Municipal Market Insight

June 2017 Portfolio Advisory Group – U.S. Fixed Income Strategies

What's inside

Click here for authors' contact information.

Summer reading: The case of the missing muni bonds

Munis continue to outperform most asset classes. Through May, only the S&P 500, emerging market debt, and high-yield corporates have posted better year-to-date numbers. Demand remains strong from individual investors who appear to agree with the growing consensus that fiscal stimulus from Washington is likely off the table until 2018. Foreign investors have also joined the party as global sovereign yields remain low and munis continue to be recognized for their high quality. The challenge, however, for investors is finding enough bonds to meet their demand since new issuance is at its lowest level since 2014. In our view, the case of the missing bonds makes it very likely this rally has room to run.

We believe it is likely the Federal Reserve will raise interest rates 25 basis points this month, but given recent soft inflation data, the timing of the third rate hike remains uncertain. The Fed will maintain its gradual path to normalizing monetary policy, but even so, continued slow growth and low inflation, in our opinion, should keep interest rates well contained near current levels.

U.S. Treasury rate forecasts (% as of May 31, 2017)

	2017				2018			
	Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
FF	1.00	1.25	1.25	1.50	1.75	2.00	2.25	2.50
2-yr	1.30	1.45	1.60	1.90	2.15	2.40	2.60	2.80
5-yr	1.90	2.10	2.25	2.50	2.65	2.90	3.05	3.20
10-yr	2.40	2.65	2.80	3.00	3.15	3.40	3.50	3.60
30-yr	3.00	3.20	3.35	3.50	3.60	3.75	3.80	3.90

Source - RBC Economics

Treasuries vs. municipals

	5-yr TSY	5-yr Muni	10-yr TSY	10-yr AAA Muni	30-yr TSY	30-yr AAA Muni
Beginning of month (5/1/17)	1.84%	1.43%	2.32%	2.18%	3.00%	3.05%
Midmonth (5/15/17)	1.86%	1.38%	2.34%	2.11%	3.01%	2.98%
End of month (5/31/17)	1.75%	1.22%	2.20%	1.90%	2.86%	2.74%

Source - Bloomberg (Treasury), Thomson Reuters TM3 (Municipals)

RBC Wealth Management

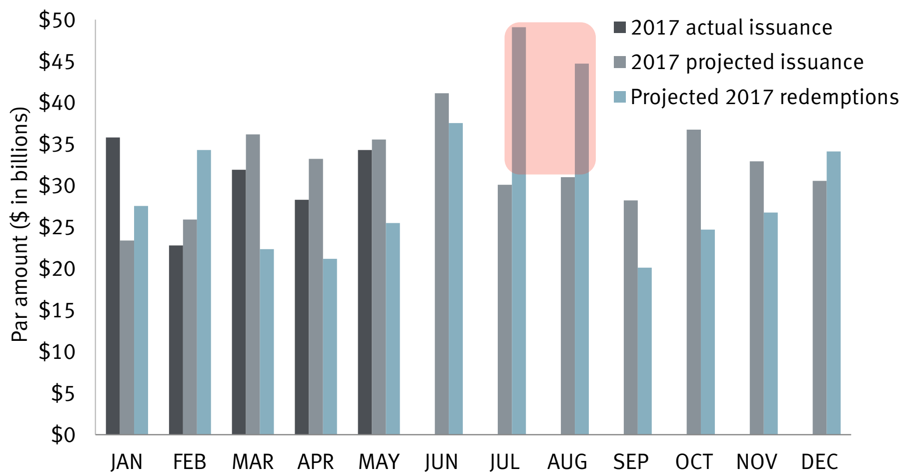
Yields fell across the curve due to strong demand from both retail and institutional investors.

Market investment strategy & market commentary

Munis performance keeps rolling along

For the fifth consecutive month municipal bond investors have benefitted from positive performance; for May, munis posted their strongest year-to-date performance returning 1.59% and outperforming both Treasuries and corporates. Yields fell across the curve due to strong demand from both retail and institutional investors. Additionally, even though new issuance topped $30B in May, the highest since January, low issuance is likely to be an ongoing story this year which, in our opinion, will give this rally some legs.

