

Then and now:

Investing in a changed municipal bond market

Prepared for Morgan Stanley

Marketing communication | 31 Mar 2024

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Important information on risk

Investing involves risk; principal loss is possible. Debt or fixed income securities are subject to credit risk, market risk and interest rate risk. The value of and income generated by debt securities will decrease or increase based on changes in market interest rates, the credit quality of issuers and general economic and market conditions. As interest rates rise, bond prices fall. Credit risk refers to an issuer's ability to make interest and principal payments when due. High yield or lower rated bonds carry heightened credit risk and potential for default. Investors investing in municipal securities should contact their tax professional regarding the appropriateness of tax-exempt investments in their portfolio. Nuveen is not a tax professional. 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 in some cases other federal income taxes, and/or state and local taxes, based on 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.

Nuv een Asset Management, LLC is a registered investment adviser and an affiliate of Nuv een, LLC.

What challenges are your clients facing today with their income portfolios?





• Interest rate changes

• Inflation expectations and risks



Understanding municipal market dynamics



- Reductions in bond inventories of broker/dealers
- · Supply and demand
- Credit conditions, downgrades and defaults
- Regulatory and tax changes



Aligning income goals with portfolio allocations

- Search for yield and total return
- · Balancing income and risk
- Portfolio diversification
- Tax efficiency

Tax policies

Market volatility

· Bond bear market

• Global economic recovery

Learn more about the current state of the municipal market and what it means for clients' portfolios.

Municipals have typically rebounded after challenging years

Bloomberg Municipal Bond Index Returns (%)



A strong rally to close 2023 created positive returns of 6.40%. YTD index performance was -0.39% through March. Performance could emerge as the year progresses.

Data source: Bloomberg, L.P., 31 Mar 2024. The average annualized return shown is for the period 01 Jan 2000–31 Dec 2023. Performance data shown represents past performance and does not predict or guarantee future results.

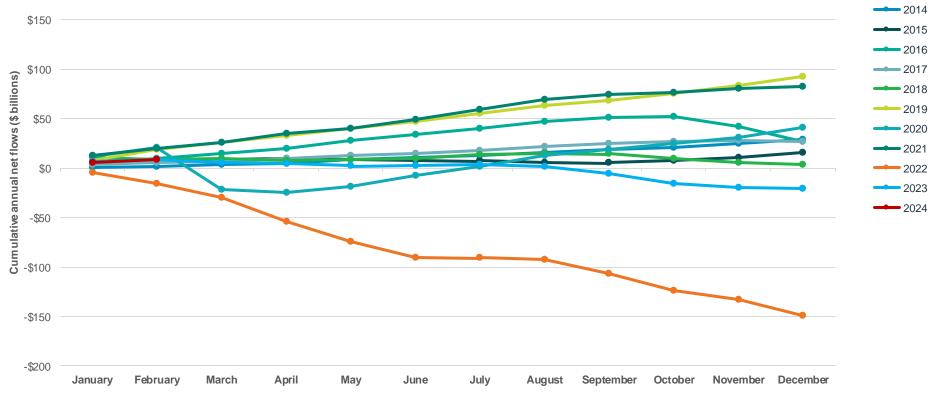
All investments carry a certain degree of risk, including possible loss of principal, and there is no assurance that an investment will provide positive performance over any period of time. Index returns include reinvestment of income and do not reflect investment professional and other fees that would reduce performance in an actual client account.

Fund flows are positive to start 2024

Municipal open-end fund net inflows were \$8.31 billion through February.

Annual municipal bond fund flows by month

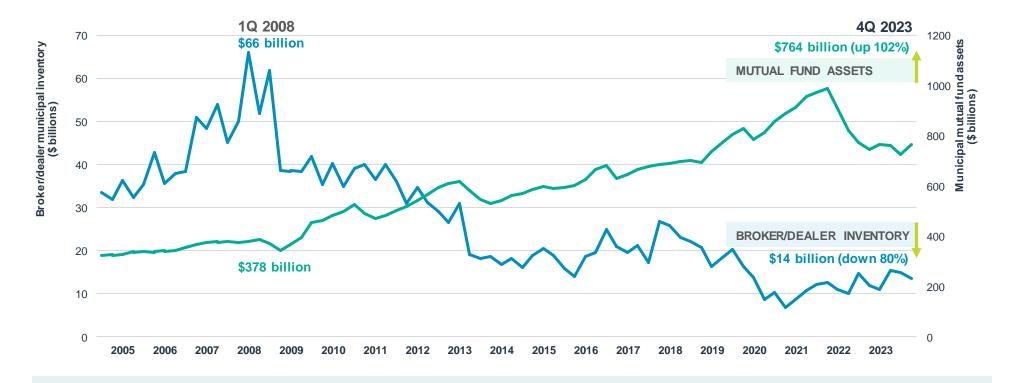
2014 - 2024 YTD



Data source: Morningstar Direct, 01 Jan 2014 – 29 Feb 2024, cumulative flows for each calendar year, shown monthly. Net flows represent the total of all municipal bond open-end funds. FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

Building individual bond portfolios has become more difficult

Professional managers can help in an environment of lower inventory.



