NEUBERGER | BERMAN

JAMES ISELIN
Senior Portfolio Manager
Head of the Municipal Fixed
Income Team

JASON PRATT
Portfolio Manager
Head of Insurance Fixed Income

JULY 2017

MUNICIPAL DEBT FOR U.S. INSURERS: MORE THAN MEETS THE EYE

Municipal finance has been making headlines in recent weeks beginning with the highly anticipated Puerto Rico default. Within the U.S., several states including Illinois, Connecticut and New Jersey have also been making headlines as they wind up their fiscal review and budgeting process. In the wake of these events, we think it's timely to address the municipal debt market and in particular how insurance portfolios should consider these risks and opportunities. U.S. insurers have long looked to municipal bonds as a relatively stable source of high-quality yield. Historically, exposure to the asset class has often been treated as little more than an extension of a core fixed income portfolio. However, post-crisis dynamics in the municipal debt market and potential changes in the investment landscape related to infrastructure policy have given rise to new challenges and amplified old ones, suggesting that the asset class demands specialized, dedicated attention.

Weaker-than-expected post-recession GDP growth in the U.S. coupled with government policy shifts related to healthcare have impacted some corners of the U.S. more than others. These market dynamics underscore the need for dedicated municipal debt experts to navigate market opportunities and avoid potential missteps.

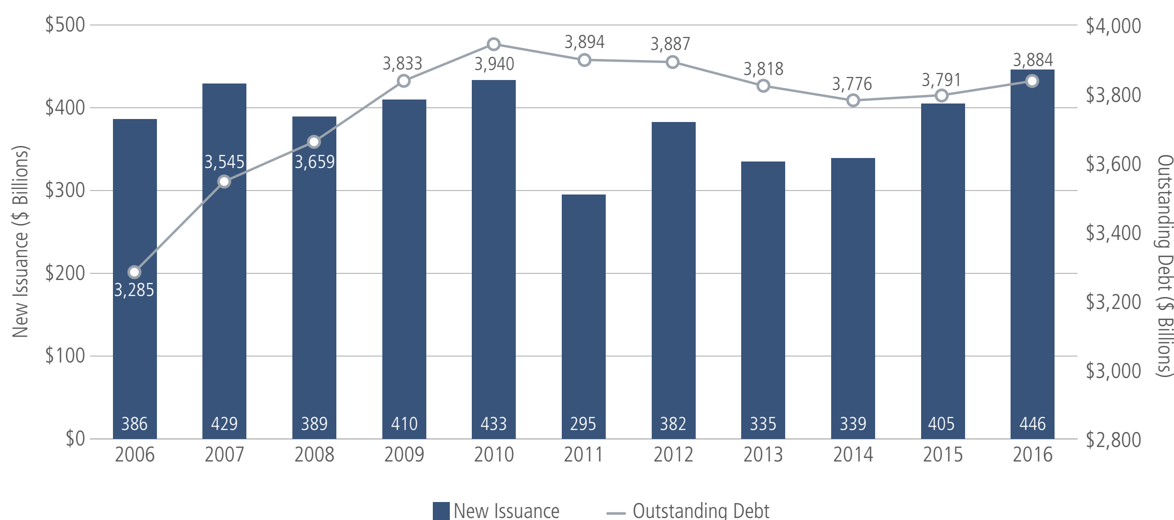
Introduction

At more than $3.8 trillion, the U.S. municipal bond market is one of the largest sectors within the global fixed income investment universe. Municipals long have been a staple of insurance company portfolios, contributing tax efficiency in the case of P&C companies and providing a source of highly rated duration for life companies to support asset/liability management. As of December 31, 2016, domestic insurance companies held nearly 15% of outstanding municipal debt.[1]

