

MUNIWATCH

FIXED INCOME MARKET UPDATE



- › The Muni curve flattened in the fourth quarter with very low volatility compared U.S. Treasuries.
- › Flows into Muni Mutual Funds continued their record-breaking pace, leading to excess demand.
- › We examine a “fair value” metric for Munis.
- › Part 2 of our Muni Market Education Series: What’s the Credit Risk?

Muni Yields Move Lower

Muni yields moved lower by up to 18 basis points in the fourth quarter, outperforming the U.S. Treasury market. While Muni yields typically move more in line with Treasury yields, the Muni market experienced significantly less volatility in the quarter and most of the curve was actually unchanged for the entire month of December (graph, top-right).

Fund Inflows Continue, Leading to Demand Exceeding Supply

Cash has continued to pile into Muni Mutual Funds at an unprecedented pace. For the full year, funds took in over \$101 billion, the highest amount ever recorded, according to Lipper (graph, middle-right). Funds have seen inflows every week this year and in all but one of the last 85 weeks. This unprecedented amount of cash flooding the market has led to strong demand. At the same time, we expect issuance to be slow for the first few weeks of the year before moving to more normal levels. Our calculations project excess demand in the market of nearly \$15 billion (graph, bottom-right). This supply/demand imbalance may lead to continued rich valuations in the short term.

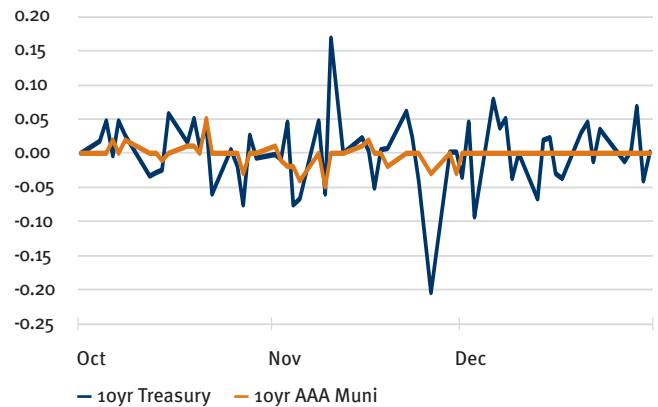
Q1 Outlook

Record fund inflows led to unprecedented demand for Munis last year, keeping volatility at a minimum compared to the wild swings in the Treasury market. As inflows are expected to continue and supply remains light to start the year, we expect modest outperformance in the near term.

However, we expect the record fund inflows and resulting demand to slow as the year progresses, resulting in a return to fair value of Muni yields compared to Treasuries (see pg 3). A jump in ratios would signal a better investment environment.

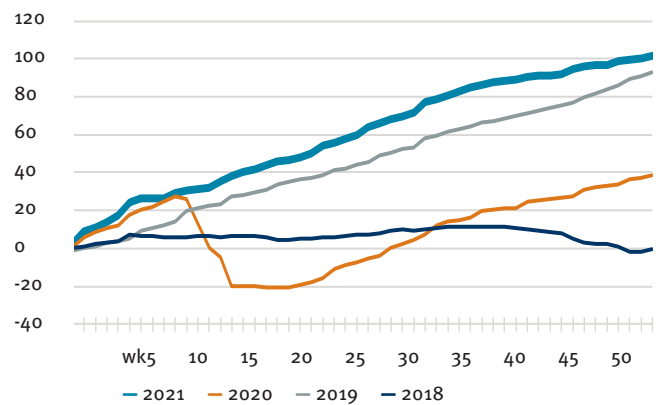
DAILY CHANGE IN 10YR TREASURY VS. 10YR AAA MUNI

Source: Bloomberg, Refinitiv TM3. Data as of 12/31/2021.