Other factors that support investing with a professional manager:

- Sources of liquidity have diminished for individual investors
- Municipal assets under management have increased since 2008, adding almost \$400 billion in mutual funds

Data source: Assets and inventory data from Federal Reserve Flow of Funds ending 07 Mar 2024, data as of 31 Dec 2023; most recent data available. FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

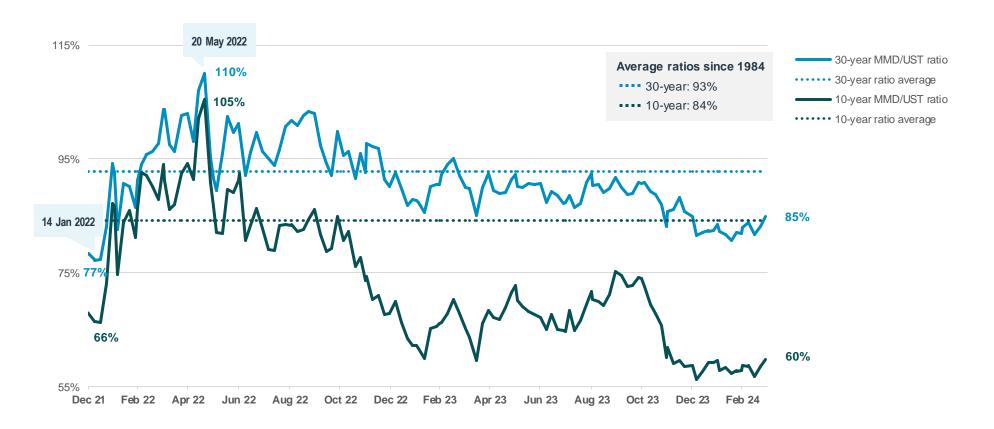
Bond purchases look different for financial professionals and asset managers

Working with an asset manager may expand investment resources and opportunities.

A FINANCIAL PROFESSIONAL BUYS A BOND	NUVEEN BUYS A BOND
Talks with trading desk	Consults with a team of credit analysts
Works with bond dealers	Works with over 100 dealers
May rely on external ratings	Performs independent credit analysis and monitoring
Can be subject to inventory	Accesses full market of securities
May include smaller blocks of bonds	Uses institutional trade execution

Technical conditions move to the rich side of fair value, but overall yield levels remain attractive

Municipal-to-Treasury ratios: AAA municipal bonds value relative to Treasuries

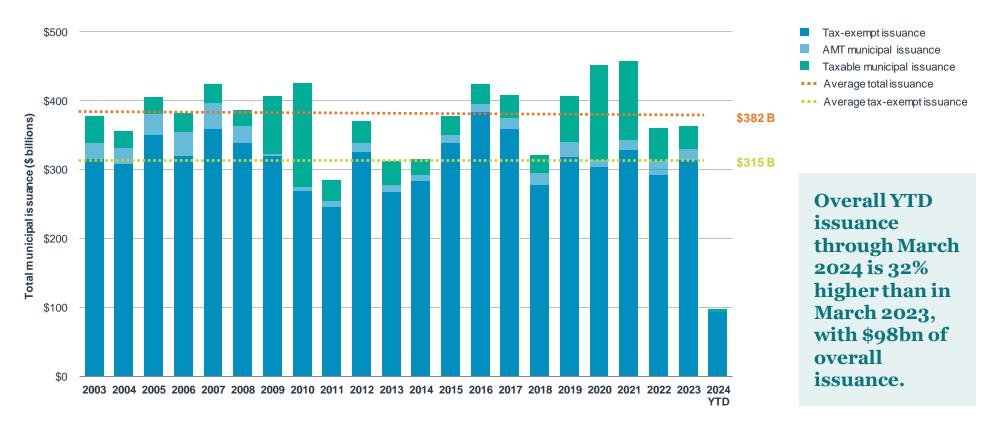


Data source: Refinitiv MMD for fair value Municipal 10- and 30-Year Index AAA General Obligation bonds; Bloomberg for 10- and 30-year U.S. Treasury yields, shown weekly, 31 Dec 2021 – 31 Mar 2024, averages shown from 01 Jan 1984 – 31 Mar 2024. Performance data shown represents past performance and does not predict or guarantee future results. Municipal-to-Treasury ratio represents the value of AAA municipal yields relative to U.S. Treasury yields. FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

Issuance patterns could be more concentrated in the months leading up to the US election

Tax-exempt supply has started 2024 above 2023 levels.

Municipal issuance



Data source: Securities Industry and Financial Markets Association (SIFMA.org), U.S. Bond Market Issuance and Outstanding, 02 Apr 2024 for period ending 31 Mar 2024. The average total issuance and average tax-exempt issuance shown are for the period 01 Jan 2003 – 31 Dec 2023. AMT municipal issuance is part of the tax-exempt municipal market.

Credit rating agency outlooks are beginning to consider slower economic growth

Federal stimulus funds, solid revenue collections and robust reserves continue to provide stability.

