

# THE CASE FOR Customized Municipal Bond Solutions

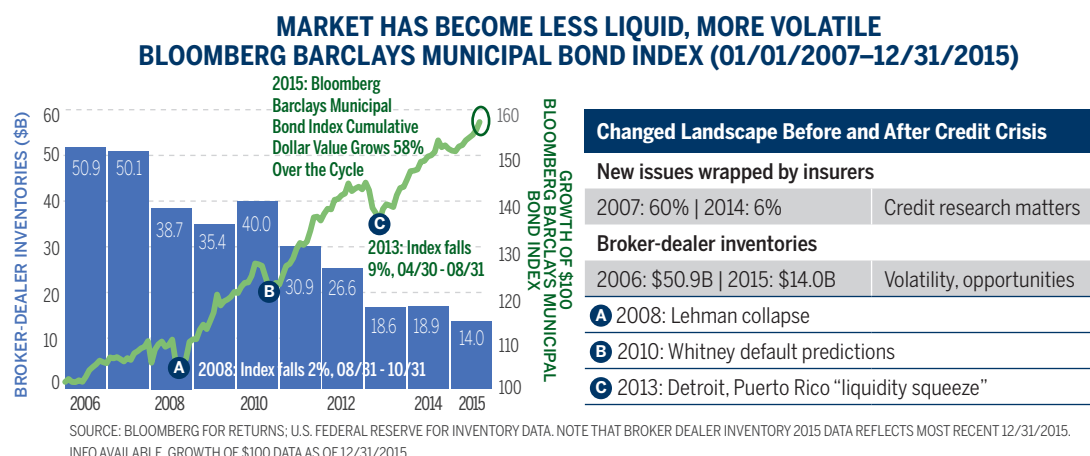
Market shifts have created a less liquid, more volatile municipal bond market that is fertile hunting ground for active managers. Coupled with outperformance in previous rate-hiking cycles, current yield spreads, comparatively low default risk and distinct diversification benefits, we believe municipal bonds offer appeal today. In a separately managed account format, investors can also enjoy the benefits of customization, liquidity and flexibility which are not always available in a mutual fund format.

- 1. Customization:** Access to state-specific, customized bond portfolios based on fundamental credit research that seek to maximize after-tax returns.
- 2. Liquidity:** A meaningful allocation to stable, high-quality general obligation and revenue issues can provide a high level of liquidity along with the benefits of institutional pricing.
- 3. Flexibility:** A portfolio constructed to target appropriate duration, quality and yield parameters that seeks to provide stable, predictable cash flows.

## WHY INVEST IN MUNI BONDS TODAY?

### Market Shifts Have Created Risks and Opportunities

Compared with taxable fixed income securities, municipal bonds today are especially attractive, in our view. Rising state and local income taxes have increased the value of tax-exempt income, and demand for municipal bonds is growing from non-traditional, institutional buyers. As a result, the market has become less liquid and more volatile, but also more attractive to active managers using fundamental credit research to uncover opportunity.



### WHY BROWN ADVISORY?

Brown Advisory is a leading independent investment firm that offers a wide range of investment solutions to institutions, corporations, nonprofits, families and individuals. We manage approximately \$61.8 billion in client assets as of 03/31/18.<sup>1</sup>

### PRIVATE & INDEPENDENT SINCE 1998

Every one of our colleagues owns equity in the firm, which aligns colleagues' interests with long-term client success.

### ADD ALPHA AND CONTROL RISK

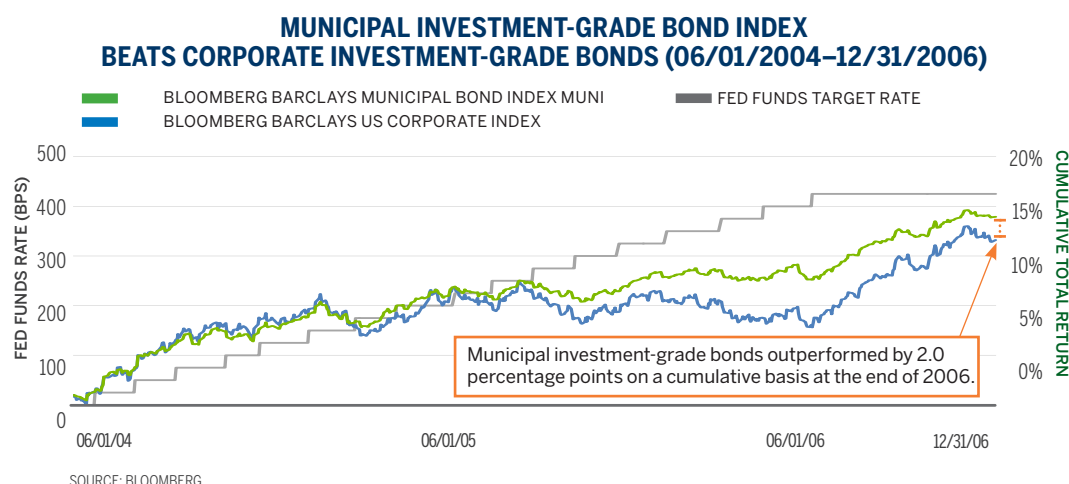
We have a fixed income investment process that incorporates bottom-up, fundamental research to drive security selection and mitigate risk. We seek price appreciation potential, not just current yield, and focus attention to actively managing maturity.

