



Joel A. Buursma, CIPM
Vice President,
Senior Software Architect

Municipal Bond Market Performance

June 2020

Overview

The municipal bond market, as measured by the Standard & Poor's Municipal Bond Investment Grade Index, had a Total Return of 0.589% in June 2020, consisting of the components displayed in Table 1.

After record months in March and May, June saw almost no yield curve movement but a modest return fueled largely by a reach for yield, as worries about lower-rated securities eased somewhat.

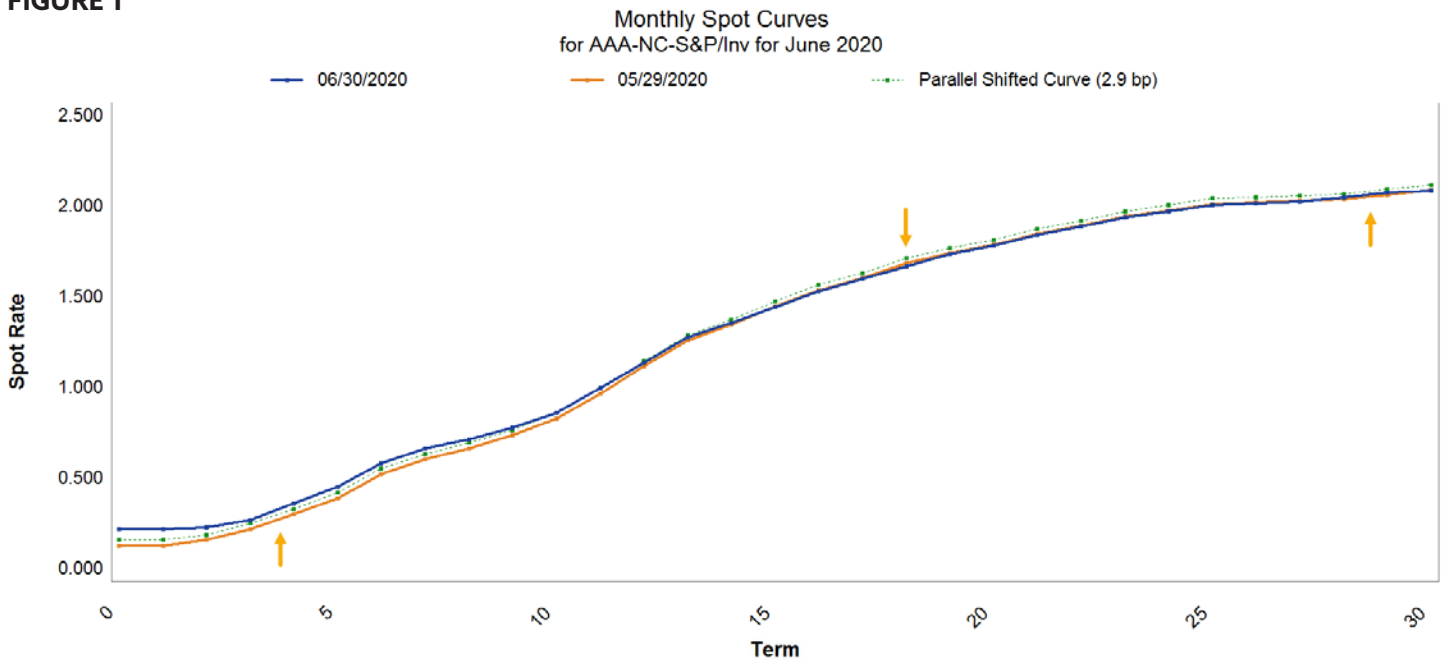
TABLE 1

Total Return	0.589%
Coupon Return	0.317%
Market Amortization Return	-0.190%
Parallel Shift Return	-0.155%
Non-Parallel Shift Return	-0.058%
Sector/Quality Return	0.693%
Residual Price Return	-0.018%

Interpretation

Figure 1 shows the overall net spot curve change for June. In sharp contrast to the historic decreases of May, June gave us only a modest flattening of the curve. The ten-year point increased by 2.9 bp, resulting in a Parallel Shift Return of -0.155%, as shown in Table 1.

