

# Technical Curve Dynamics Tilt Advantage to Team Muni

## KEY TAKEAWAYS

- Rate rise continues, with mixed results
- Curve dynamics create opportunities
- Issuance not muni boogey man

## Relative Performance

### MUNI VS. TREASURY RELATIVE PERFORMANCE

Rates moved sharply higher last week as markets repriced growth and inflation expectations. AAA BVAL yields rose 5 bps in 2s, 11 bps in 5s, 16 bps in 10s, and 12 bps in 30s. Treasuries sold off more aggressively at the front end, with yields rising 16 bps in 2s, roughly 13 bps in 5s and 10s, and over 14 bps in 30s.<sup>1</sup>

The move produced a mixed relative outcome across the curve. The 2-year muni-to-Treasury ratio richened meaningfully, declining just over a point to 59.23%, as front-end Treasuries led the selloff. However, the belly of the curve cheapened materially. The 5-year ratio rose 0.7 points to 61.01%, while the 10-year ratio widened more than 2 points to 66.34%, marking the most notable relative shift of the week. The 30-year ratio edged higher to 89.57%<sup>1</sup>.

The dynamic reflects a familiar pattern: when macro-driven volatility pushes rates higher, Treasuries often move first and fastest at the front end, while municipals adjust more gradually — particularly in intermediate maturities where technicals and fund flows play a larger role.

After several weeks of ratio compression earlier in the quarter, the recent backup in the 5–10 year range begins to reopen relative value conversations at earlier points along the yield curve. At 66% in 10-years, ratios are now solidly off of the all time tights of 53% back in February of 2021.

Bottom line: rates backed up across the board, Treasuries led the move at the short end, and municipals cheapened in the belly. We believe the rise in absolute rates for municipals provides another bite at the apple for buyers who were eyeing better entry points.

## Technicals

Municipal curve dynamics have recently diverged from Treasuries. While the UST 2s10s slope has flattened modestly, the municipal 2s10s slope has

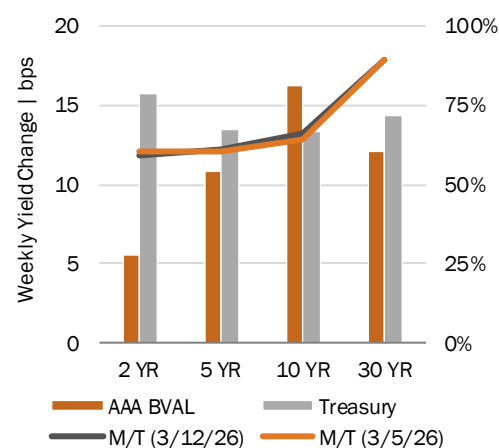
FIGURE 1: INDEX PERFORMANCE

	MTD	YTD	2025
Muni Bond 5-Year	-0.85%	0.95%	5.03%
Muni Bond 10-Year	-1.77%	0.55%	5.92%
Muni Bond 15-Year	-1.87%	0.74%	5.31%
Muni Long Bond	-1.84%	0.30%	1.95%
Muni Managed Money	-1.75%	0.55%	3.94%

Data as of March 12, 2026.

Source: Bloomberg

FIGURE 2: MUNIS OUTPERFORM



Data as of March 12, 2026. Spot Muni, Spot AAA rates

Source: Bloomberg

M/T: Municipal/Treasury Yield Ratio - Bloomberg

Municipal Bond Index

yield / Bloomberg US Treasury Index yield.

Source: Bloomberg

1. Bloomberg

continued to steepen, pushing the relationship between the two curves back toward the upper end of its historical range.

The last time the municipal curve steepened materially relative to Treasuries was in 2025, but the move represented more than a simple steepening. It marked a broader reconfiguration of the municipal yield curve, which had spent several years prior deeply inverted and unusually flat following the aggressive rate hiking cycle. As the curve began to normalize, the adjustment produced short-term price pressure that led some investors to step away from the asset class.

