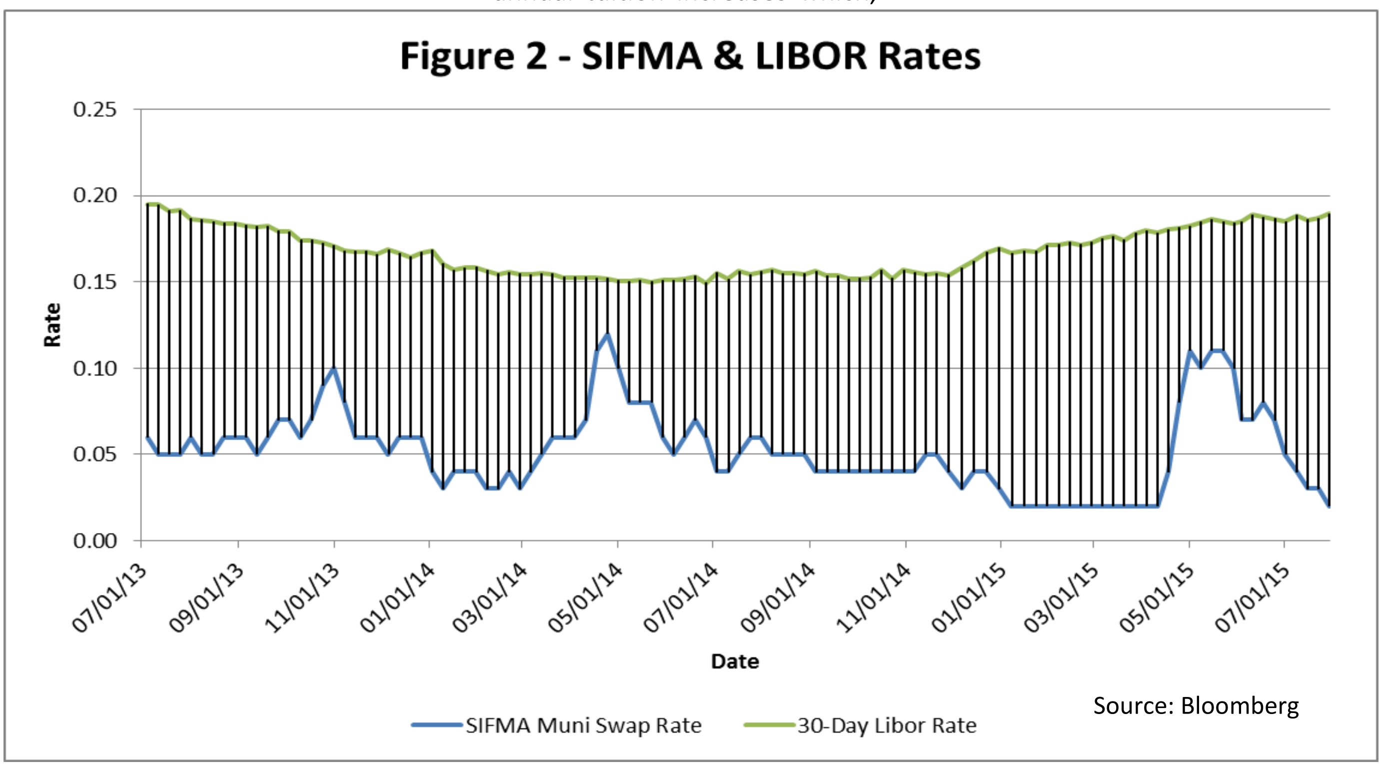


Variable Rate Market Update

The SIFMA Municipal Swap Index, an average of high-grade, tax-exempt, variable rate bonds, ended July at .02%, a three basis point decrease from the end of June. The 30-day LIBOR increased slightly in July, ending the month at .19175%, up from .1850% at the end of June. Please refer to Figure 2 below for historical SIFMA and LIBOR rates. Demand remains very strong for both tax-exempt and taxable variable-rate products.

Private Colleges Show Signs of Stabilizing

It took private colleges and universities several years to realize that they were among the institutions hit the hardest by the recession, but it took bond investors even more time to realize it. When the recession hit in 2008, students already in college, as well as prospective college students, were already too far down the road to adjust their plans. As a result, students kept enrolling and suffering through the 7% annual tuition increases which, by then, had been at least a decade long tradition of seemingly every private college, no matter its reputation. As graduates came out the other side, however, the popular media was flooded with stories of former students carrying massive loads of student debt while being underemployed, or even worse, unemployed. Prospective students and their parents began to take note and began to adjust their higher education plans. Community college and public university attendance spiked and private



colleges, which didn't have a large, usually national reputation, were put under great pressure. Those that were able to avoid an outright decline in attendance were usually only able to do so by deeply discounting their tuition and placing their revenues under pressure anyway. The end result has been that private institutions, and even many smaller public institutions, have struggled in recent years to maintain revenues and cut expenses. According to both Moody's and S&P, which released their annual studies on the medians of the colleges that they rate, private colleges appear to be making some progress. The data usually lags by one year due to the time needed to compile the information, but both rating agencies saw positives and negatives for colleges and universities.

