

AGENDA
INVESTMENT COMMITTEE MEETING
MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (MCERA)

One McInnis Parkway, 1st Floor
Retirement Board Chambers
San Rafael, CA

June 15, 2022 – 9:00 a.m.

This meeting will be held via videoconference pursuant to MCERA Board of Retirement Resolution 2021/22-01, which invoked Government Code section 54953(e) for all MCERA Board and standing committee meetings through June 16, 2022.

Instructions for watching the meeting and/or providing public comment, as well as the links for access, are available on the [Watch & Attend Meetings](https://www.mcera.org/retirementboard/agendas-minutes/watchmeetings) page of MCERA's website. Please visit <https://www.mcera.org/retirementboard/agendas-minutes/watchmeetings> for more information.

The Board of Retirement encourages a respectful presentation of public views to the Board. The Board, staff and public are expected to be polite and courteous, and refrain from questioning the character or motives of others. Please help create an atmosphere of respect during Board meetings.

CALL TO ORDER

ROLL CALL

A. OPEN TIME FOR PUBLIC EXPRESSION

Note: The public may also address the Committee regarding any agenda item when the Committee considers the item.

Open time for public expression, from three to five minutes per speaker, on items not on the Committee Agenda. While members of the public are welcome to address the Committee during this time on matters within the Committee's jurisdiction, except as otherwise permitted by the Ralph M. Brown Act (Government Code Sections 54950 et seq.), no deliberation or action may be taken by the Committee concerning a non-agenda item. Members of the Committee may (1) briefly respond to statements made or questions posed by persons addressing the Committee, (2) ask a question for clarification, or (3) provide a reference to staff for factual information.

B. TOPIC OF GENERAL INTEREST

1. Reconsideration of State of Emergency conditions under Assembly Bill (AB) 361 (ACTION)

Reconsider and take possible action to invoke Government Code section 54953(e), and to extend MCERA Resolution 2021/22-01 Authorizing Teleconferencing for Board and

Standing Committee Meetings through July 15, 2022, because the State of Emergency proclaimed under Government Code section 8625 remains in effect, and at least one of the following circumstances exists:

1. As a result of the emergency meeting in person would present imminent risks to the health or safety of attendees; or
2. State or local officials continue to impose or recommend measures to promote social distancing.

C. MANAGER REPORTS

1. Manager Overview – Jim Callahan, Callan LLC
2. Dimensional Fund Advisors – Core Small Cap Equities – Gavin Crabb, Chermaine Fullinck, Karlene Lousignont
TIME CERTAIN: 9:05 a.m.
3. Fidelity Institutional Asset Management – Select Emerging Markets Equity– Art Greenwood, John Chow
TIME CERTAIN: 9:35 a.m.

CI. NEW BUSINESS

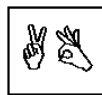
1. Fixed Income Structure Review – Jim Callahan, Callan LLC
2. Future Meetings

CII. INVESTMENT CONSULTANT QUARTERLY REPORT

1. Summary Report as of March 31, 2022
2. Flash Performance Update as of May 31, 2022

Note on Process: Items designated for information are appropriate for Committee action if the Committee wishes to take action.

Note on Voting: As provided by statute, the Alternate Safety Member votes in the absence of the Elected General or Safety Member, and in the absence of both the Retired and Alternate Retired Members. The Alternate Retired Member votes in the absence of the Elected Retired Member. If both Elected General Members, or the Safety Member and an Elected General Member, are absent, then the Elected Alternate Retired Member may vote in place of one absent Elected General Member.



Agenda material is provided upon request. Requests may be submitted by email to MCERABoard@marincounty.org, or by phone at (415) 473-6147.

MCERA is committed to assuring that its public meetings are accessible to persons with disabilities. If you are a person with a disability and require an accommodation to participate in a County program, service, or activity, requests may be made by calling (415) 473-4381 (Voice), Dial 711 for CA Relay, or by email at least five business days in advance of the event. We will do our best to fulfill requests received with less than five business days' notice. Copies of documents are available in alternative formats upon request.

The agenda is available on the Internet at <http://www.mcera.org>



Phone **415 473-6147**
Fax (benefits) **415 473-3612**
Fax (admin) **415 473-4179**
MCERA.org

June 3, 2022

To: Board of Retirement
 Marin County Employees' Retirement Association (MCERA)

From: Jeff Wickman *W*
 Retirement Administrator

Subject: Considerations for Invoking the Provisions of Assembly Bill 361 in order to
 Conduct Board and Standing Committee Meetings Virtually

Background

On October 13, 2021, the Board of Retirement adopted Resolution No. 2021/22-01 Authorizing Teleconferencing for Board and Standing Committee Meetings Pursuant to Government Code §54953(e) of the Brown Act ("Section 54953(e)"), through November 12, 2021. The Resolution was adopted in recognition that the conditions for invoking the provisions in Assembly Bill (AB) 361, permitting the Board to conduct remote access meetings, were similar to the way it had been meeting during the COVID-19 pandemic. Since this time the Board has taken the following subsequent actions:

- November 3, 2021, the Board considered the circumstances of the emergency and made findings to support invoking the provisions through December 3, 2021.
- December 2, 2021 the Board considered the circumstances of the emergency and made findings to support invoking the provisions through January 1, 2022.
- December 15, 2021, the Board considered the circumstances of the emergency and made findings to support invoking the provisions through January 14, 2022.
- January 12, 2022, the Board considered the circumstances of the emergency and made findings to support invoking the provisions through February 11, 2022.
- February 9, 2022, the Board considered the circumstances of the emergency and made findings to support invoking the provisions through March 11, 2022.
- March 2, 2022, the Board considered the circumstances of the emergency and made findings to support invoking the provisions through April 1, 2022.
- March 16, 2022, the Board considered the circumstances of the emergency and made findings to support invoking the provisions through April 15, 2022.
- April 13, 2022, the Board considered the circumstances of the emergency and made findings to support invoking the provisions through May 13, 2022.
- May 4, 2022, the Board considered the circumstances of the emergency and made findings to support invoking the provisions through June 3, 2022.
- May 17, 2022, the Board considered the circumstances of the emergency and made findings to support invoking the provisions through June 16, 2022.

The precondition to the Board reinvoking Section 54953(e) and conducting its meetings via Zoom and YouTube for an additional thirty (30) days, if certain conditions exists, has been the State of Emergency that the Governor Newsom declared in March 2020. The state of emergency is still in place.

Recommendation

Because the state of emergency is still in place, the Board may, consistent with its prior actions, making the finding(s) necessary to continue to conduct meetings via Zoom and YouTube under Section 54953(e), for the next thirty (30) days, if the following conditions exist: 1) a State of Emergency under Government Code section 8625 remains in effect; and 2) (i) State or local officials have put in place social distancing measures to protect health, or, (ii) the local agency board determines that meeting in person would present imminent risks to the health and safety of attendees. The provisions would extend through July 15, 2022 covering the July 13 Board meeting. The Board may also wish to discuss returning to in-person meetings, while continuing to broadcast online and consider if any social distancing and masking requirements should be in place for attendance in the boardroom.

C.1 Manager Overview

There is no backup for this agenda item.

Marin County Employees' Retirement Association

June 15, 2022

Gavin Crabb, Portfolio Manager and Vice President

Chermaine Fullinck, Regional Director and Vice President

Karlene Lousignont, Senior Client Relationship Manager

This information is provided for Marin County Employees' Retirement Association and institutional investors and is not intended for retail use. This information is not meant to constitute investment advice, a recommendation of any securities product or investment strategy (including account type), or an offer of any services or products for sale, nor is it intended to provide a sufficient basis on which to make an investment decision. Investors should consult with a financial professional regarding their individual circumstances before making investment decisions.

Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.

Presenters' Biographies

Gavin Crabb

Portfolio Manager and Vice President



Gavin Crabb manages equity portfolios and is responsible for strategy execution. His responsibilities include order generation, cash management, foreign currency trading, performance analysis, and interaction with current and prospective clients.

Prior to joining Dimensional, Gavin was a vice president in equity derivative sales at Barclays in New York. In this role, he helped clients gain access to emerging market equities and consulted on hedging strategies for equity portfolios. He holds a bachelor's degree in industrial engineering from California Polytechnic State University, San Luis Obispo, and an MBA from the Anderson School of Management at UCLA.

Chermaine Fullinck

Regional Director and Vice President



Chermaine Fullinck, a Regional Director in Dimensional's Global Client Group, is responsible for developing and strengthening client relationships with institutional investors. Prior to joining Dimensional, Chermaine served as an associate relationship manager with Fischer, Francis, Trees & Watts, assisting with client coverage for US clients. Before that, he was part of an investment team at Libra Group charged with launching an alternative asset management business for Libra's family office. In addition, he spent time at CRT Capital Group LLC as a senior analyst and Investment Committee member for CRT's fund of hedge funds business.

Chermaine earned a bachelor's degree in economics from the University of Alaska-Fairbanks in 1999.

Karlene Lousignont

Senior Client Relationship Manager



Karlene Lousignont is a Senior Client Relationship Manager in Dimensional's Global Client Group and has been with the firm since 2012. Based in the Charlotte, North Carolina office, Karlene collaborates closely with Regional Directors, senior leaders, and sales staff in business development and to maintain and strengthen relationships with domestic and foreign institutional investors.

She is a graduate of the University of Arizona, where she earned a BS in finance.

Relationship Summary: Marin County Employees' Retirement Association

As of April 30, 2022

Annualized Returns ¹ (%)	Account Value	Year to Date	Since Account 1st Full Month	Separate Account 1st Full Month	Relationship Inception
MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (gross of fees)	\$226,548,263	-12.22	9.34	12/22	10/99
MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (net of fees)	—	-12.31	8.98	—	—
Russell 2000 Index	—	-16.69	7.23	—	—

Performance data shown represents past performance and is no guarantee of future results. Current performance may be higher or lower than the performance shown. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost.

1. Returns for periods shorter than one year are not annualized.

Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. Indices are not available for direct investment.

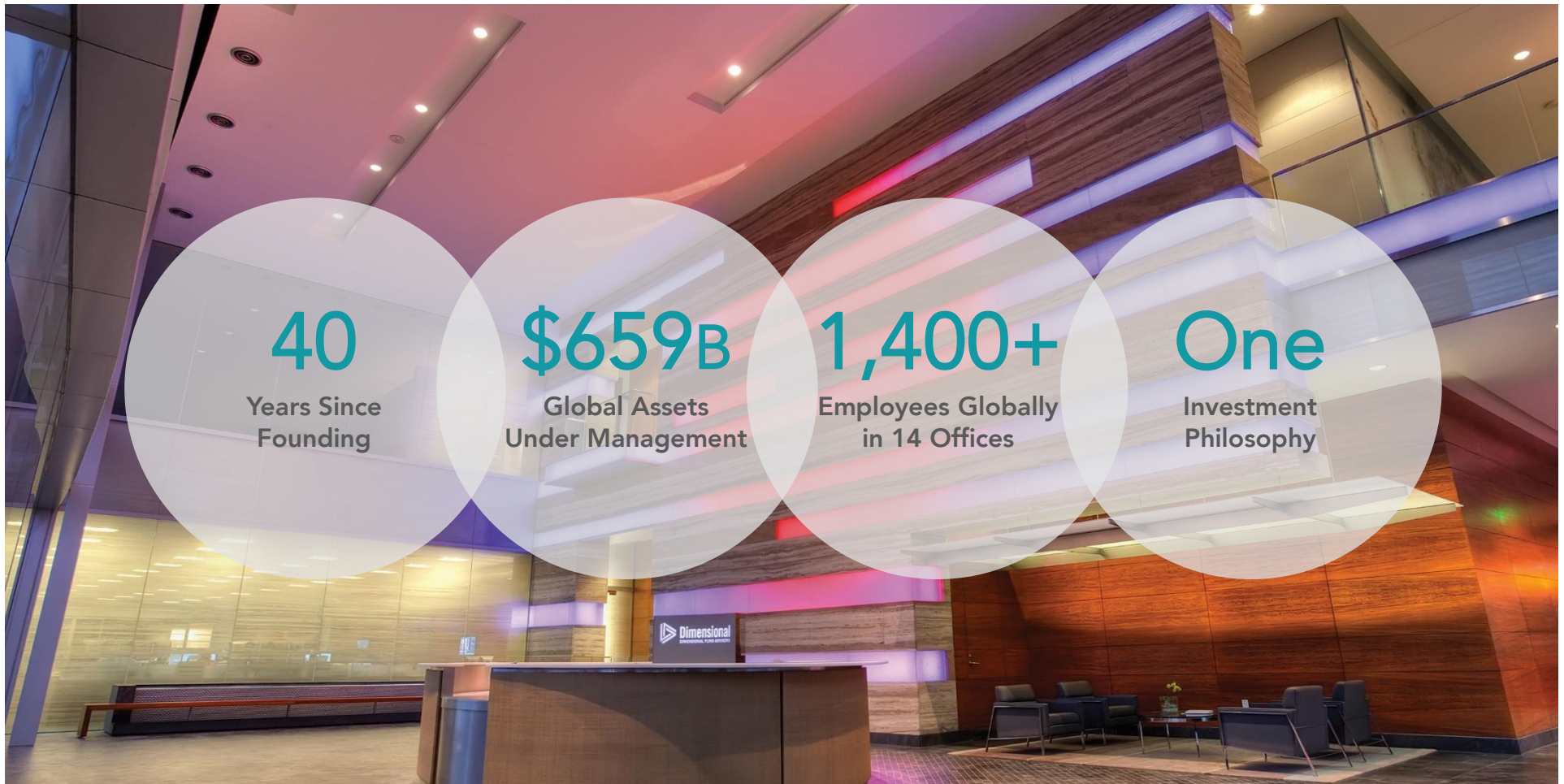
Agenda

- Dimensional
- Implementation
- US Small Cap Strategy
- Summary
- Appendix

Dimensional

Dimensional at a Glance

As of March 31, 2022

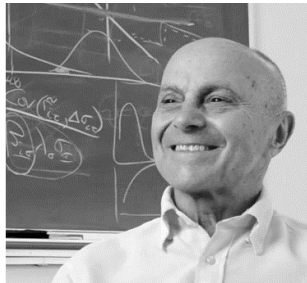


Assets in US dollars.

"Dimensional" refers to the Dimensional separate but affiliated entities generally, rather than to one particular entity. These entities are Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., Dimensional Ireland Limited, DFA Australia Limited, Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors Pte. Ltd., Dimensional Japan Ltd., and Dimensional Hong Kong Limited. Dimensional Hong Kong Limited is licensed by the Securities and Futures Commission to conduct Type 1 (dealing in securities) regulated activities only and does not provide asset management services.

A Heritage of Leading Research

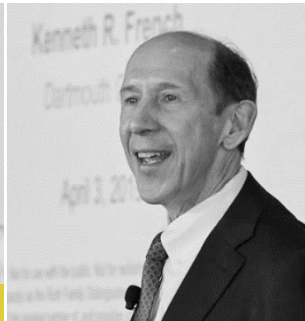
The bar for research at Dimensional has been set by the best in the field



NOBEL LAUREATE, 2013

Eugene Fama
University of Chicago

Dimensional Director and
Consultant, Dimensional,¹
1981–present



Kenneth French
Dartmouth College

Consultant, Dimensional,¹
1986–present

Co-Chair of the Investment
Research Committee,
Dimensional,¹
2006–present

Dimensional Director,
2006–present



NOBEL LAUREATE, 1997

Robert Merton
MIT

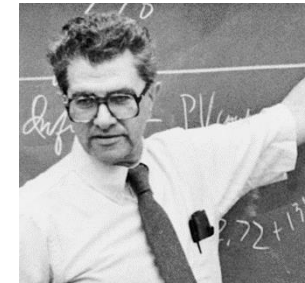
Director, Dimensional
US Mutual Funds,
2003–2009

Resident Scientist,
Dimensional Holdings Inc.,
2010–present



Robert Novy-Marx
University of Rochester

Consultant,
Dimensional¹
2014–present



NOBEL LAUREATE, 1990

Merton Miller
University of Chicago

Independent Director,
Dimensional US Mutual
Funds, 1981–2000



NOBEL LAUREATE, 1997

Myron Scholes
Stanford University

Independent Director,
Dimensional US Mutual
Funds, 1981–2021

**“At Dimensional, we don’t jump on every new idea that comes along.
We’re looking for what will stand up over a long period of time.”**

Eugene Fama
Nobel laureate, 2013

1. Dimensional Fund Advisors LP.

"Dimensional Directors" refers to the Board of Directors of the general partner of Dimensional Fund Advisors LP.

Implementation Requires Expertise

Adding value over benchmarks and peers through cost-efficient portfolio management, design, and trading



GERARD K. O'REILLY, PhD
Co-Chief Executive Officer
and Chief Investment Officer



Investment Solutions



MARLENA LEE, PhD
Global Head of
Investment Solutions

Research



SAVINA RIZOVA, PhD
Global Head
of Research



PETE DILLARD
Chief Data Officer and
Head of Investment
Analytics and Data

Trading



RYAN WILEY
Global Head of
Equity Trading



JASON LAPPING
Head of International
Equity Trading



DAVID LaRUSSO
Head of Fixed Income
Trading

Portfolio Management



JED FOGDALL
Global Head of
Portfolio Management



DAVE PLECHA
Global Head
of Fixed Income



PAUL FOLEY
Head of EMEA
Portfolio Management



BHANU SINGH
Head of Asia Pacific
Portfolio Management



MARY PHILLIPS
Deputy Head
of Portfolio
Management,
North America



ALLEN PU, PhD
Deputy Head
of Portfolio
Management,
North America



JOEL SCHNEIDER
Deputy Head
of Portfolio
Management,
North America



JIM WHITTINGTON
Head of Responsible
Investment and
Senior Portfolio
Manager



LACEY HUEBEL
Head of Responsible
Investment, North
America and
Portfolio Manager



NICOLE HUNTER
Head of Capital
Markets

Dimensional Global Investment Solutions

\$659 billion in global AUM as of March 31, 2022



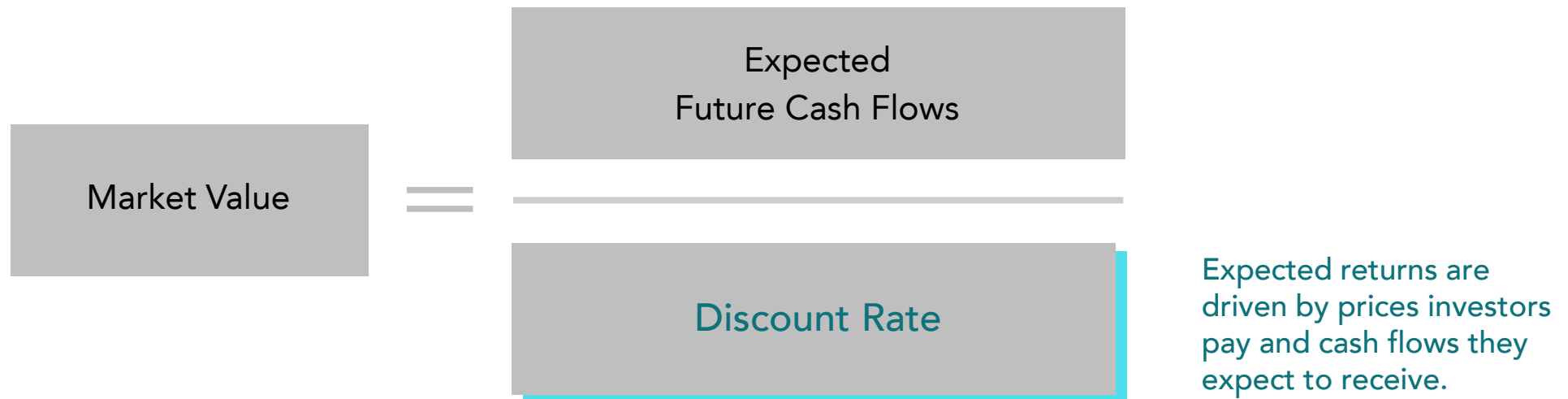
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All assets in US dollars. Numbers may not total 100% due to rounding.

Implementation

Valuation Equation: A Framework to Understand Returns

Not all securities have the same expected return



Foundations of Portfolio Structure

Building blocks of asset allocation for Dimensional's equity strategies

Company Size

SIZE PREMIUM

Small vs. large companies

Relative Price¹

VALUE PREMIUM

Value vs. growth companies

Profitability²

PROFITABILITY PREMIUM

High vs. low profitability companies

1. Relative price as measured by the price-to-book ratio; value stocks are those with lower price-to-book ratios.

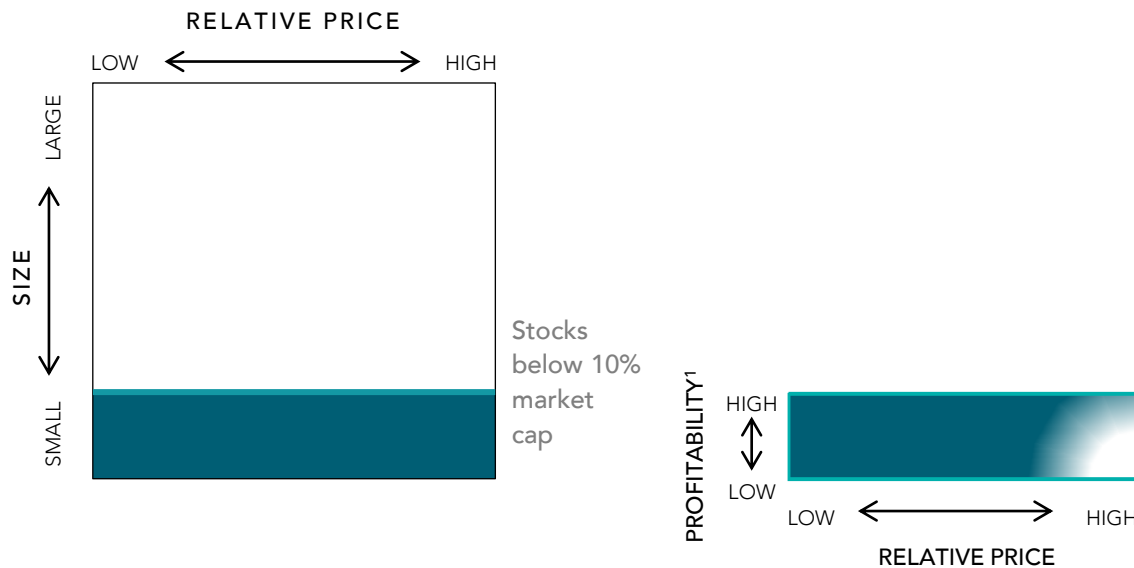
2. Profitability is a measure of current profitability, based on information from individual companies' income statements.