Projected 2017 municipal supply and redemptions

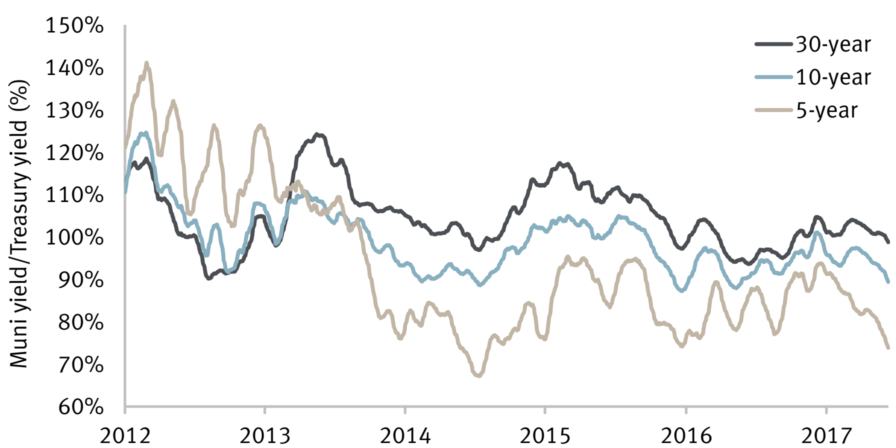


Source - RBC Capital Markets

Demand/supply imbalance could mean this rally has legs

The spring and summer months are traditionally the highest redemption months, and this year should be no exception where investors could expect to see $100B of called and maturing bonds not inclusive of coupon payments. This may leave them in a precarious position given what we see as a pattern of reduced new issuance. RBC Capital Markets projects issuance of approximately $100B over the next three months, but most importantly, the chart above highlights a potential $20B plus variance between redemptions and issuance in July and August, which means more investors for fewer newer issues!

Muni/Treasury ratios



Source - Bloomberg; data through 5/31/17

Don't get squeezed, extend maturities

During this rally, investors have shown a voracious appetite for issues maturing inside five years, which has pushed the 5-year muni/Treasury ratio to well below one-year and five-year averages. In our view, this strong demand has caused the yield curve to steepen, and the value has been squeezed out of short maturities. We think that investors are missing opportunities in longer-dated issues where despite the recent muni rally, muni/Treasury ratios in the 15- to 20- year range remain elevated at 100%. This signals longer issues are undervalued, and we recommend investors focus on extension swaps—selling short maturities and buying longer-dated issues. We prefer higher-coupon, high-quality issues that should help limit price volatility. This strategy should help investors avoid the value squeeze in short maturities.

Connecticut downgrade trifecta

Fitch, Moody's, and Standard & Poor's downgraded the state one notch to A+, A1, and A+, respectively, citing expectations of lagging future economic performance, which may exacerbate the state's financial imbalance. Connecticut's challenges are moderated by its strong governance, adequate liquidity, and its residents' high income levels.

Connecticut's economy has been slow to shake off the last economic contraction.

Economy

Connecticut's economy has been slow to shake off the last economic contraction with current employment rates hovering below the prerecession peak. Unfortunately, the state forecasts continued subpar performance with soft employment growth for the next several years. Not all is downtrodden though, the state is still the wealthiest in the U.S. as measured by per-capita personal income, albeit annual income growth has also trailed the national average.

Finances

Governor Dannel Malloy proposed exhausting the state's rainy day fund, sweeping available balances from other funds, and withholding state aid to help close this year's $450M budget gap. If realized, the state will be left with scant resources to address future downturns, including a $5B projected shortfall for the upcoming biennium. As a positive development, state employees tentatively agreed to a wage freeze and other concessions that will save the state $1.5B over the next two years.

While the governor has been hesitant to increase taxes due to the potentially adverse economic consequences, he did update the biennial budget immediately after the rating downgrades by cutting expenditures an additional $604M in fiscal 2018.

Downstreaming

In addition to spending cuts, the governor is also proposing shifting $400M of the state's contribution to the teachers' pension to local governments to address the budget gap. In response, certain local municipalities would need to increase property taxes to shoulder the additional financial burden. In Connecticut, however, property taxes are reasonable compared to those of its tristate peers.

Pensions

Connecticut's unfunded pension liability, as a percentage of the state's resources, is the second-highest among U.S. states. Encouragingly, Connecticut contributes the full amount of its annual actuarially determined contribution (ADC) pursuant to contractual requirements. Unfortunately, despite fully funding the ADC, the pension liability has grown because assumed investment returns have not been achieved.

