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# Municipal Bonds in Focus

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September 30, 2024



# Market Update

## Key Takeaways

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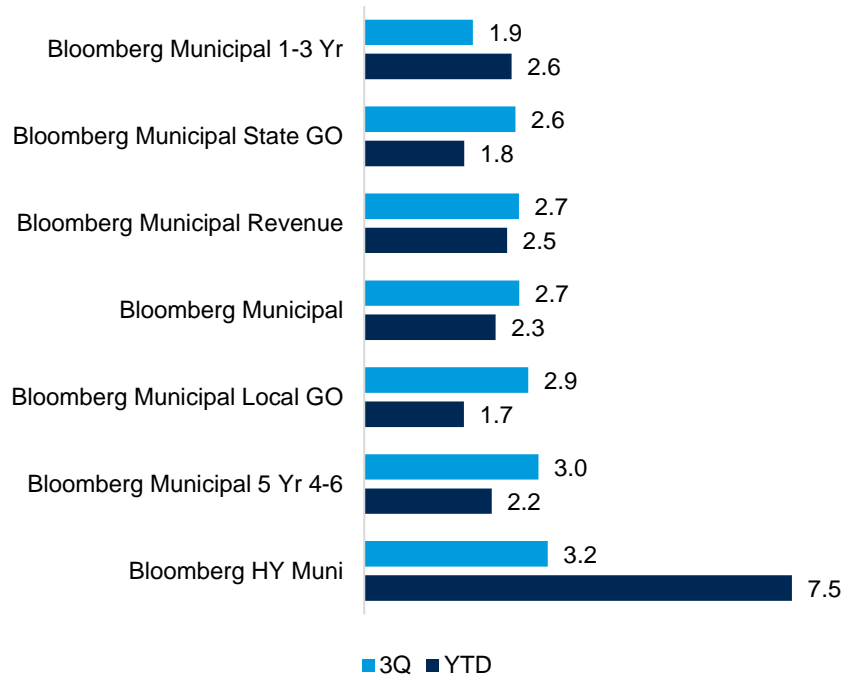
- **Performance:** After a slow start to the year, investment grade muni returns have picked up during Q3
- **Technicals:** 2022 headwind – 2023 neutral – 2024 inflows returning
- **Curve:** The yield curve remains inverted, strengthening the case for dynamic allocations and active management
- **Valuations:** Yields remain attractive; relative value to treasuries is reasonable
- **Fundamentals:** Remain well positioned given the increase in reserves over the past four years, resulting in tightening spreads

# Performance

- Falling rates were a tailwind to municipal bonds broadly
- High yield outperformed on longer duration exposure and tightening spread

- Current tax equivalent yields (TEY) may provide an attractive entry point
- Intermediate duration may provide modest tailwinds in a falling rate environment

## Performance



Source: Morningstar Direct. As of September 30, 2024.

Index	Yield To Worst	TEY	Duration	TEY/D
Bbg Municipal (1-3 Y)	2.7	4.3	1.7	2.5
Bbg Municipal Bond 5 Year	2.8	4.4	3.6	1.2
Bbg Municipal Bond	3.3	5.3	5.7	0.9
Bbg Municipal Revenue Bond	3.4	5.4	5.9	0.9
Bbg Municipal Local GO	3.3	5.2	6.0	0.9
Bbg Municipal State GO	2.9	4.6	4.6	1.0
Bbg Municipal Bond High Yield	5.2	8.3	8.9	0.9

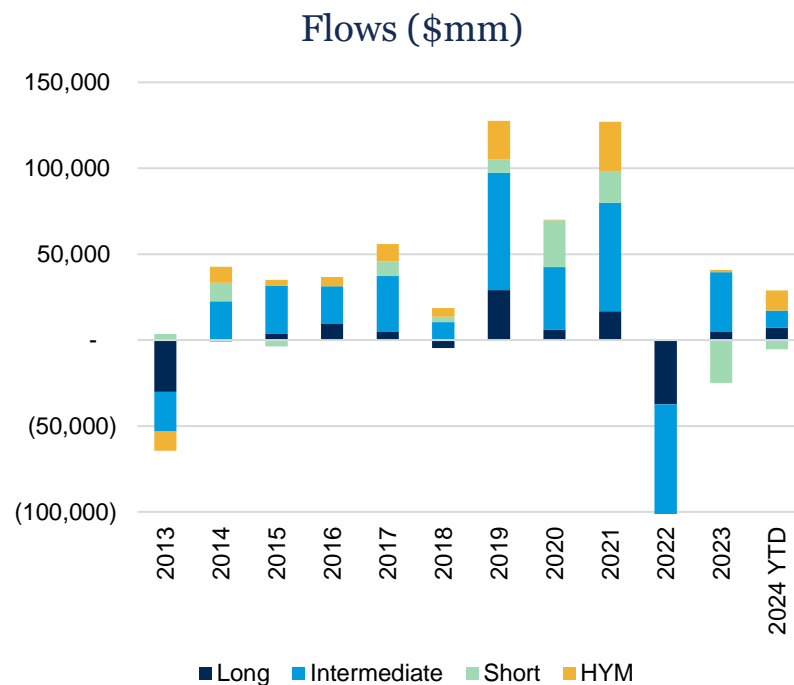
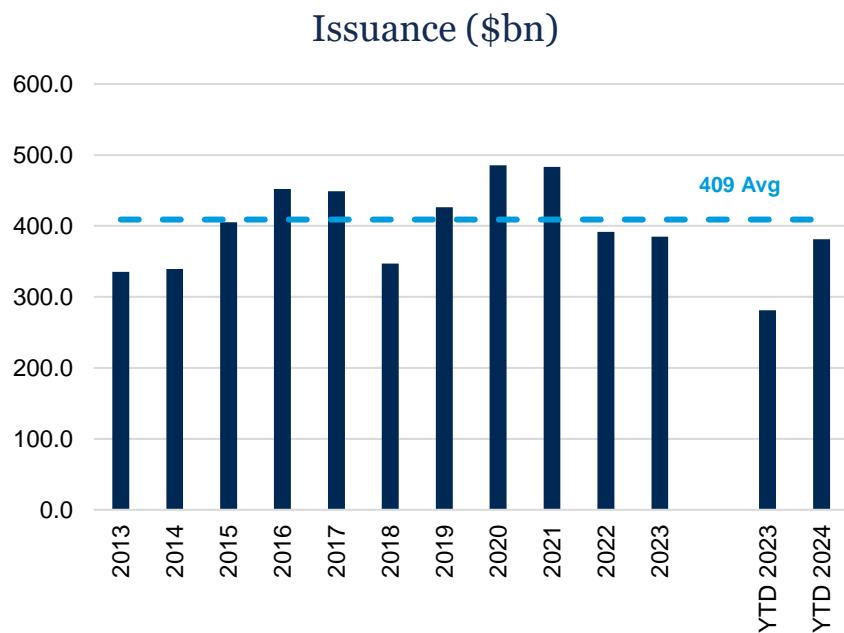
TEY ("Tax Equivalent Yield") is calculated as:  $\text{Yield to Worst} / (1 - \text{Tax Bracket})$  and is using a 37% tax bracket

Source: FactSet. As of September 30, 2024.

# Technicals

- Seven of the last nine months have had above average issuance
- Increased issuance may be driven by accelerated deal calendars due to the election
- Supply has decidedly returned in 2024

- There is still a lot of demand left to come back to municipal markets; future catalysts (rate cuts) and technicals are supportive to prices
- 2022 outflows have begun returning with investor appetite favoring intermediate assets



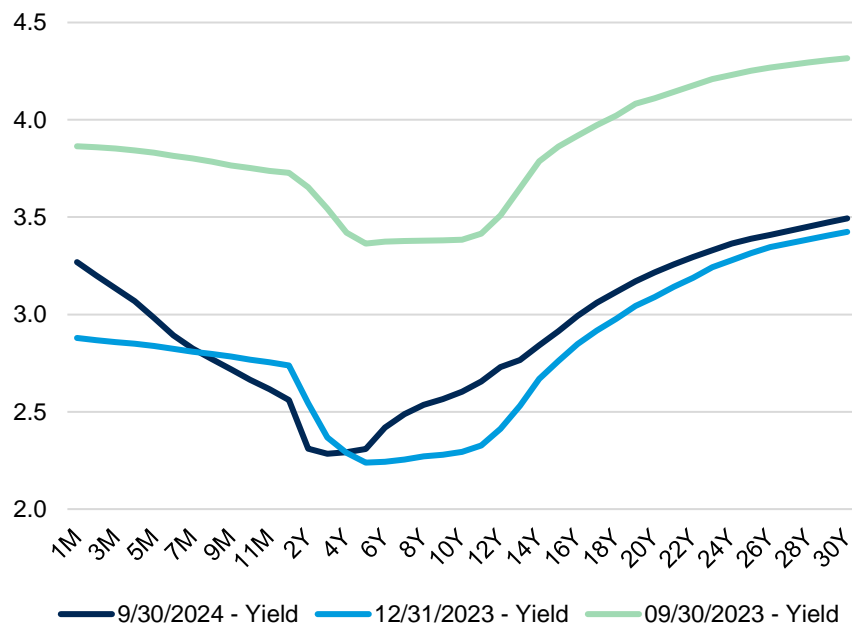
Source: SIFMA. As of September 30, 2024.

Source: Morningstar. As of September 30, 2024.

