Municipal Market
UPDATE
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INVESTMENT BANKING SINCE 1917

- **Municipal Volume Continues to Decline**
- **Variable Rate Market Update**
- **Moody's Annual Higher Ed Survey Shows Slow Growth Future**

Municipal Volume Continues to Decline

After a sluggish October, municipal volume continued its downward trend throughout the month of November. According to Thomson Reuter's data, long-term municipal bond issuance declined by 21.6% to $23.19 billion in 834 issues, a fall from $29.56 billion in 995 issues in November of 2014. This marks the lowest volume for the month of November since 2000. While refundings continued to decline for the fifth straight month, new money issuance also slipped by 1.7% in terms of year over year statistics.

The Municipal Market Data ("MMD") 'AAA' Muni Market 10 year yield ended November at 2.02% - a 2 basis point ("bps") decline from 2.04% at the end of October. The 30 year yield also decreased, ending November 9 bps lower than October at 2.96%. The 10-year US Treasury yield ended November at 2.21%, a 1 bps drop from 2.20% at the end of the prior month. The 30-year Treasury yield increased, ending November at 2.98%, up 5 bps from 2.93% at the end of October. As of November 30th, the ratios of 'AAA' General Obligation municipal yields to Treasury yields were:

Year	Yield	% Yield
1-Year	0.34 / 0.51	66.67%
5-Year	1.26 / 1.65	76.36%
10-Year	2.02 / 2.21	91.40%
30-Year	2.96 / 2.98	99.33%

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

Figure 1 - 10 Year AAA MMD and 10 Year US Treasury

Source: Bloomberg

Variable Rate Market Update

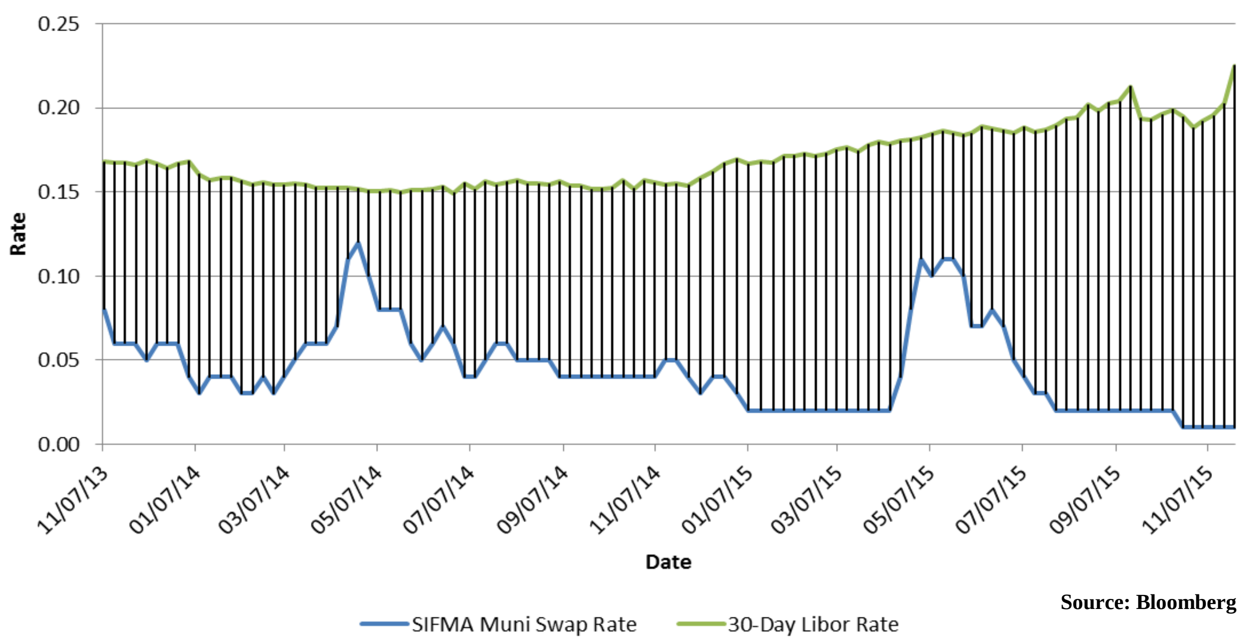
The SIFMA Municipal Swap Index, an average of high-grade, tax-exempt, variable rate bonds, ended the month at .01%, which is the same level it ended October. The 30-day LIBOR decreased slightly in November, ending the month at .2430%, up from .19200% at the end of October. Again this month, demand remains very strong for both tax-exempt and taxable variable-rate products. Please refer to Figure 2 below for historical SIFMA and LIBOR rates.

Moody's Annual Higher Ed Survey Shows Slow Growth Future

Moody's Investor Service released its now annual survey of colleges and universities which it rates and the results portend more of the same for the higher education sector. With a combination of public and private intuitions responding (129 of the former, 169 of the latter) the survey asked about respondent's initial results for the current school year. The results show that the trend towards stagnant revenue which has persisted since the end of the recession shows no signs of abating in the near future. Overall, the institutions that responded predicted a growth rate of between 2-3%- consistent with expected inflation in the economy as a whole, but much less than institutions have become accustomed to.

