



Brown Advisory Tax-Exempt Sustainable Fixed Income Strategy

AS OF DECEMBER 31, 2017



Table of Contents

- Firm Overview
 - Sustainable Fixed Income Overview
- Tax-Exempt Sustainable Fixed Income Investment Management
 - Philosophy
 - Investment Team
 - Process
- Sample Impact Portfolio Investments
- Portfolio Attributes
 - Characteristics
 - Performance
- Appendix



Firm Overview

Brown Advisory: Firm & Strategy Overview



Independent, fundamentally driven investment management firm

FIRM

1993

Launched as an investment management arm of Alex. Brown & Sons

1998

Investment team and management-led buyout enables independence, focus and expansion

2008

Expands globally and today has clients in 34 countries

100%

of colleagues collectively own 70% of the firm's equity

INVESTMENT SCOPE

100+ professionals

On our investment team, including 16 dedicated to fixed income research and portfolio management

16 years

Average investment experience of our fixed income research team

\$61 billion*

In total assets under management for clients

\$28 billion*

In institutionally marketed strategy assets

SUSTAINABLE INVESTMENTS

\$3.7 billion*

In total assets under management for clients under ESG or sustainable mandates

100%

Of the firm's proprietary equity and fixed income strategies available with client-defined ESG screens

6 sustainable investment strategies

Large-Cap Sustainable Growth Equity, Sustainable Core Fixed Income, Tax-Exempt Sustainable Fixed Income, Sustainable Balanced, U.S. Large-Cap and U.S. Small-Cap ESG

*Please see the end of the presentation for disclosures and information regarding assets.

Broad Sustainable Investing Capabilities

1983	1992	1993	2009	2010	2011	2012	2013	2014	2015	2016	2017
Early Pioneer of Sustainable Investing	Start of Fixed Income SRI Investing	Our Firm Founding	Additional Expertise Joins	Large-Cap Sustainable Growth Strategy Launch	Additional Expertise Joins	Sustainable Growth Mutual Fund Launch	Customized Sustainable Investment Advice	Sustainable Fixed Income Solutions	Integrated Sustainable Solutions	Sustainable Investment Advisory Board	Expansion of Sustainable Investment Suite
Key members of the Sustainable Investing Team begin managing ESG-focused equity portfolios at Winslow Management Company	Key members of the Sustainable Investing Team begin managing SRI-focused bond portfolios at Cavanaugh Capital Company	Brown Advisory founded	Winslow Management Company joins Brown Advisory Key Sustainable Investing Team members begin managing multi-strategy sustainable portfolios	Launch the Large-Cap Sustainable Growth Strategy, which invests in fundamentally strong companies with sustainability drivers Cavanaugh Capital Management joins Brown Advisory	Boston private client team with strong sustainable expertise joins Brown Advisory		Brown Advisory joins the Forum for Sustainable and Responsible Investment (US SIF)	Brown Advisory signs the U.N. Principles for Responsible Investment (UN PRI)	Brown Advisory offers a variety of sustainable equity, fixed income and other strategy solutions	Brown Advisory forms an sustainable investing advisory to help guide long-term strategic thinking	Brown Advisory launches the U.S. Sustainable Growth UCITS Fund, Sustainable Bond Fund, Sustainable Balanced and U.S. Large-Cap and U.S. Small-Cap Actively Screened ESG solutions

- Long history in sustainable investing that predates the firm's founding
- Perspectives from multiple firms have contributed to our approach over time
- Deep commitment to advancing sustainable investing principles through support of various sustainable investment organizations

Members, signatories or supporters of:



¹ Brown Advisory entities included are: Brown Advisory LLC, Brown Investment Advisory & Trust Company, Brown Advisory Ltd., and Brown Advisory Trust Company of Delaware, LLC.

Sustainable Fixed Income Overview

We have worked for many years with clients seeking to achieve sustainable investment goals, whether those clients are seeking a predefined sustainable fixed income strategy or a more customized approach to applying their values and principles to their bond portfolios.



Sustainable Fixed Income



Tax-Exempt Sustainable Fixed Income

Portfolio of municipal fixed income securities selected on their fundamental credit and ESG merits, that seeks long-term outperformance vs. the Bloomberg Barclays Municipal Bond 1-10 Year Blend Index.



Sustainable Core Fixed Income

Broad portfolio of fixed income securities selected on fundamental credit and ESG merits, that seeks long-term outperformance vs. the Bloomberg Barclays U.S. Aggregate Bond Index.



Custom Portfolios



ESG Policy Development

We help clients develop or refine investment policy statements to include clear ESG-related definitions and boundaries.



Mission-Related Investing

Explore ways in which clients can advance their sustainability priorities by investing in bonds that fund specific activities.



Client-Defined Screening

We can fully customize ESG screening as an option for clients invested in all of our fixed income strategies.



Tax-Exempt Sustainable Fixed Income

Investment Philosophy

We seek to deliver attractive risk-adjusted returns by incorporating into our investment research ESG factors that we believe have a clear and tangible impact on performance.

We believe this analysis strengthens our bottom-up, credit-focused research approach and produces a positive environmental and social impact.



Competitive Advantages

- We use a proprietary ESG research methodology that integrates third-party data with our own internal analysis. This methodology aims to provide additional dimensions to our understanding of opportunities and the risks embedded in the bonds we evaluate.
- We have built strong relationships with many of the world's leading green-bond issuers and underwriters, which helps us gain access to new-issue inventory.
- We manage a range of investment strategies that span a variety of risk and return profiles, which can be customized to meet a client's risk tolerance, liquidity needs and return expectations.
- We concentrate our team's best ideas in a portfolio that seeks to provide alpha and manage target duration.
- We were early adopters of the Green Bond Principles and have been a leading participant in the green bond market in recent years.

ESG—An Ideal Investing Framework for Fixed Income

We find sustainable investing to be a particularly useful and impactful approach.

Historically, investors have applied environmental, social and governance (ESG) principles primarily to equity investments. Use of these ideas within the fixed income market has been comparatively limited.

We think differently.



Performance Advantages

- **Common focus on downside risk:** The exercise of valuing bonds focuses on worst-case scenarios—the probability of default and the likely recovery rate in case of default.

