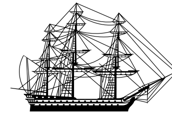

Vanguard®

Vanguard municipal perspectives

2nd Quarter, 2018

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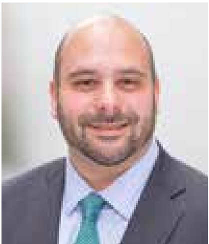

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Sometimes the slow lane can get you there faster

What happened in the muni market

Highways in or near urban areas everywhere get jammed during rush hour. Often during these times, the middle and right lanes—that is, the slower lanes—move faster than the passing lane. That's because so many drivers are lined up on the left waiting for traffic to move.

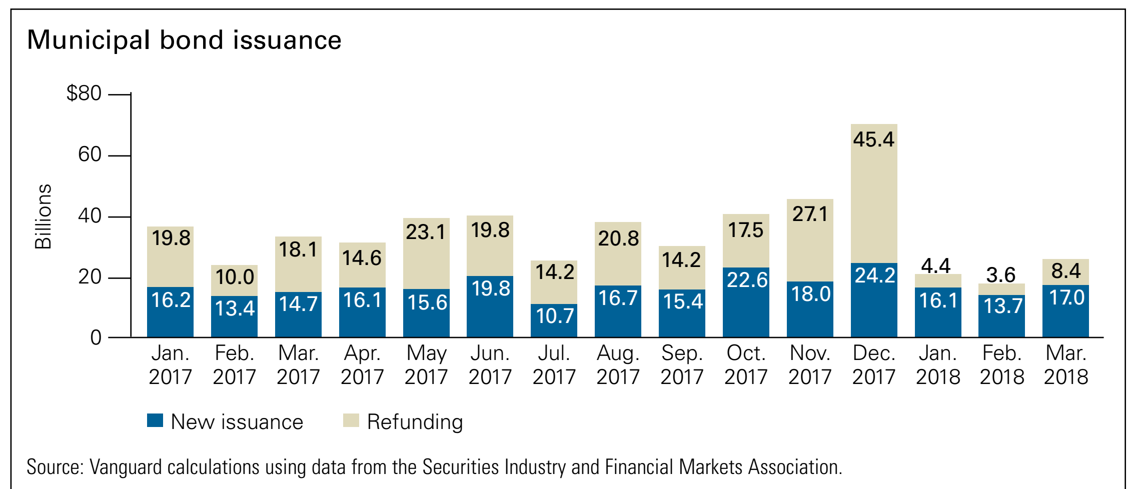
The same sort of dynamic can be seen at times in the municipal bond market. Investors may be piled into higher-yielding (i.e., less creditworthy) bonds, which are typically the fast lane to higher returns. While that strategy might work sometimes, there are other periods when the potential risks outweigh the rewards, and higher-quality bonds prove their worth. That seems to be the case in the current market environment.

Quarter in review

Before we offer our view of the market, let's first discuss how the historic municipal market in the fourth quarter of 2017 affected the muni market in the first quarter. Last year's tax legislation caused record-breaking issuance as municipalities rushed to put out tax-exempt advance refundings and private activity bonds before they could be potentially eliminated. An eager market purchased all that issuance, and yields ended up falling even in the face of such supply. The federal tax exemption for interest on new advance refunding bonds was ultimately abolished, and the pull-forward of issuance into 2017 shrunk supply this year by about 40%. This would normally support muni bond prices; however, banks and insurance companies have far less incentive to hold tax-exempt bonds now because corporate tax rates were reduced. The secondary market remains active, and issuance in the primary market should eventually return to usual. *The new tax law has had a modest effect on the municipal market, and demand remains greater than supply.*

The result is that spreads remain tight, and yields are flat, at a time when we face the prospect of rising interest rates. *We anticipate the Federal Reserve will continue to hike the benchmark federal funds rate, with two more quarter-point moves this year and three more in 2019. We believe the market has priced in only one increase for 2019, so an adjustment to current bond prices may yet occur.*

Bottom line: Overweighting high-yield bonds will not necessarily be the path to better, and certainly not better risk-adjusted, returns over the next two years or so.

