BAIRD

Private Wealth Management

Muni Fortnightly

Treasury yields falling show slowing of relation of trade. Muni yields hit record low. State of Illinois received two credit upgrades.

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Bottom Line:

- **Treasury yields fall; both inflation breakevens and real yields falling show a grinding down of the reflation trade.**
- **Moody's Municipal Default and recovery Study (1970-2021) shows the resiliency of the muni sector and favorable comparison to corporate bonds.**
- **The State of Illinois received two credit upgrades: Moody's to Baa2 and S&P to BBB**
- **Large metro property tax revenues to fall on assessment and vacancy rates.**
- **Public universities fared reasonably well through pandemic according to Moody's.**

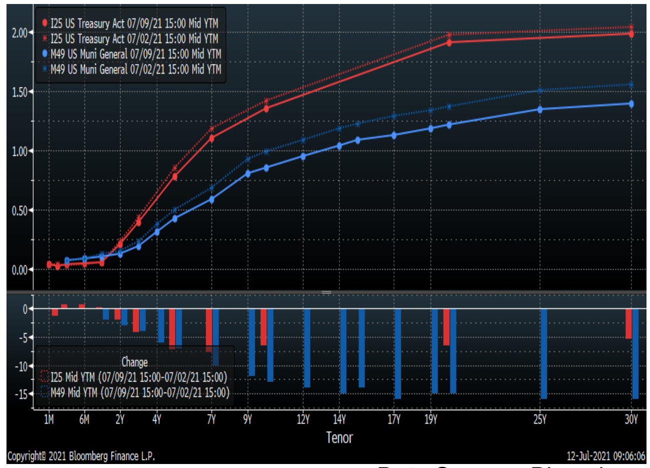
What Happened in the Bond Markets Last Week?

- Treasuries rallied yet again for another week as 10yr yields hit a seen in February. The 10yr hit 1.25% on Thursday just before seeing a slight sell-off on Friday. The componentry of the rally of recent has seen both real yields and inflation breakevens contributing but has been dominated by the fall in inflation breakevens (graph) which are off about 25 bps from their May highs. What does this say? It says, the market, at least the Treasury market says, that the reflation trade is grinding down. Whether the market came to its own conclusion (it had shown signs already) or if it is taking the hawkish Fed meeting to heart, it has had a notable impact on yields. And whether this continues, is as usual, anyone's guess. In addition to Treasuries rallying, the Muni Index hit record lows dropping 13 bps in 10yr space. This week is "inflation week" with CPI and PII being reported along with Industrial Production and Retail Sales
- Municipal bonds' yields were lower, leading Treasury yields by a noticeable margin. The 10yr AAA GO Ratio fell to 63.7.

(Since 6/30/21)	Treasuries		Munis (Bloomberg AAA GO Index)	
Tenor	**Change (bps) - MTD**	**Yield (%)**	**Change (bps) - MTD**	**Yield (%)**
3 mos.	+0.5	0.05%		
1year	-0.7	0.06%	-2	0.11%
2 year	-3.2	0.22%	-3	0.13%
5 year	-9.6	0.79%	-8	0.43%
10 year	-9.6	1.36%	-15	0.86%
30 year	-8.0	1.99%	-19	1.40%

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 - one for the most current date and one from last week and two for the AAA-rated G.O. - 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.

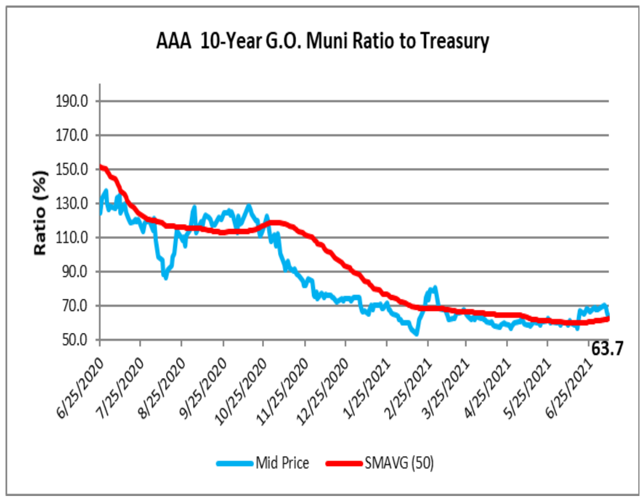
Yield Curve and Muni Curve Changes (since 6/30/21)



Data Source: Bloomberg

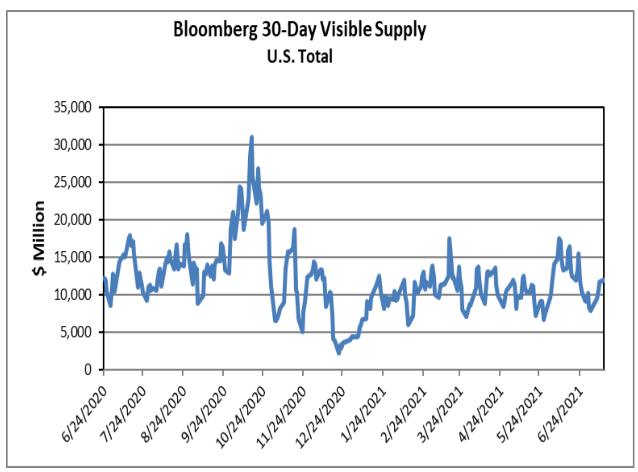
The 10yr AAA GO Ratio is 63.7.