Since ESG data primarily looks at downside risk factors, it becomes more valuable to an overall bond valuation effort.

- **High correlation across issuers:** Typically, bonds with similar structures should produce highly correlated results. A green bond from the World Bank should perform just like a traditional Freddie Mac bond with the same characteristics.

We can invest in positive-impact bonds with no meaningful impact on the performance of the portfolio.



Impact Advantages

- **Clarity on use of capital:** The use of proceeds in any bond issue means directing capital to fund specific activities more effectively than in equity strategies.
- **Emerging standards:** The Green Bond Principles have enhanced the ability for bond purchasers to understand the use of proceeds for a bond issue.

Tax-Exempt Sustainable Fixed Income Investment Team

Team-oriented research approach anchored in fundamental analysis

- Present, defend and debate investment thesis
- Focus on bottom-up, fundamental credit and sector analysis
- Promote and commit to a sense of shared responsibility

Portfolio Management

Day-to-day management of portfolios and accountable for performance

- **Paul Corbin**
Portfolio Manager
- **Thomas D.D. Graff, CFA**
Portfolio Manager;
Head of Fixed Income
- **Robert Snyder III**
Portfolio Manager
- **David Thompson, CFA, CFP**
Portfolio Manager

Portfolio Analyst

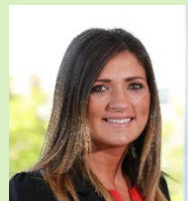
Trade allocation and account management

- **Ty Andrews**
Portfolio Analyst

Tax-Exempt Sustainable Fixed Income



Steve Shutz, CFA
Portfolio Manager



Amy Hauter, CFA
Associate Portfolio Manager,
ESG Research Analyst



Kelly McConkey
Portfolio Analyst



Joshua Perry, CFA, CAIA, FRM
Associate Portfolio Manager,
Credit Analyst

Head Trader

Trading and best execution

- **Jason Vlosich**
Associate Portfolio Manager
Trader & Credit Analyst

Research

Focus on bottom-up, fundamental credit and sector analysis

- **Tom Bandurowski, CFA**
Credit Analyst
- **James Davie, CFA**
Credit Analyst
- **John Henry Iucker**
Associate Portfolio Manager,
Securitized Products Analyst
- **Eric Levin**
ESG Research Analyst
- **Tory Szczawinski**
Securitized Products Analyst
- **Lyn White, CFA**
Credit Analyst

Seeking Sustainable Investments

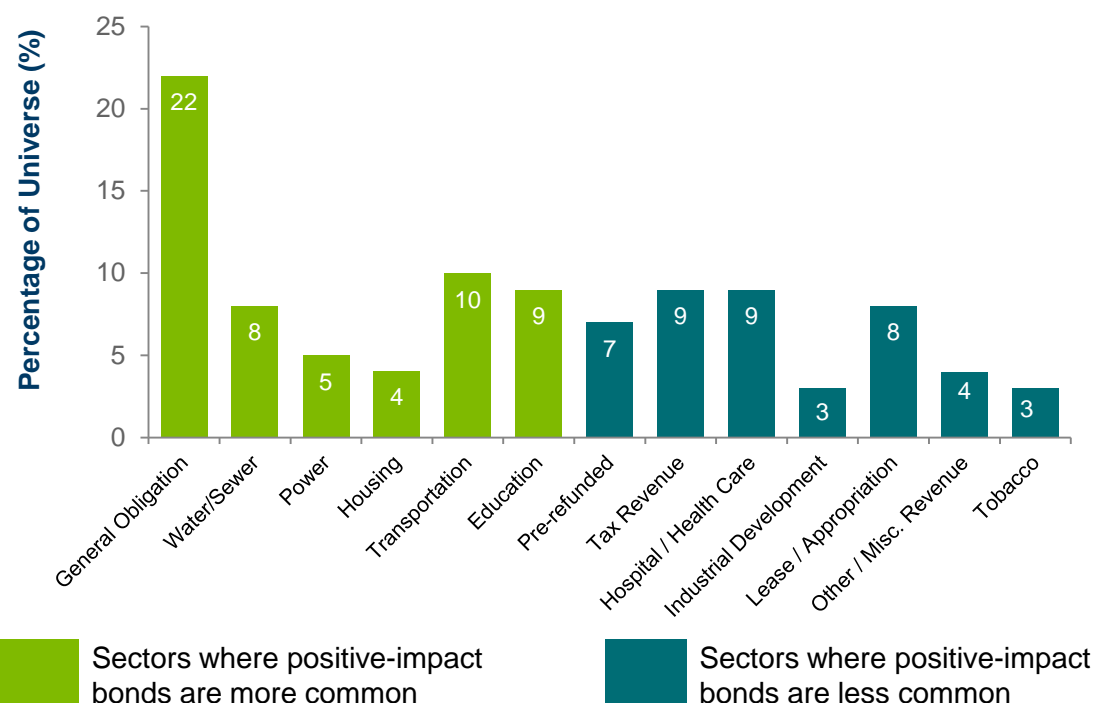
Municipal Bond Universe

Broad universe of municipal and federal government-backed bonds

- From a fundamental perspective, there is no difference between green bonds and other municipal bonds. The only differentiator is the use of proceeds from the bond issue.
 - Green bond proceeds are used for environmental projects
- Green bonds are funding projects in many segments of the municipal market, and issuance is expanding into new sectors over time.

Impact bonds are now being issued within sectors representing more than half of the \$3.7 trillion municipal bond universe.

As of 12/31/2017



Source: Bloomberg.

Please see end of presentation for important disclosures and a complete list of terms and definitions.

Identifying Impactful Bonds



The Green Bond Principles (GBP) are an essential mechanism for standardizing the way the market views impact bonds. We also leverage our understanding of the Principles to identify non-labeled bonds that still have a positive social and environmental impact.

NON-LABELED GREEN BOND

Oklahoma Water Resources Board Revenue Bonds

- Issuer Description: Oklahoma Water Resources Board is located in the State of Oklahoma. The Board was created pursuant to the 1987 amendments to the “Clean Water Act” to provide funds for financing the construction of wastewater treatment facilities for municipalities and other public entities
- Use of Proceeds: This taxable municipal issue funds the Clean Water State Revolving Fund Loan Program and the Drinking Water State Revolving Fund Loan Program.

