Municipal Market Insight

October 2017

Portfolio Advisory Group – U.S. Fixed Income Strategies

What's inside

A glimmer of possibilities this fall?

Following this summer's defeat of another attempt to repeal "Obamacare," Congress now faces the daunting task of reforming the tax code. The failure to repeal "Obamacare" has placed significant pressure on both Congress and the Administration to put a win on the board during the President's first year in office. Despite inaction in Washington, it appears the markets are operating with tail winds squarely against their backs heading into yearend.

Comments from Fed officials have removed any ambiguity surrounding the Fed's plan to hike rates in December; investors should expect another rate hike. The Fed's rate forecasts show three hikes in 2018, which to us indicates they will maintain a slow and gradual path to normalize monetary policy.

Looking ahead, we believe a demand/supply imbalance will continue to dictate the direction of the muni market. We expect average to lower issuance on a year-over-year basis through the end of the year, limiting investment opportunities. Investors should continue reviewing their portfolios, seeking out potential tax loss swap opportunities as yearend rapidly approaches, while also continuing to focus on curve repositioning.

U.S. Treasury rate forecasts (% as of September 30, 2017)

	2017				2018			
	Q1	Q2	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	1.38	1.60	1.85	2.05	2.35	2.55	2.70
5-yr	1.90	1.89	2.05	2.25	2.45	2.65	2.85	3.00
10-yr	2.40	2.31	2.45	2.65	2.85	3.00	3.20	3.40
30-yr	3.00	2.84	2.95	3.15	3.30	3.45	3.60	3.75

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 (9/1/17)	1.74%	1.13%	2.17%	1.88%	2.78%	2.71%
Midmonth (9/15/17)	1.81%	1.21%	2.20%	1.89%	2.77%	2.76%
End of month (9/30/17)	1.94%	1.35%	2.33%	2.00%	2.86%	2.84%

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

Click here for authors' contact information.

Wealth Management

Strong mutual fund demand and a 33.9% drop in issuance was not enough to offset a muni sell-off heavily geared toward the short-end of the curve.

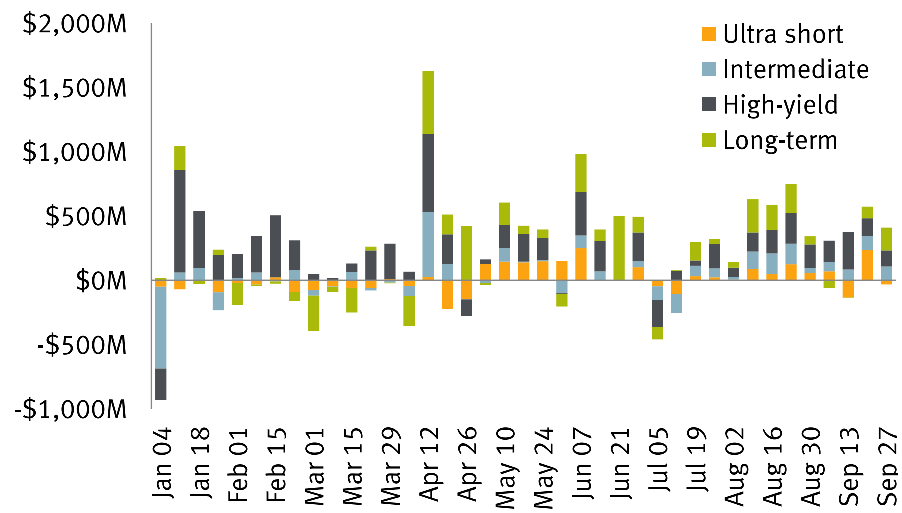
Market investment strategy & market commentary

Market performance: September sell-off sinks munis

Strong mutual fund demand and a 33.9% drop in issuance was not enough to offset a muni sell-off heavily geared toward the short-end of the curve. As a result, muni dealers were forced to offer concessions on new deals to avoid a potential inventory glut that could constrain future capital needs. The ensuing sell-off pushed muni/Treasury ratios higher across the curve, presenting attractive entry points for investors. Fed comments reinforcing the likelihood of a December rate hike have compelled investors to make curve repositioning a priority in September.

