

Second quarter 2023 outlook

Municipal bonds: technical tailwinds and positive credit momentum



Daniel J. Close, CFA *Head of Nuveen Municipals*

Municipal bond market performance improved during the first quarter, as yields declined in the face of capital market turmoil surrounding the banking sector. Low new issue supply and positive fund flows contributed to performance. Following a strong fourth quarter, municipals have positive momentum while offering an attractive entry point to investors.

KEY TAKEAWAYS

- Municipal bonds produced positive performance in the first quarter, despite continued volatility in U.S. Treasury rates and banking turmoil.
- While the pace of issuance is likely to pick up, it is expected to be relatively muted compared to levels over the past five years.
- Nearly all states are in a strong fiscal position, due to state revenue growth outpacing budget forecasts and unprecedented federal pandemic aid.

A DATA DEPENDENT FED APPROACHES A PAUSE

Despite meaningful tightening from the U.S. Federal Reserve over the last 12 months, GDP growth is surprising to the upside and the labor market remains tight.

Before concerns over the banking sector erupted, the market was pricing in further rate increases. Better-than-expected employment numbers and hawkish Fed rhetoric led the 2-year U.S. Treasury rate to exceed 5%, causing the inversion between 2- and 10-year Treasury yields to exceed 100 basis points (bps). Fed Chair Powell leaned hawkish in

congressional testimony, opening the door more firmly to a 50 bps rate hike at the March meeting.

Directly related to the banking crisis, the Fed chose to raise rates only 25 bps and it left the terminal rate at 5.1%. The Fed acknowledged that this regional banking issue, even if idiosyncratic, will pressure lending and, as a result, the economy.

The active Fed cast a cautionary tone across the municipal market. Credible scenarios in which the Fed could be finished hiking bode well for further recovery. Estimates suggest that interest rates take 9 to 12 months to influence inflation. While inflation remains elevated, the lagged impact of rate hikes continues working its way through the economy. Backward-looking inflation data should adjust downward in the coming months, providing the Fed with a clear path to pausing.

The Fed should remain data dependent throughout the year following a pause. If inflation declines and unemployment begins to soften, it is entirely possible that the Fed could cut rates in late 2023. However, the Fed is more likely to remain on hold through 2023 following one more 25 bps rate hike at its May meeting.

66

Credible scenarios in which the Fed could be finished hiking bode well for **further recovery**.

MUNICIPAL PERFORMANCE IS IMPACTED BY MARKET MOVEMENTS

The Bloomberg Municipal Bond Index returned 2.78% during the first quarter, while the Bloomberg High Yield Municipal Bond index returned 2.73%. These similar returns indicate that performance is being primarily impacted by movements in U.S. Treasury rates and municipal-to-Treasury yield ratios.

The first quarter began on a strong footing. Municipal bond yields rallied following the January effect, in which maturities and bond calls far outpaced new issue supply. In addition, fund flows turned positive, with inflows of \$5.3 billion in January. However, bond yields increased again as economic data released during February revealed a tighter-than-expected labor market and stubbornly high inflation. The banking crisis in March changed the outlook to a softer economy, lower inflation and an end to Fed tightening.

10- and 30-year AAA municipal bond yields ended the quarter down -53 bps and -40 bps, respectively. Municipal-to-Treasury ratios declined for both tenors, ending the quarter at 65% and 90%, respectively. Current ratios and Fed policy expectations suggest that the long end of the municipal yield curve remains attractive.

High yield municipal bond credit spreads widened by 12 bps during the quarter, which was more than offset by the high income and cash flow. This widening in the face of an improving credit picture allows investors to be selective on credit and take advantage of market inefficiencies.

Municipal credit strength and higher yields are enticing investors to come off the sidelines. We believe low supply, stable and predictable cash flow from existing bond portfolios, and a steeper municipal yield curve all point to strong total return potential. Going forward, when the dust settles and investors are comfortable that the Fed is done hiking, fund flows could strengthen.

