



**Joel A. Buursma**, CIPM  
Vice President,  
Senior Software Architect



**Denise Wilson**  
Index Operations Manager

# Municipal Bond Market Performance

February 2022

## Overview

The municipal bond market, as measured by the Standard & Poor's Municipal Bond Investment Grade Index, had a Total Return of -0.493% in February 2022, consisting of the components displayed in Table 1.

February 2022 saw a much more modest total return and net yield curve movement compared to January. In the first half of February, yields continued to climb as they had throughout January. However, after February 15, shorter-term yields plateaued and longer-term yields fell to levels at or near their beginning-of-month levels. Overall, modest net yield curve increases and spread tightening combined to produce another month of negative return.

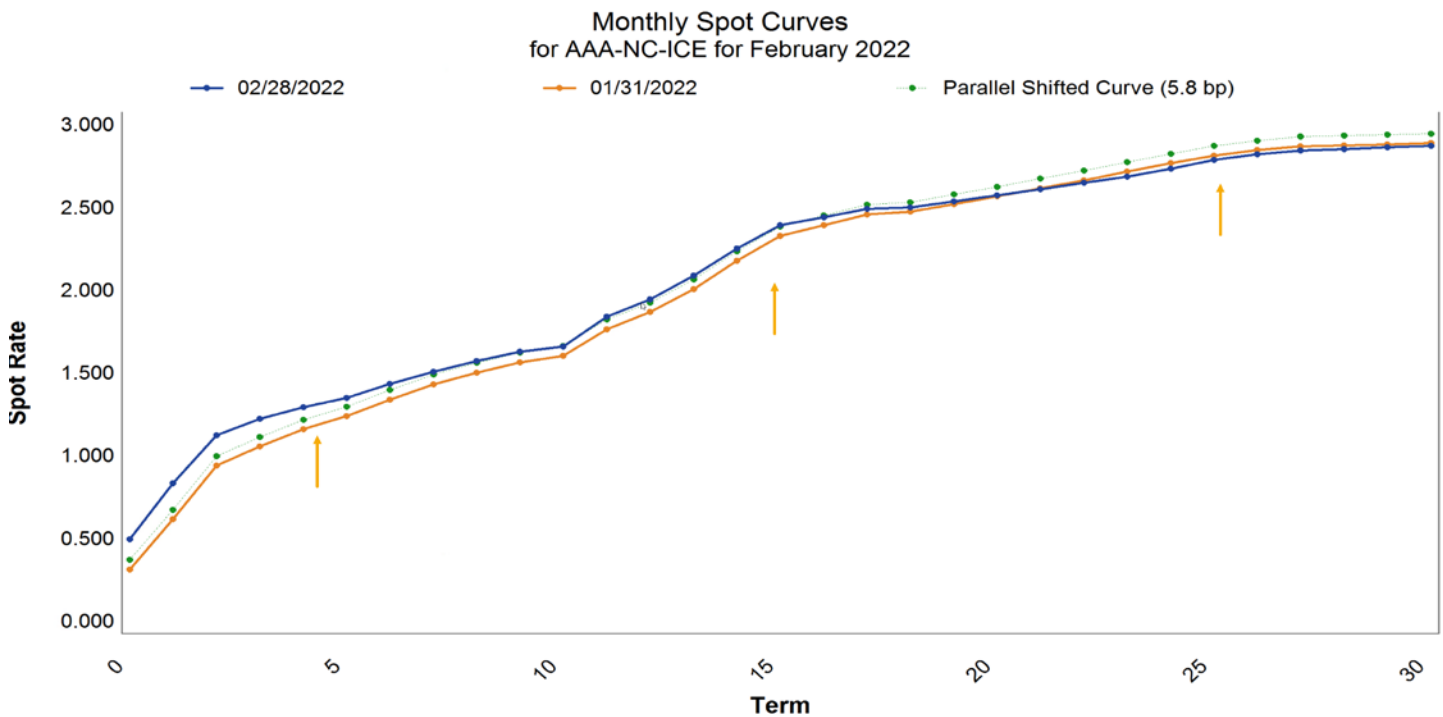
**TABLE 1**

	FEBRUARY	YTD
Total Return	<b>-0.493%</b>	<b>-2.853%</b>
Coupon Return	0.292%	0.600%
Market Amortization Return	-0.171%	-0.397%
Parallel Shift Return	-0.243%	-2.663%
Non-Parallel Shift Return	-0.167%	-0.433%
Sector/Quality Return	-0.199%	1.208%
Residual Price Return	-0.005%	-1.168%

## Interpretation

Figure 1 shows the overall change in the municipal AAA non-callable spot curve for February. While we saw a flattening of the spot curve, it demonstrated a minimal 5.8 bp increase in level (measured at the ten-year point), as depicted in Figure 1.

