2Q 2020

NEUBERGER BERMAN

Municipal Basis Points

With the spread of COVID-19, the economy and markets experienced an extraordinary dislocation. After a year of unexpected strength, municipal bonds retreated, moving to historic discounts and elevated yields relative to U.S. Treasuries. With new pressures on issuers and the likely continuation of market volatility, the Municipal Fixed Income team is redoubling its focus on credit research, adhering to its longtime dedication to capital preservation while seeking out potential opportunities. The team provides its investment views in the pages that follow.

NEUBERGER BERMAN MUNICIPAL FIXED INCOME TEAM

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"IT ALWAYS SEEMS IMPOSSIBLE UNTIL IT'S DONE."
—NELSON MANDELA

JAMES L. ISELIN
HEAD OF MUNICIPAL FIXED INCOME

After a Drastic Turn, Flexibility and Focus

The market volatility tied to COVID-19 requires renewed dedication to long-held ideas.

Usually when I get two months into a quarter, I have a pretty good idea of what I am going to write about in my section of *Municipal Basis Points*. Some muni-market related themes typically develop that warrant further attention as we share what we hope will be differentiated insights with our clients. Sadly, that was not the case this past quarter, given the rapid spread of COVID-19 around the world.

This issue of our publication has been the toughest we have ever had to write, which is saying a lot given that we went through 9/11 and the Global Financial Crisis. What makes it especially challenging is that we are all dealing with the physical and emotional toll of a dangerous and invisible enemy, combined with an unprecedented shutdown of much of the global economy. I remarked last quarter on how difficult the prediction business can be. Fast-forward to today, and trying to look into the future just got 100 times harder. Although few of us have ever experienced anything like this pandemic, I find it much more useful to look back in time. History may not provide all the answers we need or want as they relate to COVID-19, but it can provide reassurance and help us to understand that there is a way forward.

Environment Like No Other

Just over a month ago, the U.S. economy was growing at a steady and improving pace. Optimism was growing that a phase-one trade deal with China would lead to better growth as trade tensions lessened. Housing had moved past a soft patch and was firming. One analyst earlier this year even described the U.S. economy as "recession-proof." Yes, the prediction business is hard.

Then the unthinkable happened, and everything was turned upside down, almost in an instant. As jarring as this crisis has been for the U.S., the country is better off having entered it on strong economic footing. A well-conditioned prizefighter is much more likely to handle a surprise punch and get up off the mat more readily than one who hasn't trained properly or is coming into the fight in a depleted state.

New York City is my hometown and the place I have lived my entire life. During that time, this great city experienced the financial crisis of the late '70s, Black Monday in 1987, 9/11 and the financial crisis, and now it is the epicenter of the COVID-19 outbreak. During many past challenges, pundits said the city was finished, and each time it came roaring back better and stronger than ever. New York, like our country and many nations around the world, can definitely take a punch and get off the mat, and I have no doubt that will be the case again when the final chapter is written on the pandemic.

This crisis caused liquidity strains across asset classes, and municipal bonds were not spared. We recognize that investors expect munis to be a "safe harbor" at all times, but even the U.S. Treasury market experienced moments of illiquidity in March. That being said, a little perspective is important. Investment grade municipals delivered above all expectations in 2019, with the Bloomberg Barclays Municipal Bond Index posting a 7.5% total return. Those strong returns continued through February of 2020. Despite the selloff in March, driven mostly by technical factors, the year-to-date return for the index is down only 0.63%. Not great, but a lot better than many other asset classes on both a relative and absolute basis.

Looking Ahead

In the coming months, the human and economic toll of the pandemic will be immense. We don't know when this crisis will end or how things will look when we get to the "other side." What we do know is that the world may change in ways both expected and (more likely) unexpected.

Our municipal bond team adheres to one principal above all others: preserve capital. We have stayed true to that belief since our beginnings and have built our investment process around it. In the weeks since this crisis took hold, we have pushed ourselves to be flexible in our thought processes. No investment was undertaken with a global pandemic in mind. We know there is much that is unknown now, but we are confident that we will learn a little more each day. As the future unfolds, we must keep our minds open and adjust portfolios accordingly so that we can continue to deliver on our goal of preserving client capital.

