

Municipal Market Weekly Update

MACKAY MUNICIPAL MANAGERS.™ THE MINDS BEHIND MUNIS.



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Fed Easing Buffers Come from Different Places

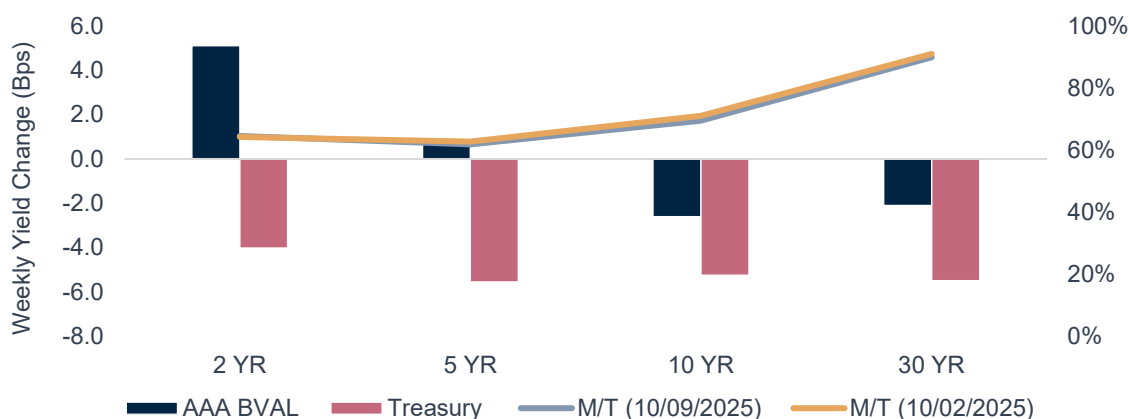
- Muni rocket cedes to taxables
- Long still beating expectations
- Blended basket of risk examined

Relative Performance

Municipal performance, at least relative to U.S. Treasuries, appeared as the laggards, over the prior week. Curve movements for AAA tax-exempts appeared a bit bifurcated, with short municipal yields rising by as much as 5bps, compared to a decline of 2.6bps in the 10-Year portion of the yield curve. Those looking for tea leaves in the gyrations of the municipal yield curve, would be better off zooming out on the lens rather than focusing too micro on the prior week's movements.

Zooming that lens out shows that the delta in performance numbers for the opposite ends of the yield curve has only widened this month. Coming into October, the gap between returns for the Bloomberg long muni index and the Bloomberg 1-Year Index (Between the end of July and 9/30) were slightly over 400bps. Mid-way through October that performance gap has widened to 500bps.

FIGURE 1: MUNIS UNDERPERFORMED TREASURIES ACROSS THE CURVE¹



1. Data as of October 09, 2025. Source: Bloomberg. Spot Muni, Spot AA rates.

Past performance is no guarantee of future results, which will vary. It is not possible to invest directly in an index.

Technicals

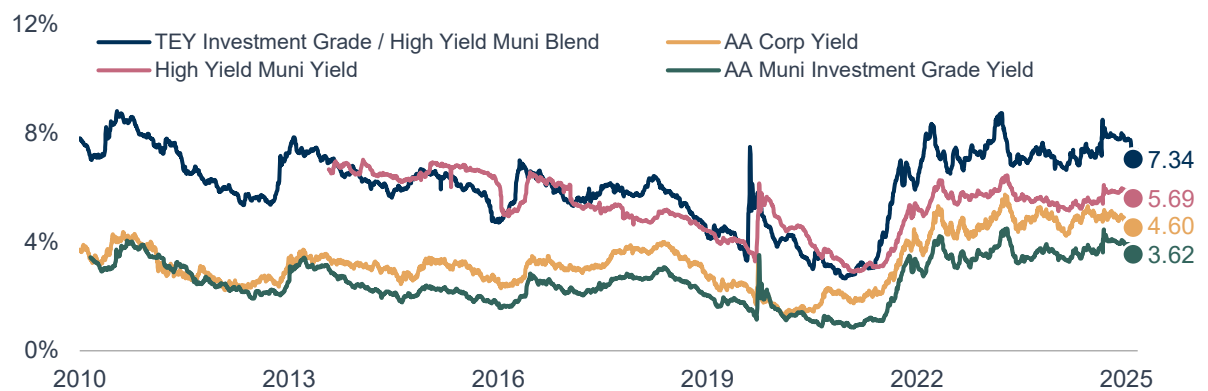
With a substantial amount of capital still parked in cash and cash equivalents,² questions around investment alternatives continue to surface frequently in our conversations. The money market landscape has offered a warm and comfortable refuge in recent years, and we understand the hesitation many investors feel when considering a shift toward longer duration assets.

