

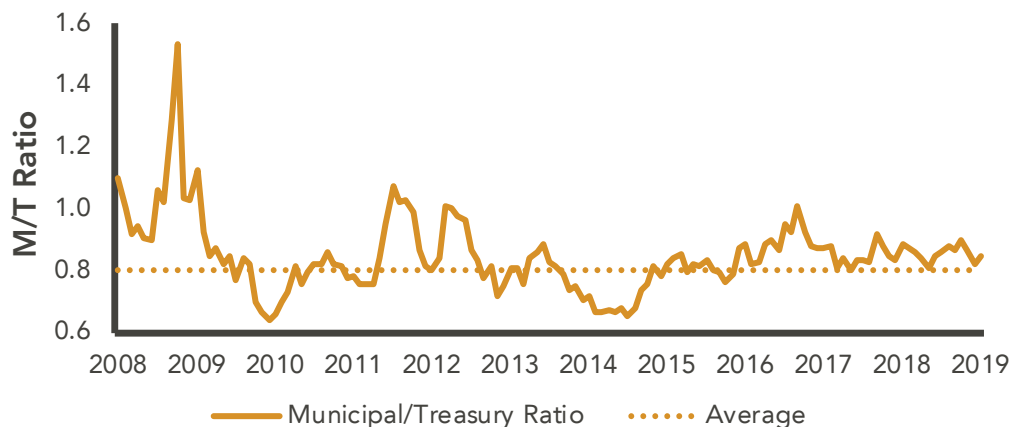
Municipal or Taxable Bonds for High Net Worth Investors?

Municipal bonds remain attractive and still make sense for high net worth investors on a go-forward basis even in the wake of the Tax Cuts and Jobs Act that went into effect in 2018 and the spread-widening that we experienced in the credit markets during the fourth quarter of 2018. This research brief compares the current state of municipal bonds versus taxable bonds.

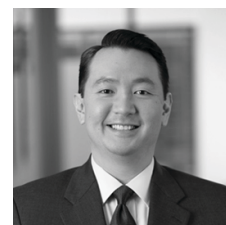
First, a General Rule of Thumb: The Municipal/Treasury Ratio

The key metric that investors use in assessing general attractiveness of municipal bonds versus taxable bonds — a rule of thumb, if you will — is called the municipal/Treasury ratio, shown in Exhibit 1 below. The municipal/Treasury ratio is defined as the Barclays AAA Municipal Bond Index yield-to-worst divided by the 10-year Treasury Bond yield. As it stands today, the municipal/Treasury ratio remains above the long-term average of 0.8, signifying that municipal bond yields are still more attractive than taxable yields for high net worth investors.

Exhibit 1: The Municipal/Treasury Ratio Favors Municipal Bonds



Note: Municipal/Treasury ratio defined as the Barclays AAA Municipal Bond Index YTW divided by the 10-year Treasury Bond yield
Sources: Bloomberg Barclays, Federal Reserve, as of March 31, 2019



Benjamin H. Mohr, CFA
Senior Research Analyst,
Fixed Income



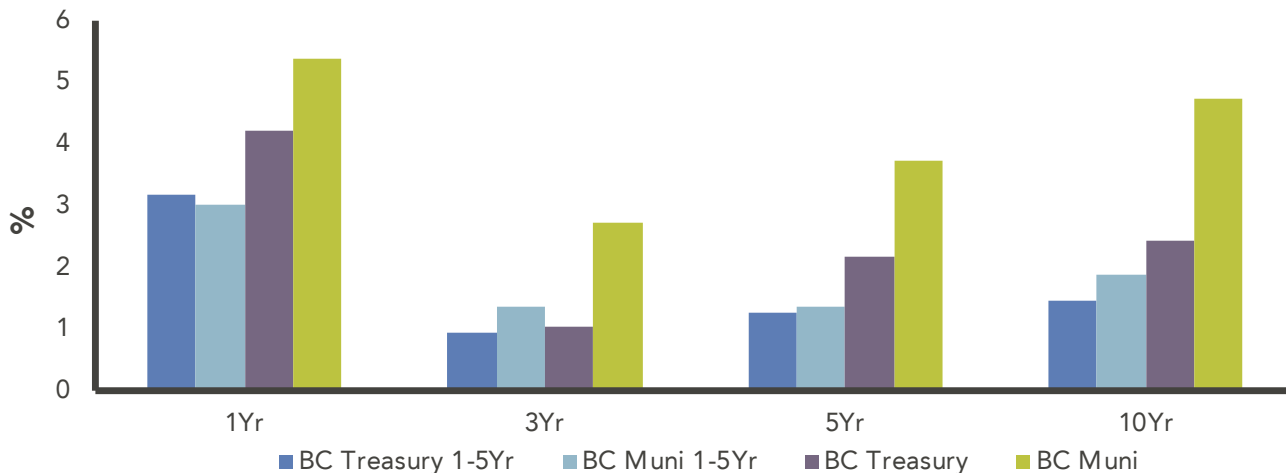
Aimee O'Connor, CFP®
Senior Vice President