"FAILING TO PLAN IS PLANNING TO FAIL."
—BEN FRANKLIN

MARKET REVIEW AND OUTLOOK

Broad 'De-risking,' Signs of Opportunity

TED VOGEL
PORTFOLIO SPECIALIST, MUNICIPAL FIXED INCOME

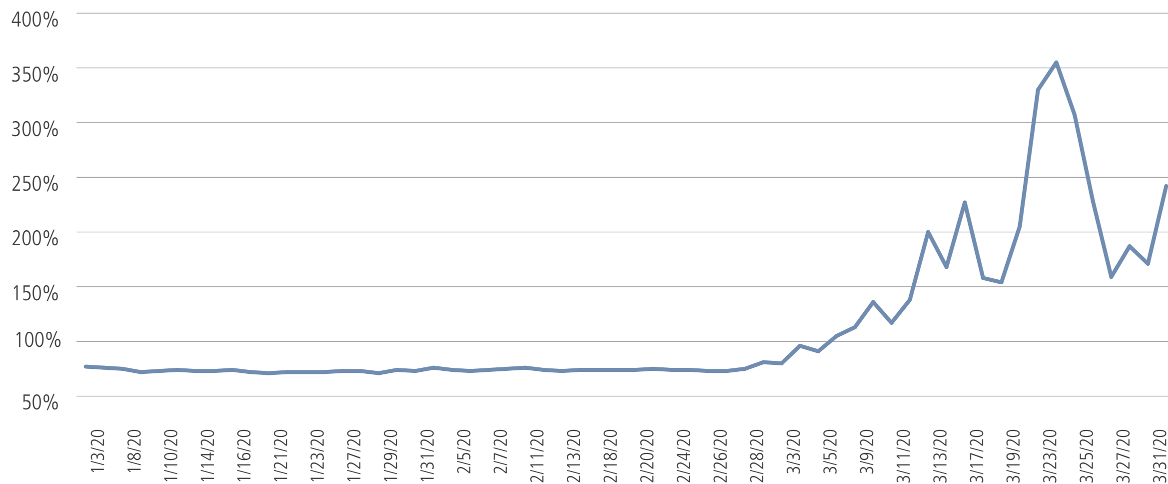
The pandemic and related economic freeze transformed the market environment and will likely keep conditions volatile.

The sharp deterioration in risk sentiment observed at the end of February intensified in March, as fears surrounding the rapid spread of COVID-19 and the potential impact on global growth reached a fever pitch. Given heightened demand for "safe-haven" assets, U.S. Treasury yields fell sharply, with the two-year down 132 basis points (bps) to 0.25%, the 10-year down 125 bps to 0.67% and the 30-year down 106 bps to 1.33%. Notably, on March 9, the 10-year Treasury rate touched a record low of 0.50%. As dramatic as the rally in Treasury yields was, equally drastic was the credit-spread widening in almost all non-Treasury fixed income sectors, including municipal bonds. Spreads widened on the back of deteriorating risk sentiment, particularly related to the outbreak, but were also exacerbated by an emergent "OPEC+" price war at the beginning of March.

Given the extraordinary volatility, central banks hastily dusted off and expanded their 2008 playbooks in order to help inject much-needed liquidity into the markets and support their economies. In the U.S, the Federal Reserve slashed its policy rate to the zero lower bound, implemented significant asset-purchasing programs and announced a return to the commercial paper market. Similarly, outside of the U.S., other key central banks (the ECB, Bank of England and Bank of Japan) all announced varying programs of their own aimed at helping mitigate the impact of the virus on their respective economies.

On the fiscal side, the U.S. government passed a $2 trillion bipartisan federal package aimed at near-term relief for impacted workers and small businesses. The program includes direct payments of $1,200 to individuals making up to certain income levels, as well as loans to large and small companies, and expanded unemployment insurance for freelance and gig-economy workers. Another $100 billion has been earmarked for

MUNI YIELDS HAVE SURGED RELATIVE TO TREASURIES
10-Year AAA Municipal Yield as % of 10-Year U.S. Treasury Yield



Source: MMD and Bloomberg.

health care providers and $16 billion will be used for a stockpile of medical equipment, which has become scarce with the rise in coronavirus cases.

Downshift in Data, Returns

Not surprisingly, U.S. economic data readings softened over the quarter due to initial impacts felt from the outbreak. The March employment report was weak, with nonfarm payrolls (-701,000 vs. -100,000) falling well short of already low expectations, average hourly earnings (+3.1% vs. +3.0% year-over-year [YoY]) outpacing consensus and the jobless rate meaningfully higher (4.4% vs. 3.8%). February core CPI (+2.4% vs. +2.3% YoY) and headline CPI (+2.3% vs. +2.2% YoY) prints were both above consensus expectations, while retail sales fell short of consensus at -0.5% month-over-month.