**FIGURE 1**



The green dotted line depicts the parallel shift implied by the ten-year point's spot curve change.

The Parallel Shift Return of -0.243% is calculated from this curve increase, as shown in Table 2. It contributed close to half of the month's total return.

**TABLE 2**

Change for 10-Year Spot Rate <sup>(a)</sup>	5.76
Total Key Rate Duration <sup>(b)</sup>	4.223
Parallel Shift Return <sup>(-b*a)</sup>	-0.243

The Non-Parallel Shift Return was -0.167%, mostly from additional curve increases in one-to-seven-year term range of the curve. See Table 3 for the full calculations for this term.

	6 Mos	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	20 Yrs	30 Yrs
Non-Parallel Change	15.34	16.05	12.55	11.04	5.45	1.96	0.00	-5.25	-7.42
Key Rate Duration	0.040	0.147	0.299	0.588	0.811	0.839	1.033	0.415	0.052
Non-Parallel Shift Return	-0.006	-0.024	-0.038	-0.065	-0.044	-0.016	0.000	0.022	0.004

Each value in the Non-Parallel Shift Return row is calculated by multiplying together the two cells above it, dividing by 100 and reversing the sign

Sector/Quality Return captures return from changes in average option-adjusted spread (adjusted by duration) for sector/quality groupings. The index's overall Sector/Quality Return was -0.199%.

The sectors exhibiting the largest widening in average option-adjusted spread (weighted by both market value and duration) were Other Utility, Tobacco Settlement, Housing and Transportation. No sectors exhibited any overall spread tightening. Quality-based groupings did not exhibit any strong trends this month.

The sector/quality categories with the biggest negative contributions to Sector/Quality Return, considering both weightings and the groupings' own sector/quality returns, are listed in Table 4. The biggest positive contributors are listed in Table 5. (Note: The A-rated State GO bonds are all New Jersey State GOs.)

	A-rated Transportation	AA-rated Local GO	AAA-rated Local GO	A-rated Other Utility
Change in Duration-Adjusted Average OA Spread <sup>(a)</sup>	8.176	3.898	3.767	118.370
Total Key Rate Duration <sup>(b)</sup>	4.672	4.460	4.468	3.585
Sector/Quality Return <sup>(-b*a)</sup>	-0.382	-0.174	-0.168	-4.243
Market Value Weight <sup>%(c)</sup>	5.546	9.594	8.895	0.345
Contribution to Duration <sup>(b*c)</sup>	0.25910	0.42785	0.39744	0.01236
Contribution to Sector/Quality Return <sup>(-b*c*a)</sup>	-0.02118	-0.01668	-0.01497	-0.01463

**TABLE 5**

	BBB-rated IDR / PCR	A-rated State GO	BBB-rated Prerefunded/ ETM	AAA-rated Insured
Change in Duration-Adjusted Average OA Spread <sup>(a)</sup>	-37.769	-1.835	-3.525	-2.114
Total Key Rate Duration <sup>(b)</sup>	4.032	4.421	1.237	3.142
Sector/Quality Return <sup>(b*a)</sup>	1.523	0.081	0.044	0.066
Market Value Weight <sup>(c)</sup>	0.575	0.232	0.272	0.074
Contribution to Duration <sup>(b*c)</sup>	0.02317	0.01028	0.00337	0.00231
Contribution to Sector/Quality Return <sup>(b*c*a)</sup>	0.00875	0.00019	0.00012	0.00005

Coupon Return was 0.292%, based on the index's average coupon of 4.299%. The average beginning-of-month market yield was 1.575%, resulting in a Market Amortization Return of -0.171%. These two terms sum to a total income effect of 0.121%.

*Note that Coupon Return reflects both interest payments and changes in accrued interest throughout the month. Market Amortization Return is negative because of the large number of premium bonds in the index due to the low yield curve environment. Premium bond prices, absent any change in yield, naturally decline over time to their redemption price. This decline is called market amortization.*

## CONTACT US

All table data and figures in this report were produced using Investortools, Inc.'s **Custom Index Manager** product.

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