Insurers including both P&C and Life companies historically have managed their municipal bond exposure in a variety of ways. Some establish in-house management capabilities to oversee their portfolios, while others outsource dedicated municipal bond mandates to third-party investment managers. Interestingly, it remains common for insurers to manage municipal assets as part of an existing core fixed income portfolio, effectively including AA and A-rated municipal debt as part of a broad allocation to investment grade credit. This approach likely is driven by the fact that the municipal market was once largely guaranteed by insurance wrap providers such as Ambac and MBIA. While the municipal market remains highly rated, the removal of the insurance guarantee means that today's market is truly credit driven; thus, dedicated, independent analysis is critical in security selection and portfolio management. Accessing municipal issuance is another important factor. The municipal broker-dealer marketplace is extremely fragmented, requiring significant resources and relationships to access the whole of municipal new issuance and participate in the vibrant secondary market. A final wrinkle impacting the role municipals play for insurers is the prospect of tax reform, as some proposals currently being floated could negatively impact the municipal bond market.

The complexity associated with these factors coupled with ongoing dynamics playing out in markets related to low yields and length of credit cycle helps to explain why insurers are taking a fresh look at the role municipal debt can play in their portfolios.

FIGURE 1. THE MUNICIPAL BOND MARKET HAS GROWN TO ALMOST $4 TRILLION



Source: Securities Industry and Financial Markets Association. SIFMA.org. U.S. Bond Market Issuance and Outstanding, as of 12/31/2016.

Municipal Bonds Are a Source of High-Quality Credit Exposure Across the Curve

With a history almost as long as that of the United States itself, the U.S. municipal bond market is one of the oldest and largest fixed income markets in the world. The $3.8 trillion outstanding as of December 31, 2016, reflects more than 50,000 government issuers at the state, city and county levels across the country.

[1] Securities Industry and Financial Markets Association, as of December 31, 2016.

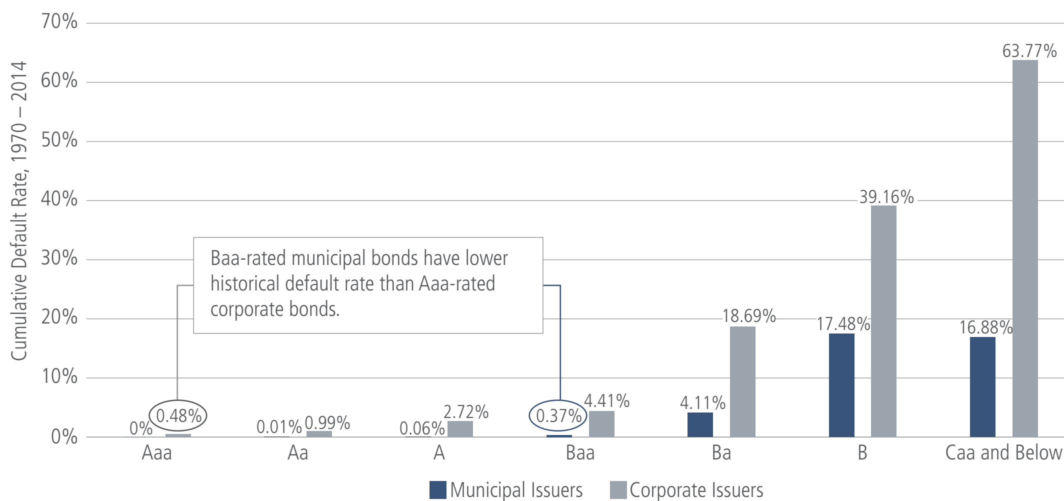
Market Refresher: Municipal Bond Basics

There are two main varieties of municipal bonds. General obligation bonds, which account for approximately one-third of total issuance, are sold to raise capital for the issuer's regular operations and are backed by the taxing power of the issuer. Revenue bonds, which account for most of the remaining two-thirds, are issued to fund infrastructure projects—from sewer systems to transportation networks to toll roads—and are backed by the cash flow generated by those projects. Interest paid to investors in these bonds can be either taxable or tax-exempt under the federal tax code; the tax status of the bond is a function of the intended use of the assets to be raised, not the issuer. As an incentive to private-market financing of state and local government spending, around 85% of the total municipal market is tax exempt today. One notable example of taxable issuance was that of the bonds associated with the "Build America Bond" (BAB) program during 2009–10 in which the U.S. federal government, as part of the post-financial crisis economic stimulus effort, offered subsidy support to taxable bonds that were issued to finance infrastructure projects.