### EXPERIENCE

Our fixed income team has an average of 16 years of investment experience.

### Muni Bonds Outperformed During the Last Rate-Hiking Cycle

Due to the cyclical nature of municipal bonds, the securities tend to outperform in rising interest-rate environments. During the last rate-hiking cycle, investment-grade municipal bonds outperformed investment-grade corporate bonds by an average of 4.2 percentage points on a cumulative basis.

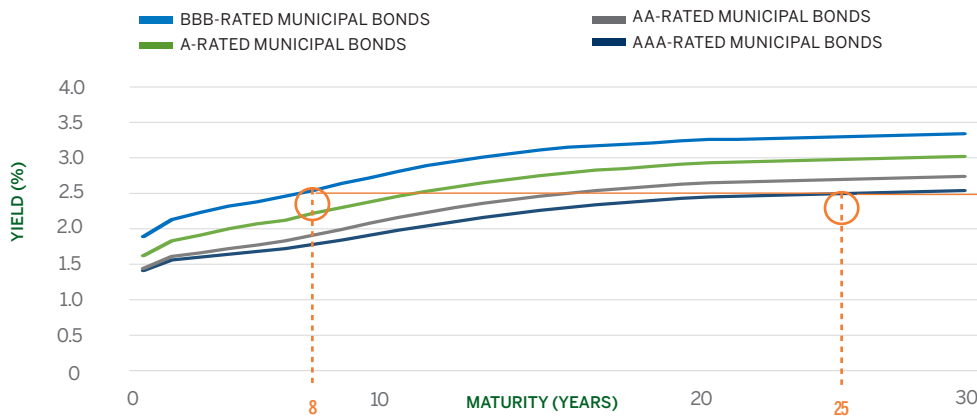


<sup>1</sup> As of March 31, 2018, Brown Advisory had approximately \$61.8 billion in client assets for the following entities: Brown Advisory, LLC, Brown Investment Advisory & Trust Company, Brown Advisory Securities, LLC, Brown Advisory Ltd., Brown Advisory Trust Company of Delaware, LLC and Brown Advisory Investment Solutions Group LLC

## Municipal Bond Spreads Look More Attractive Than Duration

As fundamental investors, we seek to uncover market opportunities at compelling yields. We are finding attractive opportunities with lower-rated bonds in the current environment, as similar yields to higher-rated bonds can be achieved with less interest-rate risk.

### MUNICIPAL INVESTMENT-GRADE BOND YIELD CURVES BY CREDIT RATING (12/31/2017)



Lower BBB-rated, 8-year municipal bonds on average offered the same 2.5% yield as the highest AAA-rated, 25-year municipal bond as of 12/31/2017. The spread opportunity is more attractive, in our view, than assuming additional duration risk.

Source: MMD®/TM3 Thomson Reuters. Past performance is not indicative of future results.

## Municipal Default Rates Are Low, Recovery Rates Are High

BBB-rated municipal bonds have historically exhibited lower default rates than the highest-rated AAA-rated corporate bonds, on average, as depicted in the historical study below. And when defaults do occur, the ultimate recovery rate for municipal bonds has been better than corporate bonds.

### CUMULATIVE HISTORICAL DEFAULT RATES, % (01/01/1970–12/31/2016)

	Moody's		S&P	
	Municipal	Corporate	Municipal	Corporate
Aaa/AAA	0.00	0.38	0.00	0.72
Aa/AA	0.02	0.78	0.02	0.77
A/A	0.07	2.22	0.10	1.41
Baa/BBB	0.40	3.93	0.62	3.76
Investment Grade	0.09	2.38	0.17	2.11
Non-Investment Grade	8.17	29.70	9.23	21.67

Source: Moody's Investor Services and S&P Global Ratings. Past performance is not indicative of future results.