Municipal bond returns were mixed across the yield curve in the first quarter, with longer maturities generally underperforming shorter maturities. The broad muni index experienced a 0.63% loss, reflecting sizable market volatility. As noted above, the drop came as Treasury yields rallied while most non-Treasury sectors faced constrained liquidity issues. According to Bloomberg, new issuance of municipals was 114% higher than the same quarter a year earlier as government issuers raced to capture lower interest rates in January and February. With regard to credit, higher-rated securities generally outperformed those with lower ratings. Turning to sectors, general obligation bonds outperformed revenue bonds.

Outlook: Turbulence and Opportunity

The global fixed income markets experienced unprecedented shocks in the wake of the COVID-19 epidemic. The ensuing repricing of risk premia, exacerbated by challenged market liquidity, has driven one of the largest and fastest selloffs in market history. That said, liquidity conditions have gradually improved and should continue to stabilize given the speed and magnitude of central bank intervention, in our view. Markets are likely to remain turbulent for much of 2020 as investors assess the path out of the pandemic, the extent of lasting economic consequences and the potential impacts that liquidity infusions may carry across asset classes. With the November election approaching, these changes are likely to influence not only the outcome, but the course of public policy, the level of taxation and the degree of government involvement in the private economy.

Despite the strong selloff that occurred in the first quarter, the muni market has shown some signs of stabilization. Unprecedented levels of stimulus from the Fed, Treasury and Congress to shore up state and local governments has been encouraging. While it is too early to sound an "all-clear," recent market volatility has provided opportunities that were not available even a couple of months ago. Our long-term view remains intact: that tax-free bonds remain one of the few tax-advantaged, high-quality options for high tax-bracket investors. We continue to seek out attractive trading opportunities for our investors in both the primary and secondary markets.

"THERE IS HOPE IN DREAMS, IMAGINATION, AND IN THE COURAGE OF THOSE WHO WISH TO MAKE THOSE DREAMS A REALITY."

— JONAS SALK

TRADING NOTES

Inside the Perfect 'Technical' Storm

RANDY L. GROSS
SENIOR PORTFOLIO MANAGER, MUNICIPAL FIXED INCOME

Outflows accelerated as large quantities of bonds were sold to relatively few buyers.

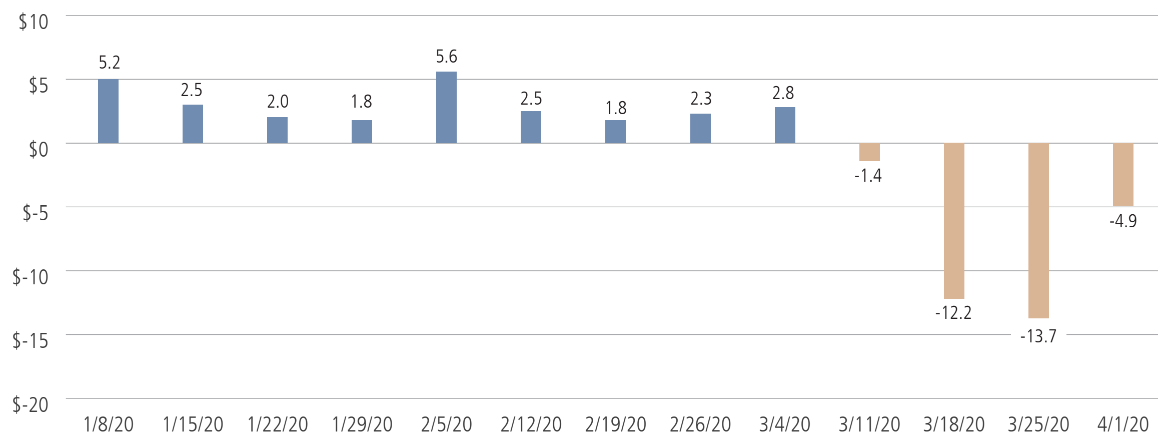
Beginning in January 2019, mutual funds and ETFs recorded 60 straight weeks of record-breaking inflows, totaling approximately $120 billion. A major theme throughout this inflow cycle was outperformance versus U.S. Treasuries, as investors competed to invest large amounts of cash. By March 9, 2020, the calm before the technical storm, 10-year AAA municipals were yielding around 80 basis points, a historical low, with the market witnessing its first outflows in over a year.

As COVID-19 began to take hold of financial markets, the outflow cycle intensified, with investors withdrawing a record-breaking $30.8 billion over the final weeks of March. To meet these redemptions, mutual funds were forced to sell large quantities of bonds to a smaller pool of buyers, resulting in the hefty drops in prices. Munis continued to experience unprecedented volatility throughout the month, resulting in large price swings in both directions. In our opinion, most of the selling was a liquidity-driven technical selloff, leading the asset class to decouple from the U.S. Treasury market in a meaningful way.

