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Municipal Bond Market Performance

October 2021

Overview

The municipal bond market, as measured by the Standard & Poor's Municipal Bond Investment Grade Index, had a Total Return of -0.081% in October 2021, consisting of the components displayed in Table 1. Table 1 also displays a breakdown of year-to-date returns; the YTD Total Return was 0.569%.

The negative total return for October was largely due to the increase in the short- and intermediate-term portions of the municipal yield curve, to which the index has significant duration exposure. While Coupon Return was the largest positive return line item, it was largely offset by the Market Amortization Return, for a total income effect only of 0.08

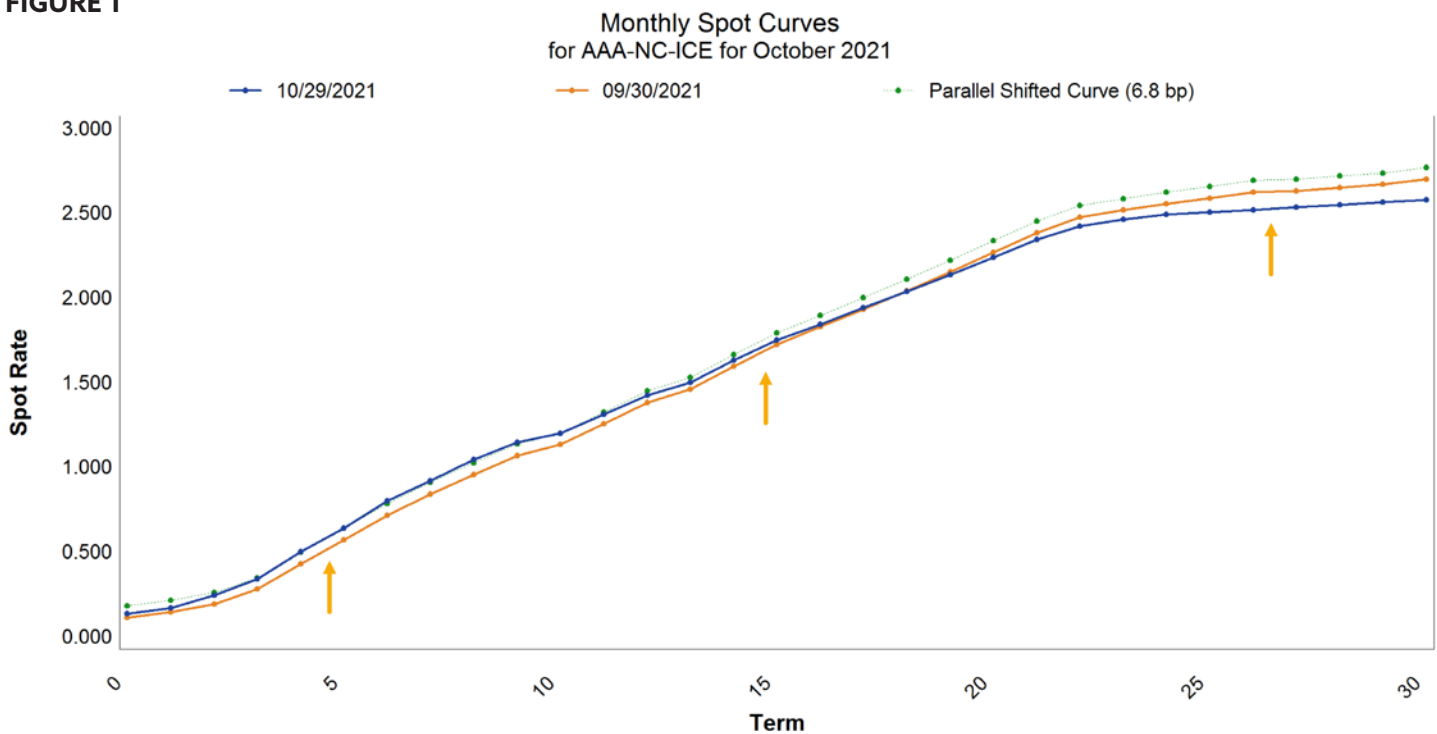
TABLE 1

	OCTOBER	YTD
Total Return	-0.081%	0.569%
Coupon Return	0.328%	3.201%
Market Amortization Return	-0.246%	-2.391%
Parallel Shift Return	-0.288%	-2.219%
Non-Parallel Shift Return	0.045%	0.349%
Sector/Quality Return	0.038%	2.972%
Residual Price Return	0.042%	-1.344%

