

Municipal Market Insight



Wealth Management

November 2023

Portfolio Advisory Group – U.S. Fixed Income Strategies

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Another painful month for fixed income

Treasury bonds had a very difficult October. Falling prices pushed yields—which move inversely to prices—higher by 25 basis points (bps) on 5-year bonds and approximately 37 bps on 10-year and 30-year government bonds. Shorter maturities, such as the 2-year Treasury, saw much smaller price changes, with yields only 5 bps higher on the month.

We believe economic data largely explains the divergent performance of long- and short-maturity bonds in October. Several reports that are focused on growth—including New Orders and Purchasing Managers' Indexes—reflected underlying demand that exceeded economists' expectations, according to pre-release Bloomberg survey data. The potential for higher GDP gains is typically negative for bonds, as investors tend to shift into stocks and other growth-sensitive assets, and we believe this reaction explains much of the fall in longer-maturity Treasury prices.

Despite the stronger demand, measures of underlying inflation pressures remain well contained, putting less pressure on the Federal Reserve to raise interest rates. Bonds maturing in two years or less are heavily influenced by

U.S. interest rate forecasts (%), October 2023

	2023				2024			
	Q1	Q2	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
FF	4.87	5.12	5.37	5.38	5.38	5.13	4.63	4.13
2-yr	4.06	4.87	5.03	4.80	4.55	4.05	3.70	3.40
5-yr	3.60	4.13	4.60	4.40	4.20	3.85	3.65	3.50
10-yr	3.48	3.81	4.59	4.50	4.40	4.20	4.05	3.95
30-yr	3.67	3.85	4.73	4.70	4.65	4.55	4.50	4.45

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 (10/1/23)	4.71%	3.41%	4.68%	3.45%	4.79%	4.34%
Mid-month (10/15/23)	4.62%	3.29%	4.61%	3.36%	4.77%	4.24%
End of month (10/31/23)	4.86%	3.51%	4.93%	3.61%	5.10%	4.57%

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

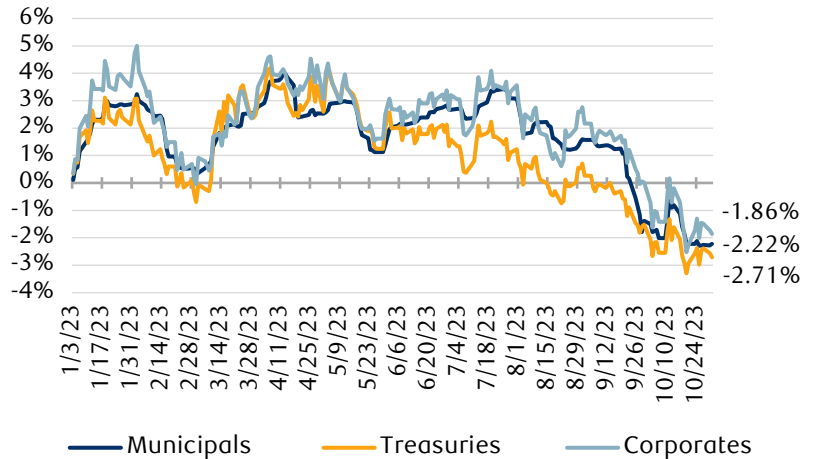
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Fed policy, and we believe the economic data showing steady but less-inflationary growth explains the strong relative outperformance of short-maturity bonds.

Corporate bonds—particularly those rated below investment-grade—underperformed Treasury bonds in October. The month saw credit spreads (which measure the additional yield investors demand for higher perceived default risk) rise nearly 40 bps for an index of 100 high-yield issuers. The positive implications of a stronger economy were seemingly outweighed for investors by the potential rise in interest costs that companies will face when refinancing pandemic-era debt.

