

# Municipal Bond Market Performance

September 2019

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

## Overview

The municipal bond market, as measured by the Standard & Poor's Municipal Bond Investment Grade Index, had a Total Return of -0.690% in September 2019, consisting of these components:

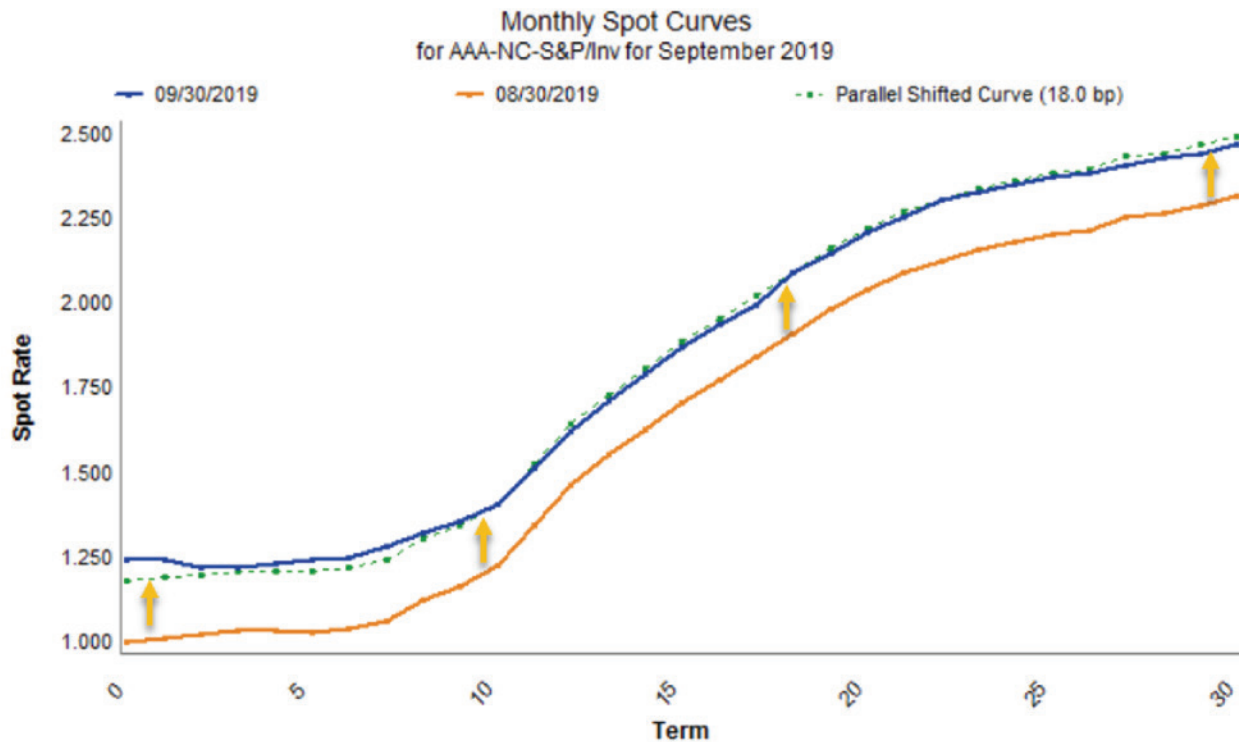
Total Return	-0.690%
Coupon Return	0.318%
Mkt Amort Return	-0.184%
Parallel Shift Return	-0.920%
Non-Parallel Shift Return	-0.089%
Sector/Quality Return	0.183%
Residual Price Return	0.003%

## Interpretation

The biggest contributor to the month's total return was the Parallel Shift Return of -0.920%. The Standard & Poor's / Investortools AAA-NC spot curve reversed its bull trend of the previous month (and much of the resulting gains) with an 18 bp overall increase this month, as measured at the ten-year point.

As the small Non-Parallel Shift Return of -0.089% suggests, and as the graph below demonstrates, the curve change was almost entirely parallel, with just a small amount of flattening occurring. The green dotted line represents what the end-of-month curve would have been if the shift had been perfectly parallel.

Change in 10-Year Spot Rate <sup>(a)</sup>	0.1797
Total Key Rate Duration <sup>(b)</sup>	5.123
Parallel Shift Return <sup>(-b+a)</sup>	-0.921%



The table below shows the breakdown of Non-Parallel Shift Return at each key rate. The Non-Parallel Change row shows the difference between the actual curve change at each key rate and the curve change at the ten-year point. Each value in the Non-Parallel Shift Return row is calculated by multiplying together the two cells above it and reversing the sign:

	6 Mos	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	20 Yrs	30 Yrs
Key Rate Duration	0.029	0.097	0.239	0.571	0.996	1.363	0.981	0.662	0.186
Non-Parallel Change	0.050	0.050	0.020	0.010	0.0306	0.041	0.000	-0.014	-0.025
Non-Parallel Shift Return	-0.001	-0.005	-0.005	-0.006	-0.030	-0.056	0.000	0.009	0.005

The next largest contributor to total return was the Coupon Return of 0.318%. This was partially offset by the Mkt Amort Return of -0.184%. The negative Mkt Amort Return reflects the large number of premium bonds in the index due to the low yield curve environment.

The next largest contributor, Sector/Quality Return, offset some of the effects of the yield curve increase. Much of the market saw spreads tighten, particularly the Housing, Other Utility, Health Care, Education, and Water / Sewer sectors. However, the Prerefunded/ETM sector saw spreads broadly widen. Sector/Quality Return reflects changes in average option-adjusted spread (adjusted for duration) for various sector/quality categories.

The following table shows the most significant positive contributors to Sector/Quality Return, reflecting both index weight and performance due spread change:

	AAA-rated Local GO	AA-rated Local GO	AA-rated Insured	AA-rated Health Care
Change in Average OA Spread BP <sup>(a)</sup>	-4.621	-3.649	-4.206	-5.636
Total Key Rate Duration <sup>(b)</sup>	5.383	5.439	6.132	5.79
Sector/Quality Return <sup>(-b*a)</sup>	0.249%	0.198%	0.258%	0.326%
Market Value Weight <sup>(c)</sup>	9.123%	10.022%	5.064%	3.970%
Contribution to Duration <sup>(b*c)</sup>	0.4911	0.5451	0.3105	0.2230
Contribution to Sector/Quality Return <sup>(-b*c*a)</sup>	0.023%	0.020%	0.013%	0.013%

And the most significant negative contributors were:

	A-rated Prere/ETM	AA-rated Prere/ETM	AAA-rated Prere/ETM	BBB-rated State GO
Change in Average OA Spread BP <sup>(a)</sup>	1.936	0.576	0.946	3.479
Total Key Rate Duration <sup>(b)</sup>	1.407	1.800	2.339	4.333
Sector/Quality Return <sup>(-b*a)</sup>	-0.027%	-0.010%	-0.022%	-0.151%
Market Value Weight <sup>(c)</sup>	0.745%	2.549%	1.202%	0.697%
Contribution to Duration <sup>(b*c)</sup>	0.0105	0.0459	0.0281	0.0302
Contribution to Sector/Quality Return <sup>(-b*c*a)</sup>	-0.0002%	-0.0003%	-0.0003%	-0.0011%

## Contact Us

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

To request a product demonstration, please contact [sales@invtools.com](mailto:sales@invtools.com).

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