

Municipal Bond Market Performance

April 2024



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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 -1.067% in April 2024, consisting of the components displayed in Table 1. This put the year-to-date return further in the red.

Yields generally increased throughout the month, especially in intermediate-to-longer terms. The 3-month-to-2-year spread for the treasury curve increased to the least inverted it has been in over a year. The increasing yields were the primary source of April's negative total return, as shown by the Parallel Shift Return of -1.784%. The Tobacco Settlement sector was once again a bright spot, as spreads tightened for it more than any other sector. In fact, the Tobacco Settlement sector has been a bright spot the entire year, having been one of the strongest sectors for every month so far in 2024.

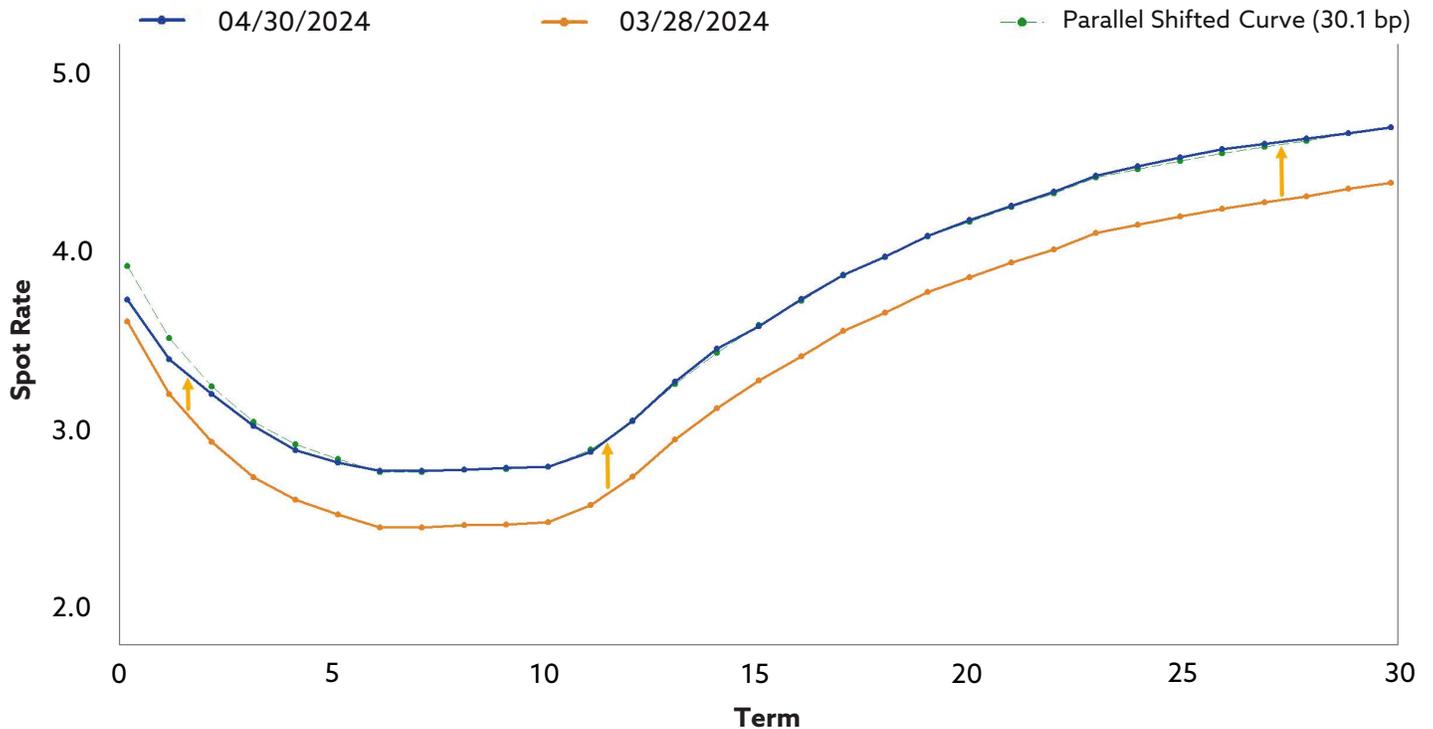
TABLE 1	April	YTD
Total Return	-1.067%	-1.358%
Coupon Return	0.343%	1.395%
Market Amortization Return	-0.022%	-0.251%
Parallel Shift Return	-1.784%	-3.217%
Non-Parallel Shift Return	0.042%	-0.156%
Sector/Quality Return	0.385%	0.874%
Residual Price Return	-0.030%	-0.002%

Intpretation

Figure 1 shows the overall change in the ICE US Municipal AAA Noncallable spot curve for April. This curve demonstrated a 30.1 bp increase in overall level as measured at the ten-year point.