Examining default data from both Moody's and S&P ratings agencies, even the lowest investment-grade rating category of municipal bonds exhibited a default rate comparable to or lower than the highest rating category of corporate bonds during the 46-year period of the study.

### HISTORICAL RECOVERY RATES, % (01/01/1970–12/31/2016)

	Municipal	Corporate
Recovery Rate	66%	53%

Source: Moody's Investor Services, Special Comment Study, U.S. Municipal Bond Defaults and Recovery Rates, 1970–2016

When municipal bonds default, historically, the ultimate recovery rate has been much higher than the average rate for corporate senior unsecured bonds, according to a Moody's study.

## Municipal Bonds Offer Diversification Benefits

Municipal bonds generally have low correlations with other asset classes, which can buffer against inflation and interest-rate risk.

### CORRELATIONS FOR 10-YEAR RETURNS

#### MUNICIPAL REVENUE BOND INDEX VS. OTHER ASSET CLASSES (01/01/2007–12/31/2017)

	Bloomberg Barclays Municipal Revenue Bond Index	S&P 500 Index	Bloomberg Barclays US Aggregate Bond Index	Bloomberg Barclays US Treasury Index	Bloomberg Barclays US TIPS Index
Bloomberg Barclays Municipal Revenue Bond Index	1.00				
S&P 500® Index	-0.22	1.00			
Bloomberg Barclays US Aggregate Bond Index	0.43	-0.32	1.00		
Bloomberg Barclays US Treasury Index	0.40	-0.42	0.94	1.00	
Bloomberg Barclays US TIPS Index	0.37	-0.22	0.79	0.76	1.00

As demonstrated by the correlation matrix, the Bloomberg Barclays Municipal Revenue Bond Index has low correlation to the traditional equity and taxable bond markets as of 12/31/17.

Source: Bloomberg for Bloomberg Barclays Index data and S&P 500 Index data. Past performance is not indicative of future results.

## Brown Advisory Fixed Income Approach

We believe that actively managed fixed income strategies based on fundamental research, concentrated on our highest-conviction ideas and reflecting an understanding of an array of market probabilities have the potential to offer core stability and add alpha. We build highly customized solutions for our clients.

UNIVERSE & IDEA GENERATION		DUE DILIGENCE		DECISION PROCESS		PORTFOLIO MANAGEMENT		SELL DISCIPLINE	
<ul style="list-style-type: none"><li>Broad universe of municipal and federal government-backed securities</li><li>Portfolio construction aims to maximize after-tax returns by identifying stability vs. alpha-generating opportunities</li></ul>		<ul style="list-style-type: none"><li>Fundamental research analysis incorporates public documents, sector dynamics and credit surveillance</li></ul>		<ul style="list-style-type: none"><li>Our process projects expected outcomes that allow us to assess the upside potential of an investment vs. the downside risk</li></ul>		<ul style="list-style-type: none"><li>We maintain a consistent balance of stability allocations, focused on principal stability, and alpha allocations, focused on upside potential</li></ul>		<ul style="list-style-type: none"><li>Underlying investment thesis is violated</li><li>Thesis is realized</li><li>Alternative opportunities offer more compelling opportunity</li></ul>	
<h3>EXPERIENCE AND EXPERTISE</h3> <p>The Brown Advisory Fixed Income team has an average of 16 years of experience working with a variety of institutional and private clients. We manage approximately \$3.5 billion in fixed income client assets as of March 31, 2018.</p>		TY ANDREWS Portfolio Analyst		THOMAS D.D. GRAFF, CFA Head of Fixed Income, Portfolio Manager		KELLY MCCONKEY Portfolio Analyst		TORY SZCZAWINSKI Securitized Products Analyst	
		TOM BANDUROWSKI Credit Analyst		AMY HAUTER, CFA Associate Portfolio Manager ESG Research Analyst		JOSHUA PERRY, CFA, CAIA, FRM Associate Portfolio Manager Credit Analyst		DAVID THOMPSON, CFA, CFP Portfolio Manager	
		PAUL CORBIN Portfolio Manager						JASON VLOSICH Associate Portfolio Manager Analyst and Trader	
		JAMES DAVIE, CFA Credit Analyst		JOHN HENRY IUCKER Associate Portfolio Manager Securitized Products Analyst		STEPHEN SHUTZ, CFA Portfolio Manager		LYN WHITE, CFA Credit Analyst	
						ROBERT SNYDER III Portfolio Manager			

As of March 31, 2018, Brown Advisory managed approximately \$3.5 billion in fixed income client assets for the following entities: Brown Advisory, LLC, Brown Investment Advisory & Trust Company, Brown Advisory Securities, LLC, Brown Advisory Ltd., Brown Advisory Trust Company of Delaware, LLC and Brown Advisory Investment Solutions Group LLC.