LABELED GREEN BOND

American Municipal Power Inc.- Ohio Revenue Bonds

- Issuer Description: American Municipal Power transmits and generates electric energy. The company offers services such as power supply, aggregation, clean energy and conservation, safety programs, business development, and scholarship programs throughout the United States
- Use of Proceeds: This taxable municipal issue funds the four run-of-river hydro-electric projects under construction on the Ohio River.

Please see end of presentation for important disclosures.

Seeking Sustainable Investments

Spotlight on credit analysis

Credit-focused due diligence process used to build investment case and mitigate downside

Sector Overviews

- Understand unique credit quality drivers/risks for each sector of the market
- Identify and monitor general risks to sector e.g. accounting / regulation/ legislation changes

Bottom-up Analysis

- Identify essentiality and feasibility of public purpose
- Focus on cash flow visibility / bondholder security / downside scenario research
- Use both borrower-disseminated and publicly available information

Relative Value

- Select potential portfolio candidates by comparing credit quality
- Ensure investments optimize total portfolio risk-return profile

Surveillance

- Monitor public disclosures of material information
- Continually update analysis of sectors and individual holdings
- Test due diligence assumptions as conditions change

Credit research primarily focuses on ensuring borrowers have a feasible way to repay proceeds and that bondholders have a clear means to protect capital in case of adverse scenarios.

Seeking Sustainable Investments

Spotlight on ESG research

Integrated ESG due diligence that provides additional dimensions to our understanding of risks and opportunities embedded in the bonds we evaluate

Issuer Conversations

- Approach relevant officers, probe quality and depth of reported sustainability initiatives
- If a green/social bond issuer, assess understanding and intent of ultimate project impact funded by the proceeds

Proprietary ESG Assessment

- Identify an issuers material environmental, social and governance (ESG) risk factors and opportunities, and the management of those risks to understand the complete investment merit and risk profile of the issuer

Use-of-Proceeds Assessment

- Ensure documents outline use-of-proceeds assessment of labeled green/social bonds and analyze the impact of the project
- Examine past impact reporting for adherence to the Green/Social Bond Principles



FACTORS CONSIDERED

- Toxic emissions and waste
- Renewable energy and energy efficiency
- Clean transportation initiatives
- Water resource conservation
- Health care impacts
- Responsible sourcing
- Air quality
- Disclosure and transparency
- Human capital management

Sustainability research is primarily focused on considering ESG risks and opportunities into our investment research that we believe have a clear tangible impact on performance.

Please see end of presentation for important disclosures and a complete list of terms and definitions.

Portfolio Construction

Tax-Exempt Sustainable Portfolios

Portfolios are constructed beginning with a core of highly liquid, stable-credit municipal bonds

1. Clearly articulate client objectives

- Liquidity needs and portfolio duration target
- State of residency and client tax bracket

2. Determine allocations for:

- **Stable Allocation**—allows portfolio to be nimble as well as meeting any client draw needs at a low cost
- **Alpha Allocation**—identify risk; determine return drivers and risks to return of all positions

3. Position management

- Separate accounts generally hold between 30-50 securities
- Positions are diversified by revenue source
- Credit-sensitive securities are weighted based on risk/reward profile

Please see end of presentation for important disclosures and a complete list of terms and definitions.

We generally sell bonds for four reasons:

1 Outlook Changes

- Changes in macro-economic themes increases or decreases risk, alters outlook
- Threats are emerging to base scenario which may change the attractiveness of a sector

2 Thesis Realized

- Better opportunities exist in other sectors/issuers relative to risk

3 Credit / ESG Risk

- Decrease in revenue stability and/or an increase in risk
- Unacceptable increase in fundamental or ESG risk factors (monitored on an ongoing basis as part of a disciplined portfolio risk assessment process)

4 Impact Factors

- Issuer fails to clearly articulate capital plans for designated green projects
- Issuer fails to implement effective management processes to track progress on designated projects



Sample Impact Projects Partially Funded By Portfolio Holdings

City of Los Angeles Streetlights Project



\$40MM Financing to finance the largest LED streetlight retrofit project in the world.

- Under the LED Street Lighting Energy Efficiency Program, the City of Los Angeles retrofitted 141,089 street lights with LED bulbs.
- Before the program, the city street lights consumed 168 gigawatt hours of electricity at an annual cost of \$15 million, while emitting 110,000 metric tons of carbon dioxide. The new lights reduce energy usage by 63.1 percent and reduce carbon emissions by 47,583 metric tons a year.
- LED lights, on average, lower energy consumption, delivering between 44 and 53 percent annual savings in energy costs when compared with high pressure sodium lights. In addition, they have a longer lifespan of up to 20 years, reducing maintenance costs while providing greater functionality.



Environmental Benefits

ESTIMATED ANNUAL SAVINGS:

- Water use avoided (1,000/liters): 1,407,000
- Nonhazardous waste avoided (metric tons): 700
- MWh reduced from efficiency projects: 71,000

Antioch Unified School District



30MM Qualified Zone Academy Bonds (QZABs) for solar and energy efficiency equipment.

- Financing will provide funds for the District to purchase solar panels for installation at 24 school sites, as well as energy efficiency equipment for lighting and HVAC upgrades. The systems will be used to produce electricity and offset utility costs, generating additional revenue and energy savings.
- The solar project will be integrated into the Pathway to Engineering program of study at Antioch High School. Students in the program will be provided a “living solar laboratory” where clean renewable energy is not only generated for the benefit of the District’s electrical energy consumption, but also monitored, measured and integrated into the core engineering curriculum.
- The entire energy project is expected to save the District \$34.3 million over the 25-year useful life of the project.



Environmental Benefits

ESTIMATED ANNUAL SAVINGS:

- Global Warming metric tons CO₂e avoided: 7,700
- Water use avoided (1000/liters): 206,000
- Non-hazardous waste avoided (metric tons): 103
- MWh reduced from efficiency projects: 1,700
- MWh produced from renewable project: 8,700

NextEra, Pioneer Plains



\$170MM tax equity investment in a wind power partnership with NextEra Energy Resources.