Next, a Comparison of Long-Term Historical Returns

Exhibits 2 through 5 below compare the returns of municipal bonds versus taxable bonds, first on a pre-tax basis and then on an after-tax basis. They make the case that in the long-run, municipal bonds consistently provide a superior after-tax return versus taxable bonds on a like-for-like duration basis.

As shown in Exhibit 2, even on a pre-tax basis, over the last 10 years, the Barclays Municipal index has outperformed the Barclays Treasury index handily. Likewise, the Barclays Municipal 1-5 Year index has also outperformed the Barclays Treasury 1-5 Year index over the last 10 years.

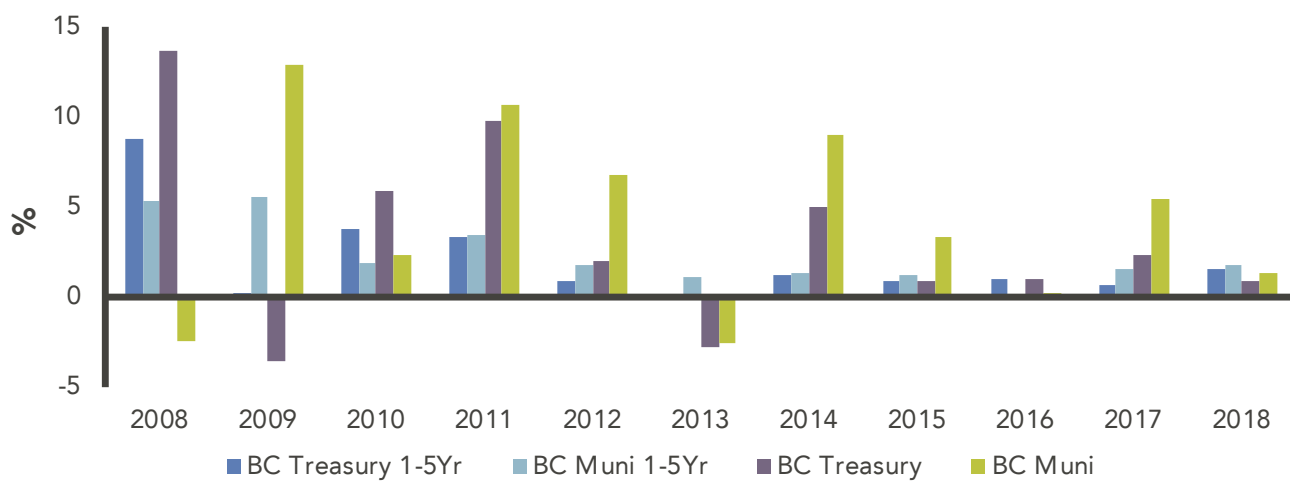
Exhibit 2: Trailing Performance, Municipal Bonds vs. Taxable Bonds – Gross, Pre-Tax



Source: Bloomberg as of March 31, 2019

Exhibit 3 below breaks out the individual calendar year performance. One item of note is the noncorrelation between municipal bonds and taxable bonds in the 2008 Housing Crisis and 2009 rebound — in 2008, as credit spreads widened, Treasury bonds outperformed while municipal bonds lagged. In the 2009 reversal, municipal bonds rallied while Treasury bonds underperformed.