Munis maturing in 5 years were off 20 basis points (bps) by month end while 10-year and 30-year maturities held firmer losing 12bps and 13 bps, respectively. We maintain our bias toward munis maturing 15 years and out where muni/Treasury ratios present the greatest value. We believe there is a low probability of a bear market absent significant rate deterioration in the 30-year space. Mutual funds, which have experienced 11 straight weeks of inflows totaling $4.5B have seen balanced inflows across all subsectors with the exception of the short-end in light of recent Fed announcements. Year to date, investors have shifted approximately $11B into mutual funds with a heavy focus on high-yield bond funds ($6.8B).

2017 Muni fund flow



Source - Lipper, RBC Wealth Management

Munis returned -0.51% in September, outperforming the -0.86% that Treasuries returned, and lagging the lower -0.17% loss posted by corporates. Year to date, munis have returned 4.66%, nearly double Treasury returns. Looking ahead, municipalities have about $9.71B in the pipeline over the next thirty days, while redemptions and announced calls are expected to top $18B reinforcing our demand/supply imbalance bias which could pressure yields lower as demand ramps up. Investors should prioritize their focus on selectivity and curve positioning, taking advantage of extension swaps to increase call protection. Despite increasing odds of a December rate hike, we maintain our lower-for-longer outlook on overall rates.

Texas municipal utility districts (MUDS)

The Bond Buyer published an article last month with the optimistic title “Texas MUDS have money to withstand Harvey,” which provided a much needed boost given the events of the past month.

The Bond Buyer article draws upon recent Standard & Poor's commentary which emphasized Texas MUDS' limited overhead and dearth of day-to-day responsibilities, coupled with generally high debt service balances, as the reasons for their near-term optimism.

The article's primary positivity draws upon comments made by Ronald Welch, an economist, who highlights that the 669 districts he covers have an aggregate debt-to-value ratio of 4.5% and says "these MUDS are so flush with cash they have enough money to pay their debt service for 2018 before they even set their tax rate."

The article also draws upon recent Standard & Poor's (S&P) commentary that is more subdued. The rating agency emphasized Texas MUDS' limited overhead and dearth of day-to-day responsibilities, coupled with generally high debt service balances, as the reasons for their near-term optimism. However, S&P highlights that since MUDS are reliant upon property taxes to pay debt service, a severe reduction in assessed valuation, especially for smaller districts, may limit a particular district's practical ability to sufficiently increase tax rates to generate adequate debt service coverage.

S&P goes on to underscore that since there is a higher probability assessed valuations will fall due to storm damage, and property tax collections may be affected in the current year if the district receives a reappraisal. Property taxes for fiscal 2018 are based on the January 1, 2017, appraisal; however, given the storm event, a MUD may request a reappraisal. If this request is authorized and the tax base declines, the district must prorate the tax bills from the date of the disaster, which would impact fiscal 2018 property tax collections. Furthermore, a district, while legally able to do so, may have difficulty practically increasing its tax rate especially if the overall tax burden is already high and other overlapping municipal entities also need to increase their tax rates.

Thankfully, many MUDs have principal and interest payments due on September 1, thus sufficient revenues were already on hand to make payment. On balance, MUDS maintain very strong debt service fund balances, with median balances exceeding 90% of maximum annual debt service (MADS), which provides a meaningful buffer against any near-term revenue turbulence.

The article is welcome news for Houston-area MUD bondholders, but we believe the truth lies somewhere between Welsh's euphoria and S&P's subdued view.

There are hundreds of Houston-area MUDS and every situation is unique. Some districts are more built out, some have greater taxpayer concentration, some have higher tax rates, and some have more robust finances. These unique circumstances will influence the individual district's ability to weather potential assessed valuation declines.