- NextEra Energy Resources is one of the largest operators of wind and solar power assets in the United States.
- The partnership finances the Blackwell and Minco III wind farms, in central and eastern Oklahoma, respectively, for a total of 160 MW of power generation. The facilities have been in operation since December 2012 and have enough installed capacity to generate power for more than 42,000 average homes.
- Additionally, the facilities deliver clean, renewable power to the citizens of Oklahoma City and surrounding areas.



Environmental Benefits

ESTIMATED ANNUAL SAVINGS:

- Global warming metric tons CO2e avoided: 157,000
- Water use avoided (1000/liters): 4,209,000
- Non-hazardous waste avoided (metric tons): 2,000



Portfolio Attributes

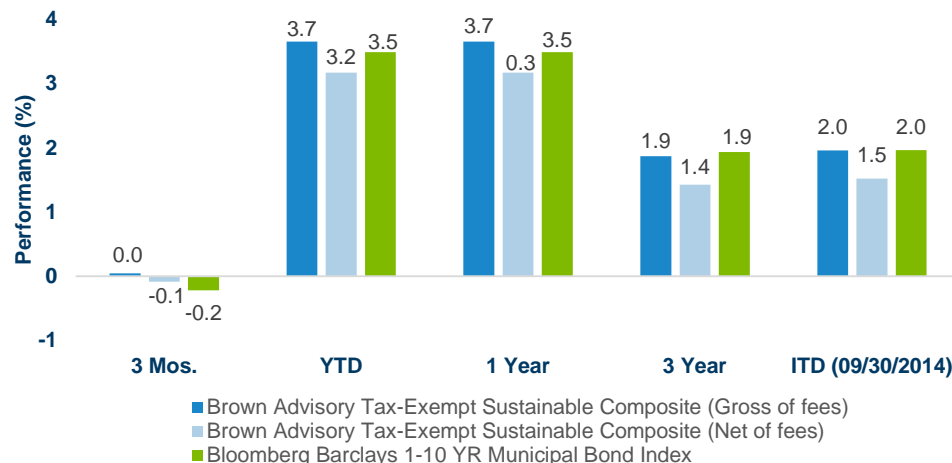
As of 12/31/2017

Fourth Quarter 2017 Tax-Exempt Sustainable Composite

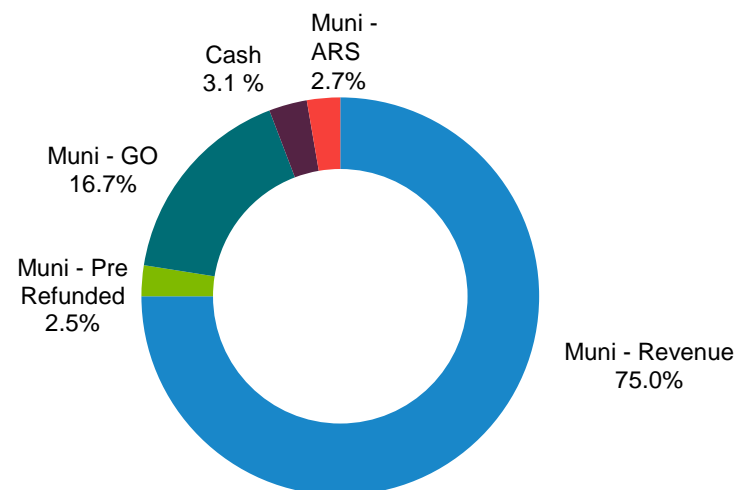
We seek to deliver attractive performance by considering social and environmental factors in our investment research that have a clear tangible impact on performance. We believe that a portfolio of fixed income securities, identified through fundamental and quantitative analysis and concentrated on our best ideas, has the potential to deliver attractive risk-adjusted returns over time.

Performance (As of 12/31/2017)

Strategy Inception Date: 9/30/2014



Sector Distribution²



FIXED INCOME CHARACTERISTICS ²		
	Rep. Account	Benchmark
Avg. Credit Quality	Aa3	AA2/AA3
Effective Duration (years)	4.0	4.2
Yield to Worst (%)	2.0	2.0
Avg. Life (years)	4.9	5.9

QUALITY DISTRIBUTION (%) ²		
	Rep. Account	Benchmark
AAA/Aaa	13.0	17.0
AA/Aa	54.1	55.1
A	19.5	22.5
BBB/Baa	6.6	5.4
High Yield	--	--
Other	6.8	--

DURATION DISTRIBUTION (%) ²		
	Rep. Account	Benchmark
Less than 1 Year	13.6	3.7
1 to 3 Years	19.8	32.1
3 to 5 Years	28.5	27.3
5 to 7 Years	30.9	24.7
7 to 10 Years	5.2	11.8
Greater than 10 Years	2.0	0.4

- Source: FactSet®. FactSet is a registered trademark of FactSet Research Systems, Inc. The composite performance shown above reflects the Tax-Exempt Sustainable Fixed Income 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.
- Source: FactSet. Sector breakdown, quality and duration distribution characteristics are as of 12/31/2017 and represent the most recent data available at time of publication. The portfolio information on the right is based on a representative Tax-Exempt Sustainable Fixed Income 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 Tax-Exempt Sustainable Composite performance disclosure statement at the end of this presentation for more information. For definitions of fixed income characteristics, please see the end of the presentation.



Appendix

ESG Investment Capabilities

- As of September 30, 2017, Brown Advisory managed approximately \$3.7 billion* in ESG mandates. We offer a range of investment solutions and resources to serve the varying needs of our clients.

Services

- Customized screening
- Mission-related investing
- Proxy voting
- ESG policy development

Services available across Brown Advisory's equity and fixed income strategies

Strategies

- Large-Cap Sustainable Growth Strategy
- Sustainable Core Fixed Income Strategy
- Tax-Exempt Sustainable Fixed Income Strategy
- U.S. Large-Cap ESG
- U.S. Small-Cap ESG
- Sustainable Balanced

Resources

- Research: internal expertise supplemented by MSCI ESG Manager®, the Carbon Disclosure Project, Bloomberg and a variety of other sources
- Portfolio compliance: Advent Rules Manager® is a comprehensive system for trading compliance and portfolio monitoring
- Proxy voting: third-party research by Glass-Lewis guides governance-related voting and supports internal analysis of sustainability-related proposals

*Brown Advisory entities included are: Brown Advisory LLC, Brown Investment Advisory & Trust Company, Brown Advisory Ltd., and Brown Advisory Trust Company of Delaware, LLC.