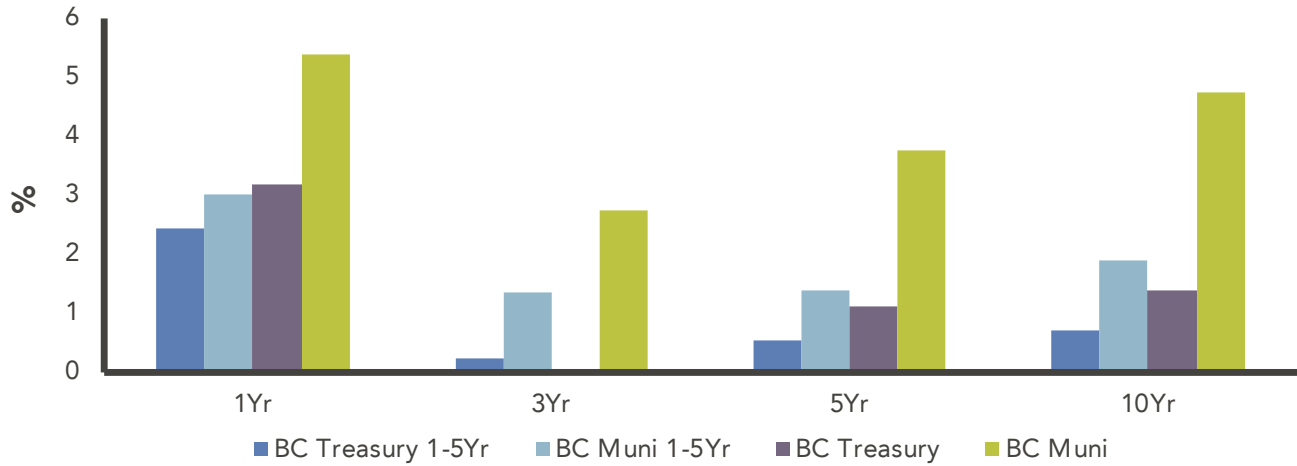
Exhibit 3: Calendar Performance, Municipal Bonds vs. Taxable Bonds – Gross, Pre-Tax



Source: Bloomberg

Exhibit 4 below shows that on an after-tax basis, the outperformance of the Barclays Municipal index over the Barclays Treasury index — as well as that of the Barclays Municipal 1-5 Year index over the Barclays Treasury 1-5 Year index — is accentuated. The strength of the outperformance of municipal bonds over taxable Treasury bonds is particularly notable over the last 10 years' timeframe.

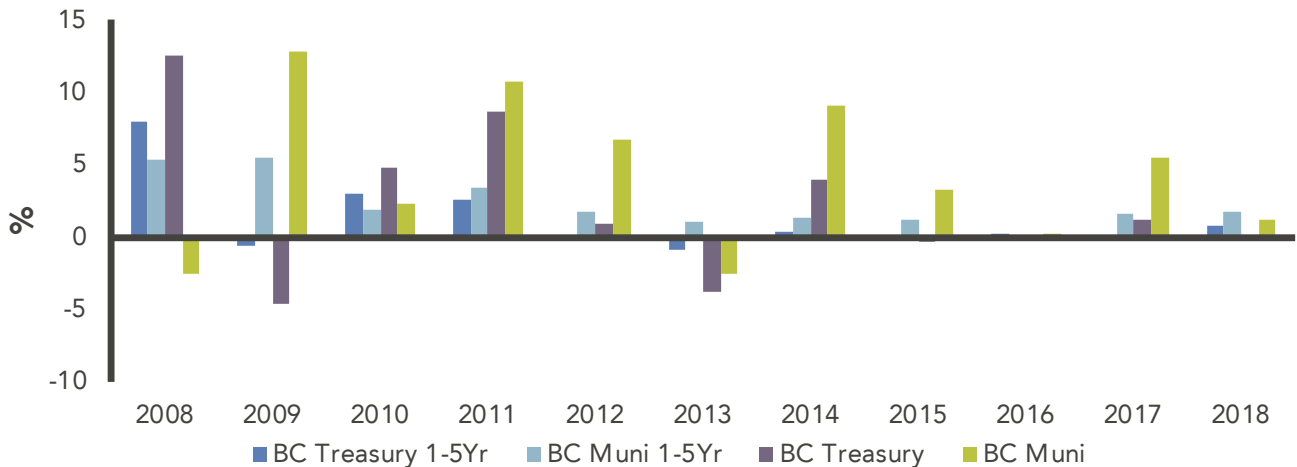
Exhibit 4: Trailing Performance, Municipal Bonds vs. Taxable Bonds – Gross, After-Tax