Category	Sector	Moody's outlook				
		2024	2023	2020		
Transportation	Airport	Stable	Stable	Negative		
	Mass transit	Negative	Negative	Negative		
	Public ports	Stable	Stable	Negative		
	Toll roads	Stable	Stable	Negative		
Higher education	Privates	Stable	Negative	Negative		
	Publics	Stable	Negative	Negative		
	Charter schools	Stable	Stable	N/A*		
General obligation	State governments	Stable	Stable	Negative		
	Local governments	Stable	Stable	Negative		
Utilities	Public power	Stable	Stable	Stable		
	Water/Sewer	Stable	Stable	Stable		
Health care	Not for profit hospitals/Health care	Stable	Negative	Negative		
Other	Housing	Stable	Stable	Stable		
	Not for profit	Stable	Stable	Negative		

Data source: Moody's, 31 Dec 2023. Moody's began publishing an outlook on charter schools in 2022.

Downgrades appear more likely than defaults

Select high-profile municipalities have experienced credit downgrades.

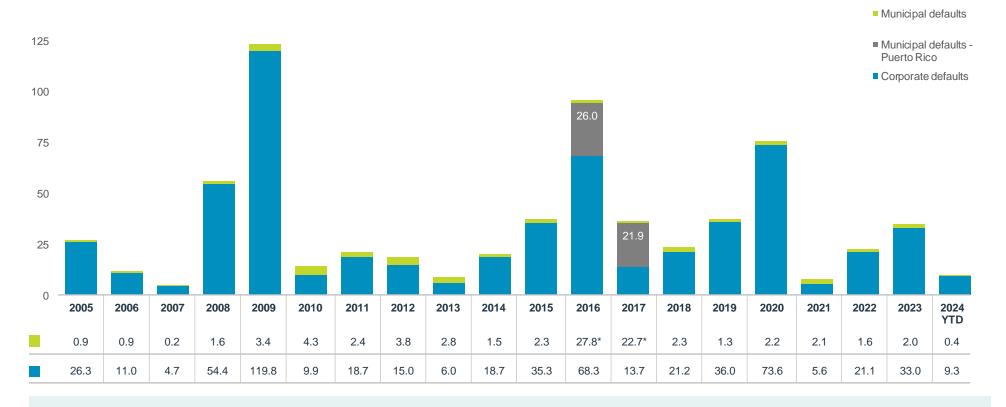
MUNICIPALITY	2007 RATING S&P / MOODY'S	2022 RATING S&P / MOODY'S
Illinois	A-/A3	BBB+/Baa1
New Jersey	A/A1	A/A1
Chicago	BBB+/Baa3	BBB+/Baa3
Puerto Rico¹	NR/NR	NR/NR

Data sources: Standard & Poor's, Moody's as of 31 Mar 2024.

¹ In March 2022, Puerto Rico emerged from bankruptcy.

Defaults remain in line with historical trends

Municipal payment defaults (\$ billions)



Municipal defaults YTD through 29 February 2024 were concentrated in nursing homes (46%), hospitals (42%) and industrial development (12%).

Data sources: Bank of America/Merrill Lynch Research, 02 Apr 2024, municipal default data as of 31 Mar 2024. Bank of America/Merrill Lynch Research HY Credit Chart book, corporate default data as of 31 Mar 2024. Data represents defaults on the entire universe of bonds, both rated and unrated, and includes Puerto Rico defaults. *For 2016 and 2017, the figures shown for municipal defaults were primarily from Puerto Rico defaults; \$26.0B (2016) and \$21.9B (2017).

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Regulatory changes are more restrictive

Best execution

Municipal securities dealers must use reasonable diligence to identify the best market for a security and obtain the most favorable price possible for the customer.

Prices on confirmations

Municipal securities dealers may be required to disclose the mark up in a class of principal transactions on retail customer confirmations.

Liquidity features

Mutual funds may be required to be more transparent about the liquidity features of holdings and cash within funds.

Bank liquidity coverage ratio

Only investment grade, general obligation municipal bonds are considered sufficiently liquid to qualify as Level 2B assets with certain restrictions.

Removing credit ratings from money funds

Mutual fund managers must determine that securities present "minimal credit risk" based on factors such as the issuer's or guarantor's financial condition, sources of liquidity, adaptability and competitive position.

Tax reform is a driver of demand

A \$10,000 cap on State and Local Tax (SALT) deductions initiated in 2017 increased the tax burden for individuals who itemize deductions.

Deduction limit	 The legislation caps annual deductibility of state and local taxes paid (income and/or property) at \$10,000 The rule is subject to sunset 31 Dec 2025
Political implications	SALT cap creates a higher political barrier for approval of new taxes
Does not impact state/local revenue	SALT cap doesn't reduce existing state and local government revenue
Concerns for some local governments	 Local governments that lack the independent ability to raise taxes may face credit concerns A divergence may emerge between home rule jurisdictions and those that require voter approval for revenue raisers
Potential positives	 We anticipate demand for municipal bonds from individuals to grow as investors realize the full impact of capped SALT deductions

Certain statements may be deemed forward-looking statements. Please note that any such statements are not guarantees or intended to constitute a prediction of any future performance; actual results or developments may differ materially from those projected.

What should you consider when constructing portfolios for clients?