Principles for Responsible Investment (PRI) Signatory

Signatory of:

- Global initiative supported by the United Nations Global Compact and the UNEP Finance Initiative
- Supported by more than 1,380 signatories representing more than \$59 trillion in assets under management as of the end of 2015



The Principles for Responsible Investment

We believe that environmental, social, and corporate governance (ESG) issues can affect the performance of investment portfolios, and we also believe that investors may better align themselves with the broader objectives of society through the consideration of ESG issues. Therefore, where consistent with our fiduciary responsibilities, we commit to the following:

- 1. We will incorporate ESG issues into investment analysis and decision-making processes*
- 2. We will be active owners and incorporate ESG issues into our ownership policies and practices*
- 3. We will seek appropriate disclosure on ESG issues by the entities in which we invest*
- 4. We will promote acceptance and implementation of the Principles within the investment industry*
- 5. We will work with other signatories to enhance their effectiveness in implementing the Principles*
- 6. We will report on our activities and progress towards implementing the Principles*

Research & Investment Team

PRIYANKA AGNIHOTRI, CFA
Financial Services Research Analyst

- Columbia University, M.B.A.
- Analyst, Bernstein Research; Analyst, Phoenix Asset Management Partners
- Investment experience since 2009; Joined Brown Advisory 2015

TY ANDREWS
Fixed Income Portfolio Analyst

- Towson University, BS
- Financial Associate, Morgan Stanley; Investment Services, T. Rowe Price
- Investment experience since 2016; Joined Brown Advisory 2014

MANEESH BAJAJ, CFA
Flexible Equity Associate Portfolio Manager

- University of Pennsylvania, The Wharton School, M.B.A.; University of Kentucky, M.S.
- Senior Associate, McKinsey & Company; Senior Associate, Standard & Poor's
- Investment experience since 2003; Joined Brown Advisory 2005

TOM BANDUROWSKI, CFA
Fixed Income Research Analyst

- Boston University, B.S.B.A., B.A.
- Manager, Credit Restructuring Advisory, EY; Associate, Restructuring & Special Situations Group, Macquarie Capital
- Investment experience since 2006; Joined Brown Advisory 2016

CHRISTOPHER BERRIER
Small-Cap Growth Portfolio Manager; Mid-Cap Growth Portfolio Manager

- Princeton University, A.B.
- Vice President, T. Rowe Price Group
- Investment experience since 2000; Joined Brown Advisory 2005

JOHN BOND, CFA
Technology Equity Research Analyst

- Harvard University, A.B.; Columbia Business School, M.B.A.
- Senior Analyst and Assistant Portfolio Manager, Nicusa Capital
- Investment experience since 1999; Joined Brown Advisory 2012

JOHN CANNING, CFA
Technology Equity Research Analyst

- Dartmouth College, B.A.
- Investment experience since 2014; Joined Brown Advisory 2014

ERIN CAWLEY
Risk Equity Research Analyst

- Loyola University, B.S.
- Investment experience since 2017; Joined Brown Advisory 2012

ERIC CHA, CFA
Consumer Equity Research Analyst

- University of Virginia, B.A.; New York University, M.B.A.
- Equity Analyst, Bethlehem Steel Pension Fund; Equity Analyst, Oppenheimer Funds
- Investment experience since 2000; Joined Brown Advisory 2007

PAUL CHEW, CFA
Chief Investment Officer

- Mount St. Mary's, B.A.; Duke University, Fuqua School of Business, M.B.A.
- International Asset Management Department, J.P. Morgan & Co.
- Investment experience since 1989; Joined Brown Advisory 1995

KENNETH COE, CFA
Financial Services Equity Research Analyst

- Wake Forest University, B.A.
- Analyst, First Annapolis Consulting; Research, Independent Financial Econometrics Study
- Investment experience since 2010; Joined Brown Advisory 2013

PAUL CORBIN
Fixed Income Portfolio Manager

- University of Virginia, B.A.; George Washington University, M.B.A.
- Senior Portfolio Manager, First Maryland Asset Management
- Investment experience since 1977; Joined Brown Advisory 1991

JAMES DAVIE, CFA
Fixed Income Research Analyst

- Boston University, M.B.A.; Ithaca College, B.A.
- Performance Analyst, State Street Investment Analytics
- Investment experience since 2010; Joined Brown Advisory in 2015

MICK DILLON, CFA
Global Leaders Portfolio Manager

- University of Melbourne, B.A.
- Co-Head of Asian Equities & Portfolio Manager, HSBC Global Asset Management; Analyst, Arete Research
- Investment experience since 2000; Joined Brown Advisory 2014

EMILY DWYER
Equity ESG Research Analyst

- Smith College, B.A.
- Investment experience since 2014; Joined Brown Advisory 2014

Research & Investment Team

DOUGLAS FALK

General Equity Research Analyst

- Goucher College, B.A.
- Investment Analyst and Financial Advisor Merrill Lynch
- Investment experience since 2014; Joined Brown Advisory 2016

THOMAS FITZALAN HOWARD

Industrial Research Analyst

- University of Edinburgh, M.A.
- Investment experience since 2016; Joined Brown Advisory 2016

MICHAEL FOSS, CFA

Flexible Equity Research Analyst

- Virginia Tech, B.A.; University of Pennsylvania, The Wharton School, M.B.A.
- Equity Research, Alex. Brown Investment Management; Managing Director & Portfolio Manager, JP Morgan Fleming; Equity Analyst, Gabelli & Co.; Retail Broker, Tucker Anthony
- Investment experience since 1987; Joined Brown Advisory 2004

KARINA FUNK, CFA

Head of Sustainable Investing; Large-Cap Sustainable Growth Portfolio Manager

- Purdue University, B.S.; MIT, Masters in Civil & Environmental Engineering; MIT, Masters in Technology & Policy; École Polytechnique - France, Post-Graduate Diploma in Management of Technology
- Manager, Massachusetts Renewable Energy Trust; Principal, Charles River Ventures
- Investment experience since 2003; Joined Brown Advisory 2009