Downgrade consequences

Connecticut joins Illinois and New Jersey as the only states not rated in at least the AA-category; however, the gap between Connecticut (rated A1/AA-) and New Jersey (A3/A-) and Illinois (Baa2/BBB) is currently a chasm, in our opinion. All three states are experiencing mounting fixed costs, among other challenges; however, Connecticut has been the most proactive in addressing its difficulties whereas Illinois has been languishing without a budget for almost two years and New Jersey has only begun to address its unfunded pension obligation through fits and starts.

Political will

The biggest hurdle to improving Connecticut's fiscal trajectory is a collective political will to take the unpopular, yet necessary, actions, including tax increases, service reductions, and pension modifications, to structurally correct the state's fiscal imbalance. We recognize these options are widely unpopular, but nonetheless must be undertaken absent a major resurgence in the state's economy and/or meaningful union concessions.

Connecticut residents are already saddled with a large tax burden, although the high per-capita income level makes the tax burden more affordable. Unfortunately, residents are likely to pay even higher taxes yet receive less service. Naturally, this juxtaposition will drive certain residents away; however, most will stay. People reside in communities for many reasons, including proximity to job, family, friends, good schools, cultural events, etc. and not simply because of the tax burden.

Parting thoughts

We believe Connecticut has the tools to correct its structural challenges.

We believe Connecticut has the tools to correct its structural challenges. However, we fully acknowledge the state's risk profile continues to incrementally increase given the magnitude of its escalating fixed costs and politicians' current timidity to holistically address its fiscal challenges.

In our opinion, the bigger risk to investors is the fringe and/or deteriorating local credits within the state since Connecticut has less flexibility to assist its local governments, but instead is pushing more financial burdens to them. The state's cupboards are not bare, so the state will still assist certain locals if it is strategically important, but its generosity is constrained.

Hartford, Connecticut

Hartford's challenges mirror many older capital cities that have a high percentage of tax-exempt government property in the tax base, coupled with high fixed costs, including employee benefits and debt obligations. However, unlike many other cities, Hartford has not experienced the same degree of urban renaissance spurred by millennials. Instead, one-third of its residents live in poverty, median family income is 52% of the national average, and unemployment is above average, all of which results in greater demands on governmental services.

Hartford Mayor Luke Bronin has proposed union cuts and concessions but is also seeking $40M in additional state aid. The mayor has stressed the state must be part of the solution; however, the state is also grappling with its own financial challenges.

Regrettably, city officials recently solicited proposals from municipal bankruptcy law firms, potentially as a bargaining tactic. In response, Hartford's city council president called the solicitation premature because the city has not exhausted every option. Several other council members have also voiced their opposition, instead advocating taxing non-profit entities, which account for 50% of the city's tax base, or consolidating services with the city's school system.

We are concerned that municipal bankruptcy is being considered so flippantly.

Because municipal bankruptcy in Connecticut requires the governor's approval, we do not think Governor Malloy will consent given the city's current financial resources. Hartford ended FY2016 with a positive 2.5% ($14.1M) unrestricted general fund balance.

Nonetheless, we are concerned that municipal bankruptcy is being considered so flippantly. Historically, bankruptcy is considered as a last resort. Unfortunately, the taboo of municipal bankruptcy seems to have vanished and, as a result, municipal bankruptcy is now one of the first options instead of the absolute last.

Admittedly, the city's options for addressing the growing fiscal imbalance are limited with property tax revenue constrained by an already high tax rate and prospects for additional state aid stymied by the state's own fiscal challenges. But there are other unexplored avenues including payment-in-lieu-of-taxes (PILOTS) from non-profits, and consolidation and/or regionalization of services.

Given Hartford officials' trivializing nature of municipal bankruptcy, we must assume if the city's fiscal situation continues to deteriorate, ultimately, the city could use bankruptcy as its solution instead of seeking a more difficult but holistic answer. However, at this point we believe Hartford officials are using the bankruptcy solicitation to elicit greater financial assistance from state officials.

Commonwealth of Puerto Rico Update

Puerto Rico – United States District Court Judge Laura Taylor Swain appointed

On May 8, Supreme Court Chief Justice John Roberts selected Laura Taylor Swain to oversee Puerto Rico's Title III federal bankruptcy proceedings, to be held in San Juan, Puerto Rico.