US Small Cap Strategy

PORTFOLIO DESIGN

What the Portfolio Can Buy

Marin County Employees' Retirement Association



- Focus on small cap securities
- Exclude companies with lowest profitability and highest relative price

As of 3/31/2022	Weighted Average Market Cap (millions)	Aggregate Price-to-Book	Weighted Average Profitability
Marin County Employees' Retirement Association	\$3,469	2.06	0.29
Russell 2000 Index	\$3,405	2.18	0.19

1. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Holdings are subject to change. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

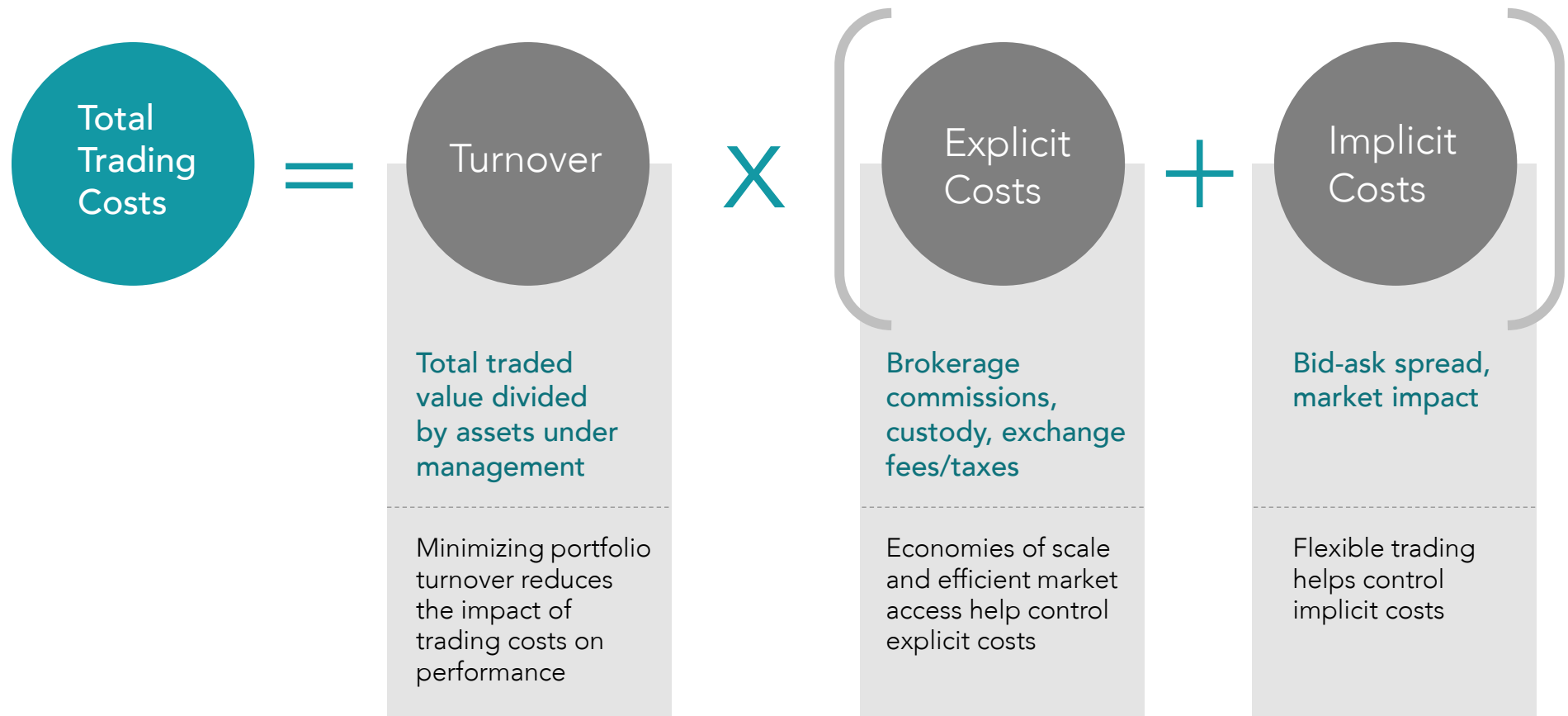
Improving Expected Returns through Daily Rebalancing

Many inputs inform which stocks we want to hold each day



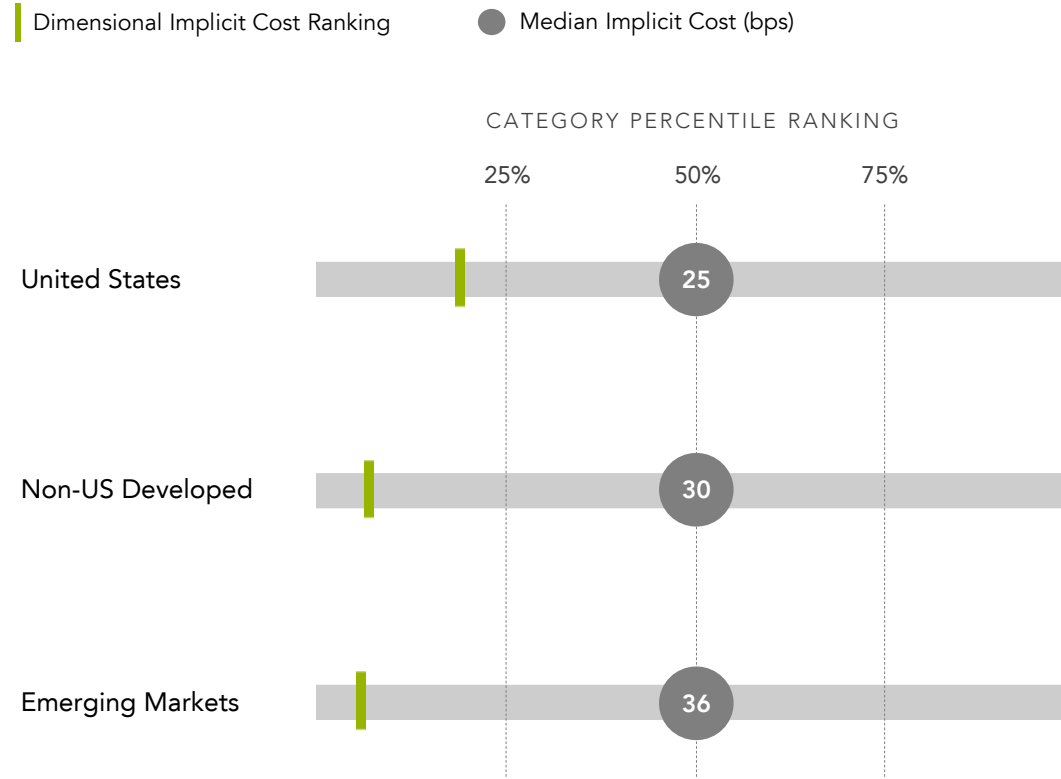
Trading Costs Matter

Dimensional's flexible approach helps reduce the total costs of trading



Dimensional Implicit Costs Relative to Peers

Virtu Post-Trade Analytics™—Peer Trade Cost Analysis, one year ending December 31, 2021



- Trading costs negatively impact returns
- Lower implicit costs contributes to lower total trading costs
- Dimensional uses both third party and internally developed benchmarks to evaluate the implicit costs of trading.

Past performance is not a guarantee of future results.

Date range reflects most recent data available. Ranking provided by Virtu. Ranking from 1-100% where 1 is lowest implicit cost and 100 is highest implicit cost. The data provided on this slide is copyrighted by Virtu ITG LLC or its affiliates and may not be copied, displayed, or transmitted in any form without prior written permission. Many factors influence transaction cost including order size, volatility, and spread. Virtu's peer universe includes a variety of firm types trading orders of all sizes in various market conditions. US peer data includes firms trading more than USD\$100mm in the US during the period.

Characteristics

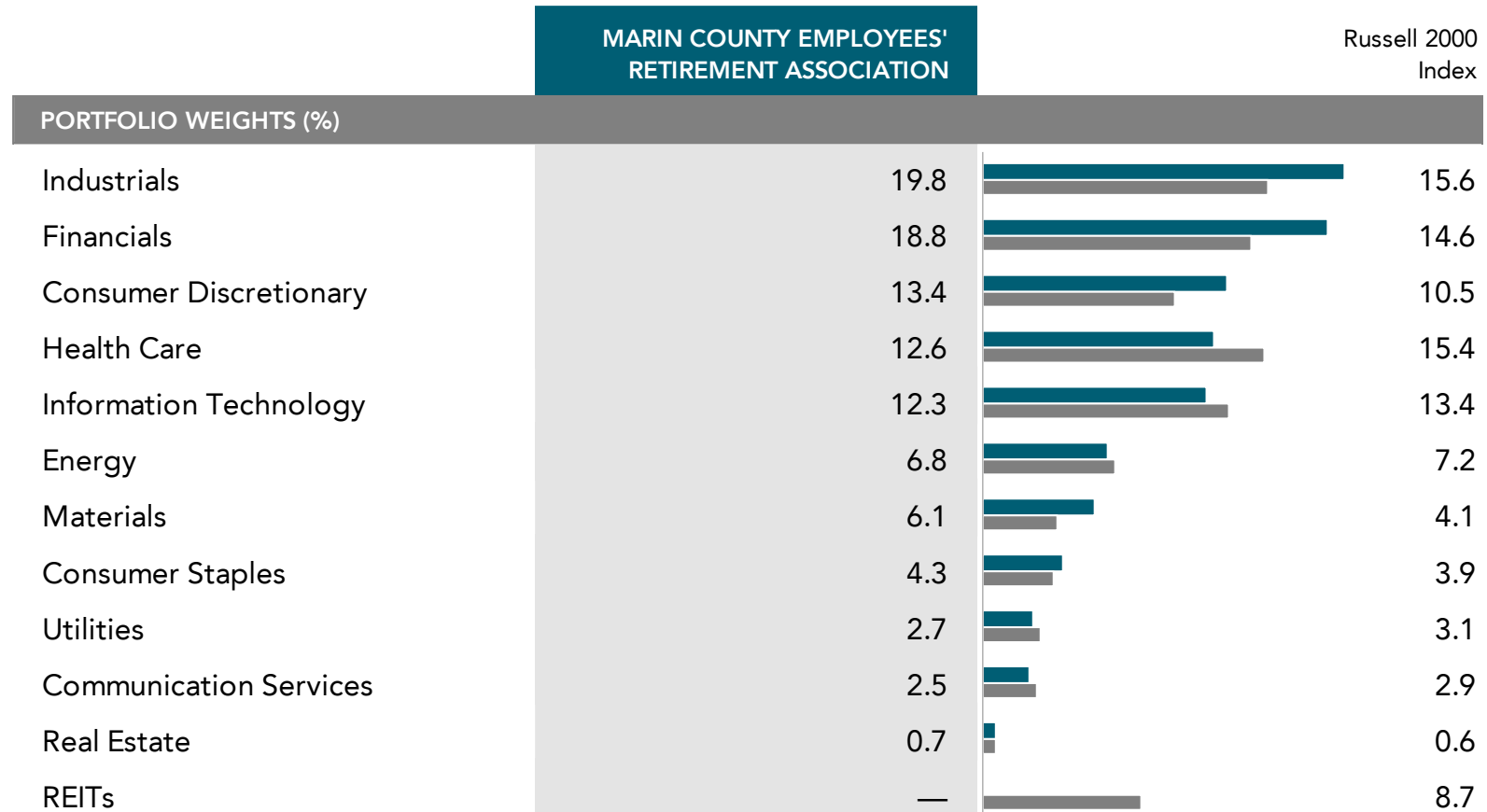
As of April 30, 2022

	MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION	Russell 2000 Index
MARKET CHARACTERISTICS		
Total Value of Eligible Universe (millions)	\$2,854,099	\$2,430,287
Number of Holdings	1,808	2,010
SIZE CHARACTERISTICS		
Wtd. Average Market Cap (millions)	\$3,239	\$3,139
Median Market Cap (millions)	\$1,171	\$938
VALUATION CHARACTERISTICS		
Aggregate Price-to-Book	1.91	1.97
Wtd. Average Dividend-to-Price	1.22%	1.31%
PROFITABILITY CHARACTERISTICS		
Wtd. Average Profitability ¹	0.30	0.20

1. Operating income before depreciation and amortization minus interest expense scaled by book.
Holdings are subject to change. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

Sector Allocations

As of April 30, 2022



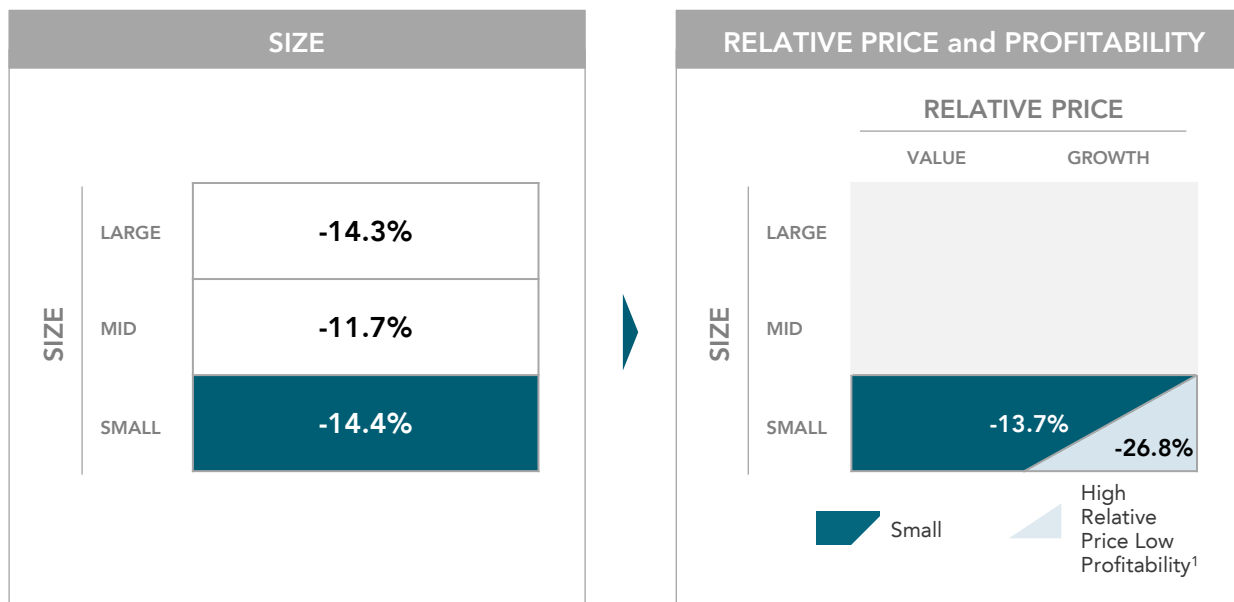
Numbers may not total 100% due to rounding. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. Real Estate Investment Trusts (REITs) are shown as a separate category to illustrate their exclusion from certain funds. REITs are classified according to GICS Industry code. GICS was developed by and is the exclusive property of MSCI and S&P Dow Jones Indices LLC, a division of S&P Global.

Market Segment Returns

US Small Cap Equity

YTD as of April 30, 2022

RUSSELL 3000 INDEX SEGMENTED RETURNS (%)



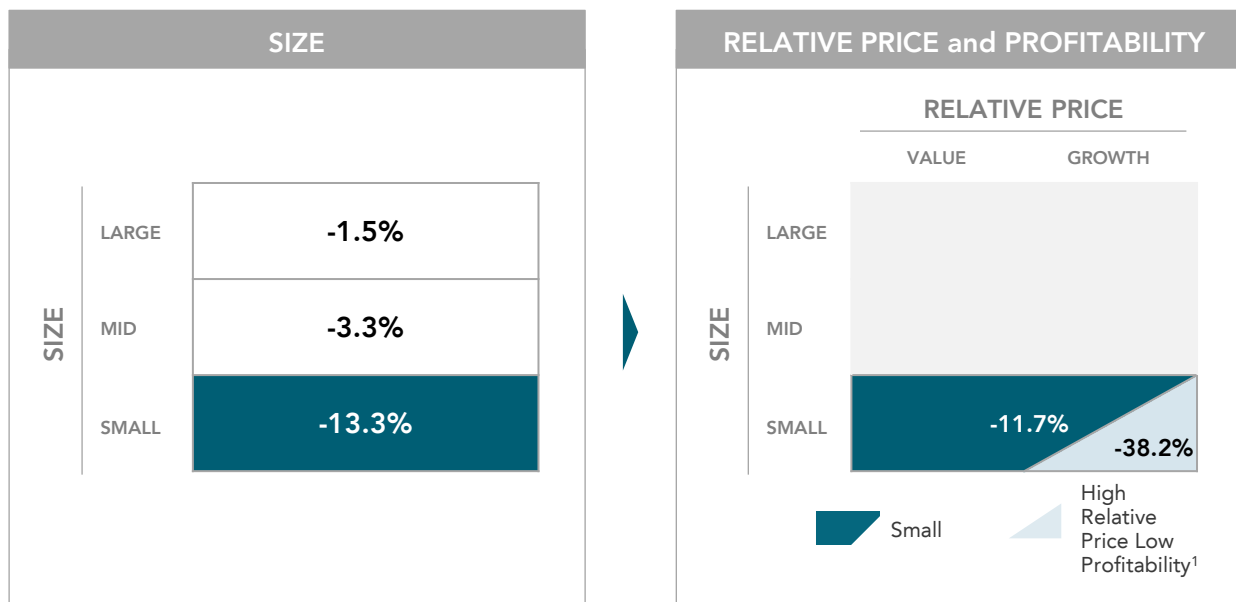
1. High Relative Price Low Profitability: Small cap securities with the lowest profitability and highest relative price in each country. Additional information available upon request. All returns are in USD. All returns (with the exception of the Russell 3000 Index) are computed from index published security weights, Dimensional computed security returns, and Dimensional classification of securities based on size, value, and profitability parameters. Additional information available upon request. Russell 3000 Index return provided by Russell. Companies are classified as small, mid, and large by computing breakpoints based on total market capitalization. Within the US, large is defined as the largest 70% of market cap, mid is the next 20%, and small is the smallest 10%. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. **Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results.** Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

Market Segment Returns

US Small Cap Equity

1 Year as of April 30, 2022

RUSSELL 3000 INDEX SEGMENTED RETURNS (%)



1. High Relative Price Low Profitability: Small cap securities with the lowest profitability and highest relative price in each country. Additional information available upon request. All returns are in USD. All returns (with the exception of the Russell 3000 Index) are computed from index published security weights, Dimensional computed security returns, and Dimensional classification of securities based on size, value, and profitability parameters. Additional information available upon request. Russell 3000 Index return provided by Russell. Companies are classified as small, mid, and large by computing breakpoints based on total market capitalization. Within the US, large is defined as the largest 70% of market cap, mid is the next 20%, and small is the smallest 10%. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. **Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results.** Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

Performance

As of April 30, 2022

Annualized Returns ¹ (%)	Year to Date	1 Year	3 Years	Since 12/18 Account 1st Full Month
MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (net of fees)	-12.31	-7.47	9.34	8.98
MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (gross of fees)	-12.22	-7.20	9.70	9.34
Russell 2000 Index	-16.69	-16.87	6.73	7.23

Calendar Year Returns (%)	MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (net of fees)	MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (gross of fees)	Russell 2000 Index	Account Value
2019	21.80	22.22	25.52	MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION \$226,548,263
2020	11.75	12.12	19.96	
2021	28.38	28.78	14.82	

Performance data shown represents past performance and is no guarantee of future results. Current performance may be higher or lower than the performance shown. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost.

1. Returns for periods shorter than one year are not annualized.

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Appendix

Fees

	Management Fee (%)
Marin County Employees' Retirement Association Separate Account	0.25

Performance

As of May 31, 2022

Annualized Returns ¹ (%)	Year to Date	1 Year	3 Years	Since 12/18 Account 1st Full Month
MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (net of fees)	-10.84	-7.85	13.58	9.28
MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (gross of fees)	-10.73	-7.57	13.95	9.64
Russell 2000 Index	-16.56	-16.92	9.70	7.10

Calendar Year Returns (%)	MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (net of fees)	MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (gross of fees)	Russell 2000 Index	Account Value	
2019	21.80	22.22	25.52	MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION	\$230,202,040
2020	11.75	12.12	19.96		
2021	28.38	28.78	14.82		

Performance data shown represents past performance and is no guarantee of future results. Current performance may be higher or lower than the performance shown. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost.

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Effective Stewardship Focuses on Effective Boards

Boards of directors set direction and policy that govern all aspects of a portfolio company

Board Composition and Structure

Elect qualified, independent boards with a diversity of backgrounds, experiences, and skillsets to oversee management and risks.

Material Environmental and Social Risks

Company boards should exercise oversight of material environmental and social risks and disclose these risks and board and management oversight.

Shareholder Rights

Companies should maintain mechanisms for shareholders to raise concerns and hold boards and management accountable.

Executive Compensation

Compensation plans should be based on rigorous and transparent metrics that clearly link pay and long-term performance.

These focus areas can have a potential impact on price:

Avoiding poor governance practices

Improving alignment of board and management with shareholder interests

Enhancing risk management and oversight

Summary of Portfolio Risk Management

Provides diversification and broad oversight with minimal style drift

Concentration Risk	<ul style="list-style-type: none"> • Highly diversified across countries (all strategies) • Country diversification leads to diversification across multiple currencies (developed ex US and emerging market strategies) • Sector target weights typically capped at their approximate weight in a broadly diversified, sector-neutral universe plus an additional 10% • Industry groups generally capped at 25% • Guidelines target a maximum 5% per issue at time of purchase
Implementation Risk	<ul style="list-style-type: none"> • Team managed • Approved exchanges only; ongoing evaluation of listing requirements, liquidity, and settlement mechanism • Governance oversight of Investment Committee, Portfolio Management, and Compliance and Risk groups
Operational Risk	<ul style="list-style-type: none"> • Customized Order Management Systems • Proprietary and third-party risk tools • Comprehensive pre- and post-trade compliance • Independent accountant, custodian bank, and auditors • Independent SOC 1 audit performed annually
Style Risk	<ul style="list-style-type: none"> • Monitor characteristics of individual securities and overall strategy to prevent style drift
Liquidity Management	<ul style="list-style-type: none"> • Emphasis on liquid securities • Flexibility in security selection • Real-time monitoring

FIAM Select Emerging Markets Equity

June 15, 2022

Presentation to:
Marin County Employees' Retirement Association

Mcera

John Chow, CFA
Portfolio Manager

Abhijeet Singh, CFA
Institutional Portfolio Manager

Arthur Greenwood
SVP, Sales Relationship Manager
401-292-4729
art.greenwood@fmr.com

Agenda

1. Biographies
2. Emerging Markets—Outlook
3. Global Investment Resources
4. FIAM Select Emerging Markets Equity
5. Appendix
 - A. GIPS® Composite Report
 - B. Important Information

This document does not make an offer or solicitation to buy or sell any securities or services, and is not investment advice. FIAM does not provide legal or tax advice and we encourage you to consult your own lawyer, accountant, or other advisor before making an investment.

Information provided in this document is for informational and educational purposes only. To the extent any investment information in this material is deemed to be a recommendation, it is not meant to be impartial investment advice or advice in a fiduciary capacity and is not intended to be used as a primary basis for you or your client's investment decisions. Fidelity and its representatives may have a conflict of interest in the products or services mentioned in this material because they have a financial interest in them, and receive compensation, directly or indirectly, in connection with the management, distribution, and/or servicing of these products or services, including Fidelity funds, certain third-party funds and products, and certain investment services.

See "Important Information" for a discussion of performance data, some of the principal risks related to any of the investment strategies referred to in this presentation, professional designations and how they are obtained, and other information related to this presentation.

Biographies

Portfolio Manager Profile: John Chow, CFA



Current Responsibilities

Fidelity Sustainable Emerging Markets Equity Fund (FA)
2022–Present

FIAM Select Emerging Markets
2011–Present

Fidelity Series Emerging Markets Fund
2020–Present

Previous Responsibilities

FIAM Diversified Large Cap Core
2006–2011

Tenure

Fidelity Investments
Since 1994

Industry Experience
Since 1994

Education

Massachusetts Institute of Technology

OVER 25 YEARS of asset management experience

Source: Fidelity.

Institutional Portfolio Manager Profile: Abhijeet Singh, CFA



Current Responsibilities

Fidelity Sustainable Emerging Markets Equity Fund (FA)
Fidelity Emerging Markets (FA, VIP)
Fidelity Advisor Focused Emerging Markets
Fidelity Emerging Asia (FA)
Fidelity Latin America
Fidelity EMEA
Fidelity China Region
FIAM Conc. Emerging Markets
FIAM Select Emerging Markets
FIAM Emerging Markets All Cap
FIAM Select Global, Global Plus, and Global All Cap
FIAM Select International, Intl Plus, and Intl All Cap)

Previous Responsibilities

Prior Experience
FIAM Equity
Institutional Portfolio Manager
2008–Present

FIAM International Equities
Associate Investment Director
2006–2008

Fidelity Business Consulting
Management Consultant;
Director; Vice President
2003–2006

Deloitte Consulting
Senior Consultant; Manager
1998–2002

Tenure

Fidelity Investments
Since 2003

Industry Experience
Since 1998

Education

Carnegie Mellon University
MBA

Indian Institute of Technology, Delhi
BTech

OVER 20 YEARS of asset management experience

Source: Fidelity.

SVP, Sales Relationship Manager: Art Greenwood



Current Responsibilities

Responsible for the overall management of institutional client relationships, including many large public and corporate pension funds located in both the eastern and western territories of the United States.

Previous Responsibilities

Prior Experience
Vice president at Fidelity Investments Institutional Services Company (FIIS)

Tenure

Fidelity Investments
Since 1986

Industry Experience
Since 1986

Education

Lehigh University, cum laude
BA

OVER 35 YEARS of asset management experience

Source: Fidelity.