Those exits proved costly. Investors who reduced exposure in mid-2025 ultimately missed nearly 500bps of total return during the second half of the year as muni yields retraced and demand returned.

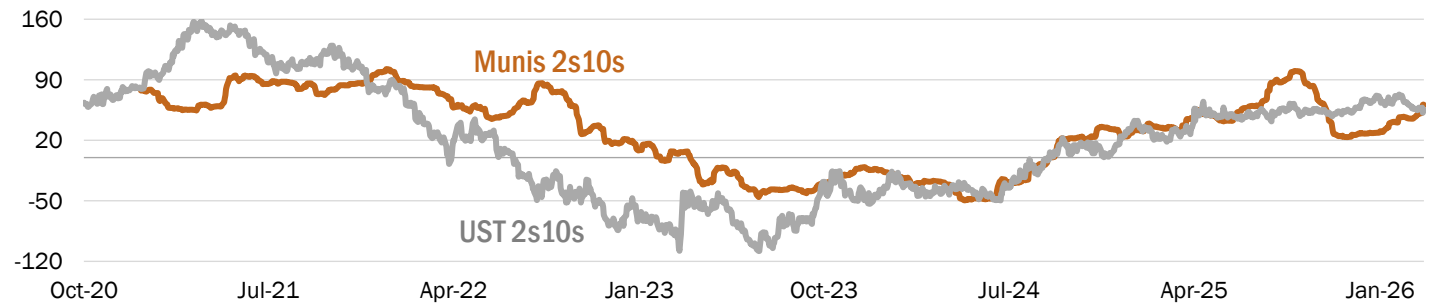
Today's steepening could potentially give investors a second bite at the apple to lock in longer-term tax-exempt rates. A 30-

year AAA municipal bond currently yields 4.31%, up 18bps from the start of the year, leaving absolute yields across the long end of the curve near the most attractive levels of the cycle.

Importantly, investors do not need to move all the way to the long end to capture most of the benefit. Due to the convexity and structural characteristics of the municipal market, investors can currently capture roughly 93% of the 30-year AAA yield in the 20-year portion of the curve, allowing portfolios to add income while avoiding the full duration exposure of the long bond.

For investors willing to extend, in our view the current curve structure offers an attractive opportunity to add long-dated tax-exempt exposure before the curve begins to normalize again.

FIGURE 3: MUNI AND UST CURVE SLOPES | BPS



Data as of March 13, 2026  
Source: Bloomberg

### Questions from the Field

**Q** Municipal issuance has picked up over the past year. Should investors be concerned that increased supply could pressure muni returns?

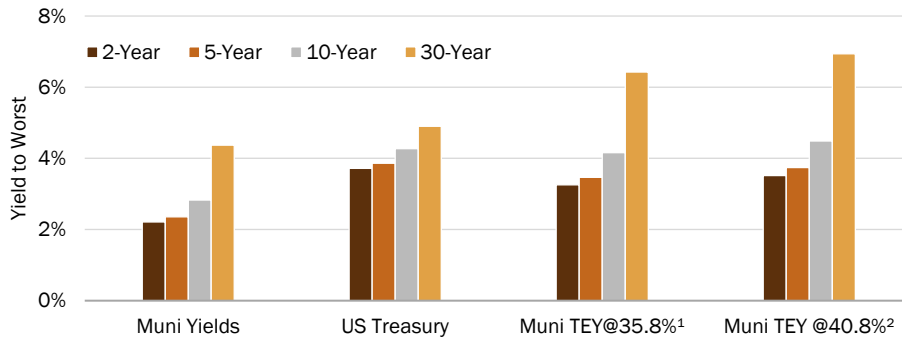
**A** Supply is an important technical factor in the municipal market, but higher issuance does not necessarily translate into weaker long-term performance. Periods of elevated supply often create temporary price concessions as new bonds are brought to market, particularly in longer maturities where deals tend to be concentrated. An often overlooked fact is that a step up in supply, also provides the municipal asset class with much appreciated price discovery, as well.