### INTERMEDIATE-TERM FOCUSED

## Brown Advisory National Municipal Bond Strategy

As Of 03/31/2018

STRATEGY INCEPTION: 05/31/1993 | TYPICAL DURATION RANGE: 1-10 YEARS | PORTFOLIO MANAGER: STEVE SHUTZ, CFA

The Brown Advisory National Municipal Bond strategy invests in a portfolio comprised of primarily tax-exempt fixed income securities—identified through fundamental analysis—that seeks to provide current income, principal preservation and stable total returns over time.

SECTOR COMPOSITION	REP. ACCOUNT	BLOOMBERG BARCLAYS MUNI BOND 1-10 YEAR BLEND INDEX
Cash & Equivalents	1.0	--
Municipal Revenue Bonds	86.7	53.6
Pre-Refunded Municipal Bonds	--	14.1
General Obligation Municipals	12.4	32.3

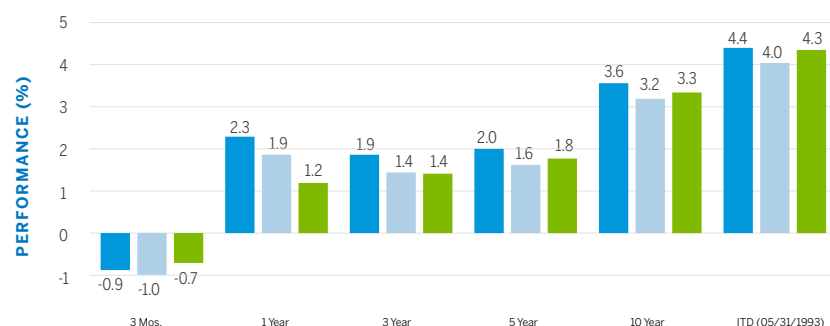
Source: FactSet®. Data shown are as of 03/31/2018

#### A Glimpse at Current Positioning: Meaningful overweight in revenue-backed bonds vs. benchmark.

Health care/Senior Living was our single largest increase in the first quarter of 2016, although we have become increasingly selective during 2016 in this space. We still think there is good value in select credits, as the Affordable Care Act (ACA) will continue to create winners and losers among hospitals. This was highlighted by United Health threatening to exit the ACA's exchange marketplaces in November. Even now, two years after the ACA implementation began, its impact continues to be an evolving story. Today, the bond market is not making much of a distinction between hospital credits with similar ratings. To uncover compelling value, we heavily scrutinize the business conditions of each hospital.

### BROWN ADVISORY NATIONAL MUNICIPAL COMPOSITE PERFORMANCE AS OF 03/31/2018

■ NATIONAL MUNICIPAL BOND (GROSS OF FEES) ■ BLOOMBERG BARCLAYS MUNI BOND 1-10 YR BLEND INDEX  
 ■ NATIONAL MUNICIPAL BOND (NET OF FEES)



Source: FactSet®. Returns shown are through 03/31/2018 for each period. All returns greater than one year are annualized. Past performance is not indicative of future results. The composite performance shown above reflects the National Municipal Bond composite, managed by Brown Advisory Institutional. Brown Advisory Institutional is a GIPS compliant firm and is a division of Brown Advisory LLC. Please see the end of this presentation for a GIPS compliant presentation.