Assumptions: BC Treasury 1-5Yr and BC Treasury subject to highest 2019 interest income tax of 37% on last 10 years' average 1.8% and 2.6% coupons, respectively. BC Treasury 1-5Yr and BC Treasury also subject to Affordable Care Act's 3.8% net investment income tax. All applied on each annualized return as estimate. Source: Bloomberg as of March 31, 2019

Exhibit 5 below is like Exhibit 3 on the previous page, showing calendar performance. The only difference is that Exhibit 5 shows after-tax returns instead of pre-tax returns. As such, the performance of municipal bonds is particularly strong in most years versus taxable bonds.

Exhibit 5: Calendar Performance, Municipal Bonds vs. Taxable Bonds – Gross, After-Tax

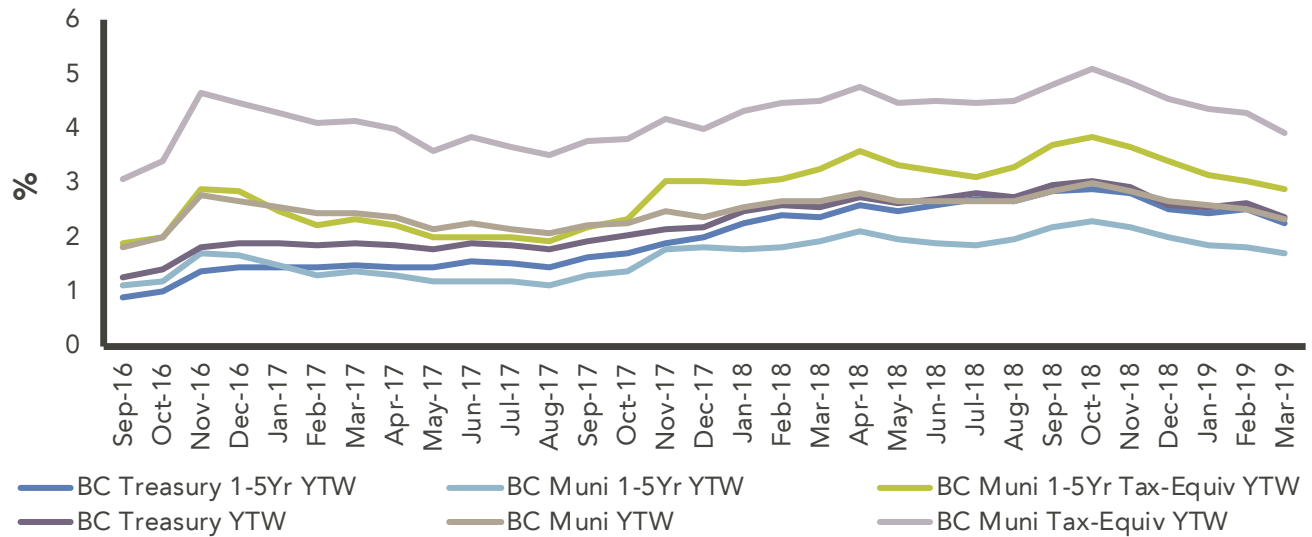


Assumptions: BC Treasury 1-5Yr and BC Treasury subject to highest 2019 interest income tax of 37% on last 10 years' average 1.8% and 2.6% coupons, respectively. BC Treasury 1-5Yr and BC Treasury also subject to Affordable Care Act's 3.8% net investment income tax. Source: Bloomberg

Finally, we examine Tax-Equivalent Yields

The stronger performance of municipal bonds over taxable bonds as shown previously comes from the consistently superior tax-equivalent yields of municipal bonds versus taxable bonds, as shown in Exhibit 6 below. Over the last three years, the Barclays Municipal tax-equivalent yield-to-worst has been stronger than the Barclays Treasury yield-to-worst. Likewise, the Barclays Municipal 1-5 Year tax-equivalent yield-to-worst has been stronger than the Barclays Treasury 1-5 Year yield-to-worst.