That said, we have no reason to believe any one district of the several hundred will fail, especially given the generally robust debt service reserves and legal obligation to increase tax rates sufficiently to pay a debt obligation.

We also believe the likelihood of someone rebuilding significantly increases if there is a reasonable probability of future prosperity. From our perspective, the Houston-area economy was flourishing prior to Harvey, and notwithstanding the temporary inundation, the economy should continue to prosper in its aftermath. In the interim, rebuilding stimulus and federal funding should boost the suppressed local economy until the region regains its footing. That said, we recognize the severe shortage of building materials and labor might sap residents' initial enthusiasm to rebuild.

Hurricane Harvey may ultimately be one for the record books, but its full effects will not be known for several months. Therefore, we believe it would be premature to speculate if this storm is any different than past catastrophic hurricanes. Assuming Harvey is not an outlier, history has proven that the storm's devastation should not translate into any municipal bond losses.

Puerto Rico officials believe its power stations were not badly damaged, but the distribution system is ruined.

Positively, President Trump stated that FEMA will pay 100%, instead of the usual 75%, of the initial debris removal and emergency protective measures.

The municipal market has experienced several catastrophic hurricanes including Hurricane Andrew, Katrina, and Sandy in recent decades, yet there has never been a municipal bond default as a result.

Territorial Update

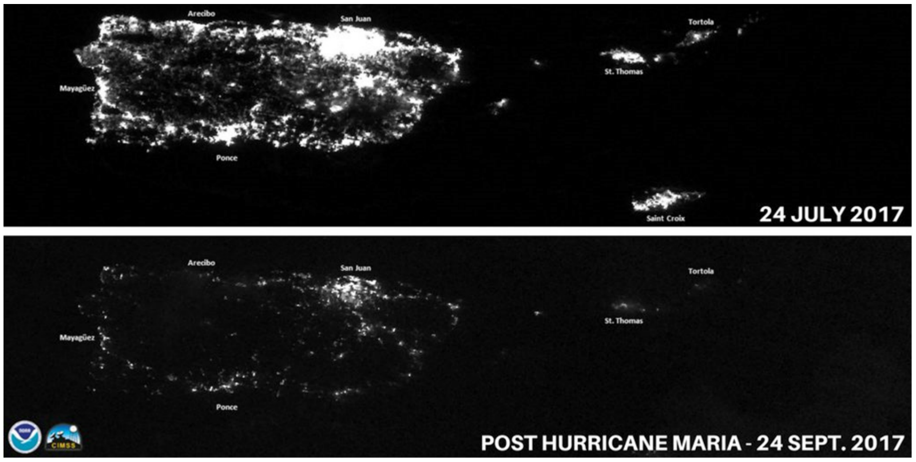
Puerto Rico: Hurricane Maria

Hurricane Maria directly struck the Commonwealth as a category 4 hurricane on September 20, causing widespread damage, including knocking out electricity to the entire island. Puerto Rico officials believe its power stations were not badly damaged, but the distribution system is ruined. If transmission lines are in better shape than thought, power outages might be fixed sooner. However, it could still take months to fully restore power to remote parts of the island.

Hurricane Maria was the fifth-strongest storm ever to hit the U.S. and the strongest to hit Puerto Rico in almost a century.

As with other recent storm-related events, Maria's full effects will not be known for several weeks or months. Assessing the damage is made more difficult because communications are splintered (85% of cell towers are damaged) and many roads are impassable because of washouts and storm debris. AIR Worldwide, a catastrophe risk consultancy, estimates the storm caused $40B–$85B in insurance claims throughout the Caribbean, with 85% of the total attributed to Puerto Rico.

Satellite Imagery of Puerto Rico and the U.S. Virgin Islands



Source - NOAA

After Hurricane Irma, Puerto Rico Electric Power Authority (PREPA) management highlighted it had $273M in emergency funds—including $173M available from the missed June 2017 debt service payment—to immediately begin repairs. The $273M will help the electric utility bridge the gap until federal funding is received.