Maintain flexibility across the credit spectrum and yield curve.



Diversify across sectors and industries.



Consider the tradeoffs between active and passive strategies.

Investment style flexibility can potentially enhance returns

Ideal positioning along the credit and yield curve spectrum has varied in different market environments.

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
High yield	A-BBB	High yield	A-BBB	High yield	High yield	High yield	High yield	AAA-AA	High Yield
14.60%	3.82%	4.70%	6.43%	4.46%	9.44%	5.88%	5.86%	-7.33%	8.17%
A-BBB	AAA-AA	A-BBB	AAA-AA	A-BBB	A-BBB	AAA-AA	A-BBB	A-BBB	A-BBB
11.20%	3.22%	0.85%	4.51%	1.41%	7.80%	5.01%	2.58%	-8.55%	6.64%
AAA-AA	High yield	AAA-AA	High yield	AAA-AA	AAA-AA	A-BBB	AAA-AA	High yield	AAA-AA
8.03%	2.84%	0.38%	4.50%	1.08%	6.74%	4.60%	0.83%	-11.67%	5.52%
Long	Long	Long	Long	Short	Long	Long	Long	Long	Long
15.50%	4.48%	1.85%	7.46%	1.64%	10.27%	6.57%	4.07%	-16.33%	8.93%
Intermediate 8.80%	Intermediate 3.80%	Short 0.48%	Intermediate 5.65%	Intermediate 1.34%	Intermediate 7.68%	Intermediate 5.46%	Intermediate 1.30%	Intermed. -6.52%	Intermed. 5.49%
Short	Short	Intermediate 0.37%	Short	Long	Short	Short	Short	Short	Short
0.60%	0.45%		0.83%	0.75%	2.18%	1.39%	0.32%	-0.13%	3.38%

High yield	A-BBB	High yield	A-BBB	High yield	High yield	High yield	High yield	AAA-AA	Long
Long	Long	Long	Long	Short	Long	Long	Long	Short	High Yield

Chart does not represent the past performance of any Nuveen Fund. For Fund performance visit nuveen.com.

Past performance does not predict or guarantee future results. Data source: Standard & Poor's, 01 Jan 2014 – 31 Dec 2023. Past performance does not predict or guarantee future results. Charts represent annual returns for years to maturity and credit rating segments of the S&P Municipal Bond Index. Index returns include reinvestment of income and do not reflect investment advisory and other fees that would reduce performance. There is no assurance that any asset class or index will provide positive performance over time. Different benchmarks, economic periods, methodologies and market conditions willprovide different results. It is not possible to invest in an index. Short maturity range: less than 1.9 years; Intermediate: 8.0 to 11.9 years; Long: 22+ years. AAA, AA, A, and BBB are investment grade ratings; BB, B, CCC/CC/C and D are below-investment grade ratings are subject to change.

Diversify across sectors and industries

As fixed income markets shift, so does sector performance.

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Tobacco	Tobacco	Tobacco	Tobacco	Tobacco	Tobacco	Tobacco	Tobacco	Tobacco	Tobacco
16.15%	13.48%	4.80%	17.12%	3.37%	11.68%	14.66%	5.39%	5.94%	9.97%
Health Care	Health Care	Housing	Health Care	IDR / PCR	Health Care	Utility	Health care	Health Care	Transportation 7.07%
12.82%	4.65%	1.42%	6.93%	1.57%	8.31%	5.36%	3.35%	4.60%	
IDR / PCR 12.34%	Utility 4.14%	IDR / PCR 1.39%	IDR / PCR 6.46%	Prerefunded/ ETM 1.56%	Transportation 8.00%	Tax-Supported 5.18%	IDR/PCR 3.08%	Housing 4.31%	IDR / PCR 6.97%
Transportation 11.07%	Education	Health Care	Transportation	Other Revenue	Education	Housing	Transportation	Tax-Supported	Health Care
	3.84%	1.12%	6.31%	1.52%	7.86%	5.03%	2.74%	4.14%	6.51%
Education	Transportation 3.77%	Utility	Education	Tax-Supported	IDR/PCR	Health Care	Education	Education	Housing
10.40%		0.83%	6.11%	1.39%	7.75%	4.94%	2.73%	4.08%	6.43%
Housing	Housing	Transportation	Housing	Utility	Tax-Supported	Other Revenue	Tax-Supported	Utility	Education
9.24%	3.71%	0.79%	5.52%	1.38%	7.25%	4.93%	1.44%	3.99%	6.21%
Utility 9.21%	IDR / PCR 3.65%	Education 0.54%	Utility 4.74%	Housing 1.22%	Utility 7.18%	Transportation 4.87%	Housing 1.33%	Transportation 3.87%	Tax-Supported 5.94%
Tax-Supported 8.42%	Tax-Supported	Other Revenue	Other Revenue	Education	Housing	Education	Other Revenue	Other Revenue	Utility
	2.65%	0.48%	4.60%	1.21%	7.14%	4.82%	1.24%	3.65%	5.88%
Other Revenue 7.00%	Other Revenue	Tax-Supported	Tax-Supported	Health Care	Other Revenue	IDR/PCR	Utility	IDR / PCR	Other Revenue
	2.53%	0.48%	4.34%	1.89%	6.78%	4.10%	1.08%	3.20%	4.87%
Prerefunded/ ETM 1.72%	Prerefunded/ ETM 0.95%	Prerefunded/ ETM 0.29%	Prerefunded/ ETM 1.18%	Transportation 0.96%	Prefunded/ ETM 3.17%	Prefunded/ ETM 2.12%	Prefunded/ ETM 0.13%	Prerefunded/ ETM 1.57%	Prerefunded/ ETM 2.93%

Chart does not represent the past performance of any Nuveen product.