Bloomberg index returns through Oct. 31, 2023



Source - RBC Wealth Management, Bloomberg; data through 10/31/23

Market investment strategy & market commentary

Municipals post their third consecutive month of negative returns

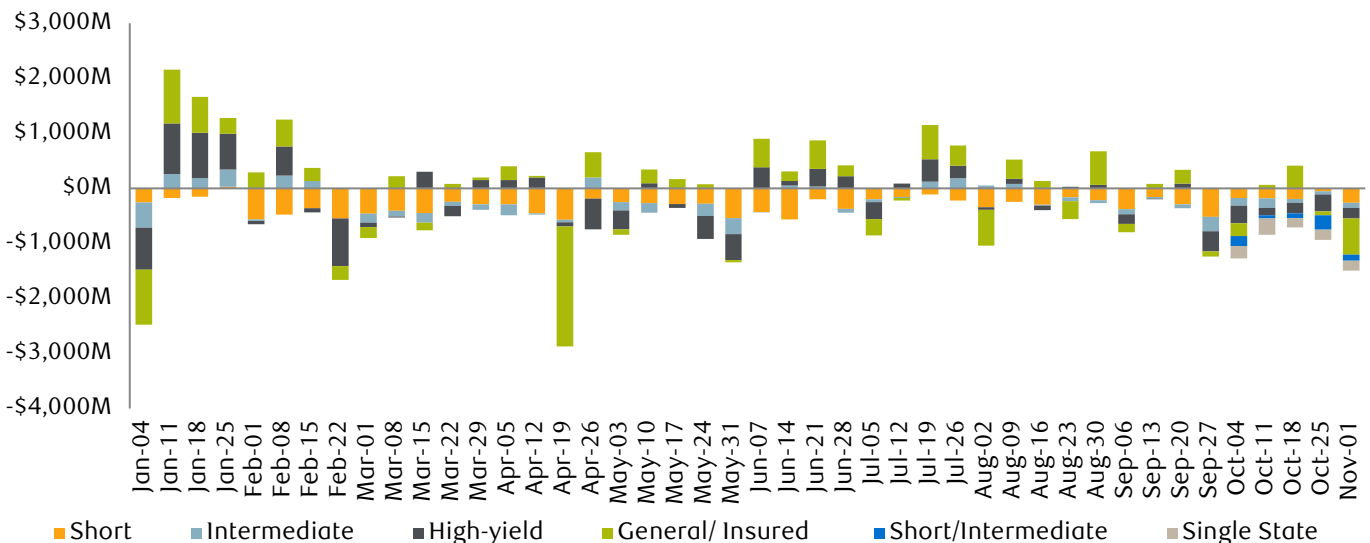
October, like August and September, proved to be a very challenging month for the \$4 trillion municipal market. Despite a rising yield environment that has pushed yields to levels not seen in many years, investors have remained apprehensive since August, and October was no exception. A combined boost in issuance and reduced reinvestment funds caused a supply/demand imbalance, which was further exacerbated by hawkish Federal Reserve statements and a steady stream of outflows to municipal bonds funds.

Municipals, Treasuries, and corporate bonds all posted negative returns in October. Municipals returned -0.85%, outperforming both Treasuries and corporate

bonds, which returned -1.21% and -1.87%, respectively. October’s weak performance pushed municipal, Treasury, and corporate returns into negative territory for the year. Municipals are returning -2.22% year to date (through Oct. 31), outperforming Treasuries (-2.71%) but underperforming corporate bonds, which are retuning -1.86% year to date, according to Bloomberg data.

All eyes were on the Federal Reserve in October, with the key question being whether the monetary policymakers would pause or continue to raise interest rates. In the end, they opted to remain on hold and take a wait-and-see approach to future rates hikes. The Fed has signaled its intention to maintain rates higher for longer as it continues to pursue its mission of curbing inflation. In our view, October’s disappointing jobs report signaled

Recent municipal fund flows



Source - Refinitiv Lipper U.S. Fund Flows, RBC Wealth Management; weekly data 1/4/23–11/1/23 with the exception of Short/Intermediate and Single State data which is 10/4/23–11/1/23

the aggressive rate-tightening cycle is achieving the Fed's goal of slowing the economy.

The Federal Reserve's pause buoys fixed income

October's rate-hiking pause provided the impetus for municipal, Treasury, and corporate bond yields to drop during the first three trading sessions of November, helping all three asset classes erase all or most of this year's negative returns through the end of October. As of Nov. 3, municipals, Treasuries, and corporate bonds are returning -0.42%, -0.90%, and 0.56%, respectively, year to date.

Can November's strong early performance hold?

