

Municipal Bond Market Performance

November 2024



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Mark Pinson 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 1.515% in November 2024, consisting of the components displayed in Table 1.

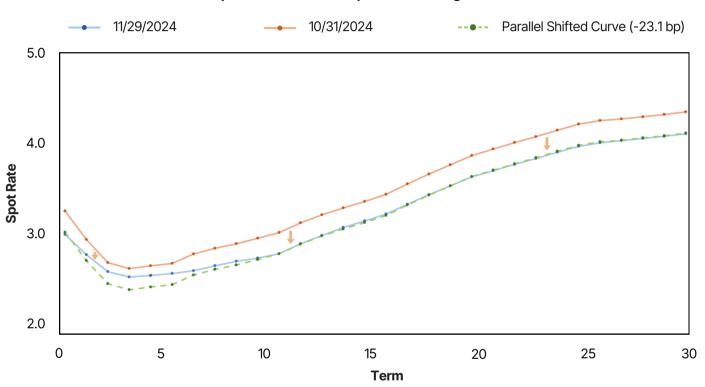
Municipal yields briefly spiked following the election in early November, but quickly dropped back down, ultimately finishing the month lower than they had started it. The shortest and longest terms finished the month with yields very near where they were at the start of 2024, but yields at terms between 3 and 15 years are still up substantially for the year. Option-adjusted spreads mostly remained steady in November, but the Tobacco Settlement sector was one exception with spreads generally widening for bonds in that sector.

| TABLE 1 | November | YTD | |
|----------------------------|----------|---------|--|
| Total Return | 1.515% | 2.691% | |
| Coupon Return | 0.347% | 3.905% | |
| Market Amortization Return | -0.060% | -0.650% | |
| Parallel Shift Return | 1.420% | -2.977% | |
| Non-Parallel Shift Return | -0.201% | 1.385% | |
| Sector/Quality Return | 0.070% | 1.037% | |
| Residual Price Return | -0.060% | -0.010% | |

Interpretation

Figure 1 shows the overall change in the ICE US Municipal AAA Noncallable spot curve for November. This curve demonstrated a 23.1 bp decrease in overall level as measured at the ten-year point.

FIGURE 1



ICE US Municipal AAA Noncallable Spot Curve Change for November 2024

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

The Parallel Shift Return of 1.420% is calculated from this curve decrease, as shown in Table 2.

TABLE 2

| Parallel Shift Return ^(-b*a) | 1.420% |
|---|--------|
| Total Key Rate Duration ^(b) | 6.1497 |
| Change for 10-Year Spot Rate ^(a) | -23.09 |

The Non-Parallel Shift Return was -0.201%, due to the curve falling less for shorter terms than for the 10-year term, with a flattening effect in this part of the curve. See Table 3 for the full calculations for this term.

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| TABLE 3 | 6 Mos | 1 Yr | 2 Yrs | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 20 Yrs | 30 Yrs |
|---------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Non-Parallel Change | 1.00 | 6.54 | 13.09 | 13.98 | 12.18 | 3.81 | 0.00 | -0.52 | -0.19 |
| Key Rate Duration | 0.040 | 0.116 | 0.228 | 0.422 | 0.633 | 0.943 | 1.859 | 1.574 | 0.333 |
| Non-Parallel Shift Return | 0.000 | -0.008 | -0.030 | -0.059 | -0.077 | -0.036 | 0.000 | 0.008 | 0.001 |

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 0.070%.

The sectors exhibiting the largest overall tightening in average option-adjusted spread (weighted by both market value and duration) were Health Care, Local GO and Other Utility. The sector exhibiting the largest overall widening was by far Tobacco Settlement, followed by the IDR / PCR and Prerefunded/ETM sectors. Quality-based groupings showed a modest overall move toward quality, although this varied substantially by sector.

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 top sector/quality categories all belong to the Health Care and Local GO sectors, which are the sectors with the largest overall spread tightening. The biggest negative contributors are listed in Table 5.

| TABLE 4 | AA-rated Local GO | AAA-rated Local GO | AA-rated Health Care | A-rated Health Care |
|---|----------------------|-----------------------|-------------------------|------------------------|
| Change in Dur-Adj Average OA Spread ^(a) | -3.434 | -2.265 | -5.197 | -5.166 |
| OA Spread Duration ^(b) | 5.383 | 5.268 | 5.485 | 5.208 |
| Sector/Quality Return ^(-b*a) | 0.185 | 0.119 | 0.285 | 0.269 |
| Market Value Weight% ^(c) | 9.411 | 10.885 | 3.655 | 2.932 |
| Contribution to Duration ^(b*c) | 0.50661 | 0.57342 | 0.20051 | 0.15270 |
| Contribution to Sector/Quality Return $^{(-b^*c^*a)}$ | 0.01740 | 0.01299 | 0.01042 | 0.00789 |

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| TABLE 5 | AAA-rated Housing | BBB-rated IDR/PCR | A-rated IDR/PCR | AA-rated Transportation |
|---|----------------------|----------------------|--------------------|----------------------------|
| Change in Dur-Adj Average OA Spread ^(a) | 3.273 | 5.685 | 2.464 | 0.743 |
| OA Spread Duration ^(b) | 6.730 | 5.483 | 4.637 | 5.410 |
| Sector/Quality Return ^(-b*a) | -0.220 | -0.312 | -0.114 | -0.040 |
| Market Value Weight% ^(c) | 1.564 | 1.008 | 2.556 | 6.335 |
| Contribution to Duration ^(b*c) | 0.10525 | 0.05524 | 0.11854 | 0.34273 |
| Contribution to Sector/Quality Return ^(-b*c*a) | -0.00345 | -0.00314 | -0.00292 | -0.00255 |

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.

Arkansas had the largest state-specific spread return by a large margin, mostly due to Insured and Local GO bonds performing much better in Arkansas than in the national average. Although Nebraska, Kansas, and New Jersey saw their Housing bonds generally underperform bonds in that sector from other states, they outperformed other states in almost every other sector. On the other hand, Housing bonds in South Dakota, Idaho, and Utah underperformed the national average so substantially that those states had among the worst state-specific spread returns.

TABLE 6

| State or Territory | Total Return Weight | Return from Sector/Quality Composition | State-Specific Spread Return | Total Spread Return |
|--------------------|------------------------|--|---------------------------------|------------------------|
| Arkansas | 0.28% | 0.134% | 0.491% | 0.625% |
| Nebraska | 0.60% | 0.022% | 0.192% | 0.214% |
| Kansas | 0.45% | 0.066% | 0.184% | 0.250% |
| West Virginia | 0.26% | 0.051% | 0.124% | 0.175% |
| New Jersey | 3.03% | 0.011% | 0.116% | 0.127% |

TABLE 7

| State or Territory | Total Return Weight | Return from Sector/Quality Composition | State-Specific Spread Return | Total Spread Return |
|--------------------|------------------------|--|---------------------------------|------------------------|
| South Dakota | 0.17% | 0.033% | -0.139% | -0.106% |
| Illinois | 3.80% | 0.035% | -0.140% | -0.105% |
| Guam | 0.06% | 0.028% | -0.142% | -0.114% |
| Idaho | 0.21% | 0.112% | -0.177% | -0.065% |
| Utah | 0.85% | 0.076% | -0.212% | -0.136% |

Coupon Return was 0.347%, based on the index's average coupon of 4.418%. The average beginning-of-month market yield was 3.613%, resulting in a Market Amortization Return of -0.060%. These two terms sum to a total income effect of 0.287%.

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 yields being lower than most coupon rates. 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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