Data source: Investortools, S& P Municipal Bond Index, 01 Jan 2014—31 Dec 2023. **Performance data shown represents past performance and does not predict or guarantee future results.** Index returns include reinvestment of income and do not reflect investment advisory and other fees that would reduce performance. Different benchmarks, economic periods, methodologies and market conditions will provide different results. It is not possible to invest directly in an index. **IDR/PCR**: Industrial development revenue bonds and pollution control revenue bonds. **ETM**: Escrowed to maturity.

Municipal bonds may offer attractive portfolio diversification

Hypothetical sample blended assets, 2004 – 2023

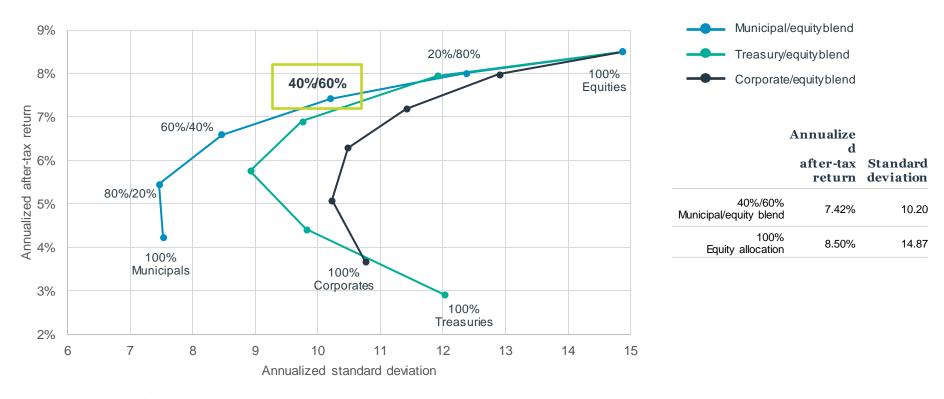


Chart does not represent the past performance of any Nuveen product.

Data source: Nuveen Asset Management, 01 Jan 2004 – 31 Dec 2023. **Performance data shown represents past performance and does not predictor guarantee future results.** These conclusions are derived from the following sample blended asset assumptions: All investment income generated by the sample blended assets is reinvested annually, along with the after-tax proceeds of an arbitrarily assumed 20% annualized turnoverrate. The allocation between the two assets was allowed to roam within a 1% band around its target before rebalancing. No provision was made for investment fees or commissions. Investment income was tax ed at the historically appropriate rate for an individual with \$100,000 in taxable income in year 2023 dollars; net capital gains taxes, if any, were deducted at the rate appropriate for the period. At the end of 2023, the sample blended assets were fully liquidated to recognize the existing tax liability. Different benchmarks, economic periods, methodologies and market conditions will produce different results. There is no assurance that any asset class or index will provide positive performance over time. It is not possible to invest directly in an index. Index data source: Bloomberg LP. **Representative indexes: municipals:** Bloomberg Long Municipal Bond Index; **Treasuries:** Bloomberg U.S. Treasury Long Index; **corporates:** Bloomberg Long Credit Index; **equities:** S&P 500® Index. Diversification does not insure against loss in a declining market.

Next steps



Initiate client conversations

Talk with your clients about changes in the municipal market.

STEP 2

Request municipal bond portfolio reviews

Professional evaluation of client portfolios can help guide conversations about managed solutions.

STEP 3

Provide investment solutions

Present professionally managed municipal portfolios when appropriate for investment goals.

Step 1: Initiate client conversations

Understand the environment.

- Because the market has changed, and is dominated by large institutional investors, it may not be efficient to invest in municipal bonds directly any longer.
- In recent years, the risks and complexities of municipal bond investing have increased therefore a different investment approach that provides additional access, resources and oversight may be beneficial.
- Today, tax-exempt supply is constrained, demand is solid, rating scales have changed and regulations to increase transparency have been implemented. Consider professionally managed solutions.

Step 2: Request municipal bond portfolio reviews

Offer clients an action plan with a portfolio review.



Gather

Nuveen looks at your client's municipal bond holdings to review the overall portfolio structure.



Analyze

We assess current portfolio strengths and uncover potential challenges.



Deliver & discuss

We provide an in-depth explanation of our analysis and results, including strategies for a portfolio that meets client needs.

Step 3: Provide investment solutions

Discuss benefits of professionally managed municipal products — including credit research, trading and management — and aspects of different investment vehicles.