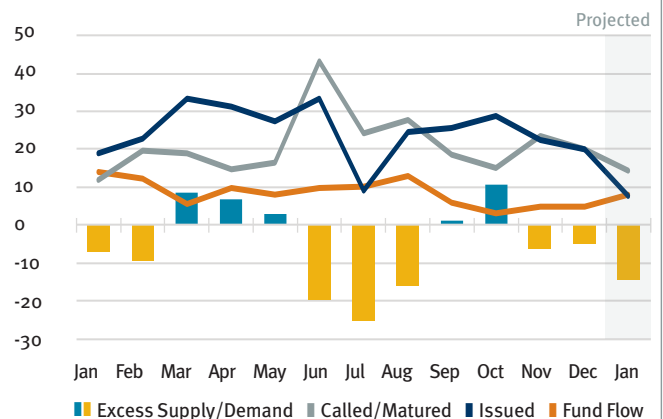
CUMULATIVE MUNI MUTUAL FUND FLOWS (BILLIONS)

Source: Refinitiv Lipper. Data as of 12/31/2021.



MONTHLY MUNI EXCESS SUPPLY/DEMAND (BILLIONS)

Source: WCA, Bloomberg. Data as of 12/31/2021.





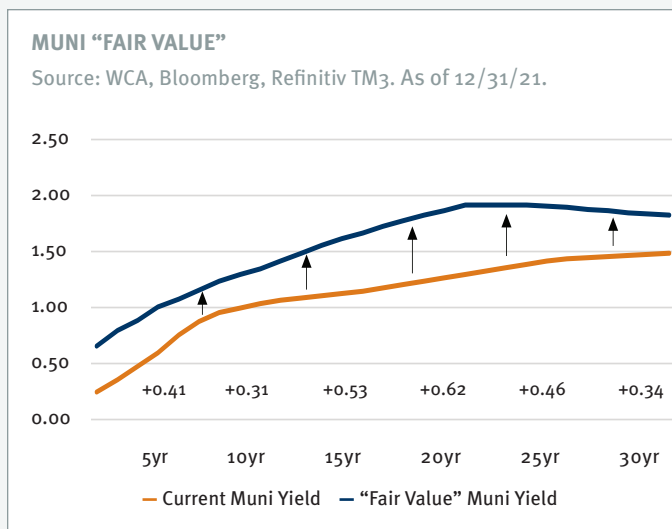
USING HISTORICAL MUNI TO TREASURY YIELD RATIO TO DETERMINE FAIR VALUE

A common valuation metric used in the market is the Muni to Treasury Yield Ratio. Using data from the past five years, we've determined a "fair value" ratio for each point on the yield curve and compared that to current ratios. From there, we determined the amount of yield movement required to achieve "fair value."

Maturity	Current Ratio	Fair Value Ratio	Current Yield	Fair Value Yield	Difference
1yr	37%	113%	0.14%	0.43%	+0.29%
5yr	47%	79%	0.59%	1.00%	+0.41%
10yr	67%	89%	1.03%	1.34%	+0.31%
15yr	67%	97%	1.14%	1.67%	+0.53%
20yr	67%	99%	1.29%	1.91%	+0.62%
25yr	75%	99%	1.43%	1.89%	+0.46%
30yr	78%	95%	1.48%	1.82%	+0.34%

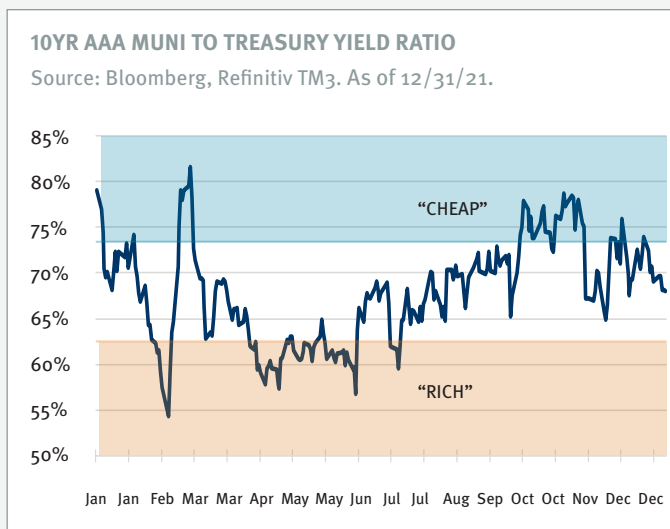
Graph 1

Based on these calculations, Muni yields would need to rise by up to 62 basis points to return to our estimate of fair value.