MUNICIPAL MARKET LIQUIDITY REMAINS STABLE IN THE WAKE OF BANK TURMOIL

On 12 March, the Fed announced the creation of a Bank Term Funding Program (BTFP), which will allow banks and other depository institutions to borrow for up to one year at a fixed rate in exchange for posting certain securities as collateral. The size of the loan will equal the par value of the securities. Acceptable collateral includes securities whose principal and interest payments are fully guaranteed and an agency of the U.S. government. Municipal securities generally do not qualify unless they mature in six months or less, had an original maturity of no more than one year, and meet other requirements regarding the source of payment.

This program was initiated in response to problems at some banks that had suffered large outflows from their deposit base, which were hard to fund because of the unrealized losses on their fixed income securities caused by rising interest rates. At the end of 2022, banks collectively had \$620 billion of unrealized losses, which equaled 2.6% of total assets. Of the unrealized losses, \$280 billion was attributable to available-to-sell securities (which are valued at market value), and \$341 billion was in the form of held-to-maturity securities (which are carried at amortized book value).

As of 31 Dec 2022, banks and other depository institutions held municipal debt with a market value of \$592 billion — equal to 15% of all municipal debt outstanding — and represented 2.5% of all bank assets. Approximately 35% of the municipal debt was in the form of loans, and presumably classified as held-to-maturity obligations, and thus would not be sold to pay depositors. During the first half of 2022, banks made net purchases of \$28 billion of municipal debt, but in the second half they liquidated \$20 billion of their municipal holdings (almost all of that in the fourth quarter).

The ability to obtain loans through the Bank Term Funding Program will probably make it unnecessary for banks to sell municipal bonds to compensate for the loss of deposits. However, as banks find it necessary to increase the interest rates they pay in order to retain deposits, and profit margins shrink or even turn negative, banks' demand for tax-exempt income is likely to be constrained.

Banks' net sales in the fourth quarter of 2022 may have been motivated by the expectation that their profits and tax liability would decline in the face of the rising cost of funds. Despite net selling by banks and net redemptions of \$40 billion from open-end municipal bond funds during the fourth quarter, the ratio of tax-exempt to 10-year Treasury yields fell, which suggests that demand from other categories of investors has been supportive in the face of reduced new issue supply.

THE TECHNICAL ENVIRONMENT REMAINS SUPPORTIVE

The Treasury yield curve continues to be inverted, while the municipal yield curve maintained its traditional upward slope with some flattening. Despite this, the broader decline in interest rates on all maturities enabled the longer maturity range to outperform those with shorter maturities during the first quarter. Demand from individual investors strengthened to start the year — both directly and through separately managed accounts — keeping municipal-to-Treasury yield ratios near historical lows.

The 10-year municipal-to-Treasury yield ratio varied during the quarter, as Treasury volatility did not pass directly through to municipals. The ratio ended the quarter at 65%, just tighter than the 68% year-end rate. This is still relatively rich compared to the long-term historical average of 85%. Conversely, the 30-year ratio was more stable and ended the quarter in line with historical averages at 90%, the same level where it started the year.



Demand from individual investors **strengthened** to start the year, keeping municipal-to-Treasury yield ratios near historical lows.

Supply

Issuance has remained muted, starting the year 26% lower year-over-year. The combination of record tax receipts and several large federal aid programs left municipalities flush with cash. Additionally, rate volatility and market uncertainty have left issuers wary.

With borrowing costs elevated due to Fed policy, it has become less advantageous to refund, significantly reducing issuance. Refunding continues to be a large driver of the lower issuance totals, with refunding issuance down 45%.

While new money for new project issuance was down in 2022, it was down meaningfully less than broader issuance trends. In the first quarter, however, new money issuance was down 20%, as higher borrowing costs and market volatility have pushed projects to delay issuance. Quarter-to-date issuance is at \$76 billion, the lowest first quarter total since 2018.