To date, the commonwealth has placed the following island issuers in Title III proceedings:

- Commonwealth of Puerto Rico General Obligation (GO) Bonds;
- Puerto Rico Highway and Transportation Authority;
- Puerto Rico Sales Tax Finance Corp.; and
- Puerto Rico Employee Retirement System.

The inclusion of the four issuers listed above into Title III shifts $38.5B of the government's total $51.9B of outstanding debt it currently owes to restructuring.

In addition to Title III, two public corporations are seeking the PROMESA board's approval of restructuring agreements reached with creditors under Title VI of PROMESA:

- Puerto Rico Electric Power Authority and
- Government Development Bank

If the board approves the restructuring plan, which includes $9B of PREPA debt and $3.2B of GDB debt, the plan would then need bankruptcy court approval.

Judge Swain takes action, halting COFINA payment

On May 30, Judge Swain halted a $16M monthly interest payment to COFINA holders due June 1. While a majority of COFINA debt pays semi-annually (February and August), a small portion pays monthly. The COFINA money, which had been set aside, will be placed in an escrow account until the Judge weighs through the various creditor arguments regarding the COFINA funds.

Since 2016, the commonwealth has clawed back $113M of rum tax revenue for the purpose of paying general obligation debt.

Insurance Commentary

Ambac Assurance Corp. – Seeks court order

In early May, Ambac filed a complaint in U.S. Court in Washington seeking to block the U.S. Treasury Department from remitting future Puerto Rico sales tax money back to the commonwealth arguing the island is misusing the funds. Since 2016, the commonwealth has clawed back $113M of rum tax revenue for the purpose of paying general obligation debt. The money was neither used for GO payments nor to cover Puerto Rico Infrastructure Financing Corp. debt which is secured by rum tax payments remitted back to the commonwealth.

Bond insurers – Join forces

Assured Guaranty, Assured Guaranty Municipal, and National Public Finance Guarantee, all with exposure to approximately $9B of outstanding Puerto Rico obligations filed a complaint in Federal Court challenging the PROMESA board's approval of the Commonwealth's fiscal reform plan. The bond insurers quoted PROMESA legislation stating the fiscal plan must "respect the relative lawful priorities or lawful liens, as may be applicable, in the constitution, other laws, or agreements of the commonwealth in effect prior to the enactment of this act."

Municipal bond insurers

Insurer	Moody's	Standard & Poor's	Kroll Ratings
ACA	Not Rated	Not Rated	Not Rated
AMBAC	Not Rated	**R	Not Rated
Assured Guaranty (AGC)	A3 (negative outlook)	AA (stable outlook)	AA (stable outlook)
Assured Guaranty Municipal Corp. (AGM)	A2 (stable outlook)	AA (stable outlook)	AA+ (stable outlook)
Berkshire Hathaway (BHAC)	Aa1 (stable outlook)	AA+ (negative outlook)	Not Rated
Build America Mutual (BAM)	Not Rated	AA (stable outlook)	Not Rated
CIFG	Not Rated	Not Rated	Not Rated
FGIC	Not Rated	Not Rated	Not Rated
Municipal Assurance Corporation	Not Rated	AA (stable outlook)	AA+ (stable outlook)
National Public Finance (MBIA)	A3 (negative outlook)	AA- (stable outlook)	AA+ (stable outlook)
Syncora	Not Rated	*R	Not Rated

*R-Regulatory Supervision (NYS Insurance Department), **R-Regulatory Supervision (Wisconsin Insurance Department)
Source - RBC Wealth Management, data through 4/28/17

Municipal Market Headline Events

Alaska – Following in Illinois' footsteps?

The state's ongoing budget woes caused Governor Bill Walker to call the state legislature into special session. The heavily oil industry-dependent state, once rated AAA, has experienced significant deterioration in its finances forcing the state to draw upon its constitutional reserves to fund state operations. Alaska is running a $3B annual budget deficit and has approximately $5B remaining in its reserve fund. Absent a solution, the state's reserve fund is projected to become depleted in two years. Democrats who control the House floated the idea of implementing a state income tax (Alaska currently does not have that tax) which could have generated approximately $700M. The Republican-led Senate shot down the income tax idea forcing the governor to call the special session.

