

Muni Fortnightly

Bottom Line:

- Treasury market yields uni-directionally bull-flattened as economic data were uninspiring and global central banks in particular the ECB, met without any sign to be in a hurry to end QE.
- Municipal yields fall alongside Treasuries; the 10yr AAA GO Ratio fell to 83.5 – the most relatively expensive level since 2010.
- Moody's did not cut Illinois to non-investment grade and bonds rallied some more.
- Moody's calls the public university sector 'mostly stable'.
- Municipal bond fund flows reversed back to net inflows.
- S&P Puerto Rico Total Return Index was +0.8% last week; -4.0% YTD.

What Happened in the Bond Markets Last Week?

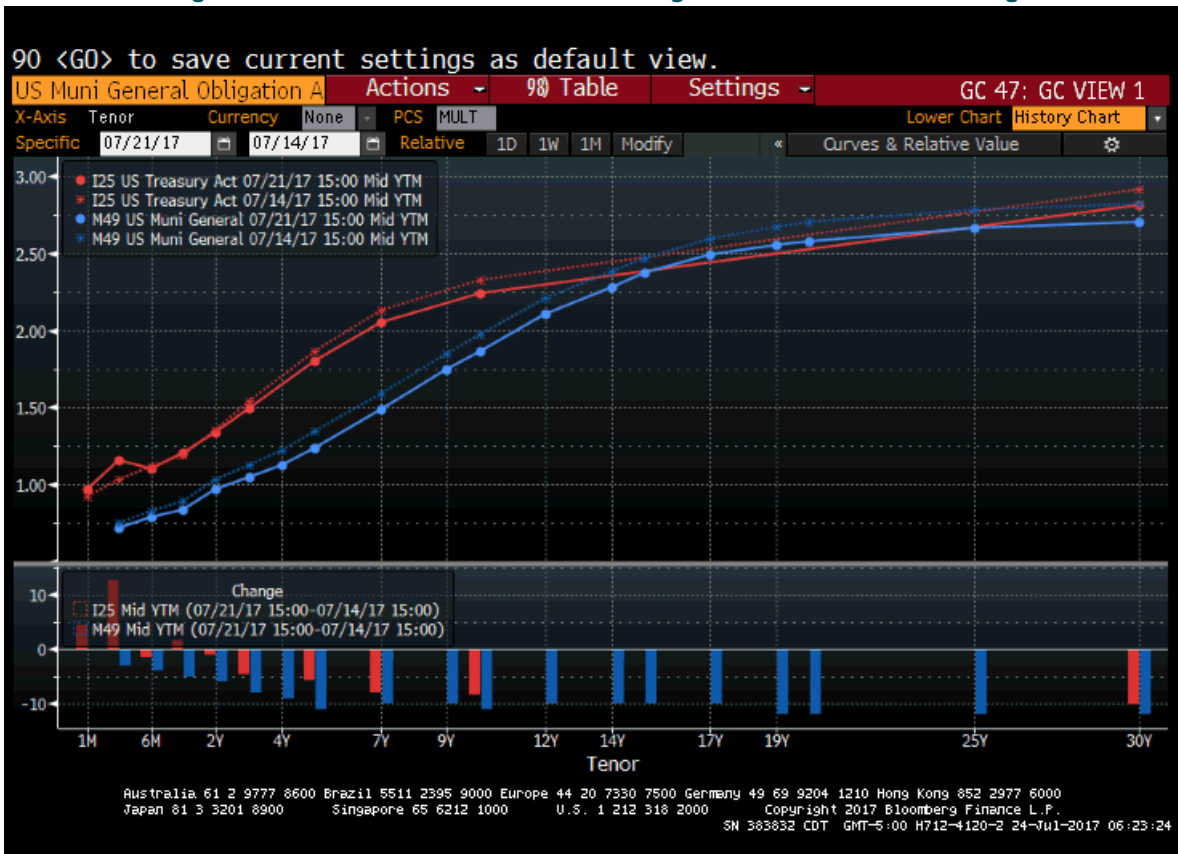
- During the past week, Treasury yields rallied strongly in bull-flattening mode. The move lower in yields was unidirectional with no days finishing with higher yields. The first look at July's manufacturing looked weak with Empire Mfg. and Philly Fed coming in weak relative to expectations. Two main central banks, Bank of Japan (BOJ) and the European central Bank (ECB) concluded meetings with no changes to current monetary policy. However, a relatively dovish ECB (with no mention of tapering QE) helped extend rallies in global yields.
- Municipal yields also fell along with Treasury yields but the move was slightly stronger. The resulting 10yr AAA GO Ratio fell to 83.5 marking munis as the most expensive relative to Treasuries since 2010. Supports from low supply and positive fund demand have boosted the dynamic.