However, we would challenge that caution by highlighting the inherent risks of remaining in instruments that reset frequently during this active phase of Federal Reserve policy. The longer investors delay making allocation decisions, the greater the reinvestment risk they may face.

In previous weekly notes, we've explored opportunities at both the short and long ends of the yield curve, emphasizing not just options but also value. This week, we turn our attention to the intermediate segment of the curve and, more importantly, underscore the advantages of a diversified approach to credit allocation.

2. <https://fred.stlouisfed.org/series/BOGZ1FL193020005Q>

FIGURE 2: INVESTMENT GRADE/HIGH YIELD BLEND YIELDS STAND OUT³



3. Source: Bloomberg.

When it comes to true high yield in the municipal market, investor approaches span a wide spectrum—from those seeking the best relative value to those prioritizing maximum income through elevated coupons. While these strategies occasionally align, they often diverge significantly.

One approach that may offer a compelling balance of yield and moderate duration is a blended allocation across investment grade and high yield municipals, such as the Bloomberg 65% IG / 35% HY Municipal Index. On a tax-adjusted basis, this blend delivers a taxable-equivalent yield (TEY) of 7.37%, which is 122 basis points higher than the Bloomberg Municipal Bond Index, while maintaining a similar duration of approximately 6.5 years.

At first glance, this may appear less attractive than the Bloomberg High Yield Municipal Index's TEY of 9.64%. However, that comparison overlooks a nearly four-year duration gap between the two. When accounting for the curve slope of roughly 50 basis points between 6 and 10 years, the additional credit exposure only nets about 177 basis points in incremental yield. This places investors in a segment of the curve that may be vulnerable to further steepening as the Federal Reserve continues its easing cycle.

Questions from the Field

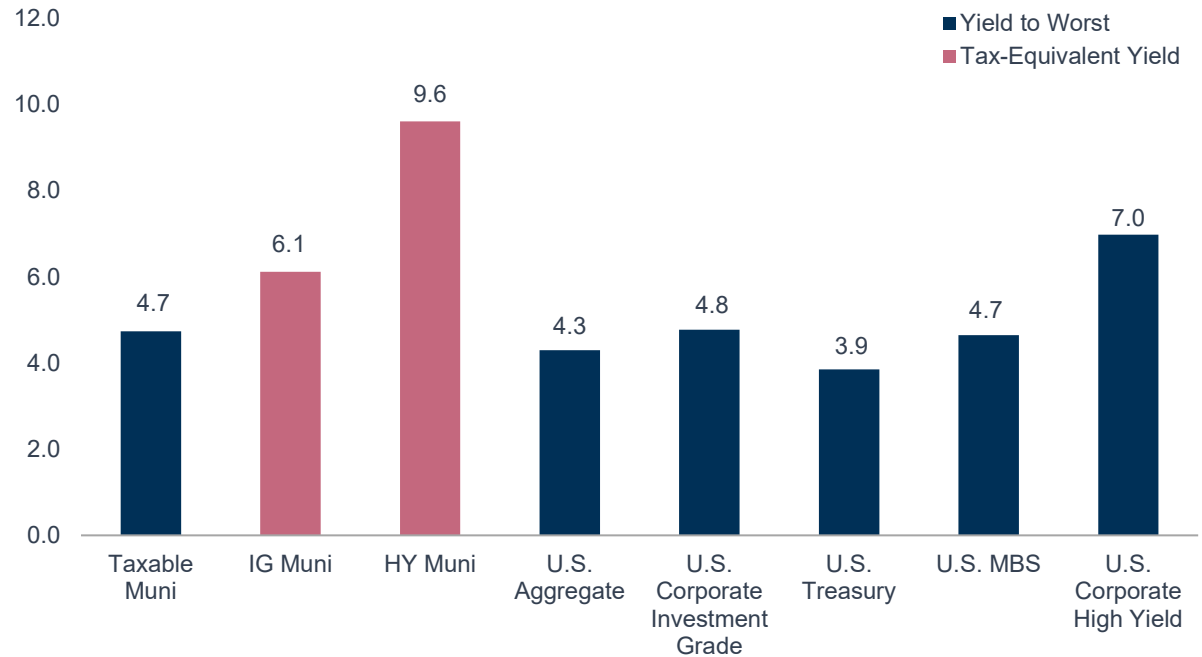
Q. With increased chatter about a slowing economy, how did municipals fare during the Great Financial Crisis?

Municipal bonds, long viewed as low-risk due to their tax-exempt status and stable revenue streams, faced notable stress during the Global Financial Crisis (2007–2009). Market volatility, liquidity disruptions, and downgrades of bond insurers challenged their perceived safety. Today, however, insurers' broader diversification beyond municipal exposure helps mitigate some of that risk.