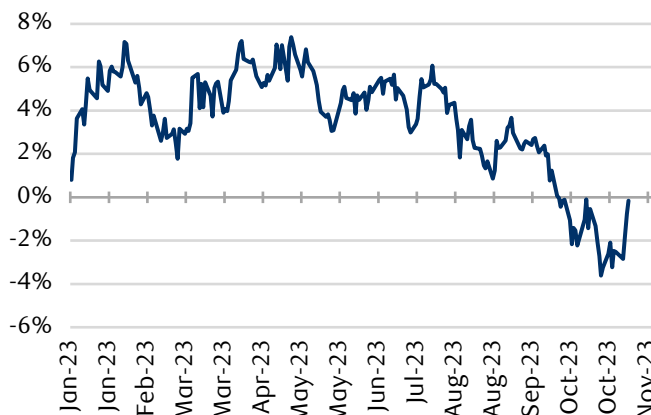
Issuance remained extremely light to begin the month of November (\$2.4 billion through Nov. 3) as issuers and investors awaited the Federal Reserve's interest rate decision. As expected by many market participants, the Fed remained on hold during this cycle, and we think it is likely to remain on hold in December as the economy continues slowing. The Bond Buyer 30-day visible supply stood at just under \$13 billion, which compares favorably to the \$31.9 billion RBC Capital Markets projection for November issuance. Lower-than-projected issuance might lead to even lower yields if it continues for the remainder of the month, as investors who are set to receive \$26.1 billion in redemptions could cause a demand/supply imbalance, potentially pushing municipal returns into positive territory for the year with just under two months remaining in 2023.

Taxable municipals – On the rebound

Taxable municipal prices are rebounding in November after facing immense selling pressure during the month of October from surging Treasury yields, particularly on the long end of the curve. According to the Bloomberg Taxable Muni Index, taxable municipals finished October down 1.7%, but the sector is up nearly 3% since the start

Taxable munis rebound to nearly flat on the year following poor performance during October

Municipal year-to-date returns



Source - RBC Wealth Management, Bloomberg; data through 11/3/23

of November with total returns now hovering near flat on the year.

In our view, taxable municipals should perform well going into year's end on the heels of still-limited issuance and reinforced demand from overseas buyers, given the sector's typically strong credit quality yield pickup over Treasuries. We think investors can find the best relative value in the intermediate area of the curve (seven to 10 years) where taxable municipal spreads offer attractive entry points versus Treasuries.

November is a historically strong month for municipals

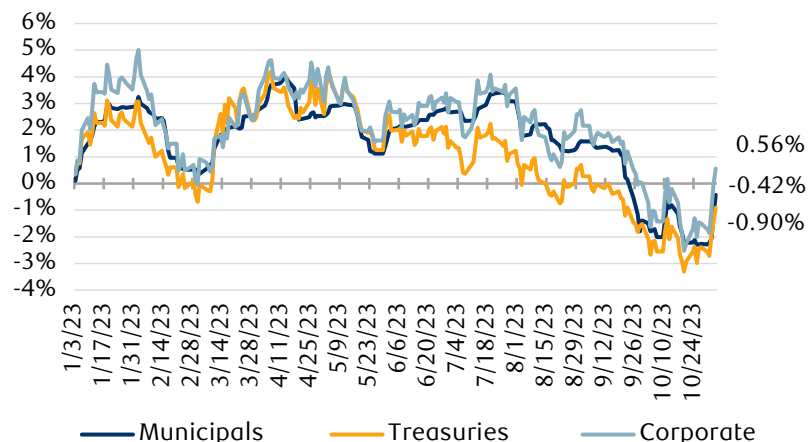
The municipal market has a strong track record for performing well in November, as new-issue activity tends to decelerate while investors are typically heavy on cash from coupon and principal payments. According to the Bloomberg Municipal Bond Index, tax-exempt municipals have generated positive returns in November seven times over the past decade, and since 2018 municipals have posted November gains every year as technical demand outweighed supply.

In our view, the November winning streak is likely to continue this year given where new-issue supply projections stand this month. According to Bloomberg data, municipal debt scheduled to be sold over the next 30 days totals roughly \$5.5 billion, which is about \$3 billion less than the average for the previous 12 months.