While municipal debt issuance tends to be thought of as intermediate-maturity financing, issuance exists across the entire curve. In fact, longer-dated issuance—a potentially strong fit for longer-tail lines such as workers compensation and professional liability insurance companies in the tax-exempt market, as well as life insurance companies in the taxable market—is easier to access than the belly of the yield curve. Alongside a sizable market of short-dated and intermediate paper, more than $100 billion of outstanding bonds have a maturity of 20 years or more, with in excess of $20 billion dated longer than 30 years.

Notably, these maturities are available to investors via high-quality bonds. More than 85% of the municipal market is rated single A or higher, and the default rate of municipal bonds is substantially lower than that of corporate bonds (as shown in Figure 2) despite some high-profile defaults in recent years—Detroit in 2013 and Puerto Rico in 2015 and 2016 among them. Recovery rates, too, have tended to favor municipals over equivalently rated corporate bonds, particularly as critical local infrastructure assets continue to generate revenues that have accrued to bondholders.

FIGURE 2. MUNICIPAL BOND DEFAULT RATES ARE MUCH LOWER THAN THOSE OF EQUALLY RATED CORPORATES

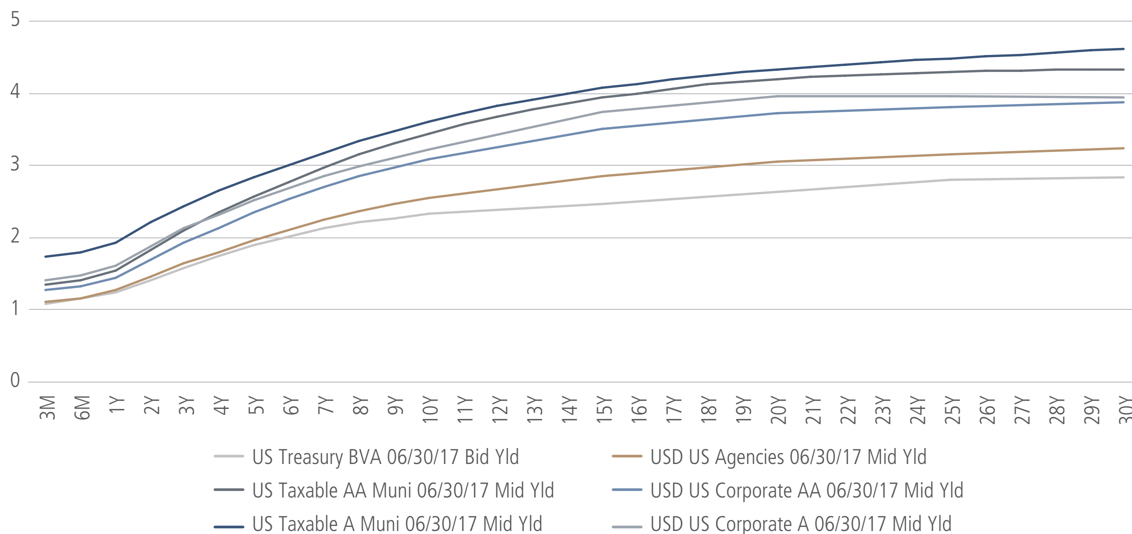


Source: Moody's Investor Service 12/31/16.

With their distinct credit profile, municipal bonds can help diversify the credit risk in broad fixed income portfolios. For example, municipal bonds do not carry the acquisition risk that corporate bonds face; an industrial issuer may find itself the target of an acquisition, leading to concerns among bondholders about balance-sheet expansion and credit-quality deterioration. This risk simply doesn't exist within the municipal market; the City of Los Angeles Water and Sewer, for example, won't be acquiring City of Columbus Water and Sewer. Given that the U.S. is now more than seven years into an economic cycle, municipal debt presents a compelling alternative versus an investment grade corporate market characterized by tight spreads. Municipal exposure allows insurers to maintain higher rating quality without a meaningful give-up in yields.