# Yields

- The intermediate portion of the yield curve has steepened which may benefit asset allocations
- Opportunity remains on wings of the curve and can be captured through dynamic muni allocations

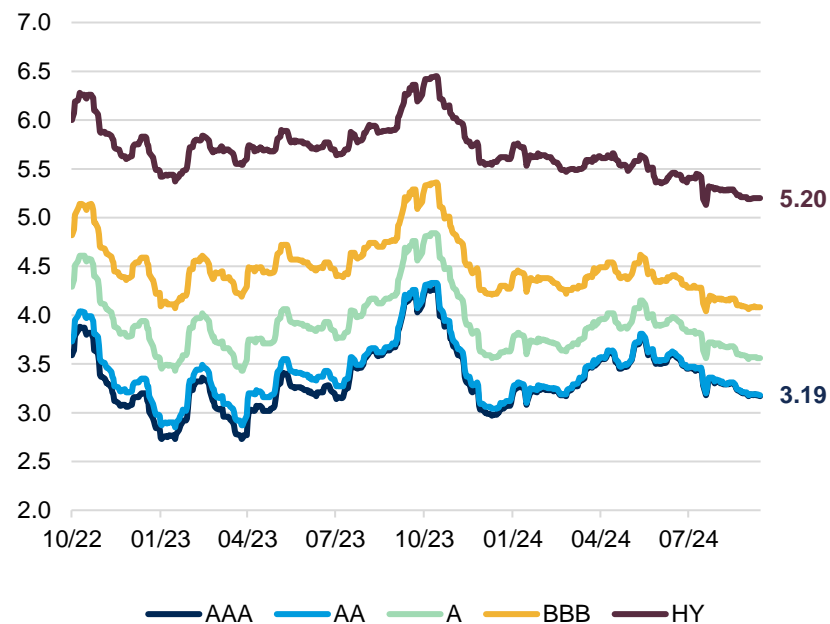
AAA Curve



Source: FactSet. As of September 30, 2024.

- Yields remain at historically attractive levels
- Attractive dispersion between investment grade and high yield strengthens the case to own the asset class

Yields



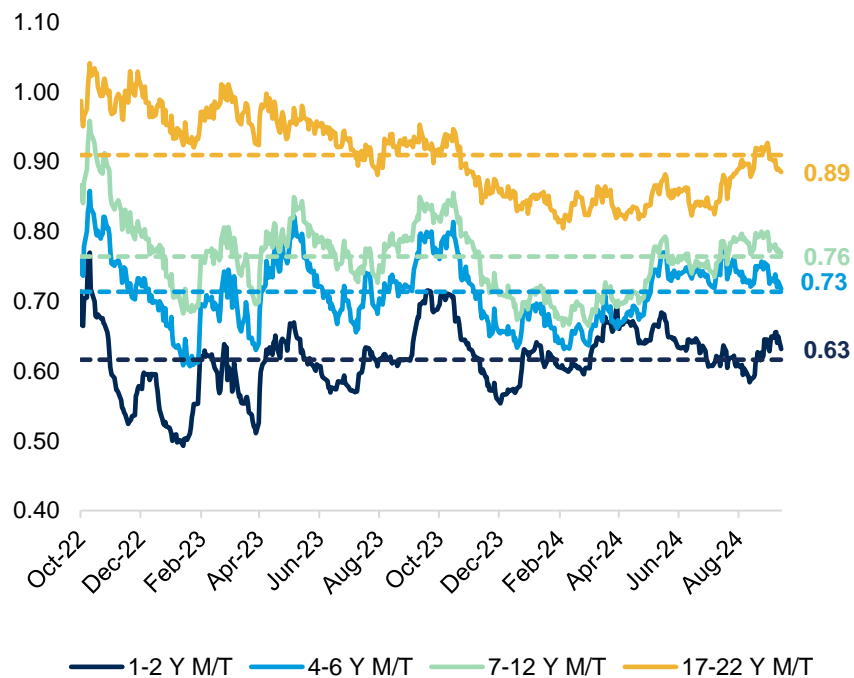
Source: FactSet. As of September 30, 2024.

# Valuation

- Valuations remained flat during 3Q
- Intermediate duration (4-6) M/T ratio is above the two-year average

- Investment grade bonds are trading cheaper relative to history

### Muni / Treasury Ratios



Source: FactSet. As of September 30, 2024.

### Prices



Source: FactSet. As of September 30, 2024.



# Fundamentals

- Spreads have tightened below first standard deviation levels



Source: FactSet. As of September 30, 2024.

Median State Reserves as  
percentage of budget

15%<sup>1</sup>

Moody's Up/Downgrade  
Ratio

68 / 32%<sup>2</sup>

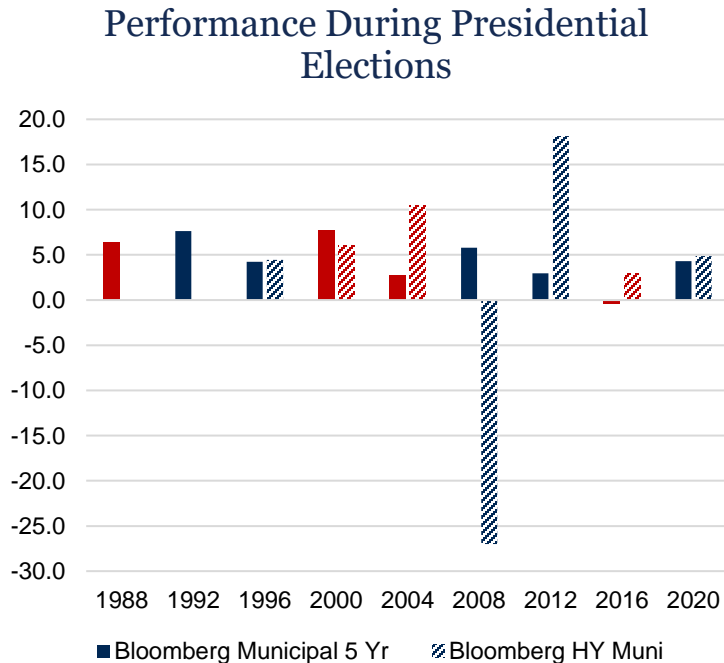
<sup>1</sup>MFS, National association of State Budget Officers, Fiscal Survey of the States (Spring 2024). Data shown is annual from 31 December 2008 through 31 December 2023. Figures for fiscal 2024 are preliminary estimates. Figures for fiscal 2025 are budgeted.

<sup>2</sup>MFS, Moody's Investor Services, J.P. Morgan. Data as of 30 June 2024.

# Elections

- Munis have generally posted positive absolute returns during election years
- Average return during non-election years was 2.9%

- Average returns during, and immediately following, election years have been positive regardless of political party outcomes
- This suggests elections may create noise rather than a market event



Average Intermediate Return During an Election Year

4.6%



Average Intermediate Return Following an Election Year

4.8%

Source: Electoral Colleges, Wikipedia, 1988 - 2024. Red indicates Republican winner, Blue indicates Democratic winner.

Source: Morningstar.



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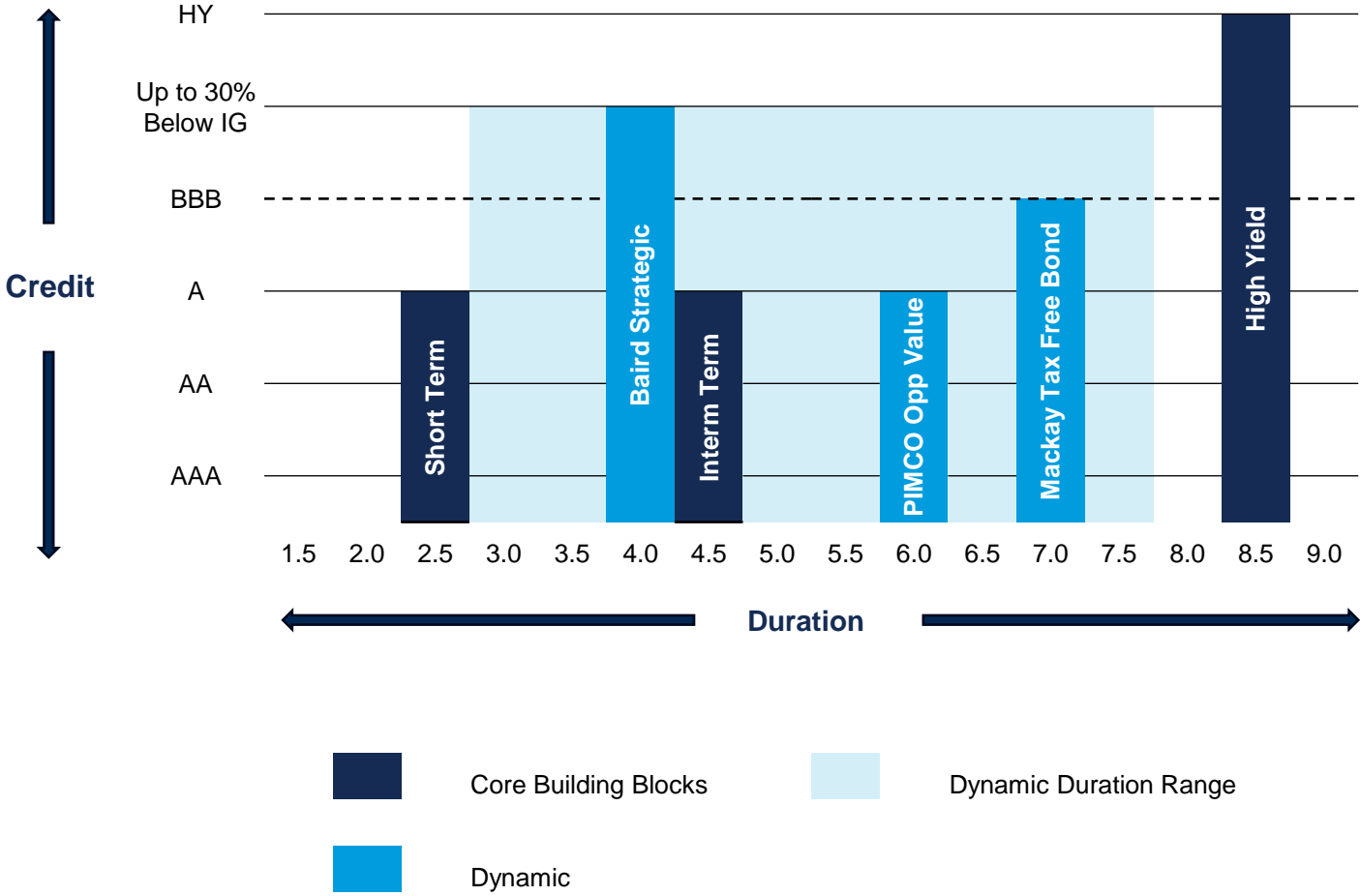
# Manager Update

## Key Takeaways

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- Belle Haven continues to provide consistent results. Breckinridge has lagged
- Spread and barbell biased managers, PNC and CWH respectively, have benefitted from the current environment
- Dynamic allocations have been additive. Baird Strategic Bond has outperformed and delivered strong absolute returns YTD
- Positive developments with PREPA bonds have helped MacKay Credit Opps returns rebound

# Conceptual Platform



For illustrative purposes only.