Issuance is expected to pick up slightly as the year progresses, with stability increasing as clarity surrounding the Fed's interest rate policy emerges. While the pace of issuance is likely to pick up, it is expected to be relatively muted compared to levels over the past five years.

Demand

Outflows set all-time records in 2022, with openend funds (excluding exchange-traded funds) totaling an astounding -\$148.3 billion. The year started out more positive, with inflows of approximately \$5.3 billion in January and \$1.7 billion in February before outflows of -\$2.2 billion in March (as of 22 March).

Looking forward, we anticipate net inflows to grow as investors regain confidence in Fed interest rate policy and look to municipal bonds as an asset class to provide income with strong fundamental strength in a market that faces the pressure of tighter fiscal policy.

66

Looking forward, **we anticipate net inflows to grow** as investors regain confidence in Fed interest rate policy.

Defaults

First-time municipal bond defaults totaled \$724 million in par value year-to-date, up more than 105% year-over-year. This represents a very small percentage of the overall \$4.2 trillion

market and lines up with first time distress levels from March 2022.

Defaults were exclusively concentrated in three sectors: hospitals comprised 32%, not-for-profits at 41% and nursing homes/senior living at 27%. While defaults are elevated to start the year, widespread issues are not expected to occur in 2023, as record balance sheets should provide ample protection for most issuers.

Credit spreads

Credit spreads were relatively stable during the first quarter, increasing 12 bps from 246 bps to 258 bps over the equivalent-maturity AAA bond. Despite this, the Bloomberg High Yield Municipal Bond index returned 2.73% for the quarter, as duration benefited performance. While banking concerns led to a flight-to-quality trade in March, municipals largely did not participate as lower investment grade spreads were also stable, with BBB spreads remaining at 99 bps.

Recessions can widen credit spreads if default trends deteriorate. However, given strong underlying fundamentals and the telegraphed nature of the Fed's actions, we anticipate spreads to hold relatively well even if economic conditions worsen.

Significant resilience is built into several of the key indentures that dominate the high yield municipal indexes. For example, COFINA and the Puerto Rico general obligation bonds were downsized to fit revenue levels near the bottom of the Commonwealth's economic cycle. Since then, sales and use taxes have surged ahead of projections while federal government support has accelerated.

Other large indentures in the tobacco bond sector have also been downsized through a string of refinancing transactions. These bonds receive a kicker, boosting their tax revenues from the recent high CPI figures. Key provisions of these and many other large high yield municipal bond credits have contributed to the relative stability of high yield spreads, even amid market volatility and limited inflows.

CREDIT FUNDAMENTALS REMAIN STRONG

Energy Harbor is acquired by Vistra Corp.

On 06 March 2023, Vistra Corp. (NYSE ticker VST) announced the acquisition of Energy Harbor. Energy Harbor equity positions originated from its previous ownership of FirstEnergy Solutions municipal bonds. The FirstEnergy Solutions municipal bonds were converted to Energy Harbor equity in Q1 2020 when Energy Harbor emerged as a standalone company separate from its former parent, FirstEnergy Corp. The Vistra/Energy Harbor deal is expected to close in the second half of 2023.

Vistra Vision should be a leading zero-carbon power generation and retail platform through the combination of the Energy Harbor zero-carbon nuclear generation assets, Vistra's zero-carbon Comanche Peak nuclear asset and Vistra's renewables and battery storage platform. Vistra Vision will also include the combined retail platforms of Vistra and Energy Harbor. Vistra Vision will include 6.4 GW of zero-carbon nuclear generation, 2.4 GW of zero-carbon renewables and storage assets and approximately 5 million retail customers.