Pressure on higher-eds

The higher-education sector of the municipal market continues to face pressure as freshman-class enrollment dropped again this fall. Compared to last year, enrollment is down 6.1% for public institutions and 4.0% for

Bloomberg index returns through Nov. 3, 2023



Source - RBC Wealth Management, Bloomberg; data through 11/3/23

private institutions, according to the National Student Clearinghouse. A combination of declining enrollment and tighter credit conditions have led to more mergers and closures in the sector, and defaults this year are the highest since 2009.

This month's focus

Municipal debt security: legal vs. practical standing

In what seems like the not-so-distant past, municipal market participants were often quoted as saying that unlimited tax General Obligation (GO) bonds were always paid first, even before police and fire, and that a municipality was legally required to increase property taxes until sufficient revenues were collected to fully repay a GO debt obligation. The City of Detroit's bankruptcy shot that thinking full of holes, and upended the common understanding of what constituted legal security protections for municipal bondholders.

In the wake of the Detroit bankruptcy, some pundits predicted either a wholesale change in municipal legal protections or a fundamental re-evaluation and repricing of municipal credit risk. But only in limited cases were legal protections improved, and widespread repricing of credit risk was temporary at best. In our view, the primary reason very little changed is that the probability of non-payment is low because conventional municipal defaults continue to be rare, despite a nominal uptick in high-profile cases. In fact, according to a study by Moody's Investors Service, municipal bonds rated investment-grade at issuance have defaulted at an average rate of 0.05% over 10-year rolling periods since 1970. Municipal default rates historically have been orders of magnitude lower than those of most other asset classes.

Puerto Rico and Detroit bankruptcies changed perceptions

The Detroit and Puerto Rico bankruptcies materially changed the market's perception of security protections in bankruptcy. In both cases, bondholders' legal security yielded to moral considerations for the health and safety of the municipality's citizens. A prime example of this shift was the treatment of employee pensions, which were nominally impaired in both bankruptcy cases compared to bondholders, despite the pension obligations having lesser legal standing compared to GO bondholders.

As a result, the two bankruptcies gave the municipal market context as to how legal securities may fare in future municipal bankruptcies, especially against other municipal liabilities with higher perceived moral standing despite their lower legal standing. Most municipal market participants now fully acknowledge that police and fire will be paid first, and that other moral imperatives

with lesser legal standing may be elevated in adverse circumstances.

Municipal security and legal protections are not uniform

Municipal bond security and protections can vary widely from state to state, from issuer to issuer, and even from one debt offering to another. Unlike other asset classes that have mostly uniform security provisions, the variety of municipal security pledges is vast. Even for the same generic repayment stream such as a GO pledge, bondholder security rights and protections can vary widely from state to state because our federalist form of government allows each state to enact its own unique laws. Therefore, the outcome of one municipal bankruptcy case may or may not be applicable to another case, because the security provisions and pledge at issue could be vastly different. Even if the debt obligation is generically the same, such as a GO or water utility net revenue pledge, the guiding state laws, specifics of the debt resolutions, and legal covenants may produce very different outcomes.

Conventional municipal defaults are still rare

Although the potential subordination of bondholder security in bankruptcy is unsettling, the negative consequences are rarely felt because bankruptcy occurs so infrequently, and furthermore subordination does not happen in all cases. There have been several instances since the Puerto Rico bankruptcy when municipal bond obligations were fully honored. Nonetheless, most municipal market participants now factor in the potential malleability of legal rights in distressed situations and assess a municipality's exposure to subordinate liabilities in order to better understand the issuer's holistic risk profile. But thankfully municipal debt security rights and protections are seldom tested because of the inherent credit strengths of conventional municipal debt. While we believe there will almost certainly be isolated cases of municipalities failing their constituents and bondholders in the future, we also believe the vast majority of the 30,000 municipal issuers will quietly and steadfastly fulfill their civic duty and honor their debt pledges.

Municipal news

Chicago, IL – Mayor facing sizable budget deficit

Chicago Mayor Brandon Johnson proposed a \$16.6 billion spending plan that closes an almost \$500 million deficit by cutting spending without increasing property taxes, as he seeks to keep his promise of not raising taxes. The mayor is taking advantage of improved tax receipts and the flexibility to move funds earmarked for economic development to balance the budget, which has come under pressure from sizable pension contributions and a

flood of undocumented migrants that is taxing the social service network.