Yields (Figure 1):

- For the week ending 7/21/17 Treasury yields traded lower; 2-year Treasury Note yields -1.2 bps to 1.34%, 5-year Notes yields were -5.8 bps to 1.80%, 10-year Notes yields were -8.5 bps to 2.24% and 30-year bonds yields were -10.3 bps to 2.81%.
- Bloomberg Municipal Index curve yields were lower; AAA-rated GO yields; 2-year bonds were -6 bps to 0.97%, 5-year bond yields were -11 bps to 1.24%, 10-year bond yields were -11 bps to 1.86% and 30-year bonds were -12 bps to 2.70%.
- The Ratio of 10-year AAA GO debt to 10-year Treasury yields remained at 83.5 from last week. The year-to-date average is 91.8 and the 12-month average is 93.4.

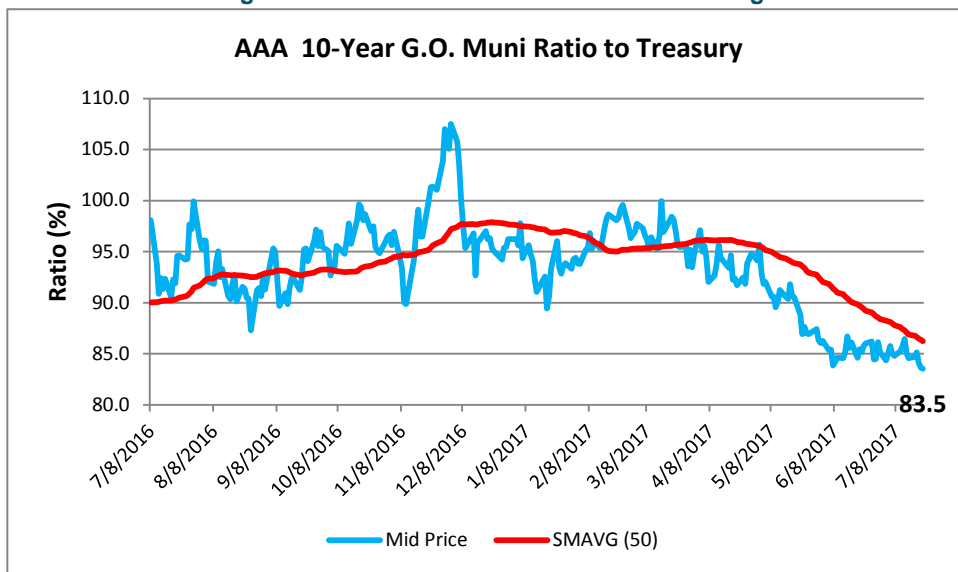
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Figure 1 - Yield Curve and Muni Curve Changes – Data Source: Bloomberg



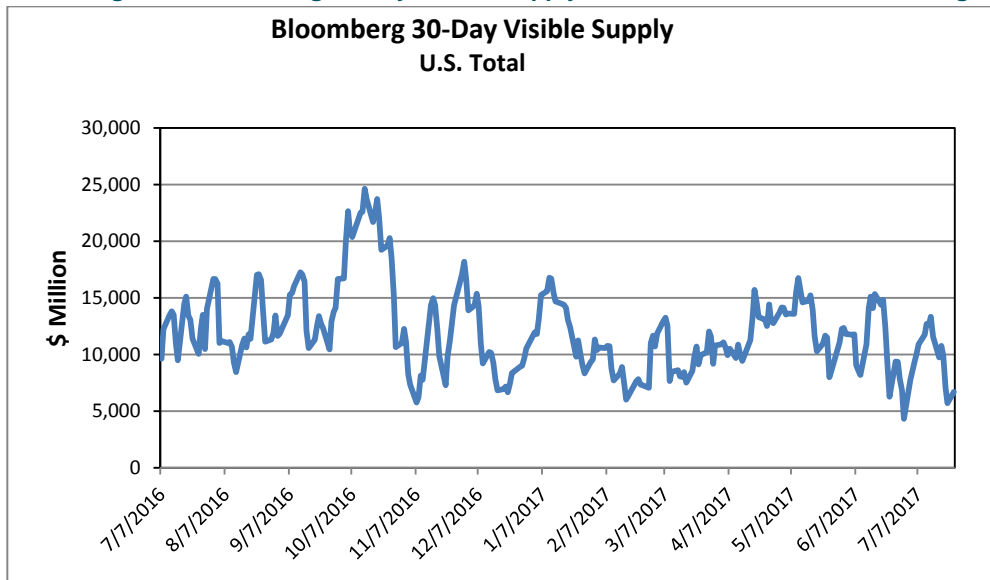
One can observe these changes by looking at how rates have changed along the curve for both the Treasury curve and for the AAA-rated G.O. Index since last week. The top panel shows four yield curves; two for the Treasury curve (in red) - one for the most current date and one from last week and two for the AAA-rated G.O. (in blue) - current and last week. The bottom panel of the graph shows changes in the rates along both curves for the week for both Treasuries and the AAA G.O. Index.