Emerging Markets—Outlook

Outlook: Emerging Market Equities

- As the duration of the Russia/Ukraine conflict is unknown, the current elevated commodity prices could significantly pressure consumer spending, company margins, and fiscal budgets in many emerging market (EM) countries.
- Prior to last quarter, the portfolio manager was cautiously optimistic on the outlook for EM as vaccinations had progressed well, COVID waves were receding, and economic reopenings were leading to earnings recoveries. Unfortunately, those positives are being offset by the stagflationary shock from the war in Europe. The economic recovery the portfolio manager expected in many parts of EM has been pushed further into the distant future.
- The portfolio manager expects volatility and risk in EM to be significantly higher for the rest of 2022. “Known unknowns,” such as the duration of the Russia/Ukraine war and whether China can stabilize its economy amid a property slowdown and rolling regional lockdowns as it implements a zero-COVID policy are the main drivers of the uncertainty in EM.
- Another significant headwind that has the potential to contribute to EM volatility is the much more hawkish U.S. Federal Reserve, who intends to hike interest rates aggressively for the rest of this year to battle high U.S. inflation. While it’s helpful that many EM central banks have already hiked last year ahead of the U.S. Fed, the possibility of a “taper tantrum” in EM assets is still quite significant as the pace of tightening picks up in the U.S.

For illustrative purposes only. Not a promise of future performance.

The statements and opinions are subject to change at any time, based on market and other conditions.

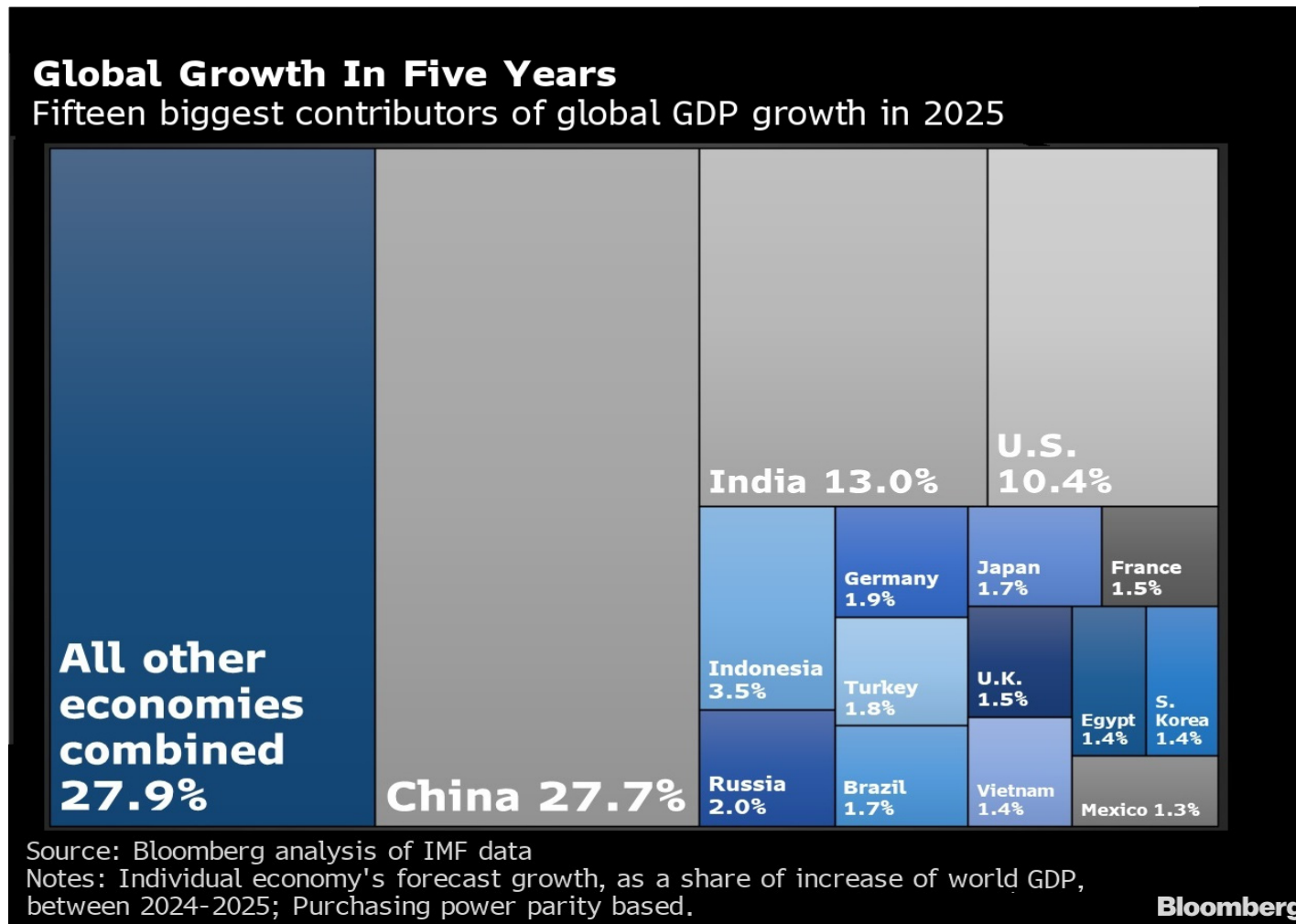
Actual results will depend on market conditions and any developments over a full market cycle that may affect these investments and will be reduced by the deduction of any fees and expenses associated with the investment. Information shown is based on analytical methods and market conditions at the time of analysis is subject to change.

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Most of the Global GDP Growth Should Continue to Come from Emerging Markets

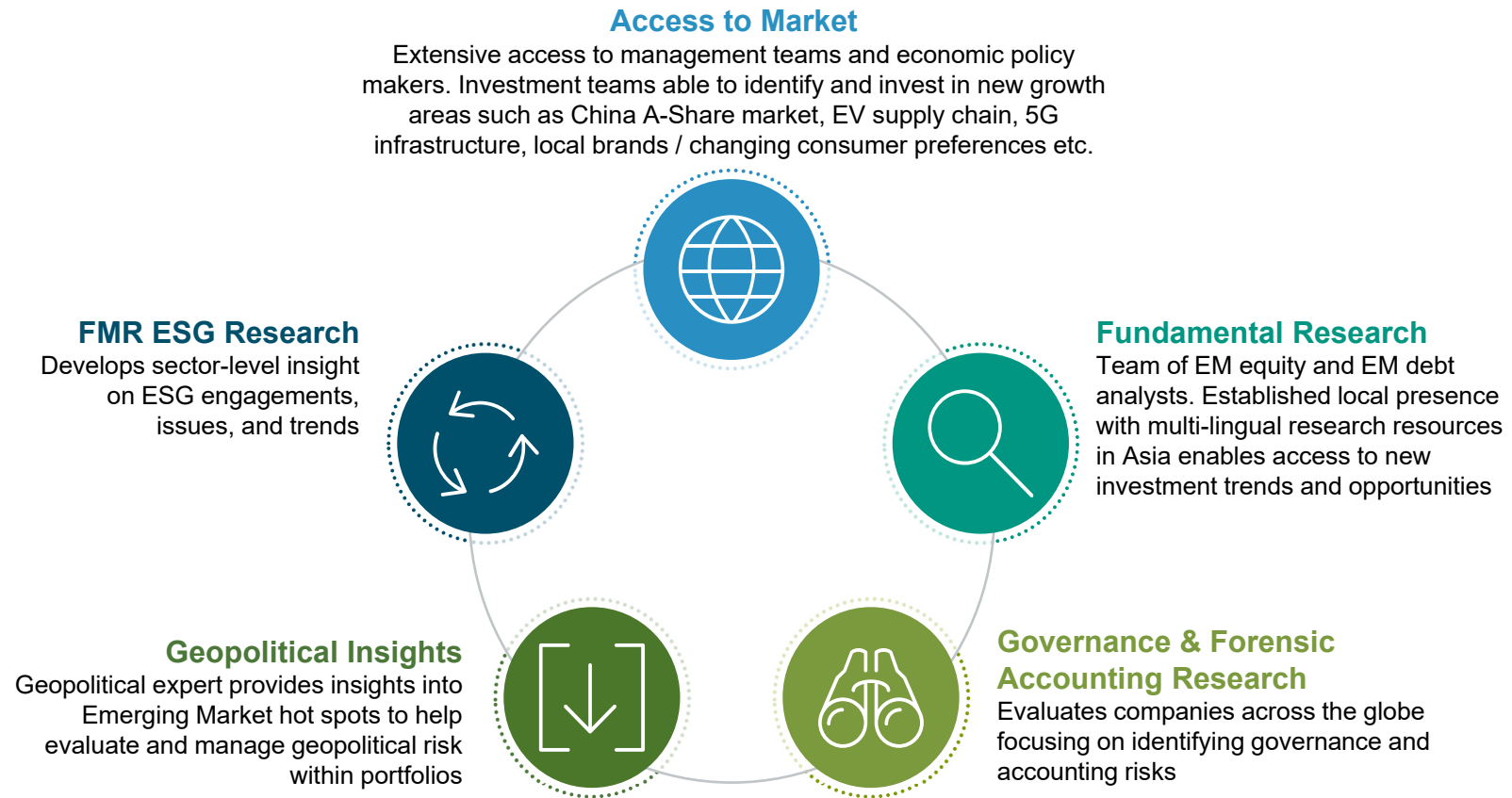


Source: Bloomberg, 2020.

Global Investment Resources

Fidelity's Investment Edge in Emerging Markets

Investment teams have access to multiple insights and perspectives that can be used to inform investment decisions



As of 3/31/22. For illustrative purposes only.

While environmental, social and corporate governance (ESG) factors are available to incorporate into our investment process across all Fidelity strategy offerings, ESG assessments represent one of many pieces of research available to the portfolio managers and the degree to which it impacts a strategy's holdings may vary strategy by strategy based on the portfolio manager's discretion. Investing based on ESG factors may cause a strategy to forgo certain investment opportunities available to strategies that do not use such criteria. Because of the subjective nature of sustainable investing, there can be no guarantee that ESG criteria used by Fidelity will reflect the beliefs or values of any particular client.

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Fidelity's Emerging Markets Equity Team and Resources

Fundamental research at a scale that isn't easily replicated: Leveraging over 360 research professionals around the globe, including 169 equity research professionals

EM Fundamental Research Resources



Intensive coverage of global EM companies
Dedicated EM team running GEM, regional, and sector funds

- Structured oversight from CIO and Director of Research
- 19 fundamental analysts from regional EM equity team
 - 11 Hong Kong¹
 - 6 Boston
 - 2 Tokyo
- Analysts average 8+ years of research experience covering EM
- Multi-lingual, including 7 Chinese speakers
- 9 sector experts / portfolio managers
- 4 regional experts / portfolio managers
- 3 EM debt portfolio managers
- 7 analysts² from EM debt team
- Global equity analysts with opportunistic EM coverage

Specialists



Resources complementary to fundamental research

- Governance team (5 in India, 2 in Hong Kong)
- FMR ESG Research Team (8 in Boston, 5 in India, 1 in London)
- Political expert (former CIA)
- Asset Allocation Research Team

As of 3/31/22.

While environmental, social and corporate governance (ESG) factors are available to incorporate into our investment process across all Fidelity strategy offerings, ESG assessments represent one of many pieces of research available to the portfolio managers and the degree to which it impacts a strategy's holdings may vary strategy by strategy based on the portfolio manager's discretion. Investing based on ESG factors may cause a strategy to forgo certain investment opportunities available to strategies that do not use such criteria. Because of the subjective nature of sustainable investing, there can be no guarantee that ESG criteria used by Fidelity will reflect the beliefs or values of any particular client.

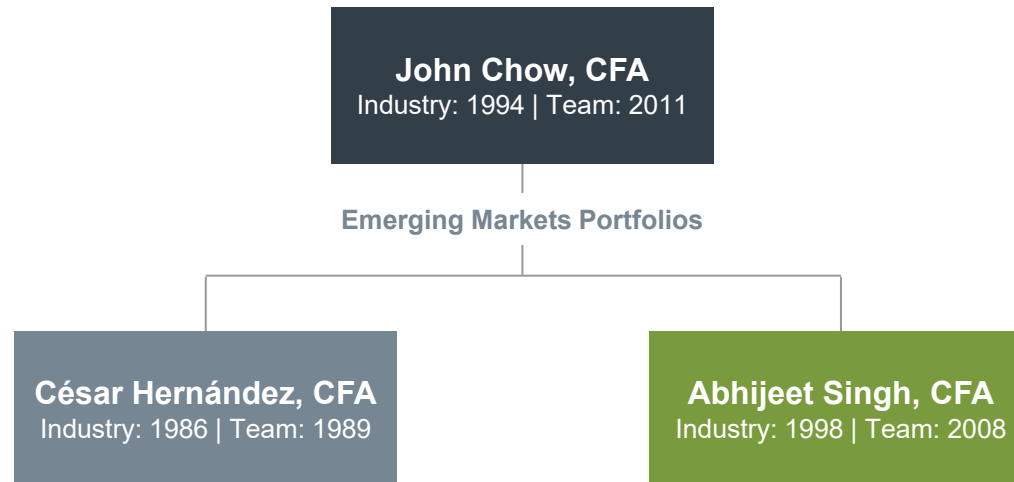
1. Three individuals with dual role of sector portfolio manager and research analyst and four with dual role of regional portfolio manager and research analyst. 2. One individual with dual role (portfolio manager and research analyst).

FIAM Select Emerging Markets Equity

Strategy Overview

Select Emerging Markets Equity

Long-tenured investment team with uncommon insight into international markets



As of 3/31/22.

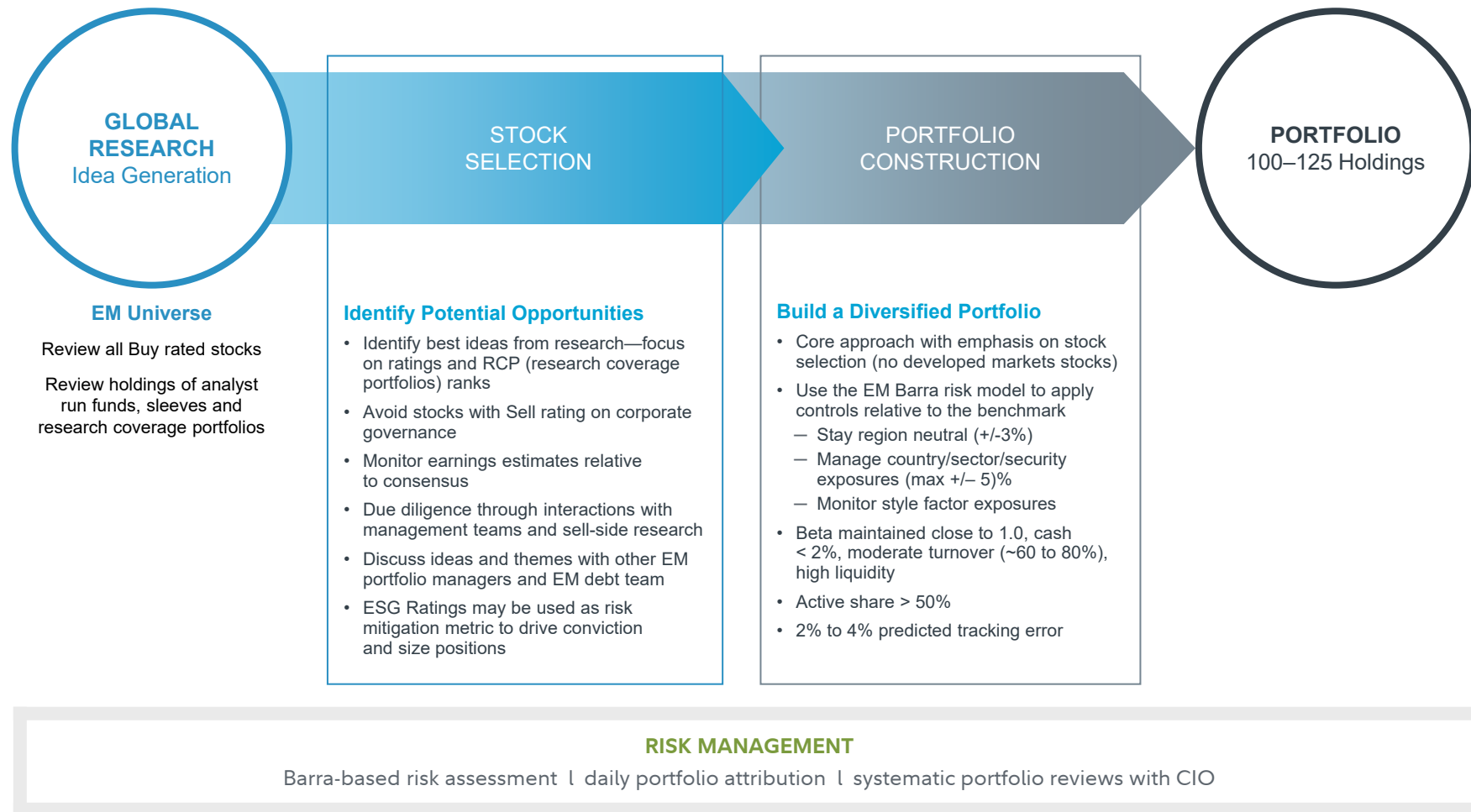
Select Emerging Markets Equity

Strategy overview

Investment Discipline	It Does Not:
<ul style="list-style-type: none"> • Pure play on Fidelity's research • Combines active stock selection with quantitative risk controls • Seeks to add value and minimize relative volatility and risk 	<ul style="list-style-type: none"> • Hedge currencies • Take top-down allocation positions
Objective	Consistent core exposure Consistent value added Low relative volatility

Select Emerging Markets

Investment process

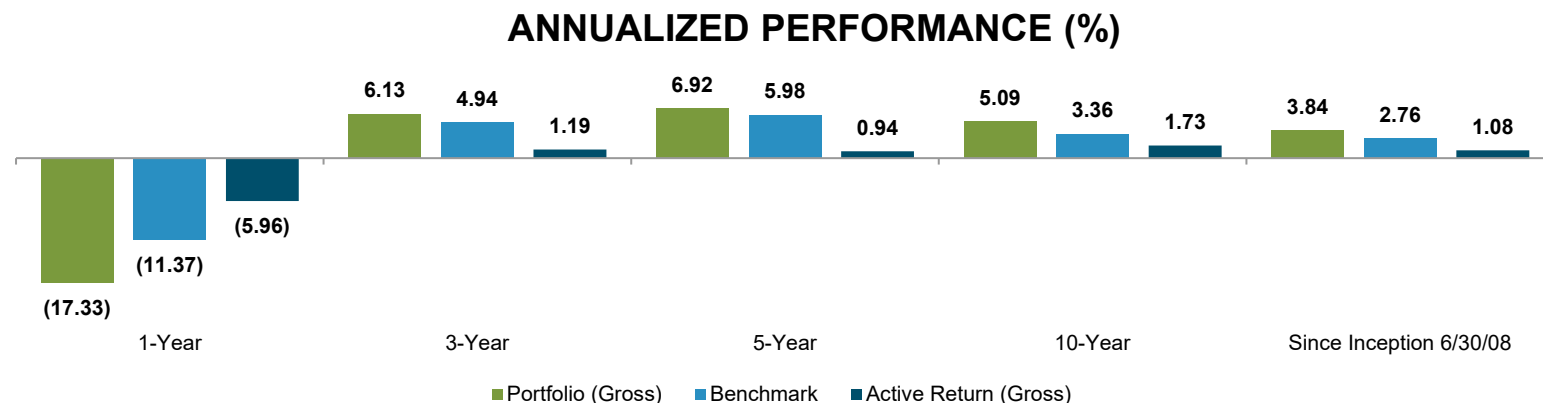


While environmental, social and corporate governance (ESG) factors are available to incorporate into our investment process across all Fidelity strategy offerings, ESG assessments represent one of many pieces of research available to the portfolio managers and the degree to which it impacts a strategy's holdings may vary strategy by strategy based on the portfolio manager's discretion. Investing based on ESG factors may cause a strategy to forgo certain investment opportunities available to strategies that do not use such criteria. Because of the subjective nature of sustainable investing, there can be no guarantee that ESG criteria used by Fidelity will reflect the beliefs or values of any particular client. For illustrative purposes only.

Investment Performance

Select Emerging Markets Equity—Composite Performance

As of March 31, 2022



Year	Portfolio (Gross)	Benchmark	Active Return (Gross)
YTD	(11.26)	(6.97)	(4.29)
2021	(4.19)	(2.54)	(1.65)
2020	26.65	18.31	8.34
2019	23.29	18.42	4.87
2018	(18.02)	(14.57)	(3.45)
2017	45.73	37.28	8.45
2016	12.59	11.19	1.40
2015	(11.50)	(14.92)	3.42
2014	3.13	(2.19)	5.32
2013	(0.98)	(2.60)	1.62
2012	16.20	18.22	(2.02)
2011	(20.96)	(18.42)	(2.54)
2010	15.74	18.88	(3.14)
2009	83.96	78.51	5.45
2008*	(46.78)	(47.11)	0.33

*Performance is presented for the period 7/1/08 through 12/31/08.

Returns of less than one year, including since inception returns if the strategy is less than one year mature, are not annualized.

All figures shown are in USD.

Any gross performance shown is gross of any fees and expenses, including advisory fees, which, when deducted, will reduce returns. If net composite performance is shown, it is less the highest advisory fee applicable to any FIAM client employing this strategy; other fees and expenses may reduce returns. Please see the GIPS® Composite Report for composite performance that is net of the highest advisory fee applicable to any account in the composite, which includes accounts managed by FIAM and its affiliates. The net performance in the GIPS® Composite Report will be lower than the net performance shown above, if applicable, if the composite includes an account of a FIAM affiliate that charges a higher fee. Past performance is no guarantee of future results.

Benchmark is MSCI Emerging Markets (N).

Select Emerging Markets Equity—Performance

As of March 31, 2022

PERFORMANCE RETURNS (%)

	CUMULATIVE	ANNUALIZED	
	QTD	Since Inception 8/12/21	TNA (\$M)
Marin County—Select Emerging Markets Equity Pool (Net)	(11.38)	(14.41)	111.3
MSCI Emerging Markets (N)	(6.97)	(10.52)	
<i>Relative Return (Net)</i>	<i>(4.41)</i>	<i>(3.89)</i>	

	CUMULATIVE	
	QTD	
Marin County—Select Emerging Markets Equity w/o Fair Value (Gross)	(10.08)	
MSCI Emerging Markets (N)	(6.97)	
<i>Relative Return (Gross)</i>	<i>(3.11)</i>	

Returns of less than one year are not annualized.

Client data shown. All figures shown are in USD.

Returns of less than one year, including since inception returns if the strategy is less than one year mature, are not annualized.

Net performance is less the client advisory fee charged employing this strategy; other fees and expenses may reduce returns. Past performance is no guarantee of future results.

Federal securities laws and related guidance generally require that securities be priced at market quotations that are readily available. Where market quotations are not readily available or are unreliable, impacted securities will be fair valued. As a result, the performance of the pool may contain prices that have been fair valued because the last market quotations may not reflect the impact of significant market events that occurred after the close of the local market, meaning that such quotations are no longer reliable. In such cases, the pool performance will reflect the impact of the fair valuation process. The last local sales price may not be the fair market value of the security at the close of the New York Stock Exchange, typically 4:00 p.m. Eastern time, which is the time generally used by FIAM to value all of its clients' portfolios. This process may cause the prices of the securities, used by a portfolio to calculate its NAV, to be different from the benchmark, which is calculated using latest local closing prices.

The pool "w/o Fair Value" returns reported above are derived from security values that are typically determined using either the latest quoted sales price or the latest closing price calculated according to local market convention. These security prices are the same as those used to value the benchmark. These returns also apply exchange rates from the close of markets in London to determine the USD value of positions beginning on 12/31/08. Prior to 12/31/08, exchange rates from the close of markets in New York rate were used to determine the position values.