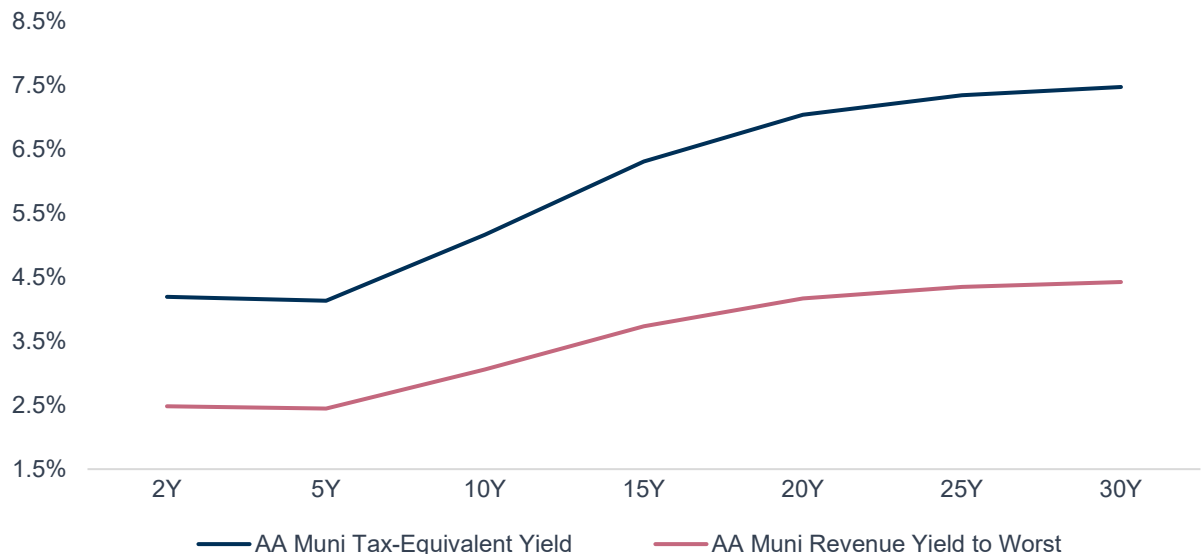
Despite heightened volatility during the GFC, defaults remained remarkably low—just **0.03% annually**, according to Moody's—with most occurring in speculative or unrated sectors. This underscores the importance of disciplined credit selection, especially as we potentially enter a slower economic cycle.

Asset Class Comparison 2008	Key Takeaways
S&P 500 ↓ ~37%	Resilience Munis showed relative strength, especially high-quality GO bonds.
High Yield Corporates ↓ ~26%	Challenges Liquidity issues and insurer downgrades hurt performance.
High Quality Munis ↓ ~2.5%	Opportunities Investors who bought during the dip benefited from strong recovery.
	Lessons Credit quality, diversification, and avoiding leverage are critical in crises.

INDEX YIELDS (in %)⁴



AA MUNI TAX-EQUIVALENT YIELD CURVE⁵



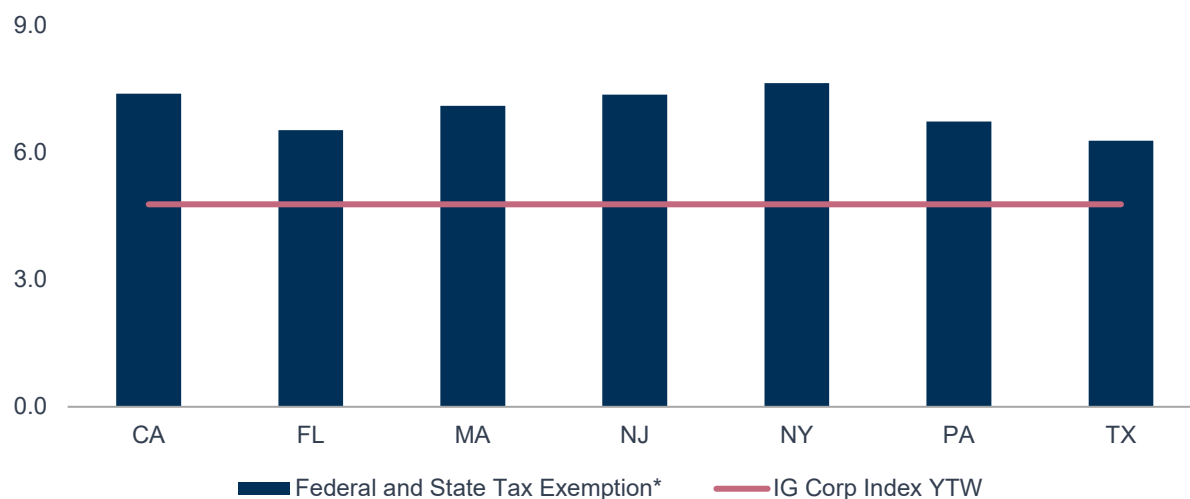
Data as of 10/09/2025.

