

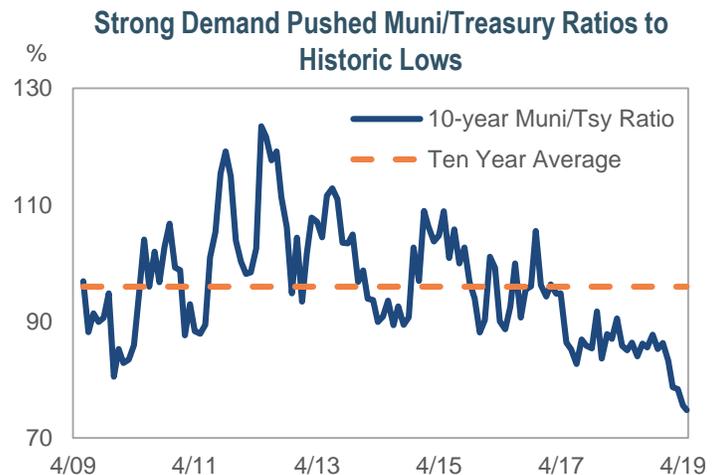
Volatility in the municipal/Treasury ratio may create opportunities to enhance after-tax yield and total return. At IR+M, we leverage our bottom-up security selection skills to take advantage of dislocations between tax-exempt and taxable bonds. We believe that our crossover strategy is an optimal solution for those taxable investors looking to capitalize on these inconsistencies. In this piece, we assess the ever-changing after-tax relative value dynamic, and highlight why the case for crossover is so compelling.

What Is a Crossover Strategy?

A crossover strategy invests across the broader fixed income universe in an attempt to achieve a higher after-tax yield and risk-adjusted return compared to a stand-alone municipal or taxable portfolio. It can dynamically adjust allocations based on relative value opportunities and curve inefficiencies, while balancing transaction and tax costs.

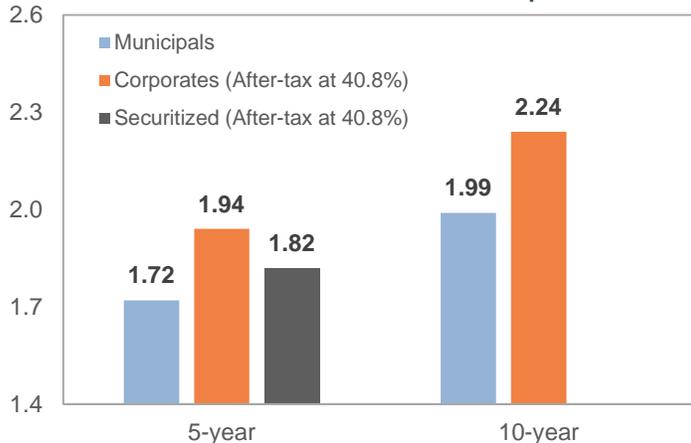
Why Now? Muni/Treasury Ratios Are Near All Time Lows

- Investors commonly look to the muni/Treasury ratio to gauge the relative value of municipals versus their taxable bond counterparts
- Supportive technicals pushed muni/Treasury ratios to the lowest levels in almost a decade during the first quarter of 2019, as supply remained light and investors poured over \$31 billion into municipal mutual funds year-to-date
- With valuations stretched and the potential for ratios to stay low for longer, this could be an opportune time for investors to consider the additional benefits of a crossover strategy: higher after-tax yield, greater diversification, and nimble sector rotation



Capitalizing on Market Dislocations: Higher After-Tax Yield

Other Investment-Grade Sectors Offer Higher After-Tax Yields Relative to Municipals



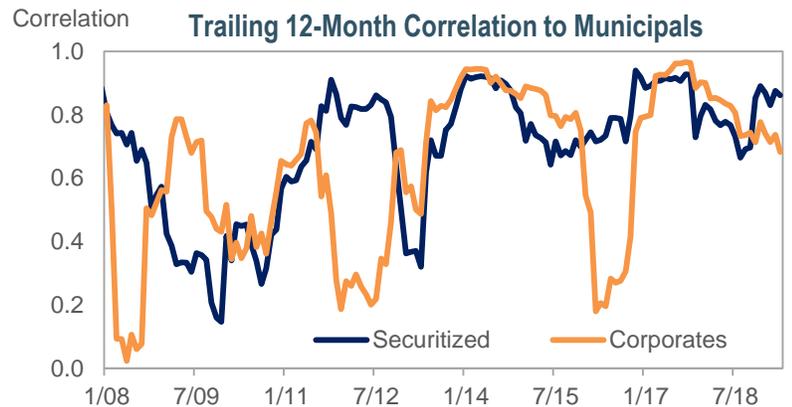
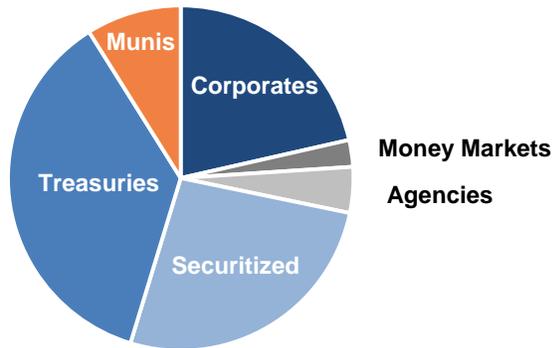
- Municipals are not always the most tax-efficient sector for investors in the highest tax bracket and there are frequent opportunities to add incremental yield elsewhere
- Over the last three years, municipals outperformed credit and securitized bonds by over 3% on a tax-equivalent basis due to robust demand, particularly from high-tax state investors
- This has made tax-exempt yields less compelling, and created opportunities to pick up additional yield by purchasing corporate or securitized bonds
- As well as having a slightly higher after-tax yield compared to munis, we believe there are additional factors, such as potential downside protection, that make the securitized sector attractive

