

First quarter 2023 outlook

Municipal bonds: Tailwinds emerge in 2023



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Municipal bond market performance remained volatile during the fourth quarter. The largest ever fund outflow cycle continued, likely driven by tax-loss selling. Nevertheless, low new issue supply was readily absorbed by investors looking for reliable income. Municipals ended the year with positive fourth quarter returns despite accelerating fund outflows and rising U.S. Treasury rates. Looking ahead, inflation should continue declining and the U.S. Federal Reserve should acknowledge this trend. In this case, the macro tailwind should help end the historic outflows and contribute to a municipal rally in 2023.

KEY TAKEAWAYS

- Municipal bonds produced positive performance in the fourth quarter, despite heavy tax-loss selling, accelerating fund outflows and higher U.S. Treasury rates.
- New issue municipal bond supply fell sharply during the fourth quarter and in 2022. Yields indicate that now is a better time to be a bond investor than a borrower.
- Municipalities are flush with cash while revenues are setting new highs, making credit quality well positioned for slower growth.

MARKETS WERE MACRO DRIVEN IN 2022

Several macroeconomic factors made the 2022 selloff more painful for municipal investors than in any period since the early 1980s. At the beginning of the year, inflationary pressures were deemed transitory. This prediction will likely prove to be accurate, but the time frame has been longer than most investors expected. Once the Fed abandoned the transitory concept, the future path of rate increases and the terminal rate forecast suddenly jumped by 425 basis points (bps) or more.

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Municipal market performance was also affected by the low starting point for yields. At the beginning of 2022, 10- and 30-year AAA MMD yields stood at 1.03% and 1.49%, respectively. Income and cash flow are important cushions supporting performance during periods of interest rate volatility. Municipal bonds now have 250 bps or more of additional income, improving their ability to absorb future rate volatility and offering more attractive valuations.

Generally, fixed income returns greater than inflation are a critical measure, as this represents investors' real rate of return. One year ago, inflation was running higher than most municipal bond yields, creating negative real rates. Today, municipal yields have adjusted higher while inflation is declining, boding well for real returns in 2023.



The macro shift has temporarily overwhelmed otherwise constructive municipal credit fundamentals.

THE FED BEGINS DECELERATING ITS PACE

The Fed raised rates faster in 2022 than at any time since 1980, triggered by unprecedented post-Covid inflation. For most of 2022, it was feared that monetary policy was not having a material effect. But monetary policy impacts with long and variable lags, and we are seeing evidence of cooling economic and price pressures. While year-over-year inflation figures are still approximately 7%, the last 5-month trend is very close to the Fed's 2% target, which bodes well for further slowing of the pace of rate hikes.

The Treasury yield curve has been inverted for the last several months, most recently by nearly 100 bps. Significant yield curve inversions have historically forecasted a slowdown or recession. We believe the Fed may be reluctant to invert the curve further with more aggressive rate hikes, especially

if the economy and inflation are slowing. Hence a deceleration to a 25 bps hiking pace in February seems increasingly likely.

What does this mean for munis? This macro shift has temporarily overpowered otherwise constructive municipal credit fundamentals. And interest rate volatility triggered the largest municipal open-end fund outflow cycle.

These adjustments have restored more attractive yields and income cushions to the municipal market. In addition, tightening has probably only just started to reduce the inflation rate. Lowering inflation to the Fed's 2% target, combined with more attractive valuations, should improve investor demand as well as asset class returns in 2023.

VALUATIONS ARE LOOKING INCREASINGLY FAVORABLE

The Treasury yield curve was inverted most of last year, while the municipal yield curve maintained its traditional upward slope. Short- and intermediate-term munis outperformed significantly throughout the year. Demand from individual investors both directly and through separately managed accounts maintained strength in 2022, keeping municipal-to-Treasury yield ratios near historical lows.

