WILMINGTON TRUST

Quarterly Market Commentary

Municipal Fixed Income

1Q | 2019

MUNICIPAL RESEARCH

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SALT Drives Investor Thirst for Municipals

Strong technicals fueled first-quarter market performance as uplift from robust demand and moderate supply led to positive returns. The S&P Municipal Bond Index turned in a strong 3-month total return of 2.761%. This was well ahead of performance of 1.356% for all of 2018. Analysts and investors attribute some of the tailwind to added demand created by the Tax Cuts and Jobs Act of 2017 (TCJA). Returns filed for tax year 2018 are the first to incorporate the $10,000 cap on state and local tax (SALT) deductions, so many taxpayers have only recently seen the effects of the law passed in late 2017. Particularly in states with high taxes, investors are seeking investments that minimize taxable income on federal tax returns. This could continue to support demand for municipals.

Tax reform also affected supply by eliminating most advance refundings, a tool used by municipalities to lower borrowing costs. The supply/demand imbalance has driven up municipal bond prices and powered performance. (To learn about the TCJA's impact on states' revenues and municipal bond credit, see my colleague Gerard Durr's article, starting on page 5 of this commentary.)

Since mid-January, flows of incoming cash from investors moving into municipal bond mutual funds were at weekly levels as strong as $3.26 billion. This represents a marked turnaround from the consistent outflows experienced the prior quarter (Figure 1).

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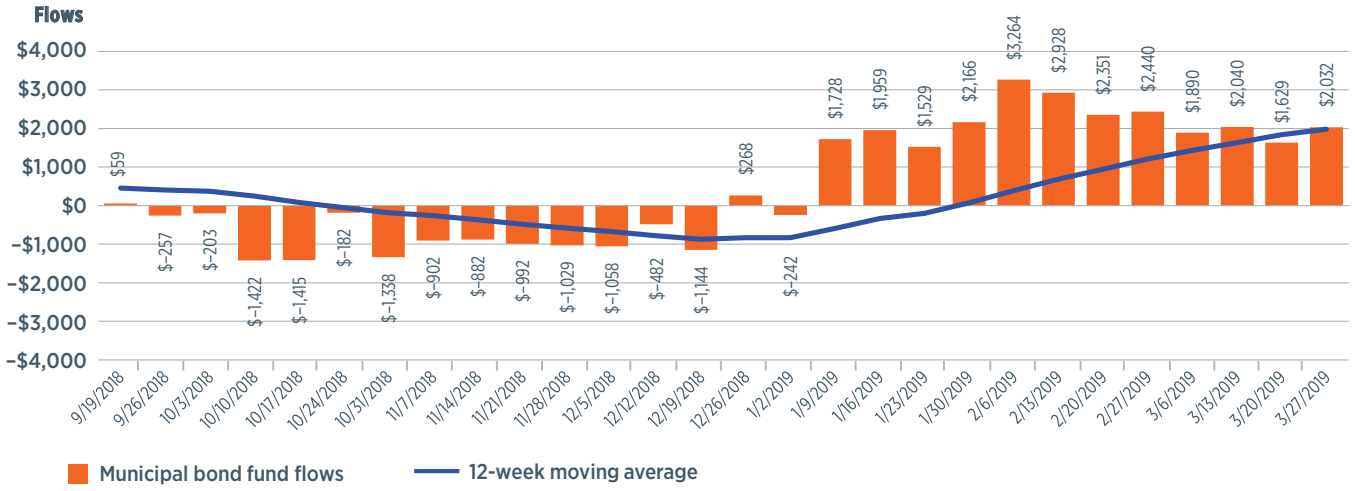
Figure 1
Estimated weekly long-term mutual fund flows (trailing six months, in $ millions)



Sources: Wilmington Trust Investment Advisors, Inc., Investment Company Institute.