Glimpses of Market Stability

- Munis rallied sharply the week of March 23 as the Fed announced a program to stabilize tax-exempt money market funds. This helped support short-term rates, leading the SIFMA Weekly Index to reset at 1.83% by month-end. This rate peaked at 5.2% in mid-March, with some variable-rate demand notes reaching much higher

MUNICIPAL FUND FLOWS TURNED NEGATIVE IN MARCH



Source: Lipper.

levels. This program also enabled some broker/dealers to provide better liquidity across the entire yield curve.

- Some market participants became better buyers of high-quality bonds as the $2.3 trillion CARES stimulus package neared final approval toward the end of the month. This gave the Fed the ability to purchase municipal bonds when needed. Around this time, investors began taking stock of the extraordinary relative value in municipals versus taxable alternatives, further stabilizing the market. As an example, 10-year AAA municipal yields since the passage of tax reform have averaged around 75% of comparable U.S. Treasury yields. This ratio ballooned to roughly 250% as the global flight to government securities took hold. These higher yields also led to crossover buyers (relative value buyers uninterested in municipals' tax benefits) entering our marketplace, providing much-needed liquidity.
- On April 9, the Fed announced a newly created Municipal Liquidity Facility, providing around $500 billion in short-term lending to larger state and local government issuers.

Redefining Liquidity

As we continue to assess our "new economy" and "known unknowns," the municipal market continues to deal with bouts of constrained liquidity. During these periods, we believe it is essential to canvass as many market sources as possible when trying to sell a position, as 90 different brokers may have 90 different rationales for the bid they submit. In other words, as liquidity becomes constrained, the disparity among bids increases, and in some cases disappears, and reinforces our preference to maintain relationships with a broad group of broker/dealer firms. Investors relying on a smaller network of liquidity providers may find fewer options during bouts of heighted volatility.

Back to Basics

We believe that many investors share our view that the primary benefits of this asset class are the preservation of capital and tax-advantaged income. Similar to the disruption in the mono-line insurance sector over a decade ago, perceived risk is likely to continue to influence price action as the market braces for possible ratings downgrades. As events unfold in the coming months, security selection and proactive credit research, independent of ratings agencies, will become even more essential.

"MORE MONEY HAS BEEN LOST BECAUSE OF FOUR WORDS THAN AT THE POINT OF A GUN. THOSE WORDS ARE 'THIS TIME IS DIFFERENT.'"

— **CARMEN M. REINHART, *THIS TIME IS DIFFERENT: EIGHT CENTURIES OF FINANCIAL FOLLY***

FUNDAMENTAL FOCUS

Tossing Out the 2008 Playbook on Credit

JAMES A. LYMAN
DIRECTOR OF MUNICIPAL FIXED INCOME RESEARCH

The nature of the current economic contraction has led to a unique environment for municipal credit analysis.

The above quote from Carmen Reinhart, a highly regarded economist, was in response to mistakes made in past crazes like the internet bubble of the late '90s and the housing bubble of the mid- to late 2000s. But ironically, when analyzing credit in light of the current crisis, we may be better off saying "this time is different," and, I would add, not in a positive way.

Why Is This Time Different?

Let's start with the general state of credit before the outbreak began. First, the U.S. economy has gone through decades of increasing income inequality and resulting in weaker personal balance sheets. This, in my opinion, is likely to exacerbate lower consumer confidence and reduce the speed of a consumer-led recovery as we emerge from the pandemic. On the corporate side, the lack of consumer confidence, and possibly a lack of confidence in the stability of political leadership, could drive weaker corporate confidence. To some extent, the lack of confidence could exacerbate the problem as the two sides find themselves in a "staring contest." During the recovery from the 2008 financial crisis, we witnessed tentative behavior by corporate managers in making investments because they were looking for stability in various governmental policies. Economic stimulus programs have been implemented much more quickly in the current crisis, but the initial programs need to have follow-on funding to make an impact.

Given today's partisan environment, this issue may be more acute. We believe that the period until the November election will likely carry a lack of policy clarity and possibly an information void. If, after the election, there is not political consensus, we can expect a bumpy recovery.

The character of this economic collapse is different from 2008. The current situation has rapidly hit the bottom of the economic pyramid, as hard as or harder than the top; in 2008, the collapse started at the top and worked its way down. The foundations of our economy—small business and labor—have been immediately impacted. Despite federal stimulus programs to support them, we believe that the longer the economy operates with social distancing, the more permanent the damage to small businesses and the slower the recovery. Federal assistance will help, but maybe not enough to make everyone whole.