The 10-year ratio held steady throughout 2022 and ended the year at just 68% versus the long-term historical average of 85%. Conversely, the longer end cheapened from 78% of Treasuries to 90% at year-end, higher than historical norms. Longer-duration bonds are more sensitive to interest rate volatility, and municipal fund outflows put greater pressure on the long end of the yield curve.

Several major pieces of fiscal legislation were passed during the first two years of the Biden administration. The American Rescue Plan Act, the Infrastructure Bill and the Inflation Reduction Act supported municipal credit and likely contributed to depressed municipal supply in 2022.

Of all the discussions around personal income tax increases, only the IRS enforcement component of the Inflation Reduction Act came to pass. Congress is divided for at least the next two years, making any significant income tax law changes unlikely.

With long muni-to-Treasury ratios above 90%, taxable-equivalent yields appear attractive. AAA bonds offer a taxable-equivalent yield above 6% and high yield municipal bonds more than 10% for top tax bracket individual investors.

The S&P Municipal Bond Index ended the year with a total return of -8.05%, the lowest in more than 40 years. This weak return was driven by the low starting point for yields, 425 bps of Fed rate increases and a shocking -\$148 billion of fund outflows. Despite extreme market pressures, pockets of demand persisted in retail direct purchases of bonds, among non-U.S. and U.S. institutional investors, and from exchange-traded funds (ETFs). These components of demand, coupled with low supply, helped municipals outperform other areas of fixed income. For example, the Barclays U.S. Aggregate Bond Index fell by -13%. We believe that when persistent demand combines with a return to fund inflows, the municipal market will be poised for a strong rebound in 2023.

Supply

As the year wore on, new issue supply continued to fall compared to prior year norms. The combination of record tax receipts and several large federal aid programs left municipalities flush with cash. Perhaps more importantly, the opportunity quickly vanished for municipal borrowers to lock in historically low rates on their new issues.

The 2017 tax law made advance refundings taxable, and taxable issuance has correlated closely with refunding issuance. The opportunity to advance refund issues depends highly on a constructive and stable interest rate environment that did not exist throughout most of the year. Therefore, we saw taxable new issuance drop by -56% and refunding supply drop by a similar -52%.

New money for new municipal projects typically grows in the low single digits, with economic development and population growth. Last year this supply also shrank by -5%, while tax-exempt supply declined -11%. All in, municipal supply totaled only \$375 billion, down -21% and the lowest in several years.

Early in this new year, supply is not yet picking up, with January likely to offer only \$8 billion. Negative net new issue supply could total more than -\$20 billion in the January/February period when maturities and bond calls are considered. All else being equal, the low supply environment should provide a technical tailwind for market performance during the first quarter of 2023.



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Demand

After consistently positive inflows of \$71 billion in 2021, outflows set all-time records in 2022. July was the only month with positive flows at \$98 million. Outflows have continued since then, with -\$14.2 billion in September, -\$17 billion in October and -\$9.9 billion in November. Open-end fund outflows (excluding exchange-traded funds) reached an astounding -\$148.3 billion through 28 December. Municipal market performance was positive in the final quarter of 2022 as inflation data improved significantly, so we suspect that most of the fourth quarter outflows were driven primarily by tax-loss selling. This would bode well for a reversal in the first quarter of 2023.

In addition, the open-end fund total understates the interest in the asset class overall, as municipal ETF flows were positive at \$26.7 billion through 28 December.

Like the broader municipal industry, high yield municipal funds also saw inflows in July, but outflows resumed in August through year-end for a total of -\$20.4 billion for 2022.

Going forward, we see reasons for fund inflows to resume. Historically, the municipal bond asset class has exhibited strongly positive returns after a negative year. Over the last 30 years, negative returns have been correlated with fund outflows, and when returns turn positive, inflows have typically come back and accentuated market strength.