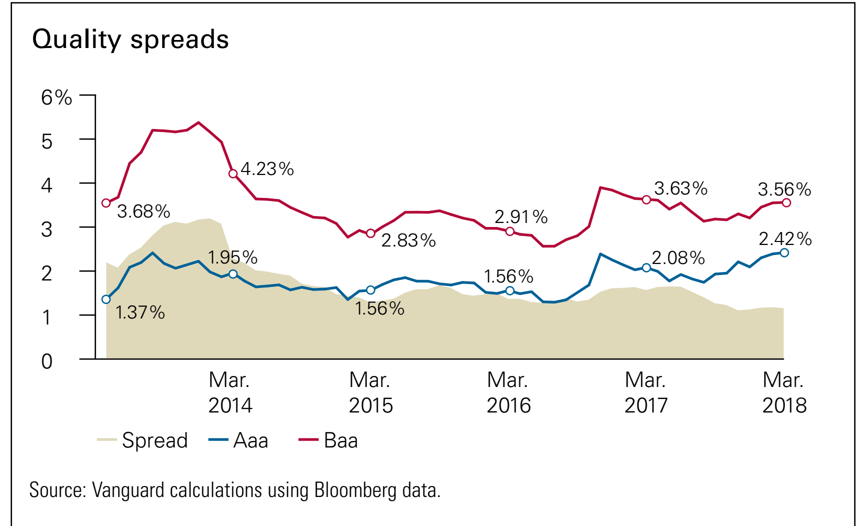


Source: Vanguard calculations using data from the Securities Industry and Financial Markets Association.

Spreads remain tight

Lower-credit-quality bonds—Baa-rated bonds and bonds considered below investment-grade[1]—outperformed in the first quarter, and we expect that to continue at least through the first half of the year. A higher economic growth rate has helped those issuers, and investors still have a strong appetite for yield. But spreads between Aaa- and Baa-rated bonds are snug, and valuations —which are within the 20th percentile of their historical range—are on the rich side. This is normal for the late stages of an economic cycle, which is where we believe the economy is right now.

Bottom line: There is not much more room for spreads to compress, but there is room for them to widen, although it could take a recession to force investors to demand a higher premium for lower-credit-quality bonds.

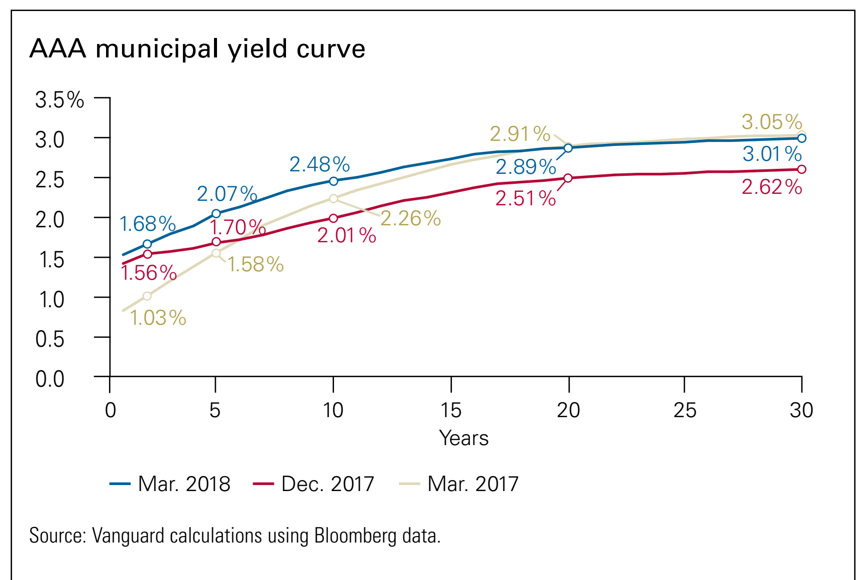


Source: Vanguard calculations using Bloomberg data.