Johnson had campaigned on raising taxes, including the implementation of a financial transaction tax on the city's exchanges. But the mayor's hopes were dampened when Illinois Governor J.B. Pritzker said he would veto any attempt by the city to enact a financial transaction tax.

Fitch Ratings – Downgrades outnumber upgrades

With the possibility of a mild recession next year, the post-pandemic pace of upgrades in the public finance sector is decreasing as revenue growth slows. Fitch downgraded 27 public finance issuers and upgraded 25 during Q3, which compares unfavorably to the 61 upgrades and 20 downgrades during Q2. This was the first quarter since Q1 2021 that downgrades outnumbered upgrades.

Gateway Tunnel Project – Work set to begin after a decade of delays

Following years of delays that included construction, approval, and a one-time cancellation, construction on the new Gateway Tunnel project connecting New Jersey and New York is about to commence. Construction of the \$16.1 billion new rail tunnel project is critical to reducing congestion pressure on the country's busiest passenger train route, the Northeast Corridor, which runs between Boston and Washington, D.C. The project has received \$7.5 billion in federal grants toward construction. The federal government recently announced another \$3.8 billion grant, bringing federal support for the project to roughly 70% of total costs to construct the new rail tunnel.

Houston, TX – Water system front and center in mayoral campaign

John Whitmire, the leading candidate to become Houston's next mayor, said the country's fourth largest city will need to borrow billions of dollars to modernize, repair, and upgrade its water distribution system. The run-down system has been springing up to 1,000 leaks per day. Last November, a system failure forced the city to implement a citywide order to boil water.

Houston-area voters approve \$2.5 billion bond sale

On Tuesday, Nov. 8, Harris County voters overwhelmingly approved a \$2.5 billion ballot measure to replace Houston's Lyndon B. Johnson Hospital and expand health care access across the county.

New Jersey – Tax revenue showing signs of slowing

The New Jersey Department of the Treasury reported tax revenue collections for the first quarter of FY 2024 (which began July 1, 2023) were down 6.2% y/y, while September collections of \$4.8 billion were 5.1% lower y/y. According to the state, the decline was primarily attributable to lower

estimated tax payments and higher state income tax refunds to taxpayers.

New York City – Finance jobs are king, for the time being

During the first eight months of 2023, state Comptroller Thomas DiNapoli reported the number of jobs in the securities industry in the city topped 195,000, the highest total in 20 years. After recent announcements of staffing cuts by some of the city's bigger financial services firms, DiNapoli warned that it remains to be seen whether employment levels in the city's financial services sector will be adversely impacted.

New York State – Beneficiary of online sports gambling revenue

The State of New York collected \$730 million from sports gambling taxes during fiscal year 2022–2023 (which ended March 31), more than double the state's \$357 million projection at the beginning of the fiscal year. The state is projecting online sports gambling revenue will rise 6.9% over the next four years.

Senior care – Rural facility closings impacting small communities

A crisis continues to brew in rural America as more and more small senior care facilities shut their doors due to financial constraints. Since 2020, 690 nursing homes have ceased operations, according to the U.S. Centers for Medicare & Medicaid Services. The closure of so many facilities across rural America is creating nursing home deserts, leaving many seniors with limited senior care facility choices. In some cases, potential residents are having to drive over 300 miles to access a senior care facility. The ongoing crisis shows no signs of abating.

State sales tax collections rise, albeit at a slower pace

The U.S. Census Bureau reported state sales tax collections rose 1% y/y in August, according to data reported by 28 states. Georgia reported a 13.2% rise in sales tax collections, while Iowa sales tax collections fell 10.4%, the biggest drop among the reporting states.

Texas – Revenue rising

Texas State Comptroller Glenn Hegar said he is projecting a bump in revenue available for spending for the 2024–2025 biennial budget cycle. The state expects expendable revenue to jump to \$194.6 billion from its original projection of \$188.2 billion in January. Hegar credits the boost in expendable resources to Texas' economy, which is outperforming the national economy.