Defaults

First-time municipal bond defaults totaled just \$1.33 billion in par value through November 2022, down -33% year-over-year. This represents a very small percentage of the overall \$4.2 trillion market. For the third consecutive year, defaults are mainly concentrated in nursing homes and industrial development revenue bonds, as these categories include arguably the most idiosyncratic risks.

Going into an economic slowdown or possible recession, general obligation bonds (GOs) have record amounts of cash in absolute terms and as a percentage of budgets. State tax revenues, which grew at a robust 17% in 2021, are still increasing at 14.5% through November 2022. Given the historical resilience of the asset class, in addition to the well-prepared cash and revenue status of the states, we do not anticipate widespread municipal payment defaults in 2023.

Credit spreads

Credit spreads were relatively stable during the fourth quarter, increasing from 230 bps to 246 bps over the equivalent-maturity AAA bond. The S&P Municipal High Yield Index returned -12.8% in 2022. Credit spreads widened for the year by 65 bps on the long end of the yield curve and 118 bps on the shorter end. Nevertheless, high yield index returns were mainly driven by duration. Lower investment grade spreads were also stable, with BBB spreads essentially remaining the same at 99 bps.

Recessions can widen credit spreads if default trends deteriorate, and municipal bond demand has recently been more focused on high quality bonds. Even so, high yield has held up reasonably well.

Significant resilience is built into several of the key indentures that dominate the high yield municipal indexes. For example, COFINA and the Puerto Rico GOs 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 received

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 fund outflows.

CREDIT ENJOYS GENERALLY POSITIVE NEWS

Market declines are impacting state revenues

After climbing by 16.6% in fiscal year (FY) 2021, and 14.5% in FY22, state government revenues are expected to decline by -3.1% in FY23, according to the National Association of State Budget Officers. Part of the reason is that 31 states enacted reductions in taxes and fees. Another factor is the decline in the value of stocks and bonds, which is expected to result in lower tax revenue from capital gains, in keeping with historical precedent. For example, between calendar year 2007 and 2009, the amount of capital gains reported to the Internal Revenue Service plummeted by -72.7%, reflecting changes in the S&P 500 Index of -4.2% in 2008 and -40.1% in 2009. As a result of higher unemployment and lower capital gains, aggregate state tax revenues shrank by -8.0% in fiscal 2009 and -2.5% in 2010.

Capital gains realized in 2022 will likely be similarly affected by the decline in the value of financial assets, as exemplified by the -19.5% decline in the S&P 500 in the past year. We may already be starting to see some impact on estimated tax payments. While personal income tax revenue received by the states during the four quarters through September 2022 was 18.4% higher than in the previous four quarters, the amount received in just the third quarter was only up by 1.6% from a year ago.

Fortunately, many states used the strong revenues of the last two years to boost their budget stabilization funds, which collectively grew from 6.9% of general fund expenditures in 2019 to 12.4% at the end of FY22. And, unlike in the financial crisis of 2008/09, unemployment has thus far remained low, which can help stabilize revenues.

General obligation bonds are healthy

Tax-backed bonds issued by state and local governments are projected to remain stable in 2023, despite headwinds presented by slower economic and revenue growth projections and higher interest rates. Increases in the cost of labor, supply and construction are driving up expenditures just as governments are nearing the end of budgetary support provided by unprecedented federal stimulus aid. Nonetheless, historically higher reserves and conservative budgeting in 2023 will enable most governments to navigate through an environment of increased budgetary pressure.

States, reliant on economically sensitive income and sales taxes, generally constructed their FY23 budgets anticipating lower revenues and the possibility of a recession. Many states budgeted for revenue declines and increased pension contributions. Even Illinois, the lowest-rated state with almost no reserves, projected lower revenues and funded a supplementary pension contribution. States have broad authority to increase taxes and cut expenditures as needed, and implementing mid-year cuts is not uncommon. In the short term, elevated reserves provide an ample runway for policy changes to be enacted. Moody's estimates state reserve balances could fall by half and still be as strong as they were in pre-pandemic 2019.