	LA DDERED PORTFOLIO	EXCHANGE- TRADED FUND	SEPARATELY MANAGED ACCOUNT	MUTUAL FUND	CLOSED-END FUND	INTERVAL FUND	LIMITED PARTNERSHIP
Actively managed		*	✓	*	✓	✓	✓
Tax planning opportunities	✓		✓				
Portfolio holdings published to the public		✓		✓	✓	✓	
Low minimum investment requirement		✓		✓	✓	✓	
Exchange-traded with intra-day pricing		✓			✓		
Opportunity for portfolio tailoring or customization	✓		✓				
Transparency of portfolio transactions	✓		\checkmark				
Direct ow nership of underlying securities	✓		✓				✓
Concentrated positions			✓			✓	✓
Can employ leverage				✓	✓	✓	✓

^{*} Ex change-traded funds and mutual funds can be either passively or actively managed.

Laddered portfolios, exchange-traded funds, separately managed accounts, mutual funds, closed-end funds, interval funds, and limited partnerships are different types of investment vehicles with different expense structures and different inflows/outflows and distribution requirements. Shares of exchange-traded funds are bought and sold at market price as opposed to net asset value. As a result, an investor may pay more than net asset valuewhen buying and receive less than net asset value when selling. In addition, brokerage commissions will reduce returns. Fund shares are not individually redeemable directly with the Fund, but blocks of shares may be acquired from the Fund and tendered for redemption to the Fund by certain institutional investors in creation units. A closed-end fund's use of leverage creates the possibility of higher volatility for the fund's per share NAV, market price, distributions and returns. There is no assurance that a fund's leveraging strategy will be successful. Closed-end funds historical distribution sources have included net investment income, realized gains and return of capital. Closed-end fund shares may frequently trade at a discount or premium to their net asset value.

Limited partnerships offer "an interest" to investors (the "Limited Partners") who meet certain eligibility criteria, as defined in the lnv estment Company Act of 1940. Limited partnerships may also use leverage and hedging techniques to increase returns and reduce the exposure of the portfolio to adverse business or market conditions. There can be no assurance that the investment objectives of the partnership will be achieved.

Evaluate different investment vehicles and strategies

Consider Nuveen's actively managed municipal offerings to meet clients' investment goals.

	INSTITUTIONAL SEPARATE ACCOUNT	SEPARATELY MANAGED ACCOUNT	MUTUAL FUND	CLOSED-END FUND	INTERVAL FUND	LIMITED PARTNERSHIP
Nuveen capabilities	Managed portfolios tailored to the institution. Investors own the securities.	Individually managed portfolios customized to the account holder. Investors own the securities.	Daily pricing and liquidity with low er investment minimums. Investors own shares of the fund.	Ex change-traded with intra- day pricing determined by the market. Investors ownshares of the fund.	Continuously offered closed- end fund. Investors own shares of the fund.	Priv ate investment fund with periodic liquidity. Investors own an interest in the partnership.
Short Term	•		•			
Limited Maturity	•	•	•			
Intermediate Term	•	•	•	•		•
Intermediate ESG	•	•				
Long Term	•	•	•	•		
Short Duration High Yield	•		•			
Intermediate Duration High Yield				•		
High Yield	•		•	•	•	•
Total Return	•	•				
Strategic Municipal Opportunities	•		•	•		
Taxable Municipal	•			•		
AMT-Free				•		
State Specific		•	•	•		
State Preference	•	•				
Laddered Portfolios	•	•	•			
Customized Portfolios	•	•				

Availability may change without notice. From time to time, we may close or reopen strategies. Certain strategies may not be available to certain investors, or may be available as other investment vehicles not listed. Not all products are available at all firms. Please check with your firm for availability.

There is no guarantee that any of the strategies will achieve their stated objectives. There are risks inherent in any investment and these risks should be carefully considered before investing. Review the fees and expenses specific to each product as disclosed on nuveen.com.

Institutional separate accounts, separately managed accounts, mutual funds, closed-end funds, interval funds and limited partnerships are different types of investment vehicles with different expense structures and different inflows/outflows and distribution requirements. Income may be subject to state and local income taxes. Capital gains, if any, will be subject to capital gains tax.

Leading the way in municipal bonds

Access our municipal expertise

Since 1898, Nuveen has been financing essential municipal bond projects and building lasting value for investors. This municipal bond heritage is reflected in the way portfolios are managed today.

125

Experience

A rich heritage spanning 125 years remains focused on relative value, principal growth and tax-aware investing. **2**3

Research

As one of the industry's largest credit research teams, 23 analysts averaging 21 years of experience are dedicated to municipal investing.

\$190B¹

Presence

Market power and institutional pricing provide an advantage when evaluating and purchasing bonds.

Personnel and assets as of 31 Mar 2024.

1 As of 31 Mar 2024. Nuveen assets under management (AUM) is inclusive of underlying investment specialists

Access municipal expertise with an industry leader

#3

#3

#1

76%

separately managed accounts municipal market share² Open-end funds² municipal market share Closed-end funds³ municipal market share Municipal bond funds rated 4 or 5 stars by Morningstar (Class I as of 31 Dec 2023)⁴

¹ As of 31 Dec 2023. Nuveen assets under management (AUM) is inclusive of underlying investment specialists.

