

nuveen

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Municipal market update

July 2024

As of 30 June 2024

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OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

GPP-3708482CG-W0624P

2024 municipal market themes

Economic environment	
Inflation	<ul style="list-style-type: none"> • Inflation has trended lower year over year. The Fed projects marginally lower Core PCE inflation by year end. • Core services inflation plus shelter remains sticky but is trending down.
Policy	<ul style="list-style-type: none"> • We expect the fed funds rates to move lower, with the timing dependent on data for inflation, wages and employment. • Fed funds rate increases have been on hold since July 2023, after increasing 525 bps this cycle.
Economic growth	<ul style="list-style-type: none"> • U.S. growth has been resilient, but the consumer is softening. Influential factors include unemployment, consumer spending and levels of excess household savings. • Capital markets are currently anticipating less risk of recession, but we are continuing to monitor closely.
Interest rates	<ul style="list-style-type: none"> • Uncertainty regarding Fed policy will continue to cause rate volatility. Rates could decline if a slowdown or recession develops.

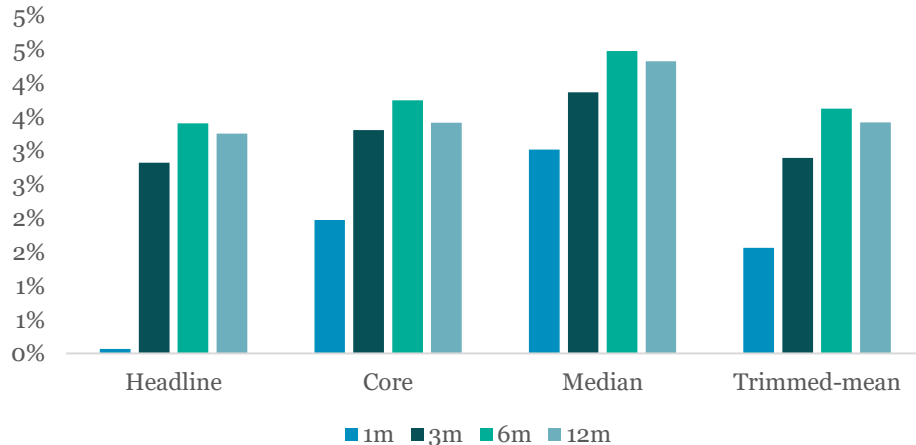
Municipal market environment	
Credit fundamentals	<ul style="list-style-type: none"> • Credit remains strong, with robust levels of rainy day and reserve funds. • Governments are adjusting for normalization of revenue collections. • We expect municipal defaults will remain low, rare and idiosyncratic.
Supply & demand	<ul style="list-style-type: none"> • Supply has picked up relative to 2023 levels and could be more predominant before the U.S. election. • We continue to predict more coupons, calls and maturities than new issues. • Inflows currently favor duration as investors don't want to miss out. • Demand is driven by higher-for-longer yields.
Valuations	<ul style="list-style-type: none"> • Municipals have displayed strong relative performance this year. • High yield credit spreads have tightened below historical averages, supported by inflows. • Despite tight ratios, municipals can generate attractive returns based on elevated income.

Source: Nuveen as of 30 Jun 2024. 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.

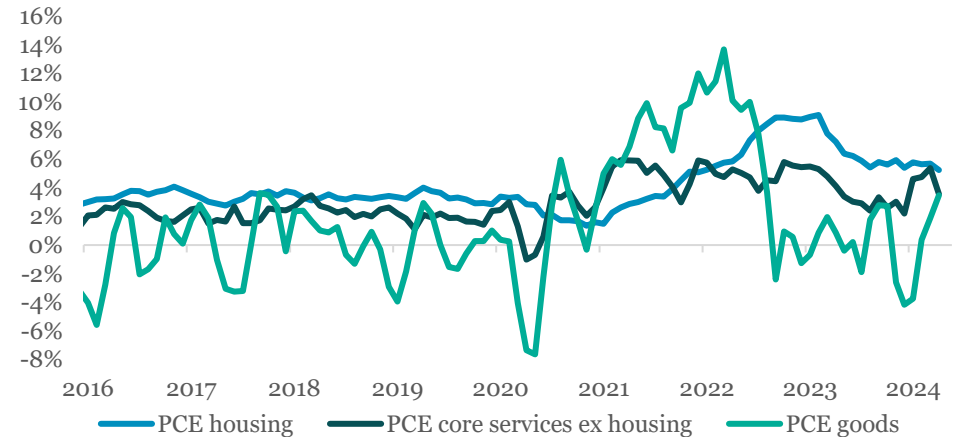
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Headline inflation will fade, but sticky inflation remains stubborn

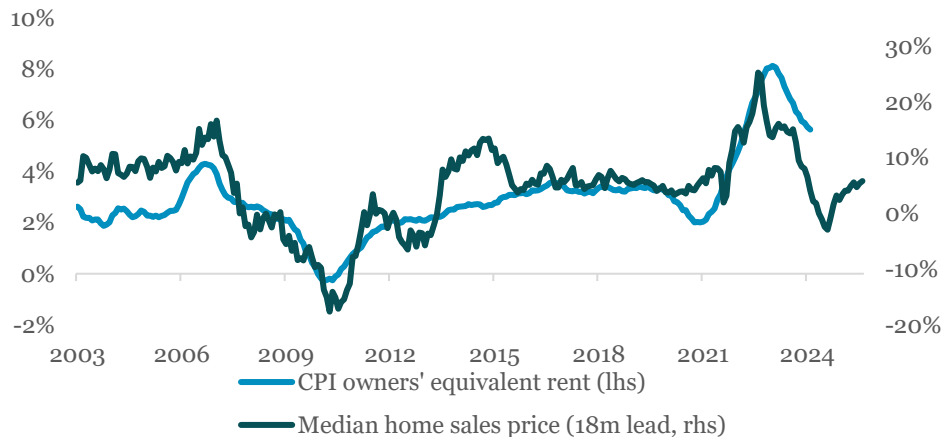
Inflation has moderated somewhat, but stickier categories have rebounded recently



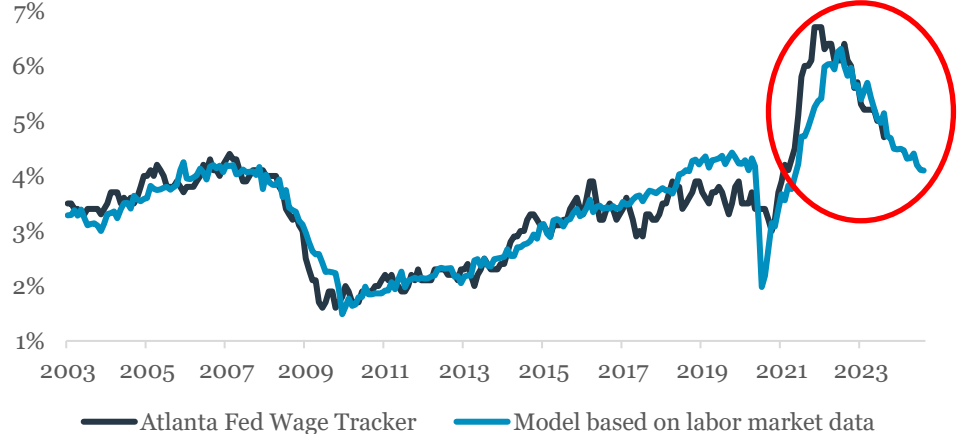
PCE housing (3m annualized) has slowly moderated, while other services fell after recent spike



High-frequency indicators point to slower house price inflation ahead



Leading indicators point to moderation in wage inflation ahead

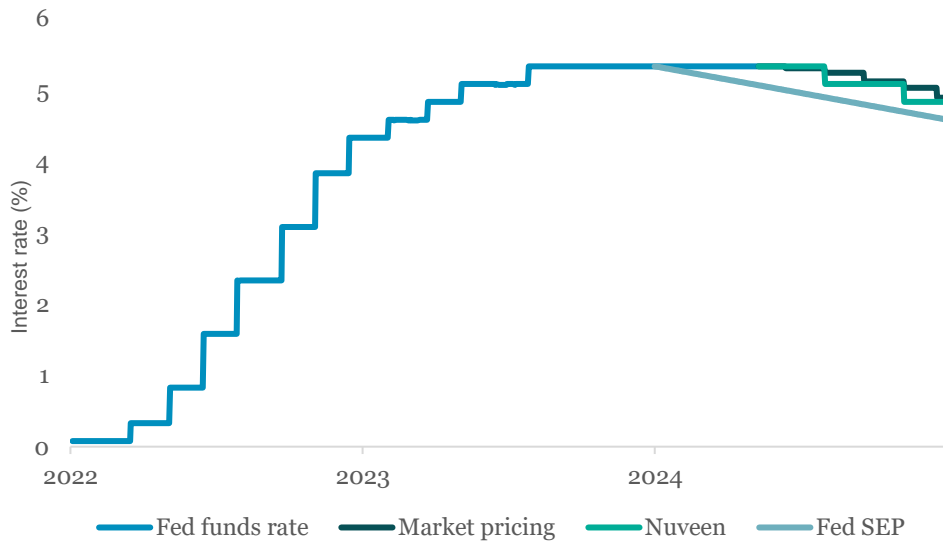


Sources: Bloomberg, BLS, as of 31 May 2024.

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Fed Outlook: rate cuts to begin this year, largely driven by lower inflation

We anticipate 50bps of rate cuts this year, close to current market pricing, and slightly less than the latest Fed SEP



Inflation has already moderated substantially, and is set to continue that trend in 2024



Source: Bloomberg, Federal Reserve, as of 31 May 2024.

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Source: Bloomberg, BEA, Federal Reserve, as of 31 May 2024.

Headline job growth has moderated again after the recent rebound

The pace of job creation slowed in the second quarter

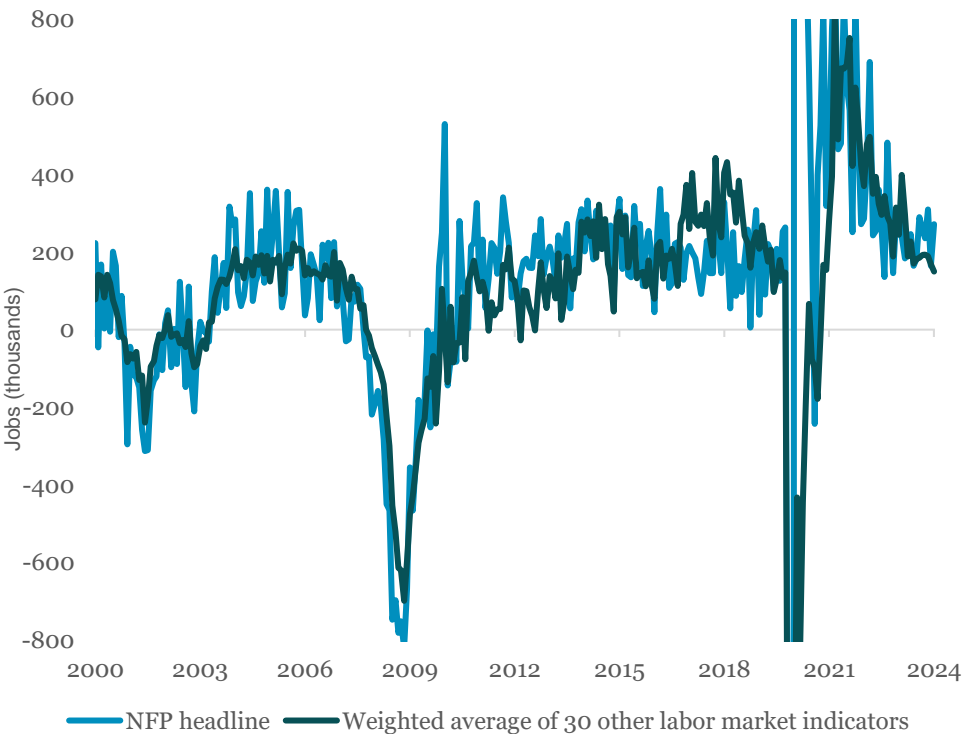
Three-month average job creation at +177,000



Source: Bloomberg, BLS, as of 31 May 2024.

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While headline job creation has been strong, other data has deteriorated

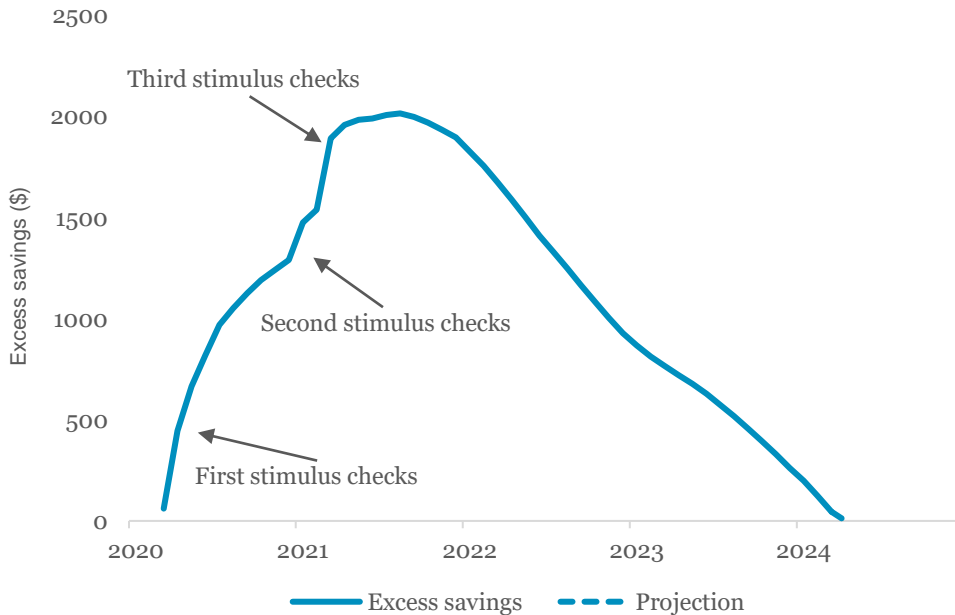


Source: Bloomberg, BLS, 31 May 2024.