The line graph to the right shows the ratio of 10-year AAA-rated muni yields to the 10-year Treasury yield over the last year.



Data Source: Bloomberg

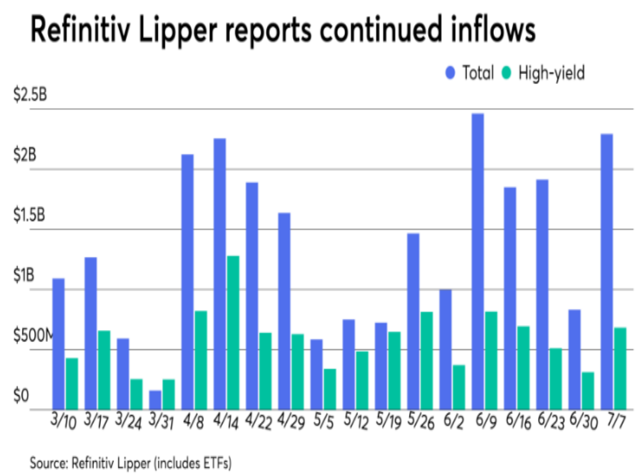
The Bloomberg 30-Day Visible Supply currently stands at $12.0 billion. The year-to-date average is 10.8 billion and the 12-mo average is $12.2 billion.



Data Source: Bloomberg

Articles of Interest

Muni Fund Flows: According to Refinitiv Lipper, muni funds had net inflows of $2.3 billion last week. Inflows have reached 18 consecutive weeks with eleven weeks greater than $1 billion. ETFs and high-yield funds had net inflows for the week.



Municipal Bond Default and Recovery Report (Moody's): Moody's issued their periodic U.S. Municipal Bond Default and Recovery report which covers 1970-2020. The highlights of the report include: 1) There were no virus-related default sin 2020 amongst Moody's-rated credits. 2) There were two Moody's-rated defaults in 2020; the Archdiocese of New Orleans (filed bankruptcy) and Virgin Islands Water and Power Authority (forced extension of a BAN maturity) – both driven by pre-pandemic factors. 3) The average 5-yr municipal bond default rate since 2011 was 0.12% compared to 0.08% for the entire period – a pick up in default rates. This compares to 5-yr global corporate bond default rate of 7.4% since 2011 (and 6.9% since 1970). 3) Muni ratings were relatively resilient to virus-related pressure as compared to corporate bond ratings.

Falling Property Tax Revenue to Hit Big Cities (Moody's): In a Local Government Sector In-Depth report, Moody's highlights how falling rents and remote work may hit large cities' property tax revenues (NYC, DC, San Francisco, Boston, Chicago). The highlights include: 1) rents will decalin and vacancy rates will increase in 2021 and into 2022. They note San Francisco as seeing the biggest hit compared to other metro areas. 2) The impact on property tax revenue varies based on property tax assessed frameworks – most exposure to NYC and DC while the others largely insulated. 3) Remote work will more greatly impact these metros given the degree of office work.

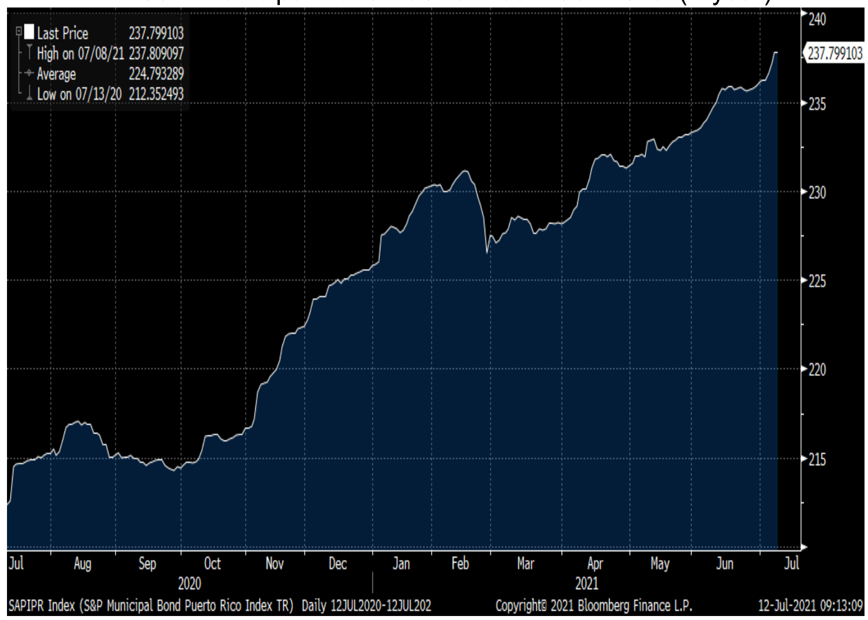
Public University Performance Steady (Moody's): Moody's issued a Higher Education Sector Profile report which includes the following highlights: 1) half of public universities reported revenues declines in fiscal 2020 while large comprehensive universities still saw revenues increase. 2) expense growth continued to exceed revenue growth for the fourth consecutive year, but operating performance remained relatively steady given federal funding assistance. 3) Net tuition revenue growth declined with 30% of public universities reporting lower tuition per student; large universities fared better. 4) Liquidity remained steady as universities moved to preserve cash and reserves. 5) median total debt levels declined, and capital investments were paused. 6) Pension liabilities added significantly to university leverage.