Vistra Vision is expected to generate significant ongoing free cash flow and should benefit from the recently enacted Inflation Reduction Act, which includes a nuclear Production Tax Credit (PTC). The PTC creates revenue stability for merchant nuclear power plant owners as it significantly de-risks exposure to downside moves in power prices. This is a material value enhancing feature of the business. The passing of the PTC legislation is validation of the unique carbon free, consistent, baseload power generation attributes of nuclear power assets.

Brightline expansion to Orlando opens soon

Brightline Florida finalized financing for its key extension from West Palm Beach to Orlando in early March, using the \$215 million of tax-exempt private activity bonds remaining in its allocation from the USDOT. Construction is more than 90% finished, with completion expected by the end of the second quarter. The new 37,000 square foot Brightline station located at Orlando International Airport is also largely complete. Upon opening to Orlando, Brightline will serve not only a corridor between Southeast Florida and Central Florida with a combined population of almost 10 million people, but also one of the world's most active travel markets that is forecasted to increase to almost 200 million visitors by 2030. In addition, it is estimated that the train line will create 2,000+ permanent jobs, remove 3 million cars from roadways annually and eliminate 160,000 metric tons of CO2 emissions yearly.

More recently, the corridor between Miami and West Palm Beach shows momentum. Ridership since last October has averaged almost 125,000 passengers per month, with totals from the first two months of 2023 representing Brightline's highest in operating history at over 150,000 riders each month. Most recent ridership numbers attained in February were up 95% compared to February of 2022, with average fares 15% higher year-over-year.

Two new train stations located in Boca Raton and Aventura that opened in late December 2022 have shown encouraging results. In addition, monthly passholders have increased more than 40% since last November, when a 15% monthly pass increase was implemented.

State budgets are growing more challenging

Nearly all states are in a strong fiscal position, due to state revenue growth outpacing budget forecasts and unprecedented federal pandemic aid. Large surpluses enabled many states to pay down debt, fund capital projects on a pay-go basis, fund supplemental pension contributions, provide tax relief and still grow reserve balances. Rainy day funds were at historically high levels at the close of fiscal year (FY) 2022 and are projected to grow again to an estimated 12.4% of general fund expenditures by the end of the FY23. An impressive 37 states have reached record-high balances.

Despite strong reserves, many states are finding FY24 to be more challenging. Most states begin

their fiscal year on o1 July and have not yet enacted their FY24 budgets. However, a few themes have emerged as states face slower economic growth, higher inflation, tightening monetary policy and reduced federal aid. Most states — including California, New York, Illinois, Arizona, New Jersey and Colorado — are projecting FY24 tax revenues to come in slightly behind FY23 collections. Anticipating a broader economic slowdown, states are keeping revenue projections very conservative. Even states expecting revenue increases, like Florida and Michigan, are projecting minimal growth. New pressures on expenditures, including the roll off of the temporary increase in the federal Medicaid matching rate, recent tax cuts and a need to fill vacant positions all put pressure on state expenditures in the coming year.

Favorably, despite fewer resources, states are not planning to spend down built-up fund balances.

Instead, many budget proposals plan for additional rainy day fund deposits. New Jersey, Illinois, Wisconsin and Montana are among the states planning to increase reserves. Efforts to provide tax relief are another common theme. Florida enacted a \$2 billion sales tax relief package in January, and new tax credits in Arizona, Pennsylvania, New Jersey and Michigan are proposed. Wisconsin is considering a significant income tax cut and both Montana and Utah have proposed both income and property tax relief. In addition to tax relief, many states are planning to boost funding for pre-K through 12 education. Colorado has proposed new funding for universal preschool and increased per pupil funding. Michigan, Pennsylvania and Utah, along with many others, have proposed education funding increases as well. States are well-positioned to weather the next year, and so far budget proposals show fiscal restraint.



States are well-positioned to weather the next year, and so far budget proposals show fiscal restraint.