Graph 2

We use these calculations to seek opportunities in the market, looking more aggressively to buy when we think the market is "cheap" and selling when the market is "rich."



MUNI VS. CORPORATE CREDIT LANDSCAPE

The Majority of Municipal Bonds Are Rated AA and Above

As of December 31, 2020, 98% of muni issuers rated by Moody's were investment grade (Baa and above)¹ and 57% were rated Aa and above. In comparison, 53% of global corporates were investment grade and 6% rated AA and above.

Muni Defaults Remain Rare

The 20-year average cumulative default rate since 1970 of all Moody's-rated muni issuers was 0.3% while all Moody's-rated global corporate issuers was nearly 15%. Defaults for investment grade munis are even rarer, with this cumulative default rate for investment grade muni issuers at 0.2% while investment grade global corporate issuers at 5.4% (graph, top-right).²

DOWNGRADE TO UPGRADE RATIO

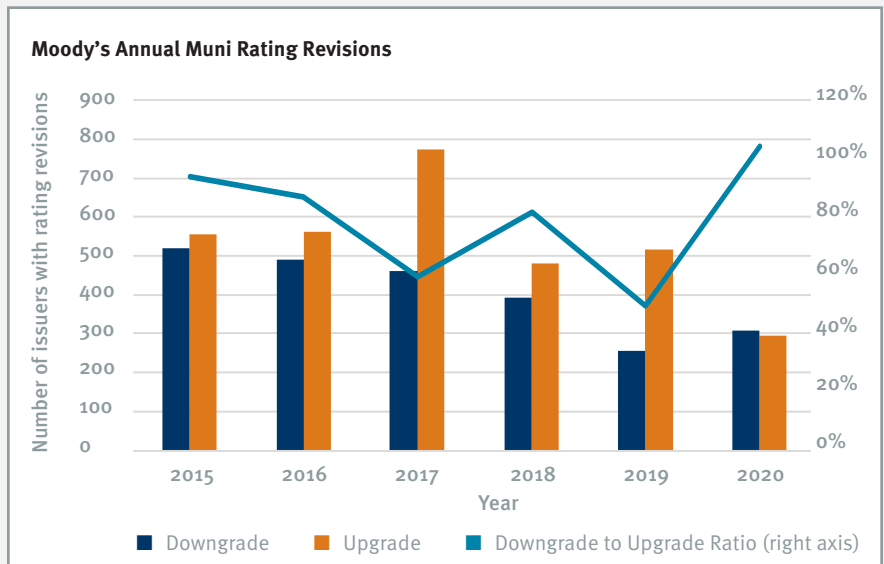
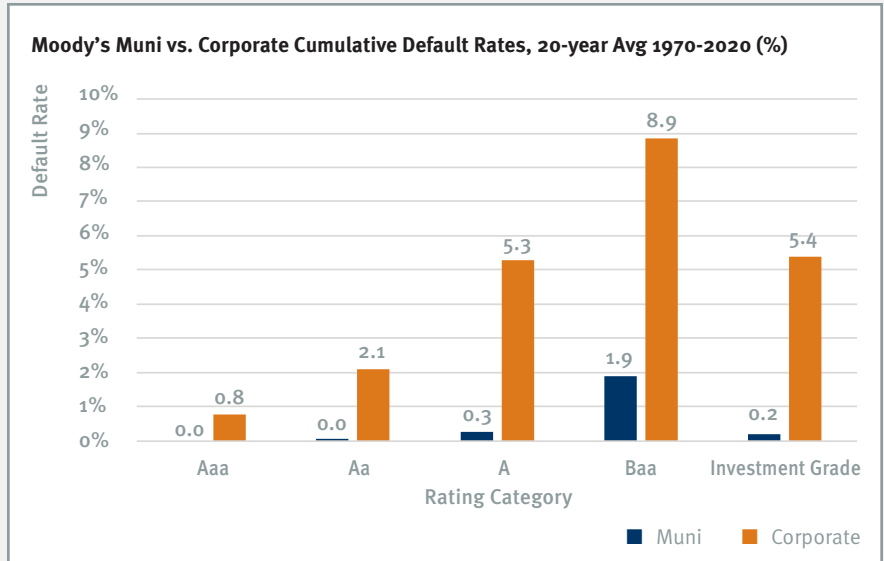
Muni Issuers Were Resilient to Virus-Related Pressures in 2020 but Challenges Exist

