

Municipal Bond Market Monitor

Municipal Bond Group Q2 2025



Q2 2025 Municipal Market Review

WEAK TECHNICALS LATE IN Q2 RESULT IN TAX-EXEMPT MUNICIPAL UNDERPERFORMANCE VS TAXABLE INDICES

- Muni Bond Index: -0.12% | HY Muni Index: -1.14% | Taxable Muni Index: +0.81%
- US Treasury: +0.85% | Corporate: +1.82%

MUNICIPAL CURVE 'TWIST STEEPENS' IN Q2 AND YTD, AS INVESTORS SHOW PREFERENCE FOR SHORTER MATURITIES

<u>Q2 '25 AAA Muni</u>		YTD '25 /	AAA Muni	
• 2-Year: 2.68% → 2.58%	-10 bps	• 2-Year:	2.82% → 2.58%	-24 bps
• 5-Year 2.86% → 2.67%	-19 bps	• 5-Year	2.87% → 2.67%	-20 bps
 10-Year 3.26% → 3.26% 	+0 bps	• 10-Year	3.06% → 3.26%	+20 bps
 30-Year 4.24% → 4.54% 	+30 bps	• 30-Year	3.90% → 4.54%	+64 bps

MUNICIPAL FUND FLOWS NEGATIVE IN EARLY Q2, BUT TURN POSITIVE IN MAY AND JUNE

- Post 'Liberation Day' volatility, fund flows turn positive but ended Q2 with outflows of approximately \$0.3bn.
- Short (+\$2.7bn), Short/Intermediate (\$1.3bn) and Intermediate (+\$0.5bn) fund flows were strong, while demand for Long Duration (-\$4.9bn) funds weakened in Q2 vs Q1.

Past performance is no guarantee of future results. It is not possible to invest directly in an index. See end of report for important additional information. This commentary may contain statements that are not historical fatcs, referred to as "forward looking statements". Actual future results may differ significantly from those stated in any forward-looking statement, depending on factors such as changes in securities or financial markets or general economic conditions. Source: Index Performance: Bloomberg, AAA YTD changes as of 6/30/2025. Fund Flows: J.P Morgan, Ratios: Bloomberg

Overview

- In June, the Fed held rates steady at 4.25-4.5% and forecasted higher inflation, higher unemployment and lower growth versus their projections in in March.
- However, at the same time they kept their policy rate forecast to two cuts in 2025, unchanged between March and June.
- In short, the Fed is prioritizing the fight against inflation and wants to see more labor data and the effects of tariffs, before considering further adjustments to monetary policy.
- Short treasury yields declined during the quarter with 2-year and 5-year yields 14bps and 12bps lower, respectively, while 10-year and 30-year yields rose 8 bps and 26 bps, respectively.
- Similarly, municipal yields fell by 19bp in 5-years, while yields rose further out on the curve with 10-year yields flat and 30-year yields higher by 30 bps.

Major Asset Class Returns

AAA Municipal Yields (%)



5% 4.5% 4.2% 3.6% 3.9% 4% 3.3% 3.3% 3.0% 2.9% 2.9% 2.7% 2.7% 2.6% 3% 2% 1% 0% 2 yr 5 yr 7 yr 10 yr 15 yr 30 yr Q1 2025

Source: Bloomberg and Morningstar Direct as of 6/30/25. Past performance is no guarantee of future results. It is not possible to invest directly in an index. See end of report for important additional information. *Basis points (BPS) is a unit that is equal to 1/100th of 1% and is used to denote the change in a financial instrument.

Index Returns

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- Q2 performance was positive out to approximately 9 years but turned • negative further out the curve.
- After outperforming in 2024 and Q1, high yield municipals underperformed • in Q2, down 1.14%.

Short duration, investment-grade muncipals continued to outperform as the

Given the volatility mitigation that short duration municipals provide and the

improving attractiveness of the longer end of the curve, we continue to like

3-year Index returned +1.05% while the 22+ year Index declined 1.94%.

Tax-Exempt and Taxable Index Returns



Q2 2025 YTD 2025



Investment Grade Tax-Exempt Index Returns

Source: Bloomberg, MMA and Morningstar Direct as of 6/30/25. Past performance is no guarantee of future results. Performance less than one year is cumulative. It is not possible to invest directly in an index. See end of report for important additional information.

barbell curve positioning heading into Q3.