Local government and school district general obligation (GO) bonds are largely secured by ad valorem property taxes, which are not expected to experience widespread decline, even in a recession. If assessed values decline, property tax levy adjustments help these governments maintain level revenues. Property tax receipts remain remarkably stable even during recessionary periods, and it normally takes years of decline to materially impact local government finances. Pressure to increase wages and growing construction costs may slow hiring and defer much needed capital maintenance, but are unlikely to drive a trend of deficit operations. The fiscal health of the states also protects against cuts in local government aid or revenue sharing agreements. Rather, many states have increased funding for K-12 school districts attempting

to counter widespread learning loss stemming from the pandemic. Numerous states, including Michigan, Washington, New York, Pennsylvania and Ohio, all boosted education funding for the upcoming year.

Chicago receives credit upgrades

The City of Chicago, a perennial worry for municipal credit, received numerous rating upgrades in 2022. Moody's upgrade to Baa3/Stable in November 2022 pulled the city's rating into investment grade territory from all public rating agencies for the first time in years. Moody's first downgraded the city to below investment grade in 2015. The rating upgrade was based on increases in pension contributions and improved budgetary management. Moody's pointed to the city's reduced structural deficit and elimination of debt-based budget maneuvers (scoop-and-toss refundings) and pension deferrals to balance the budget.

Following the upgrade, Chicago priced \$533 million of GO bonds in early December. Strong demand enabled the city to significantly upsize the deal, which received a reported \$4.5 billion of orders. Many investors, previously deterred by the city's below investment grade rating, were newly able to participate. On the long end, bonds maturing in 2043 were priced with a 5.5% coupon to yield 4.83%, a spread of 155 bps to the AAA MMD scale.

To be sure, Chicago's heavy fixed cost and pension burden will remain a concern as the city remains an outlier compared to peers, and budgetary flexibility will be restricted for years to come. However, implemented pension funding policies have shifted the city's trajectory. In 2010, a pension study projected the city's Fire Pension Plan would be insolvent by 2022 and all four pension plans would be insolvent by 2030. Instead, Chicago has climbed a steep pension funding ramp to make annual payments based on actuarially determined contribution levels (based on a 90% funding target by 2058) and instituted a new, supplemental, advance pension contribution policy. Over the next few years, contributions are projected to grow at just 1.6% per year, modest in comparison to recent jumps.

Illinois implements improved fiscal management

The state of Illinois has similarly seen credit quality improvement and rating upgrades. Moody's, S&P and Fitch all upgraded the state in 2022, to Baa1, BBB+ and BBB+, respectively. Improved fiscal management, strong revenue growth and the prudent use of federal funds all factored in the recent upgrades. FY21 revenues came in nearly 20% over the prior year and FY22 revenues were up 12% over 2021.

Illinois' FY23 budget is a stark departure from recent years. Revenue assumptions are considered very conservative, with net general fund revenues projected to decline by 7.8%. The \$46.5 billion general fund budget fully funds operations and required pension payments, inclusive of a \$350 million increase in pre-K-12 education funding and a 5% increase in funding for higher education.

The state also plans to contribute \$1 billion to a new budget stabilization fund funded by surplus revenues over 2022 and 2023. This will be the first time the state has made a deposit into a reserve fund in 18 years.

An additional \$500 million will go to a pension stabilization fund, representing a payment above the statutory requirement. Illinois' hefty unfunded pension liabilities and high fixed costs will still constrain budgetary flexibility over the longer term. Because pensions are not funded at an actuarially determined contribution amount, net pension liabilities continue to grow as annual contributions fall short of a tread water amount. S&P estimates this shortfall translates to about a 10% structural budget gap annually.

High beta names create opportunities

High beta names exhibit greater sensitivity than the broader market, meaning their prices generally move more than the prices of other bonds when the market moves. They tend to be larger issuers that make up a more substantial portion of the index. These bonds are often used for liquidity because portfolio managers are familiar with the credits.