Select Emerging Markets Equity—Attribution by Region (%)

Three months ended March 31, 2022

	Total Portfolio	Emerging Asia	Latin America	EMEA
Portfolio Return (Gross)	(11.3)	(11.7)	20.9	(25.2)
Index Return	(7.0)	(8.7)	27.3	(13.7)
Active Return (Gross)	(4.3)	(3.0)	(6.3)	(11.6)
Impact of Fair Value/FX Adjustment	(1.2)			
Active Return (Before Fair Value/FX)	(3.1)			
Value Added from Regional Allocation	1.0	(0.0)	0.6	0.4
Value Added from Stock Selection	(4.1)	(3.0)	(6.3)	(11.6)
Country Allocation	(0.7)	0.3	(2.7)	(6.7)
Sector Allocation	0.1	0.0	1.5	0.3
Stock Specific	(3.6)	(3.4)	(5.1)	(5.2)
Cash & Other Assets	0.0			
Portfolio Turnover	17%			

Client data shown.

Differences are due to rounding.

Performance data is shown gross of any fees and expenses, including advisory fees, which when deducted will reduce returns.

Past performance is no guarantee of future results.

Benchmark is MSCI Emerging Markets (N).

Select Emerging Markets Equity—Contribution by Sector (%)

Three months ended March 31, 2022

	Total Portfolio	Emerging Asia	Latin America	EMEA
Communication Services	(0.8)	(0.4)	(0.1)	(0.3)
Consumer Discretionary	(1.1)	(1.0)	(0.1)	(0.0)
Consumer Staples	0.2	0.0	0.1	0.0
Energy	0.4	0.2	(0.1)	0.3
Financials	(0.6)	0.1	0.0	(0.8)
Health Care	(0.3)	(0.2)	(0.1)	(0.1)
Industrials	(0.3)	(0.4)	0.2	(0.1)
Information Technology	(0.0)	0.0	(0.1)	0.0
Materials	(0.1)	(0.4)	0.2	0.1
Real Estate	(0.3)	(0.3)	(0.0)	(0.1)
Utilities	(0.2)	(0.1)	(0.1)	(0.0)
All Sectors	(3.2)	(2.4)	0.1	(0.9)
Cash and Other Assets	0.0			
Impact of Fair Value/FX Adjustment	(1.2)			
Total Active Return (Gross)	(4.3)			
Active Return (Before Fair Value/FX)	(3.1)			

Client data shown.

Differences are due to rounding.

Performance data is shown gross of any fees and expenses, including advisory fees, which when deducted will reduce returns.

Past performance is no guarantee of future results.

Benchmark is MSCI Emerging Markets (N).

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Select Emerging Markets Equity—Contributors/Detractors

Three months ended March 31, 2022

TOP CONTRIBUTORS

Security	WEIGHT (%)			(%)	(BPS)
	Average Portfolio	Average Benchmark	Average Active	Total Return	Contribution to Active Return
GAZPROM PJSC	0.1	0.4	(0.3)	(13.0)	56
RELIANCE INDUSTRIES LTD	2.8	1.2	1.5	8.9	23
MTN GROUP LTD	1.2	0.3	1.0	22.3	23
MMC NORILSK NICKEL PJSC	—	0.2	(0.2)	0.0	21
OIL & NATURAL GAS CORP LTD	1.2	0.1	1.1	13.8	19

TOP DETRACTORS

Security	WEIGHT (%)			(%)	(BPS)
	Average Portfolio	Average Benchmark	Average Active	Total Return	Contribution to Active Return
XPENG INC ADR	1.2	0.2	1.0	(45.0)	(57)
LUKOIL PJSC	1.1	0.3	0.8	(68.8)	(53)
BILIBILI INC	1.1	0.1	1.1	(42.9)	(51)
YANDEX NV	0.3	0.1	0.2	(94.8)	(45)
MEDIA TEK INC	2.1	0.8	1.4	(26.5)	(28)

Client data shown.

Past performance is no guarantee of future results. Holdings data shown does not represent all of the securities purchased, sold, or recommended and may change at any time. Portfolio weights are rounded and a zero weight represents either no holding or a very small weight. Contact FIAM for more information about the portfolio data calculations and for complete holdings information.

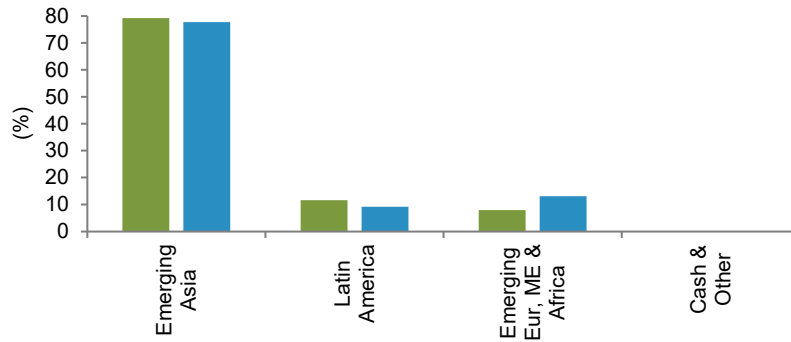
Benchmark is MSCI Emerging Markets (N).

Portfolio Positioning

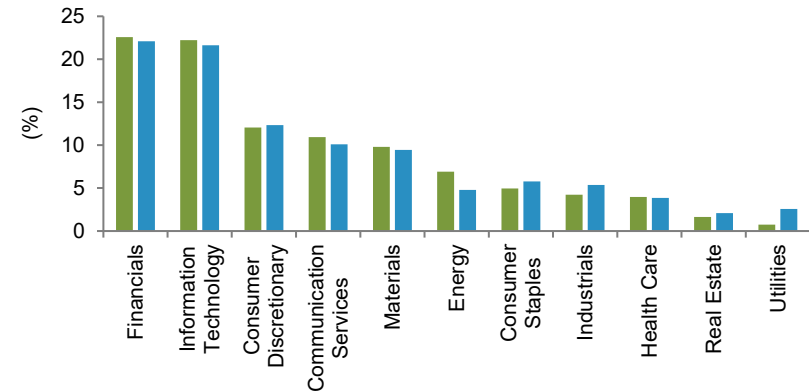
Select Emerging Markets Equity—Portfolio Positioning

As of March 31, 2022

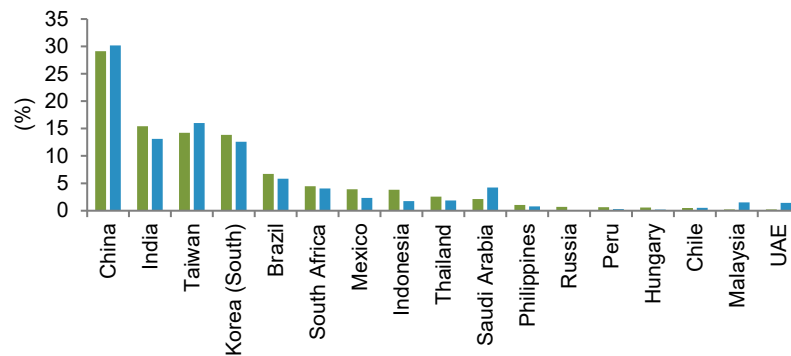
REGIONAL WEIGHTS



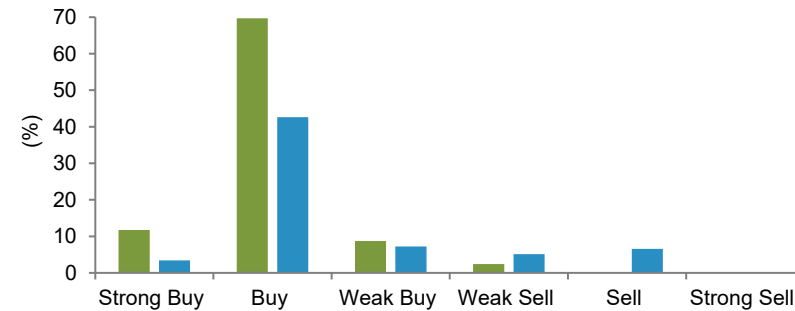
SECTOR WEIGHTS



COUNTRY WEIGHTS



PORTFOLIO WEIGHTS BY FIDELITY INVESTMENT RATING*



■ Portfolio ■ Benchmark

*The chart shows the allocations of the portfolio and benchmark according to the stock rating assigned by Fidelity analysts.

Cash & Other includes cash and cash equivalents.

Client data shown.

Benchmark is MSCI Emerging Markets (N).

Select Emerging Markets Equity—Portfolio Characteristics

As of March 31, 2022

	Portfolio	Benchmark
Beta	1.07	1.00
Dividend Yield	2.2%	2.8%
Weighted Average Market Cap (\$ Billions)	137.5 B	119.7 B
Price/Earnings Trailing	12.9x	13.2x
Price/Book	1.9x	1.8x
Return on Equity 5 Year Average	12.5%	11.7%
Number of Issues	112	1,333
Weight in Benchmark Names	92%	100%
Predicted Active Risk	3.3%	—

Predicted active risk, also known as ex ante tracking error, is predicted tracking error of the portfolio using MSCI Barra modeling.

Client data shown.

Past performance is no guarantee of future results.

Benchmark is MSCI Emerging Markets (N).

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Select Emerging Markets Equity—Top 10 Holdings

As of March 31, 2022

TOP 10 HOLDINGS

Security	WEIGHT (%)			Company Description
	Portfolio	Benchmark	Relative	
TAIWAN SEMICONDUCTOR MFG	8.8	7.0	1.8	Manufactures semiconductor wafers
SAMSUNG ELECTRONICS CO LTD	4.6	4.3	0.3	Global leader in smartphones, memory chips, & electronics
TENCENT HOLDINGS LTD	4.4	3.8	0.6	Largest social network in China
ALIBABA GROUP HOLDING LTD	3.6	3.0	0.6	Leading ecommerce company in China
RELIANCE INDUSTRIES LTD	3.3	1.4	1.9	India-based conglomerate focused on refining, petrochemicals, retail, and telecom services
AL RAJHI BANKING & INVEST CORP	1.8	0.7	1.1	Saudi banking and financial services provider
MTN GROUP LTD	1.7	0.3	1.4	Largest telecom operator in Africa.
ICICI BANK LTD	1.6	0.7	0.9	India-based banking and financial services provider
SK HYNIX INC	1.5	0.7	0.8	South Korea-based semiconductor company
HDFC BANK LTD	1.5	0.0	1.5	India-based banking and financial services provider

Client data shown.

Not representative of manager's entire portfolio or all recommendations. Not a recommendation or offer to buy or sell securities.

Benchmark is MSCI Emerging Markets (N).

Source: FIAM.

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Select Emerging Markets Equity—Top 5 Over/Underweights

As of March 31, 2022

TOP 5 OVERWEIGHTS

Security	WEIGHT (%)			Company Description
	Portfolio	Benchmark	Relative	
RELIANCE INDUSTRIES	3.3	1.4	1.9	India-based conglomerate focused on refining, petrochemicals, retail and telecom services
TAIWAN SEMICONDUCTOR	8.8	7.0	1.8	Manufactures semiconductor wafers
HDFC BANK	1.5	0.0	1.5	India-based banking and financial services provider
MTN GROUP	1.7	0.3	1.4	Largest telecom operator in Africa.
SUNGROW POWER SUPPLY	1.4	0.0	1.4	China-based solar inverter manufacturer

TOP 5 UNDERWEIGHTS

Security	WEIGHT (%)			Company Description
	Portfolio	Benchmark	Relative	
THE SAUDI NATIONAL BANK	0.0	0.6	(0.6)	Saudi banking and financial services provider
BAIDU INC SPON ADR	0.0	0.5	(0.5)	China-based internet search company
EMIRATES TELECOM	0.0	0.5	(0.5)	UAE-based telecom services provider
BANK OF CHINA	0.0	0.5	(0.5)	China-based banking and financial services provider
SAUDI BASIC INDUSTRIES	0.0	0.4	(0.4)	Saudi chemicals company

Client data shown.

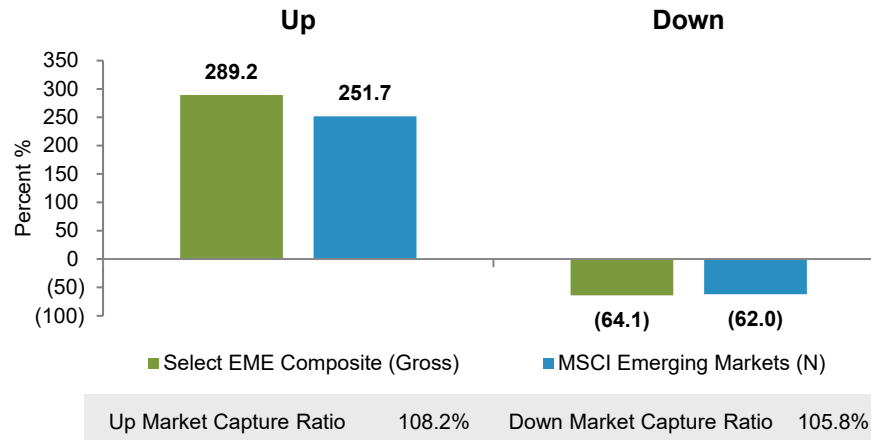
Not representative of manager's entire portfolio or all recommendations. Not a recommendation or offer to buy or sell securities.

Benchmark is MSCI Emerging Markets (N).

Source: FIAM.

Select Emerging Markets Equity—Risk & Return

UP/DOWN PERFORMANCE (GROSS): 5-Years ended 3/31/22



RISK MEASURES: As of 3/31/22

	3-Year	5-Year
Tracking Error (%)	3.55	3.28
Information Ratio	0.34	0.29

EVESTMENT GLOBAL EMERGING MARKETS ALL CAP CORE UNIVERSE RANKS As of 3/31/22

	Annualized	
	3-Year	5-Year
Total Return Universe Ranking (%)	48	49
Information Ratio Universe Ranking (%)	42	41

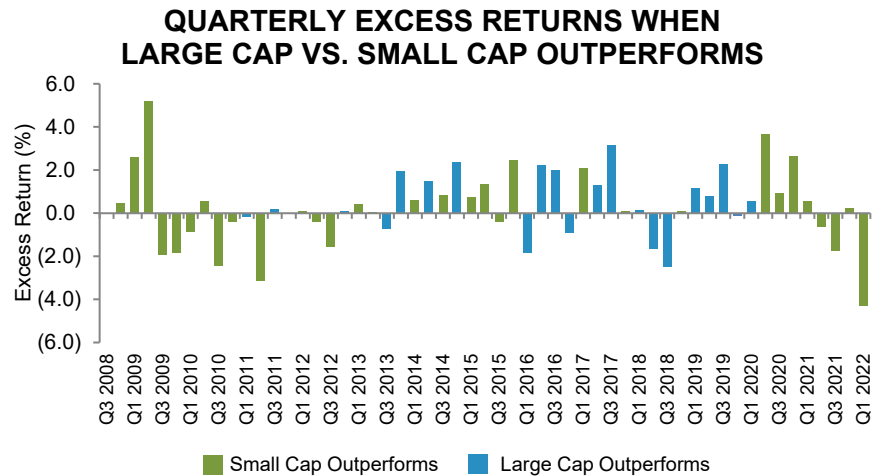
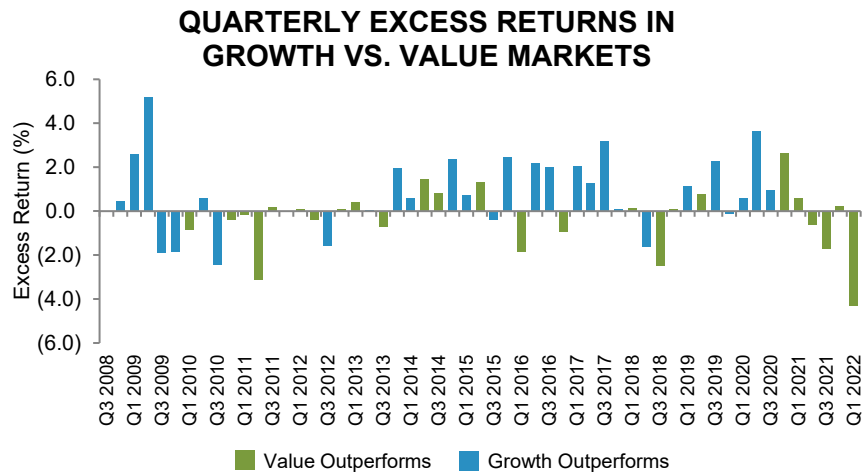
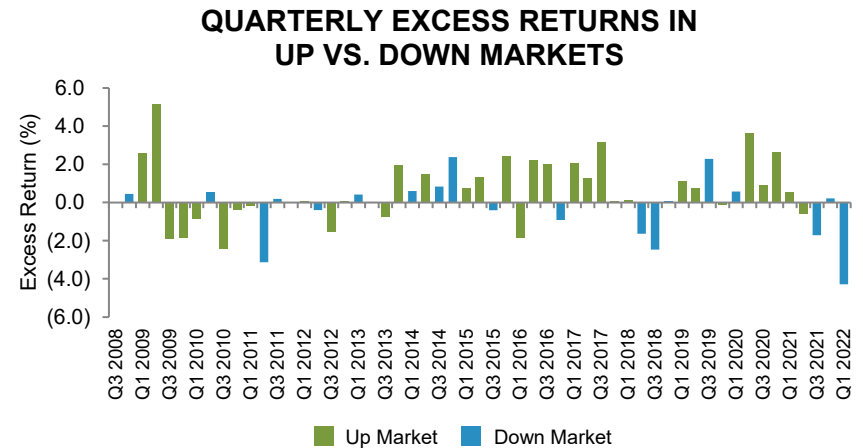
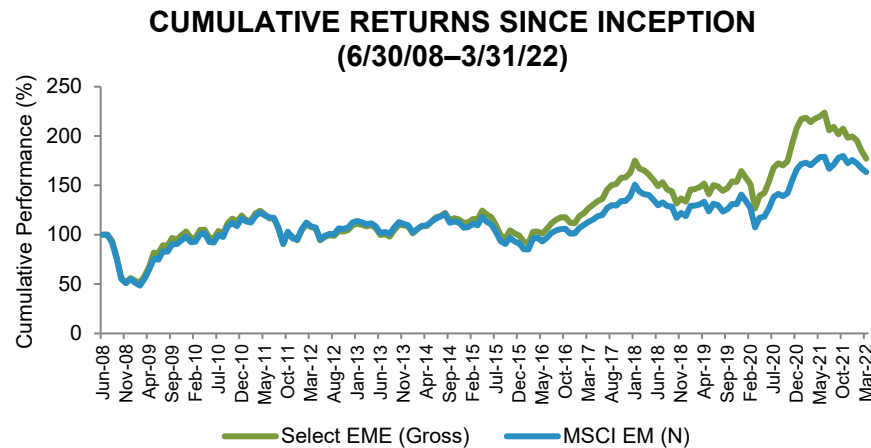
Top Quartile	3rd Quartile
2nd Quartile	4th Quartile

Rankings source eVestment Alliance. Rankings shown are as of 1Q22. FIAM has not verified and cannot verify the accuracy of information from outside sources, which are self-reported by participating investment managers. Rankings data of the FIAM strategies for all the time periods shown were retrieved on 4/26/22 with at least 80% of managers in eVestment Global Emerging Markets All Cap Core Equity universe reporting and based on 163 and 153 investment products respectively. The universe that the products are shown against is defined by eVestment Alliance. Rankings shown are based on gross composite returns. Please see the Important Information for information regarding third party databases and rankings. Past performance is no guarantee of future results.

Performance shown is gross of any fees and expenses, including advisory fees, which, when deducted, will reduce returns. See the GIPS® Composite Report for composite performance that is net of the highest advisory fee applicable to any account in the composite, which includes accounts managed by FIAM and its affiliates. Past performance is no guarantee of future results.

Benchmark: MSCI Emerging Markets (N). Sources: eVestment Alliance and Fidelity.

Select Emerging Markets Equity—Performance Analysis (Gross)



Composite data is shown. The inception of this composite is 6/30/08; quarterly performance is presented for the period 7/1/08 through 3/31/22.

Performance shown is gross of any fees and expenses, including advisory fees, which, when deducted, will reduce returns. See the GIPS® Composite Report for composite performance that is net of the highest advisory fee applicable to any account in the composite, which includes accounts managed by FIAM and its affiliates. Past performance is no guarantee of future results.

Benchmark is MSCI Emerging Markets (N).

Appendix

Fidelity Investments GIPS® Composite Report

Select Emerging Markets Equity Composite (USD) Versus MSCI Emerging Markets Index (Net)
As of March 31, 2022

Period	Composite Return (Gross%)	Composite Return (Net%)	Benchmark Return (%)	Number of Portfolios	Total Composite Assets End of Period (\$M)	Composite 3 Year Standard Deviation (Gross%)	Benchmark 3 Year Standard Deviation (%)	Asset Weighted Standard Deviation (Gross%)	Total Firm Assets(\$B)
2022 YTD	(11.26)	(11.44)	(6.97)	7	8,141	19.48	18.28	N/A	N/A
2021 Annual	(4.19)	(4.95)	(2.54)	7	8,830	19.41	18.59	0.11	1239
2020 Annual	26.65	25.64	18.31	8	8,033	20.60	19.88	0.57	1088
2019 Annual	23.29	22.31	18.42	7	2,488	14.75	14.37	0.21	960
2018 Annual	(18.02)	(18.67)	(14.57)	5	1,704	15.34	14.81	0.11	705
2017 Annual	45.73	44.56	37.28	5	1,790	15.97	15.57	0.52	613
2016 Annual	12.59	11.58	11.19	6	1,468	16.44	16.30	N/A	552
2015 Annual	(11.50)	(12.29)	(14.92)	less than 5	761	14.60	14.25	N/A	603
2014 Annual	3.13	2.21	(2.19)	less than 5	936	15.01	15.21	N/A	742
2013 Annual	(0.98)	(1.87)	(2.60)	less than 5	833	19.21	19.31	N/A	737
2012 Annual	16.20	15.17	18.22	less than 5	1,294	21.41	21.80	N/A	669

Definition of the "Firm"

For GIPS purposes, the "Firm" includes all portfolios managed by the following Fidelity Investments entities: (1) FIAM LLC; (2) Fidelity Institutional Asset Management Trust Company (together, "FIAM"); (3) Fidelity Management & Research Company LLC and its subsidiaries (FMRCO) (4) Fidelity Management Trust Company (FMTG); and (5) Fidelity Diversifying Solutions LLC (FDS). The firm excludes certain portfolios managed by those entities that primarily invest in real property, taxable wealth management accounts for which FMRCO provides sub-advisory services, and portfolios managed by the Private Equity Multi-Strategy team.

Changes to Definition of the "Firm"

Effective January 1, 2022, the firm was redefined to include all portfolios managed by FMRCO, FMTG, and FDS in addition to FIAM as described in the Definition of the Firm, excluding taxable wealth management accounts for which FMRCO provides sub-advisory services and portfolios managed by the Private Equity Multi-Strategy team. Effective January 1, 2021 the firm was redefined to exclude FIAM's management of certain portfolios that primarily invest in real property. Effective January 1, 2020, certain Fidelity investment advisers were re-organized, however, there was no impact to firm or composite assets. Effective January 1, 2016, the definition of the Firm was revised to include substantially similar fixed income investment strategies managed by FMTG and the same portfolio management team. Effective November 20, 2015, the Firm name was changed from Pyramis Global Advisors to Fidelity Institutional Asset Management (FIAM). Effective January 1, 2013, the definition of the Firm was revised to include subsidiaries of FMR Co.

Basis of Presentation

The Firm claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. The firm has been independently verified for the periods January 1, 1990 through December 31, 2020. The verification report(s) is/are available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein. The Firm's list of composite descriptions, pooled fund descriptions for limited distribution pooled funds, and names of broad distribution pooled Funds is available upon request. Policies for valuing investments, calculating performance, and preparing GIPS reports are available upon request.

Returns

Gross composite returns do not reflect the deduction of investment advisory ("IA"), administrative or custodial fees, but do include trading expenses. Net composite returns are calculated by deducting the maximum standard IA fee that could have been charged to any client employing this strategy during the time period shown, exclusive of performance fee or minimum fee arrangements. IA fees paid by a client vary depending upon a variety of factors, including portfolio size and the use of any performance fee or minimum fee arrangement. Actual returns will be reduced by the IA fee and any administrative, custodial, or other fees and expenses incurred. Returns could be higher or lower than those shown. A client's fees are generally calculated based on the average month-end assets at market value during the quarter as calculated by the Firm, and are billed quarterly in arrears. More information regarding fees is available upon request. These investment performance statistics were calculated without a provision for any income taxes.