Historically, those concessions have frequently provided opportunities for investors rather than signaling deterioration in the asset class. New issuance often comes with incremental yield relative to comparable bonds in the secondary market, allowing investors to add exposure at more attractive entry points.

In addition, demand for tax-exempt income remains structurally strong, particularly among high-income investors and separately managed account platforms. As a result, while heavier issuance can create short-term volatility, it has often served as a catalyst for reinvestment opportunities rather than a persistent headwind for the municipal market.



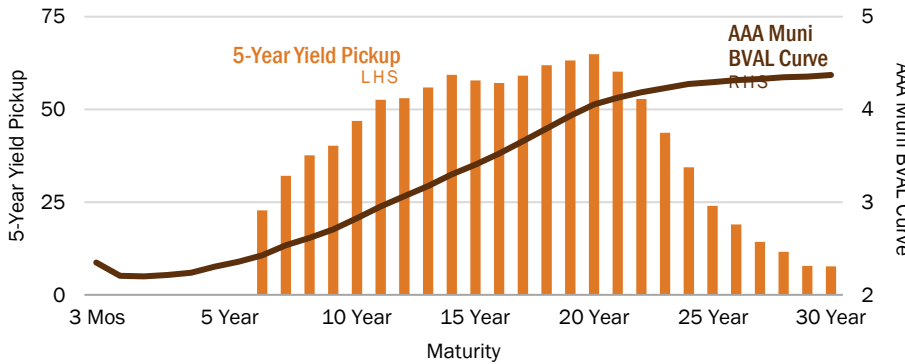
TAX-ADJUSTED YIELDS OF MUNICIPAL BOND INDEX VS US TREASURY INDEX



On a tax-adjusted basis munis handily lead across tenors

1. Tax Equivalent Yield is using 32% federal tax rate, including 3.8% Net Investment Income Tax.  
 2. Tax Equivalent Yield is using 37% federal tax rate, including 3.8% Net Investment Income Tax.  
 Data as of Data as of March 13, 2026.  
 Source: Bloomberg

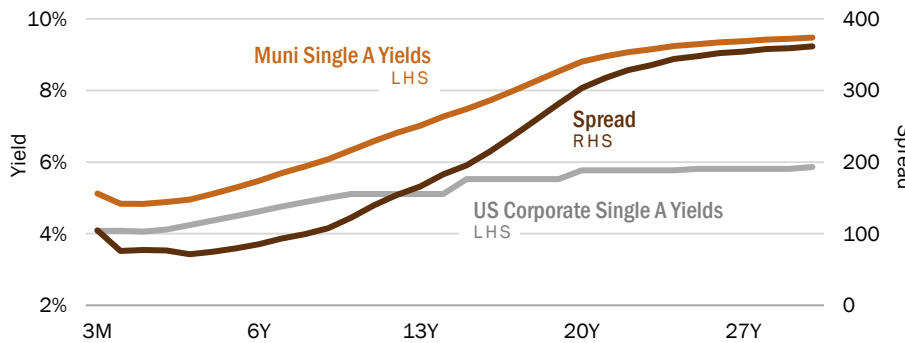
YIELD CURVE STEEPNESS



Our relative value lens focus on the area of the curve where steepness benefits returns