Municipal Fund Flows

- Though municipal fund flows were positive overall in Q2, they did turn negative early in the quarter due to 'Liberation Day' volatility and April's tax filing deadline.
- Year-to-date, municipal fund inflows are approximately \$9.5bn. Of the total, \$0.7bn have entered open-end funds while ETFs have received \$8.8bn.

- By duration, long-term fund flows weakened during the quarter, while short/intermediate and short-term fund flow momentum accelerated.
- By credit quality, both investment grade and high yield funds posted positive flows.

Muni Mutual Fund Flows 6.00% 15 5.00% 10 4.00% 3.00% -5 2.00% 1.00% -10 0.00% -15 -1.00% -20 613012012 613012013 613012014 613012015 613012016 613012018 613012019 613012022 613012024 613012025 613012010 613012011 613012017 613012020 613012021 613012023

Muni Fund Flows By Category

YTD Municipal Fund Flows (\$Bn)



Source: Thomson Reuters Municipal Market Data. Date Range: June 2010– June 2025. Flow data provided by J.P. Morgan as of 6/30/2025.

Municipal Issuance

- Following record issuance in 2024 (\$496bn), new deal activity remained robust in Q1 and Q2. At \$282bn, new issuance is up 30% year-over-year. Approximately 77% of issuance was new money and 23% refunding deals.
- We anticipate issuance will remain elevated in the second half of 2025 and likely surpass 2024's record levels.

- At \$21.7bn, high yield municipal issuance in the first half of 2025 was up relative to its trailing five-year average. However, it has represented only ~8% of overall municipal supply in 2025.
- Elevated yields, moderate issuance and strong fund flows continue to provide a supportive backdrop for high yield municipals heading into the second half of the year.

500 400 300 200 100 0 2013 2014 2015 2016 2020 2017 2018 2019 2021 2022 2023 2024 YTD 2025 New Refunding

Municipal Bond Issuance: New vs. Refunding

Issuance (Billions)



Source: Municipal Bond Issuance data from Bloomberg Barclays Research and J.P. Morgan as of 6/30/2025. Private placement issuance counted as new capital.

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High Yield Municipals

- The yield-to-worst on the High Yield Municipal Index increased 22bps during the quarter from 5.59% to 5.81%.
- The 5.81% yield is 104 basis points (bps) higher than the average yield on the Index over the last five years.
- With starting yield as one of the largest components of future returns in fixed income, we believe now is a good time to be considering high yield munis.

- Municipal credit will not be immune to a slowing economy or the impacts of tariffs. However, many municipal credits provide essential services to U.S. based customers (hospitals, senior living providers, charter schools, essential housing), which do not experience significant demand declines in economic slowdowns.
- On the flip side, Medicaid cuts will negatively impact Medicaid dependent healthcare credits while certain higher education and research facilities may be impacted if the Trump administration permanently scales back grants and federal funding. However, we do not expect widespread credit weakening, and we believe that muni credit will remain resilient.

High Yield Municipal Index YTW





High Yield Municipal Sector Returns

Source: Barclays and Bloomberg, as of 6/30/2025. The index performance is provided for illustrative purposes only and is not meant to depict the performance of a specific investment. Past performance is no guarantee of future results.

Muni-to-Treasury Yield Ratios

- Muni-to-treasury ratios richened slightly across the curve in Q2 but remained near their most attractive levels in approximately 18 months.
- Specifically, the 5-year muni/treasury ratio decreased from 74% to 70%, while the 10-year decreased from 78% to 77% however the 30-year increased from 92% to 95%.

- Longer-dated municipal yields increased in Q2, a continuation of the YTD trend. In the face of heavy supply, the muni curve has (twist) steepened, to a greater degree than treasuries, resulting in attractive Muni/UST ratios out on the curve.
- Between elevated starting yields and compelling relative value, we believe now is a great entry point for the asset class.

AAA Muni-to-Treasury Yield Ratios (%)



Muni/Treasury Ratios Look Attractive Out the Curve



Muni/Treasury Ratios 12/31/24 and Present

Source: Thomson Reuters as of 6/30/25, Bloomberg as of 6/30/25. Past performance is no guarantee of future results. See end of report for important additional information.

Municipal Yield Curve

- Consistent with Q1, the municipal curve twist steepened in Q2 as 2-year yields decreased 10bps, and 30yr yields increased 30bps.
- Meanwhile, the treasury curve bear steepened as the 2-year yield fell 17bps while the 30-year yield increased 20bps in Q2.
- At 4.54%, the 30-year AAA yield is at its highest level since October 2023.