ERIC GORDON, CFA

Energy Equity Research Analyst

- University of North Carolina, Chapel Hill, B.A.
- Equity Research, Alex. Brown Investment Management; Investment Banking Analyst, Deutsche Bank Alex. Brown, Merrill Lynch & Co.; Equity Research, Citigroup
- Investment experience since 1998; Joined Brown Advisory 2008

THOMAS GRAFF, CFA

Head of Fixed Income; Fixed Income Portfolio Manager

- Loyola University, B.A.
- Managing Director, Cavanaugh Capital Management
- Investment experience since 1999; Joined Brown Advisory 1999

BRIAN GRANEY, CFA

Equity Income Portfolio Manager

- George Washington University, B.A.
- Portfolio Manager, Equity Research, Alex. Brown Investment Management; Writer/Analyst, The Motley Fool
- Investment experience since 1996; Joined Brown Advisory 2001

TIMOTHY HATHAWAY, CFA

Director of Equity Research

- Randolph-Macon College, B.A.; Loyola University, M.B.A.
- Co-Portfolio Manager of Small-Cap Growth Strategy, Brown Advisory; Investor Relations, T. Rowe Price
- Investment experience since 1993; Joined Brown Advisory 1995

AMY HAUTER, CFA

Fixed Income Associate Portfolio Manager; ESG Research Analyst

- Old Dominion University, B.S.
- Fixed Income Client Service, Morgan Stanley
- Investment experience since 2011; Joined Brown Advisory 2012

SHA HUANG

Financials Equity Research Analyst

- Vassar College, B.A.
- Investment experience since 2016; Joined Brown Advisory 2016

JOHN HENRY IUCKER

Fixed Income Associate Portfolio Manager

- Johns Hopkins University B.A.
- Investment experience since 2013; Joined Brown Advisory 2013

MARK KELLY

Health Care Equity Research Analyst

- Johns Hopkins University B.A.; Johns Hopkins University M.H.S.
- Equity Research, Stifel Nicolaus; Managing Consultant, Navigant
- Investment experience since 2008; Joined Brown Advisory 2017

PATRICK MAHONEY

Consumer Equity Research Analyst

- University of Notre Dame, B.S.
- Associate Analyst, Oppenheimer & Co.
- Investment experience since 2007; Joined Brown Advisory 2013

KELLY MCCONKEY

Fixed Income Portfolio Analyst

- Coastal Carolina University, B.S.B.A.
- Investment experience since 2015; Joined Brown Advisory 2011

DAN MOONEY, CFA

Consumer Equity Research Analyst

- Georgetown University, B.S.; University of Virginia, M.B.A.
- Senior REIT Analyst, CB Richard Ellis Investors; Investment Banker, Barclays Capital; Equity Research Senior Associate, Green Street Advisors; Fixed Income Research Associate, Bear Sterns
- Investment experience since 2001; Joined Brown Advisory 2011

Research & Investment Team

KEVIN OSTEN, CFA

Product Specialist

- Parks College of St. Louis University, B.S.; University of Missouri St. Louis, M.B.A.
- Senior Research Analyst, Summit Strategies; Institutional Consulting, Merrill Lynch Pierce, Fenner & Smith
- Investment experience since 1999; Joined Brown Advisory 2012

ADI PADVA

Industrials & Basic Materials Equity Research Analyst

- Harvard Business School, M.B.A.; Open University of Israel, B.A.
- Senior Research Analyst, Neuberger Berman
- Investment experience since 2005; Joined Brown Advisory 2015

SUNG PARK, CFA

Health Care Equity Research Analyst

- Johns Hopkins University, B.A.; University of Maryland, Smith School of Business, M.B.A.
- Associate Portfolio Manager and Research Analyst, Croft Leominster
- Investment experience since 2003; Joined Brown Advisory 2006

SIMON PATERSON, CFA

Industrials & Basic Materials Equity Research Analyst

- Queen's University, Ontario, Canada B.Sc. and B.A.; Princeton University, M.A.
- Senior Equity Analyst, MTB Investment Advisors
- Investment experience since 2002; Joined Brown Advisory 2011

JOSHUA PERRY, CFA

Fixed Income Associate Portfolio Manager

- Princeton University, B.S.E.; University of Chicago, M.B.A.
- Analyst, Driehaus Capital Management
- Investment experience since 2006; Joined Brown Advisory 2012

MICHAEL POGGI, CFA

Small-Cap Fundamental Value Associate Portfolio Manager

- University of Richmond, B.S.B.A.
- Investment experience since 2003; Joined Brown Advisory 2003

DAVID POWELL, CFA

Large-Cap Sustainable Growth Portfolio Manager

- Bowdoin College, B.A.
- Investor Relations, T. Rowe Price
- Investment experience since 1997; Joined Brown Advisory 1999

GEORGE SAKELLARIS, CFA

Mid-Cap Growth Portfolio Manager; Small-Cap Growth Associate Portfolio Manager

- Robert H. Smith School of Business, M.B.A.; University of Maryland, B.S.
- Portfolio Manager, Credo Capital Management; Director of Research, GARP Research & Securities
- Investment experience since 2001; Joined Brown Advisory 2014

J. DAVID SCHUSTER

Small-Cap Fundamental Value Portfolio Manager, Fundamental Long/Short Fund Portfolio Manager

- Georgetown University, B.S.B.A.
- Managing Director, Citigroup; Managing Director, Lazard Freres & Co.; Officer, U.S. Army
- Investment experience since 1995; Joined Brown Advisory 2008

RODDY SEYMOUR-WILLIAMS

General Equity Research Analyst

- University of Bristol, B.S.
- Investment experience since 2018; Joined Brown Advisory 2018

STEPHEN SHUTZ, CFA

Fixed Income Portfolio Manager

- Frostburg State University, B.S.
- Vice President and Assistant Portfolio Manager, Cavanaugh Capital Management
- Investment experience since 1996; Joined Brown Advisory 2003

ROBERT SNYDER

Fixed Income Portfolio Manager

- Cornell University, B.A.
- Principal, Kingsland Capital; Senior Analyst, Katonah Capital; Securities and Lending, Chase Manhattan Bank; Cash Management, Morgan Stanley Trust Company
- Investment experience since 1997; Joined Brown Advisory 2014