The U.S. is dealing with a record number of disasters in 2023

With just under two months left in the year, the U.S. has already faced a record 24 disaster-related events, which have together cost the country more than \$1 billion. With hurricane season still ongoing, the amount of damages is likely to grow. Just over 370 people were killed by storms, drought, and wildfire in the first nine months of the year, according to a report by the National Centers for Environment Information. In addition to these disasters, the states of Texas, Louisiana, Mississippi, and Florida all saw their hottest January–September period on record this year.

Yale University, CT – Fourteenth consecutive year of positive returns

The university's endowment returned 1.8% for the fiscal year ended June 30, 2023, marking the 14th consecutive year the fund has posted positive returns. Yale's endowment posted gains totaling \$759 million, ending the year with a \$40.7 billion after accounting for \$1.8 billion in distributions to the university's operating budget.

Ratings corner

Notable state and local issuer rating updates

Alabama – Rating affirmed by Moody's

On Nov. 2, Moody's affirmed the state's Aa1 rating, citing the firm's "expectation that leverage and fixed costs will remain below average, financial management and governance will remain strong, and financial reserves will remain healthy." Moody's also highlighted the stability of the state's economy.

Chicago – Improving debt metrics drive upgrade

On Oct. 18, Fitch Ratings bumped the city's rating up one notch to BBB+ from BBB; the outlook is stable. A steadily growing economy, which pushed long-term liabilities lower, was the key driver of the upgrade. Fitch also noted the city's rating remains well below the sector median due to risks including the city's constrained expense profile, driven by its highly unionized workforce, which is boosting carrying costs for debt and pensions.

Iowa – Affirmed by Fitch

On Nov. 3, Fitch Ratings affirmed the state's AAA rating; the outlook remains stable. The rating affirmation reflects "the state's stable economic and employment trends and solid near-term revenue growth prospects." Further supporting the rating is the state's historically well-managed budget and fiscal operations, as well as its low debt and net pension liability burdens.

New York Metropolitan Transportation Authority – Rewarded with an upgrade

On Oct. 25, Fitch Ratings upgraded the MTA's rating to A from A-; the rating outlook is stable. Fitch said the rating upgrade "reflects a material improvement in the MTA's fiscal outlook, which was largely driven by New York increasing the maximum rate of the Payroll Mobility Tax (PMT)." The PMT boost to maximum levels provides a substantial increase in the MTA's recurring revenue stream.

Territorial update

COFINA – Makes payment on contingent value instrument (CVI)

On Nov. 1, the commonwealth paid holders of the island's CVI, an instrument created following the restructuring of its sales tax bonds. Repayment of the CVI is contingent on excess sales tax collections that are greater than the commonwealth's annual budget projections. The \$388.8 million payment was the excess from the baseline \$1.28 billion of sales tax revenue projected for the fiscal year ended June 30.

Puerto Rico Electric Power Authority (PREPA) – Creditors to get their day in court

Bond insurer Syncora and GoldenTree Asset Management will be in court on Dec. 4, attempting to convince the U.S. Court of Appeals for the First Circuit to lift a stay and appoint a receiver for PREPA. The two plaintiffs, who own and insure up to \$1 billion of PREPA debt, are against PREPA's attempt to reduce their outstanding debt by around 75%.

RBC Wealth Management retail trading (10/1/23 – 10/31/23)

Top 10 CUSIPs selling volume to retail customers

CUSIP	Description	Maturity	Coupon	Volume
64990AQN8	NY DORM AUTH-E-UNREFD	03/15/2048	5.00	6,600
59259N6Q1	MET TRANS AUTH-A	11/15/2047	5.00	6,016
649670NU6	NYC EDU CONSTRUCTION	04/01/2052	5.00	5,773
63165TWS0	NASSAU CNTY NY	04/01/2036	5.00	5,201
700387DM2	PARK CREEK CO MET-A	12/01/2045	5.00	5,170
89602HAU1	TRIBOROUGH BRIDGE-B-1	05/15/2056	5.00	4,639
87638QPP8	TARRANT CULT EDU-A	11/15/2045	5.00	4,419
4484924V7	HUTTO ISD	08/01/2053	5.00	4,341
89602N3D4	TRIBORO BRIDGE-A-GEN	11/15/2050	5.00	4,304
87638TFM0	TARRANT CULT EDU-A	02/15/2047	5.00	3,973