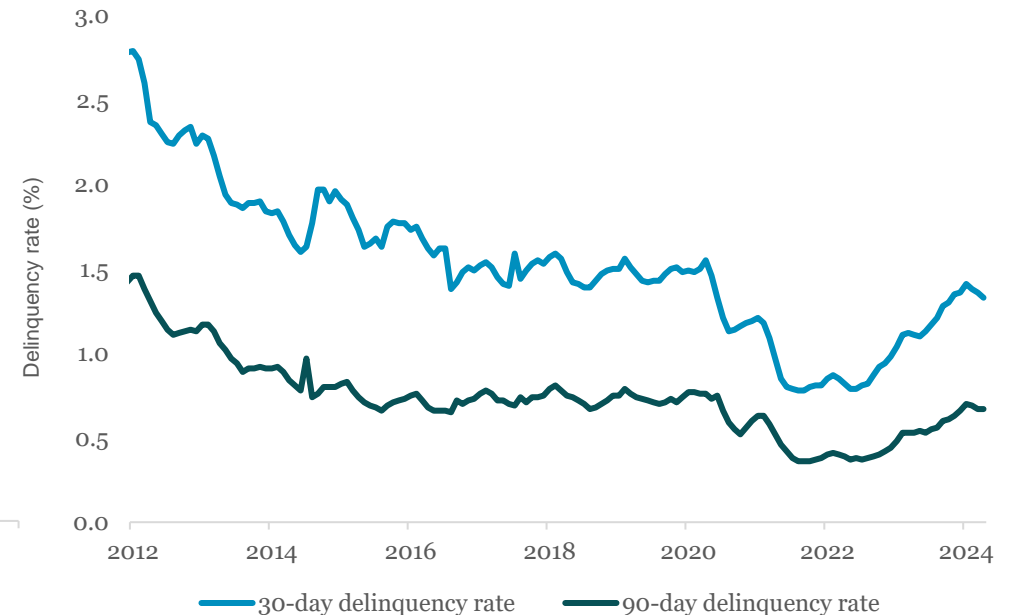
Consumer spending was stronger than expected in 2023, but headwinds are increasing

The latent impact of prior fiscal stimulus will fade

Excess saving, which supported consumption over prior quarters, are now close to exhausted



After three strong years, credit card delinquency rates are back to pre-covid levels



Source: BEA, Bloomberg, as of 31 May 2024.

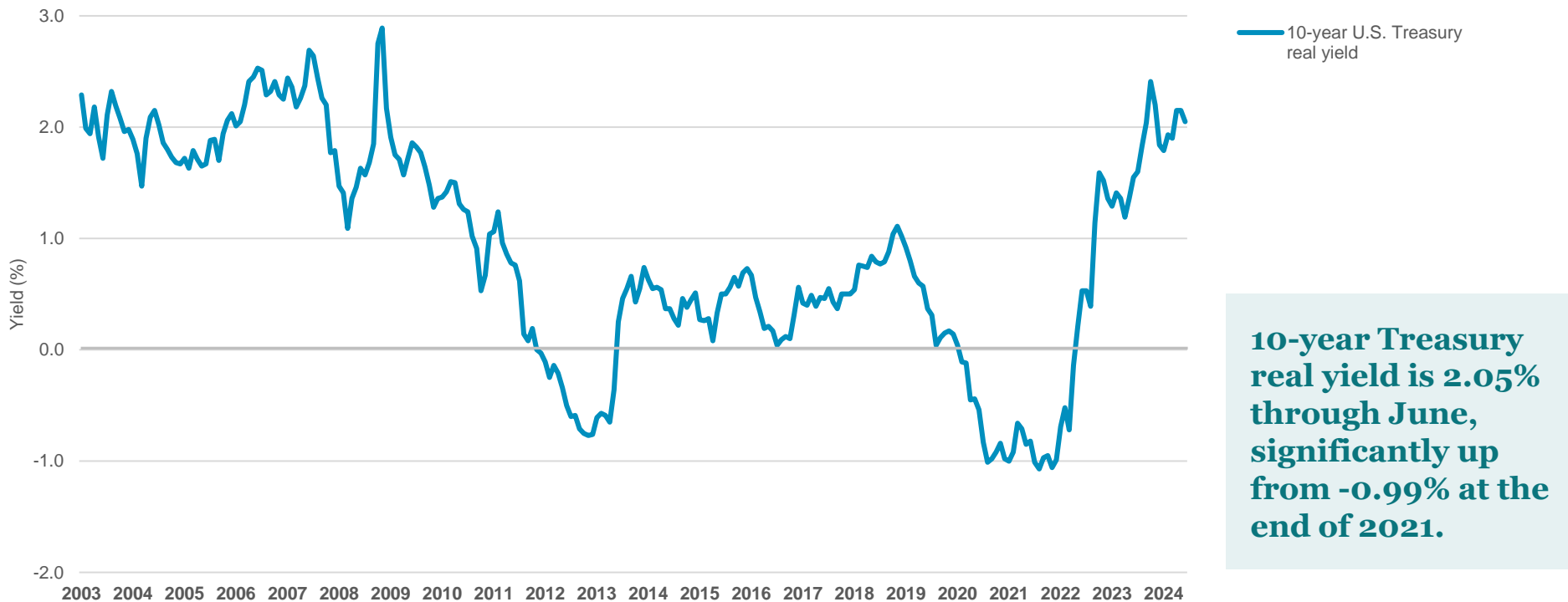
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Source: Bloomberg, BEA, EIA, CME, as of 31 May 2024.

Real yield levels are now outpacing inflation

Treasury yield minus inflation remains at levels not seen in over a decade.

10-year U.S. Treasury real yield

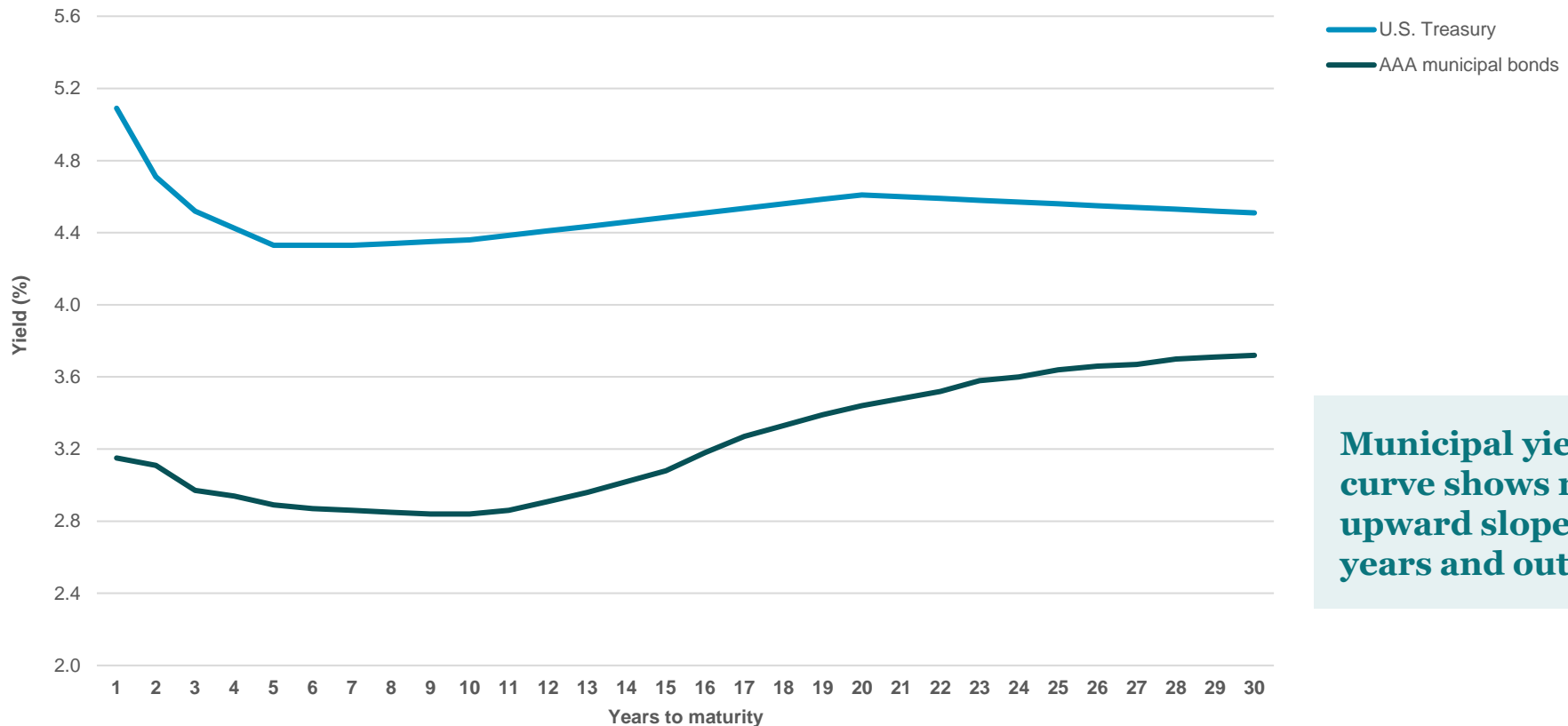


Data source: FRED, 31 Jan 2003 – 30 Jun 2024, shown monthly. The real yield is a measure of the stated return on Treasury bonds, minus inflation, as of 30 Jun 2024.

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Inverted yield curves typically forecast an economic slowdown

U.S. Treasuries vs. AAA-rated G.O. municipal yield curve



Municipal yield curve shows normal upward slope 10 years and out.

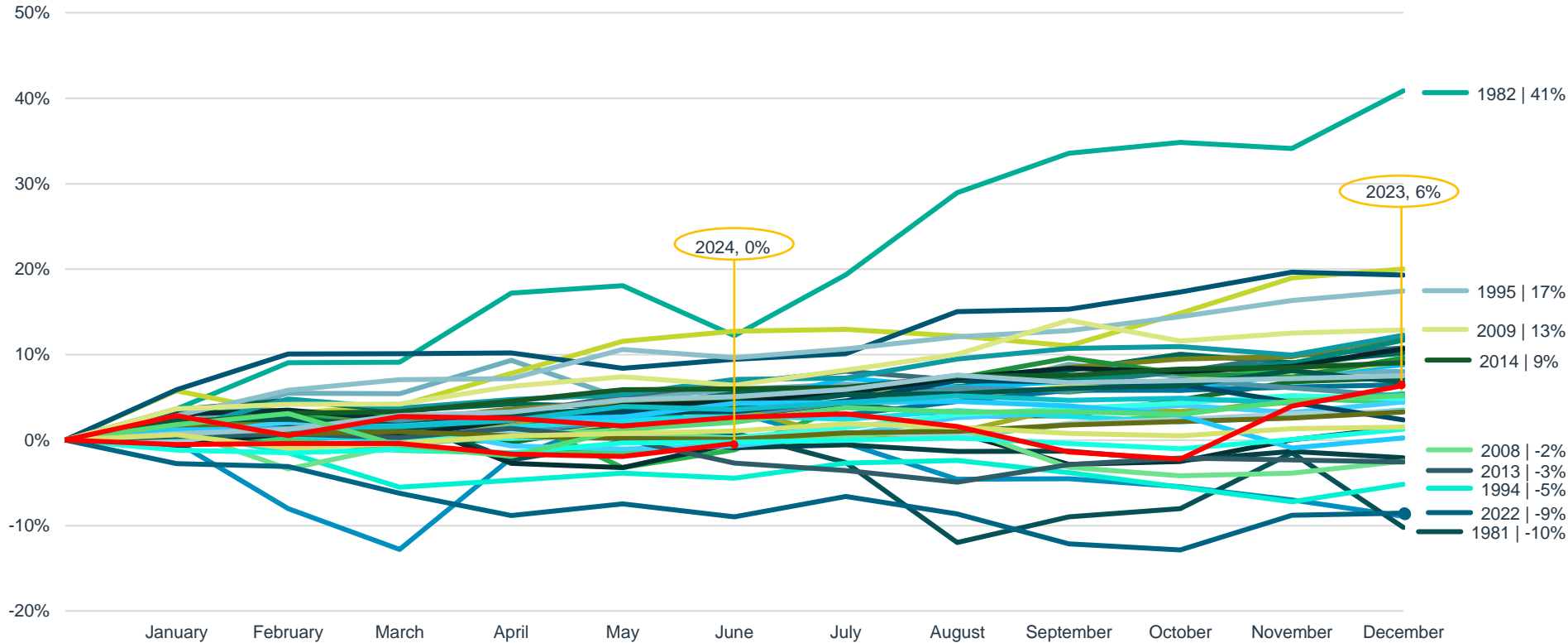
Data sources: U.S. Department of the Treasury; Refinitiv MMD, 30 Jun 2024. Performance data shown represents past performance and does not predict or guarantee future results. AAA municipals represented by Municipal Market Data (MMD) scale.

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Seasonal headwinds have impacted performance to start the year

Returns are slightly negative in the first half of the year, returning -0.40% through June.

Bloomberg Municipal Bond Index performance, calendar year path

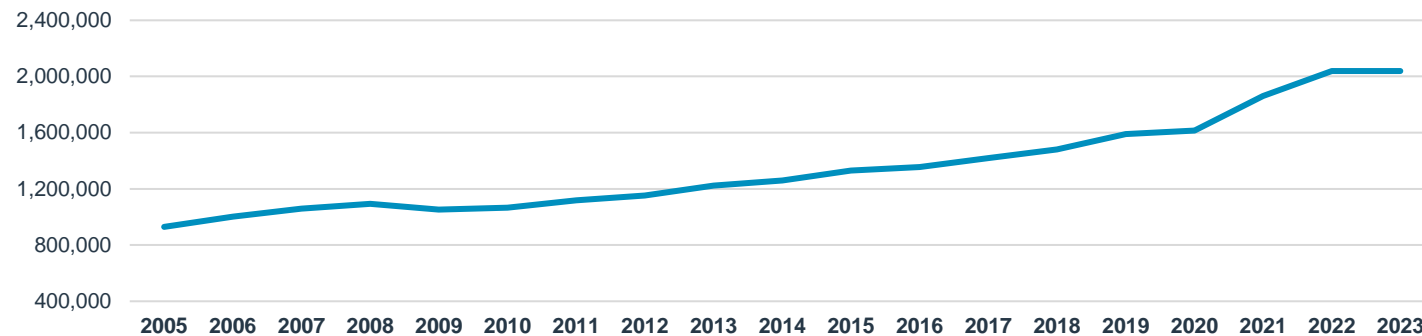


Data source: Bloomberg, L.P., 01 Jan 1980 – 30 Jun 2024; cumulative returns for each calendar year, shown monthly. Performance data shown represents past performance and does not predict or guarantee future results. OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

Municipalities are in a strong financial position

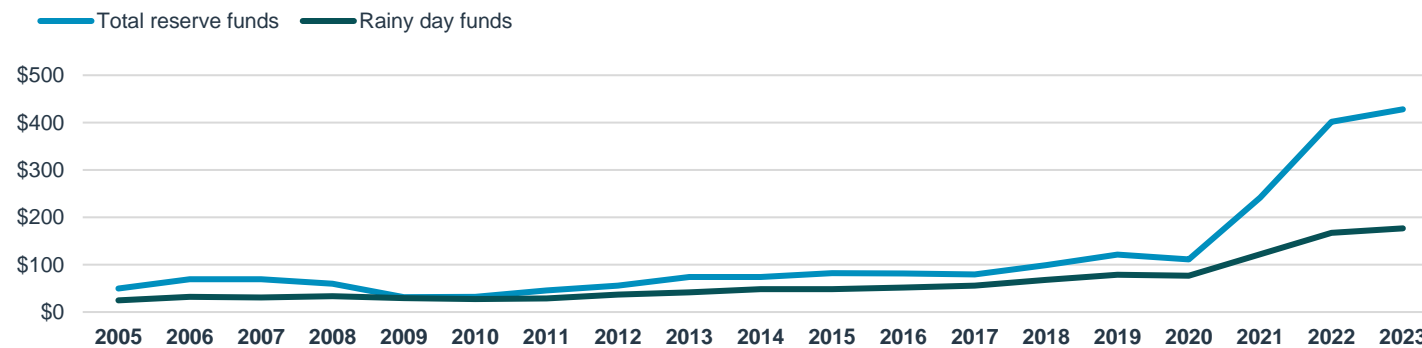
Revenue collections and reserve levels are the highest in more than 40 years.

