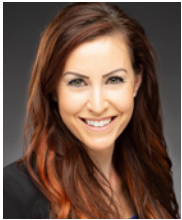




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# Municipal Bond Market Performance

January 2021

## Overview

The municipal bond market, as measured by the Standard & Poor's Municipal Bond Investment Grade Index, had a Total Return of 0.467% in January 2021, consisting of the components displayed in Table 1.

The total return for January was dominated by Sector/Quality and Coupon Returns. The Sector/Quality Return was the second largest this index has posted in the last 12 months, led by lower-rated bonds. The net muni curve movement was very small, with parallel and non-parallel shift returns nearly canceling out the other. This was in contrast to pronounced steepening in the treasury curve.

**TABLE 1**

Total Return	0.467%
Coupon Return	0.318%
Market Amortization Return	-0.240%
Parallel Shift Return	-0.057%
Non-Parallel Shift Return	-0.053%
Sector/Quality Return	0.485%
Residual Price Return	-0.093%

## Interpretation

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 0.485%.

Average option-adjusted spread for quality groupings was much like December. Exhibiting a reach for yield pattern, BBB-rated bonds tightened 34 bp overall and A-rated bonds tightened 16.6 bp overall.

Every sector demonstrated negative overall changes in option adjusted spread. The sectors exhibiting the largest tightening in option-adjusted spread (weighting by both market value and duration) were Transportation, Tobacco, IDR/PCR, and Health Care.

The only sector/quality groupings with negative contribution to Sector/Quality Return were AAA Prere/ETM (-0.00036%) and BBB Prere/ETM (-0.00004%). Therefore, there is no table this month for negative contributions.

The sector/quality categories with the biggest positive contributions, considering both weight and the groupings' own sector/quality returns, are listed in Table 2.

**TABLE 2**

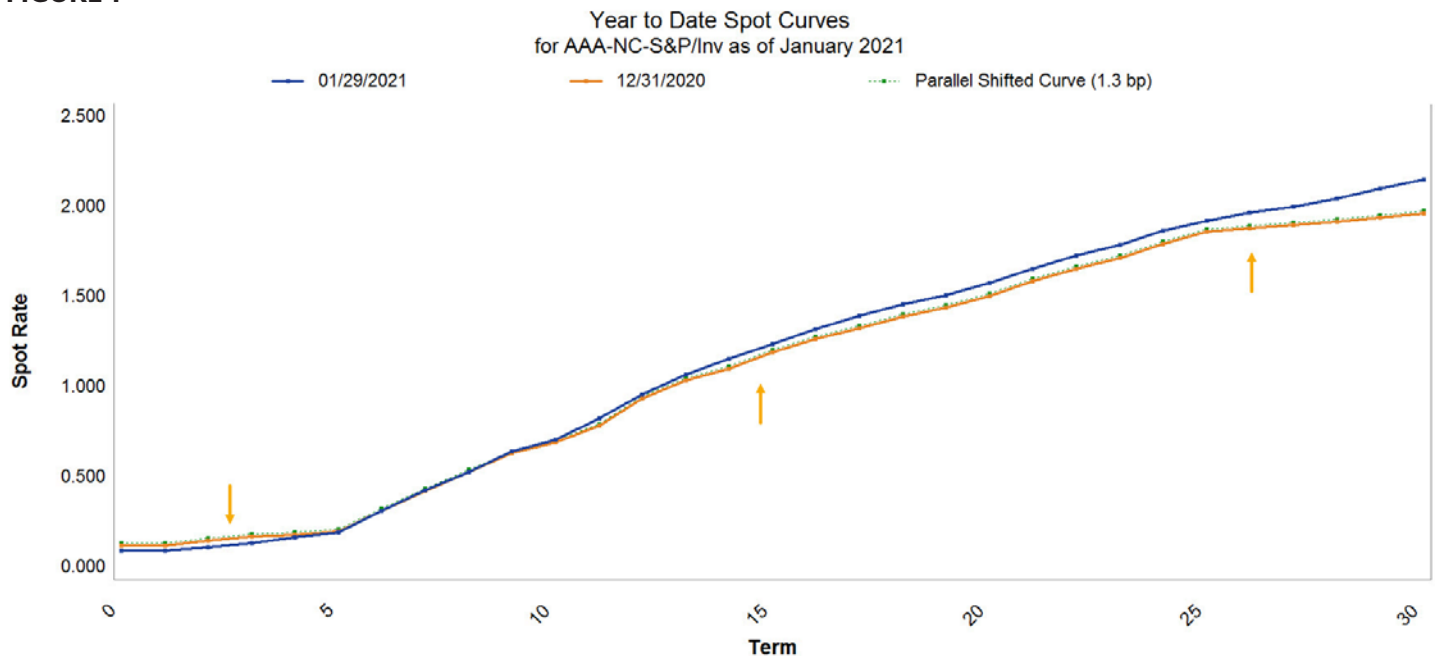
	A-rated Transportation	AA-rated Local GO	AA-rated Tax-Supported (Excl. GO's)	AA-rated Insured
Change in Duration-Adjusted Average OA Spread <sup>(a)</sup>	-24.229	-7.054	-7.970	-10.371
Total Key Rate Duration <sup>(b)</sup>	5.060	4.763	4.571	5.119
Sector/Quality Return <sup>(b*a)</sup>	1.226	0.336	0.364	0.531
Market Value Weight <sup>(c)</sup>	5.474	9.694	7.774	5.012
Contribution to Duration <sup>(b*c)</sup>	0.27700	0.46171	0.35537	0.25656
Contribution to Sector/Quality Return <sup>(b*c*a)</sup>	0.06712	0.03257	0.02832	0.02661

The month's Coupon Return was 0.318%, based on the index's average coupon of 4.375%. The average beginning-of-month market yield was 0.987%, resulting in a Market Amortization Return of -0.240%. These two terms sum to a total income effect of 0.078%.

*Note that Coupon Return reflects both interest payments and changes in accrued interest throughout the month. And 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.*

Figure 1 shows the overall change in the muni AAA non-callable spot curve for January. As depicted, the spot curve had minimal yield curve movement on the short end and an increase beginning at the ten-year point, resulting in a modest overall steepening.

**FIGURE 1**



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

The S&P Treasury spot curve also demonstrated this steepening, but to a much greater extent, with a 19.5 bp increase at the 10-year point and a 23.4 bp increase at the 30-year point.

The Parallel Shift Return of -0.057% can be calculated from the 1.3 bp change in the ten-year point of the spot curve, as shown in Table 3.

**TABLE 3**

Change in 10-Year Spot Rate <sup>(a)</sup>	1.27
Total Key Rate Duration <sup>(b)</sup>	4.502
Parallel Shift Return <sup>(-b*a)</sup>	-0.057

The Non-Parallel Shift Return was 0.053%. Points on the 6-month to 7-year range fell, while the 30-year point increased 17.34 more than the ten-year point did. See Table 4 for the full calculations.

**TABLE 4**

	6 Mos	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	20 Yrs	30 Yrs
Non-Parallel Change (bp)	-4.27	-4.27	-5.17	-5.17	-1.66	-0.94	0.00	5.74	17.34
Key Rate Duration	0.037	0.126	0.274	0.600	0.999	1.037	1.048	0.346	0.035
Non-Parallel Shift Return	0.002	0.005	0.014	0.031	0.017	0.010	0.000	-0.020	-0.006

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

#### CONTACT US

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

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