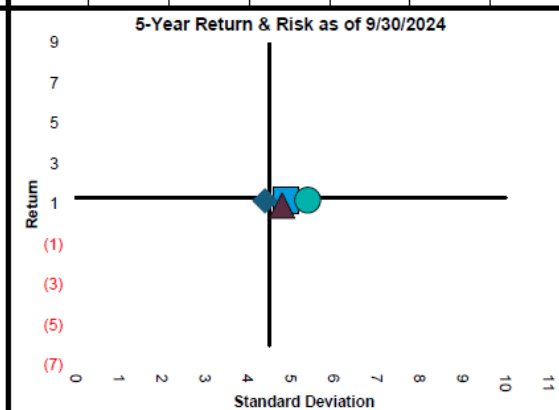
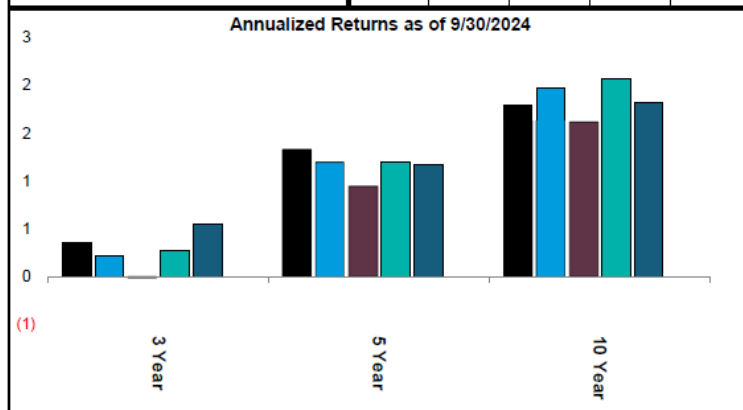
**Municipal Bond**

<b>Fund / Manager</b>	<b>Belle Haven Ladder PLUS</b>	<b>Breckinridge Interm Tax-Efficient Bd</b>	<b>PNC Interm Muni Bd</b>	<b>Federated Hermes CWHenderson Int Mun SMA</b>
<b>Status</b>	Maintain	Maintain	Maintain	Maintain
<b>Manager (Tenure in Years)</b>	Team (18)	Team (22.2)	Team (23.7)	Team (33.6)
<b>Net Assets (\$ Millions)</b>	\$2,756	\$8,349	\$2,836	\$2,868
<b>Firm</b>	- Belle Haven Investments is a privately held fixed income manager based in Rye, New York. The firm, founded in 1991, began its focus on asset management of taxable and municipal portfolios in 2003.	- Breckinridge is a Boston, MA based fixed income asset manager. The firm is employee owned and specializes in investment grade fixed income investing across the taxable and municipal landscape.	- PNC Capital Advisors is a subsidiary of PNC Financial Services Group, Inc. (PNC), a publicly traded entity. PNC focuses on fixed income management and offers a variety of liquidity, broad market, and custom solutions.	- Founded in 1990, C.W. Henderson is a privately held, Chicago-based asset manager. The firm has a singular focus on municipal bonds, offering intermediate and short duration municipal bond strategies.
<b>Team</b>	- Matt Dalton, CEO & CIO, leads the investment team. He is supported by co-portfolio managers Max Christiana, Cara Grealy, and Matt Thomas. The portfolio managers are supported by a team of analysts and traders. - There is a software engineer team that codes all of the proprietary systems.	- Matt Buscone and Jeff Glenn serve as Co-CIOs at Breckinridge. Strategies at Breckinridge are managed by a team of portfolio managers who are supported by a team of corporate and municipal research analysts.	- Adam Mackey, Senior Portfolio Manager and Head of Municipal Fixed Income, oversees the investment team, which is organized across quantitative research, credit research, and portfolio management and trading. Mr. Mackey is supported by Bill Bonawitz, Director of Research; Robert Howells, Portfolio Manager; and a team of credit and quantitative analysts.	- The investment team is led by Craig Henderson, CEO and Matt Andrews, CIO. Portfolio managers David Beck, Monika Bhasin and Fran Michl round out the portfolio management team and have day-to-day responsibility for the strategies. They are supported by a team of credit analysts.
<b>Philosophy/Process</b>	- The team focuses on execution efficiency, a factor that can be controlled, rather than focusing on managing to risk factors such as interest rates. - The firm owns its broker dealer, giving it an advantage over peers by having an additional avenue to transact with less informed, more retail driven investors. -The firm's proprietary trade allocation, portfolio construction and trade execution systems drive buy/sell decisions. The input to these systems is grounded in fundamental credit analysis. - Analysis focuses on an issuer's willingness to pay, sources of repayment (general obligation, revenue backed, appropriation), legal commitment to pay, ability to pay, transparency and political climate.	- Breckinridge is focused on preserving capital and providing reliable income. Their investment approach seeks to add value through efficient trading, bottom-up credit research, and proactive portfolio management. - The process begins with the investment committee's outlook, strategy, and portfolio targets which serve as a framework for constructing the portfolio. - Analysts conduct bottom-up due diligence and internally rate all bonds in which the firm invests based on the credit worthiness of the issuer. - Regardless of mandate type, Breckinridge takes ESG factors into account during analysis as they believe these factors have a strong correlation in whether a company will default on its debt.	- The team takes a key rate, duration neutral approach and instead focuses on evaluating credit risk and uncovering opportunities within core and non-core areas of the market. - Core securities include high quality, large general obligation and essential service revenue bonds and serves to provide market exposure and liquidity while non-core securities carry more idiosyncratic credit and liquidity risk; this bucket of securities serves as the alpha driver in the portfolio. - Sector pods create sector and regional specific themes to direct which new issue deals they want to spend time on. Analysts will then conduct full credit reviews on opportunities, ranking deals within each sector based on a relative value framework.	- The team looks to build high quality, investment grade portfolios that will maintain a yield advantage relative to traditional laddered portfolios. - The firm is active in tax loss harvesting throughout the entire year rather than in only November and December like many peers. - The portfolio aims to capitalize on technical arbitrage opportunities across four strategies: high coupon/short call, money market plus, high coupon with longer maturities, and premium 10-15-year securities with 10-year calls. The team is seeking highly liquid and high credit quality securities that fit the structural and maturity profile of each individual bucket.
<b>Portfolio Construction</b>	The Ladder strategy utilizes a traditional simple laddered structure to portfolio construction. The strategy will typically invest in securities with maturities between 1-12 years but can be customized by the client. This results in a duration profile of approximately 4-6 years. State exposure is usually capped at 30% and sectors typically limited to 50%.	- The intermediate term strategy typically has duration within half a year of the benchmark. The portfolio has a high-quality bias given the firm's focus on capital preservation. The strategy may invest in taxable municipals if the team believes the after tax return is attractive relative to a tax-exempt issue. Separate accounts can accommodate customized guidelines if needed.	- The team allocates to what they deem as core and non-core securities. Core securities serve as liquidity and to gain exposure to key rate positions while non-core issues aim to drive alpha. - The team matches the key rate durations of the underlying benchmark, while having a diversified exposure to various municipal bond sectors and regions. There are no stated state exposure limits and obligors are generally limited to 10%.	- The team employs a barbell structure along the yield curve when building portfolios and has a portion of the portfolio invested in securities with a duration of less than one year. Duration of the portfolio typically ranges from 3-5 years. Portfolios typically have sector exposures limited to 25% and single state exposures limited to 60% if there is a tax benefit, 35% if there is not.
<b>Management Fee</b>	0.20	0.13	0.20	0.23
<b>Redemption Fee</b>	N.A.	N.A.	N.A.	N.A.