OUTLOOK

We see three main factors driving second quarter performance. First, the technical environment is likely to be supportive. Now that we have more clarity from the Fed on the path of interest rates, both investors and issuers may start to move off the sidelines. Muted issuance and strong demand are current tailwinds for the asset class, and inflows for both long duration and high yield have been positive year-to-date.

Second, credit fundamentals remain strong. Municipalities have record levels of tax collections and cash on hand. Credit conditions are solid, even in the face of interest rate volatility. Credit upgrades have been outpacing downgrades by nearly 3 to 1 based on full

year 2022 data. And as essential service monopolistic providers, municipalities tend to do well in most economic environments.

Finally, long-term valuations are attractive compared to U.S. Treasuries and corporates. High yield municipal spreads could still narrow, creating the potential for additional total return. In the investment grade space, we like select longer-duration, high-quality bonds that we think are undervalued.

We believe our bottom-up, fundamental credit research process is well-positioned to take advantage of the opportunities we are seeing in the market today.

2023 THEMES

Economic environment

- Inflation has come down sharply in recent months, and the trajectory is favorable.
- Energy prices, housing costs and rents continue to trend lower, which should exert downward pressure on inflation going forward.
- The fed funds rate has risen by 475 bps during this cycle. The market is pricing in one more 25 bps hike for 2023.
- Federal Reserve policy remains dependent on employment and inflation data.
- U.S. growth should trend lower as the impact of Fed policy is absorbed. Key factors include interest rate hikes, recent headwinds in the banking sector and declining money supply.
- · Recession continues to be a concern.
- Concerns around banking are causing rate volatility.
 Anticipate a return to range bound trading once stable conditions return.

Municipal market environment

- Long-term tax-exempt and taxable municipal valuations are attractive on a spread basis, compared to similar maturity U.S. Treasuries and corporate bonds.
- Municipal performance is expected to improve as interest rates stabilize and inflows return.
- Supply remains meaningfully low due to higher interest rates. Net negative tax-exempt supply will likely persist, providing technical support.
- Municipal supply will be driven by new issuance for new projects, rather than refunding.
- Demand is returning, attracted by higher yields and potential tax increases.
- Credit remains strong, with historic levels of revenue collections and rainy day funds.
- Attractive spreads plus sound credit conditions offer an appealing entry point.
- We expect municipal defaults to remain low, rare and idiosyncratic.

Endnotes

Sources

Gross Domestic Product: U.S. Department of Commerce. Treasury Yields and Ratios: Bloomberg (subscription required). Municipal Bond Yields: Municipal Market Data. Fund flows: Morningstar. Municipal Issuance: Seibert Research. Defaults: Municipals Weekly, Bank of America/Merrill Lynch Research. State Revenues: The Nelson A. Rockefeller Institute of Government, State Revenue Report. State Budget Reserves: Pew Charitable Trust. Global Growth: International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD). Standard & Poor's and Investortools: http://www.invtools.com/. Flow of Funds, The Federal Reserve Board. Payroll Data: Bureau of Labor Statistics. Bond Ratings: Standard & Poor's, Moody's, Fitch. New Money Project Financing: The Bond Buyer. State revenues: U.S. Census Bureau.

Federal Reserve Board, Financial Accounts of the United States

https://www.federalreserve.gov/releases/Z1/

FDIC Quarterly Bank Profile

https://www.fdic.gov/bank/analytical/qbp/

https://www.fdic.gov/analysis/quarterly-banking-profile/qbp/2022dec/

Federal Reserve Board, Bank Term Funding Program and collateral requirements

https://www.federalreserve.gov/newsevents/pressreleases/monetary20230312a.htm

https://www.federalreserve.gov/monetarypolicy/files/bank-term-funding-program-faqs.pdf

https://www.ecfr.gov/current/title-12/chapter-Il/subchapter-A/part-201/subject-group-ECFR85294468abf9e0f/section-201.108#p-201.108(b)

Bond Buyer, State budgets flush with cash as some signs point downward, 09 Feb 2023