State & local government tax revenue collections (\$ millions)¹



2023 state revenues increased marginally compared to 2022.

State government funds (\$ billions)²



Total reserve funds for 2023 ended modestly above 2022 levels, at \$428 billion.

¹ Data source: census.gov, 31 Dec 2023; updated annually.

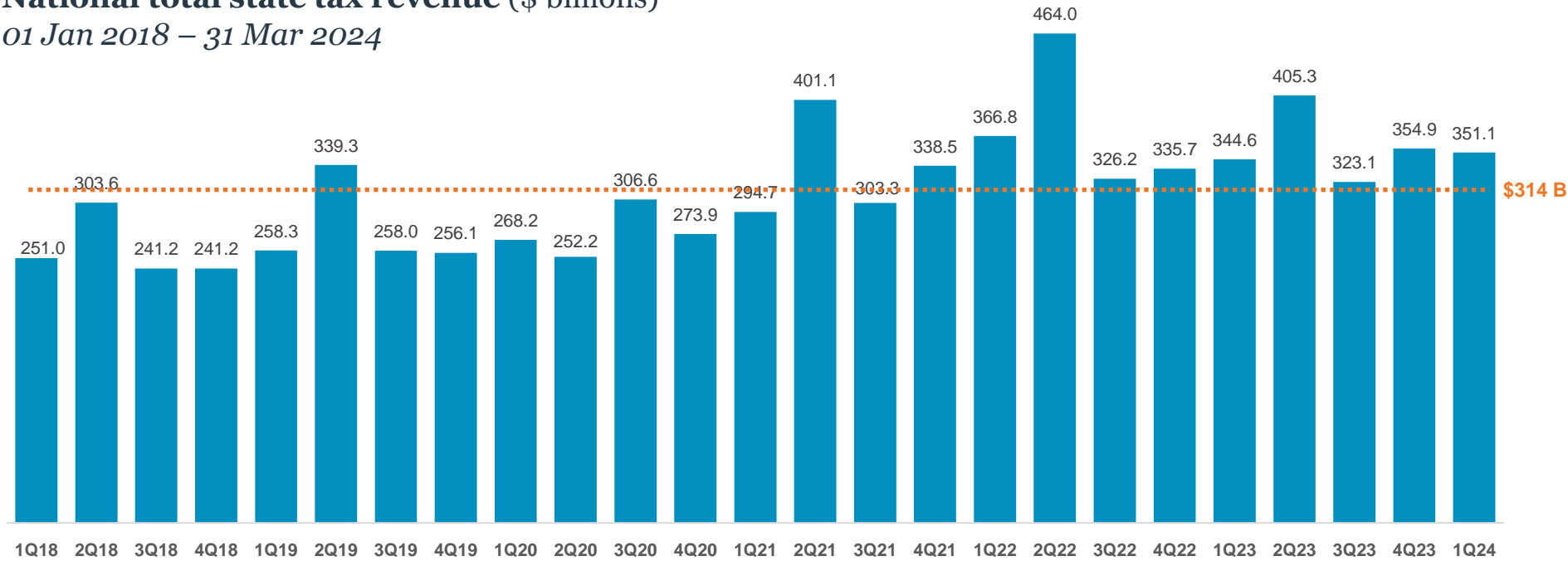
² Data sources: National Association of State Budget Officers (NASBO), *The Fiscal Survey of States*, Spring 2022. Pew Charitable Trust, *States Build Their Reserves Amid Growing Uncertainties*, 31 Dec 2023.

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We expect state tax revenue growth to normalize to pre-pandemic levels

Revenue growth is starting to slow from 2022. Credit research can be an important driver of investment success.

National total state tax revenue (\$ billions)
01 Jan 2018 – 31 Mar 2024

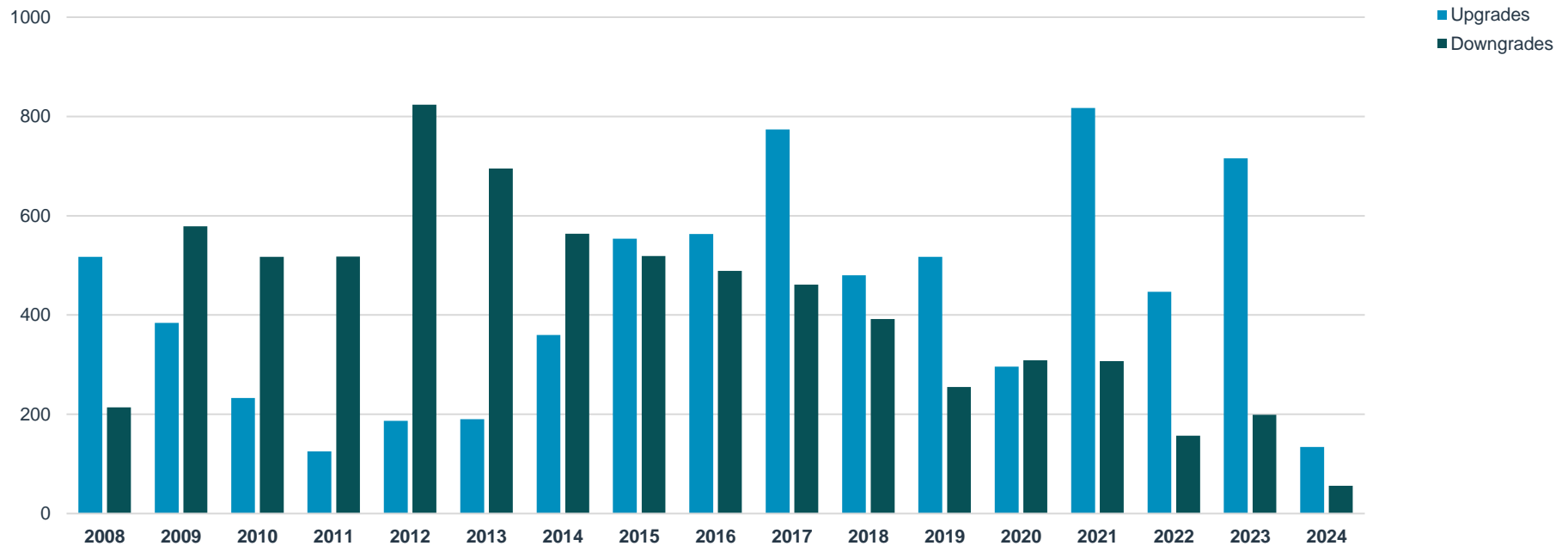


Data source: Nuveen; census.gov, as of 30 Jun 2024, with data as of 31 Mar 2024.
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Rating upgrades have continued to exceed downgrades in recent history

Credit rating upgrades outpaced downgrades by nearly 4 to 1 in 2023. Upgrades outpaced downgrades by nearly 2.5 to 1 in 1Q24, showing early signs of normalization.

Number of rating changes for public finance



Data sources: Moody's Investors Service, *Quarterly and Annual Municipal Rating Revisions*, 15 May 2024, data as of 31 Mar 2024; most recent data available.

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Municipal bond sectors are resilient in times of uncertainty

Municipal bonds fund essential services such as roads/highways, education, water & sewer, and electric, and many projects are backed by stable revenue sources.

How a potential economic downturn may affect municipal sectors

Low impact

- State and local governments
- Toll roads
- Ports
- Airports
- Airlines
- Public power

Medium impact

- Higher education
- Land secured

Mixed impact

- Industrial development revenue/
Pollution control revenue (IDR/PCR)
- Charter schools
- Health care

High impact

- Long-term care

Less impact

More impact

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Credit rating agency outlooks are beginning to consider slower economic growth

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

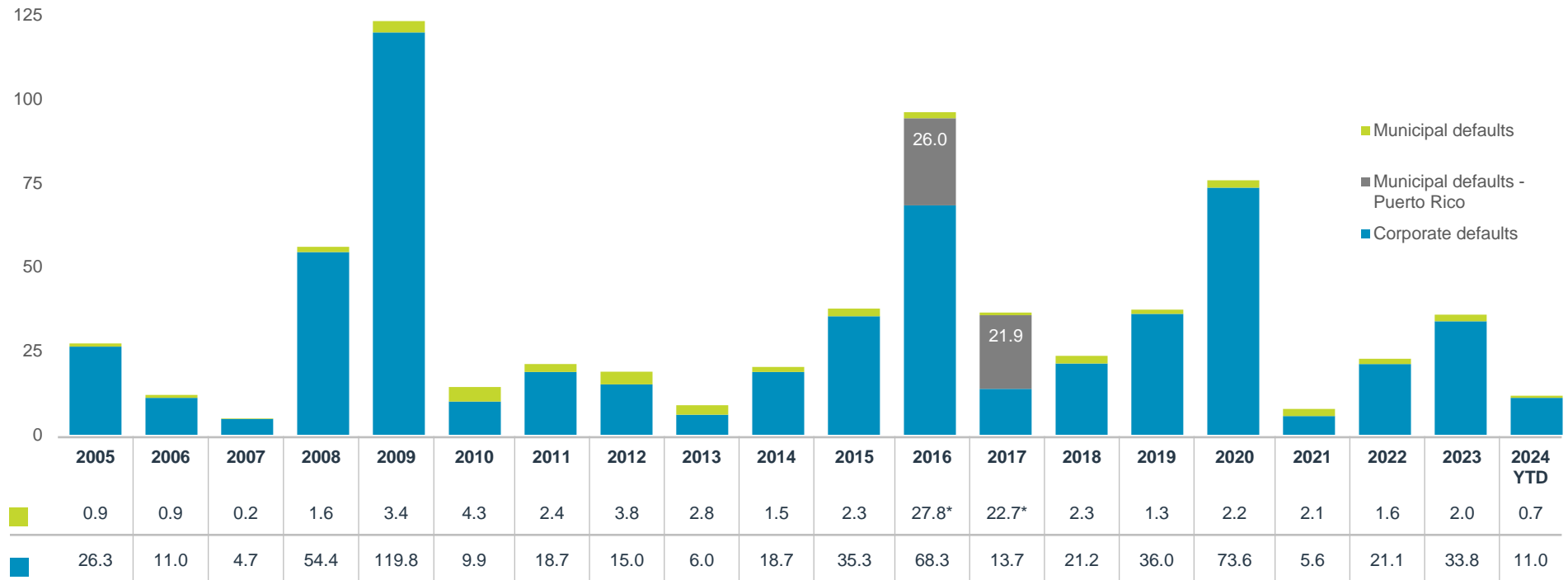
Category	Sector	Moody's outlook		
		2024	2023	2020
Transportation	Airport	Stable	Stable	Negative
	Mass transit	Negative	Negative	Negative
	Public ports	Stable	Stable	Negative
	Toll roads	Stable	Stable	Negative
Higher education	Privates	Stable	Negative	Negative
	Publics	Stable	Negative	Negative
	Charter 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.

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Defaults remain in line with historical trends

Municipal payment defaults (\$ billions)



Municipal defaults YTD through 31 May 2024 were primarily concentrated in nursing homes (42%), industrial development (28%) and hospitals (20%).

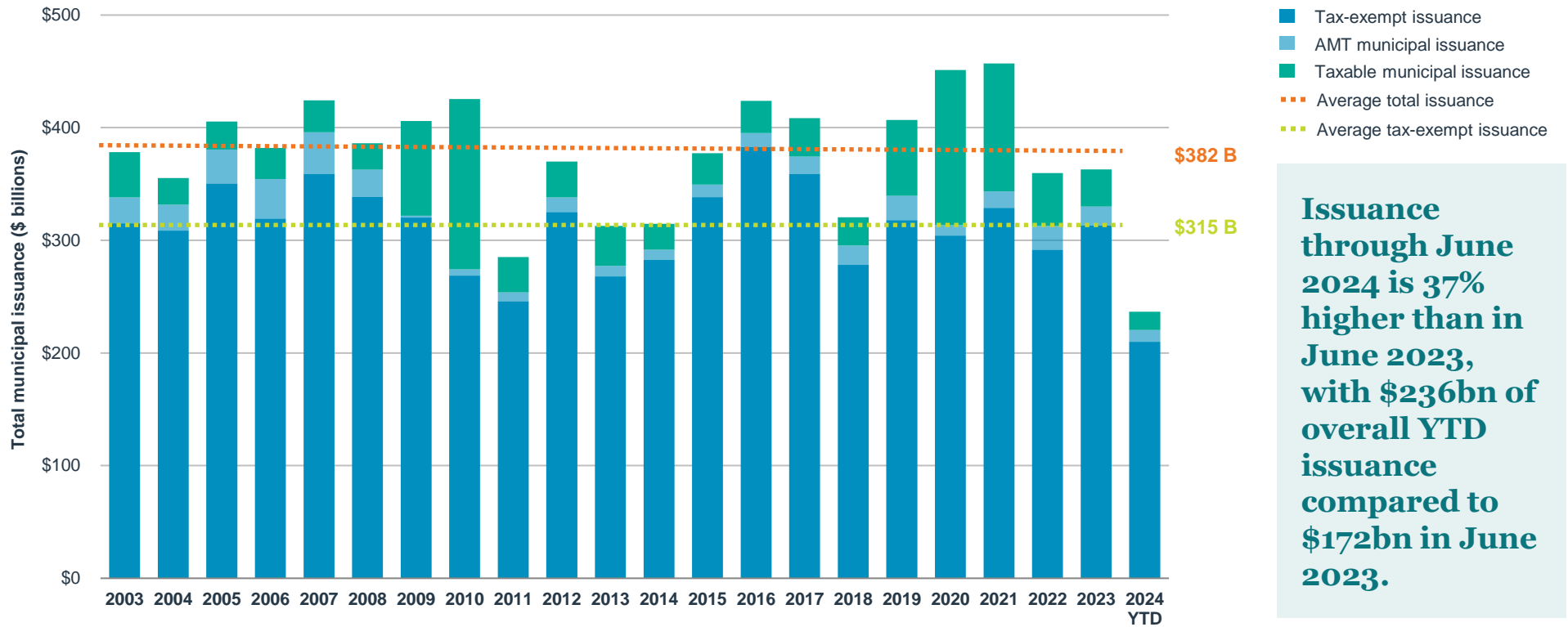
Data sources: Bank of America/Merrill Lynch Research, 02 Jul 2024, municipal default data as of 30 Jun 2024. Bank of America/Merrill Lynch Research HY Credit Chart book, corporate default data as of 30 Jun 2024. Data represents defaults on the entire universe of bonds, both rated and unrated, and includes 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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Issuance patterns could be more concentrated in the months leading up to the U.S. election

Tax-exempt supply has started 2024 above 2023 levels.