Source: Bloomberg Barclays as of 5/23/19. Yields are calculated by taking the average OAS at the 5-year and 10-year maturity of the Bloomberg Barclays Municipal Index, Bloomberg Barclays Corporate Index and Bloomberg Barclays Securitized Index and adding the spread to the respective point on the Treasury Curve. This report is for informational purposes only and is not intended to provide specific advice, recommendations for, or projected returns of any particular IR+M product. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission from Income Research & Management.

Diversification: Expanding the Investable Universe

- Broadening the investable universe, and including taxable bonds, substantially increases the opportunity set compared to a stand-alone muni portfolio
- The corporate and securitized bond markets are much larger than the municipal market; the corporate and securitized market total \$9.2 trillion and \$11.3 trillion, respectively, while the municipal market totals \$3.8 trillion
- Heterogeneous characteristics uniquely drive sector performance and as a result, correlations across sectors may occasionally break down and lead to market dislocations

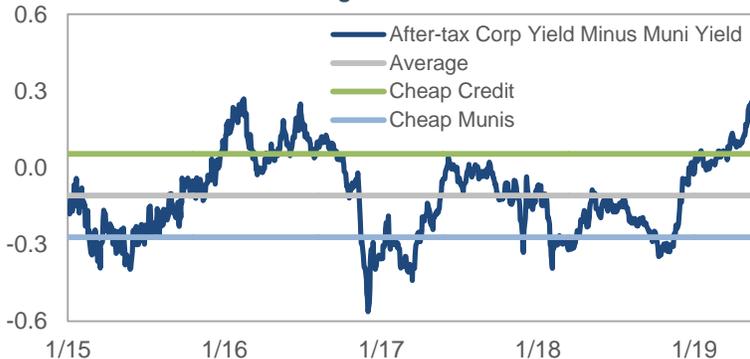
Munis Are a Small Portion of the \$43 Trillion Market



IR+M Approach: Tax-Efficiency

- At IR+M, we believe that a crossover strategy can play a key role in taxable fixed income allocations by replacing or complementing an existing municipal portfolio
- With over 12 years of experience managing crossover portfolios, we feel that the addition of corporate and securitized bonds can help enhance both the after-tax total return and diversification of the portfolio

Relative Value Changes Lead to Shifts in Allocations



- Municipal bonds currently look less attractive relative to taxable sectors and as a result, crossover investors can respond to this dislocation by opportunistically adjusting allocations while still focusing on tax-efficiency
- The make-up and sector concentrations shift over time - the muni weighting has been as high as 60% and as low as 20% - as our disciplined, bottom-up approach helps to optimize portfolios by continuously monitoring after-tax yields and relative value metrics

At IR+M, we believe that tax-sensitive clients may benefit from a more balanced approach. Our crossover strategy considers credit quality, structure, and after-tax relative value when determining the ideal sector allocation. As relative value between these sectors change, our investment team relies on its experience as bottom-up security selectors to opportunistically shift allocations across the investable universe.

Sources: SIFMA as of 12/31/18 and Bloomberg Barclays as of 5/23/19. Correlations calculated using the BloomBarc Muni 1-10yr Blend Index, BloomBarc Securitized Index and BloomBarc Int Corp Index. Yield are from the USD Corporate A BVAL 10-year Index at the 40.8% tax-rate, and the BVAL Muni Benchmark 10-year Index yield. A similar analysis can be provided for any portfolio or composite we manage. The views contained in this report are those of IR+M and are based on information obtained by IR+M from sources that are believed to be reliable. This report is for informational purposes only and is not intended to provide specific advice, recommendations, or projected returns for any particular IR+M product. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission from Income Research & Management. BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). BARCLAYS® is a trademark and service mark of Barclays Bank Plc (collectively with its affiliates, "Barclays"), used under license. Bloomberg or Bloomberg's licensors, including Barclays, own all proprietary rights in the Bloomberg Barclays Indices. Neither Bloomberg nor Barclays approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.