Figure 2
Tax-exempt municipal issuance for select states (outstandings in $MM)

	Jan 2019	Feb 2019	Mar 2019	1Q 2019	1Q 2018	1Q 2017	1Q 2016	1Q 2015	5-Yr Avg.
California	1,209	5,498	4,621	11,328	7,098	13,190	10,009	11,158	10,557
New York	2,015	2,626	3,362	8,003	7,723	7,179	8,212	5,925	7,408
Texas	1,652	2,851	1,488	5,990	5,382	7,225	9,917	10,650	7,833
Massachusetts	1,778	1,189	675	3,642	2,023	1,257	2,841	1,790	2,311
New Jersey	1,160	1,110	724	2,994	857	1,061	1,220	716	1,370
Illinois	709	539	457	1,705	1,343	4,641	3,235	1,954	2,576
Pennsylvania	518	1,236	430	2,185	2,159	3,090	2,113	3,696	2,649
Michigan	130	1,381	383	1,894	952	1,431	2,470	2,770	1,903
Wisconsin	405	313	919	1,637	1,087	1,300	1,438	1,326	1,358
Minnesota	201	378	343	923	1,363	817	1,745	829	1,135
All other	4,689	13,682	8,512	26,882	22,828	29,726	26,940	34,701	28,215
Total	**14,468**	**30,802**	**21,914**	**67,183**	**52,815**	**70,917**	**70,140**	**75,515**	**67,314**

Source: Bloomberg.

Run-of-the-mill supply

While demand was robust, tax-exempt supply was just so-so. First-quarter tax-exempt municipal issuance of $67.2 million represents a sharp 27% increase on a year-over-year basis. But this comparison misleads, as last year's first-quarter figures were unusually modest due to tax reform. The TCJA forced issuers and bankers to accelerate advance refunding transactions into the last quarter of 2017 or lose the opportunity. That shift of issuance volume to late 2017 led to a 26% decline in tax-exempt issuance in the first quarter of 2018 compared to the first quarter of 2017.

To compensate for last year's anomaly, we look to pre-2018 data (Figure 2). This tells us that issuance for 1Q 2019 was not that far off historical norms. First-quarter issuance of $67.18 billion was 99.8% of the five-year average of $67,314 and 93% of the average first-quarter results from 2015–2017.

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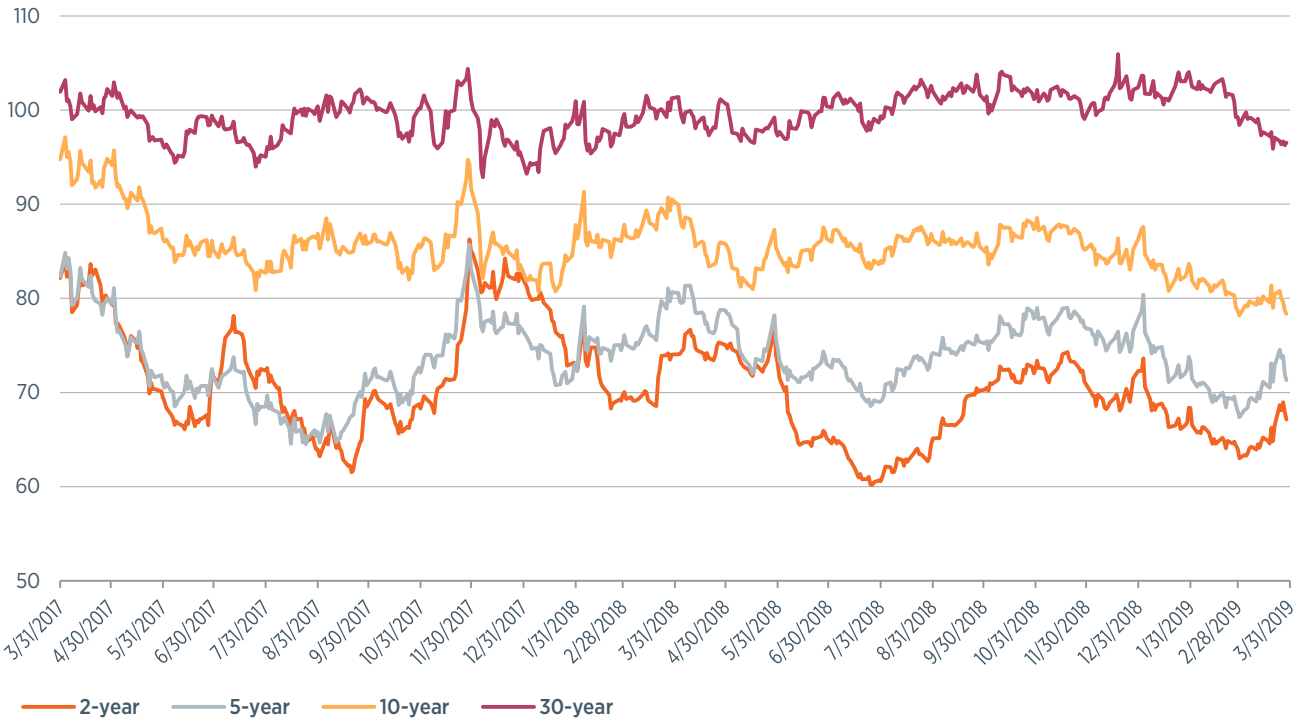
Figure 3
Bloomberg Valuation Service AAA municipal-to-U.S. Treasury ratios