This relationship was exacerbated in 2022 due to extreme differences in flows between municipal fund types. Open-end funds experienced outflows of -\$148.3 billion in 2022, whereas exchange-traded funds experienced inflows of \$26.7 billion. ETFs have become more popular recently, increasing from \$33.4 billion in assets in 2017 to \$87.1 billion in 2022. Many municipal ETFs are passive and must maintain exposure relative to the stated benchmark, even as they experience inflows. Open-end fund managers were forced to sell throughout the year, providing ETF managers with purchasing power to increase exposure to specific names.

Tobacco and Puerto Rico bonds are two high beta names that performed differently due to flows. Until the market turned on 26 October, the Bloomberg High Yield Index returned -13.35%. Tobacco bonds make up 8.3% of the index (2.2% of the issuers) and returned -20.92% during this period. Puerto Rico bonds make up 16.6% of the index (1.6% of issuers) and returned -15.99%.

However, these high beta names have provided strong upside since the market has improved. From 26 October through year end, the High Yield Tobacco Index returned 10.95% and the High Yield Puerto Rico Index returned 7.15%, versus the broader high yield index at 6.12%.



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OUTLOOK

A positive fourth quarter provides optimism for 2023

Macroeconomic factors came more into balance late in 2022. For example, while 12-month trailing inflation remains very high, the last five months' trajectory is in line with the Fed's target. The Fed remains determined to fight inflation, but we've seen a subtle shift in its hawkish tone and a decelerating pace of rate hikes.

Supply chain problems have eased significantly. And while the labor market remains strong, people going back to work is ultimately positive for the economy. Average hourly earnings growth has slowed with rising participation in the labor market.

U.S. Treasury rates rose only slightly in the fourth quarter, a marked contrast to the first three quarters.

This more balanced interest rate picture fueled the municipal market rally. The positive returns are even more impressive considering accelerating fund outflows.

This resilience in the face of a volatile macro environment and Fed tightening offers several reasons for optimism in 2023. Municipal returns have historically bounced back strongly the year after a negative year. This trend has tended to correlate with fund flows which, when they reverse, may strengthen a market recovery. While economic and Fed policy uncertainty will likely lead to more Treasury rate volatility in 2023, municipals now have much higher yields as a cushion.

Traditional municipal bond factors took a back seat to Fed policy in 2022, but these elements currently look favorable overall. Stable tax policy highlights the value of the tax exemption. And low tax-exempt bond supply and strong credit fundamentals position the asset class well for a possible recession. We believe a less active Fed should pave the way for these municipal factors to create a market recovery this year.

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.
- In 2022, the fed funds rate rose by 425 bps, and one or two more hikes are expected in 2023.
- As inflation comes down, the Fed will likely pause rate hikes after the February meeting.
- U.S. growth is softening due to higher interest rates, fiscal tightening and a global slowdown.
- Recession is looming in the U.S., but a soft landing remains a realistic probability.
- We expect range-bound trading in U.S. Treasuries and stabilization until the Fed lowers rates.

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 should improve when interest rates are more stable and fund inflows return.
- Supply dropped meaningfully in 2022 due to higher interest rates. Net negative new issuance for tax-exempt municipals will likely persist, providing technical support.
- Municipal supply will be driven by new issuance for new projects, rather than refunding.
- Demand should return as rates stabilize.
- Credit remains strong, with historic levels of revenue collections and rainy day funds.
- Attractive spreads plus sound credit conditions offer an appealing entry point.
- Municipal defaults in 2022 were lower than the prior year. We expect defaults to remain rare and idiosyncratic.

For more information, please visit nuveen.com.

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.invttools.com/>. Flow of Funds, The Federal Reserve Board: <http://www.federalreserve.gov/releases.pdf>. 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.

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