



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 Transportation	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' average performance differs from the national averages.

Puerto Rico bonds outperformed the national market in Insured and Transportation sectors, on average, as shown by its State-Specific Spread Return. For Tennessee, Local GOs were the standout performers. While Guam was heavily weighted in Dedicated Tax bonds, its Dedicated Tax bonds underperformed the general market; however, Guam's Water / Sewer bonds made up for this with their strong outperformance.

While all states benefited from the spread tightening seen in lower-rated bonds (as shown by Return from Sector/Quality Composition in the tables below), some states benefited less than others (as shown by their negative State-Specific Spread Return). Kansas & Arkansas were both dragged down by their Local GO, Insured, and Health Care bonds. Wyoming's bonds lagged behind the national market in the Insured and Housing sectors, but especially in IDR / PCR.

TABLE 6

State or Territory	Total Return Weight	Return from Sector/Quality Composition	State-Specific Spread Return	Total Spread Return
Puerto Rico	0.08%	0.159%	0.167%	0.326%
Tennessee	1.37%	0.215%	0.123%	0.338%
Guam	0.06%	0.455%	0.119%	0.574%
Massachusetts	3.17%	0.131%	0.116%	0.247%
South Carolina	1.09%	0.208%	0.102%	0.310%

TABLE 7

State or Territory	Total Return Weight	Return from Sector/Quality Composition	State-Specific Spread Return	Total Spread Return
North Dakota	0.15%	0.251%	-0.090%	0.161%
New Jersey	3.11%	0.273%	-0.093%	0.180%
Kansas	0.47%	0.125%	-0.100%	0.025%
Arkansas	0.29%	0.205%	-0.151%	0.054%
Wyoming	0.05%	0.249%	-0.233%	0.016%

Coupon Return was 0.376%, based on the index's average coupon of 4.365%. The average beginning-of-month market yield was 3.427%, resulting in a Market Amortization Return of -0.114%. These two terms sum to a total income effect of 0.262%.

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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