We believe a common measure of the market's overall "health" is the downgrade to upgrade ratio, the measure of credits downgraded compared to credits upgraded. After reaching an 11-year low of 49% in 2019 (the number of downgrades was only 49% of the number of upgrades) and remaining below 100% since 2014, the downgrade to upgrade ratio increased to 104% in 2020, mainly due to virus-related budgetary pressures (graph, bottom-right).³

¹ Source: Moody's Investors Service

² Source: Moody's Investors Service, U.S. municipal bond defaults and recoveries, 1970-2020

³ Source: Moody's Investors Service, Quarterly and Annual Municipal Rating Revisions



Source: Moody's Investor's Service

Today's municipal market is characterized by an extremely low default rate. Despite virus-related ratings shifts over the past year, the majority of credits still carry high investment-grade ratings. However, in our view, budgetary challenges still loom for some issuers. At WCA, we carefully evaluate and monitor the credit profile for each holding. We believe the in-depth monitoring offered by our active management is necessary to navigate the increasingly complex muni market while rates remain at historically low levels.



About Washington Crossing Advisors

Washington Crossing Advisors, LLC (“WCA”) is an SEC registered investment advisor and wholly owned subsidiary of Stifel Financial Corp. WCA helps supervise and manage over \$6 billion in assets under advisement for individuals and institutions.

The team is managed by Kevin R. Caron, CFA and Chad A. Morganlander, who were among the founding members of Washington Crossing Advisors.

Washington Crossing Advisors’ views on investing and markets are regularly sought by national media outlets, including *CNBC*, *Bloomberg*, *Fox Business News*, *The Wall Street Journal*, *Forbes*, and *Reuters*.

Philosophy and Process

We believe that investments should be selected only after clear and quantified measures of value, risk, and potential reward have been made. Our investment approach combines top-down analysis of the macro economy with fundamentally rooted, bottom-up security analysis.

*Washington Crossing Advisors, LLC (WCA) and its affiliates do not provide tax, legal or accounting advice. This material has been prepared for informational purposes only, and is not intended to provide, and should not be relied on for, tax, legal or accounting advice. You should consult your own tax, legal and accounting advisors before engaging in any transaction.

Description of Indices and Terms
Description of Indices and Terms: All performance calculations of indices are calculated on a total return basis (reflecting reinvestment of dividends and other earnings). Indices are unmanaged, are not available for direct investment, and have no associated management fees.

Bloomberg Barclays Aggregate Bond Index: A composite of the Bloomberg Barclays Gov't/Corp Index, Mortgage-Backed Securities Index, and Asset-Backed Securities Index, including securities that are investment grade or better, have at least one year to maturity, and have an outstanding par value of at least \$100 million.

S&P 500 Index: Capitalization-weighted composite of 500 stocks traded on the NYSE, AMEX, and NASDAQ; not the largest 500 stocks in U.S., but rather a blend of leading companies in leading industries in the U.S. economy; index comprised of 10 broad industrial sectors.

Dow Jones U.S. Select REIT: The Dow Jones U.S. Select REIT Index intends to measure the performance of publicly traded REITs and REIT-like securities. The index is a subset of the Dow Jones U.S. Select Real Estate Securities Index (RESI), which represents equity real estate investment trusts (REITs) and real estate operating companies (REOCs) traded in the U.S.