As shown in Figure 3, municipal debt offers attractive nominal yields versus other asset classes. Investment grade taxable municipals provide for 50 – 150 basis points of additional yield relative to agencies as you move further out of the curve. When you consider the credit and default statistics of the sector, the value becomes clear. What accounts for this substantial pickup in net risk-adjusted yield? One factor is that, from a practical perspective, the municipal bond market can be a difficult one in which to participate.

FIGURE 3. MOVING FROM CORPORATE BONDS TO MUNICIPAL BONDS DOES NOT MEAN GIVING UP POTENTIAL YIELD



Source: Bloomberg 6/30/17.

Municipal Bonds Today are Truly a Credit-Driven Market

The municipal bond insurance industry was battered by the financial crisis, leading a number of prominent insurers to file for bankruptcy and all of them to suffer ratings downgrades. As a result, municipal bond insurance all but disappeared from the market; the rate of municipal bond insurance penetration peaked at 57% in 2006, according to *The Bond Buyer*, and now stands below 6%. Without the crutch of an insurance wrap, today's municipal market more closely resembles the rest of the broad spectrum of credit markets, requiring deep resources to evaluate fundamental financial characteristics, geography, politics and issuers' ability to satisfy debt obligations. In other words, the municipal bond market has gone from a Treasury-like rates market to a true credit market. Since the financial crisis, it's important to note that in spread terms, municipals have been fairly well behaved through more recent bouts of volatility, as shown below in Figure 4.

Despite one of the longest recoveries on record, some issuers continue to grapple with unfunded pension obligations and other legacy costs. In recent years, major cities like Chicago and Dallas have experienced multiple downgrades, significant spread widening and reduced liquidity. The recent struggles of Dallas are noteworthy as the city has performed extremely well from an economic standpoint and has been a magnet for major corporations and talented professionals. However, mismanagement of the city's pension system has led to downgrades into the "A" rated category and significant underperformance. Rating agencies are becoming much more aggressive and proactive in their desire to alert investors about the potential risks relating to unfunded pension obligations. Credit volatility is no longer just confined to smaller, more speculative issuers. Therefore, an experienced and active research capability is critical to successfully navigating through these new market dynamics.

FIGURE 4. MUNICIPALS HAVE BEHAVED WELL THROUGH RECENT VOLATILITY

Option-Adjusted Spread: Taxable Municipal vs. U.S. Agg. Corporate and Euro Agg. Corporate

Source: Bloomberg, as of June 30, 2017.

An Increasingly Complex Market Requires Dedicated Resources

Although the quality, risk and issuance characteristics of municipal bonds are favorable, the somewhat insular marketplace for these securities creates a complexity that may be unfamiliar to investors more accustomed to the relative ease of access inherent in the investment grade bond or even the high yield bond and loan markets. Moreover, the relative liquidity of the municipal bond market can make it challenging for investors lacking an extensive network of dealer relationships to create well-diversified municipal bond portfolios.

As mentioned earlier, the municipal bond market is fast approaching $4 trillion in size. The dollar value of the market is somewhat misleading, however, as municipal purchasers tend to be buy-and-hold investors, meaning that the majority of outstanding bonds are not regularly available on the secondary market after issuance. To access the full spectrum of municipal offerings—in both the primary and secondary markets—maintaining an extensive network of broker-dealer relationships is key. This network must include not only the bulge-bracket players, but the smaller, regional operators as well.

Deal sizes range significantly between very well-known large transactions, like those issued by universities, and smaller deals issued by lesser-known towns and municipalities with strong metrics. Issue size can range between $50 million and $1 billion. Many investors can easily see and access the larger transactions, but significant value can be found in smaller offerings where more resources are required to understand and evaluate the underlying credit. This dynamic underscores the importance of having dedicated resources that touch the whole of the market.