Atlantic City, New Jersey – Taps capital markets with state assistance

The Jersey Shore gaming community operating under a state takeover since late 2016 was able to tap the capital markets with the assistance of the state's New Jersey Municipal Qualified Bond Act offering $72M tax appeal refunding bonds. The financially distressed city was able to finally reach a deal with the Borgata Casino over tax appeals from 2009 to 2015 in which the city claimed it was owed $165M with the final agreement calling for the city to receive $72M.

Chicago Public Schools System (CPS) – More borrowing

CPS, short of funds to complete the academic school year, announced it will attempt to access the capital markets offering $389M of grant anticipation notes (GANs) to provide the necessary cash flow to keep CPS schools open through the end of the school year. The school district is owed $467M by the state in the form of block grants due for fiscal 2017, which ends June 30. In addition to the GANs borrowing, the board of education authorized an additional $215M of refunding bonds. The refunding bonds will take out prior issued bonds and repay the board for prior obligations.

Colorado – Highway funding in limbo

For the second consecutive year, the state's General Assembly failed to push a $3.5B bonding measure through committee, leaving the state in a position to come up with patchwork funding for highway repairs and construction in the upcoming fiscal year. Governor John Hickenlooper decided against calling a special session to bring lawmakers back to resolve the highway funding issue. Lawmakers approved $1.8B for transportation, which the governor said was insufficient to meet the state's $9B backlog of highway projects.

Dallas – Statehouse and governor deliver

Texas Governor Greg Abbott signed legislation aimed at rescuing Dallas' financially strapped police and fire pension systems.

Texas Governor Greg Abbott signed legislation aimed at rescuing Dallas' financially strapped police and fire pension systems. The legislation came after Dallas reached an agreement with both police and firefighters in which both union members and the city agreed to increase their contributions to the system. The pension system, through a series of investments that did not pay their expected returns, caused the pension fund lose 12.6% in 2015. The city's pension woes led Moody's and Standard & Poor's to lower the city's GO rating one notch to "A1" and "AA-."

Illinois – Democrats pass spending plan without Republican support

After failing to meet a May 31 budget deadline, the state's budget process became more difficult. The failure of the Illinois House to pass a budget places added pressure on lawmakers when they return to session. Passage of a fiscal 2018 budget will require a three-fifths majority vote, reducing the likelihood of a solution to the state's third year of political gridlock. As a result of the legislature's ineffectiveness, S&P lowered the state's GO rating one notch to "BBB-" from "BBB" leaving the state on the precipice of a below investment-grade rating. At the same time, S&P lowered the state's appropriation-backed debt, including MetPier's to "BB+." Furthermore, S&P maintained a "Negative" outlook on the state's rating, signaling the possibility of another downgrade.

New Jersey – Action needed

Rapidly growing underfunded employee pension costs combined with slower paced tax collections is posing a significant risk to the state. Moody's reported that if the

President Trump's recently released spending plan could have some positive impact for the municipal market.

state's tax collections maintain their average 2.8% pace, pension returns do not meet projections, and there is no state intervention, the state's deficit is projected to balloon to $3.6B, or 9% or revenue by FY2023 up from 4% in FY2018. New Jersey currently has the least-funded pension system among all states, and rising pension costs could further jeopardize the state's rating.

President Trump – Releases his budget

While only a "spending blueprint," President Trump's recently released spending plan could have some positive impact for the municipal market. The plan proposes lifting the $15B volume cap on private-activity bonds (PABs) as well as expanding the Transportation Infrastructure Finance and Innovation Act (TIFIA). If the TIFIA subsidy is increased to the proposed $1B annually for 10 years, it could garner almost $424B in total infrastructure investment. The budget also proposes funding the Water Infrastructure Finance and Innovation Act program designed to leverage private investment in large drinking water and wastewater infrastructure projects.

Minneapolis-St. Paul, Minnesota – Hospital merger

Fairview Health Services (FHS) and HealthEast, two of the Twin Cities' not-for-profit hospital systems finalized their agreement to merge following approval by each systems' respective board. FHS is considered the stronger of the two systems and is expected to help improve the operations of HealthEast, which has been struggling to improve profitability. The merger will combine FHS' Minnesota Medical Center and six community hospitals with HealthEast's three acute care facilities allowing the system to capture 28% of the market share in its 12-county region.