Source: Bloomberg.
For more information about bond quality ratings such as AAA, see page 10.

Figure 4

Maturity	Quarter end 3/31/19	Previous year end 12/31/18	Previous 1 year 3/31/18
2-year	67.1%	72.3%	74.0%
5-year	71.3%	77.9%	80.6%
10-year	78.3%	86.3%	90.5%
30-year	96.5%	102.4%	101.2%

During the first quarter, 60% of tax-exempt supply came from issuer transactions in just 10 states. Of these top 10, California, New York, Massachusetts, New Jersey, and Wisconsin each saw total issuance above their 5-year averages (Figure 2). Illinois would have joined that list; several of its largest issues had sold, but did not close by quarter end.

Rich ratios persist

Throughout the quarter, municipal-to-U.S. Treasury ratios continued to decline, ending the quarter at historically rich levels. The benchmark 10-year AAA municipal-to-10-year U.S. Treasury ratio richened from 86.3% as of year-end 2018 to 78.3% by quarter end (Figures 3 and 4). The ratio was as high as 90.5% just one year ago, on 3/31/18. Recall that a decreasing ratio—caused by the U.S. Treasury rate increasing more or declining less than that of the AAA Municipal yield—means the tax-exempt security is outperforming Treasuries.

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Core narrative

The tax-exempt market remains solid from a credit perspective while strong demand provides support to pricing levels. Even lower-rated credit issuance has been well received, demonstrating ample market liquidity. Exogenous factors seem the most likely to surprise in the near term while longer term, a recession could serve as a disruptor to credit quality. Whether spread tightening has run its course is a more immediate question. Tactically, we have a moderate underweight in investment-grade municpal bonds but we remain constructive on the asset class.

Tax-free income becomes more attractive in high-tax states

Under the TCJA, individual taxpayer deductions for SALT payments are limited to $10,000 a year ($5,000 for a married person filing a separate return), beginning in tax year 2018 and expiring at the end of calendar year 2025. SALT payments (including income and real property taxes) that exceed those amounts are no longer deductible. Prior to the TCJA, there was no limitation on the amount of SALT payments that taxpayers could deduct, absent the alternative minimum tax.

Standard deduction amounts and SALT deduction limitations before and after the passage of the TCJA

Filing Status	Tax year 2017 standard deduction	Tax year 2018 standard deduction	Tax year 2018 SALT limitation amount
Single	$6,350	$12,000	$10,000
Married filing jointly	$12,700	$24,000	$10,000
Married filing separately	$6,350	$12,000	$5,000
Head of household	$9,350	$18,000	$10,000

Sources: IRS Publication 5307, Tax Reform Basics for Individuals and Families (October 2018) and Publication 17, Your Income Tax for Individuals (2017), Treasury Inspector General for Tax Administration.

According to the Treasury Inspector General for Tax Administration, if the SALT limitation had been in effect in tax year 2017, approximately 10.9 million taxpayers would have been affected and $323 billion in SALT payments would not have been deducted on Form 1040/Schedule A.