² Source: Cerulli Associates, The Cerulli Report, U.S. Managed Accounts 2023. Data as of 31 Dec 2023, updated annually; most recent data available. All asset manager d ata based on total assets, which includes proprietary program assets, but does not include model separate accounts.

³ Nuveen, Morningstar Direct as of 31 Mar 2024. Based on total net assets of U.S. open-end funds for the Nuveen Family of Funds and the TIAA-CREF Funds, excluding exchange-traded funds, money market funds and fund of funds.

⁴ Source: Nuveen, Morningstar Direct as of 31 Mar 2024. Represents the total net assets of all U.S. closed-end funds in the municipal bond category.

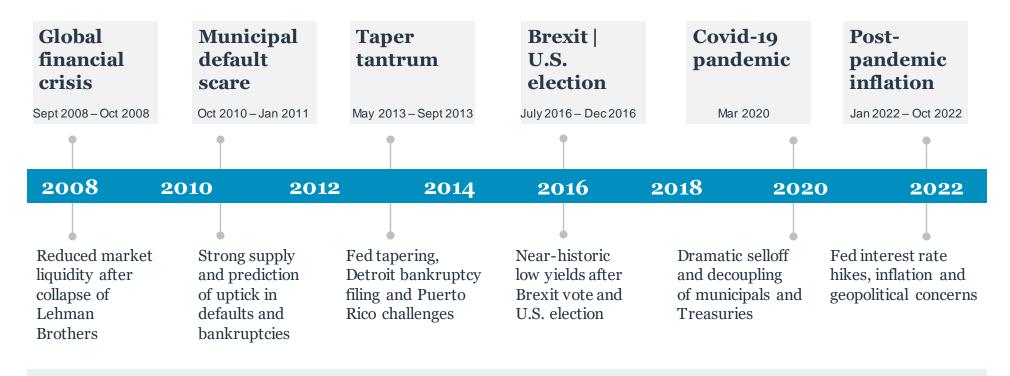
The Morningstar Rating for funds, or "star rating", is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange-traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The top 10% of products in each product sine each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, and 10-year (if applicable) Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, and 10-year (if applicable) Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, and 10-year (if applicable) Morningstar Rating forman average of the performance figures associated with its three-, and 10-year (if applicable) Morningstar Rating forman average of the performance figures associated with its three-, and 10-year (if applicable) Morningstar Rating forman average of the performance figures associated with its three-, and 10-year (if applicable) Morningstar figures are started to be accurated with its three-, and 10-year (if applicable) Morningstar figures are started to be accurated to be accurated to be accurated to be accurated. So the performance figures are star

Appendix



Staying the course has benefited investors

Since 2008, significant events have caused municipal yields to increase by at least 100 bps in less than a year, followed by full recovery.

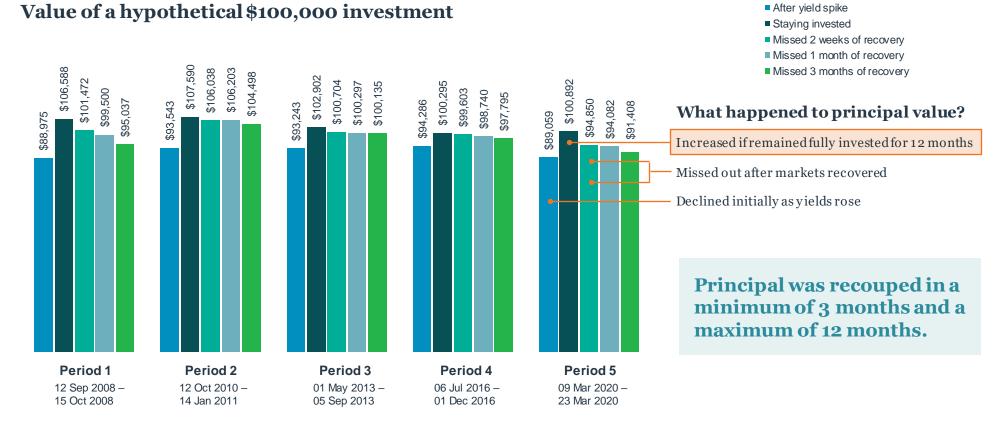


We are beginning to see signs of recovery after an extended stretch of elevated inflation and rising rates.

Municipal bond market yields as represented by Bloomberg Municipal Bond Index.

Portfolios were eventually compensated for patience

Missing even the first two weeks of a market rebound resulted in lower rates of recovery



Data source: Bloomberg L.P., as of 31 Mar 2020. Data shown applies to the actual time periods noted in the table. **Representative Index**: Bloomberg Municipal Bond Index. Nuveen analyzed five periods where municipal yields increased by at least 100 basis points in less than one year. Nuveen examined the total return of hy pothetical \$100,000 investments held for 3, 6-, and 12-month periods following the spike. In this chart, the investments were held for 12 months following the spikes. Hy pothetical examples are shown for illustrative purposes only and do not represent the performance of an actual portfolio. hdividual investor results will vary. Different benchmarks and economic periods will produce different results. Other methods and market conditions may result in slightly different outcomes. Index returns include reinvestment of income and do not reflect investment professional and/or other fees that would reduce performance in an actual client account. Hypothetical results are no guarantee of future results.