Municipal issuance

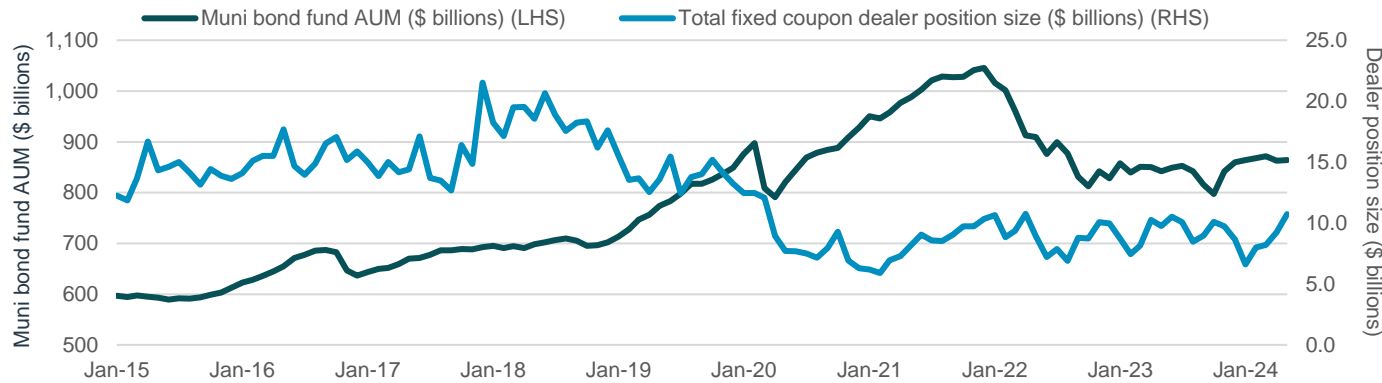


Data source: Securities Industry and Financial Markets Association (SIFMA.org), *U.S. Bond Market Issuance and Outstanding*, 01 Jul 2024 for period ending 30 Jun 2024. The average total issuance and average tax-exempt issuance shown are for the period 01 Jan 2003 – 31 Dec 2023. AMT municipal issuance is part of the tax-exempt municipal market.

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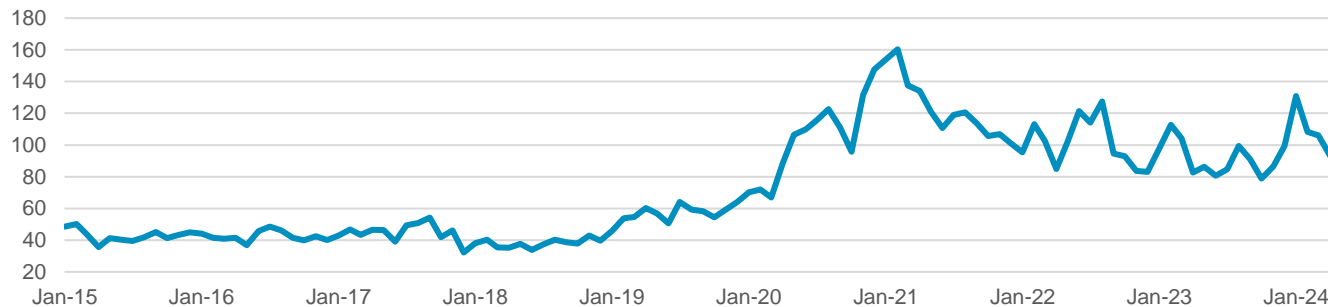
Diminished dealer participation has created elevated volatility within municipal market

Muni fund AUM vs. average dealer position size¹



Increased cost of capital has diminished dealer inventory. An institutional manager can help capitalize on market dislocations.

Muni fund AUM over dealer inventory ratio²



Muni fund AUM is 80x the size of dealer inventory levels, contributing to more volatile markets.

¹ Data source: Fund AUM data is sourced from Morningstar. Coupon dealer position size is sourced from Bloomberg. Both data sets span from 31 Dec 2014 to 31 May 2024.

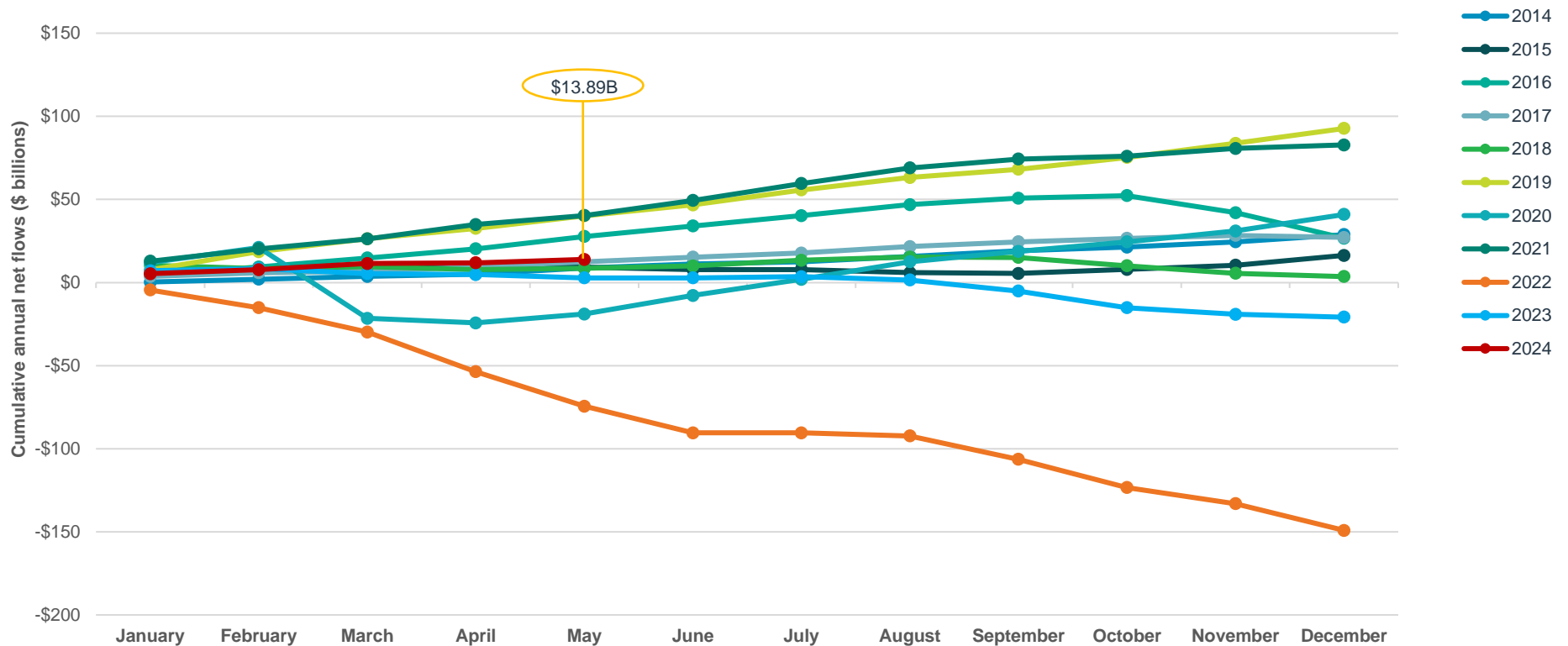
² Data source: Fund AUM data is sourced from Morningstar. Dealer inventory ratio data is sourced from Bloomberg. Both data sets span from 31 Dec 2014 to 31 May 2024...

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Fund flows are positive to start 2024

Municipal open-end fund net inflows were \$13.89 billion through May.

Annual municipal bond fund flows by month
2014 – 2024 YTD



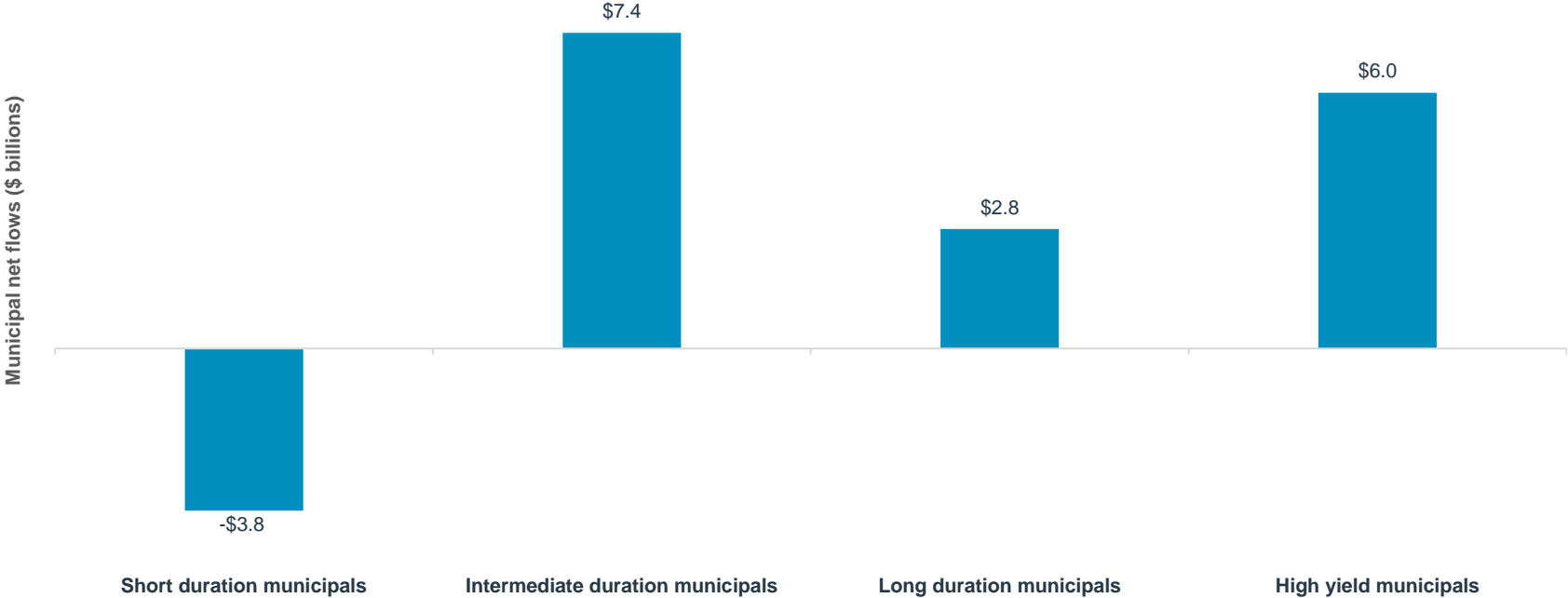
Data source: Morningstar Direct, 01 Jan 2014 – 31 May 2024, cumulative flows for each calendar year, shown monthly. Net flows represent the total of all municipal bond open-end funds.

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Investors have started to take on more duration risk

Fund flows favor intermediate, long duration and high yield municipals.

2024 YTD inflow or outflow by municipal bond category



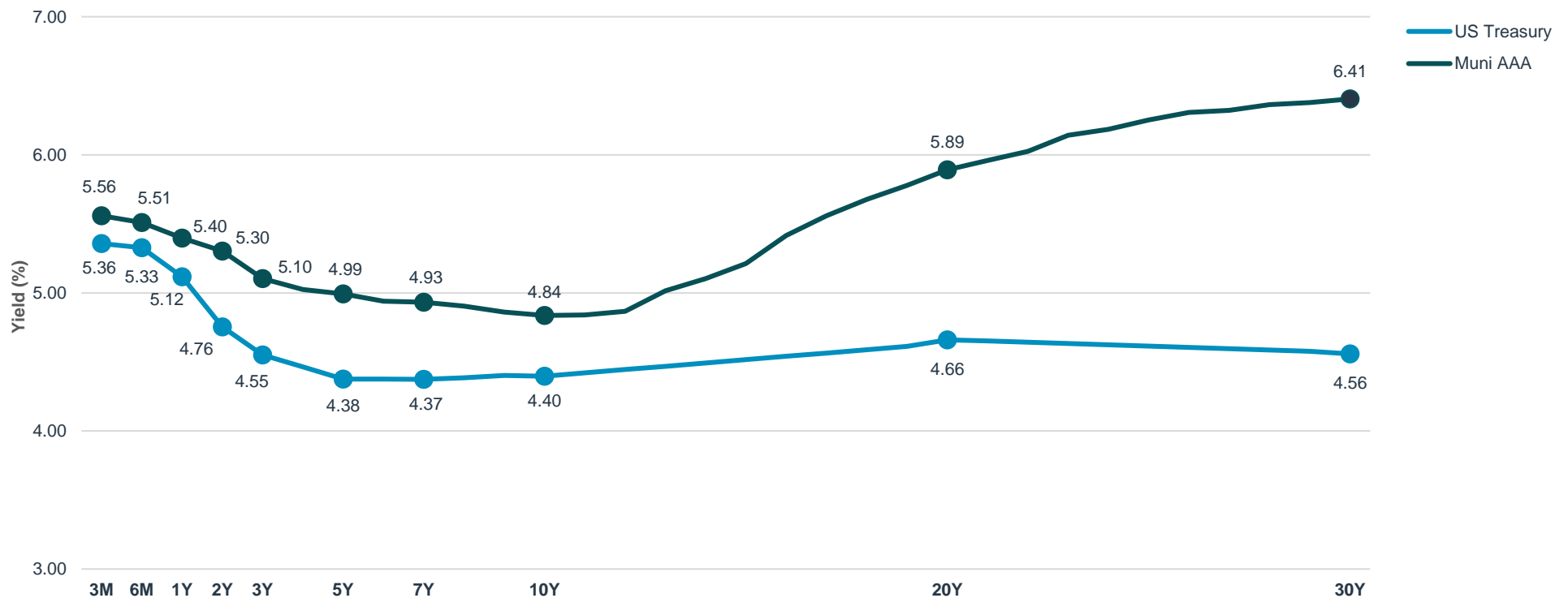
Data source: Morningstar Direct, 01 Jan 2024 – 31 May 2024. Net flows represent the total of all municipal bond open-end funds. Respective Morningstar categories: Short duration municipals: Muni National Short; Intermediate duration municipals: Muni National Inter; Long duration municipals: Muni National Long; High yield municipals: High Yield Muni.

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Municipals are attractive on an after-tax basis

By extending duration, municipal investors can achieve higher tax-efficient yields.