Estimated number of taxpayers subject to the SALT limitations, and amounts of state and local taxes paid over the SALT limitations in tax year 2018

Filing Status	Number of taxpayers	Total amount over SALT limitation
Single	2,151,826	$116,744,057,916
Married filing jointly	7,763,869	$185,864,116,484
Married filing separately	391,820	$5,772,842,933
Head of household	573,055	$14,746,499,306
TOTALS	**10,880,570**	**$323,127,515,639**

Source: Treasury Inspector General for Tax Administration calculations based on tax returns filed in tax year 2017.

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Gerard Durr
Senior Research Analyst

Federal Tax Reform and its Impact on Municipal Bond Market Credit

As mentioned in this commentary's introduction, the Tax Cuts and Jobs Act of 2017 (TCJA) not only lowered corporate and personal federal income tax rates, it also significantly reduced the ability of individuals to deduct state and local taxes (SALT) and mortgage interest from their federal income tax liability. The new law also restricted the ability of municipal debt issuers to achieve debt service costs saving by eliminating tax-exempt advance refundings prior to a bond's call date. Aside from negatively affecting the ability of municipal market entities to manage their debt, these changes have added an element of uncertainty as to how they will affect future state and local government revenues.

For some credits, these changes may well be benign or even positive over the long term. For others, particularly in states with high SALT rates, the long-term impact may well be negative. And for the municipal market on the whole, the limitation on advance refundings raises the possibility of further restrictions on tax-exempt financing in the future, which could increase municipal issuers' financing costs.

Positive immediate credit impact

The immediate macroeconomic impact of the TCJA has been positive. It added to GDP, increased employment, and further propelled the U.S. stock market—all of which are constructive for municipal credit. Additionally, tax-exempt municipal debt issuers have benefited from lower borrowing costs, due in part from the increase in demand and the greater scarcity in supply that the changes to the SALT and mortgage deduction (along with the elimination of tax-exempt advance refundings) have created.

In November 2017, the Tax Policy Center found that enactment of the TCJA would increase GDP over the first two decades of its enactment, with an increase of an additional 0.6% in 2018.[1] Wilmington Trust Chief Economist Luke Tilley predicted the impact of the TCJA on GDP growth in 2018 would be +0.5%–0.75%. With GDP growth coming in at 2.9%, he believes that the TCJA's impact on GDP last year was actually closer to the +0.75%. While the long-term economic effects of the TCJA are less certain and we will never know how the U.S. economy would have performed had it not been enacted, the widespread consensus is that the TCJA did provide a boost to the economy in 2018, which added to tax revenue growth for most state and local governments.

Empirically, the vast majority of state governments did particularly well for the fiscal year ending June 2018. According to the Pew Charitable Trusts, U.S. states received 5.5% more in tax revenue from July 2017 to June 2018, after adjusting for inflation. It was the biggest increase since tax dollars rose 7.0% in fiscal year 2011.[2] While the strengthened national economy, accompanied by increased employment, had significant roles in increasing states' tax revenues, some states that follow the federal tax code also received increases due to a broadening of income subject to taxes in their state. Federal tax law changes also motivated certain individuals and hedge funds to make pre-payments in 2017 in order to lower their overall tax liability. This also provided a temporary boost in state tax collections. The most recent information available from the U.S. Census Bureau reports that total state revenues have continued to rise, increasing 4.6% for the third quarter of 2018 versus the third quarter of 2017.

The National Association of State Budget Officers (NASBO) found that the acceleration in tax collections in 2018 resulted in the highest number of states exceeding their original budgeted revenue projections since 2006, with 40 states exceeding projections and with only seven states making budget cuts during the year—the fewest since 2006.[3] This compares to 18 states reporting revenues above projections, and 27 states falling below forecast in 2017. They also reported that state general fund spending was forecast to grow 4.3% in fiscal 2019 and that the majority of states will continue to strengthen their rainy day funds, with median balance as a

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share of general fund spending expected to reach 7.3% in fiscal 2019, up from a recent low of 1.6% in fiscal 2010. Over the short term, these increases should generally bode well for state government credit, but are also a positive for other governmental units. NASBO reports that the increase in state revenues has spurred states to appropriate over $41 billion in new money for K-12 education, higher education, Medicaid, and other core government services.