Data as of Data as of March 13, 2026.  
 Source: Bloomberg

MUNI EXCEEDS CORPORATE SPREADS



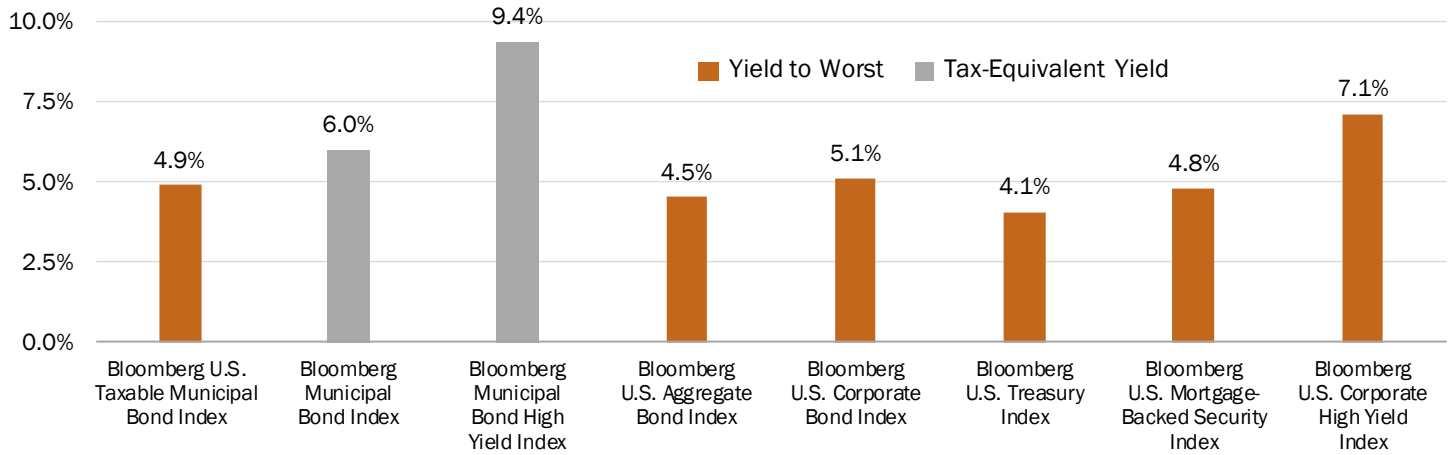
Tax equivalent munis continue to exceed corporate spread/yields

Data as of Data as of March 13, 2026.  
 Muni Single A Yields: Bloomberg Municipal Bond Index; US Corporate Single A Yields: Bloomberg Corporate Bond Index  
 Source: Bloomberg

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INDEX YIELDS

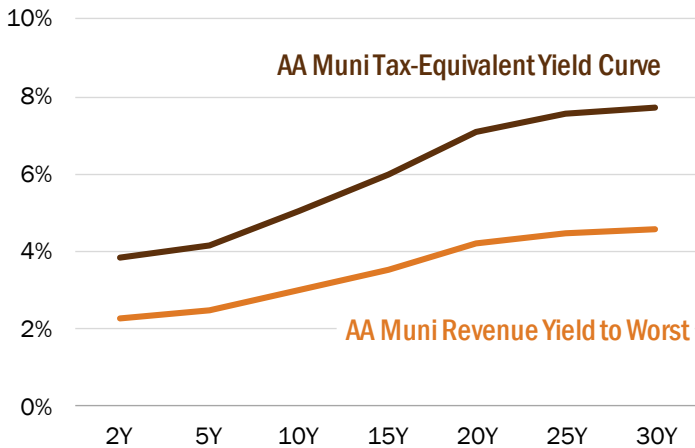


Data as of March 13, 2026

1. Using 40.8% federal tax rate, including 3.8% Net Investment Income Tax.

Source: Bloomberg

AA MUNI TAX-EQUIVALENT YIELD CURVE

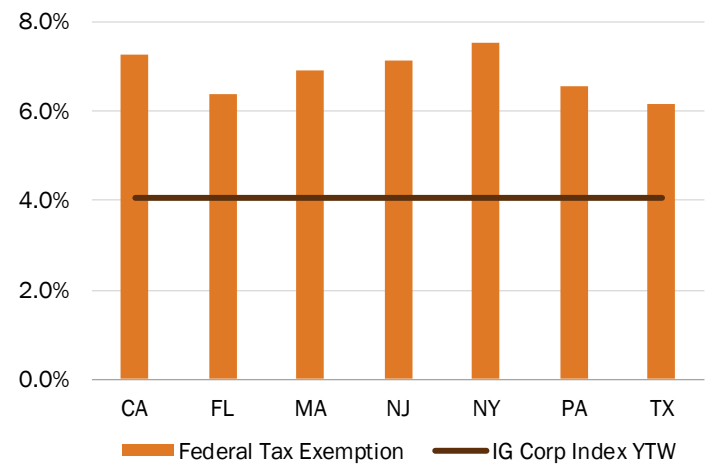


Data as of March 13, 2026

Using 40.8% federal tax rate, including 3.8% Net Investment Income Tax.