U.S. Treasuries vs. AAA municipal yield curve (taxable equivalent yield)

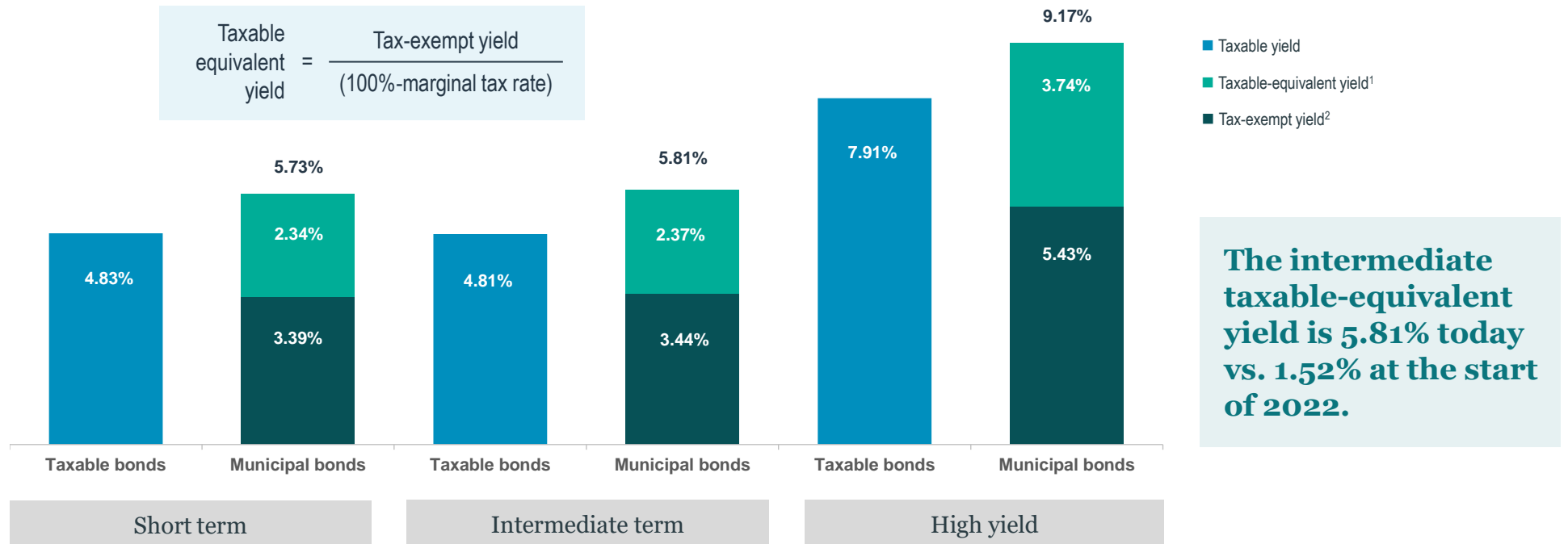


Data source: Bloomberg; Nuveen Portfolio Strategy & Solutions, as of 30 Jun 2024. **Taxable-equivalent yield (TEY)** is the yield a taxable investment needs to possess (before taxes) for its yield to be equal to that of a tax-free municipal investment. The yields shown are based on the highest individual 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.

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Municipals are attractive on an after-tax basis

Yield comparison



1 The taxable-equivalent yield is based on the highest individual marginal federal tax rate of 37%, plus the 3.8% Medicare tax on investment income (the Net Investment Income Tax). Individual tax rates may vary.

2 Some income may be subject to state and local taxes and the federal alternative minimum tax.

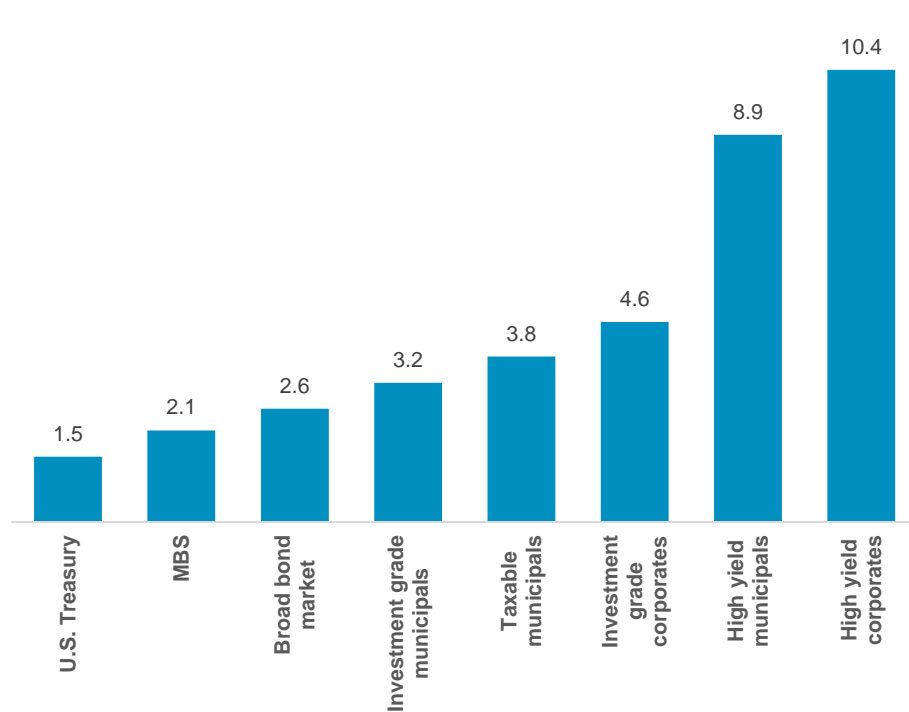
Data source: Bloomberg L.P., 30 Jun 2024. **Performance data shown represents past performance and does not predict or guarantee future results.** Yields are yield to worst. **Yield to worst** is the lowest potential yield that can be received on a bond without the issuer defaulting. **Taxable-equivalent 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. **Representative indexes:** **Short term taxable bonds:** Bloomberg U.S. Government/Credit 1-5 Year Index; **Short term municipal bonds:** Bloomberg Municipal Short Index; **Intermediate term taxable bonds:** Bloomberg U.S. Government/Credit 5-10 Year Index; **Intermediate term municipal bonds:** Bloomberg Municipal Intermediate Index; **High yield taxable bonds:** Bloomberg Corporate High Yield 2% Issuer Capped Index; **High yield municipal bonds:** Bloomberg High Yield Municipal Bond Index. Different benchmarks, economic periods, methodologies and market conditions will produce different results.

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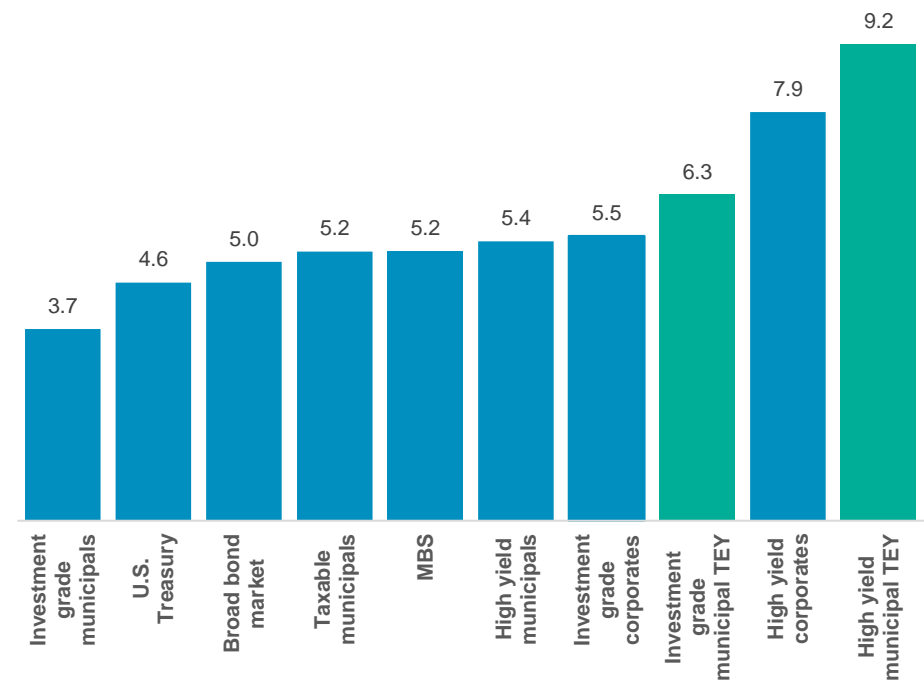
Fixed income sector performance is mixed, and investment grade municipals show resilience

Comparing asset class returns and yields

Trailing 12 month returns (%)



Yield to worst (%)

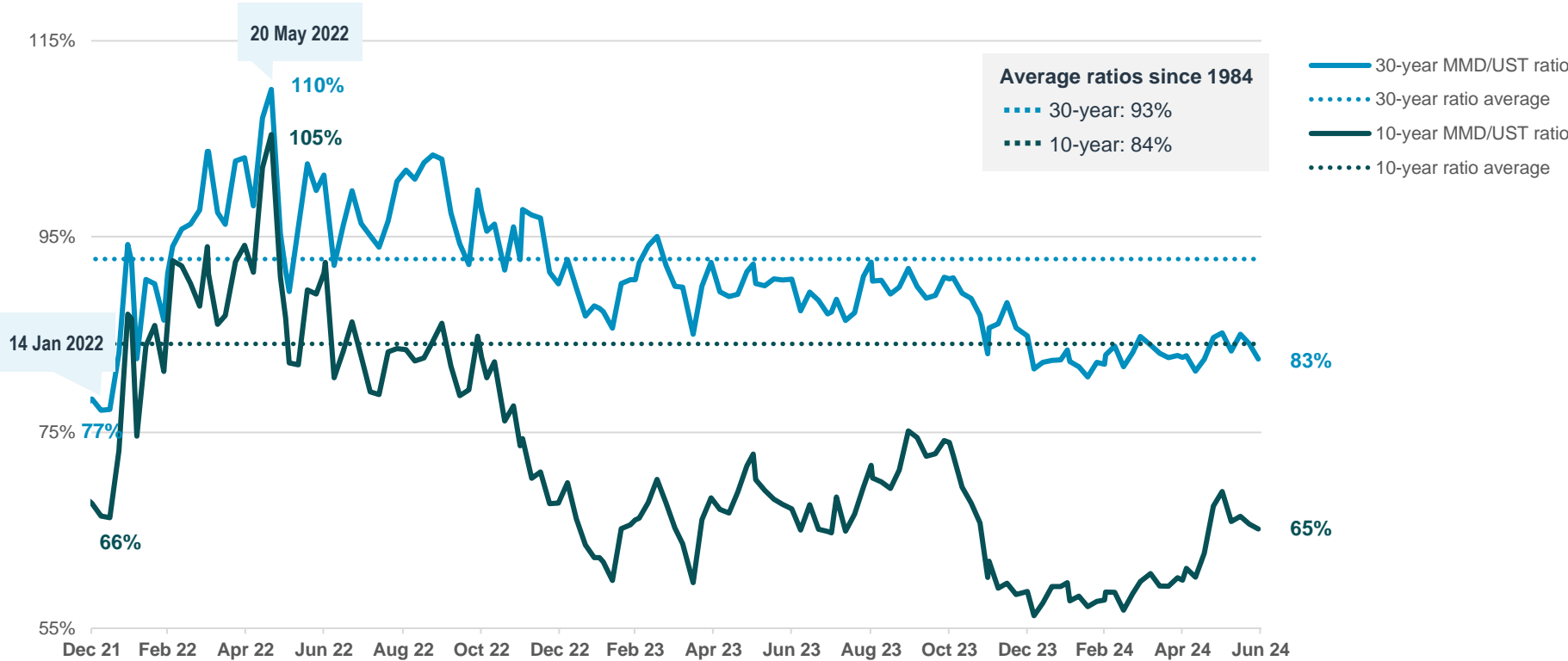


Data source: Bloomberg, L.P., trailing 12 month returns from 30 Jun 2023 – 30 Jun 2024; yield to worst as of 30 Jun 2024. Performance data shown represents past performance and does not predict or guarantee future results. Yields are yield to worst. **Yield to worst** is the lowest potential yield that can be received on a bond without the issuer defaulting. **Representative indexes:** **Broad bond market:** Bloomberg U.S. Aggregate Bond Index; **High yield corporates:** Bloomberg U.S. Corporate High Yield Index; **High yield municipals:** Bloomberg High Yield Municipal Bond Index; **Investment grade corporates:** Bloomberg U.S. Corporate Investment Grade Index; **Investment grade municipals:** Bloomberg Municipal Bond Index; **Mortgage-backed securities (MBS):** Bloomberg MBS (fixed rate) Index; **Taxable municipals:** Bloomberg Taxable Municipal Bond Index; **U.S. Treasury:** Bloomberg U.S. Treasury Index; The taxable-equivalent yield is based on the highest individual marginal federal tax rate of 37%, plus the 3.8% Medicare tax on investment income (the Net Investment Income Tax). Individual tax rates may vary.

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Absolute yield levels are attractive, but technical conditions have lagged

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

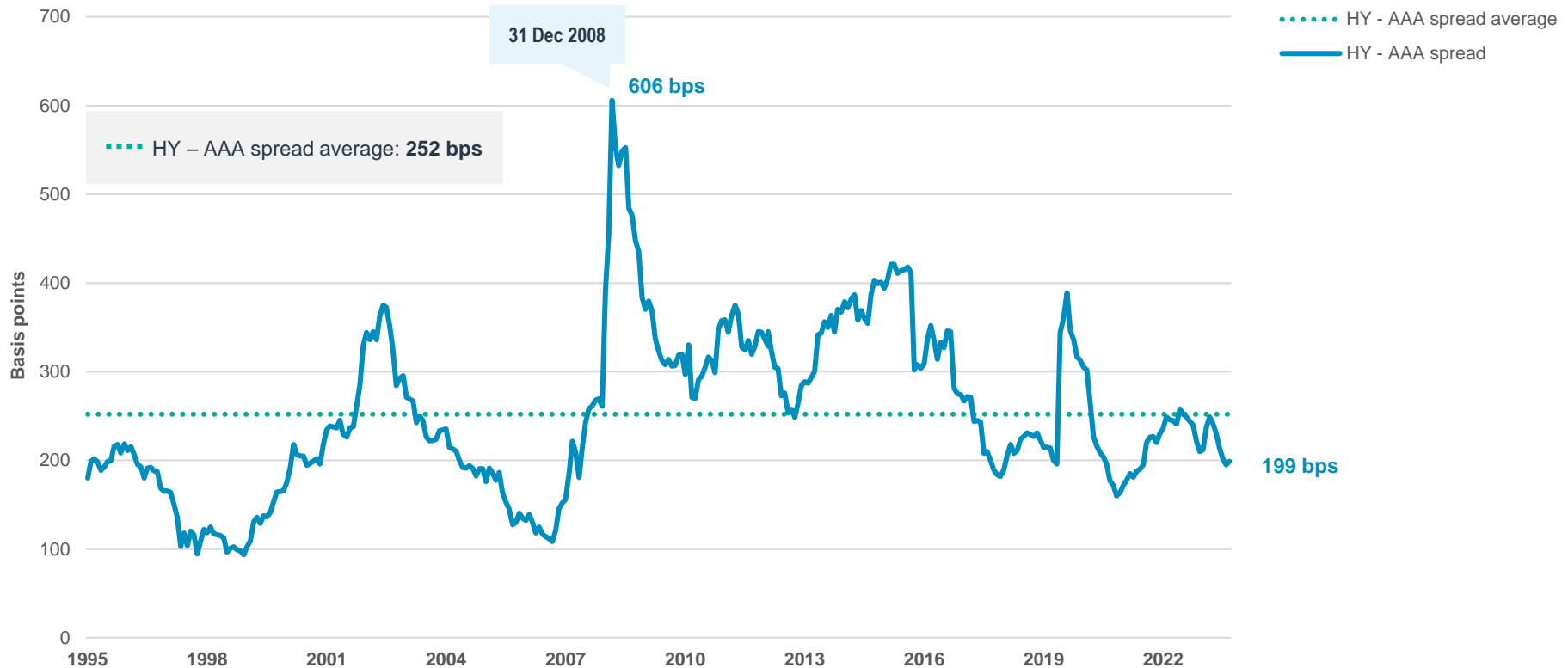


Data source: Refinitiv MMD for fair value Municipal 10- and 30-Year Index AAA General Obligation bonds; Bloomberg for 10- and 30-year U.S. Treasury yields, shown weekly, 31 Dec 2021 – 30 Jun 2024, averages shown from 01 Jan 1984 – 30 Jun 2024. Performance data shown represents past performance and does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