Roughly $400 billion[2] of new municipal debt is issued in an average year, and large, national dealers represent less than half of that issuance. Similarly, some of the best values on the secondary market—on which more than 50,000 distinct issues and 2 million CUSIPs trade over the counter—can be found in the smaller shops. At Neuberger Berman, for example, we maintain relationships with more than 100 dealers nationwide and traded with more than 100 in 2016 alone.

Policy Implications of the New Administration

The Trump administration brings with it a variety of proposals that may be of concern to municipal bond issuers and investors, tax reform and infrastructure spending chief among them.

With both the legislative and executive branches of the U.S. government now in Republican control, major tax reform has moved from a remote possibility to more likely, notwithstanding the current political climate, with the current set of proposals

[2]Source: Securities Industry and Financial Markets Association.

representing the most significant contemplated change to the tax code since the 1980s. Lower tax rates could present a challenge to the municipal market; Figure 5 provides a comparison of the yields on Aaa-rated municipals and a sample corporate bond to indicate how corporates' after-tax yields could be affected by the introduction of two alternative plans from President Trump and House Republicans. The figures reflect the effect of cutting the top ordinary income tax rate from 39.6% to 33% under both plans, the elimination under Trump of the 3.8% surtax on high earners' investment income, and the creation of a 50% deduction on dividends and interest in the House Republican plan.

As observed, the tax plans would increase the after-tax yields of Treasuries and corporates, narrowing or eliminating the after-tax spread offered by municipals under the current tax regime, particularly when it comes to corporate bonds. For example, the House Republican changes would move the after-tax yield on the sample corporate bond from the current 1.49% to 2.30% (assuming no change in bond prices), compared to the municipal yield of 2.23%. The net impact is that individuals would likely move some money on the margin into corporates, and that municipal bond yields would likely increase to make up for the tax change that creates more favorable treatment for corporates.

A major fear in the market is that municipals would actually lose their tax exemption. However, assuming that current issues were grandfathered, that might not be bad for valuations, as municipals would enjoy a scarcity value in the coming years. Moreover, the sector might actually see more demand as the appetite increases from institutional investors that currently do not invest in the sector. Still, given the popularity of the exemption among individuals and municipalities, this is an unlikely scenario. Moreover, as these issues play out in Washington, continued headline impact is likely to provide more attractive entry points for investors, which we think represents an opportunity for insurers.

FIGURE 5. REFORMS COULD TRIM MUNICIPALS' AFTER-TAX YIELD ADVANTAGE

Yield Comparison: 10-Year Bonds

	Municipal Bonds (Generic Aaa)	S&P 500 (Sample Aaa)	Difference Muni vs. Corp (bps)
Current pretax yield	2.23%	3.00%	-77
Yield after current taxes	2.23%	1.49%	74
Trump plan	2.23%	1.80%	43
House Republican plan	2.23%	2.30%	-7

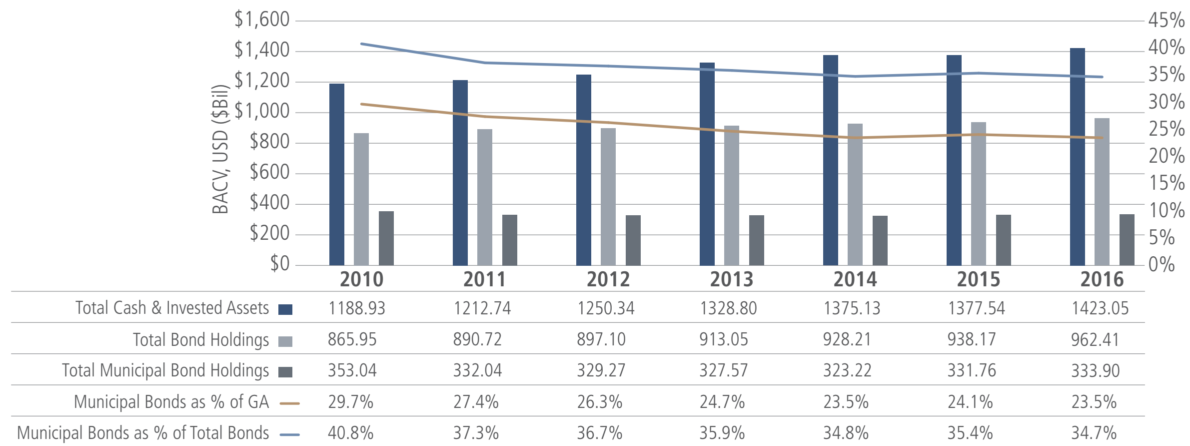
Source: Neuberger Berman, Bloomberg. Current tax rates: federal (39.6% top ordinary income tax rate), Affordable Care Act (3.8% net investment income tax), selected states' average—N.Y., N.J., Ct., Ca., Fla., Ill. (7%); Trump plan: federal (33%), ACA (0%), state (7%); House Republican plan: federal (33%), dividend/interest deduction (50%), state (7%). Data as of January 11, 2017.