FIGURE 1

ICE US Municipal AAA Noncallable Spot Curve Change for April 2024



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

The Parallel Shift Return of -1.784% is calculated from this curve increase, as shown in Table 2.

TABLE 2

Change for 10-Year Spot Rate ^(a)	30.13
Total Key Rate Duration ^(b)	5.9198
Parallel Shift Return ^(-b*a)	-1.784

The Non-Parallel Shift Return was 0.042%. This was due to shorter terms increasing slightly less than the ten-year term. See Table 3 for the full calculations for this term.

TABLE 3

	6 Mos	1Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	20 Yrs	30 Yrs
Non-Parallel Change	-17.52	-11.29	-4.25	-2.48	-1.95	0.33	0.00	0.77	-0.14
Key Rate Duration	0.040	0.120	0.249	0.478	0.652	0.836	1.656	1.551	0.338
Non-Parallel Shift Return	0.007	0.014	0.011	0.012	0.013	-0.003	0.000	-0.012	0.000

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 0.385%.

The sectors exhibiting the largest overall tightening in average option-adjusted spread (weighted by both market value and duration) were Tobacco Settlement, Housing (especially Single-Family), Transportation, Health Care, and Other Utility. The Prerefunded/ETM sector exhibited the least amount of spread change. Quality-based groupings exhibited no significant trend.

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.

TABLE 4

	A-rated State GO	A-rated Insured	AAA-rated Prerefunded/ EMT	BBB-rated Other Utility
Change in Dur-Adj Average OA Spread ^(a)	3.540	7.880	0.241	2.368
OA Spread Duration ^(b)	4.307	5.016	1.174	6.388
Sector/Quality Return ^(b*a)	-0.153	-0.395	-0.003	-0.151
Market Value Weight ^(c)	0.895	0.343	1.017	0.010
Contribution to Duration ^(b*c)	0.03854	0.01722	0.01194	0.00063
Contribution to Sector/Quality Return ^(b*c*a)	-0.00136	-0.00136	-0.00003	-0.00001

TABLE 5

	AA-rated Tax-Supported (Excl.GOs)	AA-rated Transporation	AA-rated Local GO	AAA-rated Local GO
Change in Dur-Adj Average OA Spread ^(a)	-8.811	-11.021	-5.672	-5.386
OA Spread Duration ^(b)	5.331	5.163	5.251	5.169
Sector/Quality Return ^(b*a)	0.470	0.569	0.298	0.278
Market Value Weight ^(c)	7.913	6.132	9.716	10.349
Contribution to Duration ^(b*c)	0.42182	0.31657	0.51020	0.53497
Contribution to Sector/Quality Return ^(b*c*a)	0.03717	0.03489	0.02894	0.02881

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 differs from the national averages.

Puerto Rico bonds once again outperformed the national market in the Transportation sector, giving the territory the month's highest State-Specific Spread Return. While the Housing sector was a bright spot for almost all states, North Dakota and Wyoming Housing bonds did particularly well. Arkansas Housing bonds, on the other hand, actually had widening spreads. In fact, spreads widened overall in Arkansas, resulting in a negative Total Spread Return for the state and the lowest State-Specific Spread Return. For Kansas and Kentucky, the Housing sector was about the only bright spot, as they lagged behind their peers in almost all other sectors.

TABLE 6

State or Territory	Total Return Weight	Return from Sector/Quality Composition	State-Specific Spread Return	Total Spread Return
Puerto Rico	0.08%	0.181%	0.318%	0.499%
North Dakota	0.16%	0.506%	0.277%	0.783%
Wyoming	0.05%	0.606%	0.230%	0.836%
Idaho	0.20%	0.529%	0.228%	0.757%
South Dakota	0.15%	0.500%	0.224%	0.724%

TABLE 7

State or Territory	Total Return Weight	Return from Sector/Quality Composition	State-Specific Spread Return	Total Spread Return
North Carolina	1.52%	0.392%	-0.171%	0.221%
Delaware	0.26%	0.333%	-0.183%	0.150%
Kentucky	0.92%	0.355%	-0.202%	0.153%
Kansas	0.46%	0.277%	-0.233%	0.044%
Arkansas	0.28%	0.415%	-0.448%	-0.033%

Coupon Return was 0.343%, based on the index's average coupon of 4.369%. The average beginning-of-month market yield was 3.547%, resulting in a Market Amortization Return of -0.022%. These two terms sum to a total income effect of 0.321%.

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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