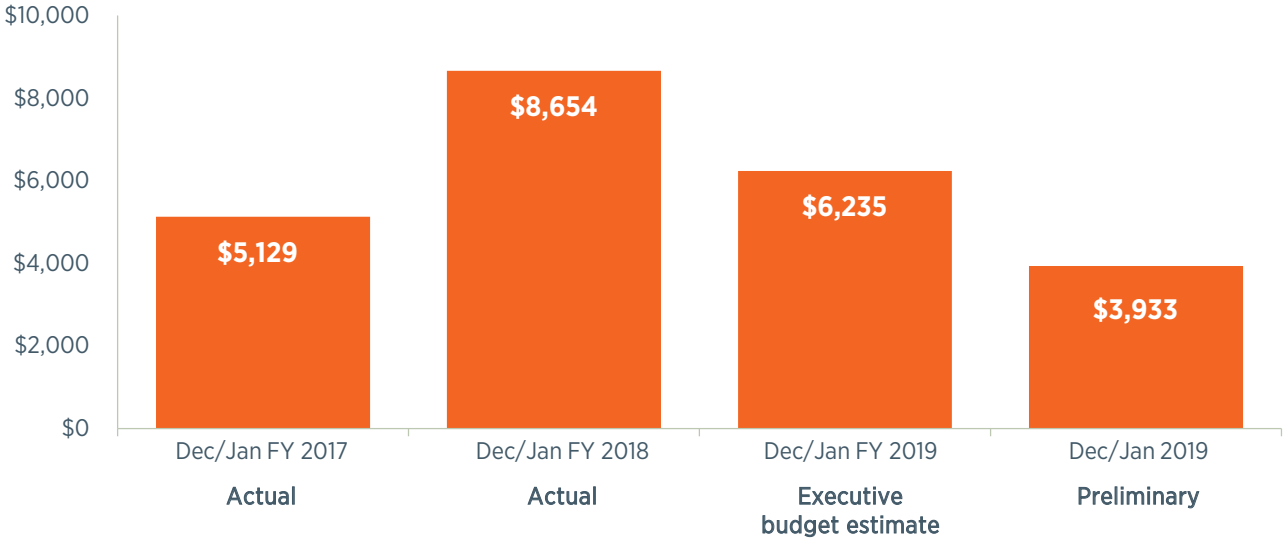
Potential long-term effect on credit quality

The most vocal opponents to the TCJA and the changes to the SALT and mortgage interest deductions have been state governors, and in particular governors in states with high state and local taxes, which are predominately Democratic. Governor Cuomo of New York said that, under the changes, "New York would be destroyed" and they amounted to "economic civil war." He has predicted the changes would devastate New York and other similarly situated high-tax states. While it is true consensus opinion that any negative effects of the TCJA are likely to be felt the greatest in states with high and state and local taxes, it is still too soon to tell. Forceful arguments have been on both sides about the effects of SALT deduction changes, yet most of the current evidence is either forecasted or anecdotal.

Supporters of the TCJA and the SALT reduction claim that any revenue loss should prompt these states to trim their wasteful spending—a credit positive. Others claim most taxpayers were never able to take complete advantage of the full SALT deduction and therefore the impact will be much less than is claimed. A recent study by Bloomberg of the 10 wealthiest counties in the U.S. claims "about 75% of people who had paid more than $10,000 in state and local taxes had been required to take the alternative minimum tax (AMT); meaning they couldn't have written off the SALT levies anyway... and because the AMT has been scaled back under the TCJA, those top earners in fact get a new tax break by now being able to write off up to $10,000 of their SALT payments."[4]

Congress' nonpartisan Joint Committee on Taxation estimated that the cap on SALT deductions and the changes to deductions for home mortgages will bring in $668.4 billion in additional tax revenue over the next decade. That money has to come from somewhere, and most likely it will be from the high-wealth individuals who are concentrated in high-tax states. In February of this year, some of the first evidence appeared that the TCJA may now be negatively impacting state revenues in at least one high-wealth, high-tax state, and that the increase in state tax revenues in 2018 was for the most part temporary.