State of Illinois Notches Upgrades: The State of Illinois has garnered two credit rating upgrades. S&P upgraded the credit to BBB from BBB- following Moody's upgrade the previous week from Baa3 to Baa2. According to S&P, "The upgrade reflects our view of improved liquidity, demonstrated operational controls during the pandemic, and an improving economic condition, The stable outlook reflects the expected strength of the liquidity position, continued economic recovery, and regular revenue and expenditure reporting and budgetary control usage." Associated appropriation-backed bonds moved into investment-grade based on notching methodologies. The market had already factored in upgrades as spreads had sharply tightened over the past several months.

Puerto Rico

The S&P Municipal Bond Puerto Rico Index: finished at 237.8 vs. 236.3 at the beginning of July; +0.7%, +5.3% YTD.

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



Source: Bloomberg

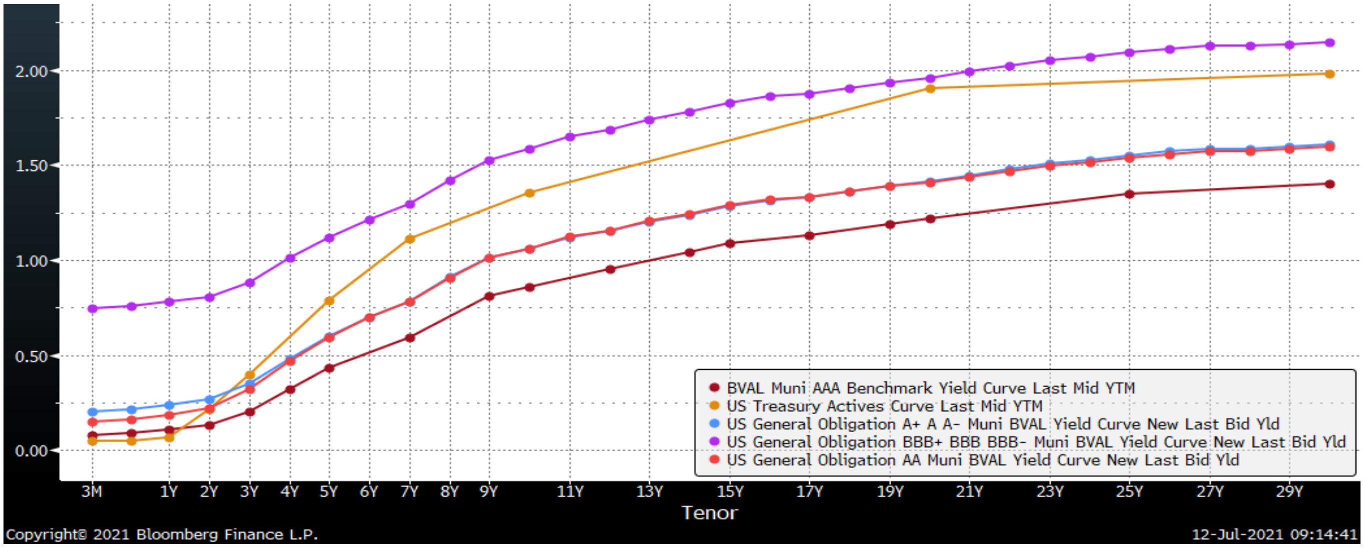
Relative Value by Maturity

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

7/12/2021	Yield-to-worst (%)		0% Tax Rate		35% Tax Equivalent	
Maturity (yrs.)	AAA Gen. Oblig.	Treasury	Spread (bps)	Ratio (%)	Spread (bps)	Ratio (%)
1	0.12	0.06	11.9	192.2	11.9	295.8
2	0.14	0.21	0.1	65.2	0.1	100.2
3	0.21	0.39	-6.8	53.6	-6.8	82.5
4	0.33	0.60	-9.1	55.1	-9.1	84.7
5	0.43	0.78	-11.1	55.7	-11.1	85.7
7	0.59	1.10	-18.6	54.0	-18.6	83.1
10	0.87	1.34	-1.0	64.5	-1.0	99.2
15	1.09	1.59	9.4	68.9	9.4	105.9
20	1.22	1.89	-1.5	64.5	-1.5	99.2
25	1.35	1.93	14.7	70.0	14.7	107.6
30	1.41	1.97	19.1	71.3	19.1	109.7

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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