The impact of proposed infrastructure projects on municipal issuance is another consideration facing the market. While the average annual issuance over the past five years amounts only to a modest $27 billion, the new administration has spoken extensively about boosting infrastructure spending using a mixture of public and private investment. While the aforementioned tax questions remain unanswered, we believe there will be a preference to push the financing of infrastructure spending down to the state and municipal levels and that tax-exempt status for much of this financing likely will be maintained. Given that more than $1 trillion of municipal debt is held by banks and insurance companies, it would seem difficult to remove a key pillar of support for this type of financing. We also believe that it is unlikely that an infrastructure bank—a centralized source of financing for large-scale projects nationwide—would fill the gap in part because of the new administration's stance against federal government control of such a facility.

Economics and Capital for Insurers

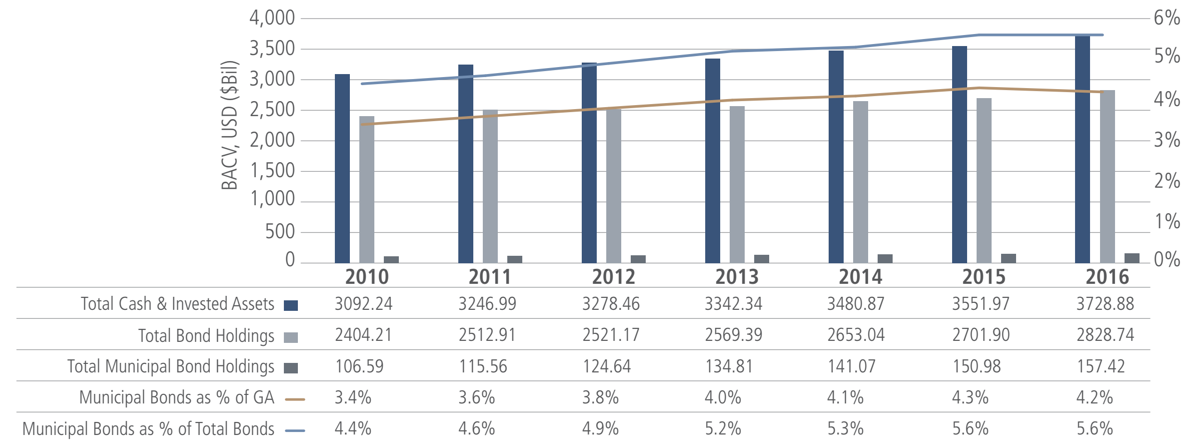
Insurance portfolio exposure to the municipal debt market has been fairly consistent over recent years. Insurers are awaiting coming changes to the way both the NAIC's RBC and A.M. Best's BCAR capital charges are calculated. While some changes have been previewed, the new metrics have not yet been finalized. The NAIC currently uses six rating classifications, which aggregate among ratings. For example, AAA, AA and A are all considered NAIC 1 for capital purposes. The expected changes will differentiate between say, AA and A, assigning a higher charge for A accordingly.