- With the curve steepening, the 2-year municipal now captures 57% of the 30yr yield compared to 84% one year ago.
- Despite the steepening, we believe short-term municipals remain attractive for their defensive characteristics and value relative to taxable alternatives.
- At the same time, we continue to believe investors should consider a barbell approach by adding duration and locking in longer-term yields.

AAA Muni Yield Curve Comparison



% of Municipal Curve Captured by 2-Yr Municipal Bond



Source: Thomson Reuters as of 6/30/25, Bloomberg as of 6/30/25. Past performance is no guarantee of future results. See end of report for important additional information.

Most Sectors Will Likely Experience Stable Credit Quality in 2025

However, we believe credit pressure could arrive amid new administration federal policy decisions

- State and Local Governments outlook remains stable. The median rainy day fund balance as a percentage of general fund expenditures has grown every year since the aftermath of the Great Recession in fiscal 2011, and states are expecting to continue this streak. Revenues have increased this year but still less than the record setting year of 2022. Most states' revenues are coming in line or above their estimates.
- Higher education is mixed, and credit bifurcation continues to widen. Strong institutions are holding their market position with healthy balance sheets while struggling schools face enrollment declines leading to weak operating performance and potential liquidity issues.
- Healthcare is also mixed. Baby-boomer driven demand, combined with the sector's track record of innovation and adaption remain central to the sector's overall resilience. Sector uncertainty persists as weaker providers continue to work towards stabilizing cash flow and prioritizing capital investments, while facing a new federal administration.
- We have a negative outlook on the Tobacco sector. The negative outlook is primarily driven by US smoker demographics, proliferation of smoking alternatives and price inflation.



Source: Eaton Vance. For informational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or do adopt any specific investment strategy.

Municipal Credit Has Weakened in Recent Months but Remains Positive Q1 2025's ratio of 1.3 to 1 is the weakest since Q4 2020's 0.3 to 1 ratio

Historical Ratings Activity (Upgrades/Downgrades Ratio)



1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025

Sector	Count of actions	Upgrade/downgrade ratio
School District	615	1.6
General Obligation	484	3.3
Appropriation	249	2.4
Water & Sewer	207	1.0
Hospital	166	0.6
Sales & Excise Tax	129	15.1
Higher Education	105	0.7
Miscellaneous Tax	101	10.2
General Obligation District (Other)	72	5.5
Economic/Industrial Development	65	2.1
Secondary Education	58	6.3
Municipal Utility (Mixed)	58	1.6
Municipal Utility District	58	58.0
Appropriation (Self)	46	5.6
Airport	43	13.3
General Revenue Tax-Guaranteed	35	2.5
Tax Increment Financing	32	15.0
Hotel Occupancy Tax	30	14.0
Toll Highway/Bridge/Tunnel	30	14.0
Pension Obligation	29	6.3
Public Power System	28	3.0
Charter School	27	0.9
Community College District	26	12.0
General Obligation Hospital/Health District	26	0.4
Continuing Care Retirement Community	22	0.5
Metro Development District	20	19.0

Source: BofA Global Research, Moody's Ratings, S&P Global Ratings. For informational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or do adopt any specific investment strategy.

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Municipal Default Overview



Municipal Default Overview

Number of Unique Defaults 160 120 80 40 0 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 YTD 2025 Puerto Rico US - ex PR

Number of Unique Annual Defaults

Dollar Value of Annual Defaults (\$ Billions)

Dollar Value of Defaults (\$ Billions) 40 30 20 10 0 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 YTD 2025 • Puerto Rico • US -ex PR

YTD 2025 Number of Unique Defaults Decreased 11% YoY



YTD 2025 Dollar Value of Defaults (\$ Billions) Decreased by 27% YoY



Source: MMA. Default data as of 6/24/2025

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Taxable Equivalent Yields

Municipal Taxable-equivalent Yields Appear Very Attractive Relative to Other High-Quality Options

Taxable Equivalent Yields



Nominal Yield
 Tax-Equivalent Yield

Sources: Barclays Live as of 6/30/25, Tax Policy Center. This table is for illustrative purposes only and uses the highest current applicable federal tax rates plus 3.8% health care tax. **Past performance is no guarantee of future results.** It is not possible to invest directly in an index. See end of report for important additional information.