4. Source: Bloomberg. Using 40.8% federal tax rate, including 3.8% Net Investment Income Tax. Taxable Muni: Bloomberg Taxable Municipal Bond Index; IG Muni: Bloomberg Taxable Municipal Bond Index; HY Muni: Bloomberg High Yield Municipal Bond Index; U.S. Aggregate: Bloomberg U.S. Aggregate Bond Index; U.S. Corporate Investment Grade: Bloomberg U.S. Corporate Investment Grade Index; U.S. Treasury: Bloomberg U.S. Treasury Index; U.S. MBS: Bloomberg U.S. Mortgage-Backed Securities Index; U.S. Corporate High Yield: Bloomberg U.S. Corporate High Yield Index.

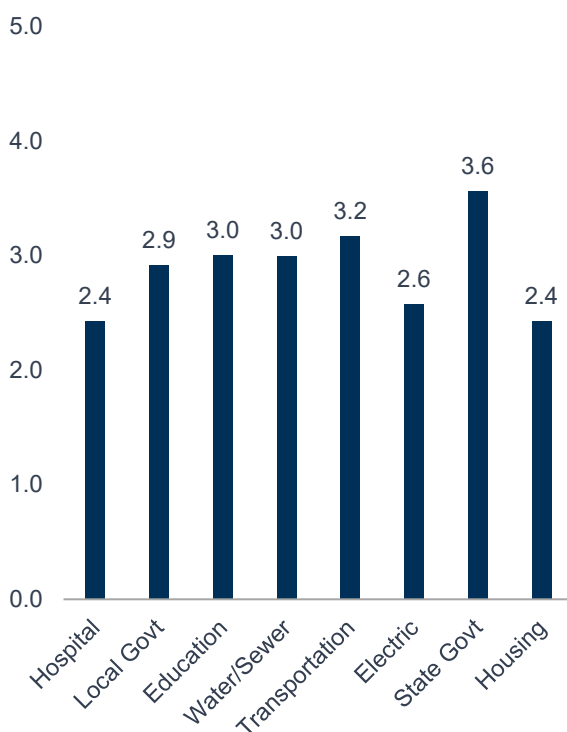
5. Source: Bloomberg. Using 40.8% federal tax rate, including 3.8% Net Investment Income Tax.

Past performance is no guarantee of future results, which will vary. It is not possible to invest directly in an index.

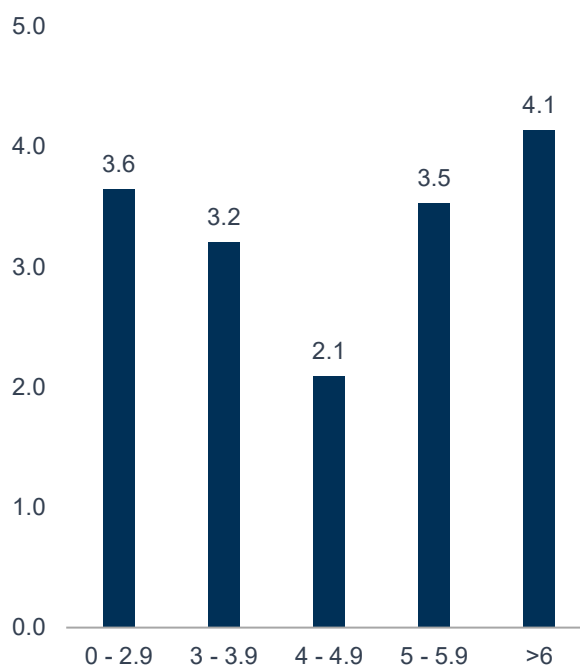
IN-STATE MUNI TAX-EQUIVALENT YTW (in %)⁶



YTD TOTAL RETURNS BY SECTOR (in %)⁷



YTD TOTAL RETURNS BY COUPON (in %)⁸



Data as of 10/09/2025.