Composite Description

The investment objective of this composite is to provide consistent excess return over the MSCI Emerging Markets Index (Net) through active stock selection. The composite is composed of all fee-paying discretionary accounts that are managed by the Firm in this style.

Limited Distribution Pooled Funds/Fair Valuation of Securities

The composite contains one or more limited distribution pooled funds ("LDPF") whose performance is presented net of custody, audit, and other administrative fees. Investment securities transactions for the pool portfolio are accounted for on trade date-plus-one. LDPF names are not included in order to comply with law and regulation which restricts the offer of the LDPF to certain eligible investors or prohibits any offer. Fees and expenses of each LDPF are described in each LDPF's offering and account opening documents and financial statements. Pools are subject to Fidelity's market timing policy, which for days with material market movement between the local market close and 4:00 pm Eastern Standard time, requires the pool's net asset value to be determined using securities valuations at 4:00 pm EST. Separate accounts are not subject to this policy and use securities valuations provided at the close of that international security's particular market. As a result, the performance of the pool may be different (higher or lower) from the performance of other accounts in this composite and may have a material impact on the performance of the overall composite.

Composite Inception and Creation Date

The inception date of this composite is June 30, 2008. This composite was created on June 30, 2008.

Institutional Fee Schedule

The maximum scheduled investment advisory fee for this strategy is 80 basis points, which may be subject to certain decreases as assets under management increase. The investment advisory fee applicable to a portfolio depends on a variety of factors, including but not limited to portfolio size, the level of committed assets, service levels, the use of a performance fee or minimum fee arrangement, and other factors.

Effect of Investment Advisory Fee

Returns will be reduced by the investment advisory fee and any other expenses incurred in the management of the portfolio. For example, an account with a compound annual return of 10% would have increased by 61% over five years. Assuming an annual advisory fee of 80 basis points, the net return would have been 55% over five years.

Pooled Fund Fee Schedule

This composite includes a limited distribution pooled fund, whose maximum scheduled investment advisory fee is 70 basis points.

Past performance is no guarantee of future results.

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Important Information

Please read this information carefully. Speak with your relationship manager if you have any questions.

This document does not make an offer or solicitation to buy or sell any securities or services, and is not investment advice. FIAM does not provide legal or tax advice and we encourage you to consult your own lawyer, accountant, or other advisor before making an investment.

Information provided in this document is for informational and educational purposes only. To the extent any investment information in this material is deemed to be a recommendation, it is not meant to be impartial investment advice or advice in a fiduciary capacity and is not intended to be used as a primary basis for you or your client's investment decisions. Fidelity and its representatives may have a conflict of interest in the products or services mentioned in this material because they have a financial interest in them, and receive compensation, directly or indirectly, in connection with the management, distribution, and/or servicing of these products or services, including Fidelity funds, certain third-party funds and products, and certain investment services.

Risks

Past performance is no guarantee of future results. An investment may be risky and may not be suitable for an investor's goals, objectives and risk tolerance. Investors should be aware that an investment's value may be volatile and any investment involves the risk that you may lose money.

Performance for individual accounts will differ from performance for composites and representative accounts due to factors, including but not limited to, portfolio size, trading restrictions, account objectives and restrictions, and factors specific to a particular investment structure. Representative account information is based on an account in that strategy's composite that generally reflects that strategy's management and is not based on performance of that account.

The value of a strategy's investments will vary in response to many factors, including adverse issuer, political, regulatory, market, or economic developments. The value of an individual security or a particular type of security can be more volatile than and perform differently from the market as a whole. Nearly all accounts are subject to volatility in non-U.S. markets, either through direct exposure or indirect effects on U.S. markets from events abroad, including fluctuations in foreign currency exchange rates and, in the case of less developed markets, currency illiquidity. Events such as natural disasters, pandemics, epidemics, and social unrest in one country, region, or financial market may adversely impact issuers in a different country, region, or financial market. Performance could be negatively impacted if the value of a portfolio holding were harmed by such political or economic conditions or events. Moreover, such negative political and economic conditions and events could disrupt the processes necessary for investment operations.

Derivatives may be volatile and involve significant risk, such as credit risk, currency risk, leverage risk, counterparty risk, and liquidity risk. Using derivatives can disproportionately increase losses and reduce opportunities for gains in certain circumstances.

The performance of international strategies depends upon currency values, political, and regulatory environments, and overall economic factors in the countries in which they invest. Foreign markets often are more volatile than the U.S. market due to increased risks of adverse issuer, political, regulatory, market, or economic developments and often perform differently from the U.S. market. Government actions as a result of the political process can result in additional market volatility in those regions affected by a particular issue (e.g. Brexit). Foreign exchange rates also can be extremely volatile. The risks are particularly significant for strategies that focus on a single country or region or single group or type of countries. Non-U.S. security trading, settlement, and custodial practices (including those involving securities settlement where fund or account assets may be released prior to receipt of payment) may be less developed than those in U.S. markets and may result in increased investment or valuation risks, increased counterparty exposure, or substantial delays (including those arising from failed trades or the insolvency of, or breach of duty by, a non-U.S. broker-dealer, securities depository, sub-custodian, clearinghouse, or other party) for funds and accounts that invest in non-U.S. markets.

The securities, derivatives, and currency markets of emerging-market countries are generally smaller, less developed, less liquid, and more volatile than those of the United States and other developed markets, and disclosure and regulatory standards in many respects are less stringent. There also may be a lower level of monitoring and regulation of markets in emerging market countries and the activities of investors in such markets and enforcement of existing regulations may be extremely limited and arbitrary. Emerging-market countries are more likely to experience political uncertainty and instability, including the risk of war, terrorism, nationalization, limitations on the removal of funds or other assets, impacts of the spread of infectious diseases, or diplomatic developments that affect investments in these countries. In many cases, there is a heightened possibility of government control of the economy, expropriation or confiscatory taxation, imposition of withholding taxes on interest payments, or other similar developments.

These materials contain statements that are "forward-looking statements," which are based on certain assumptions of future events. FIAM does not assume any duty to update any forward-looking statement. Actual events may differ from those assumed. There can be no assurance that forward-looking statements, including any projected returns, will materialize or that actual market conditions and/or performance results will not be materially different or worse than those presented.

Important Information, continued

Performance Data

Unless otherwise indicated performance data shown is client data. Performance data is generally presented gross of any fees and expenses, including advisory fees, which when deducted will reduce returns. All results reflect realized and unrealized appreciation and the reinvestment of dividends and investment income, if applicable. Taxes have not been deducted.

FIAM claims compliance with the Global Investment Performance Standards (GIPS®) as part of the Fidelity Investments firm.

Performance for individual accounts will differ from performance for composites and representative accounts due to factors, including but not limited to, portfolio size, trading restrictions, account objectives and restrictions, and factors specific to a particular investment structure. If representative account information is shown, it is based on an account in the subject strategy's composite that generally reflects that strategy's management and is not based on performance.

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Fidelity Institutional Asset Management (FIAM) includes the following entities or divisions that provide investment services: Fidelity Institutional Asset Management Trust Company, a New Hampshire trust company (FIAM TC); FIAM LLC, a U.S. registered investment adviser; the Fidelity Institutional Asset Management division of FMR Investment Management (UK) Limited, a UK registered investment manager and U.S. registered investment adviser; and the Fidelity Institutional Asset Management division of Fidelity Management & Research (Hong Kong) Limited, a Hong Kong and U.S. registered investment adviser. Fidelity Asset Management Solutions (FAMS) provides a broad array of investment solutions with its Global Institutional Solutions (GIS), Global Asset Allocation (GAA), and institutional equity, fixed income, high income, and alternative asset management teams through FIAM LLC and Fidelity Institutional Asset Management Trust Company.

"Fidelity Investments" and/or "Fidelity" refers collectively to FMR LLC, a U.S. company, and its subsidiaries, including but not limited to Fidelity Management & Research Company LLC (FMR), FIAM LLC and FIAM TC.

Certain data and other information in this presentation have been supplied by outside sources and are believed to be reliable and current. Data and information from third-party databases, such as eVestment Alliance, Callan, and Morningstar are self-reported by firms that generally pay a subscription fee to use such databases, and the database sponsors do not guarantee or audit the accuracy, timeliness, or completeness of the data and information provided, including any rankings. Rankings or similar data reflect information at the time rankings were retrieved from a third-party database, and such rankings may vary significantly as additional data from managers is reported. Rankings may include a variety of product structures, including some in which certain clients may not be eligible to invest. FIAM cannot verify the accuracy of information from outside sources, and potential investors should be aware that such information is subject to change without notice.

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The Chartered Financial Analyst (CFA) designation is offered by the CFA Institute. To obtain the CFA charter, candidates must pass three exams demonstrating their competence, integrity, and extensive knowledge in accounting, ethical and professional standards, economics, portfolio management, and security analysis, and must also have at least four years of qualifying work experience, among other requirements. CFA® and Chartered Financial Analyst® are registered trademarks owned by CFA Institute.

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Callan

June 15, 2022



Marin County Employees' Retirement Association

Fixed Income Structure Review

Kevin Machiz CFA, FRM
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Jim Callahan, CFA
Fund Sponsor Consulting

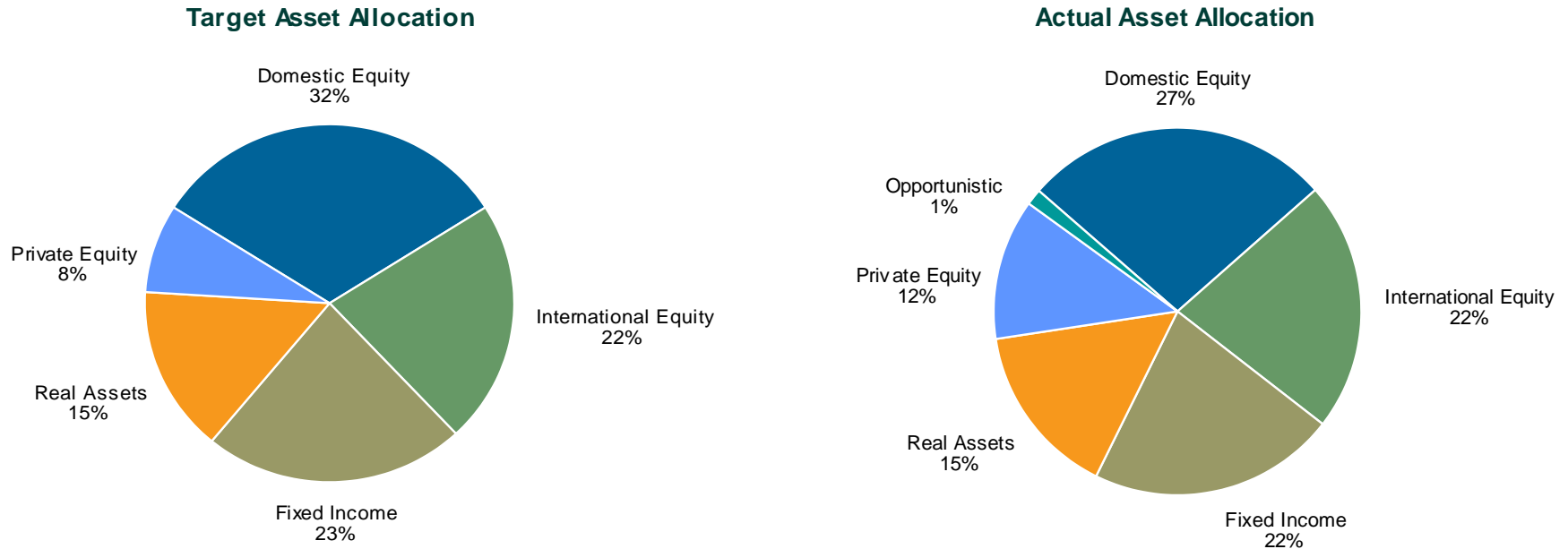
Anne Heaphy
Fund Sponsor Consulting

Introduction

- MCERA's current fixed income structure was implemented in 2014 to prepare for a rising rate environment, and eight years later, it is finally here. Current structure consists of:
 - 50% U.S. Core Plus
 - 25% U.S. Intermediate Credit
 - 25% Global Fixed Income
- U.S. fixed income continues to be a challenging investment market
 - Yields have been at historic lows for over a decade
 - Yields are now rising, but with that comes negative returns
 - U.S. Aggregate bond index duration is long (duration measures interest rate risk)
 - Credit sector can offer more return (for commensurate risk) and has higher correlation to equities
- Global fixed income has faced currency headwinds
 - Global fixed income was added as a diversifier from U.S. interest rate exposure
 - Current portfolio is unhedged which presents currency risk, but currency offers diversification and a lever managers can use to express a view and potentially add incremental value
 - A hedged portfolio removes currency risk/effect and hedges it back to the U.S. dollar
 - The U.S. dollar has been very strong for a number of years, thus impacting unhedged strategies
- Topics to discuss:
 - Is MCERA comfortable with the current structure?
 - Could tweaks be made to the allocations?
 - *Keep dedicated credit, reduce global, unhedged vs. hedged?*
 - Are there new strategies that could be appealing?
 - *US Treasuries (liquidity, downside protection), multi-sector credit (return enhancement)*

Total Fund Asset Allocation

As of March 31, 2022

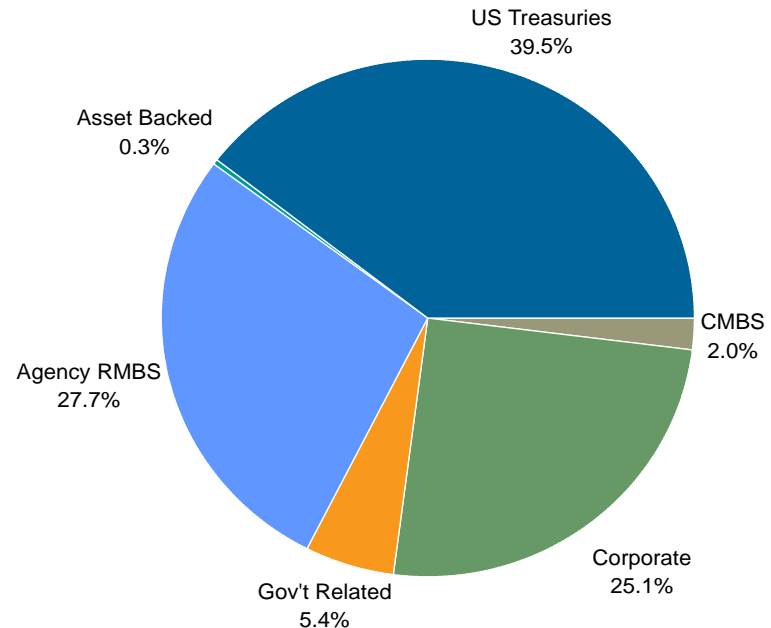


- Total assets as of March 31, 2022 = \$3,352,948,672
- For modeling purposes, we used the Bloomberg Aggregate Index as the proxy
- MCERA Fixed Income allocation is 100% actively managed in three separate mandates

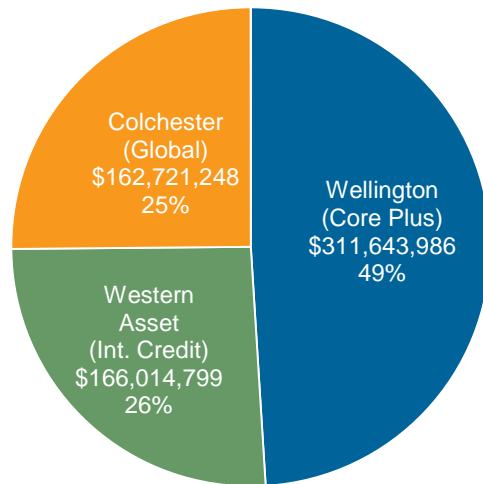
Bloomberg U.S. Aggregate Bond Index

Sector Allocations as of March 31, 2022

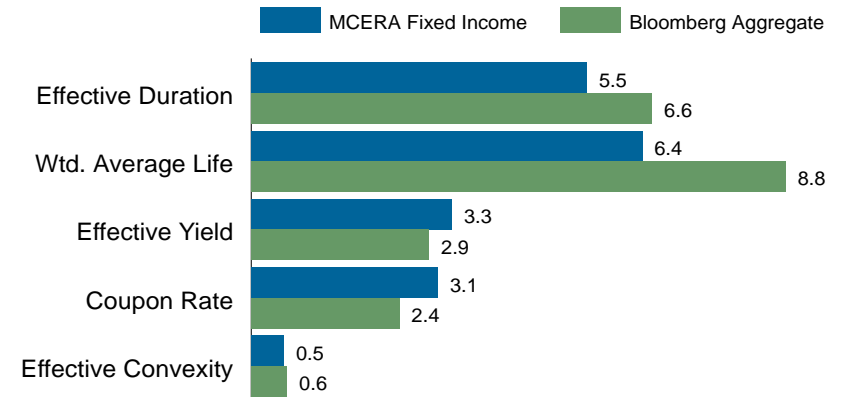
- The Aggregate Index covers most of the U.S. fixed income market. Qualifying issues include:
 - Rated investment-grade by at least two ratings agencies
 - Fixed rate
 - Dollar-denominated
 - Non-convertible
 - Publicly issued
- The Aggregate does not include:
 - Non-agency mortgage backed securities
 - High yield (“junk”) bonds
 - Non-U.S. developed market bonds
 - Emerging market bonds



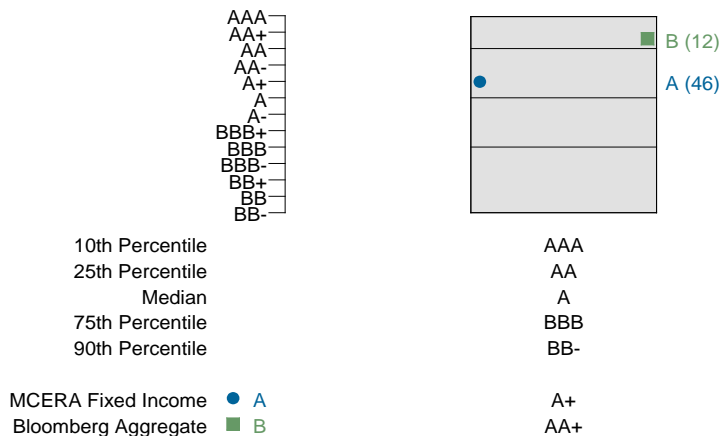
MCERA Fixed Income Structure



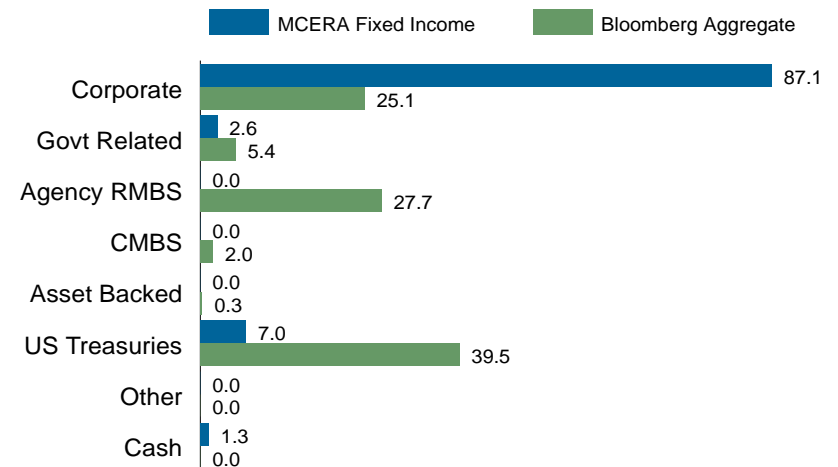
Portfolio Characteristics as of March 31, 2022



Quality Rating as of March 31, 2022 Total Domestic Fixed Income Database



Sector Allocation as of March 31, 2022



Callan

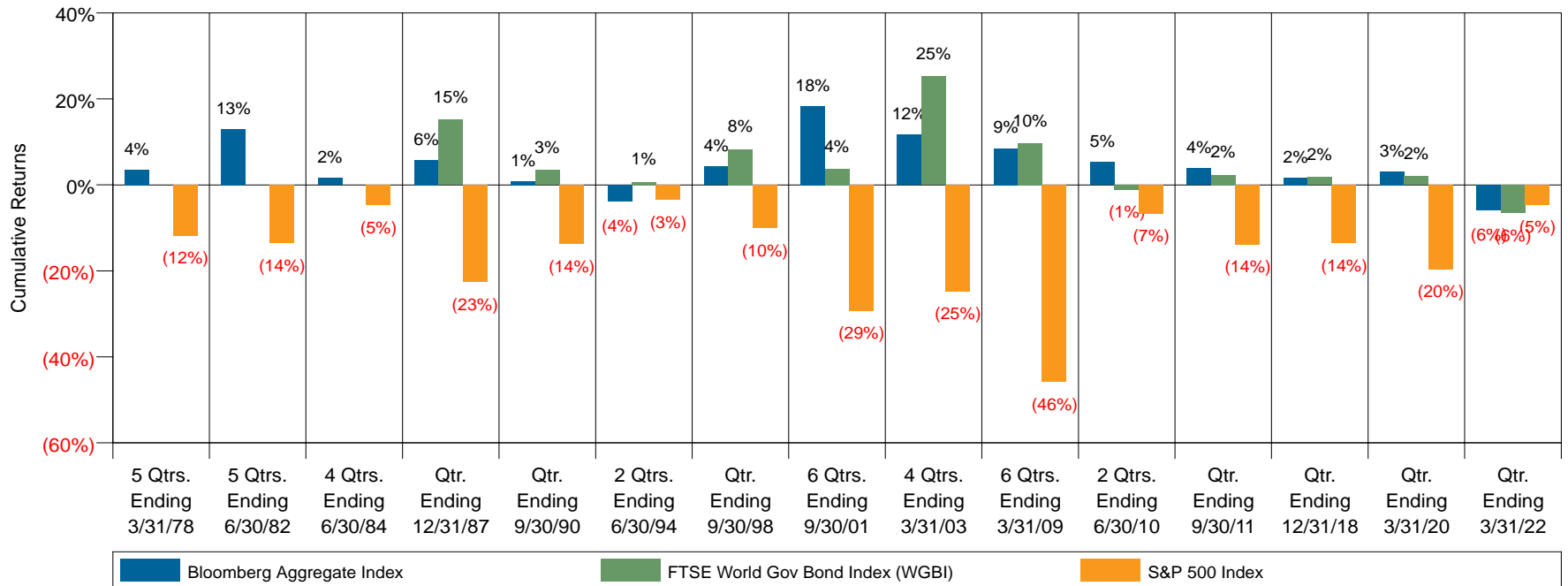
Fixed Income Structure Review

Role of Fixed Income

- Fixed income is typically a low-risk, diversifying asset for the equity allocation rather than a primary source of additional return to a fund
 - Bonds offer protection in the short run
 - Dependable income provides comfort in economic downturns or sudden market corrections
- The fixed income allocation is the primary diversifier for the exposure to equities
- Fixed income can also serve as a very important source of liquidity
- Is the fixed income allocation, at 23% of the total plan (policy target), fulfilling an appropriate role?
- How should fixed income be structured to fulfill competing goals of safety, diversification, liquidity, and returns?
 - Treasury allocations can reliably provide liquidity and diversification
 - Credit is more volatile, but historically produces relatively higher returns
 - *The lowest quality credit has the highest volatility and correlation with equity markets*
 - Global fixed income provides a larger and more diverse opportunity set