Top 10 CUSIPs buying volume from retail customers

CUSIP	Description	Maturity	Coupon	Volume
650036CE4	NEW YORK ST URBAN DEV	03/15/2043	5.00	3,570
64990FKW3	NY ST DORM AUTH -A	03/15/2039	5.00	2,321
6500357X0	NY URBAN DEV-A	03/15/2038	5.00	2,029
650035ZP6	NY ST URBAN DEV-A-1	03/15/2043	5.00	1,610
940157M64	WA SUBURBAN SAN DIST	06/01/2041	4.00	1,600
650036AJ5	NEW YORK ST URBAN DEV	03/15/2039	4.00	1,536
64972HY97	NYC TRANS FIN AUTH	07/15/2036	5.00	1,524
119699JN7	BUFFALO NY MUNI WTR F	07/01/2028	5.00	1,507
64990FGF5	NEW YORK ST DORM AUTH	02/15/2038	5.00	1,496
966769DK4	WHITTIER HLTH-PIH	06/01/2044	5.00	1,493

Source - RBC Wealth Management

RBC Capital Markets institutional trading (10/1/23 – 10/31/23)

Top 10 CUSIPs selling volume to institutional customers

CUSIP	Description	Maturity	Coupon	Volume
679111D27	OK TURNPIKE AUTH	01/01/2053	5.50	123,968
56035DFC1	MAIN ST NAT GAS INC-B	07/01/2053	5.00	99,804
56035DFK3	MAIN ST NAT GAS INC	09/01/2053	5.00	78,730
09182NCT5	BLACK BELT ENERGY GAS	12/01/2053	5.25	66,281
40934TAV5	HAMPTON ROADS-A-BANS	07/01/2026	5.00	47,191
56035DDH2	MAIN STREET NATURAL	07/01/2052	4.00	46,740
56035DGB2	MAIN ST NAT GAS-E-1	12/01/2053	5.00	46,401
09182NBR0	BLACK BELT ENERGY GAS	06/01/2051	4.00	37,705
154872AT2	CENTRL PLAINS ENERGY	12/01/2049	4.00	37,048
249002MC7	DENTON ISD	08/15/2053	5.00	31,685

Top 10 CUSIPs buying volume from institutional customers

CUSIP	Description	Maturity	Coupon	Volume
679111D27	OK TURNPIKE AUTH	01/01/2053	5.50	125,878
56035DFK3	MAIN ST NAT GAS INC	09/01/2053	5.00	102,961
56035DFC1	MAIN ST NAT GAS INC-B	07/01/2053	5.00	87,793
56035DGB2	MAIN ST NAT GAS-E-1	12/01/2053	5.00	56,559
09182NCT5	BLACK BELT ENERGY GAS	12/01/2053	5.25	44,402
09182NBR0	BLACK BELT ENERGY GAS	06/01/2051	4.00	38,043
154872AT2	CENTRL PLAINS ENERGY	12/01/2049	4.00	37,440
40934TAV5	HAMPTON ROADS-A-BANS	07/01/2026	5.00	37,344
56035DDH2	MAIN STREET NATURAL	07/01/2052	4.00	34,852
249002MC7	DENTON ISD	08/15/2053	5.00	31,997

Source - RBC Capital Markets

Bond Buyer indexes

Weekly	Current		2023		2023	
	10/26/23	10/19/23	high	Date	low	Date
Bond Buyer Revenue Bond Index	4.47%	4.47%	4.47%	(10/19)	3.60%	(4/13)
Bond Buyer 20-Bond Index	4.19%	4.19%	4.19%	(10/19)	3.32%	(4/13)
Bond Buyer 11-Bond Index	4.09%	4.09%	4.09%	(10/19)	3.22%	(4/13)