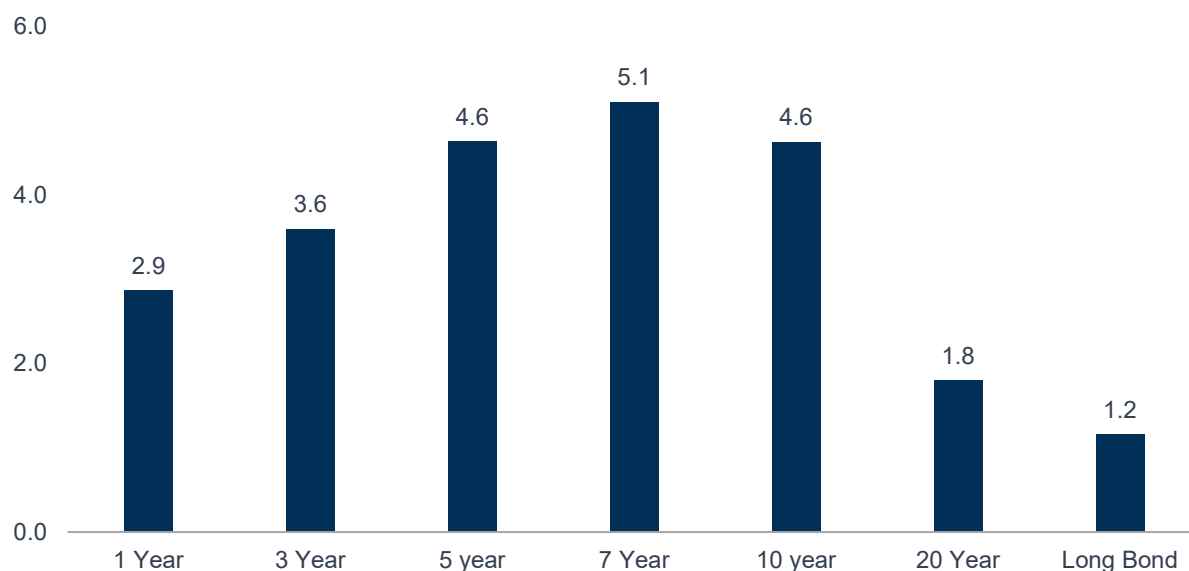
6. Source: Bloomberg. *Using 40.8% federal tax rate, including 3.8% Net Investment Income Tax. Using respective maximum state income tax rate.

7. Source: Bloomberg.

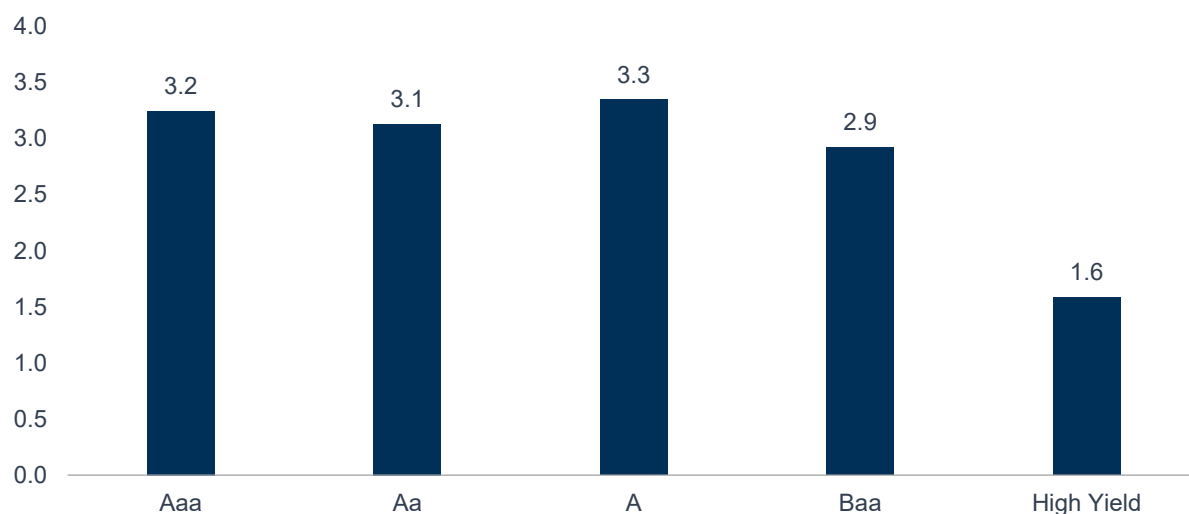
8. Source: Bloomberg.

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YTD TOTAL RETURNS BY MATURITY (in %)⁹



YTD TOTAL RETURNS BY RATING CATEGORY (in %)¹⁰



Data as of 10/09/2025.

9. Source: Bloomberg.

10. Source: Bloomberg.

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BLOOMBERG MUNICIPAL YIELD-TO-WORST¹¹ (YTW)



MUNI YIELDS

Tenor	10/03/2025	10/10/2025	Change (+/-)
Bloomberg AAA Muni Key Rate Yields¹²			
2-year	2.27%	2.32%	+0.05%
5-year	2.30%	2.29%	-0.01%
10-year	2.90%	2.85%	-0.05%
30-year	4.27%	4.22%	-0.04%
U.S. Treasury Key Rate Yields¹²			
2-year	3.58%	3.52%	-0.06%
5-year	3.72%	3.65%	-0.07%
10-year	4.13%	4.05%	-0.08%
30-year	4.71%	4.63%	-0.08%
U.S. Treasury & AAA Muni Curve Slopes¹³			
	2s10s	10s30s	2s30s
U.S. Treasury Curve Slope	+53 bps	+58 bps	+111 bps
AAA Muni Curve Slope	+53 bps	+137 bps	+190 bps

Data as of 10/10/2025.