An Illustration of the Role of Fixed Income

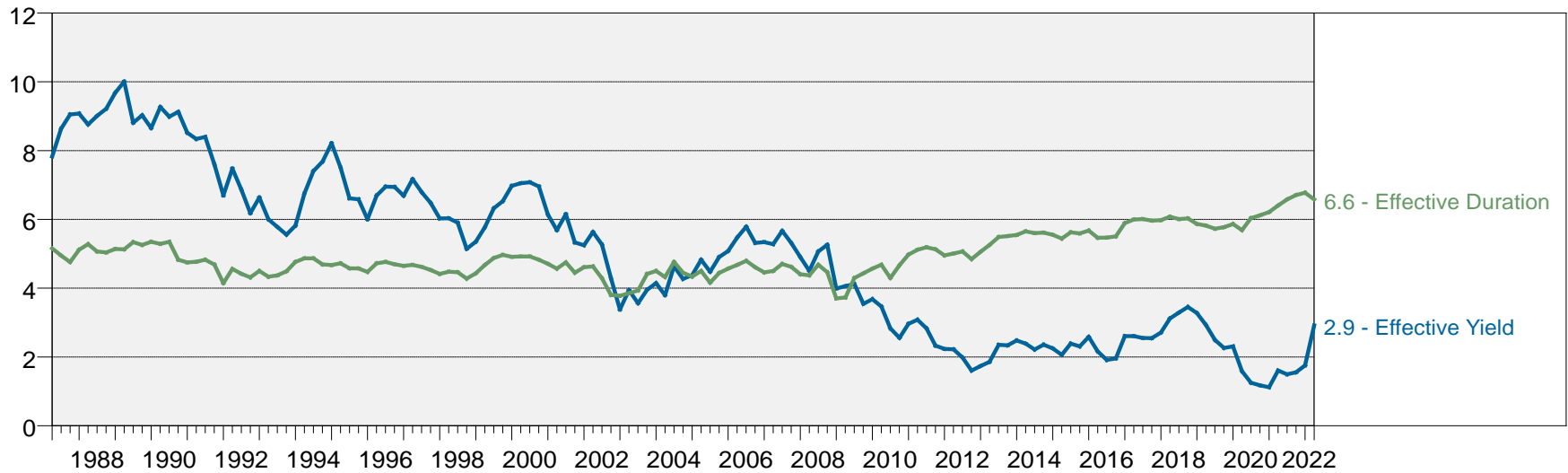
Fixed Income Performance in Declining Equity Environments



- The U.S. Aggregate index has had positive returns in every S&P 500 declining period for the most recent 35 years except two (first 2 quarters of 1994 and first quarter of this year)
- The FTSE World Government Bond Index has also generated positive returns when the S&P 500 was down except for two periods (first 2 quarters of 2010 and first quarter of this year)
- Data for the index dates back to 1985

High Duration and Low Yield are Headwinds for Fixed Income

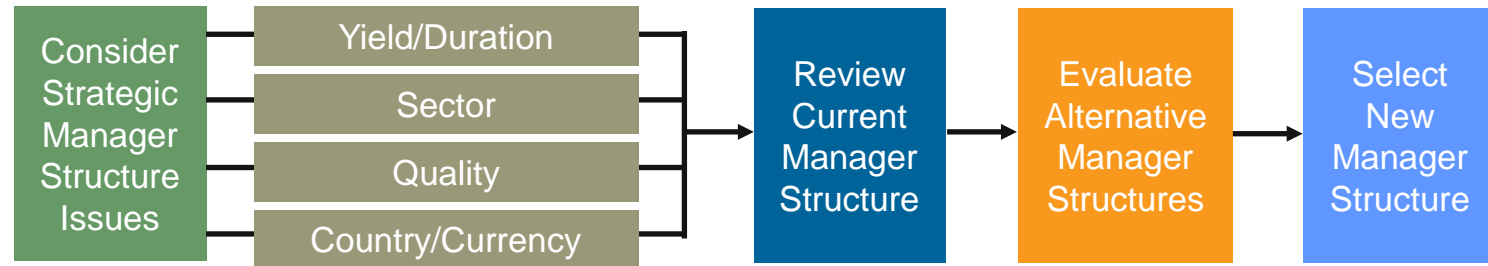
Effective Yield and Duration
Bloomberg Aggregate Index
35 Years Through March 31, 2022



- Duration measures interest rate risk: at 6.6 years of duration, a 1% rise in yields would be expected to detract about 6.6% from returns
- Yield indicates the sustainable potential return if bonds are held to maturity without experiencing default

Manager Structure Process

Evaluation and Construction



- Consider strategic manager structure issues:
 - Role of the overall asset class
 - Components of the asset class
 - Prospects for active management
 - Implementation issues
- Review the current manager structure:
 - What manager structure issues are already addressed in the current structure?
 - What structure issues are not addressed?
- Evaluate alternative manager structures:
 - Consider the pros and cons of different approaches to the structure
- Select the new manager structure

Fixed Income Roles and Opportunities

- The three main factors that define fixed income strategies are:
 - Broad market exposure vs. one narrowed by sector or duration
 - Use of tactical “core plus” mandates vs. dedicated allocations to “satellite” securities outside of the benchmark, such as low quality credit or global bonds
 - Active vs. passive implementation
- Approaches include core, core plus, and specialty:
 - Investment managers should be allowed to make tactical sector decisions
 - Managers have the knowledge, experience, tools, and focus to make value-adding decisions on sector allocations that reflect the relative attractiveness of the sectors
 - Overvalued sectors can be underweighted to limit losses consistent with the stabilizing role of fixed income
 - Limiting managers to specific sectors often results in more complex structures due to the need for an increased number of managers

Current Structure

Wellington - Core Plus

- October 2002 inception with MCERA (Core), moved to Core Plus in 2012
- 50% of fixed income structure
- Actively managed portfolio provides exposure to the broad U.S. fixed income market although sectors can be over/underweight
- Wellington's fixed income process focuses on fundamental research, diversification and risk control. The firm's orientation is toward intensive, bottom-up research.
 - Broad markets team determines top-down sector and duration positioning
 - Sector specialist teams conduct bottom-up fundamental research, and ideas are drawn from individual sector teams
 - Seek small, incremental gains on consistent basis, rather than outsized gains in any one time period
- Moderate duration range
 - Typically with 0.5 years above or below that of the index
- A low allocation to U.S. Treasuries is balanced by an allocation to securitized
- Allowed to invest up to 20% in securities rated below investment grade and up to 20% in non-dollar denominated securities and currencies
- Dynamic sector rotation and conservative risk posture has produced consistently competitive returns
 - Wellington's Core Plus portfolio has outperformed the index since inception in 2012 by 87 bps (annualized) net of fees

Current Structure

Western Asset – Intermediate Credit

- August 2001 inception with MCERA (Core Plus), moved to Intermediate Credit in 2014
- 25% of fixed income structure
- Actively managed portfolio provides exposure to credit sector only
- Western Asset's process applies a tightly controlled, value-oriented approach with the firm's top-down macroeconomic view that is integrated with extensive bottom-up credit research and relative value analysis.
 - Portfolio construction process is a coordinated effort between Western's dedicated credit analysts, traders, risk analytics and portfolio managers. The primary responsibilities of each group include:
 - Credit analysts: provide fundamental research, analyze industry and issuer risk/reward characteristics, and source new opportunities
 - Traders: provide best execution, manage deal flow, and source new investment opportunities
 - Risk management: breaks down portfolio exposures by rating, industry, and issuer, and generates various risk reports
 - Portfolio managers: synthesize this information to create a portfolio that accurately reflects the team's views within the constructs of the client's guidelines and risk tolerance
- Duration is fairly neutral to the index, usually less than 0.3 years above or below
- Allowed to invest up to 30% in securities rated below investment grade, up to 10% in securities of emerging market issuers, and up to 10% in non-dollar denominated securities
- Western Asset's Intermediate Credit portfolio has outperformed the index by 68 bps (annualized) net of fees since inception in 2014

Current Structure

Colchester – Global Bond (Unhedged)

- February 2014 inception with MCERA
- 25% of fixed income structure
- Actively managed portfolio investing in global sovereign bonds and currencies only
- Colchester applies a value driven framework in their evaluation of sovereign bonds and currencies
 - Invests in high quality sovereign bonds that offer attractive real yields. Inflation forecasts are central to the process for determining real yields, and these forecasts are produced internally.
 - Similarly on the currency side, Colchester believes currencies are mean reverting and invest in currencies that are most undervalued according to their real exchange rate
 - Analysis is supplemented by an assessment of sovereign financial balances - fiscal, external and monetary
 - Team-driven process – investment team consists of 10 individuals that cover developed and emerging market countries across the firm's product set
- The investable universe of countries is determined on the basis of quality, the development levels of local fixed income markets and most importantly, liquidity (emerging markets are included if they meet this criteria)
- About two-thirds of the portfolio's relative return is derived from bond selection and one third from currency management
- Colchester has outperformed the index by 46 bps (annualized) net of fees since inception in 2014

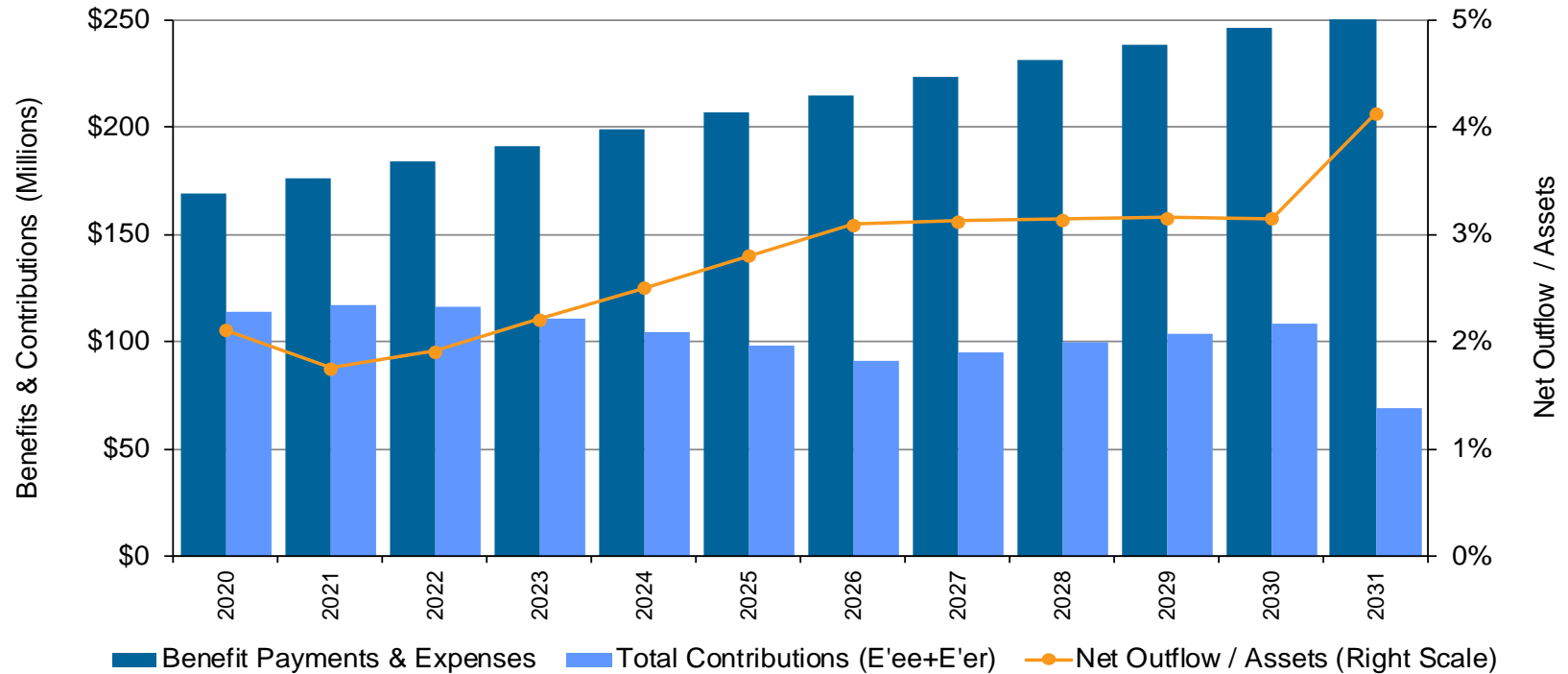
Current Fixed Income Structure

Manager	Target Allocation (%)	Benchmark	Current Allocation (%)	Current Allocation (\$)
Core Plus				
Wellington	50%	Bloomberg U.S. Aggregate	49%	\$311,643,986
Intermediate Credit				
Western Asset	25%	Bloomberg U.S. Intermediate Credit	26%	\$166,014,799
Global				
Colchester	25%	FTSE World Government Bond	25%	\$162,721,248
Total Public Fixed Income	100%	Custom Benchmark*	100%	\$640,380,033
			Total Fees (%)	Total Fees (\$)
			0.25%	\$1,602,152

*The Fixed Income Custom Benchmark consists of: 100% Bloomberg Aggregate until 3/31/14 and 50% Bloomberg Aggregate, 25% Bloomberg Intermediate Credit, and 25% FTSE World Government Bond Index thereafter.

Liquidity Analysis

Baseline Projection



- Net Outflow = Benefit Payments + Expenses – Employer Contributions – Employee Contributions
- Net outflow as a percentage of assets ranges between 2-3% over the first 11 years before rising to just over 4% in 2031 as the employer contribution rate falls
- As long as the Plan adheres to the current funding policy, net outflow should be manageable over the next 10 years but should be assessed along the way

Alternative Fixed Income Structures

Manager	Current Structure (%)	Simplified (Mix A)	Reduce Global (Mix B)	Intro Treasury (Mix C)	Barbell (Mix D)
Core Plus					
Wellington	50%	50%	50%	40%	-
Western Asset	-	50%	-	-	-
Intermediate Credit					
Western Asset	25%	-	40%	20%	35%
Global					
Colchester	25%	-	10%	15%	-
Intermediate Treasury					
Candidate - Int. Treasury	-	-	-	25%	30%
Multi-Sector Credit					
Candidate - Multi-Sector	-	-	-	-	35%
Total Public Fixed Income	100%	100%	100%	100%	100%
Total Fees (\$)	\$1,602,152	\$1,250,184	\$1,436,146	\$1,324,080	\$2,804,375
Total Fees (%)	0.25%	0.20%	0.22%	0.21%	0.44%

- Actual fee schedules were used for the current mandates. Assumed fees for: Western Asset Core Plus (21 bps), Multi-Sector credit manager (100 bps), passively managed Treasury mandate (4 bps). Fees based on 3/31/2022 allocations.

Alternative Fixed Income Strategies

U.S. Treasuries (Intermediate Duration)

Replicate exposure of the Bloomberg 5-10 Year U.S. Treasury Bond Index

Pros

- Risk-free investment backed by full faith and credit of U.S. government – probability of default is almost non-existent
- Treasuries are very high quality, liquid securities that provide good drawdown protection and low correlation to equities
- Passive implementation would result in very low fees

Cons

- Passive implementation would track benchmark returns – no ability to add value over the benchmark
- Yields on treasuries are low, because they are the safest debt security. Investors get compensated as more risk is taken and the probability of default increases.

Alternative Fixed Income Strategies

Multi-Sector Credit

Diversified allocations to leveraged credit with varying degrees of risk and use of below-investment grade sectors

Pros

- Provides broad exposure to below-investment grade markets
- Managers have the ability to move between under- and over-valued sectors within leveraged credit
 - Bank loans have historically exhibited low correlations to traditional fixed income asset classes and should support returns in a rising rate environment
 - High yield has provided meaningful returns over time
 - Other sectors provide potential for additional diversification or returns

Cons

- Higher allocations to credit could result in “hidden” or indirect exposure to equity markets within fixed income
 - Default rates are higher than investment grade credit and increase when the economy is sluggish
 - Higher correlations to equity in market downturns
 - Both high yield and bank loan liquidity can be challenged in market crises
- Multi-sector credit strategies are relatively new
 - Requires a credit specialist to adequately cover the markets and mitigate the risks of a new approach
- Multi-sector strategies are more difficult to benchmark than single-asset class strategies
- Fees are significantly higher than MCERA’s current fixed income allocations. While a flat fee is expected, liquidity terms may be similar to a hedge fund
 - Daily to quarterly liquidity terms, 30-60 days’ notice
- Ability to add value over the benchmark is difficult to measure due to lack of historical performance data

Metrics Relative to Current Structure

Metric	Simplified (Mix A)	Reduce Global (Mix B)	Intro Treasury (Mix C)	Barbell (Mix D)
Yield	Higher	Higher	Lower	Higher
Fees	Lower	Lower	Lower	Higher
Credit Risk	Higher	Higher	Lower	Higher
Diversification vs. Equity	Higher	Lower	Higher	Lower
Tracking Error	Similar	Similar	Lower	Higher
Duration	Higher	Lower	Lower	Lower
Sharpe Ratio	Higher	Higher	Similar	Higher

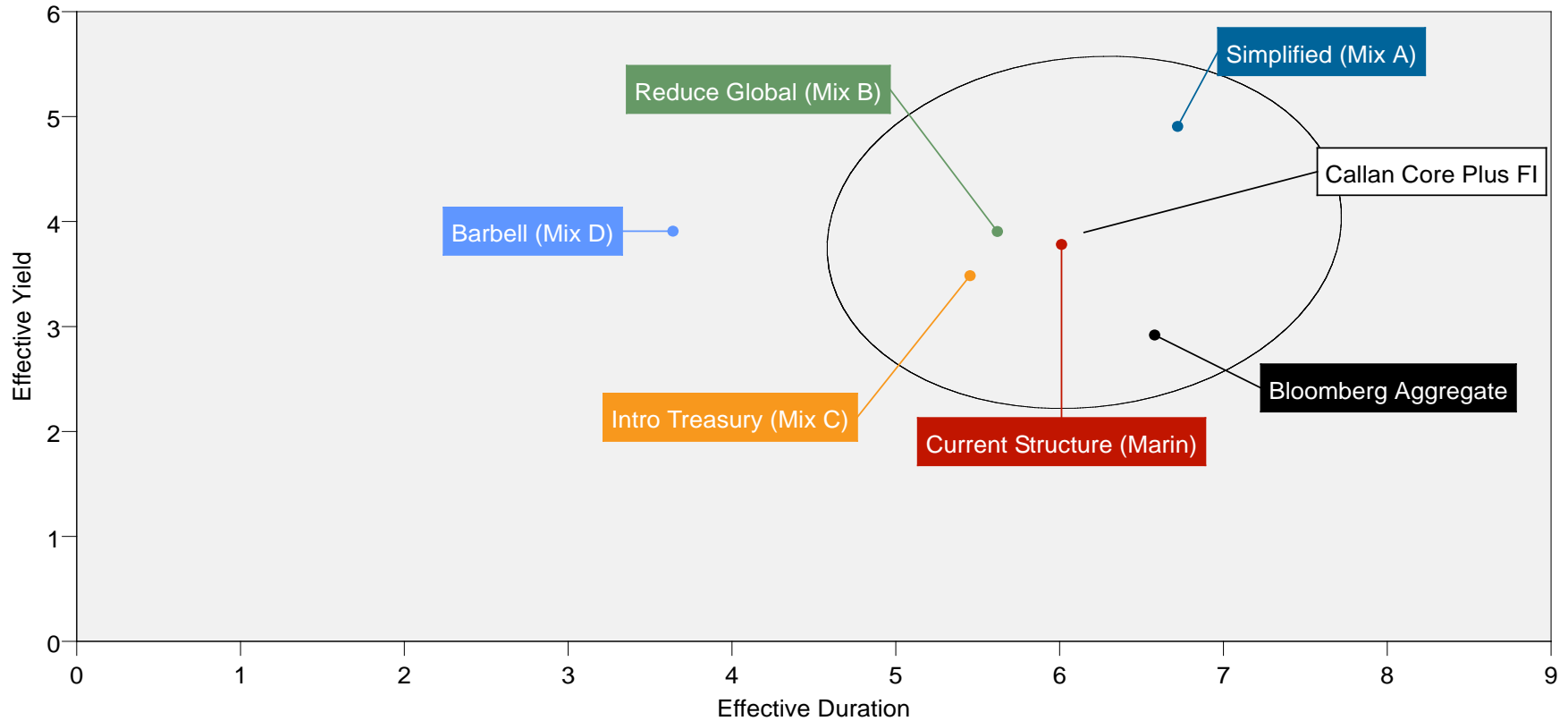
- The chosen mix will depend upon which metrics are most important to the committee

Historical Analysis

- To analyze historical results, Callan observed the Current Structure and modeled historical returns assuming monthly rebalancing
- Manager returns are shown net-of-fees, while peer group returns are shown gross-of-fees
- This is an analysis of how structures would have performed historically, not the portfolio's actual performance
- The Current Structure is compared to Mix A, Mix B, Mix C, and Mix D
- Other material assumptions disclosed in the Appendix

Yield vs. Duration

Effective Yield and Duration
as of March 31, 2022

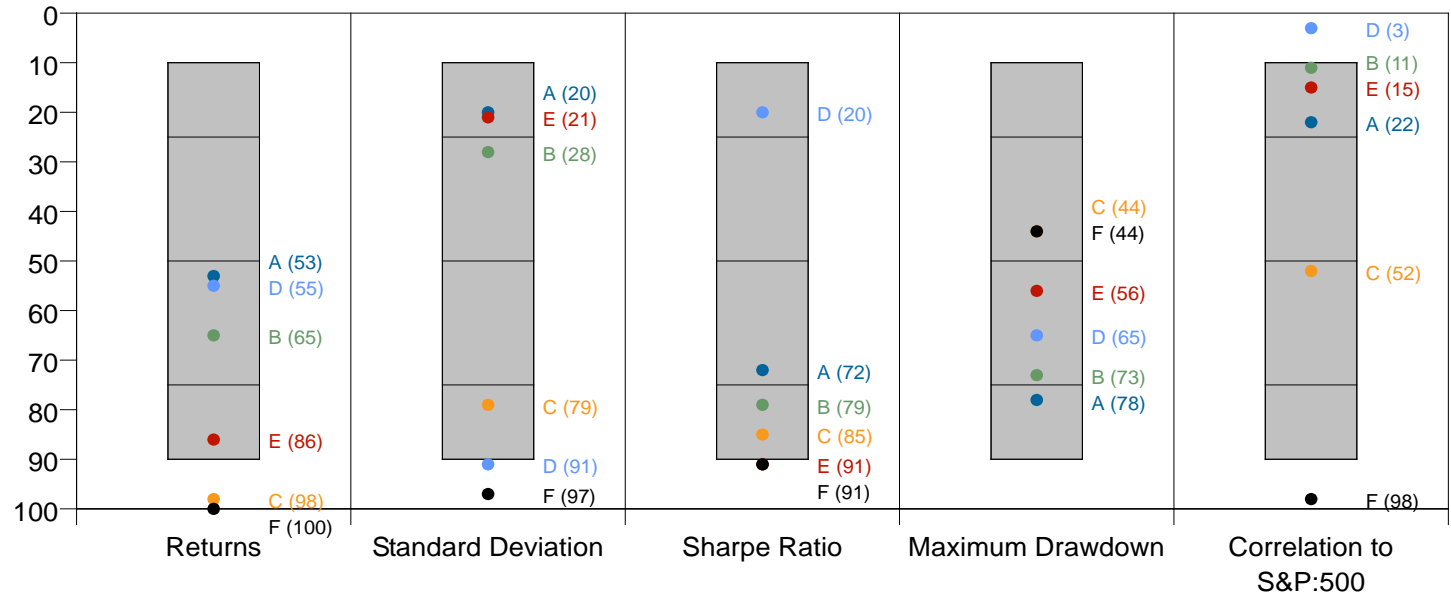


- The yields of every alternative mix except for Intro Treasury (Mix C) are all increased relative to the Current Structure

