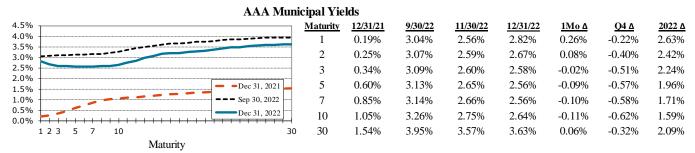


Baird Advisors Municipal Fixed Income Market Commentary 2022 Review and 2023 Outlook

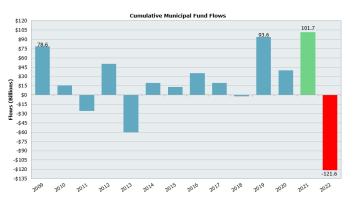
2022 Municipal Market Review

The tax-exempt market closed the year with a strong tone, as yields fell modestly in December, adding to the strong rally that began in November. Although yields were lower for the quarter, they still rose significantly across the curve for the full year with short-term rates rising more than long. The 1yr tax-exempt yield rose an amazing 263 bps while 10yr and 30yr yields rose 159 bps and 209 bps, respectively. The magnitude of the move in short rates left yields between the 1 - 10-year curve inverted for the first time ever (-18 bps at year end). Inflation, which rose much more than expected and proved to be more persistent than transitory, was the obvious catalyst for the big upward yield adjustment in 2022. The CPI rose to a 40-year high in June, to 9.1% YoY, before declining to 7.1% at year end. Exacerbating the inflation pressures was Russia's invasion of Ukraine, especially impacting global food and energy prices, as well as China's strict Covid lockdowns which prolonged global supply constraints. A tight labor market in the US, with nearly two job openings for every unemployed individual, also kept wage pressures elevated. The Fed reacted aggressively as the inflation data became more troubling. Rather than boost rates by the total of 75 bps they expected at the start of the year, the federal funds rate rose by 425 bps (including four successive 75 bps increases); the most aggressive Fed rate campaign on record combined with transitioning from QE to QT as the Fed's balance sheet is unwound.



Specific to the municipal market, a record level of net municipal fund redemptions was the dominant story in 2022. A total of \$121.6B exited funds as rising rates and declining fund net asset values (NAVs) created a significant opportunity to harvest tax

losses. For perspective, this was more than one-third of all fixed income outflows for the year (\$331B). The fact that municipal funds had record inflows of \$102B in 2021, when rates were near all-time lows and fund NAVs near their highs, certainly added to the tax harvesting incentive. Also, some investors simply sought to reduce portfolio risk and volatility by going to cash. Contributing to the market volatility was an cautious and capital-restricted understandably dealer community, reluctant to add inventory as rates rose given the inherent difficulty in hedging municipal bonds against rate movements. Fortunately, the level of new municipal supply in 2022 was light or the rate rise might have been greater. Issuance in Q4 of \$70.5B was the lowest in at least 13 years and total supply for the year (\$372.8B) was off 23% YoY; the



annual decline overstates the available supply for most municipal investors since it was taxable issuance that fell most dramatically (-57% YoY) as refunding opportunities faded. Tax-exempt supply was still off 9% YoY, as many issuers had less need to borrow and/or were willing to wait for more market stability to do so.

Even with the aforementioned market challenges, 2022 was, to oversimplify, a municipal rate move, not a credit driven market sell-off (as was the case during the GFC and the Covid pandemic). Fixed income managers could, therefore, focus on meeting uncertain liquidity needs without heightened concern over a wave of ratings downgrades. In fact, by many measures the financial position of state and local governments was never better than this year. Rainy day reserves were at record levels, thanks to unprecedented federal fiscal support surrounding the pandemic. In addition, the strong post-pandemic economic recovery and favorable financial markets of 2021 led to a surge in tax revenues in 2022.

Solid Q4 Returns Partially Offset Significant Declines in 2022

The rally in Q4 led to positive returns across the recent period, but it was insufficient to offset the full year declines of 2022. For the quarter, long maturities significantly outperformed short and intermediate maturities as rates fell. The opposite was true, however, for the year where short-term maturities outperformed longer curve segments. Notably, the Bloomberg Municipal Bond Index return of -8.53% in 2022 was its worst annual return since 1981. Across market sectors, the Prerefunded sector outperformed both GOs and Revenue bonds for the year. Finally, wider credit spreads led to AAAs outperforming lower-quality issues for the quarter and calendar year.