PORTFOLIO ATTRIBUTES <sup>1</sup>	REP. ACCOUNT	BLOOMBERG BARCLAYS MUNI BOND 1-10 YEAR BLEND INDEX
Avg. Credit Quality	A2	AA2/AA3
Effective Duration (yrs)	4.0	4.1
Yield to Worst (%)	3.1	2.3
Avg. Life (yrs)	7.8	5.8
CREDIT QUALITY <sup>1</sup>		
AAA/Aaa	3.1	16.6
AA/Aa	36.6	53.9
A	22.5	23.1
BBB/Baa	26.2	6.4
High Yield	2.5	--
Other	9.1	--
DURATION DISTRIBUTION <sup>1</sup>		
Less than 1 Year	31.1	3.7
1 to 3 Years	10.7	32.0
3 to 5 Years	13.1	29.2
5 to 7 Years	22.0	24.1
7 to 10 Years	19.2	10.5
Greater than 10 Years	3.9	0.5

<sup>1</sup>Source: FactSet®. Data shown are as of 03/31/2018. The portfolio information above is based on a representative National Municipal Bond account and is provided as supplemental information. Portfolio level information includes cash and cash equivalents. Fixed income sectors, quality distribution and duration distribution may not total 100% due to rounding. Please see the Brown Advisory National Municipal Bond Composite performance disclosure on the last page for additional information and a complete list of terms and definitions.

# About Brown Advisory

Brown Advisory is a leading independent investment firm that offers a wide range of solutions to institutions, corporations, nonprofits, families and individuals. Our mission is to make a material and positive difference in the lives of our clients by providing them first-rate investment performance, customized strategic advice and the highest level of personalized service.

We follow a philosophy that low-turnover, concentrated portfolios derived from sound bottom-up fundamental research provide an opportunity for attractive performance results over time. We have a culture and firm equity ownership structure that help us attract and retain professionals who share those beliefs, and we follow a repeatable investment process that helps us stay true to our philosophy.

## INSTITUTIONAL AND INVESTMENT CONSULTANTS

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## ENDOWMENTS AND FOUNDATIONS

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# Brown Advisory National Municipal Bond

Year	Composite Total Gross Returns (%)	Composite Total Net Returns (%)	Benchmark Returns (%)	Composite 3-Yr Annualized Standard Deviation (%)	Benchmark 3-Yr Annualized Standard Deviation (%)	Portfolios in Composite at End of Year	Composite Dispersion (%)	Composite Assets (\$USD Millions)	GIPS Firm Assets (\$USD Millions)
2017	4.4	4.0	3.5	2.4	2.5	142	0.3	993	33,155
2016	0.7	0.3	-0.1	2.5	2.4	134	0.3	875	30,417
2015	1.9	1.6	2.5	2.3	2.1	123	0.3	729	43,746
2014	5.7	5.4	4.7	2.4	2.2	45	0.5	415	44,772
2013	-1.1	-1.4	-0.3	2.5	2.5	24	0.4	283	40,739
2012	3.5	3.1	3.6	2.3	2.5	20	0.9	293	26,794
2011	6.8	6.5	7.6	3.4	3.2	9	0.8	48	19,962
2010	3.7	3.3	3.1	4.5	4.2	12	0.6	25	16,859
2009	8.6	8.3	7.2	4.4	3.9	12	0.7	31	N/A
2008	3.6	3.2	4.2	3.5	3.3	11	0.7	38	N/A
2007	4.5	4.2	4.8	1.9	1.8	8	0.2	25	N/A

Brown Advisory Institutional claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Brown Advisory Institutional has been independently verified for the periods from January 1, 1993 through December 31, 2017. The Verification reports are available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. GIPS® is a registered trademark owned by CFA Institute.

- \*For the purpose of complying with the GIPS standards, the firm is defined as Brown Advisory Institutional, the Institutional and Balanced Institutional asset management divisions of Brown Advisory. As of July 1, 2016, the firm was redefined to exclude the Brown Advisory Private Client division, due to an evolution of the three distinct business lines.
- The National Municipal Bond Composite is comprised of all discretionary accounts with no material investment restrictions, which invest in tax-exempt fixed income securities of an intermediate target duration, and flexibility to invest in bonds from multiple states. At least 80% of the securities in each portfolio in this composite will have credit quality ratings of A or better at the time of purchase. The minimum account market value required for composite inclusion is \$2 million. Prior to October 2012 the name of this composite was Intermediate Municipal Bond (AMT-Free) Composite. The strategy remains the same except the maximum federal tax bracket requirement is relaxed. Prior to October 2012 the minimum account market value required for composite inclusion was \$1 million.
- This composite was defined and initially created on March 1, 2006.
- The current benchmark is the Bloomberg Barclays Municipal Bond 1-10 Year Blend (1-12) Index. The Bloomberg Barclays Municipal Bond 1-10 Year Blend (1-12) Index consists of a broad selection of investment-grade general obligation bonds, revenue bonds, insured bonds (including all insured bonds with a Aaa/AAA rating), and prerefunded bonds with maturities of at least 1 year and less than 12 years. It is an unmanaged index representative of the tax-exempt bond market. Bloomberg Barclays Indices are trademarks of Bloomberg or its licensors, including Barclays Bank PLC. An investor cannot invest directly into an index. Benchmark returns are not covered by the report of the independent

verifiers.