Figure 1
NYS estimated payments ($ in millions)



Source: htttps://www.governor.ny.gov.new/governor-cuomo-and comptroller-dinapoli-deliver-update-state revenues-and-impact-salt.

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In a February 4 update on New York State's revenues and the impact of SALT, Governor Cuomo and State Comptroller Napoli presented preliminary information showing a sharp decline in tax payments. Those revenues were not only well below the same period in 2018, but they were also well below the much-lower Executive Budget Payment Estimate for December/January FY 2019. They went on to report that New Jersey, Connecticut, California, and Massachusetts have all had similarly large revenue declines, and that while other states that have much lower levels of state and local taxes also experienced declines, they were not remotely similar in magnitude.[5] While these numbers may have some partisan "rounding" in them, they should not be dismissed.

What is the real concern for high-tax states?

High-tax states fear many of their residents will have a higher overall tax burden under the TCJA. As a result, disposable income will decrease and residents may vote with their feet and either move to low-tax states, or at least establish residency for tax purposes in a low-tax state. Just as concerning is that those residents who chose to move are most likely to be among the state's best educated and/or most productive or wealthiest citizens. In states with progressive tax structures, such as New York, it can be particularly troubling. New York claims the top 1% of its taxpayers account for 46% of the state income tax liability and that more than 95% of the tax increase from SALT falls on the top 20% of taxpayers that pay 87% of New York's income taxes.[6] Even a relatively small number of residents with high income moving out could have a significant impact on state tax revenues.

For those left behind, there is the fear that residents will either experience tax fatigue, whereby it will be increasingly difficult for state and local government to raise taxes, or that governments will begin to cut services and programs to their residents. Under either scenario, or a combination of both, it is possible the cycle of out-migration will continue and that those that have the means to do so will continue to head for the exit.

While not nearly as severe, but also theoretically troubling, is that changes to SALT and the mortgage interest deduction have the potential to negatively affect real estate values in the high-tax states. Initially, any impact would be expected to be found on residential real estate values, where these changes are likely to increase the cost of home ownership for many residents in these states. However, if this plays out, as residential values begin to fall, the impact could also be felt over time through decreased commercial property values in those communities that see the largest residential declines. These declines in value would lead either to a decrease in state and local property tax revenues or to the need to raise revenues through increased property tax rates or another source.

While a recent paper by the Federal Reserve Bank of Cleveland notes that "high standard deductions have caused the mortgage interest deduction and the property tax deduction to benefit only about one in four filers in recent years … the benefits for the tax preference for housing accrue disproportionally to those with higher incomes."[7] As whole, the Cleveland Reserve Bank's study proposes that the overall price declines from eliminating the housing preference will be limited, but that the largest decreases will be centered in the "high-income, high-valued neighborhoods whose tax filers often itemize deductions (i.e., high-tax states) … with modest price gains in places where there are no wasted housing deductions under the new law and the marginal rate becomes steeper."

Finally, there is the concern that if these states begin to see a revenues decline, they would at some point be forced to make cuts in their support to underlying local governments. This would place further budgetary pressure on those underlying units at a time when their local property tax revenues may be in decline as well.

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There is ample evidence that the short-term effect of the TJCA has been at least moderately positive for the municipal credit market. The TJCA provided a boost to GDP in 2018, which in turn seems to have aided governmental revenue collection and has had the seemingly unintended consequence of helping to create the current exceptionally low-cost capital environment for market issuers. Together they have more than offset the immediate negative effect of the elimination of tax-exempt advance refundings prior to a bond's call date.

It is too soon to tell with any certainty the longer-term effects—and the degree of those effects—of the TCJA on municipal market credit. Most people choose where they live for a variety of factors, with taxes being one of many. However, there is good reason to believe the equation could be changing for many people, and that the TJCA may well have a negative impact on states with high state and local tax burdens. Those states that appear most at risk are New York, New Jersey, Connecticut, and California. And while the impact would be felt initially at the state level, it would eventually impact many of their underlying governmental units. If this scenario were to play out, the high-tax state's loss could be other states' gains. States well positioned to benefit as a result, and due in large part to their relatively low-tax environment and growing economies, are Texas, Florida, Nevada, and Arizona. We will continue to monitor and report back as the picture becomes clearer.