Comparison to Institutional Core Plus Fixed Income Managers

Statistics for 14 Years Ended March 31, 2022

Group: Callan Core Plus Fixed Income

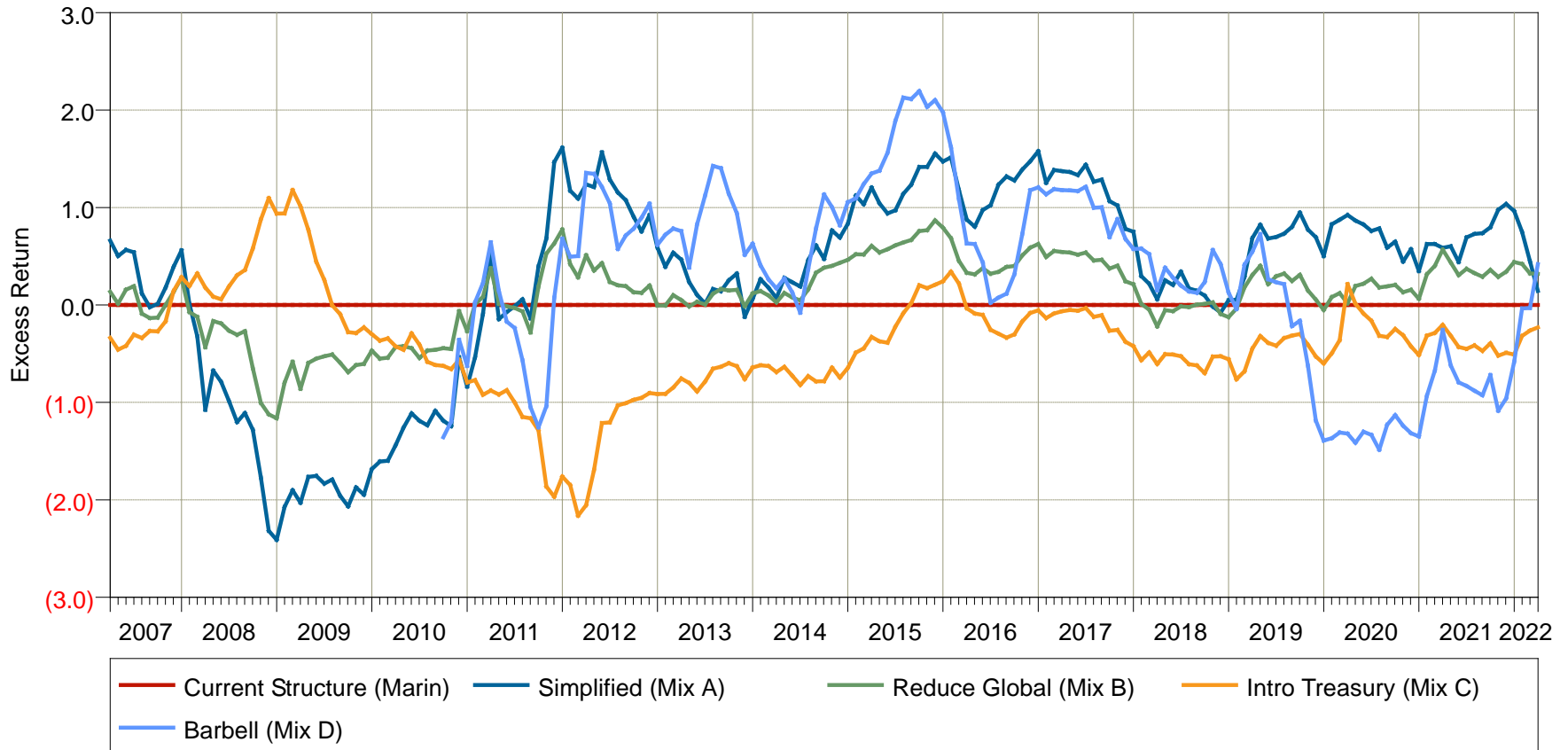


Simplified (Mix A)	● A	4.62	4.55	0.89	(11.63)	0.44
Reduce Global (Mix B)	● B	4.39	4.43	0.86	(10.35)	0.50
Intro Treasury (Mix C)	● C	3.67	3.67	0.84	(7.54)	0.38
Barbell (Mix D)	● D	4.54	3.58	1.11	(9.17)	0.57
Current Structure (Marin)	● E	4.11	4.52	0.78	(8.82)	0.48
Bloomberg Aggregate	● F	3.27	3.43	0.79	(7.57)	0.06

- Barbell (Mix D) has the highest Sharpe Ratio
- All of the mixes have a meaningful correlation to equities

Excess Returns Relative to Current Structure

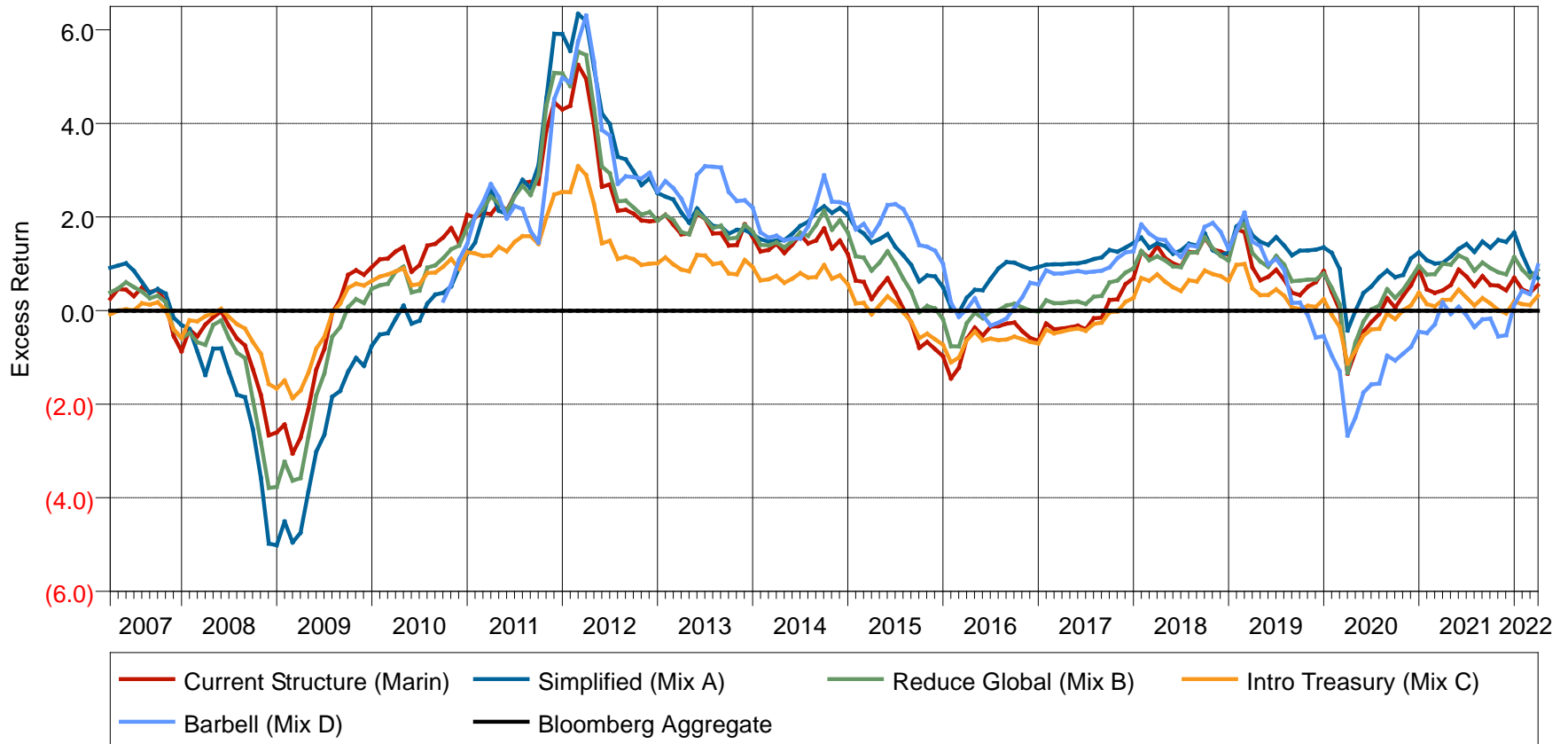
Rolling 36 Month Excess Return Relative To Current Structure (Marin)
for 15 Years Ended March 31, 2022



- The Barbell portfolio (Mix D) and Intro Treasury (Mix C) provided the largest amount of over/under performance

Excess Returns Relative to Bloomberg Aggregate Index

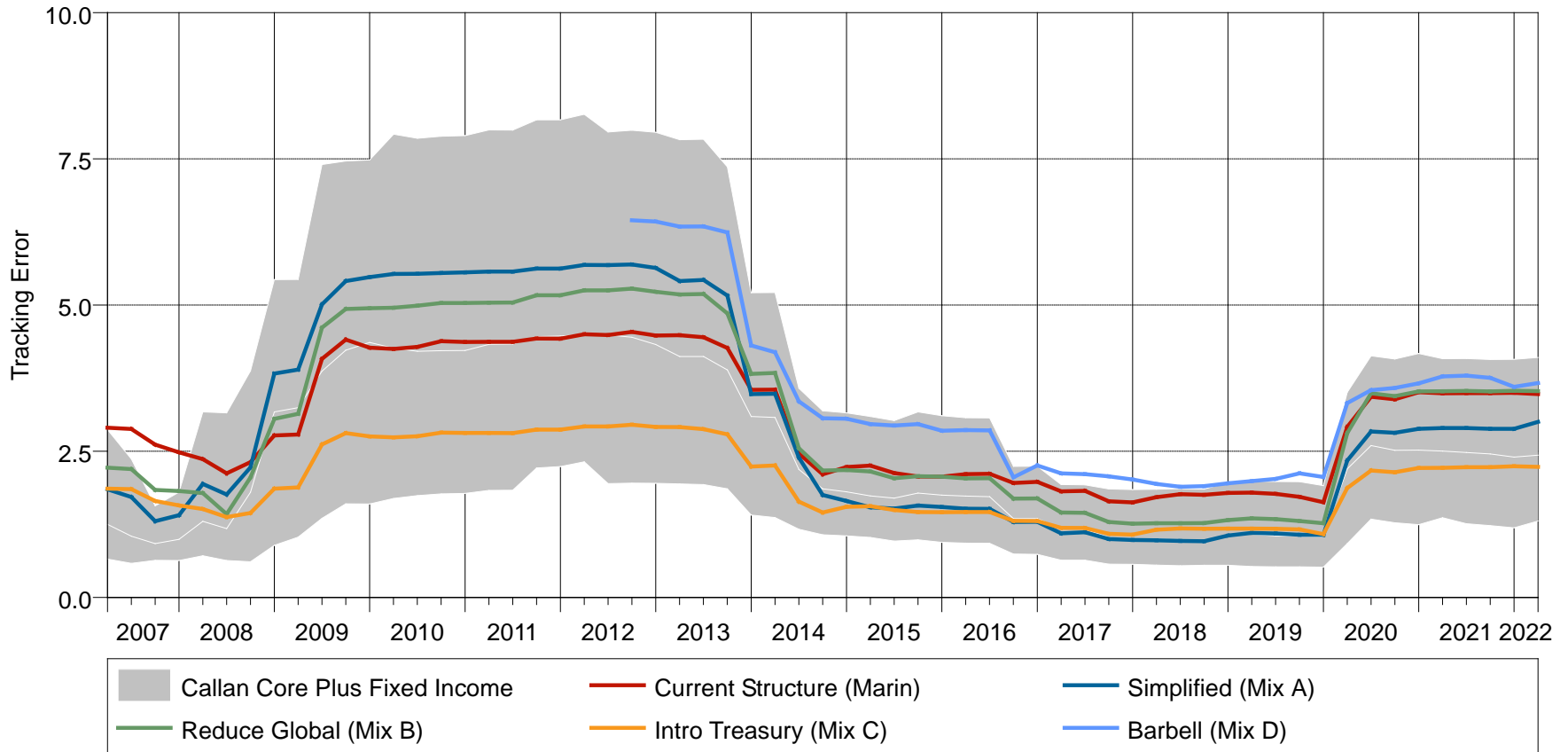
Rolling 36 Month Excess Return Relative To Blmbg:Aggregate
for 15 Years Ended March 31, 2022



- All Mixes outperformed the Index except during the GFC and Covid crisis

Tracking Error

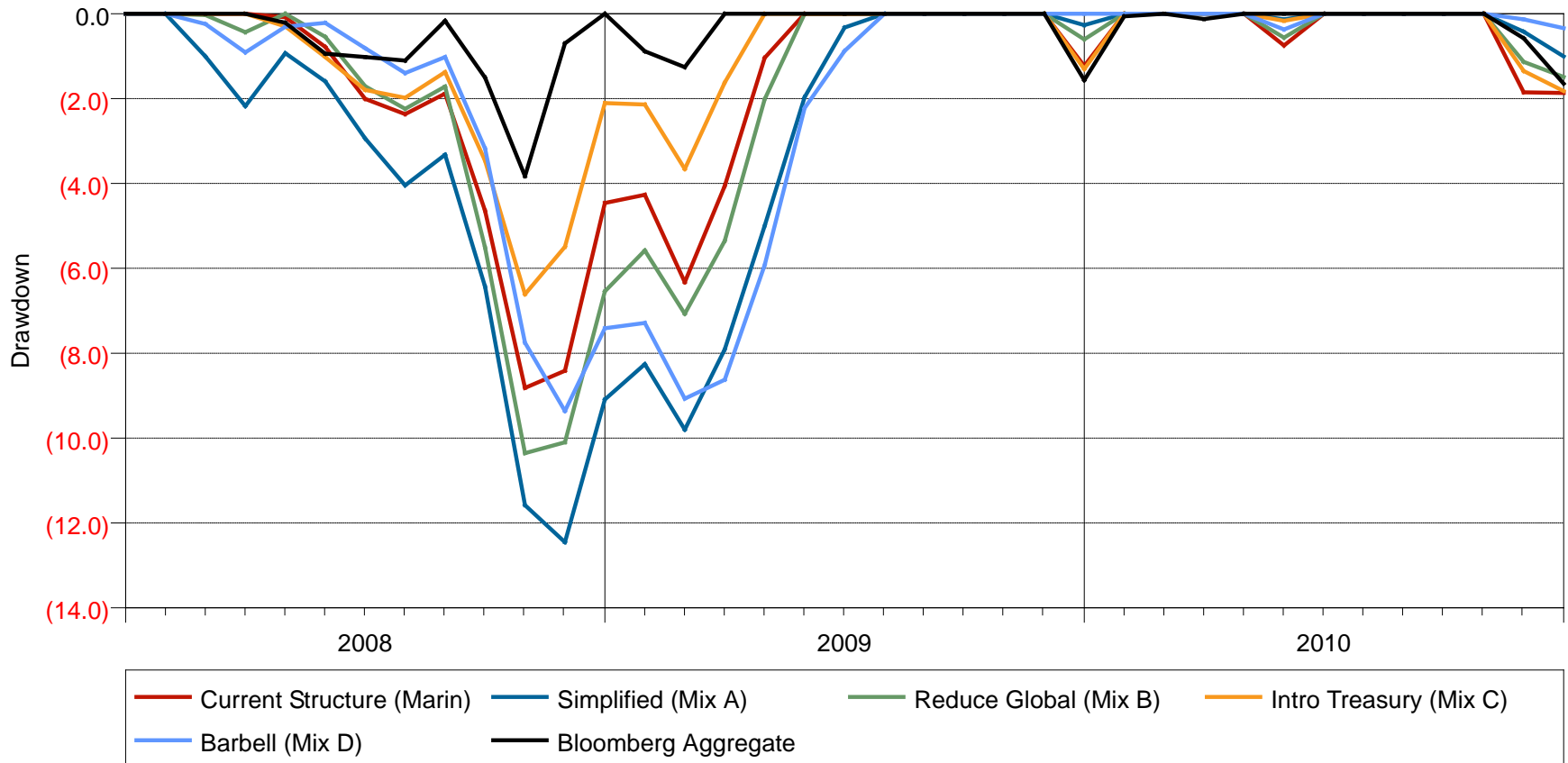
Rolling 20 Quarter Tracking Error Relative To Blmbg:Aggregate
for 15 Years Ended March 31, 2022



- The peer group is gross of fees

Global Financial Crisis Drawdown

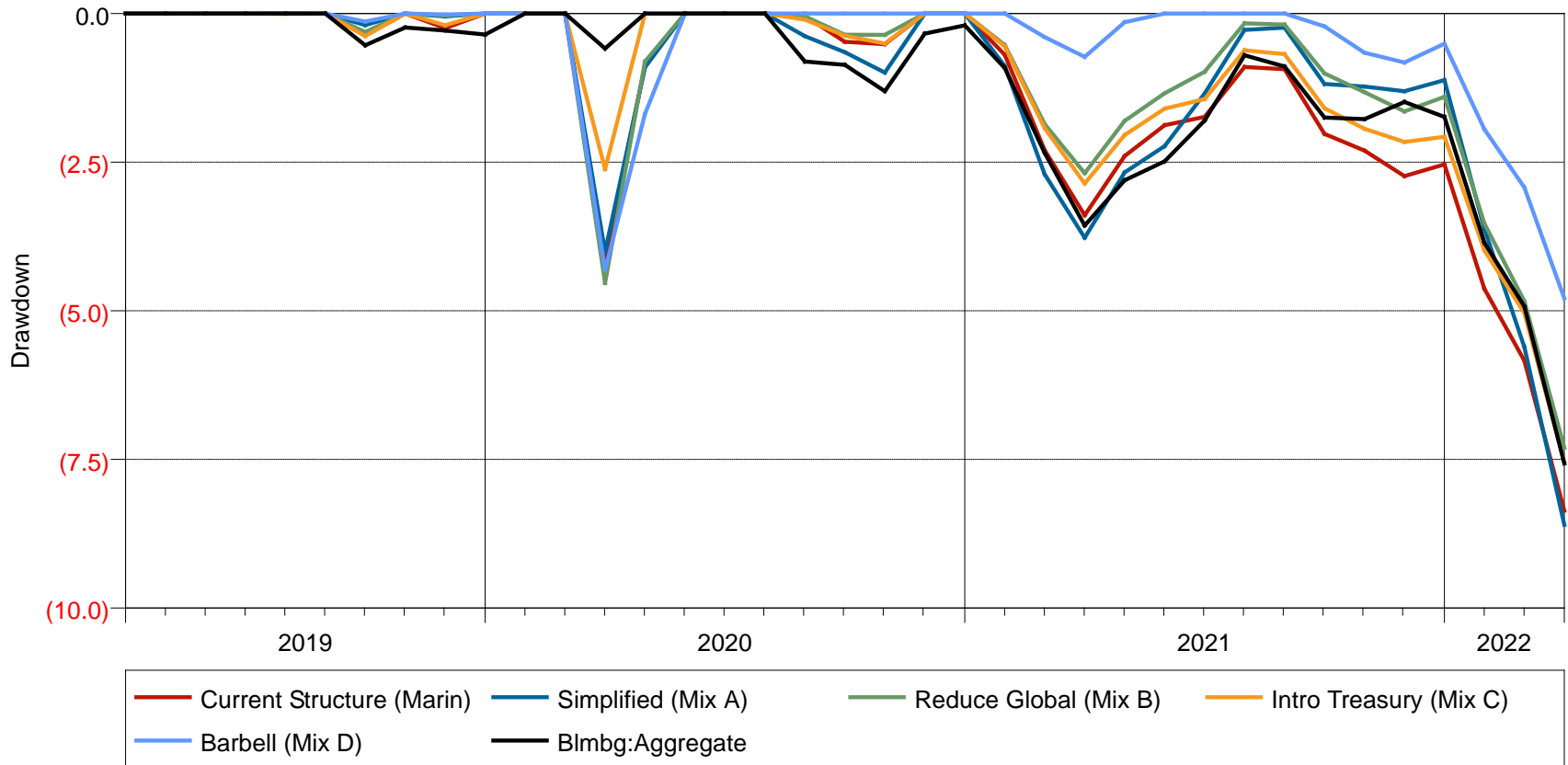
Drawdown
for 3 Years Ended December 31, 2010



- The Intro Treasury (Mix D) provided the best drawdown protection from the Global Financial Crisis (GFC)

Current Drawdown

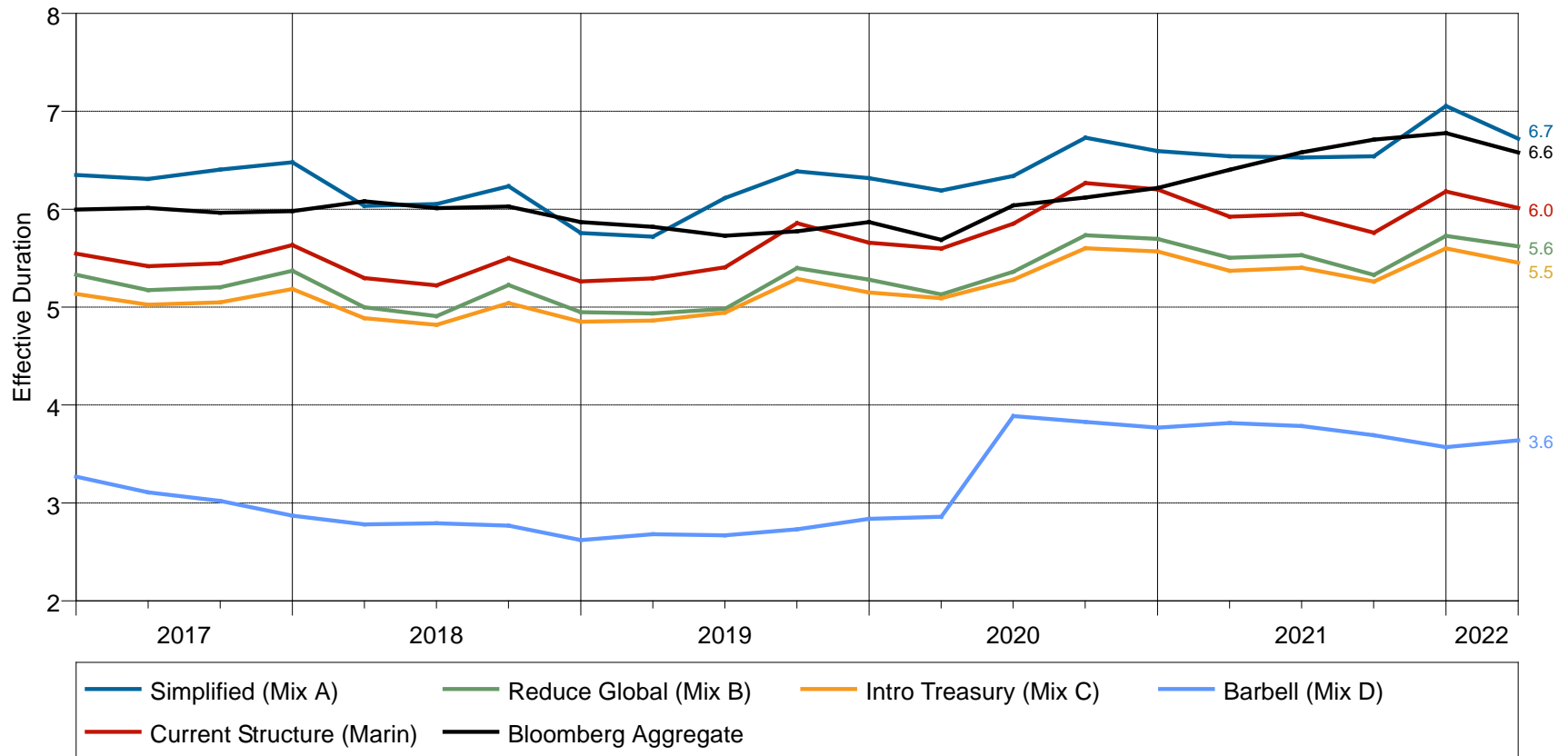
Drawdown
for 3 Years Ended March 31, 2022



- As yields rose, the longer duration structures under-performed

Historical Duration

Effective Duration
for 5 Years Ended March 31, 2022



Summary

- There are no major problems with the Current Structure
 - Leaving structure unchanged is a viable option
- If the goal is to reduce manager complexity
 - Mix A is desirable
- The global fixed income asset class is not efficient
 - However, there is potential to generate outperformance and broaden the opportunity set so a smaller allocation (Mix B or Mix C) could be appropriate
- If the goal is to pursue higher returns
 - Barbell (Mix D) is desirable
 - Credit risk exposure is highest under Mix D

Metric	Simplified (Mix A)	Reduce Global (Mix B)	Intro Treasury (Mix C)	Barbell (Mix D)
Yield	Higher	Higher	Lower	Higher
Fees	Lower	Lower	Lower	Higher
Credit Risk	Higher	Higher	Lower	Higher
Diversification vs. Equity	Higher	Lower	Higher	Lower
Tracking Error	Similar	Similar	Lower	Higher
Duration	Higher	Lower	Lower	Lower
Sharpe Ratio	Higher	Higher	Similar	Higher