11. Source: Bloomberg. "Post GIFC Average" measures the period from 01/01/2010–10/10/2025.

12. Source: Bloomberg.

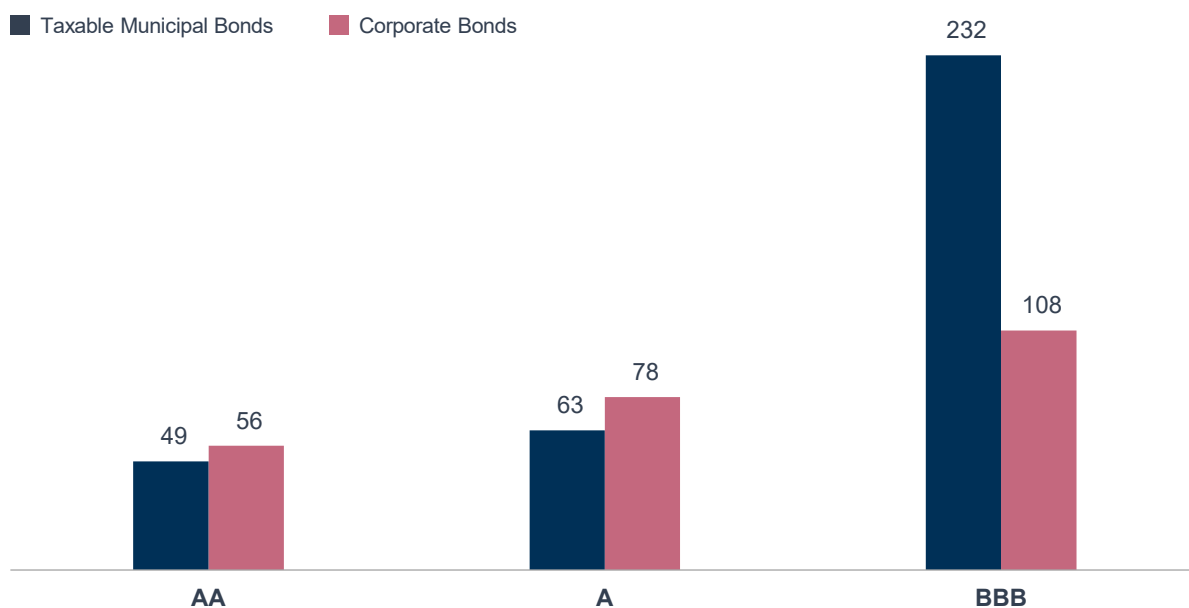
13. Source: Bloomberg. 2s10s—is spread between 10yr and 2yr yield; 10s30s—refers to spread between 30yr and 10yr yield; 2s30s—refers to spread between 30yr and 2yr yield.