The way rates rise can determine how fixed income may react

Fed funds rising rate periods rates since 1994

	Period 1 04 Feb 1994 to 01 Feb 1995	Period 2 30 Jun 1999 to 16 May 2000	Period 3 30 Jun 2004 to 29 Jun 2006	Period 4 15 Dec 2015 to 19 Dec 2018	Period 5 16 Mar 2022 to 26 Jul 2023
Starting rate level	3.00%	4.75%	1.00%	0 to 25 bps	0 to 25 bps
Number of hikes	7	6	17	9	11
Duration	12 Months	10 Months	24 Months	36 months	16 months
Ending rate level	6.00%	6.50%	5.25%	2.50%	5.50%
Magnitude	300 basis points	175 basis points	425 basis points	225 basis points	525 basis points

Data sources: Bloomberg, www.federalreserve.gov, data indicates changes in fed funds rates. Data shown applies to the actual time periods noted in the table. Data for period 5 is as of 31 Mar 2024. Performance data shown represents past performance and does not predict or guarantee future results. One basis point equals .01%, or 100 basis points equal 1%. Different benchmarks and economic periods will produce different results. Other methods and market conditions may result in slightly different outcomes. All investments carry a certain degree of risk, including possible loss of principal, and there is no assurance that an investment will provide positive performance overany period of time. Each period has its own specific factors that may help or hurt the total returns of bonds. These may be economic in nature or technically driven.

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Speaker notes

Slide 3

Clients may be facing challenges today with their income portfolios. Staying updated on market trends and municipal market dynamics can help when evaluating portfolios to help meet income goals.

Slide 4

2024 YTD performance started the year negative at -0.4% below the historical average of 4.5%.

Slide 5

Municipal mutual fund flows were mixed in 2023, but have historically rebounded after market dislocations.

Slide 6

Declining inventory for broker/dealers has made it difficult for financial professionals to invest in the municipal bond market. Comparatively, municipal mutual fund assets have continued to increase since 2008, although assets declined during the selloff in 2022, but are showing signs of a potential recovery.

Slide 7

As the municipal market has changed, resources and market access have become a key difference in the way financial professionals and asset managers invest.

Slide 8

Municipal-to-Treasury yield ratios measure high quality municipal bond valuations relative to the U.S. Treasury bond curve. Technical conditions have moved to the rich side of fair value, but overall yield levels remain attractive.

Slide 9

Tax-exempt supply has started 2024 above 2023 levels. Higher interest rates and healthy financial reserves have kept new issuance low.

Slide 10

Bonds with the same rating may show a wide yield range and illustrate a less efficient market.

Slide 11

Credit outlooks have improved since the pandemic began in 2020, but credit rating agency outlooks are beginning to consider slower economic growth.

Slide 11

Select high-profile municipalities experienced credit downgrades over the past decade, demonstrating the importance of credit research.

Slide 12

Municipal defaults tend to be idiosyncratic and represent a very small percentage of the overall market. Defaults in 2024 are currently in line with historical standards, with nursing homes and industrial development revenue bonds representing the majority of defaults.

Slide 13-14

Regulatory changes can make it more difficult for investors to navigate the market.

Slide 15

Tax reform as part of the Tax Cuts and Jobs Act of 2017 placed limits on deductions for State and Local Taxes (SALT), increasing the tax burden for investors in states with higher taxes.

Slide 16

Some of the key considerations when constructing portfolios for clients include positioning across the credit spectrum and yield curve, diversifying sources of income, and evaluating the tradeoff between passive and active strategies.

Slide 17

Investment style flexibility can potentially enhance returns. Ideal positioning along the credit and yield curve spectrum has varied in different market environments. Investment managers with size and scale are positioned to capitalize on market movements.

Slide 18

As fixed income markets shift, so does sector performance. Diversify by investing broadly across income sectors in an effort to reduce risk in an overall portfolio. Diversification does not assure a profit or protect against loss.

Slide 19

Adding municipal bonds to a portfolio can help reduce risk and improve returns. A portfolio allocation of 40% municipal / 60% equity assumed less risk and added similar after-tax return when compared with a 100% equity portfolio over 20 years.

Slide 20

As you look to implement these ideas, discuss the current environment with your clients, evaluate existing holdings and consider potential investments that may be appropriate for their portfolios.

Speaker notes

Slide 21

Initiate conversations with your clients about changes in the municipal market and the benefits of professionally managed solutions.

Slide 22

Consider a customized municipal bond portfolio review. Working with Nuveen, a portfolio review offers an in-depth analysis of a client's municipal bond holdings and offers an action plan for the portfolio that is tailored to the client's needs.

Slides 23-24

Different types of municipal solutions are available with a variety of features. The solutions shown are ordered from left to right by the sophistication level of the asset manager's toolkit available for each solution. Evaluate different types of investment vehicles and strategies to help meet clients' goals.

Slides 25-26

Nuveen has been investing in municipal bonds since 1898 and is a market leader in several categories.

Slides 27-31 Appendix and Disclosures

Read slides if needed.