KENNETH STUZIN, CFA

Large-Cap Growth Portfolio Manager

- Columbia University, B.A.; Columbia Business School, M.B.A.
- Senior Portfolio Manager and Quantitative Strategist, J.P. Morgan
- Investment experience since 1986; Joined Brown Advisory 1996

TORY SZCZAWINSKI

Fixed Income Research Analyst

- Loyola University Maryland, B.B.A.
- Investment experience since 2017; Joined Brown Advisory 2014

BERTIE THOMSON, CFA

Global Leaders Portfolio Manager

- Edinburgh University, M.A.
- Senior Investment Manager, Aberdeen Asset Management
- Investment experience since 2002; Joined Brown Advisory 2015

Research & Investment Team

DAVID THOMPSON, CFA**Fixed Income Portfolio Manager**

- Babson College, M.B.A.; University of Denver, B.S.B.A.
- Director of Fixed Income, North American Management; Senior Vice President, Director of Fixed Income, Hale and Dorr Capital Management
- Investment experience since 1972; Joined Brown Advisory 2015

ALEX TREVINO**Consumer Equity Research Analyst**

- University of Virginia, B.S.
- Investment experience since 2016; Joined Brown Advisory 2016

R. HUTCHINGS VERNON, CFA**Flexible Equity Portfolio Manager**

- University of Virginia, B.A.
- Portfolio Manager & Equity Research, Alex. Brown Investment Management; Portfolio Manager and Research Analyst, T. Rowe Price, Legg Mason and Wachovia Bank
- Investment experience since 1982; Joined Brown Advisory 1993

JASON VLOSICH**Fixed Income Associate Portfolio Manager; Fixed Income Trader**

- University of Baltimore, B.S.; Loyola University, M.B.A.
- Taxable Fixed Income Trader, Ferris, Baker Watts, Inc. and Deutsche Bank Alex. Brown
- Investment experience since 1998; Joined Brown Advisory 2008

EMILY WACHTMEISTER, CFA**Technology Equity Research Analyst**

- Washington & Lee University, B.A.
- Junior Associate, Morgan Stanley
- Investment experience since 2011; Joined Brown Advisory 2013

LYN WHITE, CFA**Fixed Income Research Analyst**

- University of Delaware, B.S.
- Senior Investment Analyst, Fidelity & Guaranty Life Insurance; Senior Portfolio Manager, Standard Insurance Company
- Investment experience since 2003; Joined Brown Advisory 2015

NINA YUDELL**Portfolio Manager; Flexible Equity Generalist**

- University of Baltimore, B.S., M.B.A.; Johns Hopkins University, M.S.B.
- Portfolio Manager and Investment Analyst, Alex. Brown Investment Management; Investment Assistant, Oppenheimer & Co., Inc.; Investment Assistant, T. Rowe Price
- Investment experience since 1986; Joined Brown Advisory 1992

Brown Advisory Board of Directors



Our independent Board of Directors provides objective guidance and insights.

WILLIAM C. BAKER*

- President and CEO, Chesapeake Bay Foundation
- Trustee: Johns Hopkins Medicine, Open Society Institute-Baltimore, The Clayton Baker Trust
- Director, Central Maryland Transportation Alliance
- Honorary Director: Garden Club of America, Baltimore Community Foundation
- Member, UMBC Board of Visitors

HOWARD E. COX, JR.

- Advisory Partner, Greylock
- Board Member: Stryker Corporation (NYSE: SYK), In-Q-Tel, Secretary of Defense Business Board, Foundation Board of Forum of Young Global Leaders
- Member, The Council on Foreign Relations
- Investment Committee Member: Partners Healthcare, Dana-Farber Cancer Institute, Museum of Fine Arts, Brookings Institute
- Board of Fellows Member, Harvard Medical School
- Dean's Council Member, Harvard Kennedy School

JOHN O. DOWNING

- Founder, CDK Investment Management
- Vice Chairman, Brown Advisory Incorporated
- Former General Partner, Goldman Sachs & Co.
- Director, The Medical University of South Carolina Foundation
- Investment Committee Member, The Hotchkiss School
- Co-Founder, Vermont 99 Foods

ROBERT J. FLANAGAN

- President of Clark Enterprises, Inc.
- Chairman of the Board: Sagent Pharmaceuticals, Inc. (NASDAQ:SGNT); Federal City Council
- Board Member: Eagle Oil & Gas Co., Svelte Medical Systems

BENJAMIN H. GRISWOLD, IV*

- Chairman, Brown Investment Advisory & Trust Company
- Director and Non-Executive Chairman, W.P. Carey Inc. (NYSE: WPC)
- Lead Director, Flowers Foods, Inc. (NYSE: FLO)
- Director, Signal Hill Capital Group LLC
- Board Member, Americas Advisory Board - Deutsche Bank
- Trustee Emeritus, The Johns Hopkins University
- Trustee Gilman School
- Dean's Advisory Committee, Johns Hopkins Carey Business School

MICHAEL D. HANKIN*

- President and CEO, Brown Advisory
- Vice Chairman, Johns Hopkins Medicine
- Trustee: Johns Hopkins Medicine, The Johns Hopkins University, Chesapeake Conservancy
- Chairman of Board of Managers, Johns Hopkins University Applied Physics Lab
- Director: Stanley Black & Decker, Inc. (NYSE: SWK), Tate Engineering Services, Inc. and The Wills Group, Inc.
- Chairman, Baltimore Waterfront Partnership and Management Authority
- President, Land Preservation Trust Inc.
- Director: National Steeplechase Association, Center for Large Landscape Conservation

BEATRICE H.M. HOLLOND

- Chair, UK family (Pearson) investment office, Millbank Investment Management, Ltd; Keystone Investment Trust; Pembroke College Endowment Fund; Audit Committee of Henderson Smaller Companies Investment Trust.
- Director, Templeton Emerging Markets Investment Trust
- Trustee, Esmeé Fairbairn Foundation
- Advisory Fellow, Pembroke College, Oxford
- Vice Chair, Soho Theatre, London
- Deputy Chair, The Philanthropy Workshop

*Also a director of Brown Investment Advisory and Trust Company

Brown Advisory Board of Directors



Our independent Board of Directors provides objective guidance and insights.