Traditionally, municipal credit followed corporate credit into recessions, but this time, blows to the foundations of the economy will be felt more quickly by municipalities, particularly those reliant on economically sensitive revenues such as excise taxes. Unlike 2008, municipalities will for the most part see a jump in expenditures for areas like public health. Municipalities that receive state-shared revenues will see a faster decline than in 2008, since states are shouldering public health costs they did not have 12 years ago, and need to act fast on spending cuts in order to balance budgets.

Balancing Public Health and Economic Policy

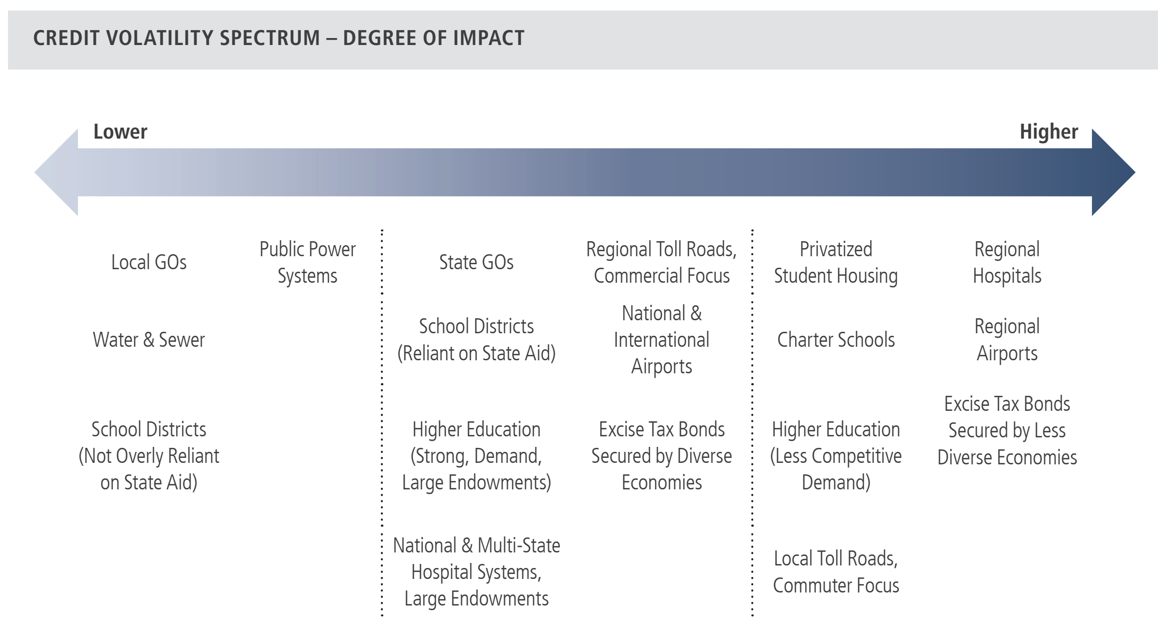
In modern times, we have never before experienced economic upheaval from a non-economic event like this global pandemic. As a society, we are not sure how to balance public health with economics, and partisan politics are likely to cloud policy decisions. We have already seen fissures down party lines, for example in Pennsylvania, where lawmakers are looking to overturn the governor's social distancing policies. In New York, on the other hand, the battle between Governor Andrew Cuomo and New York City Mayor Bill de Blasio over the closing of New York City schools through the end of the year appears

to be simply a power grab by two members of the same party. However, whether involving politics or not, decisions to soften social distancing policies are incredibly complex from both science and risk management perspectives. Another factor is the likelihood that loosening social distancing restrictions will not be consistent, making the jagged reopening of the economy another drag on the recovery. For example, supply chains may not fully reconnect to allow a smooth ramp-up in production, and service industries may be located in areas where restrictions may still be in place.

Sector View of Impact

The impact to the various sectors within the municipal market will vary depending on the makeup of each issuer's revenues and the level of service it supplies to its populace. Often these factors differ by state. Below, we provide a spectrum of credit volatility for the various sectors, which is based on our assessment of the structure of the current, unique economic crisis. The broad point is that, while conditions will likely be difficult for municipalities, specific implications will be closely tied to conditions in specific sectors and, most critically, specific issuers. The landscape will require very thorough research efforts and modeling to distinguish opportunities and risk in a truly "different" time.

CREDIT VOLATILITY SPECTRUM – DEGREE OF IMPACT



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