Source: Bloomberg

IN-STATE MUNI TAX-EQUIVALENT YTW



Data as of March 13, 2026

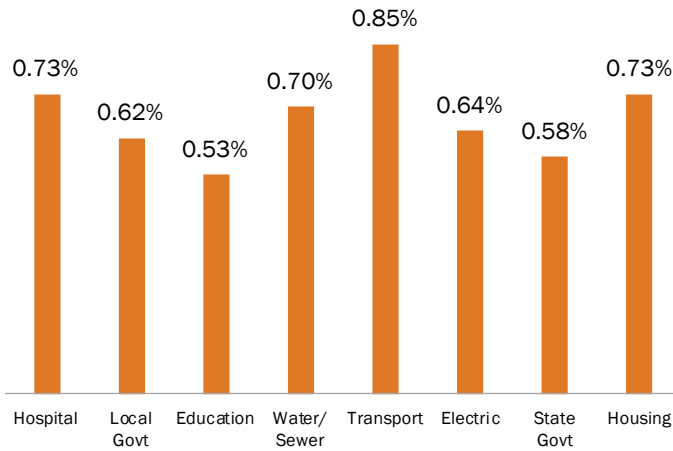
Using 40.8% federal tax rate, including 3.8% Net Investment Income Tax.

Source: Bloomberg

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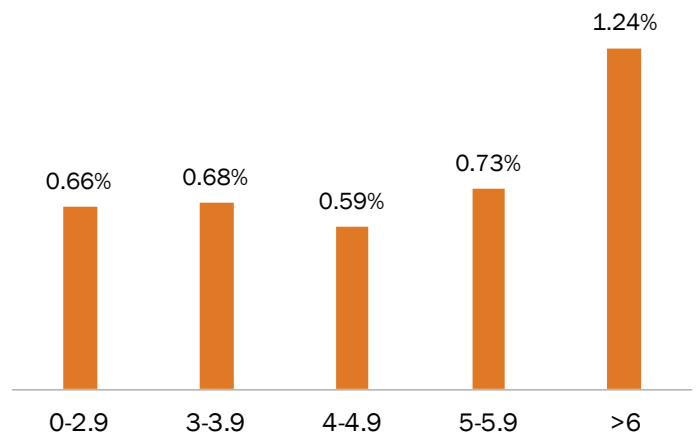


YTD TOTAL RETURNS BY SECTOR



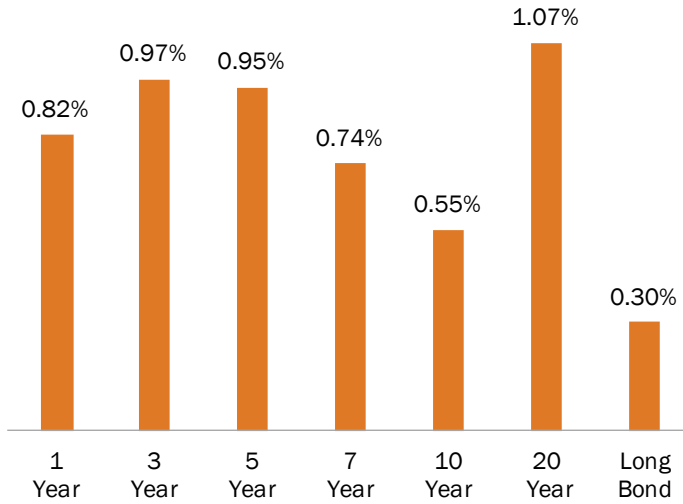
Data as of March 13, 2026  
Source: Bloomberg