The ICE U.S. Treasury 1-3 Year Bond Index is a market value weighted index designed to measure the performance of U.S. dollar-denominated, fixed rate U.S. Treasury securities with minimum term to maturity greater than one year and less than or equal to three years.

Markit iBoxx USD Liquid High Yield Index consists of liquid USD high yield bonds, selected to provide a balanced representation of the broad USD high yield corporate bond universe.

Moody's Baa Corporate Bond Index—An index comprised of industrial bonds rated Baa by Moody's with a minimum maturity of 20 years.

Consumer Price Index—A measure of the average change in prices over time for a basket of consumer goods.

Asset Allocation—Asset allocation does not ensure a profit or protect against loss.

The FTSE Developed All Cap ex U.S. Index is part of a range of indices designed to benchmark international investments. The index comprises large, mid and small cap stocks from developed markets excluding the U.S.

The FTSE Emerging Markets All Cap China A Inclusion Index is a market-capitalization weighted index representing the performance of large, mid and small cap stocks in Emerging markets. The index is comprised of approximately 3350 securities from 21 countries.

International and Emerging Markets Investing—There are special considerations associated with international investing, including the risk of currency fluctuations and political and economic events. Investing in emerging markets may involve greater risk and volatility than investing in more developed countries.

Bonds and High Yield Bonds—When investing in bonds, it is important to note that as interest rates rise, bond prices will fall. High yield bonds have greater credit risk than higher quality bonds.

Commodities and Futures—The risk of loss in trading commodities and futures can be substantial. You should therefore carefully consider whether such trading is suitable for you in light of your financial condition. The high degree of leverage that is often obtainable in commodity trading can work against you as well as for you. The use of leverage can lead to large losses as well as gains.

Real Estate—When investing in real estate companies, property values can fall due to environmental, economic, or other reasons, and changes in interest rates can negatively impact the performance.

Opportunity Disclosure: The Washington Crossing Advisors, LLC Stifel Conquest and Conquest Alternatives Portfolios require a \$25,000 minimum investment. More information on the Stifel Opportunity Program is included in the Stifel Consulting Services Disclosure Brochure and Part II of the Manager's Form ADV, which may be obtained from your Financial Advisor and which further outlines the fees, services, exclusions, and disclosures associated with this program. The information contained herein is believed to be reliable and representative of the portfolios available through Stifel; however, the accuracy of this information cannot be guaranteed. Investors should consider all terms and conditions before deciding whether the Opportunity Program and these strategies are appropriate for their needs.

The S&P CoreLogic Case-Shiller 20-City Composite Home Price NSA Index is a value-weighted average that seeks to measure the value of residential real estate in 20 major U.S. metropolitan areas. The index is a composite of single-family home price indices for the nine U.S. Census divisions.

This commentary often expresses opinions about the direction of market, investment sector, and other trends. The opinions should not be considered predictions of future results. The information contained in this report is based on sources believed to be reliable, but is not guaranteed and not necessarily complete.

All investments involve risk, including loss of principal, and there is no guarantee that investment objectives will be met. It is important to review your investment objectives, risk tolerance, and liquidity needs before choosing an investment style or manager. Equity investments are subject generally to market, market sector, market liquidity, issuer, and investment style risks, among other factors to varying degrees. Fixed Income investments are subject to market, market liquidity, issuer, investment style, interest rate, credit quality, and call risks, among other factors to varying degrees.

Any projections, targets, or estimates in this report are forward looking statements and are based on WCA's research, analysis, and assumptions made by the Adviser. Due to rapidly changing market conditions and the complexity of investment decisions, supplemental information and other sources may be required to make informed investment decisions based on your individual investment objectives and suitability specifications. All expressions of opinions are subject to change without notice. Clients should seek financial advice regarding the appropriateness of investing in any security or investment strategy discussed in this commentary.

About Washington Crossing Advisors | Washington Crossing Advisors a wholly owned subsidiary of Stifel Financial Corp. (NYSE-SF). The WCA team has been helping individual and institutional investors build wealth for over 25 years.

www.washingtoncrossingadvisors.com

0122.4141995.1