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High yield credit spreads are below historical averages as flows return

Bloomberg High Yield Municipal Index versus AAA yields



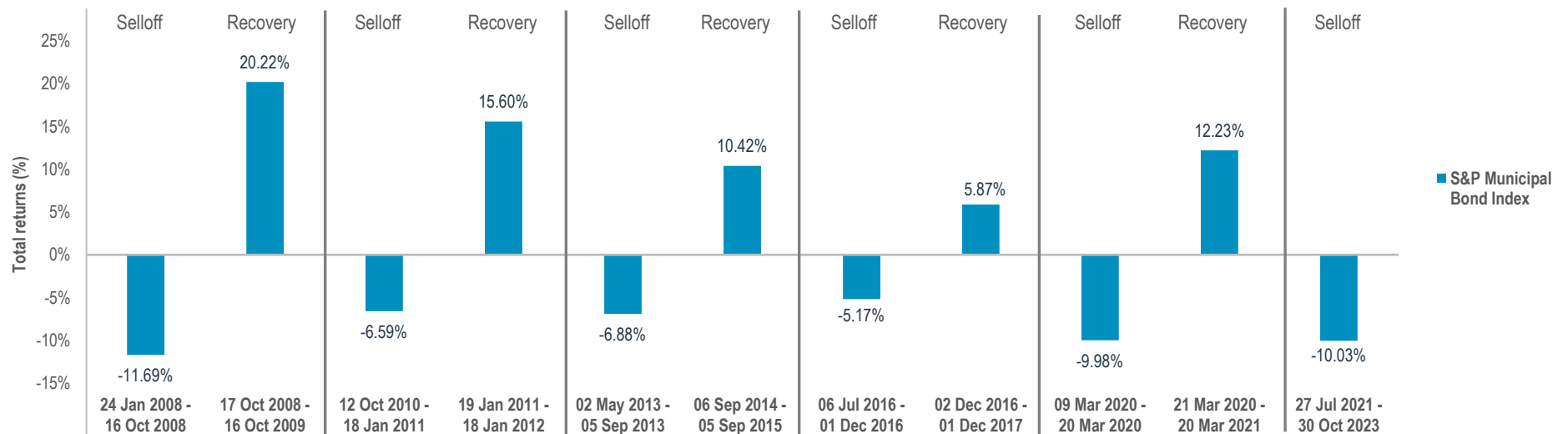
Data source: Bloomberg, Refinitiv MMD, 31 Oct 1995 – 30 Jun 2024, shown monthly. Chart shows data to the earliest period available. Performance data shown represents past performance and does not predict or guarantee future results. High yield municipal yields represented by the Bloomberg High Yield Municipal Index; AAA municipal yields represented by Municipal Market Data (MMD) yields for AAA rated 20-year bonds. High yield or lower-rated bonds and municipal bonds carry greater credit risk, and are subject to greater price volatility. Ratings shown are from S&P and are subject to change. AAA, AA, A, and BBB are investment grade ratings; BB, B, CCC/CC/C and D are below-investment grade ratings. Different benchmarks, economic periods, methodologies and market conditions will produce different results.

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Municipal market has generally bounced back within one year after major downturns

Municipal performance during selloffs and subsequent 1-year recoveries

S&P Municipal Bond Index total returns



Cumulative municipal returns were 8.18% over the past eight months, from the end of the selloff period on 31 October 2023 through 30 June 2024. 2023 returns were 5.85%.

Data source: Morningstar Direct. Data shown applies to the actual time periods noted in the table. Performance data shown represents past performance and does not predict or guarantee future results. The drawdown time periods are based on periods where the S&P Municipal Bond Index declined 5% or more. The recovery periods are the 1-year period from the trough. Data shown is based on the most recent data provided to Morningstar by asset managers, which may be modified based on Morningstar's methodology and is subject to change.

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Outlook

Opportunities

- Interest rate volatility and elevated yields are creating opportunity across various municipal strategies.
- Higher-for-longer yields are providing meaningful taxable-equivalent yields.
- Unique yield curve shape can help drive higher income.
- Municipal credit remains strong, with rating upgrades outpacing downgrades and rainy day funds at historically high levels.
- Credit selection and a willingness to own duration could help support performance.
- Demand could continue to outpace supply in 2024, providing technical support.

Challenges

- Overall municipal supply could remain constrained in 2024, and concerns about the U.S. election could alter issuance patterns.
- Uncertainty regarding the timing of Fed rate cuts is creating higher interest rate volatility for municipals.
- Investors have been cautiously returning to duration, although short-term rates remain attractive.
- Inflation continues to trend lower year over year, but a resilient economy may delay the timing of expected Fed rate cuts.
- Capital markets are leaning toward a ‘no landing’ recession scenario, but recession risks do remain.

Source: Nuveen as of 30 Jun 2024. 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. Investing involves risk, including possible loss of principal. This information should not be relied upon as investment advice or recommendations. For additional information, please refer to Risks and Important Disclosures provided at the end of this presentation.

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Taxable municipal market

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Fundamentals and technical strength continue to be a tailwind

Characteristics and performance

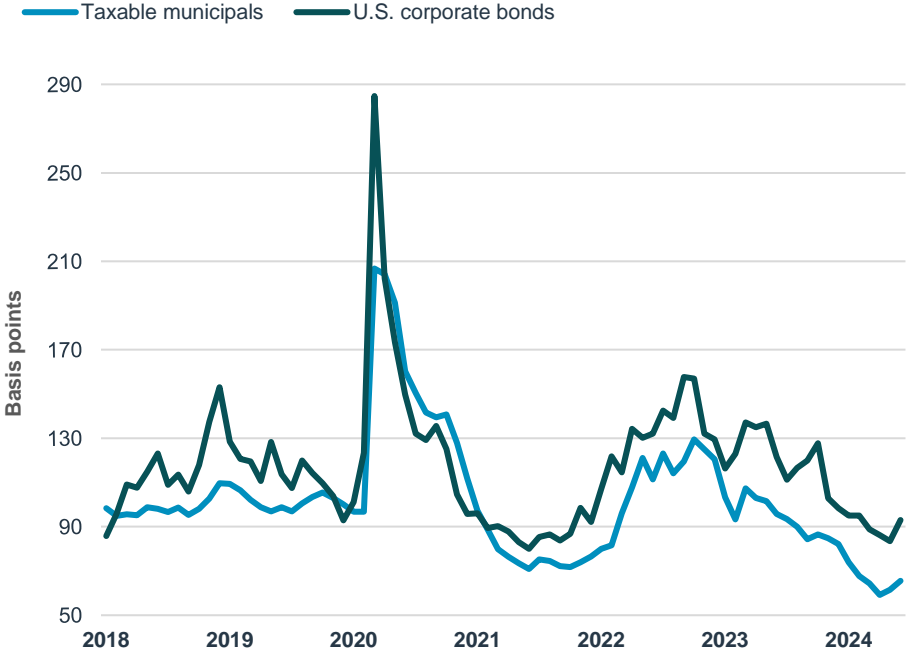
Index	Yield to worst (%)	Spread (bps)	Effective duration (years)	Returns (%)		
				June 2024	2Q 2024	2023
Taxable municipal (AA-)	5.19	66	7.60	1.05	-0.19	8.82
U.S. asset-backed securities (AA+)	5.33	56	2.57	0.67	0.98	5.54
U.S. mortgage-backed securities (AA+)	5.22	47	6.03	1.17	0.07	5.05
U.S. corporate investment grade (BBB+)	5.48	93	6.84	0.64	-0.09	8.52
U.S. aggregate bond (AA)	5.01	39	6.08	0.95	0.07	5.53
U.S. Treasury (AAA)	4.58	0	5.88	1.01	0.10	4.05
Global corporate bonds (BBB+)	5.04	103	5.90	0.30	-0.16	9.61
Global aggregate (unhedged) (A+)	3.90	41	6.48	0.14	-1.10	5.72

Data sources: Bloomberg, L.P., Bloomberg indexes, as of 30 Jun 2024. Performance data shown represents past performance and does not predict or guarantee future results. Total returns for a period of less than one year are cumulative. OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

Taxable municipals can have higher credit quality than corporates but similar spreads and yields

Taxable municipals have historically been more defensive during economic downturns.

Credit spreads



Yield



Data source: Bloomberg, L.P., 31 Jan 2018 – 30 Jun 2024, shown monthly. Spread represents option-adjusted spread (OAS). Performance data shown represents past performance and does not predict or guarantee future results. Representative indexes: taxable municipals: Bloomberg U.S. Taxable Municipal Bond Index; U.S. corporate bonds: Bloomberg U.S. Corporate Bond Index.

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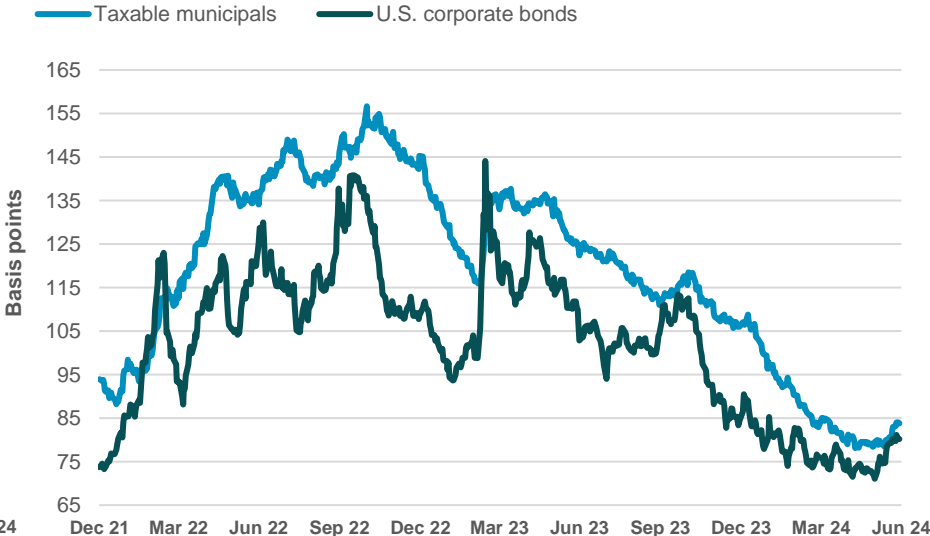
Taxable municipal credit spreads remain wider relative to corporate bonds

Municipal bonds provide financing for essential services, which can help provide insulation from economic downturns.

AA-rated spread



A-rated spread



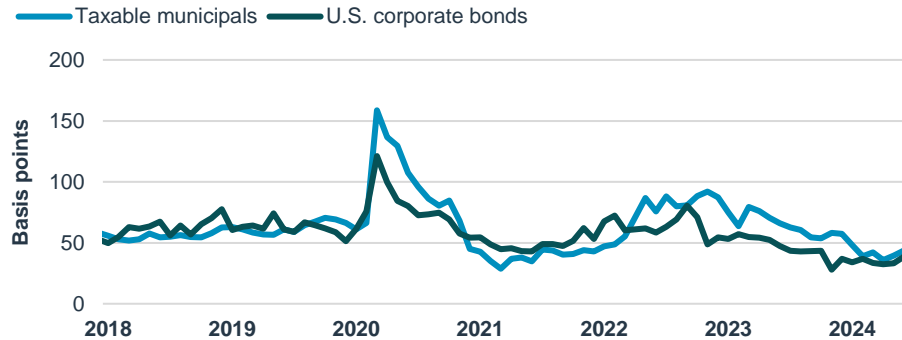
Credit spreads are narrowing but taxable municipals continue to offer an advantage over similarly rated corporate bonds.

Data source: Bloomberg, L.P., 31 Dec 2021 – 30 Jun 2024, shown daily. Spread represents option-adjusted spread (OAS). Performance data shown represents past performance and does not predict or guarantee future results. Representative indexes: taxable municipals: Bloomberg U.S. Taxable Municipal Bond Index; U.S. corporate bonds: Bloomberg U.S. Corporate Bond Index.

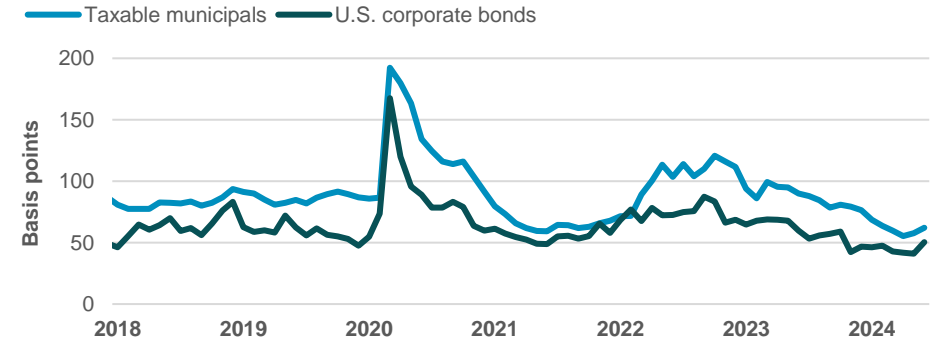
OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

Looking across the credit spectrum in taxable municipals can provide yield premium

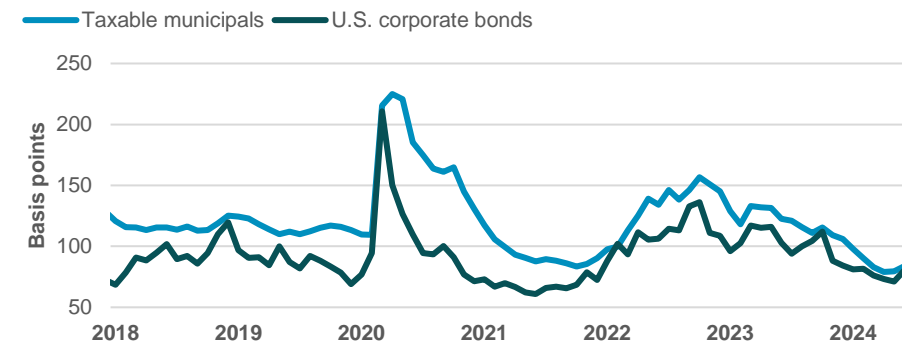
AAA-rated spread



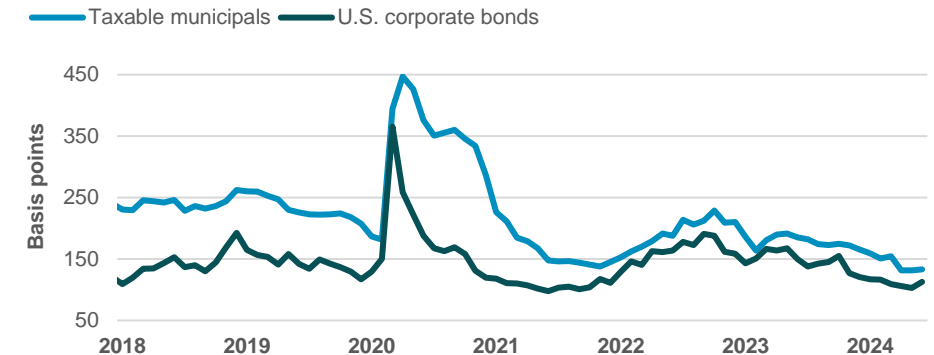
AA-rated spread



A-rated spread



BBB-rated spread



Data source: Bloomberg, L.P., 31 Jan 2018 – 30 Jun 2024, shown monthly. Spread represents option-adjusted spread (OAS). Performance data shown represents past performance and does not predict or guarantee future results. Representative indexes: taxable municipals: Bloomberg U.S. Taxable Municipal Bond Index; U.S. corporate bonds: Bloomberg U.S. Corporate Bond Index.