Interpretation

Figure 1 shows the overall change in the muni AAA non-callable spot curve for October. The graph captures the curve increase over the month in short and intermediate terms. There were decreases from flattening on the long end of the curve. The treasury curve saw similar, but more pronounced, changes.

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 -0.288% is calculated from the 6.8 bp increase in the ten-year point of the spot curve, as shown in Table 2.

TABLE 2

Change for 10-Year Spot Rate ^(a)	6.78
Total Key Rate Duration ^(b)	4.251
Parallel Shift Return ^(-b*a)	-0.288

The Non-Parallel Shift Return was 0.045%. As seen, most points increased less than the 10-year point did, resulting in negative Non-Parallel Changes and a positive Non-Parallel Shift Return. This is very similar to what we saw in the September spot curve. This suggests that shorter-term portfolios and indices would have higher (less negative) returns from October's yield curve movements than this index did. See Table 3 for the full calculations for this term.

TABLE 3

	6 Mos	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	20 Yrs	30 Yrs
Non-Parallel Change	-4.38	-4.38	-1.68	-0.77	-0.14	0.92	0.00	-9.62	-19.22
Key Rate Duration	0.037	0.135	0.280	0.641	0.965	0.925	0.935	0.302	0.031
Non-Parallel Shift Return	0.002	0.006	0.005	0.005	0.001	-0.009	0.000	0.029	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.

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 0.038%.

The sectors exhibiting the largest tightening in average option-adjusted spread (weighted by both market value and duration) were Tax-Supported (Excl. GO's), Other Utility, and Resource Recovery. The sectors exhibiting the largest tightening in average option-adjusted spread (weighted by both market value and duration) were Tobacco Settlement (with a 12.6 basis point increase in overall OAS), Housing, and IDR / PCR. Quality-based groupings did not exhibit any strong trends this month. In general, spread tightening tended to be more pronounced in callable bonds.

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. As shown, there are only two sector/quality categories with negative contributions. The biggest positive contributors are listed in Table 5.

TABLE 4

	AA-rated Housing	AAA-rated Housing	A-rated IDR/PCR	AA-rated Insured
Change in Duration-Adjusted Average OA Spread ^(a)	4.312	7.830	3.472	1.128
Total Key Rate Duration ^(b)	5.037	4.972	4.263	4.821
Sector/Quality Return ^(-b*a)	-0.217	-0.389	-0.148	-0.054
Market Value Weight ^{%(c)}	1.763	0.800	1.906	5.092
Contribution to Duration ^(b*c)	0.08881	0.03977	0.08124	0.24552
Contribution to Sector/Quality Return ^(-b*c*a)	-0.00383	-0.00311	-0.00282	-0.00277

TABLE 5

	AA-rated Tax Supported (Excl. GO's)	AAA-rated Tax Supported (Excl. GO's)	A-rated Transportation	AA-rated Local GO
Change in Duration-Adjusted Average OA Spread ^(a)	-3.703	-7.008	-2.358	-1.358
Total Key Rate Duration ^(b)	4.420	4.430	4.657	4.529
Sector/Quality Return ^(b*a)	0.164	0.310	0.110	0.061
Market Value Weight ^(c)	7.626	2.649	5.662	9.524
Contribution to Duration ^(b*c)	0.33708	0.11734	0.26372	0.43131
Contribution to Sector/Quality Return ^(b*c*a)	0.01248	0.00822	0.00622	0.00586

Coupon Return was 0.328%, based on the index's average coupon of 4.322%. The average beginning-of-month market yield was 1.034%, resulting in a Market Amortization Return of -0.246%. These two terms sum to a total income effect of 0.082%.

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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