Yield curve

The yield curve flattened over the past year, and we expect it will continue to be flat this year. In the next six months, we expect the 10-year U.S. Treasury note to trade above 2.6%, perhaps rising a little over 3.0%. Muni rates are up about 50 basis points this quarter, with the market pricing in higher inflation, more Federal Reserve tightening, and higher risk. We do expect a modest pickup in inflation, which will force the Fed to continue putting pressure on short-term rates. It is typical to see a bear flattening at the late stages of a cycle.

Bottom line: The current yield curve is flatter than normal, leaving little room for further compression.



Source: Vanguard calculations using Bloomberg data.

1 A bond whose credit quality is considered to be among the highest by independent bond-rating agencies.

Municipal market performance

As the chart below shows, both lower-credit-quality and longer-dated bonds continued to outperform over the first quarter.

Credit quality

	1 month	3 months	12 months
Aaa	0.33%	–1.19%	1.75%
Aa	0.35	–1.11	2.26
A	0.39	–1.08	3.24
Baa	0.47	–1.00	5.36
Total return	**0.37%**	**–1.11%**	**2.66%**

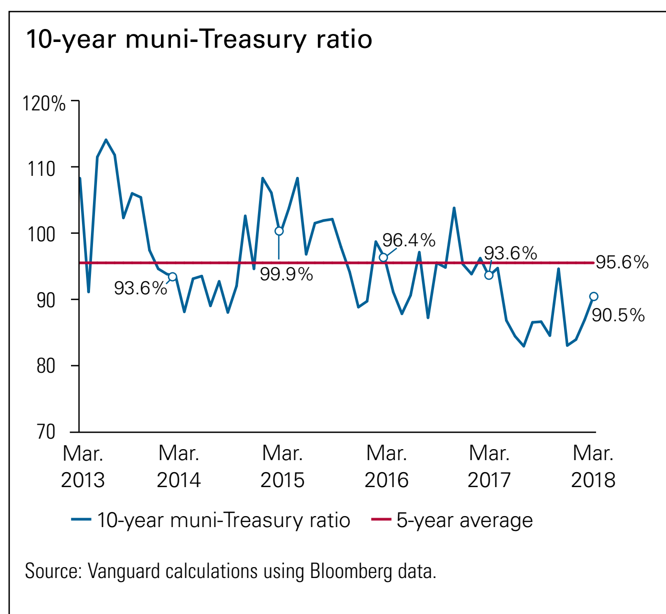
Maturity

	1 month	3 months	12 months
1–5 years	–0.07%	0.10%	0.50%
5–10 years	0.15	–1.29	1.41
10–20 years	0.61	–1.57	3.62
20+ years	0.68	–1.50	4.60
Total return	**0.37%**	**–1.11%**	**2.66%**

Source: Vanguard calculations using Bloomberg data.

Ratios increased

Ratios are at about fair value. The long end of the yield curve offers more compelling valuations than the short end, which is more expensive right now. We believe ratios will remain in this range as long as the economy holds strong.



Source: Vanguard calculations using Bloomberg data.

Positioning of the Vanguard portfolios

According to our internal metrics, our municipal portfolios hold about half the risk they would otherwise hold if we were managing in full bull-market mode. It's not because we expect a recession imminently—we don't. But an economic slowdown may occur sometime in the next two years or so, and we would expect to continue to hold the current level of risk or reduce it until a recession arrives. We are not typically fast-lane speedsters anyway, but at this point, we feel the best route is in the slower, and we think safer, lanes of investment-grade credit.

Our 45-person municipal team does occasionally find some opportunities to make headway, finding higher-yielding issues from relatively strong issuers. For example, our credit analysts recently identified attractive senior notes with a 6.5% coupon for an Oregon biofuels plant. Before approving the purchase, our traders estimated a fair price, and our portfolio managers specified the structure they were looking for to fit into their portfolios. This is how our specialized teams find value among higher-yielding bonds. But deals like that remain hard to find.

Counterintuitively, the biggest opportunity for outperformance in the future may come from calling the potentially bad-credit states well. Some states that face pension-funding and structural deficits—such as Kentucky, Connecticut, and Pennsylvania—are trading at fair prices now, but the market may punish them if the economy starts to stall and revenues deteriorate. Our goal is to get in front of these problems. Other states, such as New Jersey and Illinois, have seen their bonds cheapen already, and so the question is whether their political leaders can take on the long-term issues. If leaders in such states can make progress, investors could be rewarded.