State/territory credit ratings

Moody's, Fitch, and S&P downgraded Connecticut citing expectations of lagging future economic performance, which may exacerbate the state's financial imbalance.
Illinois was downgraded by Moody's and S&P on May 31. S&P's move was based on Illinois' legislature missing a May 31, 2017, budget deadline and continued weakened finanical conditions while Moody's cited fruitless negotiations and partisan wrangling, and fundamental credit challenges which warranted the downgrade.

State/Territory	Fitch	Moody's	Standard & Poor's
Alabama	AA+	Aa1	AA
Alaska	AA+	Aa2	AA+
Arizona	-----	Aa2	AA
Arkansas	-----	Aa1	AA
California	AA-	Aa3	AA-
Colorado	-----	Aa1	AA
Connecticut	A+	A1	A+
Delaware	AAA	Aaa	AAA
Florida	AAA	Aa1	AAA
Georgia	AAA	Aaa	AAA
Hawaii	AA	Aa1	AA+
Idaho	AA+*	Aa1	AA+
Illinois	BBB	Baa3	BBB-
Indiana	AAA*	Aaa	AAA
Iowa	AAA*	Aaa	AAA
Kansas	-----	Aa2	AA-
Kentucky	AA-*	Aa2	A+
Louisiana	AA-	Aa3	AA-
Maine	AA	Aa2	AA
Maryland	AAA	Aaa	AAA
Massachusetts	AA+	Aa1	AA+
Michigan	AA	Aa1	AA-
Minnesota	AAA	Aa1	AA+
Mississippi	AAA	Aa2	AA
Missouri	AAA	Aaa	AAA
Montana	AA+	Aa1	AA
Nebraska	-----	-----	AAA

State/Territory	Fitch	Moody's	Standard & Poor's
Nevada	AA+	Aa2	AA
New Hampshire	AA+	Aa1	AA
New Jersey	A	A3	A-
New Mexico	-----	Aa1	AA
New York	AA+	Aa1	AA+
North Carolina	AAA	Aaa	AAA
North Dakota	-----	Aa1	AA+
Ohio	AA+	Aa1	AA+
Oklahoma	AA+	Aa2	AA
Oregon	AA+	Aa1	AA+
Pennsylvania	AA-	Aa3	AA-
Rhode Island	AA	Aa2	AA
South Carolina	AAA	Aaa	AA+
South Dakota	AAA	Aaa	AAA
Tennessee	AAA	Aaa	AAA
Texas	AAA	Aaa	AAA
Utah	AAA	Aaa	AAA
Vermont	AAA	Aaa	AA+
Virginia	AAA	Aaa	AAA
Washington	AA+	Aa1	AA+
West Virginia	AA	Aa2	AA-
Wisconsin	AA	Aa2	AA
Wyoming	-----	-----	AAA
District of Columbia	AA	Aa1	AA
Guam	-----	-----	BB-
Puerto Rico	CC	Caa3	CC
Virgin Islands	BB-	-----	-----

Blue text indicates ICR (Issuer Credit Rating); all other ratings are GO; red text represents recent change
Source - Fitch Ratings, Moody's Investors Service, and Standard & Poor's

RBC Wealth Management retail trading (4/29/17 – 5/31/17)

Top 10 CUSIPs selling volume to retail customers

CUSIP	Description	Maturity	Coupon	Volume
90171TDB3	TWIN RIVERS USD-CABS	08/01/2037	0.00	3,835
643154DF1	NEW CANEY ISD-BLDG	02/15/2047	5.00	3,220
73358WH31	PORT AUTH NY & NJ-200	10/15/2057	5.25	3,125
59261AMD6	MET TRANSPRTN AUTH NY	11/15/2048	4.00	3,110
56516TBU8	MAPLE GROVE HLTH-REF	05/01/2037	4.00	2,840
721901KG0	PIMA CO DEV-A-REF	12/15/2047	4.25	2,545
64972GDE1	NYC MUNI WTR FIN-BB	06/15/2046	5.00	2,385
810164BT9	SCOTTS BLUFF SD#16	12/01/2046	5.00	2,170
64972GCE2	NYC MUNI WTR FIN-EE	06/15/2047	5.00	2,150
592250BF0	MET PIER-B-BAM-TCRS	06/15/2042	4.25	2,115