Total Returns of Selected Barclays Municipal Indices and Subsectors

Bloomberg Index/Sector	<u>December</u>	<u>Q4</u>	<u>2022</u>	<u>2021</u>	<u>Duration</u>	Bloomberg Quality	December	<u>Q4</u>	<u>2022</u>	<u>2021</u>	<u>Duration</u>
Municipal Bond Index	0.29%	4.10%	-8.53%	1.52%	6.19	AAA	0.19%	4.29%	-7.93%	0.47%	5.94
General Obligation bonds	0.31%	4.19%	-7.74%	1.01%	5.76	AA	0.28%	4.13%	-7.97%	0.92%	6.09
Revenue bonds	0.29%	4.21%	-9.29%	1.86%	6.63	А	0.43%	3.98%	-9.06%	2.25%	6.30
Prerefunded bonds	0.05%	2.09%	-3.01%	0.00%	2.34	BBB	0.04%	3.88%	-11.63%	4.85%	7.27
Long maturities (22+ yrs.)	-0.28%	5.19%	-15.58%	3.17%	10.49	High Yield	-0.16%	3.48%	-13.10%	7.77%	7.87
Intermediate maturities (1 - 17 yrs.)	0.47%	3.59%	-4.84%	0.86%	4.62	HY, ex-Puerto Rico	-0.36%	3.53%	-12.64%	7.74%	7.65
Short maturities (1 - 5 yrs.)	0.15%	2.00%	-3.17%	0.36%	2.42						

2023 Outlook and Opportunities

The US economy grew at a faster pace in the second half of 2022 than the first half, which implies at least modest growth momentum as we enter 2023. Supporting the economy is a resilient consumer, given the low unemployment rate and rising wages. Yet, concerns are emerging as excess savings from Covid-related fiscal support are coming down rapidly and the personal savings rate has fallen sharply, suggesting a spending slowdown is looming. Appreciating that monetary policy changes by the Fed and other global central banks operate with long and variable lags, an economic slowdown, if not mild recession, is likely to unfold over the course of the year. We expect this will lower inflation as demand eases and supply levels rise. The big question, however, is to what level will inflation fall? The goal to return to a 2% target inflation rate remains the Fed's primary focus as Chair Powell and the other Fed governors have made clear. They want to avoid the mistakes of the 1970s, when the Fed eased too soon only to see inflation reemerge and rise to new heights. Therefore, a "higher for longer" federal funds rate outlook is likely which should translate into a flatter (even inverted) curve through much of 2023.

In the municipal market, with the tax-loss harvesting volatility behind us, municipal fund cash flows should stabilize as we enter the new year. We also expect that with tax-free yields now among the highest of the last decade that investor demand will return given the desire/need for safe, supplemental income. The new supply of municipal debt is likely to remain modest in 2023, perhaps even less than what was issued in 2022. While the \$1.2 trillion Infrastructure Investment and Jobs Act of 2022 should help to spur more project activity and increase the level of new money borrowings, refunding supply will once again remain low, limiting total municipal volume.

From a credit perspective, municipal budgets are likely to come under pressure in coming quarters as tax revenues slow and the demand for public services and spending rises. Fortunately, municipalities enter this slower economic phase from a position of fiscal strength with record reserves to draw upon as needed. As a result, we expect credit ratings for state and local governments to remain stable in 2023. Closer scrutiny will be required, however, for large, urban credits where office vacancies remain high and mass transit ridership and revenues low, still below pre-pandemic levels. Two sectors where we anticipate challenges as well as opportunities are Healthcare and Higher Education. Many Healthcare issuers are battling rising costs, particularly wages, in order to attract and retain critical care workers. In the Higher Education sector, many colleges/universities face declining enrollment, requiring cost-cutting measures and larger draws from endowment assets. With this backdrop, we expect modest spread widening among lower quality credits, but welcome the opportunities that may emerge as a result. Finally, yield spreads also widened on some higher-quality issues with varying cash flow characteristics, such as Housing bonds. We expect that the additional yield offered through structural opportunities, identified through individual security selection, will be helpful in 2023 as well.

Disclosures

Fixed income is generally considered to be a more conservative investment than stocks, but bonds and other fixed income investments still carry a variety of risks such as interest rate risk, credit risk, inflation risk, and liquidity risk. In a rising interest rate environment, the value of fixed-income securities generally decline and conversely, in a falling interest rate environment, the value of fixed-income securities generally decline and conversely, in a falling interest rate or credit risk and should not be purchased solely because of the stated yield.

The Bloomberg Municipal Bond Index is a broad-based, total-return index. The bonds are all investment-grade, tax-exempt, and fixed-rate securities with long-term maturities (greater than 2 years). They are selected from issues larger than \$50 million. The components listed below the Municipal Bond Index (long maturities, intermediate maturities, short maturities, prefunded bonds, general obligation bonds and revenue bonds) are subsectors of the Bloomberg Municipal Bond Index and do not represent separate indices.

The Bloomberg High Yield Municipal Index includes bonds with a par value of at least 3 million and must be issued as part of a transaction of at least 20 million. The maximum rating for inclusion is Ba1/BB+/BB+ using the middle rating.

For more information about the Bloomberg Municipal Bond Index or Bloomberg High Yield Municipal Index, please visit https://index.barcap.com/Home/Guides_and_Factsheets.

Municipal securities investments are not appropriate for all investors, especially those taxed at lower rates. The alternative minimum tax (AMT) may be applicable, even for securities identified as tax exempt. Past performance is not a guarantee of future results.

Ratings are measured on a scale that ranges from AAA or Aaa (highest) to D or C (lowest). Investment grade investments are those rated from highest down to BBB- or Baa3.

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