FIGURE 6. P&C COMPANIES—MUNICIPAL BOND HOLDINGS AS A PERCENTAGE OF CASH & INVESTED ASSETS AND TOTAL BOND HOLDINGS 2010–2016[3]



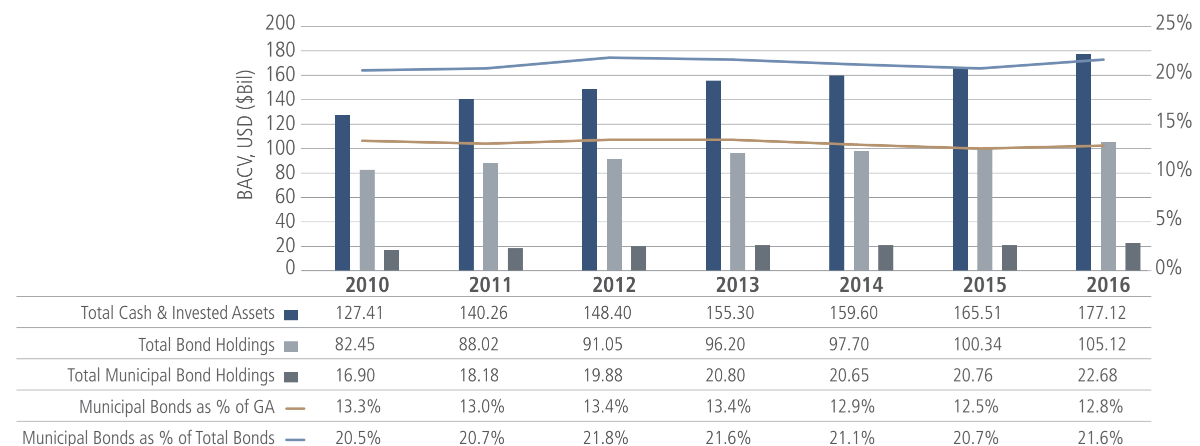
	2010	2011	2012	2013	2014	2015	2016
Total Cash & Invested Assets	1188.93	1212.74	1250.34	1328.80	1375.13	1377.54	1423.05
Total Bond Holdings	865.95	890.72	897.10	913.05	928.21	938.17	962.41
Total Municipal Bond Holdings	353.04	332.04	329.27	327.57	323.22	331.76	333.90
Municipal Bonds as % of GA	29.7%	27.4%	26.3%	24.7%	23.5%	24.1%	23.5%
Municipal Bonds as % of Total Bonds	40.8%	37.3%	36.7%	35.9%	34.8%	35.4%	34.7%

FIGURE 7. LIFE COMPANIES—MUNICIPAL BOND HOLDINGS AS A PERCENTAGE OF CASH & INVESTED ASSETS AND TOTAL BOND HOLDINGS 2010–2016[3]



	2010	2011	2012	2013	2014	2015	2016
Total Cash & Invested Assets	3092.24	3246.99	3278.46	3342.34	3480.87	3551.97	3728.88
Total Bond Holdings	2404.21	2512.91	2521.17	2569.39	2653.04	2701.90	2828.74
Total Municipal Bond Holdings	106.59	115.56	124.64	134.81	141.07	150.98	157.42
Municipal Bonds as % of GA	3.4%	3.6%	3.8%	4.0%	4.1%	4.3%	4.2%
Municipal Bonds as % of Total Bonds	4.4%	4.6%	4.9%	5.2%	5.3%	5.6%	5.6%

FIGURE 8. HEALTH COMPANIES—MUNICIPAL BOND HOLDINGS AS A PERCENTAGE OF CASH & INVESTED ASSETS AND TOTAL BOND HOLDINGS 2010–2016[3]



	2010	2011	2012	2013	2014	2015	2016
Total Cash & Invested Assets	127.41	140.26	148.40	155.30	159.60	165.51	177.12
Total Bond Holdings	82.45	88.02	91.05	96.20	97.70	100.34	105.12
Total Municipal Bond Holdings	16.90	18.18	19.88	20.80	20.65	20.76	22.68
Municipal Bonds as % of GA	13.3%	13.0%	13.4%	13.4%	12.9%	12.5%	12.8%
Municipal Bonds as % of Total Bonds	20.5%	20.7%	21.8%	21.6%	21.1%	20.7%	21.6%

[3] Cash and Invested Assets/Total Bonds are Unaffiliated Assets of the Insurance Company.