## Municipal Bond Return, Standard Deviation and Peer Group Comparisons

9/30/2024

Manager or Index	Annual Returns (%) as of 9/30/2024					Calendar Year Returns (%)							Volatility (%) as of 9/30/2024				
	1 Year	3 Year	5 Year	7 Year	10 Year	2024 YTD	2023	2022	2021	2020	2019	2018	1 Year	3 Year	5 Year	7 Year	10 Year
Bloomberg Municipal Bond: 5 Year (4-6)	7.6	0.4	1.3	1.7	1.8	2.2	4.3	(5.3)	0.3	4.3	5.4	1.7	4.4	5.2	4.5	4.0	3.6
Belle Haven Ladder PLUS	7.6	0.2	1.2	1.8	2.0	1.9	4.2	(5.5)	0.4	4.8	5.8	1.6	5.0	5.7	4.9	4.3	3.8
Breckinridge Interm Tax-Efficient Bd	7.6	(0.0)	0.9	1.5	1.6	1.1	4.4	(5.4)	(0.1)	4.3	5.4	1.3	5.5	5.8	4.8	4.2	3.8
PNC Interm Muni Bd	8.4	0.3	1.2	1.9	2.1	1.7	5.5	(6.4)	0.2	4.9	6.7	1.1	5.6	6.3	5.4	4.8	4.4
Federated Hermes CWHenderson Int Mun SMA	7.3	0.5	1.2	1.7	1.8	1.5	4.8	(4.9)	0.2	4.2	5.3	1.1	4.6	5.1	4.4	3.8	3.4



■ / + Index (Bloomberg Municipal Bond: 5 Year (4-6))

- Belle Haven Ladder PLUS
- ▲ Breckinridge Interm Tax-Efficient Bd
- PNC Interm Muni Bd
- ◆ Federated Hermes CWHenderson Int Mun SMA

### Differentiators

Batting Average <sup>^</sup>	Loss Protection (5 Yrs)
1) Belle (72%)	1) Federated (97%)
2) Federated (67%)	2) Belle (109%)
3) PNC (67%)	3) Breckinridge (110%)
4) Breckinridge (12%)	4) PNC (124%)

Manager or Index	Peer Group Rankings as of 9/30/2024					Calendar Year Peer Group Rank						
	1 Year	3 Year	5 Year	7 Year	10 Year	2024 YTD	2023	2022	2021	2020	2019	2018
Bloomberg Municipal Bond: 5 Year (4-6)	92	35	45	71	75	77	92	4	86	56	91	7
Belle Haven Ladder PLUS	91	47	59	64	61	90	93	6	85	32	85	8
Breckinridge Interm Tax-Efficient Bd	92	65	75	83	84	100	92	5	96	55	91	21
PNC Interm Muni Bd	84	42	58	57	53	94	63	16	88	26	53	30
Federated Hermes CWHenderson Int Mun SMA	95	24	61	71	72	96	85	3	88	65	92	29

High Alpha (5 Yrs)	Low-to-High Beta (5 Yrs)
1) PNC (0.1)	1) Federated (0.94)
2) Belle (-0.1)	2) Breckinridge (1.06)
3) Federated (-0.2)	3) Belle (1.07)
4) Breckinridge (-0.3)	4) PNC (1.19)

Peer Group Range	Peer Group Spreads as of 9/30/2024					Calendar Year Peer Group Spreads						
	1 Year	3 Year	5 Year	7 Year	10 Year	2024 YTD	2023	2022	2021	2020	2019	2018
10th Percentile	11.2	0.8	1.8	2.4	2.7	4.0	6.8	(6.1)	2.8	5.7	8.0	1.5
25th Percentile	10.2	0.5	1.6	2.2	2.4	3.3	6.2	(6.9)	2.1	4.9	7.5	1.2
50th Percentile	9.4	0.2	1.3	2.0	2.1	2.9	5.7	(7.9)	1.3	4.4	6.8	0.9
75th Percentile	8.6	(0.2)	0.9	1.6	1.8	2.3	5.2	(9.1)	0.8	4.0	6.3	0.6
90th Percentile	7.7	(0.6)	0.6	1.3	1.5	1.8	4.5	(10.3)	0.1	3.2	5.5	0.1
Top/Bottom Quartile spread	+1.6	+0.7	+0.6	+0.6	+0.6	+1.0	+1.0	+2.2	+1.3	+1.0	+1.2	+0.6

Low Vol (5 Yrs)	Low-to-High Expense
1) Federated (4.4)	1) Breckinridge (0.13)
2) Breckinridge (4.8)	2) Belle (0.20)
3) Belle (4.9)	3) PNC (0.20)
4) PNC (5.4)	4) Federated (0.23)

<sup>^</sup>The Batting Average measures the frequency of rolling 3-year period outperformance from the lesser of 10 years or each fund's inception date.



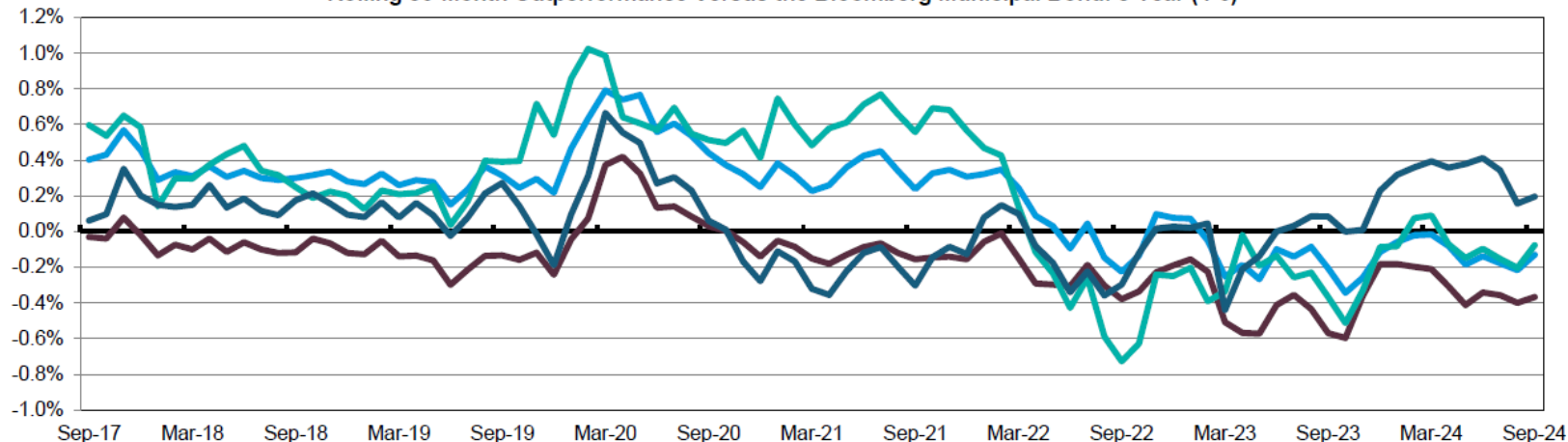
## Municipal Bond MPT and Other Quantitative Risk and Return Metrics

9/30/2024

Managers vs. Bloomberg Municipal Bond: 5 Year (4-6)	Past 10-Year Metrics as of 9/30/2024							Past 5-Year Metrics as of 9/30/2024							Max Drawdowns (10 yrs)		
	Correl / R <sup>2</sup>	Beta	Alpha (%)	Sharpe Ratio (%)	Track Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R2	Beta	Alpha (%)	Sharpe Ratio (%)	Track Error / Info. Ratio (%)	UP Capture	DOWN Capture	8/2021 - 10/2022	8/2016 - 11/2016	3/2020 - 4/2020
Bloomberg Municipal Bond: 5 Year (4-6)	1 / 1	1	0	0.04	0 / 0	100%	100%	1 / 1	1	0	(0.22)	0 / 0	100%	100%	-8.7%	-3.5%	-2.9%
Belle Haven Ladder PLUS	0.98 / 0.96	1.05	0.2	0.09	0.8 / 0.25	105%	101%	0.99 / 0.98	1.07	(0.1)	(0.23)	0.8 / -0.16	106%	109%	-9.5%	-3.6%	-2.4%
Breckinridge Interm Tax-Efficient Bd	0.98 / 0.96	1.04	(0.2)	(0.01)	0.8 / -0.23	99%	104%	0.98 / 0.97	1.06	(0.3)	(0.29)	0.9 / -0.43	103%	110%	-9.2%	-3.7%	-1.8%
PNC Interm Muni Bd	0.97 / 0.95	1.20	0.3	0.10	1.2 / 0.24	121%	120%	0.99 / 0.97	1.19	0.1	(0.21)	1.3 / -0.1	120%	124%	-10.9%	-4.8%	-3.7%
Federated Hermes CWHenderson Int Mun SMA	0.96 / 0.91	0.91	0.1	0.06	1.1 / 0.03	91%	87%	0.97 / 0.95	0.94	(0.2)	(0.26)	1 / -0.15	95%	97%	-8.5%	-3.1%	-2.1%

Managers vs. Bloomberg Municipal Bond: 5 Year (4-6)	Monthly, 12-month and 36-month batting averages vs. Bloomberg Municipal Bond: 5 Year (4-6) for 10 Years (or manager inception date)							Graph Legend	
	1 Month Periods	% + Months	12 Month periods	% + 12-Months	36 Month Periods	% + 36 Months	Return Start Date	Line Color	Manager Name
Belle Haven Ladder PLUS	120	54%	109	57%	85	72%	Sep-14	Blue	Belle Haven Ladder PLUS
Breckinridge Interm Tax-Efficient Bd	120	45%	109	35%	85	12%	Sep-14	Brown	Breckinridge Interm Tax-Efficient Bd
PNC Interm Muni Bd	120	54%	109	65%	85	67%	Sep-14	Teal	PNC Interm Muni Bd
Federated Hermes CWHenderson Int Mun SMA	120	49%	109	57%	85	67%	Sep-14	Dark Blue	Federated Hermes CWHenderson Int Mun SMA

