Investortools

Municipal Bond Market Performance

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Index Production and Analysis

The municipal bond market, as measured by the Standard & Poor's Municipal Bond Investment Grade Index, had a Total Return of -1.318% in October 2024, consisting of the components displayed in Table 1.

Yields crept up throughout October, finishing the month substantially higher in both the municipal and treasury curves. This was the largest monthly increase in yields and worst monthly return since September of last year. The negative impact of the yield curve movement was partially offset by tightening spreads especially on lower-rated securities.

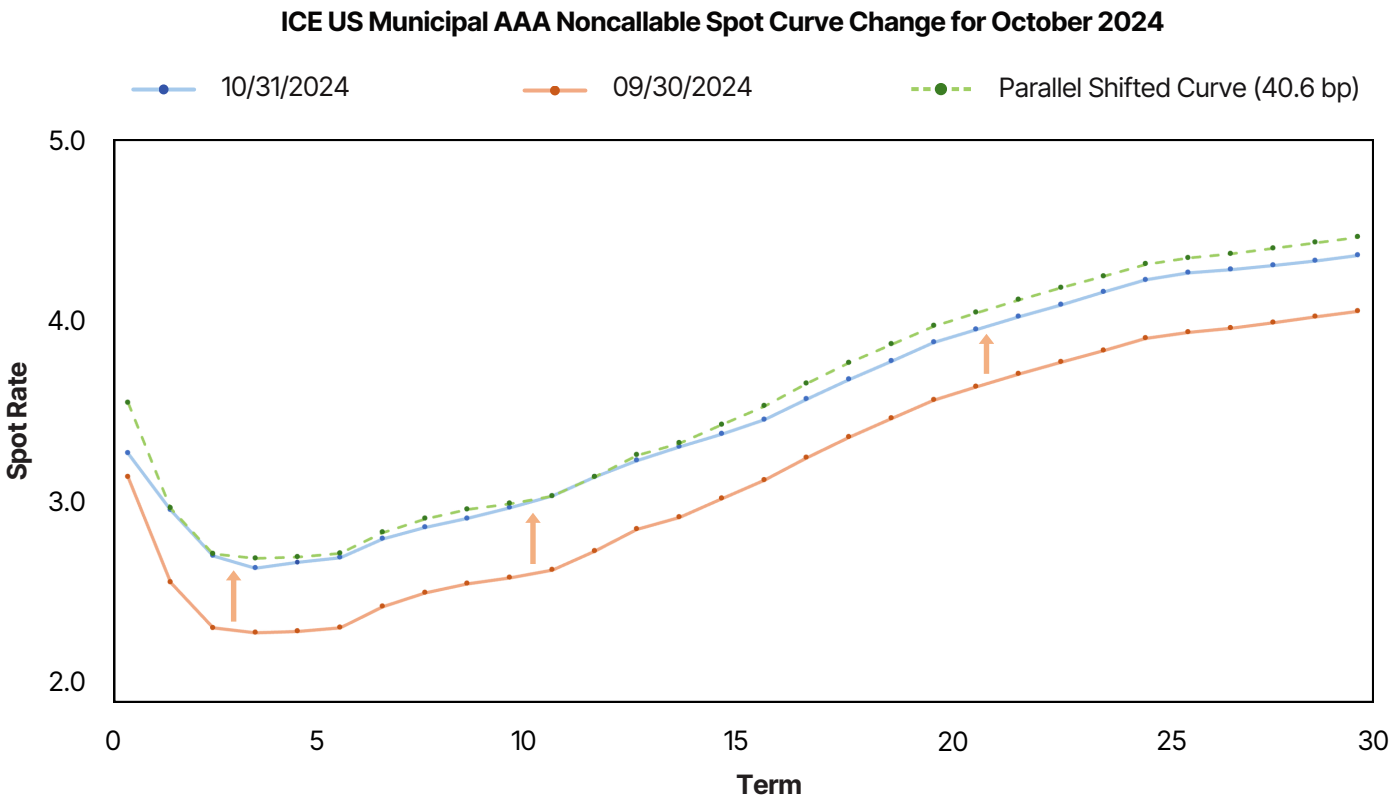
TABLE 1

	October	YTD
Total Return	**-1.318%**	**1.158%**
Coupon Return	0.364%	3.555%
Market Amortization Return	-0.085%	-0.590%
Parallel Shift Return	-2.450%	-4.413%
Non-Parallel Shift Return	0.268%	1.589%
Sector/Quality Return	0.507%	0.966%
Residual Price Return	0.078%	0.051%

Interpretation

Figure 1 shows the overall change in the ICE US Municipal AAA Noncallable spot curve for October. This curve demonstrated a 40.6 bp increase in overall level as measured at the ten-year point.