EARL L. LINEHAN*

- President, Woodbrook Capital Inc.
- Board Member: Heritage Properties Inc., AllTrust Networks
- Trustee/Director: Mercy Hospital, UMBC Board of Visitors, Cristo Rey Jesuit High School

GLENN R. MARTIN*

- President, Clay County Port Inc.
- President, Universal Sales Corp.
- Trustee: Hospital for the Women of Maryland of Baltimore City, The Missionary Emergency Foundation, Richard S. Reynolds Foundation

ROBERT S. MURLEY

- Vice Chairman—Senior Advisor and Chairman of Investment Banking for the Americas, Credit Suisse (NYSE: CS)
- Director, Apollo Education Group; Stone Energy Corporation (NYSE: SGY); Trustee, Princeton University; Princeton University Investment Company
- Vice Chair, Ann & Robert H. Lurie Children's Hospital of Chicago
- Chair, Lurie Children's Foundation; Board of Overseers of the UCLA Anderson School of Management
- Trustee, Museum of Science and Industry of Chicago

WALTER D. PINKARD, JR.*

- Senior Advisor Cushman & Wakefield
- President and Investment Committee Member, France Merrick Foundation
- Trustee Emeritus: The Johns Hopkins University, Baltimore Community Foundation
- Trustee, Johns Hopkins Medicine
- Chairman: Hippodrome Foundation, National Advisory Council of Johns Hopkins School of Nursing
- Board Member: Stulman Foundation, Dome Corporation, Central Maryland Transportation Alliance
- Board of Directors, Chair of Finance and Investment Committee, Baltimore Life Companies

GORDON F. RAINEY, JR.*

- Chairman Emeritus, Hunton & Williams
- Past Rector and Member of Board of Visitors, the University of Virginia
- National Chairman, Campaign for the University of Virginia
- Senior Trustee, The Colonial Williamsburg Foundation
- Trustee, Virginia Higher Education Business Council
- Life Trustee, Virginia Foundation for Independent Colleges

MARY M. "MEG" VANDEWEGHE*

- Director, Brown Investment Advisory & Trust Company
- CEO of Forte Consulting Inc.
- Former Managing Director J.P. Morgan
- Former Senior Vice President of Finance, Lockheed Martin Corporation
- Former Director, Ecolab Inc. (NYSE: ECL); Nalco (NYSE: NLC); W.P. Carey Inc. (NYSE: WPC), B/E Aerospace (NYSE: BEAV)

*Also a director of Brown Investment Advisory and Trust Company

Disclosures

The views expressed are those of the author and Brown Advisory as of the date referenced and are subject to change at any time based on market or other conditions. These views are not intended to be and should not be relied upon as investment advice and are not intended to be a forecast of future events or a guarantee of future results. Past performance is not a guarantee of future performance and you may not get back the amount invested. The information provided in this material is not intended to be and should not be considered to be 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. It should not be assumed that investments in such securities have been or will be profitable. To the extent specific securities are mentioned, they have been selected by the author on an objective basis to illustrate views expressed in the commentary and do not represent all of the securities purchased, sold or recommended for advisory clients. The information contained herein has been prepared from sources believed reliable but is not guaranteed by us as to its timeliness or accuracy, and is not a complete summary or statement of all available data. This piece is intended solely for our clients and prospective clients, is for informational purposes only, and is not individually tailored for or directed to any particular client or prospective client.

Bloomberg Barclays Municipal Bond 1-10 Year Blend Index is a broad selection of investment-grade general obligation bonds, revenue bonds, insured bonds (including all insured bonds with an 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 Barclays Bank PLC. One can not directly invest into an index.

BLOOMBERG, BLOOMBERG PROFESSIONAL, BLOOMBERG MARKETS, BLOOMBERG NEWS, BLOOMBERG ANYWHERE, BLOOMBERG TRADEBOOK, BLOOMBERG BONDTTRADER, BLOOMBERG TELEVISION, BLOOMBERG RADIO, BLOOMBERG PRESS, BLOOMBERG.COM and BLOOMBERG LAW are trademarks and service marks of Bloomberg Finance L.P., a Delaware limited partnership, or its subsidiaries.

As of December 31, 2017, Brown Advisory had \$60.9 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. Regarding ESG/sustainable assets, as of December 31, 2017, Brown Advisory had \$3.7 billion in assets for the following entities: Brown Advisory LLC, Brown Investment Advisory & Trust Company, Brown Advisory Ltd., and Brown Advisory Trust Company of Delaware LLC. Numbers may not total due to rounding.

Terms and Definitions for Representative Account Calculations

All financial statistics and ratios are calculated using information from BondEdge® as of the report date unless otherwise noted.

Alpha is a measure of performance on a risk-adjusted basis. Alpha takes the volatility (price risk) of a portfolio and compares its risk-adjusted performance to a benchmark index.

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.

Tax-Exempt Sustainable Composite

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)*
2016	-0.1	-0.5	-0.1	N/A	N/A	7	N/A	29	30,417
2015	2.1	1.7	2.5	N/A	N/A	1	N/A	7	43,746
2014*	0.8	0.7	0.6	N/A	N/A	1	N/A	7	44,772

*Return is for period October 1, 2014 through December 31, 2014.

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, 2016. 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 Tax-Exempt Sustainable 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. Bonds in composite accounts are evaluated according to a variety of environmental, social and governance factors. These factors are used by the portfolio manager to seek holdings with attractive ESG risk profiles and or bonds whose uses of proceeds meet the standards of the Green Bond Principles. ESG factors are not used for the purposes of absolute negative screening in composite accounts. The minimum account market value required for composite inclusion is \$1 million. Prior to July 1, 2016 there was no minimum account market value required for composite inclusion.
- This composite was defined and initially created on May 1, 2016.
- 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 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. Benchmark returns are not covered by the report of the independent verifiers. An investor cannot invest directly into an index. Bloomberg Barclays Indices are trademarks of Bloomberg or its licensors, including Barclays Bank PLC.
- 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. The composite dispersion is not applicable (N/A) for periods where there were five or fewer accounts in the composite for the entire 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. The 3 year annualized standard deviation is not presented as of December 31, 2014 and December 31, 2015, because 36 monthly returns for the composite were not available (N/A) because the composite did not exist.
- 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.