Given the mix of AA and A-rated municipal debt outstanding versus the corporate market, it stands to reason that as these changes come into focus, the municipal market may offer a compelling solution for capital relief while satisfying yield requirements.

While the pending RBC changes are focused on life companies, additional and possibly similar changes may be coming for the P&C industry as well, and the municipal market may serve a more important role in portfolios as companies weigh capital efficiency and available yields.

Using Municipal Exposure Strategically

Many insurers continue to look for yield alternatives to boost operating income, and below investment grade exposure continues to be a compelling approach. Obviously adding this type of exposure impacts the average portfolio quality. Considering the long-term default performance of municipal debt and available yield versus like-rated corporate credit may offer a useful solution for insurers looking to boost yield without compromising their overall risk culture. Although the rating profile would be similar to investment grade credit, the value of adding municipal exposure effectively offsets the default risk implied by the corporate credit market. The stability of the municipal market in OAS terms and the lack of risks associated with corporate events (i.e. M&A activity) diversifies the overall risk profile without requiring investors to compromise on yield. This type of approach is a creative way to approach the yield conundrum while maintaining discipline around risk management.

Conclusion

Despite the intricacies of the municipal bond market, it remains quite common for insurers to consider municipals as a mere extension of their core fixed income portfolio. As we've discussed in this report, however, municipal market dynamics have shifted in recent years, making credit fundamentals and broad access to the market more important than ever. Adding to these factors, Washington may bring some form of tax reform, as well as a broad expansion in infrastructure spending, both of which are potential wild cards for the municipal market.

Given recent and expected moves in the yield curve, high-quality duration at attractive yields present a welcome opportunity for institutional investors, particularly life insurance companies (where taxable exposure would be a natural fit) and P&C insurers (with tax-exempt issuance). Today, municipal investment requires true credit expertise to differentiate relative value among tens of thousands of issues, as well as the ability to access a highly fragmented universe of new and secondary offerings in the over-the-counter market. With these factors in mind, insurers should re-examine their ability to access this key market given the unique role municipals can play for insurers of all types.

This material is provided for informational purposes only and nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security. Information is obtained from sources deemed reliable, but there is no representation or warranty as to its accuracy, completeness or reliability. All information is current as of the date of this material and is subject to change without notice. Any views or opinions expressed may not reflect those of the firm as a whole. Neuberger Berman products and services may not be available in all jurisdictions or to all client types. Investing entails risks, including possible loss of principal. Investments in hedge funds and private equity are speculative and involve a higher degree of risk than more traditional investments. Investments in hedge funds and private equity are intended for sophisticated investors only. Diversification does not guarantee profit or protect against loss in declining markets. Indexes are unmanaged and are not available for direct investment. **Past performance is no guarantee of future results.**

The views expressed herein are those of the Neuberger Berman Fixed Income Investment Strategy Committee. Their views do not constitute a prediction or projection of future events or future market behavior. This material may include estimates, outlooks, projections and other "forward-looking statements." Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed.

This material is being issued on a limited basis through various global subsidiaries and affiliates of Neuberger Berman Group LLC. Please visit www.nb.com/disclosure-global-communications for the specific entities and jurisdictional limitations and restrictions.

The "Neuberger Berman" name and logo are registered service marks of Neuberger Berman Group LLC.

Neuberger Berman
1290 Avenue of the Americas
New York, NY 10104-0001

www.nb.com

S0161 07/17 ©2017 Neuberger Berman Group LLC. All rights reserved.