ENDNOTES

[1] Tax Policy Center "Macroeconomic Analysis Of The Tax Cuts and Jobs Act As Passed By The House Of Representatives" Page, Rosenberg, Nunns, Rohaly, Berger

[2] Pew Trusts "State Tax Revenue Makes Biggest Gains in Seven Years" Rosewicz, Theal, & Newman

[3] The National Association of State Budget Officers "The Fiscal Survey of States" Fall 2018

[4] Bloomberg "Many Rich Fretting About SALT Didn't Get That Tax Break Anyway" Davidson and Goldman

[5,6] https://www.governor.ny.gov/news/governor-cuomo-and-comptroller-dinapoli-deliver-update-state-revenues-and-impact-salt

[7] Federal Reserve Bank of Cleveland "The Impact of Tax Cuts and Jobs Act on Local Home Values" Martin

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Selected S&P Municipal Bond Index totals and averages

	AS OF MARCH 28, 2019								
	Number of holdings	Market value (in $ billions)	Coupon	Yield-to-worst	Maturity	Maturity (in yrs.)	Priced-to date	Priced-to date (in yrs.)	Effective duration
Municipal Bond	194,201	2,354.31	4.393	2.365	06/11/2031	12.283	12/10/2024	5.71	5.934
Investment Grade (IG)	185,876	2,211.73	4.488	2.235	12/17/2030	11.794	09/06/2024	5.45	5.826
Intermediate	111,106	1,124.32	4.512	2.115	09/22/2027	8.504	09/23/2024	5.50	5.174
IG Intermediate	107,427	1,078.43	4.503	2.051	09/20/2027	8.499	09/22/2024	5.50	5.199
Short Intermediate	78,683	783.92	4.570	1.777	06/04/2023	4.192	12/01/2022	3.68	3.333
IG Short Intermediate	75,489	743.97	4.549	1.739	06/18/2023	4.230	12/15/2022	3.72	3.377
Short	43,371	432.90	4.592	1.648	05/17/2021	2.142	05/24/2021	2.16	1.938
IG Short	41,129	401.69	4.558	1.618	05/22/2021	2.155	05/01/2021	2.10	1.952
High Yield	8,325	142.57	3.428	4.379	01/04/2039	19.868	12/18/2028	9.75	7.617
High Yield Ex-Puerto Rico	8,142	126.63	3.637	4.423	09/02/2038	19.513	11/26/2027	8.68	7.363
California	27,643	384.84	4.153	2.212	05/07/2032	13.199	12/21/2024	5.75	6.156
New York	12,920	285.19	4.502	2.205	12/07/2031	12.770	07/27/2024	5.34	5.699
Puerto Rico	244	18.64	2.486	3.799	01/13/2040	20.994	11/20/2035	16.71	9.033

Sources: Wilmington Trust Investment Advisors, Investortools, Inc., S&P Dow Jones Indices LLC, ICE Securities Evaluations, Inc.
Index calculations by Investortools, Inc. Custom Index Manager, the Federal Reserve System.

DISCLOSURES

The S&P Municipal Bond Index is a broad, market value-weighted index that seeks to measure the performance of the U.S. municipal bond market. It tracks fixed-rate bonds exempt from federal income tax, though they may be subject to the alternative minimum tax (AMT), with par outstanding of at least $2 million. The index includes bonds of all quality ratings–from AAA to non-rated, including defaulted bonds–and from all sectors of the bond market. The S&P Municipal Bond Index constituents undergo a monthly review and rebalancing.

The S&P Municipal Bond Investment Grade Index consists of bonds in the S&P Municipal Bond Index that are rated at least BBB- by Standard & Poor's, Baa3 by Moody's, or BBB- by Fitch Ratings. For the avoidance of doubt, the lowest rating is used in determining if a bond is eligible for the Index. S&P Dow Jones Indices looks at the long term rating, either insured or uninsured, and the underlying rating for index inclusion. All bonds must also have a minimum maturity of three years and a maximum maturity of up to, but not including, fifteen years, as measured from the rebalancing date.