YTD TOTAL RETURNS BY COUPON



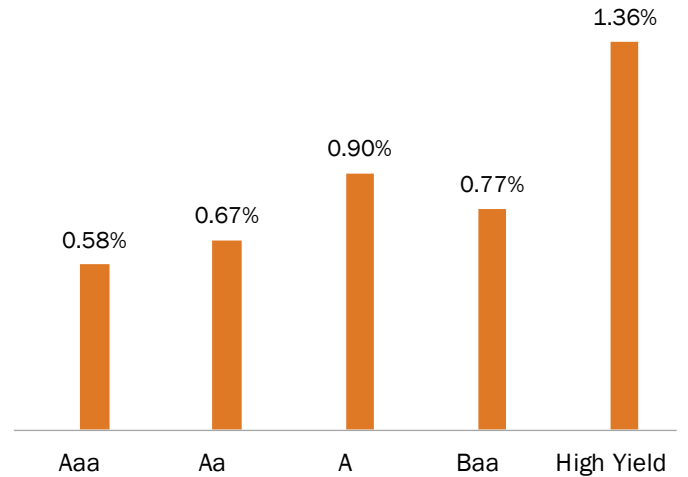
Data as of March 13, 2026  
Source: Bloomberg

YTD TOTAL RETURNS BY MATURITY



Data as of March 13, 2026  
Source: Bloomberg

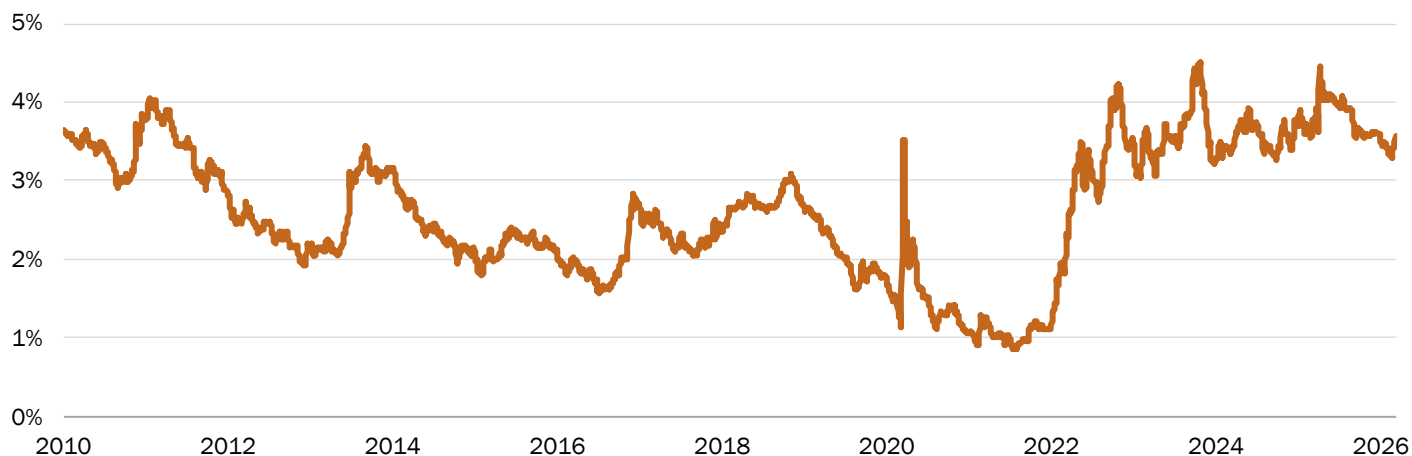
YTD TOTAL RETURNS BY RATING CATEGORY



Data as of March 13, 2026  
Source: Bloomberg



**BLOOMBERG MUNICIPAL YIELD-TO-WORST**



Data as of March 12, 2026  
 "Post GFC Average" measures the period from 1/1/2010 - 3/12/2025  
 Source: Bloomberg