**Rolling 36-Month Outperformance Versus the Bloomberg Municipal Bond: 5 Year (4-6)**





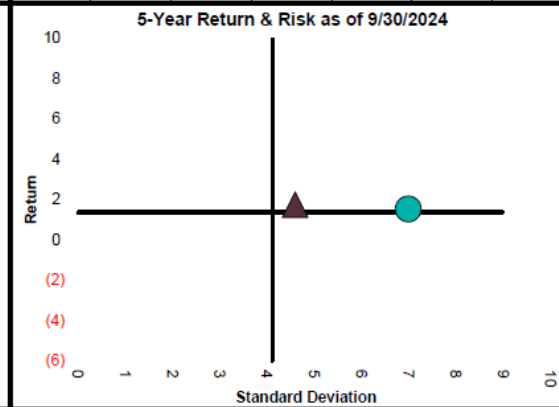
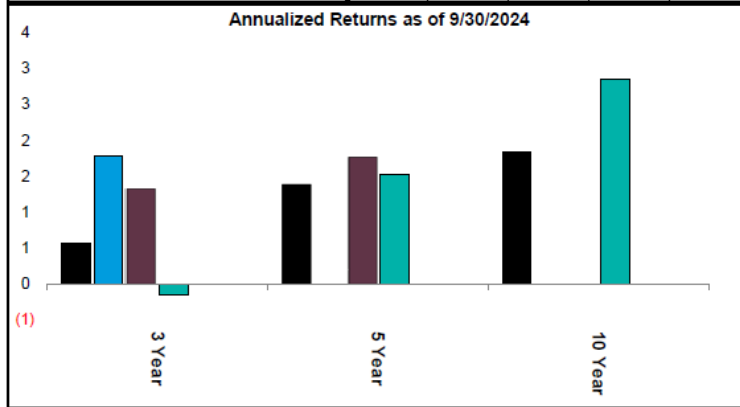
Dynamic Municipal Bond

Fund / Manager	Baird Strategic Municipal Bond Instl	PIMCO National Municipal Opportunistic Value	MacKay Shields Tax-Free Bond
Status	Maintain	Maintain	Maintain
Manager (Tenure in Years)	Team (4.9)	Team (2.6)	Team (15.3)
Net Assets (\$ Millions)	\$1,429	\$308	\$9,682
Firm	<ul style="list-style-type: none"> <li>- Robert W. Baird &amp; Company is a privately held investment company headquartered in Milwaukee, Wisconsin.</li> <li>- The firm's capabilities are comprised of Baird Advisors, the fixed income team that joined Baird in 2000 and Baird Equity Management which was started in 1971.</li> </ul>	<ul style="list-style-type: none"> <li>- Founded in 1971, PIMCO was established as a fixed income manager. It was acquired by Allianz SE, a global financial services company.</li> <li>- The firm is based in Newport Beach, CA, with offices located globally; it offers equity, fixed income, and alternatives products.</li> <li>- PIMCO acquired Gurtin in 2018 to complement their existing municipal franchise.</li> </ul>	<ul style="list-style-type: none"> <li>- MacKay Shields was founded in 1939 and was acquired by New York Life Investment Management in 1984.</li> <li>- The firm specializes in the management of taxable and municipal fixed income credit, although it has global equity strategies as well.</li> </ul>
Team	<ul style="list-style-type: none"> <li>- The strategy is managed by Lyle Fitterer, Gabe Diederich, and Duane McAllister. They each bring over 20 years of experience.</li> <li>- The teams comprised of eight team members who all act as analysts, portfolio managers and traders.</li> </ul>	<ul style="list-style-type: none"> <li>- The strategy is managed by Brian Hannibal and Peter Gunther. They are supported by the larger PIMCO research team.</li> <li>- The team is constructed where all PMs are generalists and supported by sector specialists.</li> </ul>	<ul style="list-style-type: none"> <li>- Co-CIOs John Loffredo and Bob DiMella lead a team of investment professionals, including portfolio managers, research analysts and traders.</li> <li>- The team has been incredibly stable over the last three decades, seeing no departures and a few positive additions.</li> </ul>
Philosophy/Process	<ul style="list-style-type: none"> <li>- The strategy aims to "go where the value is" and exploit opportunities in the market including duration and yield curve positioning, credit, sector and sub-sector weightings while focusing on security selection.</li> <li>- The team begins its portfolio analysis with a neutral position relative to the benchmark across the key metrics mentioned above. From there they identify and evaluate relative value opportunities available in the market, which determines the portfolio's relative overweight's and underweights.</li> </ul>	<ul style="list-style-type: none"> <li>- The strategy aims to capture yields in excess of the market based on dislocations and investing in securities the market misunderstands.</li> <li>- In maximizing risk-adjusted total return, the process begins with an analysis of top-down and bottom-up factors on value creation as well as a focus on diversification and low volatility.</li> <li>- Bottom-up analysis is conducted with a focus on bonds that meet strict yield targets and risk/reward of securities across the credit spectrum.</li> </ul>	<ul style="list-style-type: none"> <li>- The process combines top-down macroeconomic research, bottom-up fundamental credit research, and technically driven trading strategies.</li> <li>- The top-down "Annual Insights" include 4-5 macro themes expected to play out over the next calendar year and inform portfolio decisions.</li> <li>- Credit analysis focuses on identifying relative value opportunities and total return opportunities. The research focuses on a holistic assessment of the bond issue, the municipality's balance sheet, collateral and various structural factors.</li> </ul>
Portfolio Construction	<ul style="list-style-type: none"> <li>- The portfolio has at least 80% of assets invested in municipal securities with 20% allowed to be invested in U.S. Government and corporate bonds.</li> <li>- The Max non-prefunded position size is 5% at cost and market value.</li> <li>- Up to 30% of the portfolio can be high yield.</li> <li>- Duration must be kept <math>\pm</math> 2 years of the benchmark.</li> </ul>	<ul style="list-style-type: none"> <li>- Portfolio is broadly diversified with 30-40 issuers in the portfolio.</li> <li>- Issuer concentration is limited to 5% for non-state issuers and 10-15% for state issuers.</li> <li>- The portfolio does not have a size requirement on purchases so the portfolio can hold odd lots based on price.</li> </ul>	<ul style="list-style-type: none"> <li>- Portfolios will remain relatively neutral to the benchmark's duration and maintain a +/-10% band around the benchmark's exposure.</li> <li>- Active trading is common for tax loss harvesting and when the team identifies more attractive relative value or technical opportunities.</li> <li>- The portfolio will typically hold 1-2% in individual obligors, and caps state GO bond exposure at 5% and sector weights at 25%.</li> </ul>
Expense Ratio	0.30	0.60	0.49
Redemption Fee	N.A.	N.A.	N.A.

## Dynamic Municipal Bond Return, Standard Deviation and Peer Group Comparisons

9/30/2024

Manager or Index	Annual Returns (%) as of 9/30/2024					Calendar Year Returns (%)								Volatility (%) as of 9/30/2024				
	1 Year	3 Year	5 Year	7 Year	10 Year	2024 YTD	2023	2022	2021	2020	2019	2018	1 Year	3 Year	5 Year	7 Year	10 Year	
Bloomberg Municipal Bond: 1-10 Year	7.2	0.6	1.4	1.8	1.8	2.0	4.3	(4.5)	0.4	4.0	5.2	1.7	4.2	4.8	4.1	3.6	3.2	
Baird Strategic Municipal Bond Instl	9.9	1.8	N/A	N/A	N/A	3.7	6.8	(5.3)	2.3	8.4	N/A	N/A	4.9	5.7	N/A	N/A	N/A	
PIMCO National Municipal Opportunistic Value	9.3	1.3	1.8	2.5	N/A	3.0	5.4	(4.5)	1.4	3.2	6.4	2.1	5.8	5.5	4.6	4.0	N/A	
MacKay Shields Tax-Free Bond	10.9	(0.2)	1.5	2.5	2.9	2.9	6.6	(10.2)	2.3	6.4	7.8	1.7	7.0	8.0	7.0	6.1	5.4	



■ /+ Index (Bloomberg Municipal Bond: 1-10 Year)

- Baird Strategic Municipal Bond Instl
- ▲ PIMCO National Municipal Opportunistic Value
- MacKay Shields Tax-Free Bond

Differentiators	
<b>Batting Average<sup>a</sup></b>	<b>Loss Protection (5 Yrs)</b>
1) Baird (100%) 2) PIMCO (96%) 3) MacKay (69%)	1) PIMCO (102%) 2) MacKay (171%)

Manager or Index	Peer Group Rankings as of 9/30/2024					Calendar Year Peer Group Rank							
	1 Year	3 Year	5 Year	7 Year	10 Year	2024 YTD	2023	2022	2021	2020	2019	2018	
Bloomberg Municipal Bond: 1-10 Year	100	6	42	77	91	98	97	1	100	84	100	9	
Baird Strategic Municipal Bond Instl	94	1	N/A	N/A	N/A	38	65	1	62	2	N/A	N/A	
PIMCO National Municipal Opportunistic Value	98	2	11	23	N/A	68	91	1	86	94	99	4	
MacKay Shields Tax-Free Bond	81	44	27	21	23	78	70	29	58	19	58	7	

High Alpha (5 Yrs)	Low-to-High Beta (5 Yrs)
1) MacKay (0.8) 2) PIMCO (0.4)	1) PIMCO (1.06) 2) MacKay (1.63)

Peer Group Range	Peer Group Spreads as of 9/30/2024					Calendar Year Peer Group Spreads							
	1 Year	3 Year	5 Year	7 Year	10 Year	2024 YTD	2023	2022	2021	2020	2019	2018	
10th Percentile	14.8	0.5	1.8	2.8	3.0	5.0	8.3	(8.7)	4.1	7.3	10.0	1.4	
25th Percentile	13.3	0.2	1.5	2.5	2.8	4.1	7.7	(10.1)	3.3	5.9	8.7	1.0	
50th Percentile	12.1	(0.2)	1.3	2.1	2.5	3.4	7.1	(11.2)	2.4	5.1	8.1	0.7	
75th Percentile	11.2	(0.7)	0.9	1.8	2.2	3.0	6.5	(12.7)	1.8	4.3	7.4	0.2	
90th Percentile	10.1	(1.6)	0.4	1.5	1.9	2.5	5.5	(16.0)	1.3	3.6	7.1	(0.4)	
Top/Bottom Quartile spread	+2.1	+0.9	+0.7	+0.7	+0.6	+1.1	+1.2	+2.6	+1.5	+1.6	+1.3	+0.8	

Low Vol (5 Yrs)	Low-to-High Expense
1) PIMCO (4.6) 2) MacKay (7.0)	1) Baird (0.30) 2) MacKay (0.49) 3) PIMCO (0.60)

<sup>a</sup>The Batting Average measures the frequency of rolling 3-year period outperformance from the lesser of 10 years or each fund's inception date.