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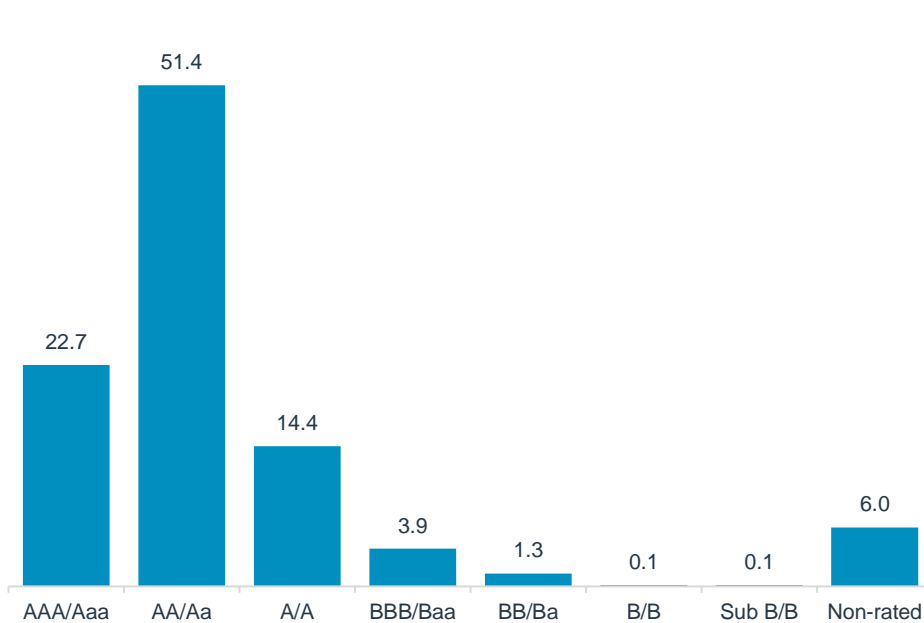
Appendix

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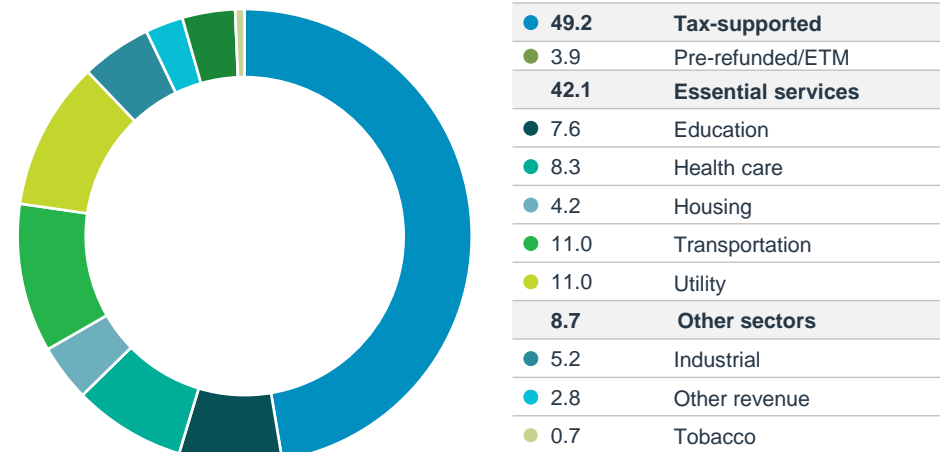
The market is dominated by high quality and essential service sectors

Municipal bonds generally feature high credit qualities and are backed by tax revenues or linked to essential services.

Municipal market credit quality breakdown (%)



Municipal market sector breakdown (%)



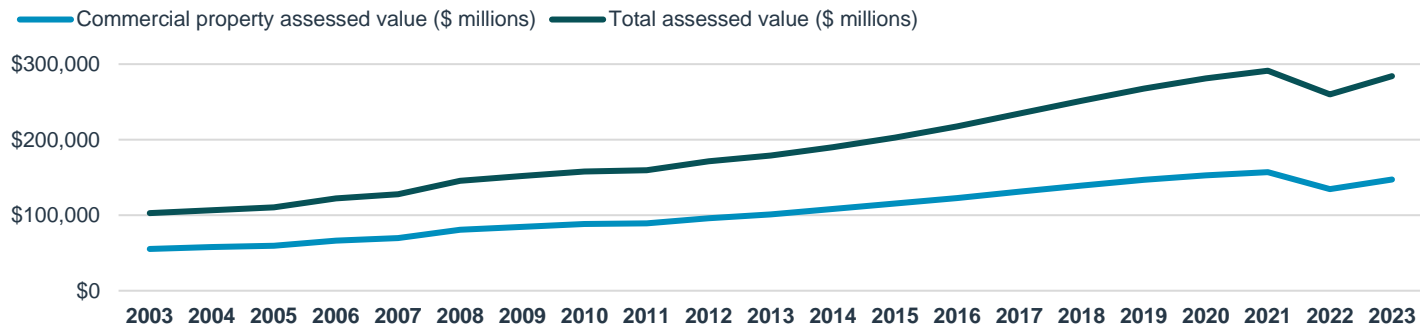
Data source: Standard & Poor's for the S&P Municipal Bond Index, 30 Jun 2024. Ratings shown are the highest rating given by one of the following national rating agencies: Standard & Poor's (S&P), Moody's Investors Service, Inc. (Moody's) or Fitch, Inc. (Fitch). Credit ratings are subject to change. Aaa, Aa, A and Baa are investment grade ratings; Ba, B and Caa/Ca/C are below investment grade ratings. Certain bonds backed by U.S. government or agency securities are regarded as having an implied rating equal to the rating of such securities. Holdings designated N/R are not rated by these national rating agencies. High yield or lower-rated bonds and municipal bonds carry greater credit risk and are subject to greater price volatility. Totals may not add up to 100% due to rounding.

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Revenue collections can remain resilient through economic downturns

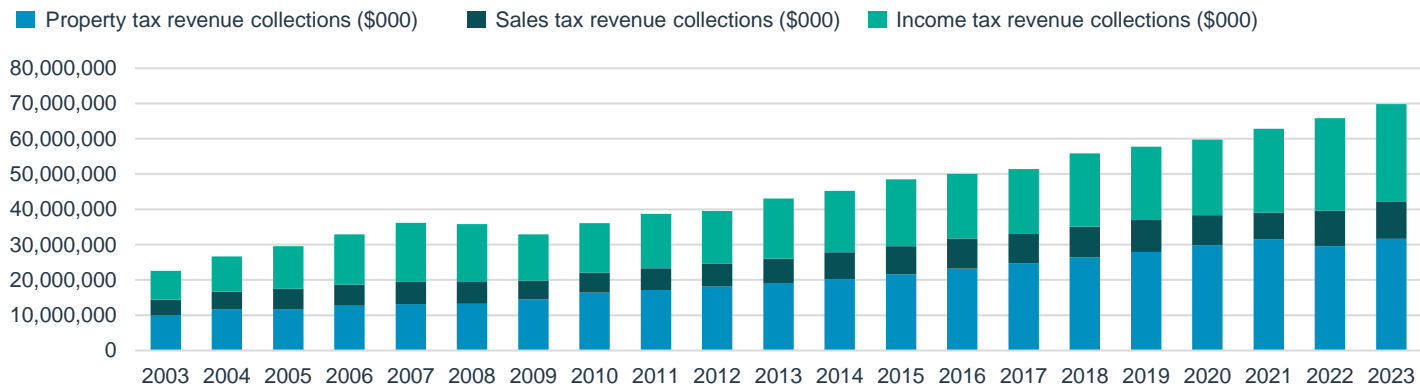
New York City case studies show that many factors contribute to financial health.

Commercial property assessed value vs. total assessed value



Assessed valuations can fluctuate over time.

Tax revenues are diverse



Cities can increase taxes to provide stability.

Data source: The City of New York, New York, *Annual Comprehensive Financial Report of the Comptroller for the fiscal years ended June 30, 2023 and 2022*, October 26, 2023.

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

Key factors in municipal bond returns

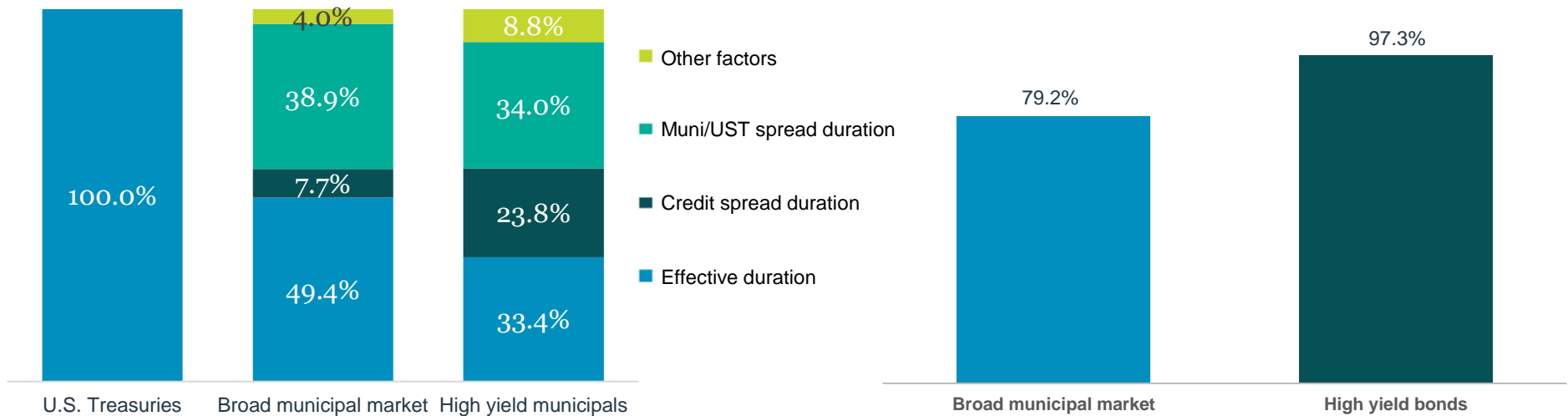
Municipal bonds react differently to market conditions when compared to U.S. Treasuries, while income drives overall returns.

Drivers of risk¹

Municipal bonds tend to be influenced by duration and spreads, whereas high yield municipals are primarily driven by credit spreads

Income as a portion of total return (%)

Income has dominated total return over time and can help offset any price declines due to rising rates



¹ Risk defined as volatility of returns. Data source: Nuveen monthly returns 01 Jul 2009 – 30 Jun 2024. Broad municipal market defined as S&P Municipal Bond Index, and high yield market defined as S&P Municipal Yield TR Index. It is not possible to invest in an index. Other factors can be attributed to credit selection and individual security selection. **Past performance is no guarantee of future results.**

Data source: Bloomberg, L.P. As of 30 Jun 2024.

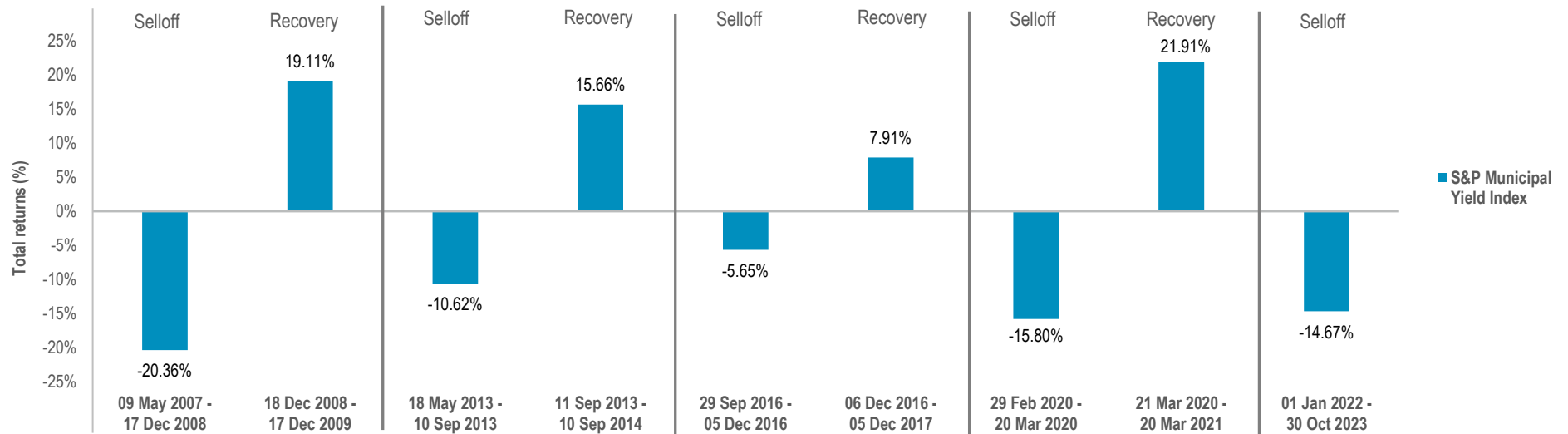
Chart shows the percent of annualized total return derived from coupon return (as opposed to price appreciation) since index inception. Investment grade bonds are represented by the S&P Municipal Bond Index, which has an inception date of 01 Jan 1976; returns from 30 Jun 2009 – 30 Jun 2024. High yield bonds are represented by the S&P Municipal Yield Index, which has an inception date of 31 Jan 1993; returns from 30 Jun 2009 – 30 Jun 2024. The index return presented is for illustration purposes only and does not represent or predict performance of any Nuveen product. It is not possible to invest directly in an index. **Performance data shown represents past performance and does not predict or guarantee future results.**

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High yield municipals have performed well within one year after significant declines

High yield municipal performance during selloffs and subsequent 1-year recoveries

S&P Municipal Yield Index total returns



High yield municipal returns have been positive for the past eight months, with a cumulative return of 14.67% from 31 October 2023 through 30 June 2024. 2023 returns were 8.78%.

Data source: Morningstar Direct. Data shown applies to the actual time periods noted in the table. Performance data shown represents past performance and does not predict or guarantee future results. The drawdown time periods are based on periods where the S&P Municipal Yield Index declined 5% or more. The recovery periods are the 1-year period from the trough. Data shown is based on the most recent data provided to Morningstar by asset managers, which may be modified based on Morningstar's methodology and is subject to change.