We are neutral in our positioning across the yield curve, not favoring short-, intermediate-, or long-term bonds. Strategies using convexity and involving callable bonds may prove helpful. The expected returns from bonds are lower than they have been historically, but bonds still make sense as ballast in a portfolio, and muni bonds remain advantageous to most taxable investors.

Bottom line: Overall, we are content to favor investment-grade credit, holding paper from issuers who we feel are willing and able to repay their debts. Bonds backed by predictable and stable revenue sources tend to fit that profile. We think that given the current municipal market dynamics, some defensive driving will serve our investors—and your clients—best over the long term.

Vanguard tax-exempt fund	Share class	Ticker symbol	Expense ratio[1]
Index			
Tax-Exempt Bond Index	ETF	VTEB	0.09%
	Admiral™	VTEAX[2]	0.09
	Investor	VTEBX[2]	0.19
National actively managed			
Short-Term Tax-Exempt	Admiral	VWSUX	0.09%
	Investor	VWSTX	0.19
Limited-Term Tax-Exempt	Admiral	VMLUX	0.09
	Investor	VMLTX	0.19
Intermediate-Term Tax-Exempt	Admiral	VWIUX	0.09
	Investor	VWITX	0.19
Long-Term Tax-Exempt	Admiral	VWLUX	0.09
	Investor	VWLTX	0.19
High-Yield Tax-Exempt	Admiral	VWALX	0.09
	Investor	VWAHX	0.19
State actively managed			
California Intermediate-Term Tax-Exempt	Admiral	VCADX	0.09%
	Investor	VCAIX	0.19
California Long-Term Tax-Exempt	Admiral	VCLAX	0.09
	Investor	VCITX	0.19
Massachusetts Tax-Exempt	Investor	VMATX[3]	0.15
New Jersey Long-Term Tax-Exempt	Admiral	VNJUX	0.09
	Investor	VNJTX	0.19
New York Long-Term Tax-Exempt	Admiral	VNYUX	0.09
	Investor	VNYTX	0.19
Ohio Long-Term Tax-Exempt	Investor	VOHIX[3]	0.15
Pennsylvania Long-Term Tax-Exempt	Admiral	VPALX	0.09
	Investor	VPAIX	0.19

1 As reported in each fund's prospectus. A fund's current expense ratio may be higher or lower than the figure shown.
2 The conventional share classes each have a 0.25% purchase fee. See the prospectus for more information.
3 There is no minimum investment required for these funds' Investor Shares for advised clients.

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For more information about Vanguard funds or Vanguard ETFs, visit advisors.vanguard.com or call 800-997-2798 to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing.

Vanguard ETF Shares are not redeemable with the issuing Fund other than in very large aggregations worth millions of dollars. Instead, investors must buy and sell Vanguard ETF Shares in the secondary market and hold those shares in a brokerage account. In doing so, the investor may incur brokerage commissions and may pay more than net asset value when buying and receive less than net asset value when selling.

Past performance is no guarantee of future results. All investing is subject to risk, including possible loss of principal.

High-yield bonds generally have medium- and lower-range credit quality ratings and are therefore subject to a higher level of credit risk than bonds with higher credit quality ratings.

Bond funds are subject to interest rate risk, which is the chance bond prices overall will decline because of rising interest rates, and credit risk, which is the chance a bond issuer will fail to pay interest and principal in a timely manner or that negative perceptions of the issuer's ability to make such payments will cause the price of that bond to decline.

Although the income from a municipal bond fund is exempt from federal tax, you may owe taxes on any capital gains realized through the fund's trading or through your own redemption of shares. For some investors, a portion of the fund's income may be subject to state and local taxes, as well as to the federal Alternative Minimum Tax.

The information contained herein does not constitute tax advice, and cannot be used by any person to avoid tax penalties that may be imposed under the Internal Revenue Code. Each person should consult an independent tax advisor about his/her individual situation before investing in any fund or ETF.

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