Figure 2 - Muni Ratio – Data Source: Bloomberg



Supply (Figure 3) – Bloomberg 30-Day Visible Supply currently stands at \$6.7 billion down from \$9.7 billion this time last week. The YTD average visible supply is \$11.1 billion and the 12-mo average is \$12.1 billion. *Bloomberg Brief* reports that monthly issuance has fallen to the lowest level since 2014.

Figure 3- Bloomberg 30-Day Visible Supply - 1 Year; Data Source: Bloomberg



Articles of Interest

Municipal Fund Flows: According to Lipper data municipal bond funds had \$299 million of net inflows last week after \$173 million of outflows during the previous week. The four-week average is a negative \$41 million. High-yield muni funds had net inflows.

Illinois: Moody's decided not to cut Illinois' rating to non-investment grade and affirmed its Baa3 rating after its review post-budget enactment. However, they maintained their negative outlook. S&P's rating is BBB- and Fitch's is BBB. State of Illinois bonds have rallied according to *Bloomberg Brief* e.g. 10yr spreads over top rated munis has dropped from about 360 bps to approximately 182 bps.

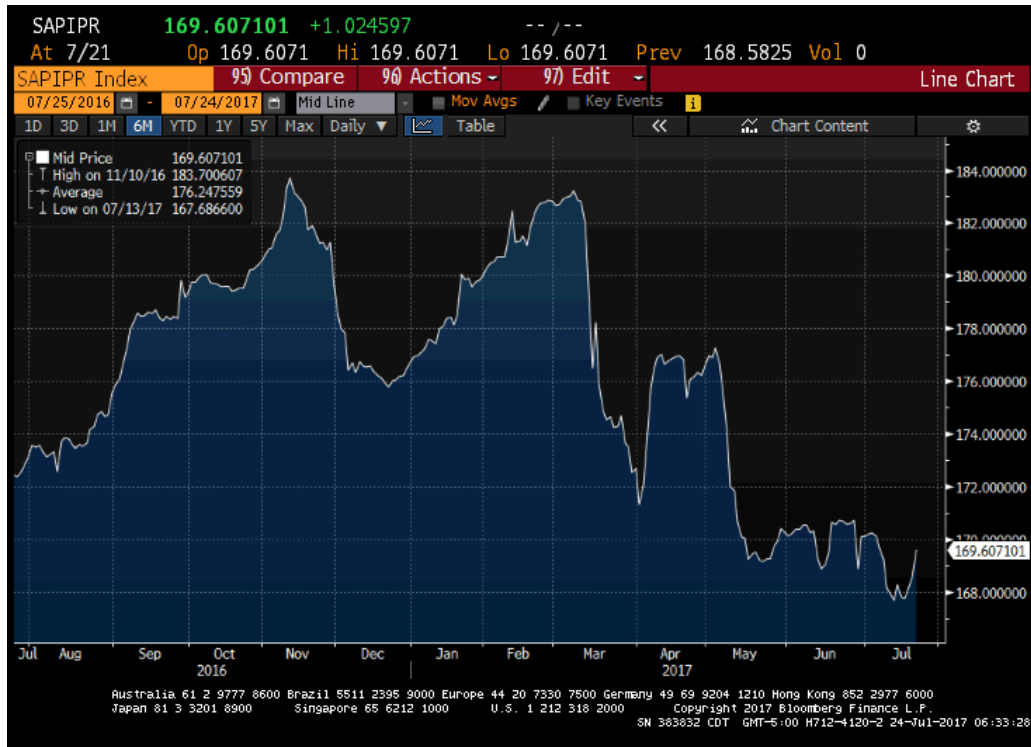
Public University Sector 'Mostly Stable' (Moody's): Moody's issued a *Sector In-Depth* report on the Higher Education sector. In the report Moody's describes a sector that is "mostly stable, but with pockets of stress." Some of the highlights of the reports include: 1) enrollment grew at 1% pace while net tuition per student grew 2.6% in 2016. 2) Cash operating margins have held relatively steady at 11-12% but they expect "moderation" given cost pressures and moderating revenue streams. 3) Liquidity remains steady. 4) Debt has risen but is manageable relative to operations; 5.3x cash flow. 5) Capital spending has been greater than depreciation but they expect it to moderate especially amongst smaller institutions. 6) Retirement liabilities are an increasing credit risk.