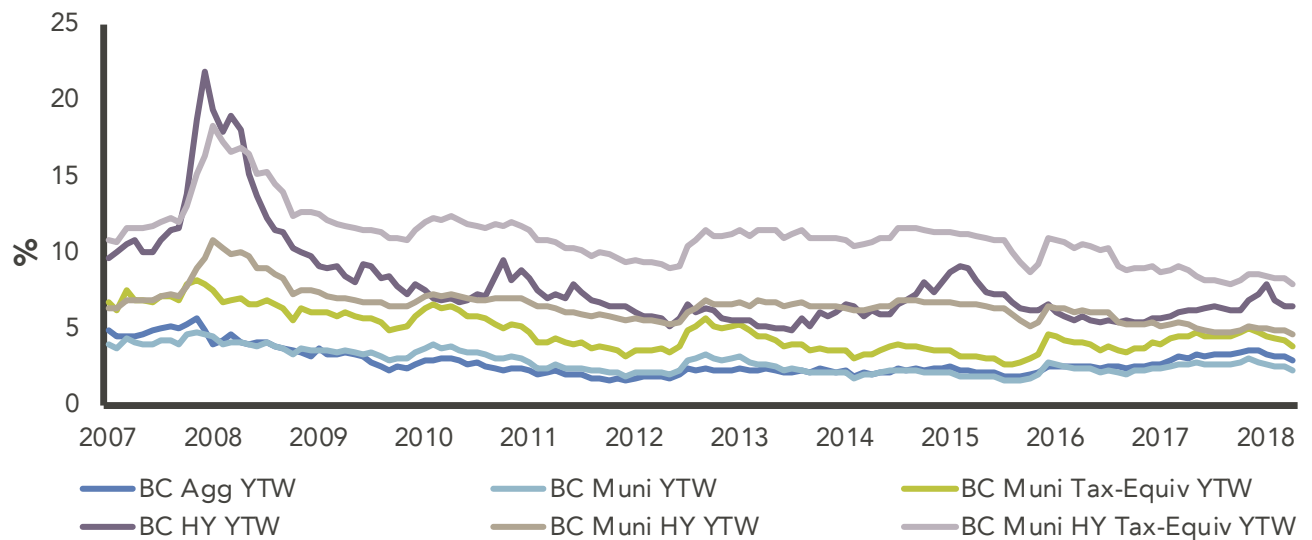
Exhibit 6: Municipal Bonds Provide Better Tax-Equivalent Yield than Taxable Bonds



Source: Bloomberg as of March 31, 2019, assumes highest 2019 tax bracket of 37% and Affordable Care Act's 3.8% net investment income tax applied on yields at every period; yield available for BC Muni 1-5Yr only since September 2016

Similar to Exhibit 6 above, Exhibit 7 below shows that the municipal high yield tax-equivalent yield-to-worst has been consistently better than corporate high yield yield-to-worst.

Exhibit 7: HY Municipal Bonds Provide Better Tax-Equivalent Yield than HY Corporate Bonds



Source: Bloomberg as of March 31, 2019, assumes highest 2019 tax bracket of 37% and Affordable Care Act's 3.8% net investment income tax applied on yields at every period

Conclusion

In conclusion, we have seen through this research brief that the municipal/Treasury ratio currently still favors municipal bonds, that municipal bond performance on a long-term and after-tax basis is consistently stronger than that of its taxable counterparts, and that this outperformance is driven by consistently superior tax-equivalent yield from municipal bonds over taxable bonds. Marquette would recommend that high net worth investors and family offices continue to consider municipal bonds in their various forms — from short duration municipal bonds to intermediate/core municipal bonds to high yield municipal bonds — as they provide stronger tax-equivalent yields and after-tax total returns over their taxable counterparts. ■

PREPARED BY MARQUETTE ASSOCIATES

180 North LaSalle St, Ste 3500, Chicago, Illinois 60601
CHICAGO BALTIMORE MILWAUKEE PHILADELPHIA ST. LOUIS

PHONE 312-527-5500
WEB MarquetteAssociates.com

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