Moody's Investors Service, which has had a negative outlook on the entire higher education sector for the last four years, upgraded it to stable on July 20th. Among the points that Moody's raises in its revised outlook is that they are projecting that operating revenue growth will stabilize for the sector in the 3% range, down significantly from the pre-recession average but certainly a step in the right direction. Other factors that Moody's points to include institutions doing a better job of managing their expenses and the positive effects of the strong equity market on endowments and balance sheets. The rating agency is careful to point out, however, that there is a minority of colleges and universities that are still struggling to stem revenue declines due to weak demand and that for them the fight goes on.

For its part, Standard & Poor's is still slightly on the pessimistic side of neutral with regards to private higher education noting that as of July 10th they had maintained negative outlooks on 11% of their rated institutions, while only 5% were positive. They still expect some pressure "…particularly at the lower end of the rating scale, because of persistent operating stress and a delayed recovery from the Great Recession." They are not all doom and gloom either, however. They saw slight improvement in demand ratios and overall enrollments, while they too were encouraged about the effects of rising stock prices.

Overall, our belief is that some smaller colleges and universities may remain under pressure for a while. As the administration of Sweet Briar College alluded to in their short-lived attempt to shut themselves down, rural colleges in particular are facing challenges different from those in urban or suburban areas. We believe that the majority of those colleges will be able to adjust and continue to attract students as they have for a century and a half in many cases. Some dislocations in the market may occur, but the overall value of the product that is the U.S.'s private colleges and universities remains high and will continue to attract customers.

Sources: Moody's, Standard & Poor's

July 2015 Selected Bond Issues

General Obligation and Essential Service Revenue

Sale Date	Par ($ mil)	Issuer	Project	Ratings	Final Maturity	Yield	Spread to MMD	Notes
7/21/2015	$17.78	Clackamas County, Oregon Fire District No. 1	General Obligation Bonds	/AA/	6/1/2030	3.210%	47	
7/8/2015	$4.11	Borough of Middlesex, New Jersey	General Obligation Bonds	/AA/	7/15/2025	2.300%	8	Bank Qualified
7/7/2015	$3.00	Ransom County, North Dakota	General Obligation Bonds	A2/AA/	5/1/2030	3.000%	28	Bank Qualified, Insured - MAC
7/9/2015	$6.00	City of Bunkie, State of Louisiana	General Obligation Bonds	/AA/	3/1/2040	3.750%	59	Insured - BAM

Education Sector

Sale Date	Par ($ mil)	Issuer	Project	Ratings	Final Maturity	Yield	Spread to MMD	Notes
7/20/2015	$28.09	The Trustees of Ivy Tech Community College of Indiana	Ivy Tech Community College Student Fee Bonds, Series T	AA/AA/	7/1/2025	2.710%	42	
7/13/2015	$27.40	Maine Health and Higher Educational Facilities Authority	Revenue Bonds, Series 2015A	A1/ /AA	3/1/2040	4.000%	77	
7/7/2015	$9.50	Board of Trustees of Northeastern Illinois University	Certificates of Participation Capital Improvement Project	/AA/	7/1/2025	3.200%	98	Insured - AGM
7/6/2015	$27.31	Snyder County Higher Education Authority (Commonwealth of Pennsylvania)	University Revenue Bonds (Susquehanna University Project)	A2/ /	1/1/2035	4.110%	111	

Source: Bloomberg

Sale Date	Par ($ mil)	Issuer	Project	Ratings	Final Maturity	Yield	Spread to MMD	Notes
Water/Utility Sector								
7/6/2015	$5.90	The Sewer Board of the City of Arab	Sewer Revenue Bonds	/AA/	10/1/2045	4.370%	110	Insured - AGM
7/14/2015	$8.96	City of Lawrence, Kansas	Water and Sewage System Refunding Revenue Bonds, Series 2015-B	Aa2/ /	11/1/2025	2.530%	20	
7/6/2015	$9.25	City of North Bend, Washington	Water and Sewer Revenue Refunding Bonds	/A+/	8/1/2032	2.810%	-6	Bank Qualified
Healthcare Sector								
Sale Date	**Par ($ mil)**	**Issuer**	**Project**	**Ratings**	**Final Maturity**	**Yield**	**Spread to MMD**	**Notes**
7/13/2015	$71.56	The Carroll City-County Hospital Authority (Georgia)	Revenue Anticipation Certificates	Aa2/AA/	7/1/2045	4.11	80	Insured - CNTY GTD
7/13/2015	$28.10	The DCH Health Care Authority (Alabama)	Health Care Facilities Revenue Bonds	A2/A/	6/1/2036	4.000%	91	

Source: Bloomberg