Alaska Cut by S&P: S&P lowered Alaska's rating for the second time in two years to AA and keeps them on negative outlook. S&P cites Alaska's draw on reserves as energy industry related revenues decline as a result of lower oil prices.

Puerto Rico:

- **The S&P Municipal Bond Puerto Rico Index** finished at 169.6 on Friday vs. 169.7 at the end of the previous week, +0.8%. Year-to-date the index is -4.0%.

S&P Municipal Bond Puerto Rico Index Level (1-year)

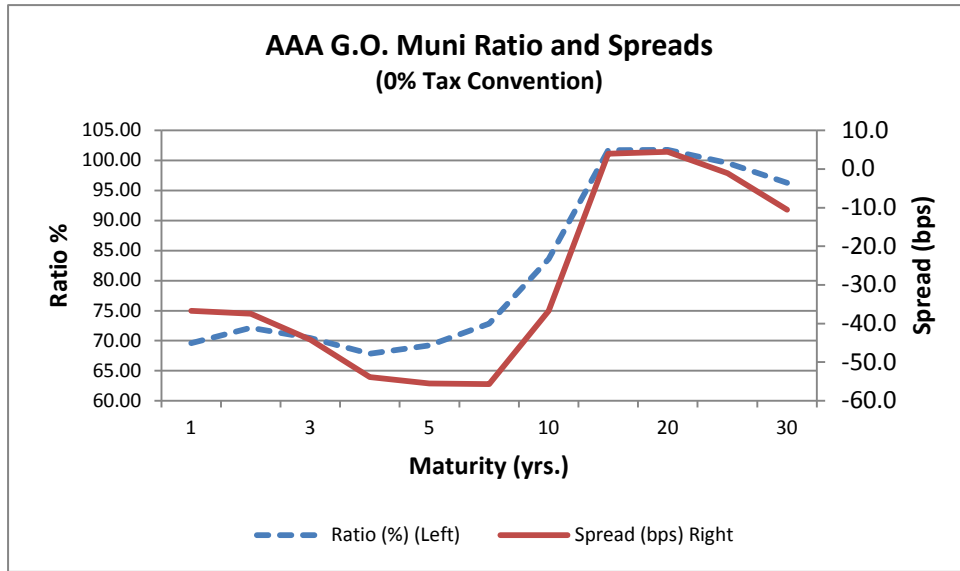


Relative Value by Maturity

Table 1 - AAA Muni Ratios and Spreads by Maturity - Data Source: Bloomberg

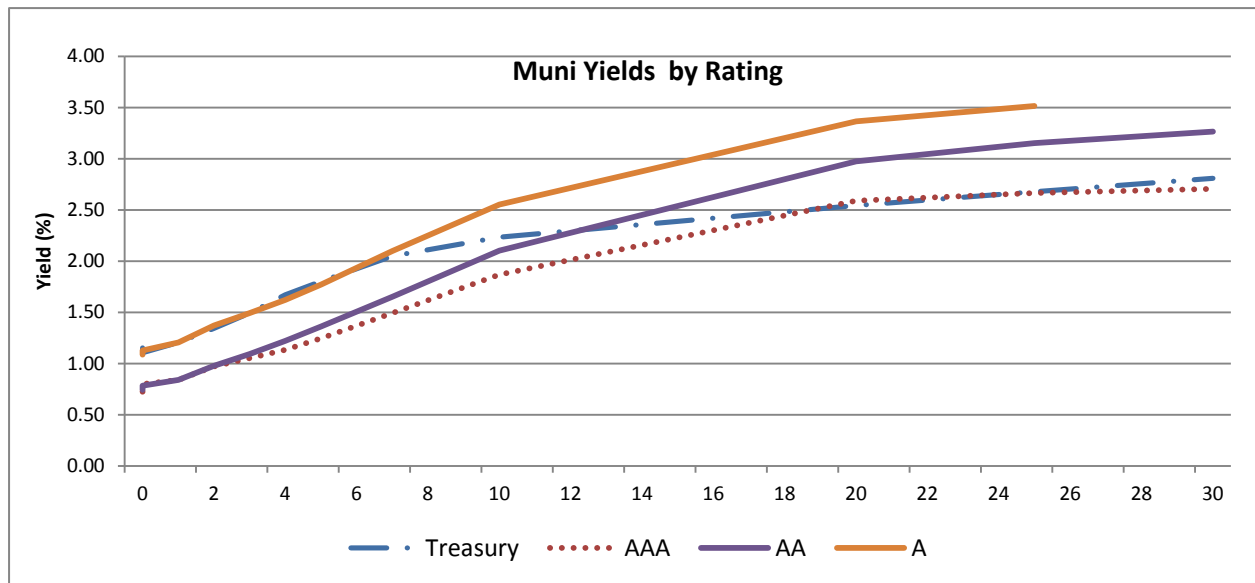
7/24/2017 Maturity (yrs.)	Yield-to-Maturity (%)		0% Tax Rate		35% Tax Equivalent	
	AAA Gen. Oblig.	Treasury	Spread (bps)	Ratio (%)	Spread (bps)	Ratio (%)
1	0.84	1.21	-36.7	69.6	8.5	107.1
2	0.97	1.34	-37.4	72.2	14.8	111.0
3	1.05	1.49	-44.2	70.5	12.5	108.4
4	1.14	1.67	-53.8	67.8	7.3	104.4
5	1.25	1.80	-55.5	69.2	11.7	106.5
7	1.49	2.05	-55.6	72.8	24.7	112.1
10	1.87	2.24	-36.7	83.6	64.0	128.6
15	2.38	2.34	4.0	101.7	131.9	156.5
20	2.59	2.55	4.5	101.8	143.9	156.6
25	2.67	2.68	-1.1	99.6	142.5	153.2
30	2.71	2.81	-10.5	96.3	135.2	148.1

Figure 4 – AAA General Obligation Ratios and Spreads – Data Source: Bloomberg



Relative Value by Rating

Figure 5 – Muni Index Yield Curve by Credit Rating – Data Source: Bloomberg



For more information please contact your Financial Advisor.

Appendix – Important Disclosures

Some of the potential risks associated with fixed income investments include call risk, reinvestment risk, default risk and inflation risk. Additionally, it is important that an investor is familiar with the inverse relationship between a bond's price and its yield. Bond prices will fall as interest rates rise and vice versa.

When considering a potential investment, investors should compare the credit qualities of available bond issues before they invest. The two most recognized rating agencies that assign credit ratings to bond issuers are Moody's Investors Service ("Moody's") and Standard & Poor's Corporation ("S&P"). Moody's lowest investment-grade rating for a bond is Baa3 and S&P's lowest investment-grade rating for a bond is BBB-. Ratings are measured on a scale that ranges from AAA or Aaa (highest) to D or C (lowest).

The Bond Buyer 20-Bond Index consists of 20 general obligation bonds that mature in 20 years. The average rating of the 20 bonds is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA. The Bond Buyer 11-Bond Index uses a select group of 11 bonds in the 20-Bond Index. The average rating of the 11 bonds is roughly equivalent to Moody's Aa1 and S&P's AA-plus. The Bond Buyer Revenue Bond Index consists of 25 various revenue bonds that mature in 30 years. The average rating is roughly equivalent to Moody's A1 and S&P's A-plus. The indexes represent theoretical yields rather than actual price or yield quotations. Municipal bond traders are asked to estimate what a current-coupon bond for each issuer in the indexes would yield if the bond was sold at par value. The indexes are simple averages of the average estimated yields of the bonds, are unmanaged and a direct investment cannot be made in them.

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