The S&P Municipal Bond Intermediate Index consists of bonds in the S&P Municipal Bond Index with a minimum maturity of three years and a maximum maturity of up to, but not including, 15 years, as measured from the rebalancing date.

The S&P Municipal Bond Short Intermediate Index consists of bonds in the S&P Municipal Bond Index with a minimum maturity of one year and a maximum maturity of up to, but not including, eight years, as measured from the rebalancing date.

The S&P Municipal Bond Short Index consists of bonds in the S&P Municipal Bond Index with a minimum maturity of six months and a maximum maturity of up to, but not including, four years, as measured from the rebalancing date.

The S&P Municipal Bond High-Yield Index consists of bonds in the S&P Municipal Bond Index that are not rated or whose ratings are less than or equal to BB+ by Standard & Poor's, Ba1 by Moody's, or BB+ by Fitch Ratings. Bonds that are prerefunded or escrowed to maturity are not included in this index. The lowest long-term underlying rating, either insured or uninsured, is used in determining if a bond is eligible for the Index.

The state level municipal bond sub-indices consists of bonds in the S&P Municipal Bond Index that have been issued by municipalities or municipal authorities within the respective states, the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands. States and municipalities may have issues across the duration and quality spectrums or may be more concentrated to certain sub-indices, such as in the S&P Investment Grade or High Yield bond indices.

The S&P Municipal Bond Puerto Rico Index consists of bonds in the S&P Municipal Bond Index issued by the Commonwealth of Puerto Rico, and municipalities and municipal authorities within the Commonwealth. Individually these entities may have issues across the duration and quality spectra; however, as a general matter they have been increasingly concentrated in the S&P High Yield Bond Index.

Indices are not available for direct investment. Investment in a security or strategy designed to replicate the performance of an index will incur expenses, such as management fees and transaction costs, which would reduce returns.

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Selected S&P Municipal Bond Index total returns

	AS OF MARCH 28, 2019			CALENDAR
	MTD	QTD	YTD	2018
Municipal Bond	+1.405%	+2.688%	+2.688%	+1.356%
Investment Grade (IG)	+1.356%	+2.625%	+2.625%	+1.125%
Intermediate	+1.120%	+2.658%	+2.658%	+1.546%
IG Intermediate	+0.596%	+1.773%	+1.773%	+1.394%
Short Intermediate	+0.591%	+1.776%	+1.776%	+1.777%
IG Short Intermediate	+0.591%	+1.776%	+1.776%	+1.684%
Short	+0.368%	+1.063%	+1.063%	+1.778%
IG Short	+0.362%	+1.050%	+1.050%	+1.717%
High Yield	+2.175%	+3.679%	+3.679%	+5.226%
High Yield Ex-Puerto Rico	+2.100%	+3.369%	+3.369%	+3.258%
California	+1.468%	+2.612%	+2.612%	+1.077%
New York	+1.433%	+2.763%	+2.763%	+0.918%
Puerto Rico	+2.526%	+6.046%	+6.046%	+23.698%

Sources: Wilmington Trust Investment Advisors, Investortools, Inc., S&P Dow Jones Indices LLC, ICE Securities Evaluations, Inc. Index calculations by Investortools, Inc. Custom Index Manager.

Quality ratings are used to evaluate the likelihood of default by a bond issuer. Independent rating agencies, such as Standard & Poor's and Moody's Investors Service, analyze the financial strength of each bond's issuer. Moody's ratings range from Aaa (highest quality) to C (lowest quality). Bonds rated Baa3 and better are considered "Investment Grade." Bonds rated Ba1 and below are "Below Investment Grade" (also "High Yield" or "Speculative"). Similarly, Standard & Poor's ratings range from AAA to D. Bonds rated BBB– and better are considered "Investment Grade" and bonds rated BB+ and below are "Below Investment Grade."

All investments carry some degree of risk. Investors should develop a thorough understanding of the risks of any investment prior to committing funds.

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