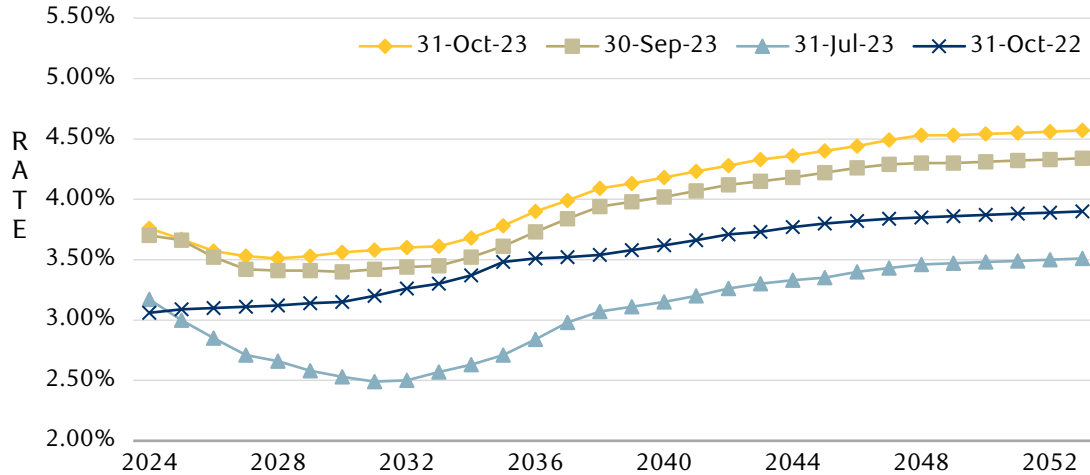
Source - The Bond Buyer

Bloomberg 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	-0.85%	-0.15%	-0.60%	-1.01%	-1.98%	-0.60%	-0.80%	-1.02%	-1.41%
Year-to-date total return	-2.22%	-1.01%	-2.16%	-2.83%	-3.96%	-2.93%	-2.36%	-1.59%	-1.64%

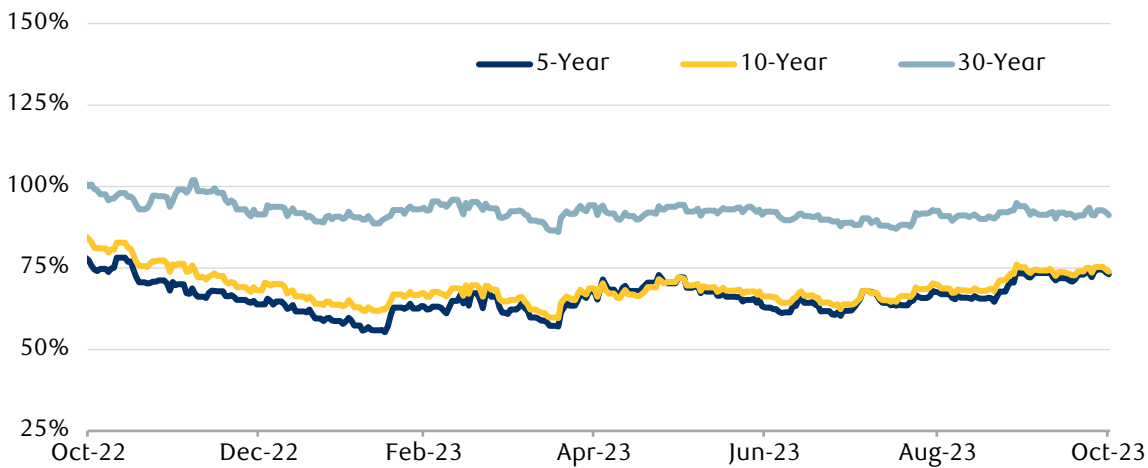
Source - Bloomberg; data through 10/31/23

Muni market data AAA yield curve



Source - RBC Wealth Management, Thomson One Refinitiv; data through 10/31/23

Muni/Treasury ratio comparison



Source - RBC Wealth Management, Bloomberg; data through 10/31/23

Municipal bond insurers

Insurer	Moody's	Kroll Ratings
ACA	Not rated	Not rated
AMBAC	Not rated	Not rated
Assured Guaranty (AGC)	A2 (stable outlook)	AA+ (stable outlook)
Assured Guaranty Municipal Corp. (AGM)	A1 (stable outlook)	AA+ (stable outlook)
Berkshire Hathaway (BHAC)	Aa1 (stable outlook)	Not rated
Build America Mutual (BAM)	Not rated	Not rated
FGIC	Not rated	Not rated
National Public Finance (MBIA)	Baa2 (negative outlook)	Not rated
Syncora	Not rated	Not rated

Source - RBC Wealth Management; as of 10/31/23

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