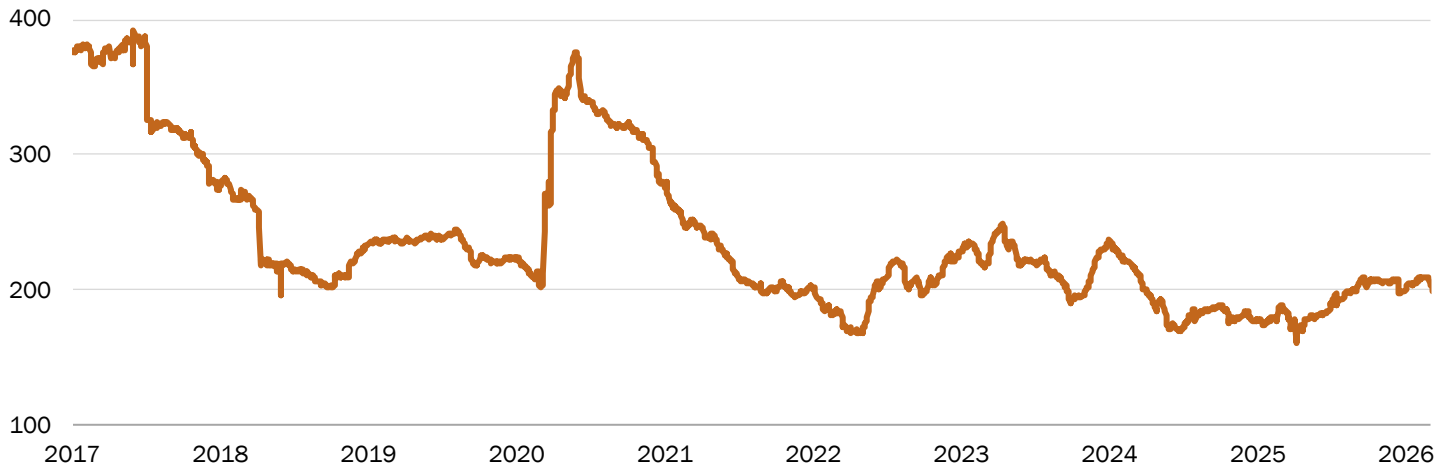
**MUNI YIELDS**

Tenor	3/12/2026	3/5/2026	Change (+/-)
<b>BLOOMBERG AAA MUNI KEY RATE YIELDS</b>			
2 YEAR	2.21%	2.16%	0.06%
5 YEAR	2.36%	2.25%	0.11%
10 YEAR	2.83%	2.66%	0.17%
30 YEAR	4.37%	4.24%	0.13%
<b>US TREASURY RATE YIELDS</b>			
2 YEAR	3.76%	3.57%	0.19%
5 YEAR	3.88%	3.72%	0.16%
10 YEAR	4.27%	4.13%	0.14%
30 YEAR	4.88%	4.74%	0.14%
<b>US TREASURY &amp; AAA MUNI CURVE SLOPES<sup>1</sup></b>			
	<b>2s10s</b>	<b>10s30s</b>	<b>2s30s</b>
US TREASURY CURVE SLOPE	+ 51 bps	+ 61 bps	+ 112 bps
AAA MUNI CURVE SLOPE	+ 61 bps	+ 154 bps	+ 216 bps

Data as of March 12, 2026  
 1. 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  
 Source: Bloomberg