Municipal Market Outlook

- The Federal Reserve left rates unchanged during both the May and June FOMC meetings, as Chairman Powell urged patience in the evaluation of potential inflationary effects resulting from tariff policy.
- Weak seasonal technicals in Q2, coupled with macro uncertainty, resulted in a steeper muni curve and higher yields for longer-dated securities, providing investors additional opportunity to lock in starting yields near decade highs
- Given attractive absolute yields and relative value, coupled with an improving technical picture, we anticipate net positive flows to the asset class for the remainder of 2025.
- With the election behind us, we remain focused on the proposed legislation related to changes to marginal tax rates, the standard deduction, the cap on State and Local Tax deductions (SALT) and the phaseout of the Alternative Minimum Tax (AMT) exemption.

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Appendix: Additional Slides



Overview of Legislation and Municipal-Related Spending in Relief Bills

The Below Table Provides a High-level Summary of the Fiscal Support for Municipals Through the Four Most Recent Pieces of Legislation Passed by Congress. In Aggregate, over \$1.7 Trillion of Capital has Been Allocated to Various Parts of the Municipal Bond Market.

	2021 Infrastructure Bill	American Rescue Plan	Dec. Federal Stimulus	CARES Act
Total Muni Market Support	\$550	\$650	\$157	\$347
States	\$136	\$408	\$30	\$169
Locals		\$182	\$30	\$164
Community based orgs.		-	_	\$1
Not for Profits		\$0.8	\$15	-
Healthcare		\$13	\$4	\$108
Primary/Sec Education		\$137	\$58	\$25
Higher education		\$40	\$26	\$17
Airports/Ports	\$42	\$11	\$2	\$10
Surface transit	\$110	_	\$10	-
Mass transit	\$39	\$30	\$14	\$25
Other Transportation	\$78	\$2	\$2	-
Housing		\$39	\$25	-
Utilities	\$143	-	_	-

Source: US Congress, J.P Morgan. Note: Sum of individual sector amounts may not add up to aggregate total due to double counting, as much of the capital is shared across sectors.

RISK CONSIDERATIONS

An imbalance in supply and demand in the municipal market may result in valuation uncertainties and greater volatility, less liquidity, widening credit spreads and a lack of price transparency in the market. There generally is limited public information about municipal issuers. Investments in income securities may be affected by changes in the credit worthiness of the issuer and are subject to the risk of non-payment of principal and interest. The value of income securities also may decline because of real or perceived concerns about the issuer's ability to make principal and interest payments. As interest rates rise, the value of certain income investments is likely to decline. Diversification cannot ensure a profit or eliminate the risk of loss. Debt securities are subject to risks that the issuer will not meet its payment obligations. Low rated or equivalent unrated debt securities, but also are subject to greater risks that the issuer will default. Unrated bonds are generally regarded as being speculative.

Credit ratings that may be referenced are based on Moody's, S&P or Fitch, as applicable. Credit ratings are based largely on the rating agency's investment analysis at the time of rating and the rating assigned to any particular security is not necessarily a reflection of the issuer's current financial condition. The rating assigned to a security by a rating agency does not necessarily reflect its assessment of the volatility of a security's market value or of the liquidity of an investment in the security. Ratings of BBB or higher by Standard and Poor's or Fitch (Baa or higher by Moody's) are considered to be investment grade quality.

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ADDITIONAL INFORMATION Important Information and Disclosure

TERMS

Municipal-to-Treasury Yield Ratios are relative value indicators that measure the richness or cheapness of Municipal bond yields to comparable maturity Treasury bond yields.

Yield to Worst is a measure which reflects the lowest potential yield earned on a bond without the issuer defaulting. The yield to worst is calculated by making worst-case scenario assumptions by calculating the returns that would be received if provisions, including prepayment, call or sinking fund, are used by the issuer.

INDEX DEFINITIONS

Bloomberg Municipal Bond Index is an unmanaged index of municipal bonds traded in the U.S.

Bloomberg High Yield Municipal Bond Index is an unmanaged index of non-Investment Grade Municipal bonds traded in the U.S.

Bloomberg Taxable Municipal Bond Index is an unmanaged index of Taxable Municipal Bonds traded in the U.S.

Bloomberg U.S. Treasury Index measures public debt instruments issued by the U.S. Treasury.

Bloomberg U.S. Aggregate Index is an unmanaged index of domestic investment-grade bonds, including corporate, government and mortgage-backed securities.

Bloomberg U.S. Corporate High Yield Index measures USD-denominated, non-investment grade corporate securities.

Bloomberg U.S. Corporate Index is an unmanaged index that measures the performance of investmentgrade corporate securities within the Barclays Capital U.S. Aggregate Index.

S&P/LSTA Leveraged Loan Index is an unmanaged index of the institutional leveraged loan market.

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