Federal assistance is essential

The amount of Federal Emergency Management Agency (FEMA) assistance Puerto Rico ultimately receives will be pivotal in the Commonwealth's need to modify its 10-year fiscal plan, which is the basis for all its debt restructurings. The PROMESA board has already authorized $1B of budget resources toward the rebuilding effort, but it is unclear which expenditures will be cut as a result. Several members of the Puerto Rico legislature have asked the PROMESA board to suspend enforcing its austerity measures for this year and possibly for as long as the next five years.

Positively, President Trump stated that FEMA will pay 100%, instead of the usual 75%, of the initial debris removal and emergency protective measures. However, the receipt of FEMA rebuilding aid is more complicated. Usually, FEMA's programs are funded on a reimbursement basis and project-specific. In Puerto Rico's case, the reimbursement funding mechanism would have been more difficult because the island cannot access capital due to its bankruptcy. However, the federal officials have already waived the reimbursement requirement given Puerto Rico's unique circumstances.

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As a silver lining, the FEMA aid will help rebuild some of the Puerto Rico's dilapidated infrastructure. However, the aid will not be a panacea for the island's woes unless Commonwealth officials can convince federal officials that most of the island's infrastructure was destroyed by Hurricanes Irma and Maria.

Bondholders' perspective

The Commonwealth and its advisors will use this unfortunate episode to intensify the humanitarian crisis narrative they have been broadcasting to maximize the recapture of pledged revenues and reprioritize constitutional protections. While we felt Hurricane Irma did not have enough punch to influence recovery outcomes, Hurricane Maria could sway the court's decisions because of the extenuating circumstances. The amount of FEMA money will be critical to all those decisions.

Regardless of the hurricanes, the receipt of FEMA money, or the eventual fiscal plan, credits with strong security protections should fare much better than lesser securities, but every credit is going to be impaired, in our opinion. Naturally, security-light transactions or ones subject to the claw-back provision should experience exponentially higher haircuts (potentially total loss) compared to highly-secured debt obligations.

At this point, predicting individual recovery values for any credit is fruitless because of the security provision quagmire, and it is now further complicated by the unknown extent of the damage and the paramount need to restore basic services.

Bankruptcy proceedings timeline

The federal bankruptcy judge recently issued an order indefinitely postponing the Commonwealth's bankruptcy case. While the Commonwealth initially requested the procedural extensions, it also stated it wished to proceed with as little disruption as possible because a significant delay could undermine the progress achieved to date.

Regardless, we believe any extensions will be fairly irrelevant to the overall bankruptcy timeline, which is expected to take two to four years.

U.S. Virgin Islands – Disputes Moody's claim

On September 14, Moody's said the U.S. territory may redirect rum-tax revenue away from bondholders in the event the territory s liquidity position continues deteriorating after suffering significant structural damage from Hurricane Irma.

On September 15, the U.S. Virgin Island Finance Authority refuted Moody's conclusion saying it would not default on any bonds backed by its rum-tax revenue. The "lock box" structure requires direct payments from the U.S. Treasury to the Bank of New York, trustee for the matching fund revenue bonds. It is important to note that rum tax revenue never reaches the island and never enters the U.S. Virgin Island's General Fund.

State news

Bond insurer – Hurricane update (Florida & Texas)

On September 14, Kroll Bond Rating Agency (KBRA) issued a report reviewing the preliminary review of the potential impact of Hurricane Harvey and Irma on the bond insurers KBRA currently rates. Assured Guaranty, its subsidiaries, and

National Public Finance Guarantee Corp. have substantial exposure to Florida and Texas. In Florida, Irma impacted most of the state while in Texas Hurricane Harvey's damage was concentrated in 12 counties in southeastern Texas, including Houston at its center. KBRA reported that "historically natural disasters have not caused municipal bond defaults". The availability of federal disaster aid is expected to provide near-term relief limiting the need to file immediate insurance claims. If claims are filed, insurers' expectations are that they would be short-term in nature, according to the report. Insurers, in the beginning stages of surveillance are further along in the process assessing damage in Texas than in Florida. The bond insurers could experience liquidity events as has been the case in the past, but liquidity demands tend to be short term. The size, scope, and severity of the damage and size of potential claims could impact bond insurer ratings near term and tend not to be long term.