- The composite dispersion presented is an equal-weighted standard deviation of portfolio returns calculated for the accounts in the composite for the entire calendar year period.
- Gross-of-fees performance returns are presented before management fees but after all trading commissions, and gross of foreign withholding taxes (if applicable). Net-of-fee performance returns reflect the deduction of actual management fees and all trading commissions. Other expenses can reduce returns to investors. The standard management fee schedule is as follows: 0.375% on the first \$10 million; 0.25% on the next \$15 million and 0.20% on the balance over \$25 million. Further information regarding investment advisory fees is described in Part II A of the firm's form ADV. Actual fees paid by accounts in the composite may differ from the current fee schedule.
- The three-year annualized ex-post standard deviation measures the variability of the composite (using gross returns) and the benchmark for the 36-month period ended on December 31.
- Valuations and performance returns are computed and stated in U.S. Dollars. All returns reflect the reinvestment of income and other earnings.
- A complete list of composite descriptions, policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.
- Past performance does not indicate future results.
- This piece is provided for informational purposes only and should not be construed as a research report, a recommendation or suggestion to engage in or refrain from a particular course of action or to make or hold a particular investment or pursue a particular investment strategy, including whether or not to buy, sell or hold any of the securities mentioned, including any mutual fund managed by Brown Advisory.
- Some portfolios may utilize derivative securities. To date, any derivatives used have been CMOs and range accrual notes. Any CMO at the time of purchase must pass the FFIEC volatility tests.
- Duration is a measure of interest rate risk.

## Terms and Definitions for Representative Account Calculations

FactSet® is a registered trademark of FactSet Solutions LLC. BLOOMBERG is a trademark and service mark of Bloomberg Finance L.P., a Delaware limited partnership, or its subsidiaries. FactSet® is a registered trademark of FactSet Research Systems, Inc. MMD®/TM3 Thomson Reuters are trademarks and service marks of Thomson Reuters.

**Effective Duration** is a time measure of a bond's interest-rate sensitivity, based on the weighted average of the time periods over which a bond's cash flows accrue to the bondholder. **Yield to Worst** is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call or sinking fund, are used by the issuer. **Average Life** is the period of time for all principal dollars to be returned to investors. **Alpha** takes the volatility (price risk) of an investment and compares its risk-adjusted performance to a benchmark index. The **Bloomberg Barclays Municipal Revenue Bond Index** is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. The **Bloomberg Barclays U.S. TIPS Index** is an unmanaged index that consists of inflation-protected securities issued by the U.S. Treasury. The **Bloomberg Barclays U.S. Treasury Index** is an unmanaged index of public obligations of the U.S. Treasury with a remaining maturity of one year or more. The **Bloomberg Barclays U.S. Aggregate Bond Index** represents securities that are SEC-registered, taxable, and dollar denominated. The 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. The **Bloomberg Barclays Municipal Bond 1-10 Year Blend Index** is a market value-weighted index which covers the short and intermediate components of the Bloomberg Barclays Municipal Bond Index—an unmanaged, market value-weighted index which covers the U.S. investment-grade tax-exempt bond market. The 1-10 Year Municipal Blend index tracks tax-exempt municipal General Obligation, Revenue, Insured, and Prerefunded bonds with a minimum \$5 million par amount outstanding, issued as part of a transaction of at least \$50 million, and with a remaining maturity from 1 up to (but not including) 12 years. The index includes reinvestment of income. **Bloomberg Barclays Municipal Bond Index** is a broad-based benchmark that measures the investment grade, US dollar-denominated, fixed tax exempt bond market. **Bloomberg Barclays US Corporate Bond Index** measures the investment grade, fixed rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers. Bloomberg Barclays Indices are trademarks of Bloomberg or its licensors, including Barclays Bank PLC. The **S&P 500® Index** represents the large-cap segment of the U.S. equity markets and consists of approximately 500 leading companies in leading industries of the U.S. economy. Criteria evaluated include: market capitalization, financial viability, liquidity, public float, sector representation, and corporate structure. An index constituent must also be considered a U.S. company. Standard & Poor's, S&P, and S&P 500 are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"), a subsidiary of S&P Global Inc. An investor cannot invest directly into an index.

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