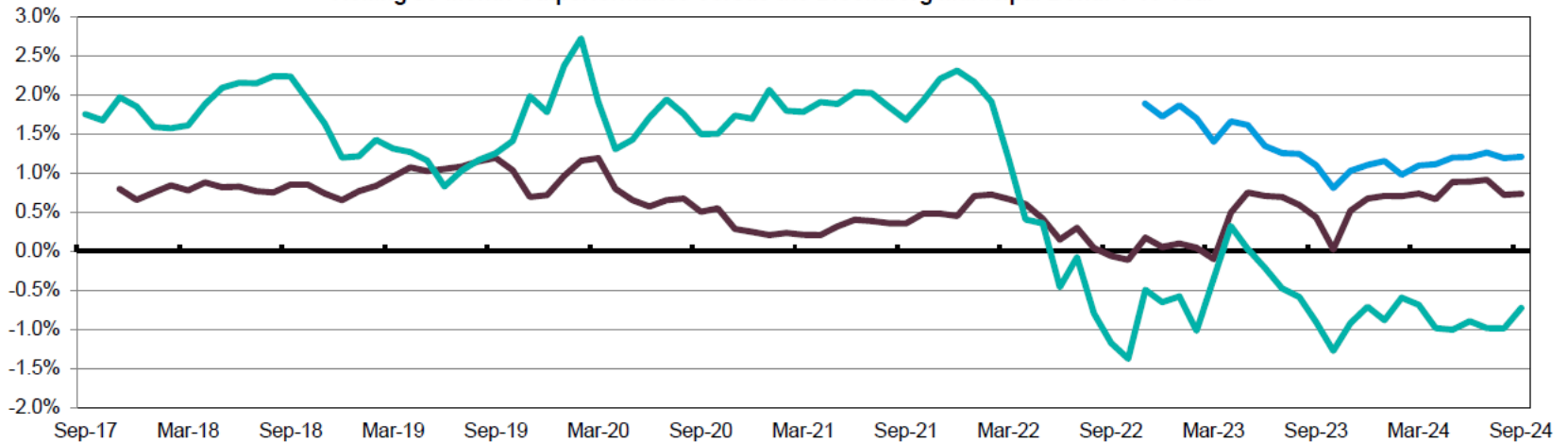
## Dynamic Municipal Bond MPT and Other Quantitative Risk and Return Metrics

9/30/2024

Managers vs. Bloomberg Municipal Bond: 1-10 Year	Past 10-Year Metrics as of 9/30/2024							Past 5-Year Metrics as of 9/30/2024							Max Drawdowns (10 yrs)		
	Correl / R <sup>2</sup>	Beta	Alpha (%)	Sharpe Ratio (%)	Track Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R <sup>2</sup>	Beta	Alpha (%)	Sharpe Ratio (%)	Track Error / Info. Ratio (%)	UP Capture	DOWN Capture	8/2021 - 10/2022	8/2016 - 11/2016	3/2020 - 4/2020
<b>Bloomberg Municipal Bond: 1-10 Year</b>	1 / 1	1	0	0.06	0 / 0	100%	100%	1 / 1	1	0	(0.23)	0 / 0	100%	100%	-7.8%	-3.2%	-2.6%
Baird Strategic Municipal Bond Instl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-9.1%	N/A	-2.1%
PIMCO National Municipal Opportunistic Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.95 / 0.9	1.06	0.4	(0.13)	1.5 / 0.25	109%	102%	-7.9%	-1.7%	-3.7%
Mackay Shields Tax-Free Bond	0.93 / 0.87	1.55	0.9	0.23	2.7 / 0.39	155%	147%	0.96 / 0.91	1.63	0.8	(0.12)	3.3 / 0.05	168%	171%	-14.9%	-5.0%	-5.9%

Managers vs. Bloomberg Municipal Bond: 1-10 Year	Monthly, 12-month and 36-month batting averages vs. Bloomberg Municipal Bond: 1-10 Year for 10 Years (or manager inception date)							Graph Legend		
	1 Month Periods	% + Months	12 Month periods	% + 12-Months	36 Month Periods	% + 36 Months	Return Start Date	—	—	—
Baird Strategic Municipal Bond Instl	58	71%	47	79%	23	100%	Nov-19	Baird Strategic Municipal Bond Instl	PIMCO National Municipal Opportunistic Value	Mackay Shields Tax-Free Bond
PIMCO National Municipal Opportunistic Value	118	58%	107	77%	83	96%	Nov-14			
Mackay Shields Tax-Free Bond	120	60%	109	79%	85	69%	Sep-14			

**Rolling 36-Month Outperformance Versus the Bloomberg Municipal Bond: 1-10 Year**



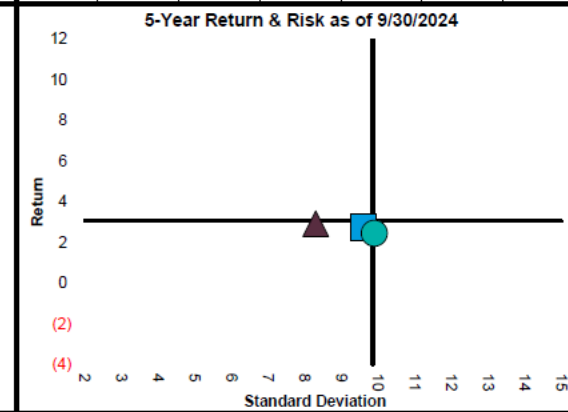
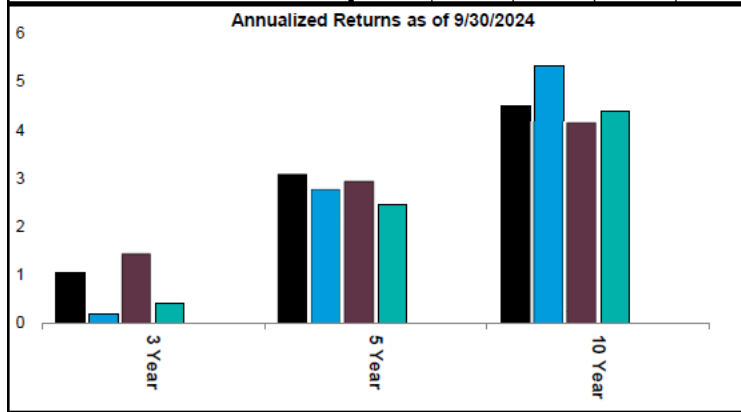
High Yield Municipal Bond