California – Revenue rebounding?

California August revenue surprised to the upside for the second consecutive month following several months of disappointing results. The $8.9B August take was $343.7M ahead of budget according to the State Controller's office. The state's FY18 (July 1) year-to-date revenues of $14.99B are approximately $532.5M ahead of the state budget that was enacted July 1 and $1.01B higher than one year ago.

Connecticut – No budget accord

Connecticut, entering its fourth month without a budget, continues operating on the governor's executive orders after members of the state's House of Representatives failed to override the governor's veto of their $40.7B legislative budget. The governor's executive order is funding essential services and has cut as much as $1B in state aid to local governments.

Illinois – Bill backlog mounts

Illinois: By mid-September the state's backlog of unpaid bills reached a record $16.5B, created by the state's most recent two-year budget impasse.

By mid-September the state's backlog of unpaid bills reached a record $16.5B, created by the state's most recent two-year budget impasse. Following passage of a fiscal year 2018 budget (FY18 began July 1) the state is planning to issue up to $6B of general obligation bonds to down a portion of the unpaid bills which are costing the state millions in late payment charges. The borrowing, expected to be paid over 12 years and to cost as much as $500M , could force the state to reduce expenditures to offset the costs associated with the borrowing.

Michigan – A "positive" outlook

Michigan's general obligation rating outlook was revised to "positive" from "stable" on September 5 by S&P. Growing reserve levels and an overall improvement in the state's employment and economic indicators led S&P to revise the state's rating outlook. Michigan has posted five consecutive years of economic growth, but its economy remains susceptible to downturns in manufacturing which accounts for approximately19.2% of the state's gross product.

Minnesota – Legislator's head to mediation

A Minnesota Supreme Court ruling in favor of Governor Mark Dayton's veto of the legislature's appropriation reversed a lower court ruling, causing legislator's to head to mediation in efforts to resolve the funding issue which has placed long-term lease payments for the Senate building in limbo. Under a temporary funding agreement, lease-backed appropriations have been made and there are funds on hand to make an upcoming December payment. It remains unclear what affect the ruling will have on post-December coupon payments that come due.

Wisconsin: Governor Scott Walker signed a new $76B biennial budget.

Pennsylvania – Inaction leads to downgrade

On September 20, S&P downgraded the state's general obligation rating to "A+" from "AA-" with a stable outlook. The downgrade was largely due to the state's history of structural imbalance (nearly a decade), late budget adoption, and weakened liquidity position that caused the state to hold back payments on scheduled expenditures for the first time in the state's history. S&P also downgraded the state's appropriation debt rating to "A" from "A+." The state, now in its fourth month without a budget, has held back up to $1.2B in payments to Medicaid programs and approximately $581M in payments to cover state pension plans.

Wisconsin – A budget settlement

Two months after the fiscal year began, Governor Scott Walker signed a new $76B biennial budget after agreeing to last-minute changes. The budget agreement, increases borrowing and drops expansion of the state's national conduit issuing authority the Public Finance Authority. The state's budget delay was primarily due to a disagreement over how to address transportation funding shortfalls. Legislators settled on limited borrowing, some project delays, and raising annual fees on hybrid and electric cars.

State/territory credit ratings

State of Pennsylvania downgraded one notch to A+ from AA- by Standard & Poor's on September 20, 2017.

State/Territory	Fitch	Moody's	Standard & Poor's
Alabama	AA+	Aa1	AA
Alaska	AA	Aa3	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-*	Aa3	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	A+
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	Aa1	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, Standard & Poor's

Cash-starved Chicago Public Schools has started receiving state and city aid enabling it to payoff two tranches ($150M) of short-term notes earlier in September.