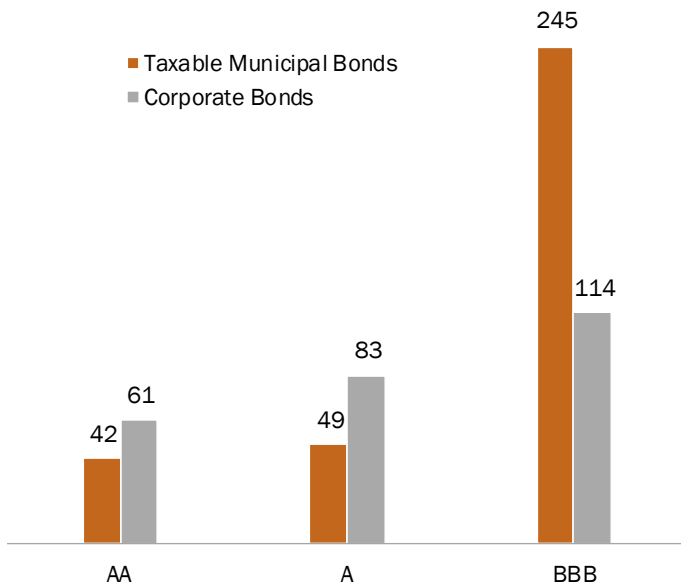


BLOOMBERG MUNICIPAL HIGH YIELD | AAA YIELD DIFFERENTIAL



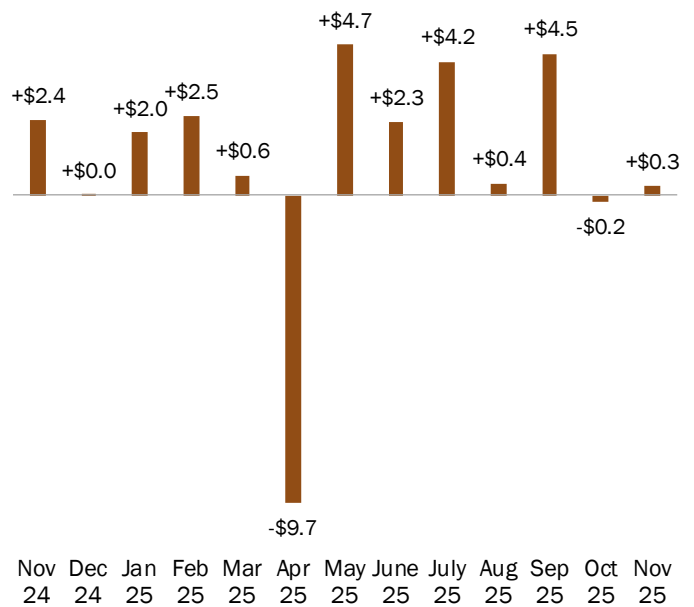
Data as of March 12, 2026  
Source: Bloomberg

TAXABLE MUNICIPAL AND CORPORATE CREDIT SPREADS



Data as of March 12, 2026  
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.  
Source: Bloomberg

LONG TERM FUND FLOWS | USD \$BN



Data as of March 12, 2026  
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.

### Additional Yield Definition

BVAL AA, A, BBB and BB Yields is calculated by Bloomberg and is representative of the average 2YR spot rate on respective Bloomberg Yield curves of corporate credits with the respective average credit rating that are valued by Bloomberg’s valuation service.

## INDEX DESCRIPTIONS

### Bloomberg U.S. Taxable Municipal Bond Index

The 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

The 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 AMT ex Territories Index

The Muni IG ex. AMT and ex Territories Index is the Bloomberg Municipal Bond Index excluding AMT and US. 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-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.

### Bloomberg 5-Year Muni Index

The Bloomberg 5 Year Municipal Bond 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

The 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

The 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 Municipal Bond High Yield Index

The Bloomberg Municipal Bond: High Yield Index is a flagship measure of the US municipal tax-exempt non-investment grade bond market. Included in the index are securities from all 50 US 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.



#### **Bloomberg U.S. Aggregate Bond Index**

The 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**

The Bloomberg US Corporate Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by US and non-US industrial, utility, and financial issuers. The index is a component of the US Credit and US Aggregate Indices, and provided the necessary inclusion rules are met, US 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**

The 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 Security Index**

The US MBS 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 US MBS Index.

#### **Bloomberg U.S. Corporate High Yield Index**

The Bloomberg US Corporate High Yield Bond 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 US 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 US Aggregate Total Return Value Unhedged**

The Bloomberg US Aggregate Total Return Value Unhedged Index (LBSTRUU: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 US Treasury Total Return Unhedged**

The Bloomberg US Treasury Index measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury.