

First quarter 2024 outlook

Municipal bonds: Resilient credit and higher yields offer opportunity



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In the fourth quarter, the municipal bond market posted its strongest quarterly return since 1986. Munis rallied in sympathy with U.S. Treasuries on expectations that the U.S. Federal Reserve will begin easing rates in 2024. While muni rates have rallied from the highs, yields are at their highest point to start a year since 2011. We believe portfolios should be rewarded by assuming a modestly longer duration profile while adding credit risk.



We expect the Treasury yield curve to move lower in 2024.

KEY TAKEAWAYS

- The Fed's dot plot in December suggested rate cuts in 2024, and the resulting Treasury rally supported the municipal market in the fourth quarter.
- We believe attractive absolute and taxableequivalent yield levels should encourage municipal bond demand.
- Municipal bonds should be well placed to capitalize on solid fundamentals, with yields starting 2024 at their highest level since 2011.

OUTLOOK: POISED FOR IMPROVEMENT

Attention shifts toward Fed rate cuts

We believe the U.S. Federal Reserve is finished hiking interest rates. Given our outlook for modest rate cuts to start 2024, we expect the Treasury yield curve to move lower.

Rate cuts should help alleviate hedging cost pressures, likely attracting foreign demand back to the Treasury market. The Fed may also end its balance sheet runoff policy, further alleviating excess supply. We believe fair value for the 10-year Treasury yield in the medium-term is around 3.50%.

U.S. inflation offers optimism, with potential for further squeezes

Our base case is for core inflation to finish 2024 around 2.75% - 3.00%. This view is driven by:

- Shelter costs decelerating materially, set to normalize near 3% annualized by mid-2024.
- Non-housing core services slowing from around 4% to 3%.
- Goods price inflation remaining near zero amid the pivot from manufactured goods to services.
- · Energy prices stabilizing.

However, these factors could push inflation higher than our forecast:

- Housing prices have rebounded somewhat. Given the lag of approximately 15 months between actual housing market activity and housing price inflation, we may see upside risks in late 2024.
- Energy prices reflect international dynamics, and geopolitical uncertainty could weigh heavily.
- Wage inflation has been decelerating, along with a softening labor market, which helps moderate core services inflation. However, a strongerthan-anticipated labor market may put upward pressure on wage inflation.

Many reasons for confidence

We believe the municipal market is poised for improvement in 2024, depending on how the economy responds to the end of Fed rate hikes. The Fed and others believe a soft landing is still possible, but we remain unconvinced. Regardless, we believe municipal credit may help stabilize investment portfolios.

While the Fed's torrid pace of rate hikes has impacted municipal bond yields, credit fundamentals remain strong. State and local governments remain flush with cash after several rounds of stimulus during the pandemic, and revenues remain well above prepandemic averages.

Municipal bonds should be well placed to capitalize on these solid fundamentals, with yields starting 2024 at their highest level since 2011. In this environment, investors may enjoy attractive total returns from income alone, a dynamic absent for nearly a decade.

2023 was the second consecutive year of investor outflows with -\$19 billion in net fund outflows. But we believe attractive absolute and taxable-equivalent yield levels should encourage demand once investors remaining on the sidelines feel confident that the Fed is done hiking rates.

New issue supply ended 2023 down 2% compared to 2022, the second consecutive year of lower year-over-year supply. If investor sentiment shifts positively, as we expect, strengthening demand could absorb secondary market supply and act as a catalyst for spread tightening.

With a focus on fundamental strength, we believe municipal bonds have attractive potential in welldiversified, long-term portfolios.



Investors may enjoy attractive total returns from income alone, a dynamic absent for nearly a decade.

THE FED AND TREASURY PIVOT LEADS TO A RALLY

Fixed income investors were fatigued at the end of October. The 10-year Treasury yield touched 5.0%, inflation remained sticky and the labor market strengthened further, offering no relief to the Fed. The highest yields in decades spurred demand, and the municipal market remained constructive through the turbulence. Taxable-equivalent yields for the Bloomberg Municipal Bond Index exceeded 8% for top earners, fueling demand in the face of peaking yields.

Market sentiment shifted quickly in November, and municipals were off to the races with the Fed on hold and weaker-than-expected employment and inflation data. The fed fund futures market quickly priced in a near zero probability of future rate hikes and the U.S. Treasury announced less supply than expected for coupon bonds, supporting Treasury market technical factors.

The Fed's dot plot in December suggested rate cuts in 2024, and markets were rightfully delighted. A balancing act between taming inflation and supporting labor means that the Fed could be quick to change direction if the economy shows signs of recession over the next year.

The resulting Treasury rally supported the municipal market in the fourth quarter. Going forward, we believe performance should continue to improve. As the economy continues to cool, interest rates should moderate further, supporting high quality fixed income. In addition, a record amount of cash on the sidelines could make its way to longer-term investments.

MUNI BONDS FOLLOW TREASURIES STRONGER

Municipal bond yields declined in sympathy with Treasury yields. The 10-year AAA muni yield declined by 117 bps, ending the quarter at 2.28%. The 30-year yield decreased 92 bps, finishing at 3.42%. Municipal-to-Treasury yield ratios declined during the quarter, with the 10-year ratio moving from 75% to 59% and 30-year ratio declining from 92% to 85%. Longer maturities continue to offer compelling value, and the muni-to-Treasury yield ratio curve signals steepness in the municipal yield curve not seen in the Treasury curve. While ratios have declined, investors remain focused on elevated absolute taxable-equivalent yields.

Investment grade municipal credit spreads narrowed during the quarter. AA rated spreads tightened by 2 to 13 bps across the yield curve, with the more meaningful tightening occurring in maturities of 20 years and longer. A rated spreads narrowed by 5 to 14 bps, with similar additional tightening on the long end. High yield municipal credit spreads widened,

however, ending the quarter 38 bps higher at 248 bps above AAA.

Declining Treasury yields and ratios, combined with narrowing investment grade credit spreads, boosted fourth quarter municipal bond performance. The Bloomberg Municipal Bond Index returned 7.89%. And while high yield municipal credit spreads widened, returns were bolstered by rallying Treasury yields and declining ratios combined with higher yield carry. The Bloomberg High Yield Municipal Bond Index returned 9.21%.

The essential service nature of the municipal market has historically afforded resiliency in the face of economic uncertainty. Enthusiasm around higher yields continues to build, especially as they offer more cushion against Treasury volatility.

Further, U.S. taxpayers potentially face higher future tax rates that could be enacted to counteract federal budget deficits and related interest costs, making the tax-exempt status of municipals more attractive.

THE TECHNICAL ENVIRONMENT REMAINS SUPPORTIVE

Supply

Issuance declined 2.8% in 2023 versus 2022. While this only represents a slight drop, declining issuance in 2022 makes two consecutive years of light supply.

New money issuance was down 5%, to \$294.6 billion, due to higher borrowing costs and rate volatility. Refunding issuance was up 2% year-over-year through the end of the year. Much of this refunding volume was a result of current refunding deals and refinancing through tender offers, making the activity beneficial from a present value savings perspective.

Demand

After record outflows in 2022, net outflows from open-end funds totaled -\$19 billion in 2023. Fourth quarter outflows totaled -\$15.5 billion, as surging Treasury yields created more redemptions from open-end mutual funds for tax harvesting purposes.

Many of those flows could return in the first quarter.

Demand for individual bonds remains a bright spot. Higher yields fueled strong demand from separately managed account programs and direct purchases, causing short-term ratios to decline.

Looking forward, we anticipate net inflows to return as tax loss harvesting subsides and the interest rate environment becomes more contained.

Defaults

First-time municipal bond defaults totaled \$1.8 billion in par during 2023, trending with historical averages. Defaults have been concentrated in three sectors, with 62% coming from senior living, project finance and non-profits.

While economic uncertainty exists, widespread issues are not expected in 2024, as record balance sheets should provide ample protection for most issuers. We expect municipal bond defaults to remain low, rare and idiosyncratic, reflecting the resiliency of the asset class even in economic downturns.

The credit backdrop overall has been robust. Upgrades have outpaced downgrades by a 4:1 ratio for two years in a row. However, given the pace of upgrades since 2020, this momentum is much less likely to continue. We expect closer to a 1:1 ratio for upgrades versus downgrades.

Credit spreads

High yield municipal credit spreads widened during the fourth quarter from 210 bps to 248 bps over the equivalent-maturity AAA bond. Nevertheless, the Bloomberg High Yield Municipal Bond Index returned 9.21%% for the quarter, as its long duration helped performance in a declining rate environment. BBB rated spreads narrowed by -9 bps.

The divergence between BBB and high yield credit spreads is likely due to technical factors involving tax loss harvesting and demand from an absolute yield perspective. High yield municipal bonds appear to be trading based on their absolute yield levels, which was a force for spread tightening in the third quarter and spread widening in the fourth quarter. The fundamental credit picture remains robust.

High yield municipal spreads remain near historical averages. High yield munis remain attractive, considering their fundamental strength and taxable-equivalent yields. In addition, the outflow cycle of 2022 has not yet reversed. Investors have waited for a catalyst to move back into long-duration fixed income.

As the Fed appears to be at the end of its rate hike cycle and interest rates stabilize, investors may look to balance elevated cash positions with higher long-term yields. Positive momentum in fund flows may push spreads tighter and support total returns going forward.



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Figure 1: Municipal bond yields appear especially attractive, both today and versus the previous low-rate environment

AAA Municipal Bond								Municipal-to-Treasury yield ratio (x)	
Maurity (years)	U.S. Treasury yield (%)	Yield (%)	TEY (%)	10-year average yield (%)	Current yield/10-year average (x)	4-year low yield (%)	Current yield/ 4-year low (x)	Ratio	TEY ratio
1	4.79	2.67	4.51	1.03	2.59	0.05	53.40	0.56	0.94
3	4.01	2.37	4.00	1.23	1.93	0.13	18.23	0.59	1.00
5	3.84	2.28	3.85	1.43	1.59	0.22	10.36	0.59	1.00
10	3.88	2.28	3.85	1.93	1.18	0.65	3.51	0.59	0.99
20	4.20	3.08	5.20	2.51	1.23	1.17	2.63	0.73	1.24
30	4.03	3.42	5.78	2.70	1.27	1.37	2.50	0.85	1.43

Data source: Bloomberg, L.P., 29 Dec 2023. **Performance data shown represents past performance and does not predict or guarantee future results.** Yields are yield to worst. Yield to worst is the lowest potential yield that can be received on a bond without the issuer defaulting. Taxable-equivalent yield is the yield a taxable investment needs to possess (before taxes) for its yield to be equal to that of a tax-free municipal investment. The yields shown are based on the highest individual marginal federal tax rate of 37%, plus the 3.8% Medicare tax on investment income. Individual tax rates may vary. They do not take into account the effects of the federal alternative minimum tax (AMT) or capital gains taxes.0.

THE APPEAL OF TAXABLE-EQUIVALENT YIELDS

Current municipal bond yields appear especially attractive as tighter fiscal policy begins to impact inflation and the economy. State and local governments with historically high cash levels on their balance sheets compel a strong credit risk environment. Attractive yields coupled with low default risk offer an attractive entry point. A 20-year AAA municipal bond offers a 5.20% taxable-equivalent yield (TEY), which equates to an affordable municipal-to-Treasury yield ratio of 1.24x (Figure 1).

Today's yields highlight the dramatic change from the previous low-rate environment. The current AAA 10-year maturity yields 1.18x the 10-year average and 3.51x the lowest yield in the trailing four years. This gap is particularly significant on the short end of the curve as the 1- and 3-year maturities offer yields 53.40x and 18.23x higher, respectively, than their 4-year lows.

The conclusion of the hiking cycle likely means the end for these compelling yields. Bond yields have historically fallen by about 1 percentage point on average in the year following the last Fed rate hike, and rates have already declined from their recent peak on 31 Oct 2023. At that time, 1- and 3-year maturities offered yields 75.2x and 27.5x higher, respectively, than their 4-year lows.

Considering state and local tax exemptions

Municipal investors maximize tax-exempt income by combining federal, state and local income tax rates to calculate overall TEY. California imposes the highest state income tax, subjecting an investor in the highest income tax bracket to a marginal tax rate of 54.10%. However, the burden could be higher for investors subject to local income taxes as well, such as in New York City (3.8%) with a maximum marginal tax rate of 55.5%. An investor from New York City at this tax rate would receive a TEY of 6.92% on a New York 20-year AAA municipal bond, or 8.94% for a BBB rated bond (Figure 2).

The benefit of tax-exemption is amplified in the current higher yield environment. For example, the 20-year AAA muni yield has risen 191 bps from its recent low of 1.17% in December 2020 to 3.08% today. The current TEY for a New York City investor of 6.92% is 429 bps higher than in December 2020, meaning a 191 bps increase in yield resulted in a 429 bps increase in TEY.

Today's tax burden is relatively high

Tax burdens were higher from 2020 to 2022 than in any other year since 1978. High-income, high-tax states saw collections soar due to a boom in the

stock market after a 2020 dip, a boost in spending from federal aid to individuals and businesses, and a hot housing market translating into higher property tax assessments.

These trends resulted in tax collections increasing faster than income growth, yielding higher overall tax burdens from 2020 to 2022 despite more states cutting tax rates than raising them. Furthermore, the ballooning federal deficit may result in higher federal tax rates, making tax-exempt income even more attractive, especially among the highest earners.

Congress is deliberating a range of tax issues related to the expiration of the Tax Cuts and Jobs Act (TCJA) at the end of 2025. The TCJA capped the state and local tax (SALT) deduction at \$10,000 per year. Prior to the TCJA in 2016, SALT deductions by New York, California and New Jersey

residents averaged \$21,779, \$18,770 and \$18,092, respectively. Removing the SALT cap deduction in 2025 would increase the top 1 percent earners' after-tax incomes by about 2.7%. Additionally, the TCJA lowered marginal rates for most individual tax brackets. Without intervention from Congress, rates are set to return to their previously higher levels (Figure 3).

STATES' ACCUMULATED CASH AND RESERVES OFFER STABILITY

Heading into 2024, many state and local governments are planning for budget deficits, as they expect revenue collections to decline. Total state and local tax revenues were down 5.7% through the first half of 2023, driven by a steep 23.6% decline in individual income tax collections compared to the first half of 2022.

Figure 2: Higher yields amplify the benefit of tax exemption

			2023 total marginal tax rate			
		Federal tax rate 40.80%	California 54.10%	New york 51.70%	New York City 55.50%	
Maturity (years)	AAA muni bond yield (%)		Taxable-equivalent yield (%)			
29 Dec 2023						
1	2.67	4.51	5.82	5.53	6.00	
3	2.37	4.00	5.16	4.91	5.33	
5	2.28	3.85	4.97	4.72	5.12	
10	2.28	3.85	4.97	4.72	5.12	
20	3.08	5.20	6.71	6.38	6.92	
30	3.42	5.78	7.45	7.08	7.69	
31 Dec 2020						
1	0.13	0.22	0.28	0.27	0.29	
3	0.16	0.27	0.35	0.33	0.36	
5	0.22	0.37	0.48	0.46	0.49	
10	0.71	1.20	1.55	1.47	1.60	
20	1.17	1.98	2.55	2.42	2.63	
30	1.39	2.35	3.03	2.88	3.12	

Data source: Bloomberg, L.P., 29 Dec 2023. Performance data shown represents past performance and does not predict or guarantee future results. Yields are yield to worst. Yield to worst is the lowest potential yield that can be received on a bond without the issuer defaulting. Taxable-equivalent yield is the yield a taxable investment needs to possess (before taxes) for its yield to be equal to that of a tax-free municipal investment. The yields shown are based on the highest individual marginal federal tax rate of 37%, plus the 3.8% Medicare tax on investment income. Individual tax rates may vary. They do not take into account the effects of the federal alternative minimum tax (AMT) or capital gains taxes.

Despite this decline, total tax collections remain above pre-pandemic nominal levels. Total tax revenues for the first half of 2023 are nearly 24% higher than 2019, and almost 31% higher than in 2020. Income tax collections are also strong compared to pre-pandemic levels.

2022 peak tax revenue collections were boosted by an influx of federal aid, higher capital gains taxes from strong stock market returns, sales taxes boosted by higher inflation, and accelerated consumer spending. As many of these factors have waned, tax collections are unsurprisingly lower in 2023 compared to the tremendous, unanticipated revenue growth seen in 2021 and 2022.

States rely on income taxes for about 40% of revenues and sales taxes for more than 35% of total revenues, and some states with progress tax structures (like California) may be more sensitive. However, the revenue slowdown will not necessarily cause a sector-wide deterioration in credit quality, as states have prepared for

revenue declines. States originally forecasted lower revenues for fiscal year (FY) 2023 with initial budgets projecting a 3.1% decline. The presumed tax revenue decline was based on lower economic growth, consumption patterns shifting from goods to services, and the impact of tax policy changes. Some revenue declines were intentional as many states had cut tax rates and revised income tax bracket structures.

Given conservative budgeting, most states ended FY23 with a budget surplus, adding to historically high reserves. Rainy day fund balances are projected to remain at all-time-high levels in FY24 which can soften the impact of revenue declines. Adopted state budgets for FY24 project lower revenues and less spending.

Strong municipal credit fundamentals are reflected in credit ratings. Moody's ratings saw the tenth consecutive quarter of rating upgrades outpacing downgrades.

Figure 3: Tax rates may return to previously higher levels

Taxable income	Current marginal tax rate (2018 - 2025) (%)	Pre- and post-TCJA marginal tax rate (to resume in 2026) (%)
\$11,000 or less	10%	10%
\$11,001 to \$44,725	12%	15%
\$44,726 to \$95,375	22%	25%
\$95,376 to \$182,100	24%	28%
\$182,101 to \$231,250	32%	33%
\$231,251 to \$578,125	35%	35%
\$578,126 or more	37%	39.6%

Data source: Internal Revenue Service. Does not include the 3.8% Medicare tax on investment income.

2024 THEMES

Economic environment

- Inflation has softened in recent months via goods and the rollover of housing costs, providing favorable trajectory entering 2024.
- Core services inflation excluding housing remains sticky but is starting to trend down.
- The fed funds rate has risen by 525 bps during this cycle.
 Fed policy remains data dependent, with a focus on core services inflation.
- We expect 150 bps of rate cuts in 2024 with the timing dependent on inflation, wage and employment data.
- U.S. growth should trend lower as the impact of Fed policy is fully absorbed. Key factors include interest rates, geopolitical issues and declining money supply.
- While a soft landing remains possible, once the economy begins moving one direction, it tends to stay on that course absent outside forces.
- Uncertainty regarding the end of Fed rate hikes will continue to cause rate volatility. Fed funds could decline more than anticipated if the economy slows more than forecast.

Municipal market environment

- Credit remains strong, with robust levels of rainy day and reserve funds.
- While revenue collections are below peaks witnessed in 2022, they remain above pre-pandemic levels.
- We expect municipal defaults will remain low, rare and idiosyncratic.
- Supply throughout 2024 could hover near levels seen in 2023. Predictions include more coupons, calls and maturities than new issues.
- Demand has favored owning duration, which could continue/accelerate in 2024. Investors don't want to miss out, driving demand.
- Yields remain attractive despite a strong rally in November.
 Demand could increase in 2024 as investors gain conviction that the Fed is done hiking.
- Municipal performance rebounded sharply in November.
 Absent a meaningful catalyst, municipals can still post attractive returns based on elevated income generation from adjusted rates.
- Long-term taxable municipal valuations are attractive on a spread basis compared to similar-maturity corporate bonds.

For more information, please visit nuveen.com.

Endnotes

Sources

State and local tax burdens, calendar year 2022. Tax Foundation. (2023, August 2); Explaining changes to the state and local tax deduction. SmartAsset. (n.d.).; Hulehan, K. (2023a, December 7). Policymakers must weigh the revenue, distributional, and economic trade-offs of SALT deduction cap design options. Tax Foundation.; State tax rates: Tax Foundation; Gross Domestic Product: U.S. Department of Commerce. Treasury Yields and Ratios: Bloomberg (subscription required). Municipal Bond Yields: Municipal Market Data. Open-end fund flows: Investment Company Institute. 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: 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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