Regional updates and other market news

Atlantic City, New Jersey – On the mend

The city's most recent $68.3M muni offering to finance property tax appeal settlements was met with very strong demand. Atlantic City was near bankruptcy before the state stepped in to turnaround the city's finances. The city's bonds were issued under the New Jersey's Qualified Bond Act program and insured by Assured Guaranty Municipal (AGM). Prior to the city's May and September bond sales, the city had not tapped capital markets since 2015.

Chicago Public Schools (CPS) – Funds are flowing

With a state budget in place, cash-starved CPS has started receiving state and city aid enabling it to payoff two tranches ($150M) of short-term notes earlier in September. CPS also paid off an additional $400M of costly grant anticipation notes at the end of September. CPS' rating outlook was revised to "stable" from "negative" by Moody's earlier in September as funding to CPS was established by the state.

Hartford, Connecticut – Insurers could step up with help

Mayor Luke Bronin, finding himself in a precarious position awaiting state aid, held a conference call with bondholders to discuss the city's financial condition and potential debt restructuring. The city cannot unilaterally declare bankruptcy and would need state approval it has opted to seek restructuring talks. Approximately 80% of the city's debt is insured by Assured Guaranty and Build America Mutual. Assured Guaranty has made overtures to the city offering to extend financial assistance to help the city avoid a bankruptcy filing.

On September 26, both Moody's and S&P downgraded the capital city's rating to "Caa3" and "CC" respectively, with Moody's calling a default, distressed exchange, or redemption a "virtual certainty".

Municipal Electric Agency of Georgia (MEAG) – Downgrade on recent decision

Recent decisions by Georgia Power (GP), MEAG, and Oglethorpe Power Corp. (OPC) to complete construction on two nuclear reactors triggered rating downgrades. Construction on the projects was suspended following Westinghouse Inc.'s bankruptcy filing. Fitch citing the high leverage associated with the project downgraded both OPC and MEAG one-notch to "A-" from "A" and to "A" from "A+," respectively.

On October 2, *The Bond Buyer* reported the U.S. Department of Energy had conditionally approved up to $3.7B in additional loan guarantees for the three largest owners of the project. GP (45.7% stake), MEAG (22.7% stake), and OPC (30% stake), will receive guarantees of $1.67B, $1.6B, and $0.420M, respectively once contractual obligations are finalized.

Oyster Bay, New York – A new direction

Following the resignation of long-time Town Supervisor John Venditto, newly appointed Joseph Saladino is proposing reducing the town's outstanding debt by $50M in his first budget. The wealthy Long Island town once rated "AAA" by S&P, saw its credit rating downgraded seven notches from 2011 to 2016. Saladino, appointed in February, released his $298.9M FY18 budget October 4. Saladino's budget accelerates debt service payments by $85M this year to a $98.3M debt service payment. The accelerated payment schedule is expected to reduce the town's debt 21.5% over a two-year period as the town seeks to improve its ratings.

RBC Wealth Management retail trading (9/1/17 – 9/30/17)

Top 10 CUSIPs selling volume to retail customers

CUSIP	Description	Maturity	Coupon	Volume
09747EBF4	BOISER-KUNA IRR	06/01/2040	7.38	4,283
408394EE0	HAMMOND IMPT BONDS-C	02/01/2024	5.00	3,558
187145HG5	CLIFTON HGR EDU FIN	08/15/2047	4.00	3,427
64971XAK4	NEW YORK CITY BY TRAN	08/01/2043	4.00	3,184
896858BY2	TRIVIEW MET DIST-REF	11/01/2046	4.13	3,145
64990AGU3	NEW YORK ST DORM AUTH	03/15/2046	4.00	2,842
674736AP8	OCEAN CNTY-GEN IMP	12/01/2029	3.00	2,783
550802GP1	LYCOMING CLG-PA	10/01/2027	5.25	2,757
242238DK6	DEAF SMITH HOSP-REF	03/01/2040	4.00	2,563
62476RAC9	MTA HUDSON RAIL YRD-A	11/15/2056	5.00	2,440

Top 10 CUSIPs buying volume from retail customers

CUSIP	Description	Maturity	Coupon	Volume
64972F5D4	NYC MUNI WTR/SWR-CC	06/15/2045	5.00	4,522
592248AX6	MET PIER	06/15/2050	5.00	2,410
646039SZ1	NEW JERSEY-REF=Q	08/15/2019	5.00	1,596
64577HQZ7	NJ ECON	07/01/2048	5.00	1,293
73358WRQ9	PORT AUTH NY&NJ-A82	08/01/2046	5.31	1,093
167486DS5	CHICAGO-C	01/01/2034	5.00	1,035
70914PRB0	PA ST-FIRST SER	11/15/2026	5.00	975
70870ECC1	PA ECON DEV-B	07/01/2053	6.00	975
646066JQ4	NJ EDUCTNL FACS-D	07/01/2045	4.00	946
799708AY8	SAND CITY REDEV-A	11/01/2027	4.20	929

Source - RBC Wealth Management

RBC Capital Markets institutional trading (9/1/17 – 9/30/17)

CUSIP	Description	Maturity	Coupon	Volume
68607LXQ5	OR ST-TXB PENSION	06/01/2027	5.89	49,051
392274X43	GTR ORLANDO AVIATION	10/01/2047	5.00	33,371
66483PAH4	N CALIF GAS-LIBOR	07/01/2027	1.59	27,956
392274X92	GTR ORLANDO AVIATION	10/01/2052	4.00	26,426
645913AZ7	NJ ECON-SER-B	02/15/2021	0.00	26,073
592647ER8	MET WASHINGTON DC ARP	10/01/2047	5.00	22,180
392274X35	GTR ORLANDO AVIATION	10/01/2042	5.00	20,262
154872AF2	CNTRL PLAINS ENERGY	08/01/2039	5.00	19,382
60637BML1	MO HSG DEV-C REF-TXBL	06/01/2044	2.40	19,232
574193KM9	MARYLAND-SECOND SER C	08/01/2023	5.00	18,139

CUSIP	Description	Maturity	Coupon	Volume
68607LXQ5	OR ST-TXB PENSION	06/01/2027	5.89	67,325
645913AZ7	NJ ECON-SER-B	02/15/2021	0.00	31,723
66483PAH4	N CALIF GAS LIBOR	07/01/2027	1.59	27,656
592248BA5	MET PIER	06/15/2043	0.00	24,385
73358WN34	PORT AUTH NY & NJ 205	11/15/2033	5.00	23,503
392274X92	GTR ORLANDO AVIATION	10/01/2052	4.00	22,382
592647ER8	MET WASHINGTON DC ARP	10/01/2047	5.00	22,154
60635R3K1	MISSOURI H&E 2003A	11/15/2028	5.50	20,986
154872AF2	CNTRL PLAINS ENERGY	08/01/2039	5.00	19,370
647293RQ4	NEW MEXICO ST-B-REF	03/01/2022	5.00	17,904

Source - RBC Capital Markets

Bond Buyer indexes

Weekly	Current 9/28/17	Previous 9/21/17	2017 high	Date	2017 low	Date
Bond Buyer Revenue Bond Index	3.85%	3.81%	4.17%	(3/9)	3.70%	(6/08)
Bond Buyer 20-Bond Index	3.64%	3.60%	4.02%	(3/9)	3.50%	(8/03)
Bond Buyer 11-Bond Index	3.15%	3.11%	3.53%	(3/9)	3.01%	(8/03)

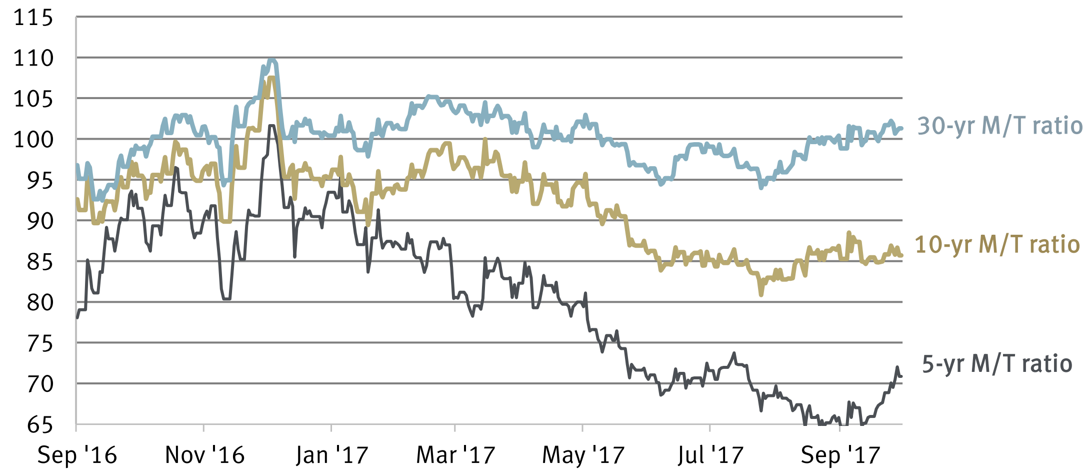
Source - *The Bond Buyer*

Barclays Municipal Index returns

	INDEX								
	1 Month	5 Year (4-6)	10 Year (8-12)	15 Year (12-17)	Long Bond (22+)	AAA	AA	A	BAA
Month-to-date total return	-0.51%	-0.69%	-0.58%	-0.32%	-0.70%	-0.62%	-0.56%	-0.49%	0.05%
Year-to-date total return	4.86%	3.87%	5.28%	5.58%	5.83%	3.92%	4.28%	5.22%	7.23%

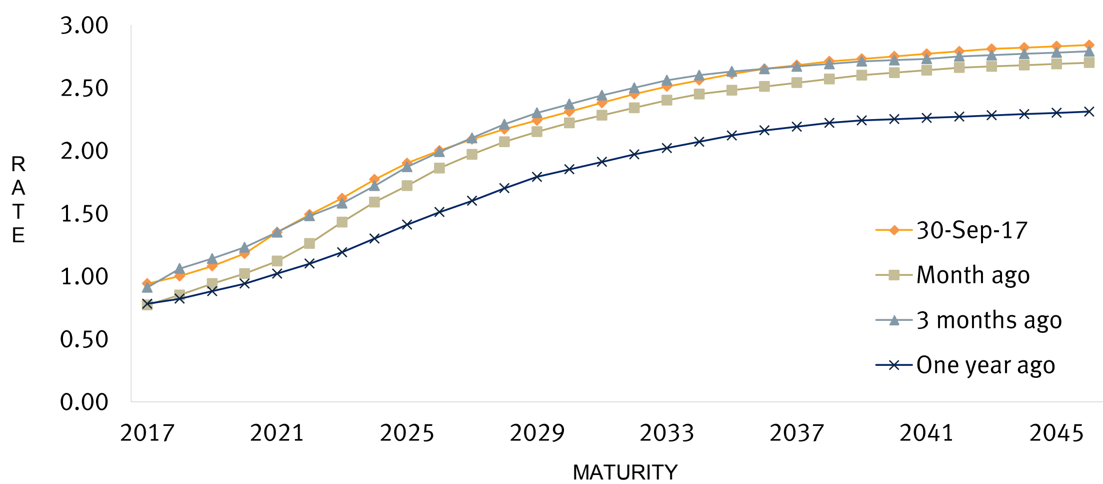
Source - Barclays, data as of 9/30/17

Muni/Treasury ratio comparison



Source - RBC Wealth Management, Bloomberg

Muni market data AAA yield curve



Source - RBC Wealth Management, Thomson Reuters TM3

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
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)	A (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 9/30/17

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Third-party disclaimer

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