Top 10 CUSIPs buying volume from retail customers

CUSIP	Description	Maturity	Coupon	Volume
74514LD20	PR-RF-A	07/01/2035	5.00	10,985
6499025Z2	NY DORM AUTH-C	03/15/2041	5.00	3,515
745160QC8	PR AQUEDUCT SR LIEN-A	07/01/2047	5.13	3,380
745190ZR2	PR HWY/TRN-N-REF	07/01/2034	5.25	2,430
490229AR2	KENT CO REV	10/01/2046	5.13	2,110
745235C41	PR BLDGS PREREF-CAB-D	07/01/2030	5.45	2,000
4442PQC8	HUDSON YARDS	02/15/2047	5.00	1,960
74529JKL8	PR SALES-1ST SUB-A	08/01/2040	5.00	1,900
745190DH8	PR HWY/TRN-A-NATL	07/01/2038	4.75	1,770
745160RC7	PR AQUEDUCT SR LIEN-A	07/01/2042	5.25	1,680

Source - RBC Wealth Management

RBC Capital Markets institutional trading (4/29/17 – 5/31/17)

Top 10 CUSIPs selling volume to institutional customers

CUSIP	Description	Maturity	Coupon	Volume
13063CBQ6	CALIFORNIA ST-REF	08/01/2027	3.50	35,345
235036XY1	DALLAS-FT WORTH ARPT	11/01/2035	5.00	16,155
44244CGH4	HOUSTON-UTIL SYS-B-REF	11/15/2025	5.00	15,625
592248BE7	MET PIER	06/15/2047	0.00	15,000
720390ZQ9	PUYALLUP SD #3	12/01/2034	5.00	14,880
189342UR7	CLOVIS USD CAB-SERA	08/01/2028	0.00	13,715
455059AG0	INDIANA ST FIN AUTH-A	12/01/2024	3.13	12,000
982354EU2	WRIGHT UNIV-A-BAM	05/01/2031	5.00	11,830
803321NU8	SARASOTA CO UTL SYS-A	10/01/2043	4.00	10,000
576051SF4	MA WTR RES AUTH-C-REF	01/01/2031	5.00	10,000

Top 10 CUSIPs buying volume from institutional customers

CUSIP	Description	Maturity	Coupon	Volume
13063C8Q6	CALIFORNIA ST-REF	08/01/2027	3.50	41,090
74529JHN8	PR S/TAX-1ST SUB-B	08/01/2042	6.00	24,536
09182NAJ9	BLACK BELT GAS DT-A	07/01/2046	4.00	21,326
455059AG0	INDIANA ST FIN AUTH-A	12/01/2024	3.13	16,058
167593KX9	CHICAGO O'HARE-B-REF	01/01/2029	4.00	14,508
44244CGH4	HOUSTON-UTIL SYS-B-REF	11/15/2025	5.00	14,296
720390ZQ9	PUYALLUP SD #3	12/01/2034	5.00	13,013
592248BE7	MET PIER	06/15/2047	0.00	11,700
982354DD1	WRIGHT UNIV-A	05/01/2031	5.00	11,657
13063A5G5	CA TXB-VAR-PURP	04/01/2039	7.55	11,418

Source - RBC Capital Markets

Bond Buyer indexes

Weekly	Current 5/25/17	Previous 5/18/17	2017 high	Date	2017 low	Date
Bond Buyer Revenue Bond Index	3.87%	3.92%	4.17%	(3/9)	3.83%	(1/12)
Bond Buyer 20-Bond Index	3.69%	3.73%	4.02%	(3/9)	3.69%	(5/25)
Bond Buyer 11-Bond Index	3.20%	3.24%	3.53%	(3/9)	3.20%	(5/25)