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BLOOMBERG MUNICIPAL HIGH YIELD | AAA YIELD DIFFERENTIAL¹⁴



TAXABLE MUNICIPAL AND CORPORATE CREDIT SPREADS¹⁵

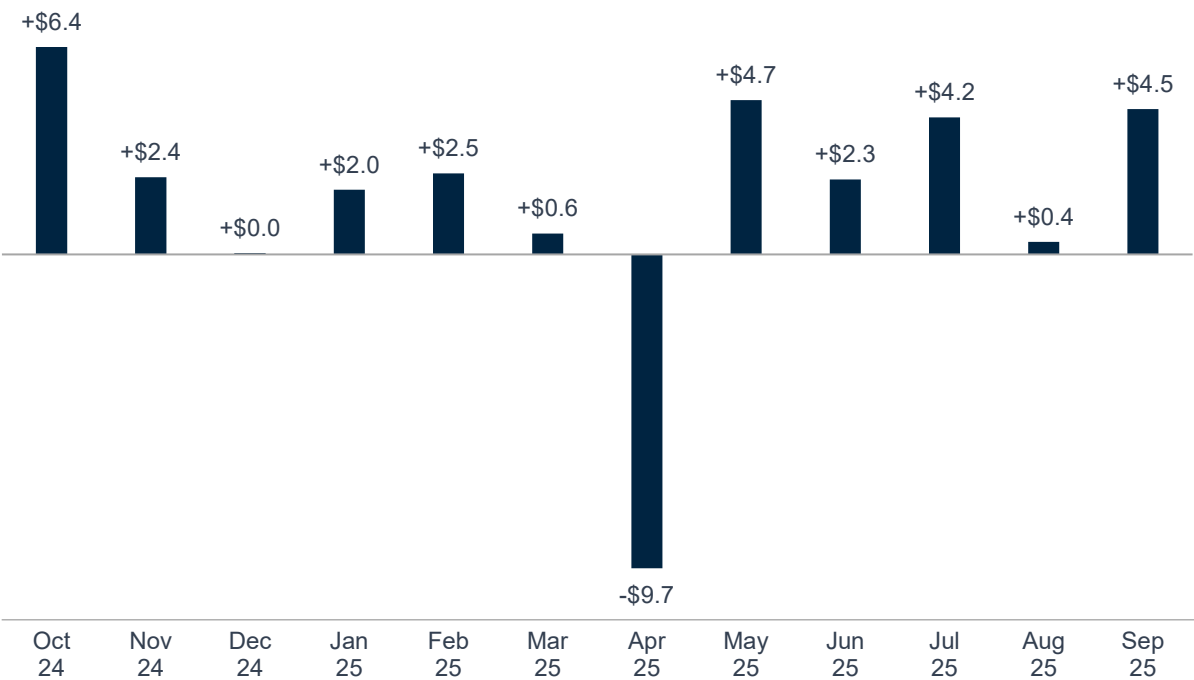


14. Data as of 10/10/2025. Source: Bloomberg.

15. Data as of 10/10/2025. Source: Bloomberg. The spread, better known as the option-adjusted spread (OAS) is the measurement of the yield of a fixed income security over that of a risk-free rate of return, which is adjusted to take into account an embedded option.

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LONG TERM FUND FLOWS¹⁶ (USD BILLION)



Data as of 10/10/2025.

16. Source: Bloomberg.

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DEFINITION OF TERMS

Option-Adjusted Spread

The option-adjusted spread (OAS) measures the spread between a bond's rate and the risk-free rate, while adjusting for any embedded options like callables or mortgage-backed securities.

Standard Deviation

Standard deviation is a statistical measurement that looks at how far discrete points in a dataset are dispersed from the mean of that set. It is calculated as the square root of the variance.

Tax Equivalent Yield

The tax-equivalent yield is the return a taxable bond needs to equal the yield on a comparable tax-exempt municipal bond. Investors use this calculation to compare the returns between a tax-free investment and a taxable alternative.

Tax Equivalent Yield to Worst

Tax Equivalent YTW is calculated by dividing the tax-exempt yield by one minus the marginal income tax. This is used to compare YTW on a tax-exempt investment to a taxable investment.

Volatility

Volatility is a measurement of how varied the returns of a given security or market index are over time. It is often measured from either the standard deviation or variance between those returns. In most cases, the higher the volatility, the riskier the security.

Yield to Worst

Yield to worst is a measure of the lowest possible yield that can be received on a bond that fully operates within the terms of its contract. It is a type of yield that is referenced when a bond has provisions that would allow the issuer to close it out before it matures. YTW helps investors manage risks and ensure that specific income requirements will still be met even in the worst scenarios.

INDEX DESCRIPTIONS

Bloomberg U.S. Taxable Municipal Bond Index is a rules-based, market-value-weighted index engineered for the long-term taxable bond market. To be included in the index, bonds must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies if all three rate the bond: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment grade. They must have an outstanding par value of at least \$7 million and be issued as part of a transaction of at least \$75 million. The bonds must be fixed rate and must be at least one year from their maturity date. Remarketed issues (unless converted to fixed rate), bonds with floating rates, and derivatives, are excluded from the benchmark.

Bloomberg Municipal AMT index refers to a specific Bloomberg municipal bond index that includes bonds subject to the Alternative Minimum Tax (AMT). Unlike most municipal bond indices, which exclude AMT-subject securities, these indices contain bonds that typically offer higher yields to individuals who are subject to the AMT.

Muni IG ex. AMT and ex Territories Index is the Bloomberg Municipal Bond Index excluding AMT and U.S. Territory exposure.

Bloomberg Municipal Bond Index A rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. To be included in the index, bonds must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least \$7 million and be issued as part of a transaction of at least \$75 million. The bonds must be fixed rate, have a date after December 31, 1990, and must be at least one year from their maturity date. Remarketed issues, taxable municipal bonds, bonds with floating rates, and derivatives, are excluded from the benchmark. The index has four main sectors: general obligation bonds, revenue bonds, insured bonds (including all insured bonds with a Aaa/AAA rating), and pre-refunded bonds. Most of the index has historical data to January 1980. In addition, sub-indices have been created based on maturity, state, sector, quality, and revenue source, with inception dates later than January 1980.