One of the measureable reasons for the expected decline is that the number of graduating high school students reached its peak several years ago and demographically there just aren't as many candidates

Figure 2 - SIFMA & LIBOR Rates



Source: Bloomberg

to move into college. Other reasons exist as well, but are much harder or even impossible to measure. The notion that college was a guaranteed ticket to a comfortable career and higher lifetime earnings died in the wake of the recession and many of today's graduating high school students know it, having witnessed their siblings going through it firsthand. Media stories of college graduates working one or two menial jobs while simultaneously being crushed by student loans have been pervasive for the last seven or eight years as well. For all of these reasons and more, 40% of Moody's survey respondents expect lower total enrollment for fall 2015 when the final numbers are added up. The demographic problems are more pronounced in the Northeast and Midwest as well as the population centers of the country shift more southward and westward.

Other than the shared demographic challenge, both public and private institutions report their own unique concerns going forward. For public institutions, the question of college affordability has become a political issue and sometimes a very prominent one. This has spurred state governments to impose their own limits on the ability of their colleges to raise tuition revenues while simultaneously, in all but a few states, cutting direct state support at worst or at best not increasing it. Many states have constitutional protections that extend to primary and secondary schools holding spending at certain levels so the cuts have to come from somewhere and the public university system is a prime candidate. For these reasons, tuition stagnation at public institutions has as much to do with external pressure as it does market forces.

The story of private higher education is altogether different. In reality, it's two different stories, the first being that of the highly rated, highly selective colleges with a national reputation that have not missed a beat. Through the recession and beyond, they have maintained their pricing power by leveraging their academic reputations into the ability to raise tuition at whatever rate they choose, although most of them already have sufficient endowments and donor support so as to make the necessity of tuition increases moot in the first place.

For smaller, regional private colleges the story is much starker. Fully 30% of private universities that responded to Moody's project an outright decline in net revenue this year and most of them belong in this category. Without a national reputation these schools are left to battle each other for students for whom the small college experience is appealing. Those battles are primarily conducted via discounting the "sticker-price" tuition lowering the proceeds on the margin that would otherwise flow to the surplus. The pressure on small private colleges is immense. In a separate report from earlier this year, Moody's analysts projected that small college closures could almost triple in the next few years, from 5 to 15.

Colleges are trying everything they can to break out of the no-growth rut. Public universities, also to the chagrin of many of their respective state legislatures, have been increasing the number of out of state students in order to be able to charge higher tuition. All colleges are heavily pursuing international students as well, who usually pay the full tuition regardless of where they attend. More than anything, however, colleges will hopefully adjust to the new environment that the rest of the economy has always lived in; an economy where costs matter because revenues can't always be raised at will to fund every marginal academic or social program that sounds good at the moment. Small private colleges seem to be adapting to the new reality faster than the others, but it is a reality and they will all eventually have to catch on.

Source: Moody's Investors Service

November 2015 Selected Bond Issues								
General Obligation and Essential Service Revenue								
Sale Date	**Par ($ mil)**	**Issuer**	**Project**	**Ratings**	**Final Maturity**	**Yield**	**Spread to MMD**	**Notes**
10/26/2015	$5.00	Calumet County, WI	General Obligation Promissory Notes	/AA+/	12/1/2025	2.070%	4	BQ
11/9/2015	$23.00	Waterbury, CT	General Obligation School Improvement Bonds	/AA/A+	8/1/2035	3.550%	89	Insured - BAM
11/23/2015	$17.01	Trenton, NJ	General Obligation Bonds	A3/AA/	7/15/2033	4.220%	127	Insured - BAM
Education Sector								
Sale Date	**Par ($ mil)**	**Issuer**	**Project**	**Ratings**	**Final Maturity**	**Yield**	**Spread to MMD**	**Notes**
11/2/2015	$34.00	UCF Stadium Corporation, FL	College & Univ. Improvement Revenue Bonds	/A+/AA-	3/1/2036	4.000%	110	
11/16/2015	$74.05	Troy, NY Capital Resource Corporation	Revenue Bonds (Rensselaer Polytechnic Institute Project)	A3/A-/	8/1/2035	4.030%	127	
11/23/2015	$5.63	Pennsylvania State Finance Authority	College Revenue Bonds (Community College Beaver County Project)	/AA/	12/1/2035	3.760%	93	Insured - AGM
Utilities								
Sale Date	**Par ($ mil)**	**Issuer**	**Project**	**Ratings**	**Final Maturity**	**Yield**	**Spread to MMD**	**Notes**
10/26/2015	$70.20	Silicon Valley CA Clean Water Authority	Wastewater Revenue Refunding Bonds	Aa2/AA/	8/1/2045	3.190%	24	
11/9/2015	$15.09	Dayton, OH	Water System Revenue Bonds	Aa2/AA-/	12/1/2035	4.030%	113	
11/16/2015	$37.96	Redding CA JT Powers Financing Authority	Electric System Revenue Bonds	/ /A+	6/1/2035	3.900%	84	
11/16/2015	$7.59	Western Westmoreland PA Municipal Authority	Sewer Revenue Bonds	/AA/	10/15/2040	4.000%	93	Insured - BAM

Source: Bloomberg

Healthcare Sector

Sale Date	Par ($ mil)	Issuer	Project	Ratings	Final Maturity	Yield	Spread to MMD	Notes
10/26/2015	$30.29	Washington Township Health Care District	Hospital Revenue Bonds	Baa1/ /	7/1/2029	3.900%	145	-
11/9/2015	$55.20	Kerrville Texas Health Facilities Development Corporation	Hospital Revenue Ref. Bonds (Peterson Regional Medical Center Project)	/BBB+/BBB+	8/15/2035	3.900%	95	-
11/16/2015	$39.73	California Statewide Communities Development Authority	Hospital Revenue Bonds	/BBB-/	2/1/2045	4.460%	133	

Source: Bloomberg