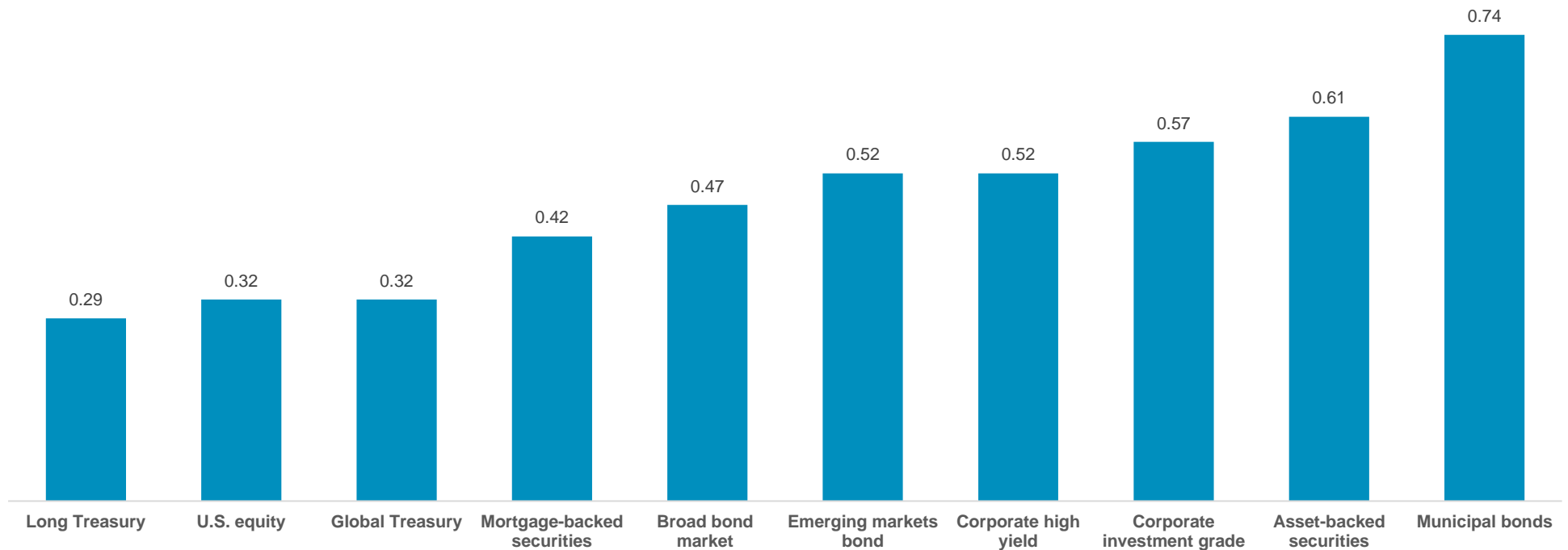
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High yield municipal bonds have a low correlation to other asset classes

High yield municipal bonds tend to be less cyclical than corporate bonds due to the essential nature of the projects being financed.

Correlation to Bloomberg High Yield Municipal Bond Index

01 Jul 1999 – 30 Jun 2024



Data source: Morningstar Direct; 01 Jul 1999 – 30 Jun 2024. Performance data shown represents past performance and does not predict or guarantee future results. Representative indexes: Asset-backed securities: Bloomberg Asset-Backed Securities Index; Broad bond market: Bloomberg U.S. Aggregate Bond Index; Corporate high yield: Bloomberg U.S. Corporate High Yield Index; Corporate investment grade: Bloomberg U.S. Corporate Investment Grade Index; Emerging markets bond: Bloomberg Emerging Market Index; Global Treasury: Bloomberg Global Ex U.S. Treasury Bond Index; Long Treasury: Bloomberg U.S. Treasury Long Index; Mortgage-backed securities: Bloomberg MBS (fixed rate) Index; Municipal bonds: Bloomberg U.S. Municipal Bond Index; U.S. equity: S&P 500 Index.

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Municipal bond default rates have fared better than for similarly rated corporate bonds

A-rated municipal default rates are lower than for Aaa corporate bonds.

Moody's average cumulative default rates of municipals vs. global corporates, 1970-2022¹

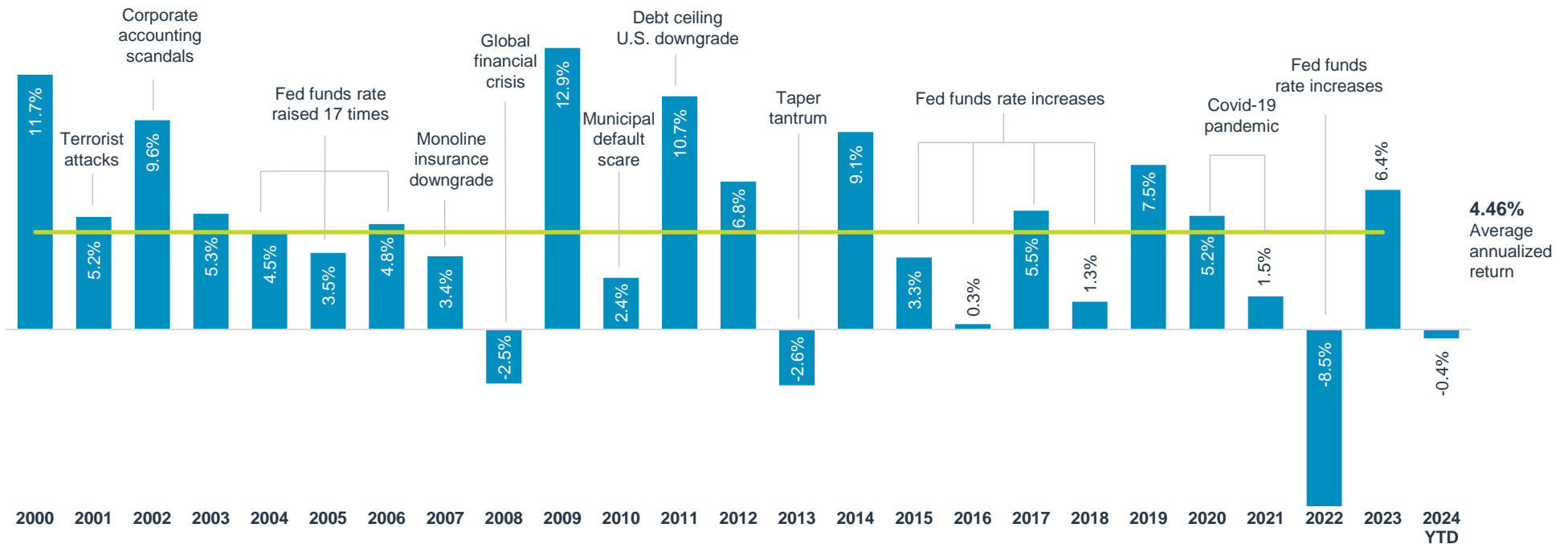
Rating	YEAR 5			YEAR 10		
	Corporate	Municipal	Difference	Corporate	Municipal	Difference
Aaa	0.08%	0.00%	0.08%	0.34%	0.00%	0.34%
Aa	0.28%	0.01%	0.27%	0.75%	0.02%	0.73%
A	0.66%	0.03%	0.63%	1.90%	0.10%	1.81%
Baa	1.47%	0.44%	1.03%	3.64%	1.05%	2.60%
Ba	7.94%	1.83%	6.10%	15.82%	3.31%	12.51%
B	20.49%	11.74%	8.75%	34.66%	16.65%	18.01%
Caa-C	32.31%	19.01%	13.30%	47.92%	23.58%	24.33%

¹ Data source: Moody's Investors Service, *U.S. Municipal Bond Defaults and Recoveries, 1970 – 2022*, 19 Jul 2023, with data as of 31 Dec 2022; updated annually. Performance data shown represents past performance and does not predict or guarantee future results. The universe for the study represents approximately 12,500 fundamental U.S. public finance ratings from Moody's.

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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 -0.40% through June. Performance could emerge as the year progresses.

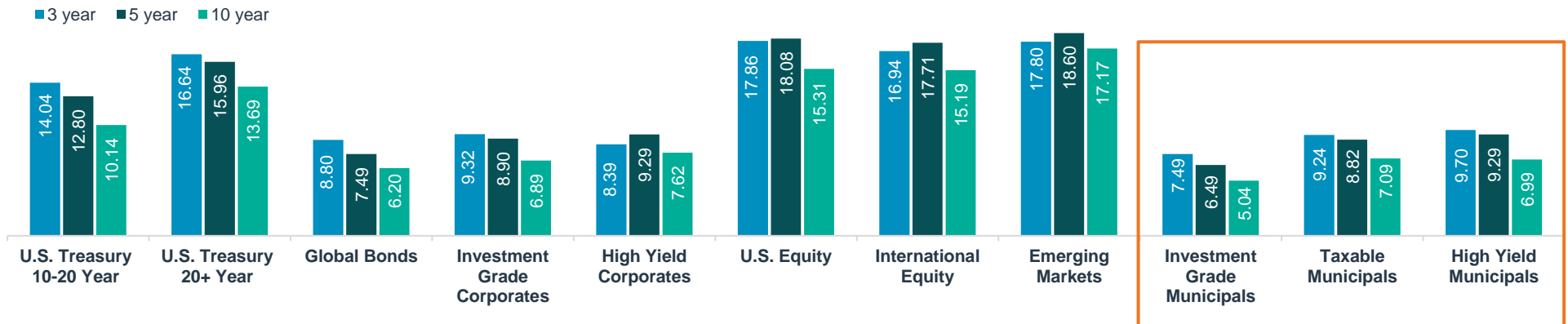
Data source: Bloomberg, L.P., 30 Jun 2024. The average annualized return shown is for the period 01 Jan 2000 – 31 Dec 2023. Performance data shown represents past performance and does not predict or guarantee future results. All investments carry a certain degree of risk, including possible loss of principal, 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.

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Municipals have exhibited lower volatility with strong risk-adjusted returns

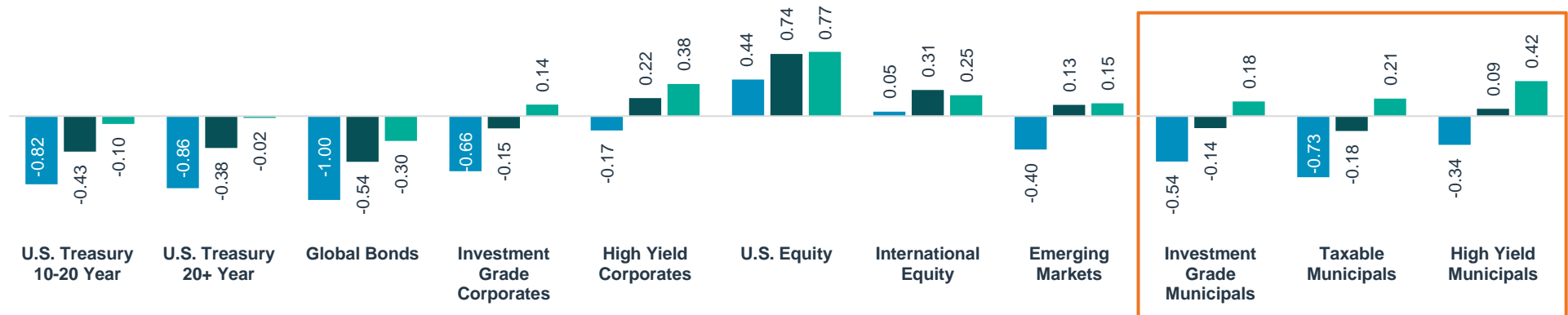
Standard deviation

Municipals have exhibited low volatility among asset classes.



Sharpe ratio

Municipals have been relatively attractive on a risk-adjusted basis.

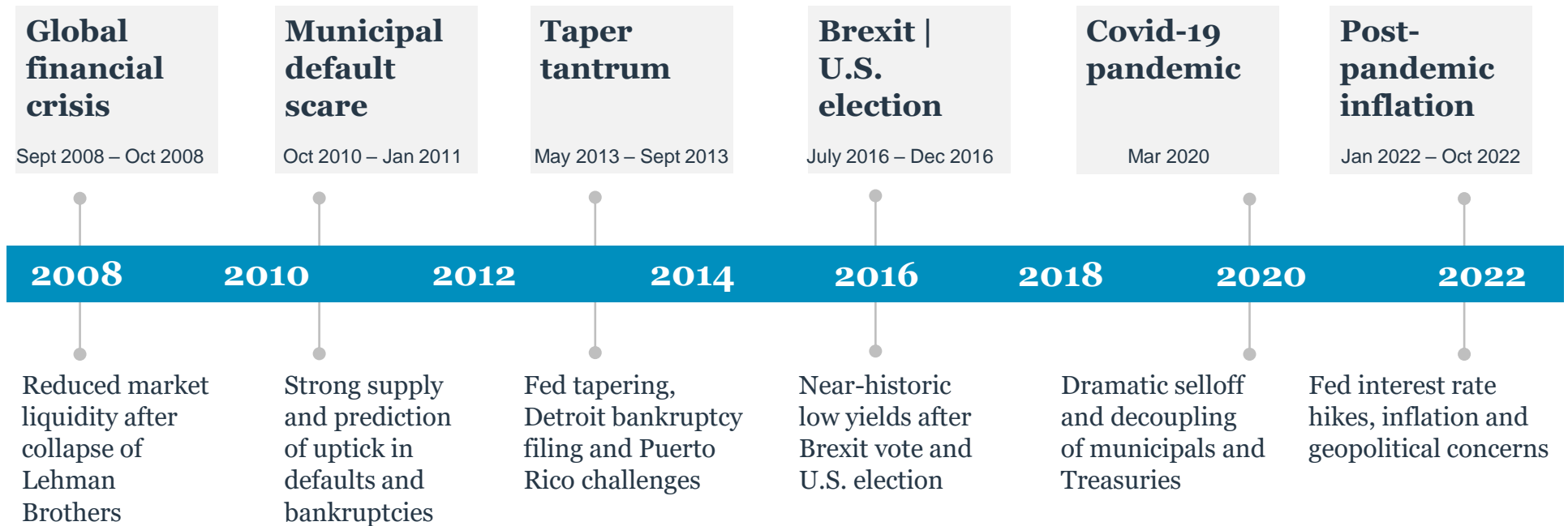


Data source: Morningstar, period ending 30 Jun 2024. Performance data shown represents past performance and does not predict or guarantee future results. Representative Indexes: Treasuries: Bloomberg U.S. 10-20 Year Treasury Index and the Bloomberg U.S. 20+ Year Treasury Index; Global bonds: Bloomberg Global Aggregate Unhedged Index; Investment grade corporates: Bloomberg US Corporate Bond Index; High yield corporates: Bloomberg High Yield Corporate Index; U.S. equity: S&P 500 Index; International equity: MSCI EAFE Index; Emerging markets: MSCI Emerging Markets Index; Investment grade municipals: Bloomberg Municipal Bond Index; Taxable municipals: Bloomberg Taxable Municipal Bond Index; High yield municipals: S&P Municipal Yield Index.

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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.

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