Fund / Manager	MacKay Shields Municipal Credit Opps	American High-Income Municipal Bond F3	Mainstay MacKay High Yield Municipal Bd I
Status	Maintain	Maintain	Maintain
Manager (Tenure in Years)	Team (14.6)	Team (13)	Team (14.6)
Net Assets (\$ Millions)	\$9,625	\$12,222	\$9,625
Firm	<ul style="list-style-type: none"> <li>- MacKay Shields was founded in 1938 and became a registered investment advisor in 1969.</li> <li>- The firm is now a wholly-owned subsidiary of New York Life Insurance Company.</li> </ul>	<ul style="list-style-type: none"> <li>- Capital Group is one of the largest privately held investment management organizations in the world, serving thousands of leading institutions and millions of individual investors.</li> </ul>	<ul style="list-style-type: none"> <li>- MacKay Shields was founded in 1938 and became a registered investment advisor in 1969.</li> <li>- The firm is now a wholly-owned subsidiary of New York Life Insurance Company.</li> </ul>
Team	<ul style="list-style-type: none"> <li>- The investment team is led by John Loffredo and Bob DiMella.</li> <li>- The team is organized by sector with portfolio managers Bob DiMella, David Dowden and Robert Burke spending the majority of their time on investment grade portfolios and John Loffredo and Mike Petty focusing on high yield portfolios.</li> </ul>	<ul style="list-style-type: none"> <li>- The strategy is led by three portfolio managers and the municipal research team.</li> <li>- Each portfolio manager and the team of analysts manage the strategy in four independent sleeves.</li> <li>- Chad Rach, PIO, is charged with overseeing the direction of the strategy, risk management and allocating assets across each sleeve.</li> </ul>	<ul style="list-style-type: none"> <li>- The investment team is led by John Loffredo and Bob DiMella.</li> <li>- The team is organized by sector with portfolio managers Bob DiMella, David Dowden and Robert Burke spending the majority of their time on investment grade portfolios and John Loffredo and Mike Petty focusing on high yield portfolios.</li> </ul>
Philosophy/Process	<ul style="list-style-type: none"> <li>- The team's process combines top-down macroeconomic research, bottom-up fundamental credit research, and technically driven trading strategies.</li> <li>- Beginning with top-down macroeconomic research, the portfolio management team formulates "Annual Insights" in the fourth quarter of the preceding year.</li> <li>- "Annual Insights" generally include 4-5 macro themes portfolio managers expect to play out over the next calendar year.</li> <li>- The top-down analysis drives the bottom-up credit analysis. Credit analysis focuses on identifying attractive relative value opportunities.</li> <li>- The team focuses on total return opportunities, looking for higher yielding securities trading at attractive yields and dollar prices.</li> </ul>	<ul style="list-style-type: none"> <li>- Inherent in any Capital Group strategy is the philosophy that a multi-manager approach allows for multiple sources of alpha with less overall risk.</li> <li>- Because the high yield municipal bond is more fragmented and less liquid relative to other bond markets, Capital Group believes that the only way to understand the risks embedded in those bonds is through fundamental research.</li> <li>- Having the knowledge and experience the portfolio management team is believed to create an informational advantage over the marketplace allowing for consistent outperformance.</li> </ul>	<ul style="list-style-type: none"> <li>- The team's process combines top-down macroeconomic research, bottom-up fundamental credit research, and technically driven trading strategies.</li> <li>- Beginning with top-down macroeconomic research, the portfolio management team formulates "Annual Insights" in the fourth quarter of the preceding year.</li> <li>- "Annual Insights" generally include 4-5 macro themes portfolio managers expect to play out over the next calendar year.</li> <li>- The top-down analysis drives the bottom-up credit analysis. Credit analysis focuses on identifying attractive relative value opportunities.</li> <li>- The team focuses on total return opportunities, looking for higher yielding securities trading at attractive yields and dollar prices.</li> </ul>
Portfolio Construction	<ul style="list-style-type: none"> <li>- Portfolios will remain relatively neutral maintaining a +/-10% band around the benchmark exposure.</li> <li>- Portfolios are actively traded, seeking to capitalize on short-term relative value opportunities and will also take advantage of tax-loss harvesting opportunities.</li> <li>- Many of the trading opportunities are driven by price dislocations that are a function of the fragmented municipal bond space.</li> </ul>	<ul style="list-style-type: none"> <li>- The portfolio is allocated fairly evenly across the four independent sleeves; the PIO does not seek to market time allocating more capital to a given manager.</li> <li>- Each portfolio manager and the team of analysts will implement their own previously described security selection and sector allocation approach guided by the PSG's sector forums and analyst's bottom-up credit analysis.</li> </ul>	<ul style="list-style-type: none"> <li>- Portfolios will remain relatively neutral maintaining a +/-10% band around the benchmark exposure.</li> <li>- Portfolios are actively traded, seeking to capitalize on short-term relative value opportunities and will also take advantage of tax-loss harvesting opportunities.</li> <li>- Many of the trading opportunities are driven by price dislocations that are a function of the fragmented municipal bond space.</li> </ul>
Expense Ratio	N.A.	0.30	0.62
Management Fee	0.90	N.A.	N.A.
Redemption Fee	N.A.	N.A.	N.A.

## High Yield Municipal Bond Return, Standard Deviation and Peer Group Comparisons

9/30/2024

Manager or Index	Annual Returns (%) as of 9/30/2024					Calendar Year Returns (%)							Volatility (%) as of 9/30/2024				
	1 Year	3 Year	5 Year	7 Year	10 Year	2024 YTD	2023	2022	2021	2020	2019	2018	1 Year	3 Year	5 Year	7 Year	10 Year
Bloomberg High Yield Muni	17.4	1.1	3.1	4.5	4.5	7.5	9.2	(13.1)	7.8	4.9	10.7	4.8	8.2	9.7	9.9	8.5	7.7
MacKay Shields Municipal Credit Opps	16.7	0.2	2.8	4.6	5.3	6.8	7.8	(13.5)	7.5	6.2	13.2	6.5	9.2	10.1	9.6	8.4	7.6
American High-Income Municipal Bond F3	16.5	1.4	2.9	3.8	4.1	7.8	8.3	(11.5)	5.9	4.7	9.2	1.9	7.5	8.8	8.3	7.2	6.3
Mainstay MacKay High Yield Municipal Bd I	16.9	0.4	2.5	3.6	4.4	6.1	9.5	(14.0)	6.4	5.4	9.1	4.3	9.4	10.8	9.9	8.5	7.5



■ Index (Bloomberg High Yield Muni)  
■ MacKay Shields Municipal Credit Opps  
▲ American High-Income Municipal Bond F3  
● Mainstay MacKay High Yield Municipal Bd I

Differentiators	
<b>Batting Average<sup>A</sup></b>	<b>Loss Protection (5 Yrs)</b>
1) MacKay (76%)	1) American (87%)
2) American (16%)	2) MacKay (98%)
3) Mainstay (11%)	3) Mainstay (102%)

Manager or Index	Peer Group Rankings as of 9/30/2024					Calendar Year Peer Group Rank						
	1 Year	3 Year	5 Year	7 Year	10 Year	2024 YTD	2023	2022	2021	2020	2019	2018
Bloomberg High Yield Muni	13	11	5	2	2	14	9	36	9	24	11	5
MacKay Shields Municipal Credit Opps	17	31	6	2	1	37	29	41	11	11	1	3
American High-Income Municipal Bond F3	21	6	6	6	11	9	18	24	37	27	44	39
Mainstay MacKay High Yield Municipal Bd I	15	22	14	10	4	58	5	55	25	19	46	6

High Alpha (5 Yrs)		Low-to-High Beta (5 Yrs)	
1) American (0.0)	1) American (0.84)	1) American (0.84)	1) American (0.84)
2) MacKay (-0.3)	2) MacKay (0.96)	2) MacKay (0.96)	2) MacKay (0.96)
3) Mainstay (-0.6)	3) Mainstay (0.98)	3) Mainstay (0.98)	3) Mainstay (0.98)

Peer Group Range	Peer Group Spreads as of 9/30/2024					Calendar Year Peer Group Spreads						
	1 Year	3 Year	5 Year	7 Year	10 Year	2024 YTD	2023	2022	2021	2020	2019	2018
10th Percentile	18.0	1.1	2.6	3.6	4.2	7.7	8.9	(9.0)	7.7	6.2	10.9	3.8
25th Percentile	16.2	0.4	2.1	3.2	3.8	7.1	8.0	(11.7)	6.4	4.9	10.1	2.3
<b>50th Percentile</b>	<b>15.1</b>	<b>(0.3)</b>	<b>1.7</b>	<b>2.7</b>	<b>3.3</b>	<b>6.4</b>	<b>6.8</b>	<b>(13.9)</b>	<b>5.4</b>	<b>3.8</b>	<b>9.1</b>	<b>1.5</b>
75th Percentile	13.1	(0.8)	1.0	2.1	2.8	5.5	5.2	(15.3)	4.3	2.9	8.2	0.6
90th Percentile	10.7	(1.5)	0.7	1.9	2.5	4.6	3.8	(16.8)	3.6	1.3	7.2	0.1
Top/Bottom Quartile spread	+3.0	+1.2	+1.1	+1.0	+1.0	+1.6	+2.8	+3.6	+2.1	+2.0	+1.9	+1.7

Low Vol (5 Yrs)		Low-to-High Expense	
1) American (8.3)	1) American (0.30)	1) American (0.30)	1) American (0.30)
2) MacKay (9.6)	2) Mainstay (0.62)	2) Mainstay (0.62)	2) MacKay (0.90)
3) Mainstay (9.9)	3) MacKay (0.90)	3) MacKay (0.90)	3) MacKay (0.90)

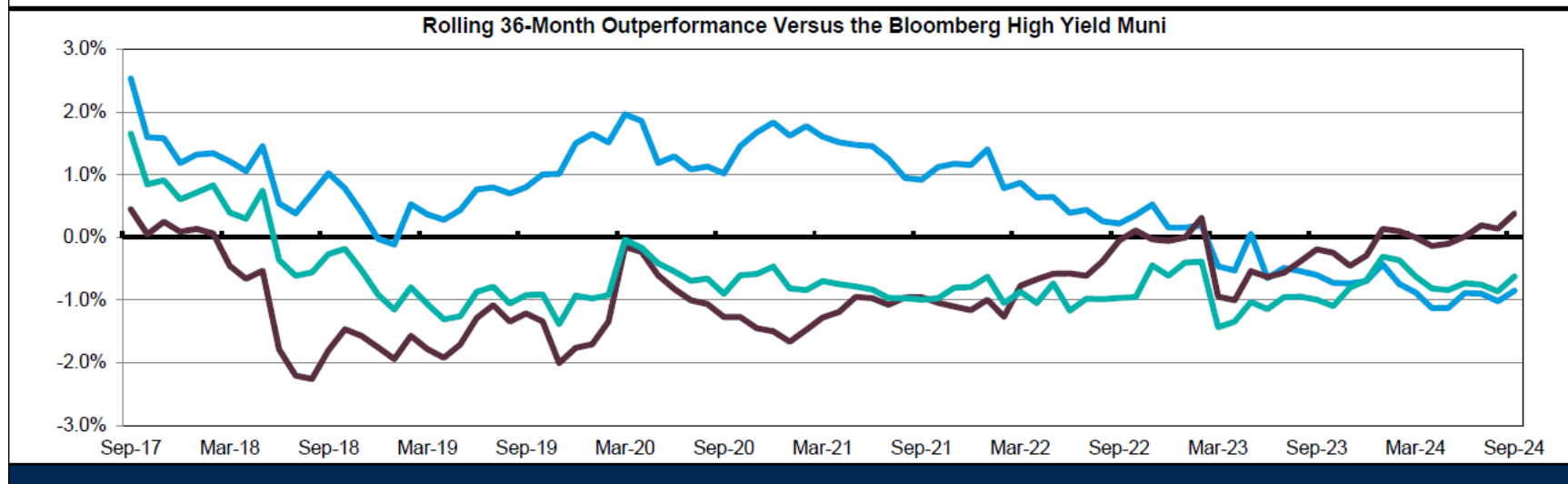
<sup>A</sup>The Batting Average measures the frequency of rolling 3-year period outperformance from the lesser of 10 years or each fund's inception date.