FIGURE 1



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

TABLE 2

Change in 10-Year Spot Rate ^(a)	2.9
Total Key Rate Duration ^(b)	5.257
Parallel Shift Return ^(-b*a)	-0.155

For the Non-Parallel Shift Return, the short end of the curve increased 6.1 bp more than the 10 year did, while the long end dropped -3.3 bp.

TABLE 3

	6 Mos	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	20 Yrs	30 Yrs
Key Rate Duration	0.030	0.109	0.253	0.537	0.949	1.091	1.235	0.882	0.171
Non-Parallel Change	6.1	6.1	2.1	3.1	3.1	3.1	0.0	-3.3	-3.3
Non-Parallel Shift Return	-0.002	-0.007	-0.010	-0.011	-0.029	-0.034	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.

The Sector/Quality Return of 0.693% represented the month's biggest story. While looking at total return by sector, Prerefunded/ETM was the only sector posting a negative return, while Health Care, Transportation, IDR / PCR, and Tobacco Settlement lead in positive returns, as shown in Table 4.

TABLE 4

SECTOR	Total Return	Sector/Quality Return
Prerefunded/ETM	-0.110%	-0.028%
Health Care	1.606%	1.745%
IDR / PCR	1.719%	1.732%
Transportation	1.752%	1.880%
Tobacco Settlement	2.406%	2.507%

Whereas when looking at quality groupings, we see the BBB category with the strongest return, and the AAA category with the smallest return (besides the Other category), as seen in Table 5.

TABLE 5

QUALITY	Total Return	Sector/Quality Return
AAA / Aaa	0.027%	0.139%
AA / Aa	0.250%	0.349%
A / A	1.413%	1.534%
BBB / Baa	3.197%	3.261%
Other	-0.090%	1.370%

The sector/quality categories with negative return contributions to Sector/Quality Return were almost exclusively in the Prerefunded/ETM Sector. The biggest negative contributors, considering both weight and the groupings' own sector/quality returns, are listed in Table 6. The biggest positive contributors this month are listed in Table 7.

TABLE 6

	AA-rated Prere/ETM	A-rated Prere/ETM	AAA-rated Prere/ETM	Sub-B-rated Prere/ETM
Change in Duration-Adjusted Average OA Spread ^(a)	1.457	2.983	1.376	0.945
Total Key Rate Duration ^(b)	1.928	1.516	2.024	2.102
Sector/Quality Return ^(-b*a)	-0.028	-0.045	-0.028	-0.020
Market Value Weight ^(c)	3.364	1.113	1.263	1.257
Contribution to Duration ^(b*c)	0.06488	0.01687	0.02557	0.02643
Contribution to Sector/Quality Return ^(-b*c*a)	-0.00095	-0.00050	-0.00035	-0.00025

TABLE 7

	A-rated Transportation	A-rated Health Care	BBB-rated Transportation	AA-rated Transportation
Change in Duration-Adjusted Average OA Spread ^(a)	-34.424	-30.178	-66.283	-17.335
Total Key Rate Duration ^(b)	6.047	6.586	7.132	5.559
Sector/Quality Return ^(-b*a)	2.082	1.987	4.727	0.964
Market Value Weight ^(c)	5.721	3.090	0.964	4.033
Contribution to Duration ^(b*c)	0.34592	0.20353	0.06877	0.22421
Contribution to Sector/Quality Return ^(-b*c*a)	0.11908	0.06142	0.04558	0.03887

Finally, the Coupon Return was 0.317%, based on the index's average coupon of 4.425%. The average beginning-of-month market yield was 1.441%, resulting in a Market Amortization Return of -0.190%. These two terms sum to a total income effect of 0.127%.

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.

CONTACT US

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

For more information about Investortools, please visit www.invtools.com or [click here to contact us](#).

To request a product demonstration, please contact sales@invtools.com.

For more information about **Custom Index Manager**, please [click here](#).