National Association of State Budget Officers, Rainy Day Funds Reach Historic Levels, Leaving States More Prepared Than Ever for a Future Downturn, 25 Jan 2023 https://budgetblog.nasbo.org/budgetblogs/blogs/kathryn-white/2023/01/25/rainy-day-funds-reach-historic-levels

NABSO, FY 2024 Proposed Budget Summaries

https://www.nasbo.org/mainsite/resources/proposed-enacted-budgets

Pew, Record State Budget Reserves Buffer Against Mounting Fiscal Threats, 16 Mar 2023

https://www.pewtrusts.org/en/research-and-analysis/articles/2023/03/16/record-state-budget-reserves-buffer-against-mounting-fiscal-threats

Pew, 4 Facts About Using State Budget Reserves to Improve Fiscal Stability, 20 Mar 2023

https://www.pewtrusts.org/en/research-and-analysis/articles/2023/03/20/4-facts-about-using-state-budget-reserves-to-improve-fiscal-stability

Pew, State Tax Revenue Growth Approaches Possible Inflection Point, 14 Feb 2023

https://www.pewtrusts.org/en/research-and-analysis/articles/2023/02/14/state-tax-revenue-growth-approaches-possible-inflection-point

This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy, sell or hold a security or an investment strategy, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on an investor's objectives and circumstances and in consultation with his or her financial professionals.

The views and opinions expressed are for informational and educational purposes only as of the date of production/writing and may change without notice at any time based on numerous factors, such as market or other conditions, legal and regulatory developments, additional risks and uncertainties and may not come to pass. This material may contain "forward-looking" information that is not purely historical in nature. Such information may include, among other things, projections, forecasts, estimates of market returns, and proposed or expected portfolio composition. Any changes to assumptions that may have been made in preparing this material could have a material impact on the information presented herein by way of example. **Performance data shown represents past performance and does not predict or guarantee future results.** Investing involves risk; principal loss is possible.

All information has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such. For term definitions and index descriptions, please access the glossary on nuveen.com. **Please note, it is not possible to invest directly in an index.**

Important information on risk

Investing involves risk; principal loss is possible. All investments carry a certain degree of risk and there is no assurance that an investment will provide positive performance over any period of time. Investing in municipal bonds involves risks such as interest rate risk, credit risk and market risk. The value of the portfolio will fluctuate based on the value of the underlying securities. There are special risks associated with investments in high yield bonds, hedging activities and the potential use of leverage. Portfolios that include lower rated municipal bonds, commonly referred to as "high yield" or "junk" bonds, which are considered to be speculative, the credit and investment risk is heightened for the portfolio. Bond insurance guarantees only the payment of principal and interest on the bond when due, and not the value of the bonds themselves, which will fluctuate with the bond market and the financial success of the issuer and the insurer. No representation is made as to an insurer's ability to meet their commitments. This information should not replace an investor's consultation with a financial professional regarding their tax situation. Nuveen is not a tax advisor. Investors should contact a tax professional regarding the appropriateness of tax-evempt investments in their portfolio. If sold prior to maturity, municipal securities are subject to gain/losses based on the level of interest rates, market conditions and the credit quality of the issuer. Income may be subject to the alternative minimum tax (AMT) and/or state and local taxes, based on the state of residence. Income from municipal bonds held by a portfolio could be declared taxable because of unfavorable changes in tax laws, adverse interpretations by the Internal Revenue Service or state tax authorities, or noncompliant conduct of a bond issuer. It is important to review your investment objectives, risk tolerance and liquidity needs before choosing an investment style or manager.

CFA® and Chartered Financial Analyst® are registered trademarks owned by CFA Institute.

Nuveen provides investment advisory solutions through its investment specialists.

This information does not constitute investment research as defined under MiFID.

NOT FDIC INSURED | NO BANK GUARANTEE | MAY LOSE VALUE