INDEX DESCRIPTIONS (continued)

Subset of Bloomberg Municipal Bond Index

1 Year: This index is the 1 Year (1-2) component of the Municipal Bond index.

3 Year: This index is the 3 Year (2-4) component of the Bloomberg Municipal Bond Index.

5 Year: This index is the 5 Year (4-6) component of the Municipal Bond index.

7 Year: This index is the 7 Year (6-8) component of the Municipal Bond index.

10 Year: This index is the 10 Year (8-12) component of the Municipal Bond index.

15 Year: This index is the 15 Year (12-17) component of the Municipal Bond index.

20 Year: This index is the 20 Year (17-22) component of the Municipal Bond index.

Long Bond: This index is the Long Bond (22+) component of the Municipal Bond index.

Bloomberg 5-Year Muni Index is a capitalization weighted bond index created by Bloomberg intended to be representative of major municipal bonds of all quality ratings with an average maturity of approximately five years.

Bloomberg Municipal 1-10 Year Blend 1-12 Year Index measures the performance of short and intermediate components of the Municipal Bond Index — an unmanaged, market value-weighted index which covers the U.S. investment grade, tax-exempt bond market.

Bloomberg Municipal Long Bond 22+ Index (often referred to as the Bloomberg Long-Term Municipal Bond Index) tracks the performance of long-term, tax-exempt U.S. municipal bonds with maturities of 22 years or longer. This index serves as a benchmark for high-quality municipal debt and covers various sectors, including general obligation, revenue, insured, and pre-refunded bonds.

Bloomberg High Yield Municipal Bond Index is a flagship measure of the U.S. municipal tax-exempt non-investment grade bond market. Included in the index are securities from all 50 U.S. States and four other qualifying regions (Washington DC, Puerto Rico, Guam, and the Virgin Islands). The index includes state and local general obligation bonds and revenue bonds. All bonds in the Municipal High Yield Bond Index are tax exempt and hence are not eligible for other indices that include taxable high yield bonds, such as the U.S. High Yield Index and EM USD Aggregate Index.

Bloomberg U.S. Aggregate Bond Index measures the performance of investment grade, U.S. dollar-denominated, fixed rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS, and CMBS. It rolls up into other flagship indices, such as the multi-currency Global Aggregate Index and the U.S. Universal Index, which includes high yield and emerging markets debt.

Bloomberg U.S. Corporate Bond Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by U.S. and non-US industrial, utility, and financial issuers. The index is a component of the U.S. Credit and U.S. Aggregate Indices, and provided the necessary inclusion rules are met, U.S. Corporate Index securities also contribute to the multi-currency Global Aggregate Index. The index includes securities with remaining maturity of at least one year.

Bloomberg U.S. Treasury Index measures the performance of public obligations of the U.S. Treasury, including securities that roll up to the U.S. Aggregate, U.S. Universal, and Global Aggregate Indices.

Bloomberg U.S. Mortgage-Backed Securities Index is formed by grouping the universe of individual TBA-deliverable MBS pools into pool cohorts and then applying the index inclusion rules at the cohort level. Each cohort is a representation of its mapped individual pools and contributes their total amount outstanding to the U.S. MBS Index.

Bloomberg U.S. Corporate High Yield Index measures the USD-denominated, high yield, fixed-rate corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below.

Bloomberg Global Aggregate Bond Index The Bloomberg Global Aggregate Index is a flagship measure of global investment grade debt from twenty-seven local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

Bloomberg Securitized Bond Index The Bloomberg U.S. Securitized: MBS, ABS, and CMBS Index tracks all USD-denominated, investment grade, securitized issues within the "Parent Index". MBS must have a weighted average maturity of at least one year. CMBS and ABS must have a remaining average life of at least one year.

Bloomberg U.S. Municipal Bond Index Total Return Index Value Unhedged The Bloomberg U.S. Municipal Index covers the USD-denominated long-term tax-exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds and pre-refunded bonds

Bloomberg U.S. Aggregate Total Return Value Unhedged The Bloomberg U.S. Aggregate Total Return Value Unhedged Index (LBUSTRUU:IND) is a benchmark that measures the performance of the U.S. investment-grade, fixed-rate, taxable bond market, excluding any currency hedging. It tracks a broad universe of U.S. dollar-denominated securities, including U.S. Treasuries, government-related debt, corporate bonds, mortgage-backed securities (MBS), and asset-backed securities (ABS).

Bloomberg U.S. Treasury Total Return Unhedged The Bloomberg U.S. Treasury Index measures U.S. dollar-denominated, fixed-rate, nominal debt issued by the U.S. Treasury.