## High Yield Municipal Bond MPT and Other Quantitative Risk and Return Metrics

9/30/2024

Managers vs. Bloomberg High Yield Muni	Past 10-Year Metrics as of 9/30/2024							Past 5-Year Metrics as of 9/30/2024						Max Drawdowns (10 yrs)			
	Correl / R <sup>2</sup>	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	Correl / R <sup>2</sup>	Beta	Alpha (%)	Sharpe Ratio (%)	Track. Error / Info. Ratio (%)	UP Capture	DOWN Capture	1/2022 - 10/2022	3/2020 - 4/2020	10/2016 - 11/2016
<b>Bloomberg High Yield Muni</b>	<b>1 / 1</b>	<b>1</b>	<b>0</b>	<b>0.38</b>	<b>0 / 0</b>	<b>100%</b>	<b>100%</b>	<b>1 / 1</b>	<b>1</b>	<b>0</b>	<b>0.07</b>	<b>0 / 0</b>	<b>100%</b>	<b>100%</b>	<b>-17.7%</b>	<b>-14.0%</b>	<b>-7.1%</b>
MackKay Shields Municipal Credit Opps	0.96 / 0.92	0.94	1.0	0.49	2.2 / 0.37	101%	91%	0.98 / 0.96	0.96	(0.3)	0.04	1.9 / -0.16	96%	98%	-17.9%	-11.9%	-8.0%
American High-Income Municipal Bond F3	0.97 / 0.93	0.79	0.2	0.40	2.3 / -0.17	81%	78%	0.99 / 0.98	0.84	(0.0)	0.07	2.1 / -0.07	86%	87%	-16.0%	-10.9%	-5.3%
Mainstay MacKay High Yield Municipal Bd I	0.96 / 0.92	0.93	0.1	0.37	2.2 / -0.06	93%	92%	0.98 / 0.96	0.98	(0.6)	0.01	2 / -0.3	98%	102%	-19.5%	-11.6%	-6.3%

Managers vs. Bloomberg High Yield Muni	Monthly, 12-month and 36-month batting averages vs. Bloomberg High Yield Muni for 10 Years (or manager inception date)							Graph Legend	
	1 Month Periods	% + Months	12 Month periods	% + 12-Months	36 Month Periods	% + 36 Months	Return Start Date		
MackKay Shields Municipal Credit Opps	120	51%	109	57%	85	76%	Sep-14	<ul style="list-style-type: none"> <li><span style="color: blue;">—</span> MackKay Shields Municipal Credit Opps</li> <li><span style="color: brown;">—</span> American High-Income Municipal Bond F3</li> <li><span style="color: teal;">—</span> Mainstay MacKay High Yield Municipal Bd I</li> </ul>	
American High-Income Municipal Bond F3	120	42%	109	37%	85	16%	Sep-14		
Mainstay MacKay High Yield Municipal Bd I	120	37%	109	35%	85	11%	Sep-14		



# Disclosures and Definitions

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When referencing asset class returns or statistics, the following indices are used to represent those asset classes, unless otherwise noted. Each index is unmanaged, and investors can not actually invest directly into an index:

Intermediate Muni: Bloomberg Municipal Bond 5 Year (4-6) Total Return Index

High Yield Municipals: Bloomberg Muni High Yield Total Return Index

AAA Yield Curve: S&P US Muni AAA Curve

1-2 Y M/T: ICE BofA US General Obligation Municipal Securities (1-2 Y) - Yield to Worst / US Benchmark Bond - 1 Year – Yield

4-6 Y M/T: ICE BofA US General Obligation Municipal Securities (4-6 Y) - Yield to Worst / US Benchmark Bond - 5 Year – Yield

7-12 Y M/T: ICE BofA US General Obligation Municipal Securities (7-12 Y) - Yield to Worst / US Benchmark Bond - 10 Year – Yield

17-22 Y M/T: ICE BofA US General Obligation Municipal Securities (17-22 Y) - Yield to Worst / US Benchmark Bond - 20 Year – Yield

HYM – AAA Spread: Bloomberg Muni High Yield Total Return Index Yield to Worst – Bloomberg Municipal Bond AAA Total Return Index Yield to Worst

AAA: Bloomberg Municipal Bond AAA Total Return Index Yield to Worst

AA: Bloomberg Municipal Bond AA Total Return Index Yield to Worst

A: Bloomberg Municipal Bond A Total Return Index Yield to Worst

BBB: Bloomberg Municipal Bond BBB Total Return Index Yield to Worst

HY: Bloomberg Muni High Yield Total Return Index Yield to Worst

# Material Risks & Limitations

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**Fixed Income** securities are subject to interest rate risks, the risk of default and liquidity risk. U.S. investors exposed to non-U.S. fixed income may also be subject to currency risk and fluctuations.

**Cash** may be subject to the loss of principal and over longer period of time may lose purchasing power due to inflation.



# Disclosures – Index & Benchmark Definitions

## Index & Benchmark Definitions

### Fixed Income

- **Bloomberg U.S. Aggregate Index** covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.
- **Bloomberg U.S. Corporate High Yield Index** covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- **The Bloomberg Municipal Bond 1-3 Year Index** is another benchmark index used to track the performance of municipal bonds with maturities ranging from 1 to 3 years. Municipal bonds are debt securities issued by state and local governments to finance public projects such as roads, schools, and infrastructure.
- **The Bloomberg Municipal Bond 5-Year (4-6) Index** is a benchmark index used to track the performance of municipal bonds with maturities ranging from 4 to 6 years. Municipal bonds are debt securities issued by state and local governments to finance public projects such as roads, schools, and infrastructure.
- **Bloomberg Muni Index** is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- **Bloomberg High Yield Municipal Bond Index** covers the universe of fixed rate, non-investment grade debt.
- **The Bloomberg Municipal Revenue Bond Index** is a benchmark index used to track the performance of municipal revenue bonds. Municipal revenue bonds are a type of municipal bond that is backed by the revenue generated from specific projects or facilities, such as toll roads, airports, utilities, hospitals, or other revenue-generating infrastructure.
- **The Bloomberg State General Obligation (GO) Index** is a benchmark index used to track the performance of state general obligation bonds. State general obligation bonds are municipal bonds issued by state governments and backed by the full faith and credit of the issuing state. They are considered one of the safest types of municipal bonds because they are backed by the taxing power of the state government.
- **The Bloomberg Local General Obligation (GO) Index** is a benchmark index used to track the performance of local general obligation bonds. Local general obligation bonds are municipal bonds issued by local governments, such as cities, counties, or other local authorities, and backed by the full faith and credit of the issuing local government.
- **The ICE BofA US General Obligation Municipal Securities (1-2 Y) Index**, formerly known as the Merrill Lynch US General Obligation Municipal Securities (1-2 Y) Index, is a benchmark index used to track the performance of US general obligation municipal securities with maturities ranging from 1 to 2 years.
- **The ICE BofA US General Obligation Municipal Securities (4-6 Y) Index**, formerly known as the Merrill Lynch US General Obligation Municipal Securities (4-6 Y) Index, is a benchmark index used to track the performance of US general obligation municipal securities with maturities ranging from 4 to 6 years.

## Index & Benchmark Definitions

### Fixed Income

- **The ICE BofA US General Obligation Municipal Securities (7-12 Y) Index**, formerly known as the Merrill Lynch US General Obligation Municipal Securities (7-12 Y) Index, is a benchmark index used to track the performance of US general obligation municipal securities with maturities ranging from 7 to 12 years.
- **The ICE BofA US General Obligation Municipal Securities (17-22 Y) Index**, formerly known as the Merrill Lynch US General Obligation Municipal Securities (17-22 Y) Index, is a benchmark index used to track the performance of US general obligation municipal securities with maturities ranging from 17 to 22 years.
- **The Bloomberg Municipal Bond AAA Total Return Index** is a benchmark index used to track the performance of AAA-rated municipal bonds in the United States. Municipal bonds are debt securities issued by state and local governments to finance public projects such as roads, schools, and infrastructure. Bonds with AAA ratings are considered to have the highest credit quality, indicating a low risk of default.
- **The Bloomberg Municipal Bond AA Total Return Index** is a benchmark index used to track the performance of AA-rated municipal bonds in the United States. Municipal bonds are debt securities issued by state and local governments to finance public projects such as roads, schools, and infrastructure. Bonds with AA ratings are considered to have high credit quality, indicating a lower risk of default compared to lower-rated bonds.
- **The Bloomberg Municipal Bond A Total Return Index** is a benchmark index used to track the performance of A-rated municipal bonds in the United States. Municipal bonds are debt securities issued by state and local governments to finance public projects such as roads, schools, and infrastructure. Bonds with A ratings are considered to have a relatively high credit quality, indicating a lower risk of default compared to lower-rated bonds.
- **The Bloomberg Municipal Bond BBB Total Return Index** is a benchmark index used to track the performance of BBB-rated municipal bonds in the United States. Municipal bonds are debt securities issued by state and local governments to finance public projects such as roads, schools, and infrastructure. Bonds with BBB ratings are considered to have a moderate credit quality, indicating a higher risk of default compared to higher-rated bonds.