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 -2.450% is calculated from this curve increase, as shown in Table 2.

TABLE 2

Change for 10-Year Spot Rate[(a)]	40.64
Total Key Rate Duration[(b)]	6.0293
Parallel Shift Return[(-b*a)]	**-2.450%**

The Non-Parallel Shift Return was 0.268%. Though the entire curve shifted up, most terms shifted less than the 10-year term, resulting in a relatively small positive Non-Parallel Shift Return. 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	-15.00	-1.17	-1.29	-5.18	-2.41	-4.62	0.00	-9.24	-10.39
Key Rate Duration	0.040	0.118	0.235	0.433	0.630	0.927	1.770	1.543	0.333
Non-Parallel Shift Return	0.006	0.001	0.003	0.022	0.015	0.043	0.000	0.143	0.035

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 0.507%.

The sector exhibiting the largest overall tightening in average option-adjusted spread (weighted by both market value and duration) was Tobacco Settlement. The Prerefunded/ETM sector exhibited the least spread change. In general, securities with lower ratings saw spreads tighten more than similar securities with higher ratings, giving evidence of modestly increased demand for lower-rated securities.

The sector/quality categories with the biggest positive contributions to Sector/Quality Return, considering both weightings and the groupings' own sector/quality returns, are listed in Table 4. The biggest negative contributor is shown in Table 5.

TABLE 4

	AAA-rated Local GO	AA-rated Tax Supported (Excl. GOs)	AA-rated Transportation	AA-rated Insured
Change in Dur-Adj Average OA Spread [a]	-9.094	-10.406	-11.704	-9.893
OA Spread Duration [b]	5.163	5.263	5.276	6.130
Sector/Quality Return [-b*a]	0.469	0.548	0.617	0.606
Market Value Weight% [c]	10.885	7.757	6.429	6.273
Contribution to Duration [b*c]	0.56196	0.40824	0.33923	0.38455
Contribution to Sector/Quality Return [-b*c*a]	0.05110	0.04248	0.03970	0.03804

TABLE 5

	A-rated Prerefunded/ ETM
Change in Dur-Adj Average OA Spread[(a)]	1.663
OA Spread Duration[(b)]	0.670
Sector/Quality Return[(-b*a)]	-0.011
Market Value Weight%[(c)]	0.495
Contribution to Duration[(b*c)]	0.00332
Contribution to Sector/Quality Return[(-b*c*a)]	-0.00006

Table 6 below shows the states and territories with the five best state-specific spread returns while Table 7 shows the states and territories with the five worst state-specific spread returns. This is the portion of return from change in spread after adjusting for the sector/quality composition of the state's bonds, capturing the extent to which the state's bonds' performance differed from the national averages.

South Dakota, Wyoming, and Montana all benefited from spreads in the Housing sector tightening more in those three states than the national average. For West Virginia, it was the State GO and especially Health Care sectors that led to its relatively strong performance. On the other hand, Connecticut saw relative underperformance in its State GO and Tax-Supported (Excl. GOs) sectors. The Local GO sector, which saw spreads tighten nationally, saw spreads widen in Arkansas and was the primary reason for its poor state-specific spread return.

TABLE 6

State or Teritory	Total Return Weight	Return from Sector/Quality Composition	State-Specific Spread Return	Total Spread Return
Puerto Rico	0.07%	0.346%	0.316%	0.662%
West Virginia	0.26%	0.590%	0.204%	0.794%
South Dakota	0.17%	0.608%	0.197%	0.805%
Wyoming	0.05%	0.679%	0.153%	0.832%
Montana	0.09%	0.516%	0.136%	0.652%

TABLE 7

State or Teritory	Total Return Weight	Return from Sector/Quality Composition	State-Specific Spread Return	Total Spread Return
Kentucky	0.96%	0.489%	-0.184%	0.305%
North Carolina	1.53%	0.505%	-0.199%	0.306%
Kansas	0.46%	0.393%	-0.209%	0.184%
Connecticut	1.36%	0.412%	-0.223%	0.189%
Arkansas	0.28%	0.546%	-0.421%	0.125%

Coupon Return was 0.364%, based on the index's average coupon of 4.411%. The average beginning-of-month market yield was 3.287%, resulting in a Market Amortization Return of -0.085%. These two terms sum to a total income effect of 0.279%.

Note that Coupon Return reflects both interest payments and changes in accrued interest throughout the month. Market Amortization Return is negative due to yields being lower than most coupon rates, producing premium bonds. Premium bond prices, absent any change in yield, naturally decline over time to their redemption price. This decline is called market amortization.