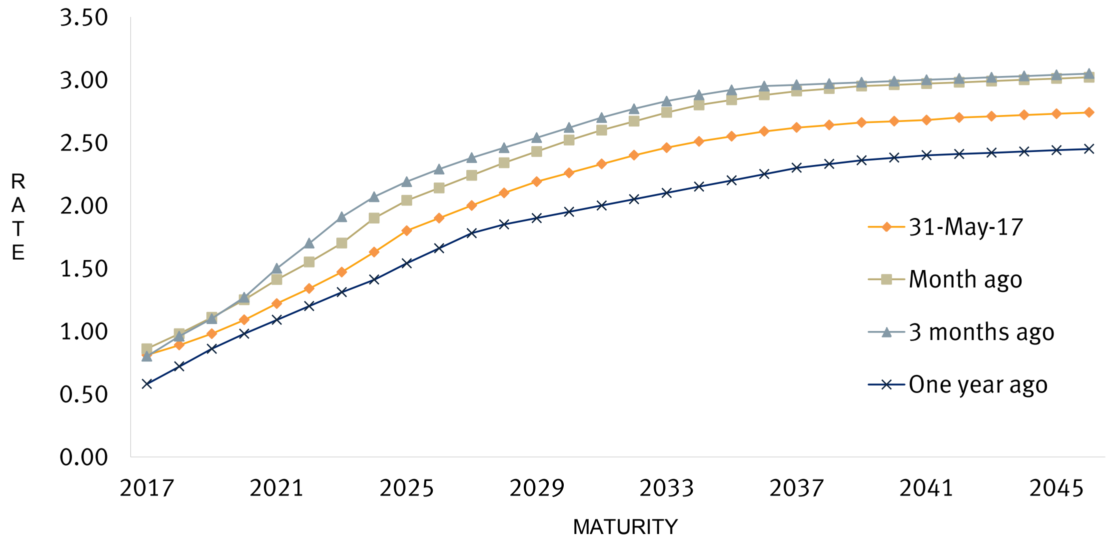
Source - *The Bond Buyer*

Barclays Municipal Index returns

	INDEX								
	1 Year	5 Year (4-6)	10 Year (8-12)	15 Year (12-17)	Long Bond (22+)	AAA	AA	A	BAA
Month-to-Date Total Return	1.59%	0.99%	1.79%	2.00%	2.25%	1.49%	1.53%	1.70%	1.83%
Year-to-Date Total Return	3.94%	3.62%	4.59%	4.52%	4.80%	3.66%	3.78%	4.25%	4.71%

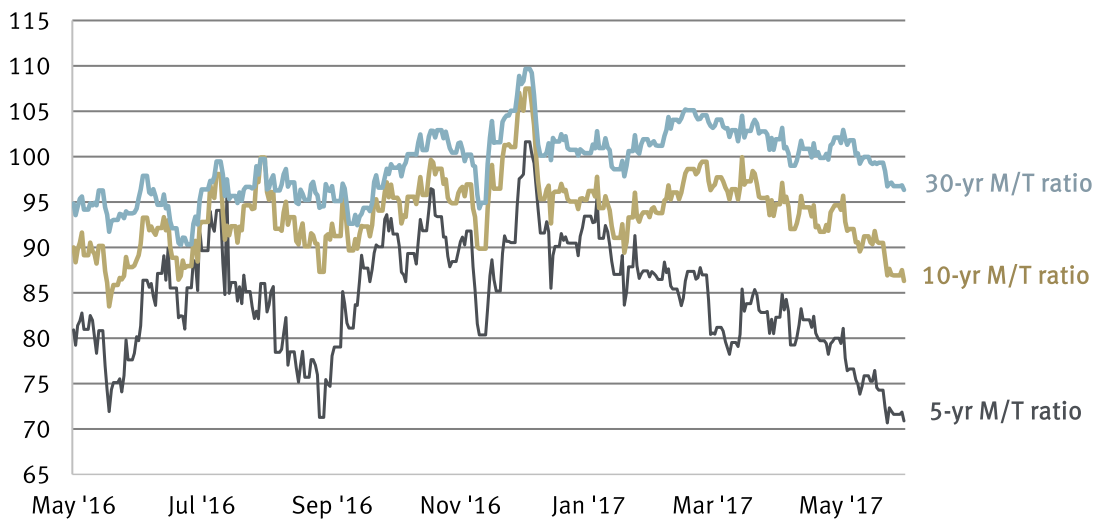
Source - Barclays, data as of 5/31/17

Muni market data AAA yield curve



Source - RBC Wealth Management, Thomson Reuters TM3

Muni/Treasury ratio comparison



Source - RBC Wealth Management, Bloomberg

Authors

Craig Bishop, Lead Strategist
craig.bishop@rbc.com; RBC Capital Markets, LLC

Remo Di Re, Senior Municipal Credit Strategist
remo.dire@rbc.com; RBC Capital Markets, LLC

James Mann, Head, U.S. Fixed Income Strategies Group
james.mann@rbc.com; RBC Capital Markets, LLC

Disclaimer