Callan

Appendix

Core Plus Bond Style vs. Bloomberg Aggregate

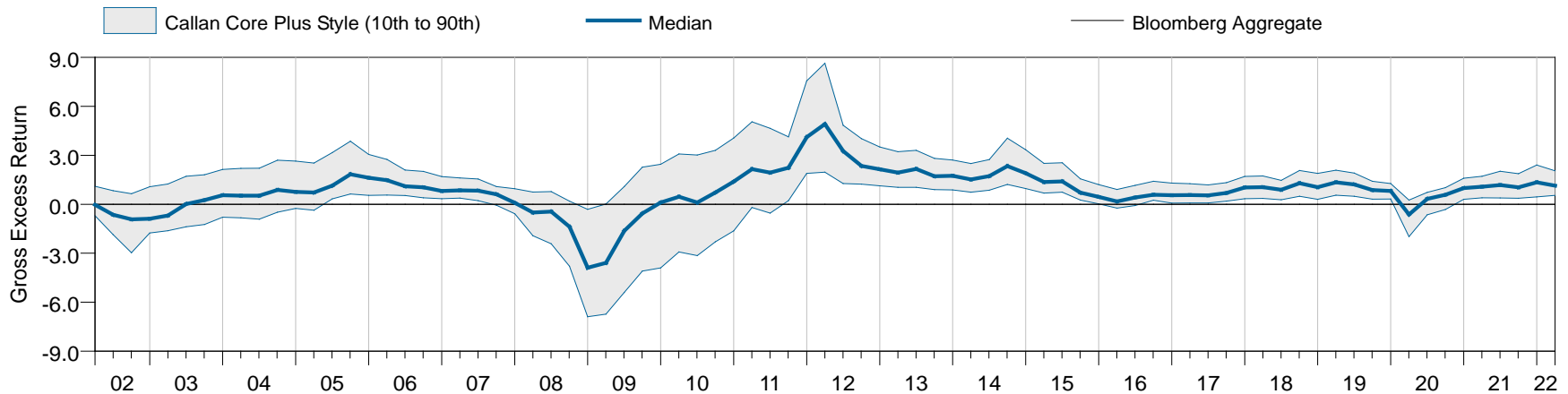
How often Manager Beat Benchmark by more than Fee Hurdle in Rolling 3-Year Periods over last 20 Years

Fee Hurdle	0.20%	0.25%	0.30%	0.35%	0.40%	0.45%	0.50%	0.55%	0.60%	0.65%
Median	79%	79%	78%	76%	76%	75%	73%	69%	63%	61%
45th Percentile	83%	80%	78%	78%	76%	75%	75%	74%	70%	64%
40th Percentile	84%	83%	83%	80%	80%	79%	78%	78%	76%	74%
35th Percentile	85%	85%	84%	83%	81%	80%	80%	80%	79%	76%
30th Percentile	86%	86%	86%	85%	85%	83%	83%	81%	81%	79%
25th Percentile	89%	89%	89%	89%	86%	85%	84%	84%	83%	83%

Average Annualized 3-Year Excess Return (gross) – Median Manager:

0.82%

Rolling 3-Year Gross Excess Return relative to Bloomberg Aggregate
for 20 Years ended March 31, 2022



Global Fixed Style vs. Bloomberg Global Aggregate

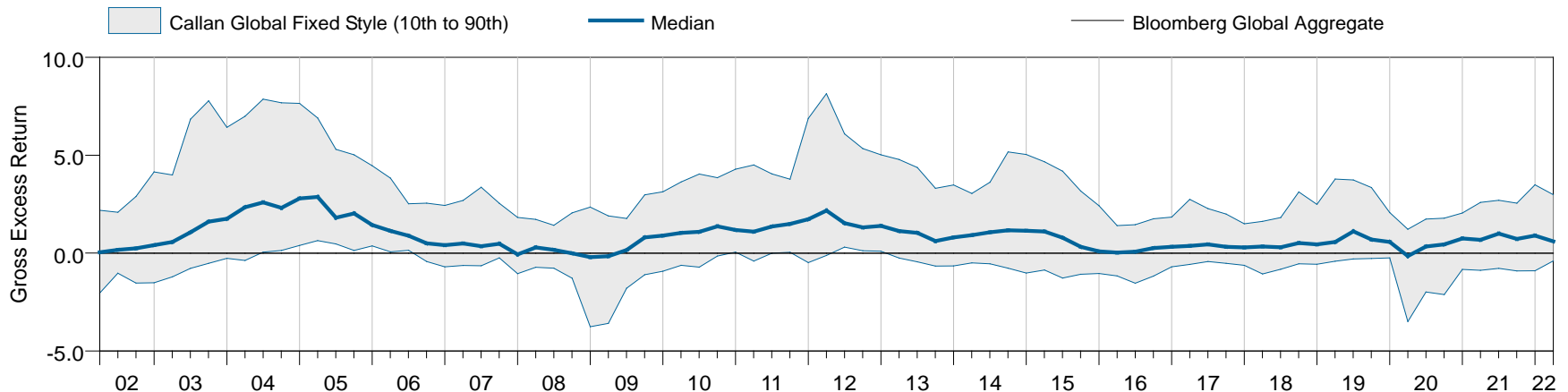
How often Manager Beat Benchmark by more than Fee Hurdle in Rolling 3-Year Periods over last 20 Years

Fee Hurdle	0.20%	0.25%	0.30%	0.35%	0.40%	0.45%	0.50%	0.55%	0.60%	0.65%
Median	86%	85%	81%	74%	71%	66%	63%	60%	56%	54%
45th Percentile	89%	88%	86%	85%	81%	75%	73%	65%	64%	63%
40th Percentile	94%	94%	89%	86%	86%	84%	79%	78%	74%	71%
35th Percentile	100%	98%	98%	98%	94%	94%	93%	88%	84%	79%
30th Percentile	100%	100%	99%	99%	99%	99%	96%	94%	91%	90%
25th Percentile	100%	100%	100%	100%	99%	99%	99%	98%	95%	93%

Average Annualized 3-Year Excess Return (gross) – Median Manager:

0.86%

Rolling 3-Year Gross Excess Return relative to Bloomberg Global Aggregate
for 20 Years ended March 31, 2022



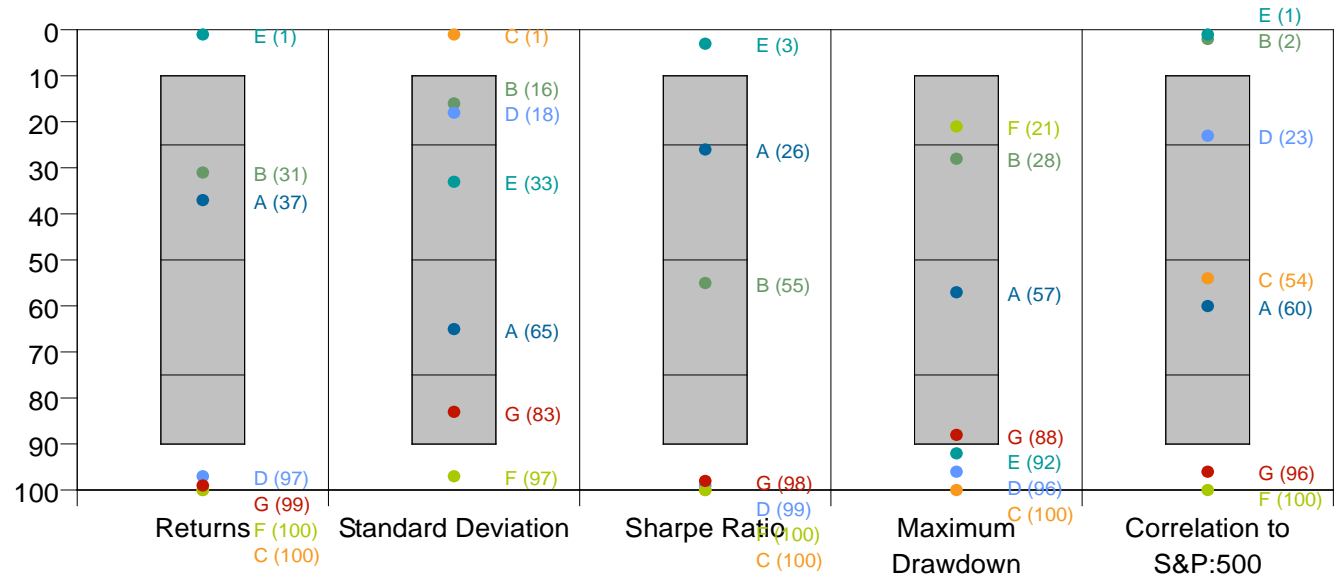
Other Material Assumptions for Historical Analysis

- To analyze historical results, Callan observed the Current Structure and modeled historical returns assuming monthly rebalancing
- Manager returns are shown net-of-fees, while peer group returns are shown gross-of-fees
- This is an analysis of how structures would have performed historically, not the portfolio's actual performance
 - WAMCO is represented by the composite since inception (2Q2014) and prior to that by an 80%/20% blend of Bloomberg Intermediate Credit and Bloomberg High Yield Corporate
 - Candidate Multi-Sector Credit manager is represented by the Guggenheim Multi-Credit composite since inception

Manager Comparison

Statistics for 8 Years Ended March 31, 2022

Group: Callan Core Plus Fixed Income

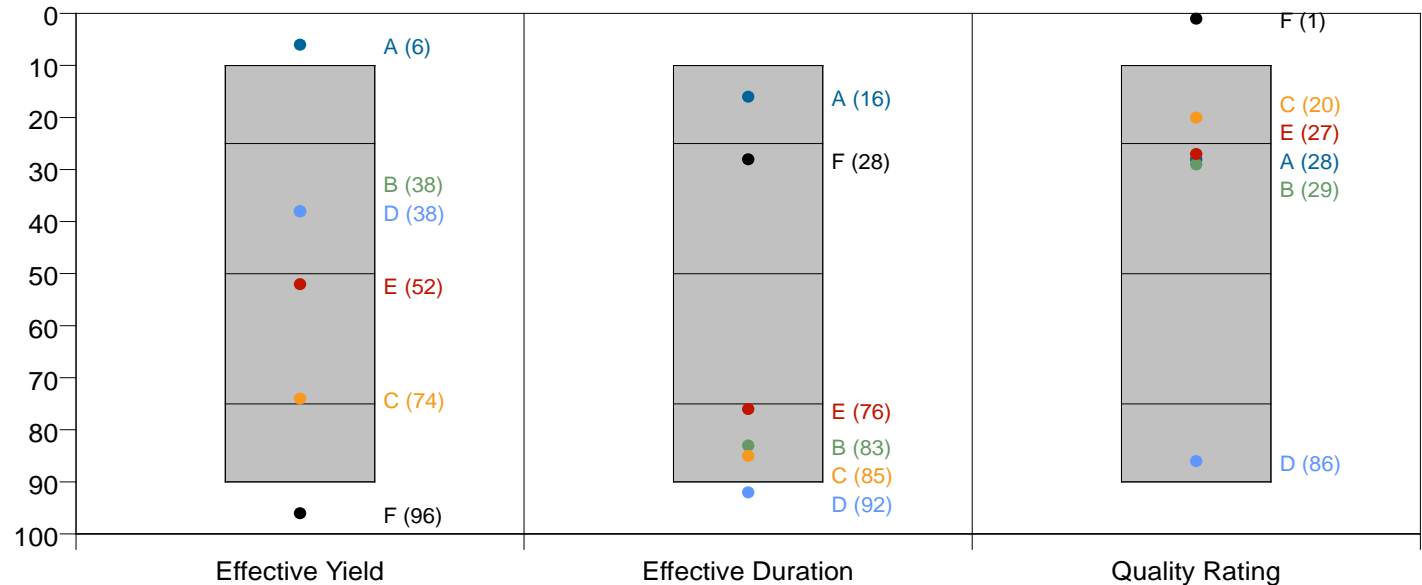


Wellington Core Plus	● A	3.35	3.54	0.73	(6.79)	0.28
Western Asset Intermediate Credit	● B	3.44	4.08	0.65	(6.33)	0.54
Colchester Global	● C	1.23	6.20	0.07	(12.32)	0.31
Current Structure (Marin)	● D	2.53	4.04	0.44	(8.36)	0.41
Candidate - Multi-Sector Credit	● E	5.16	3.86	1.14	(7.74)	0.58
Candidate - Intermediate Treasury	● F	1.43	2.52	0.26	(6.19)	(0.31)
Bloomberg Aggregate	● G	2.35	3.33	0.47	(7.57)	0.04

Yield vs. Duration vs. Quality

Yield vs. Duration vs. Quality

Group: Callan Core Plus Fixed Income, as of March 31, 2022



- Simplified (Mix A) ● A
- Reduce Global (Mix B) ● B
- Intro Treasury (Mix C) ● C
- Barbell (Mix D) ● D
- Current Structure (Marin) ● E
- Bloomberg Aggregate ● F

4.91
3.91
3.48
3.91
3.78
2.92

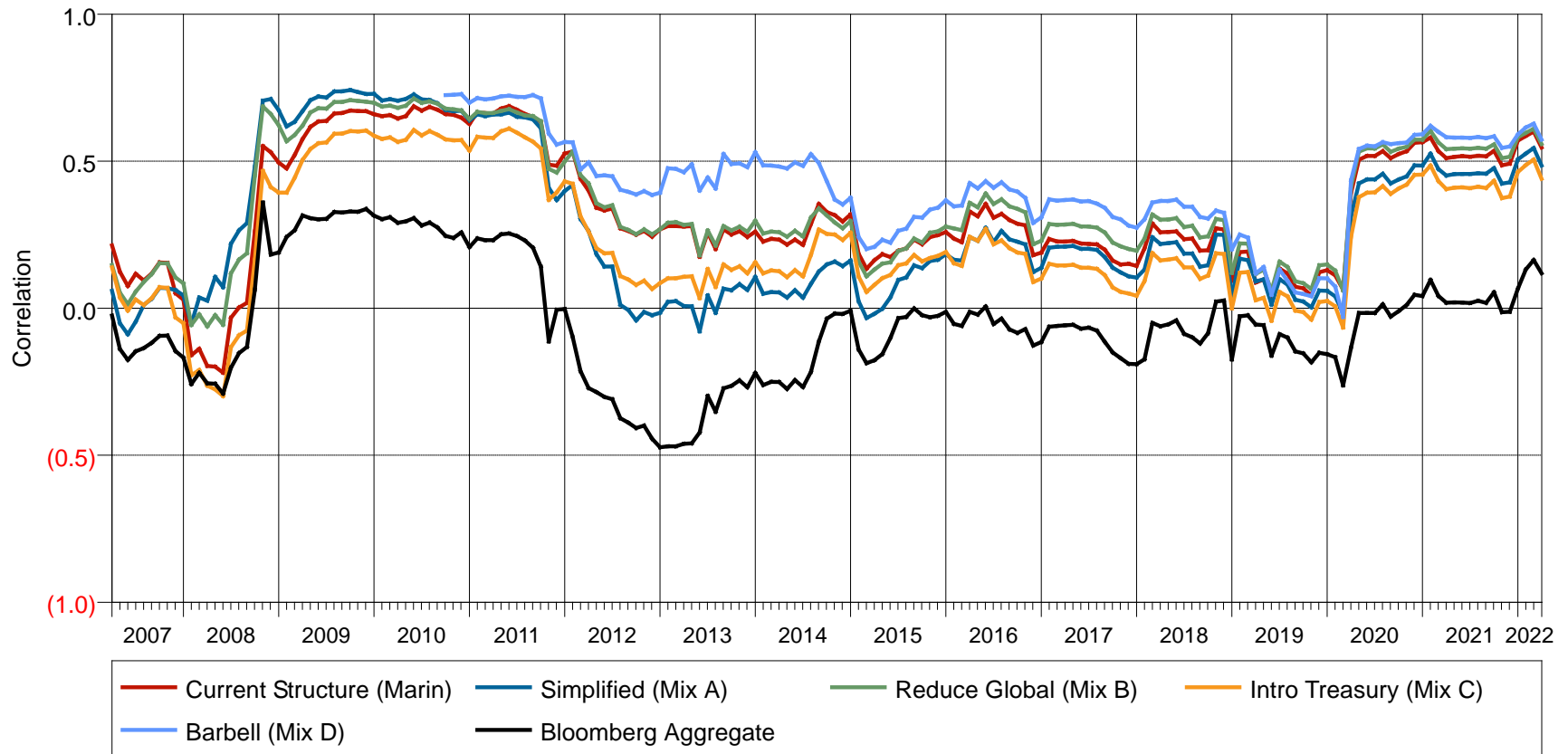
6.72
5.62
5.45
3.64
6.01
6.58

A+
A+
AA-
A-
AA-
AA+

- The yields of every alternative mix except for Intro Treasury (Mix C) are all increased relative to the Current Structure

Fixed Income Correlation with Equity

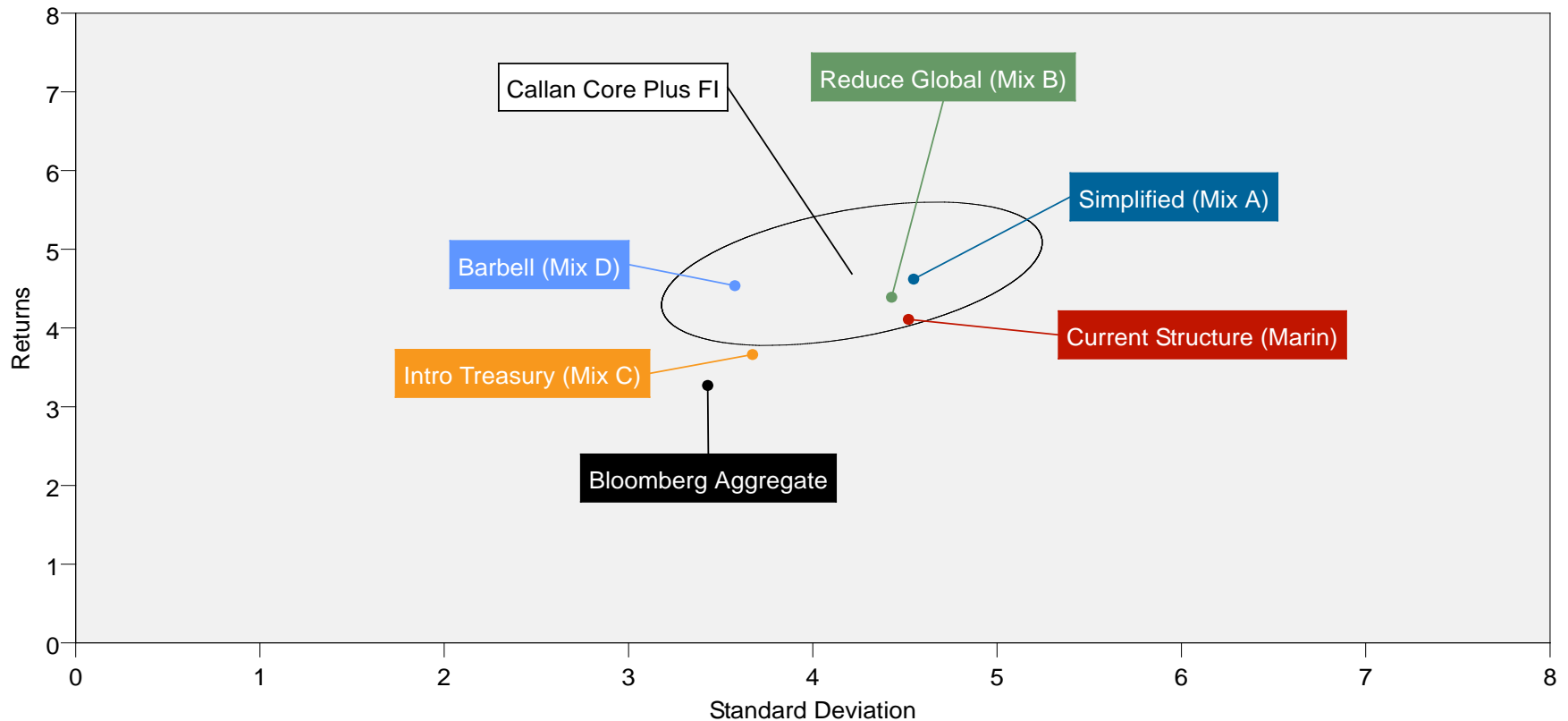
Rolling 36 Month Correlation Relative To S&P:500
for 15 Years Ended March 31, 2022



- Post GFC and due to the amount of credit in the alternative mixes, the correlation between fixed income and equities increased

Returns vs. Volatility

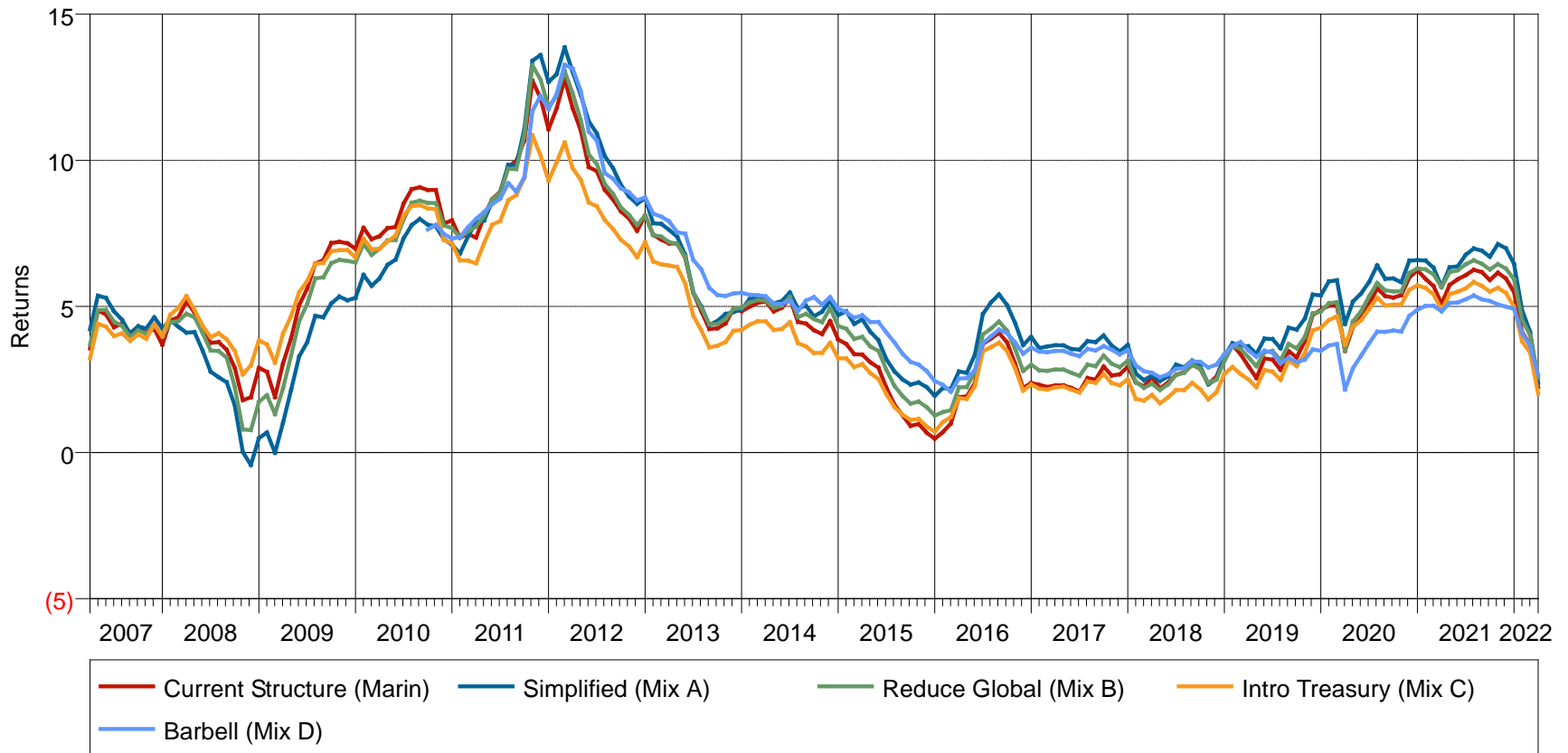
14 Years Ended March 31, 2022
using Gross of Fee Returns



- Ellipse represents a peer group of institutional Core Plus fixed income managers (gross of fees)

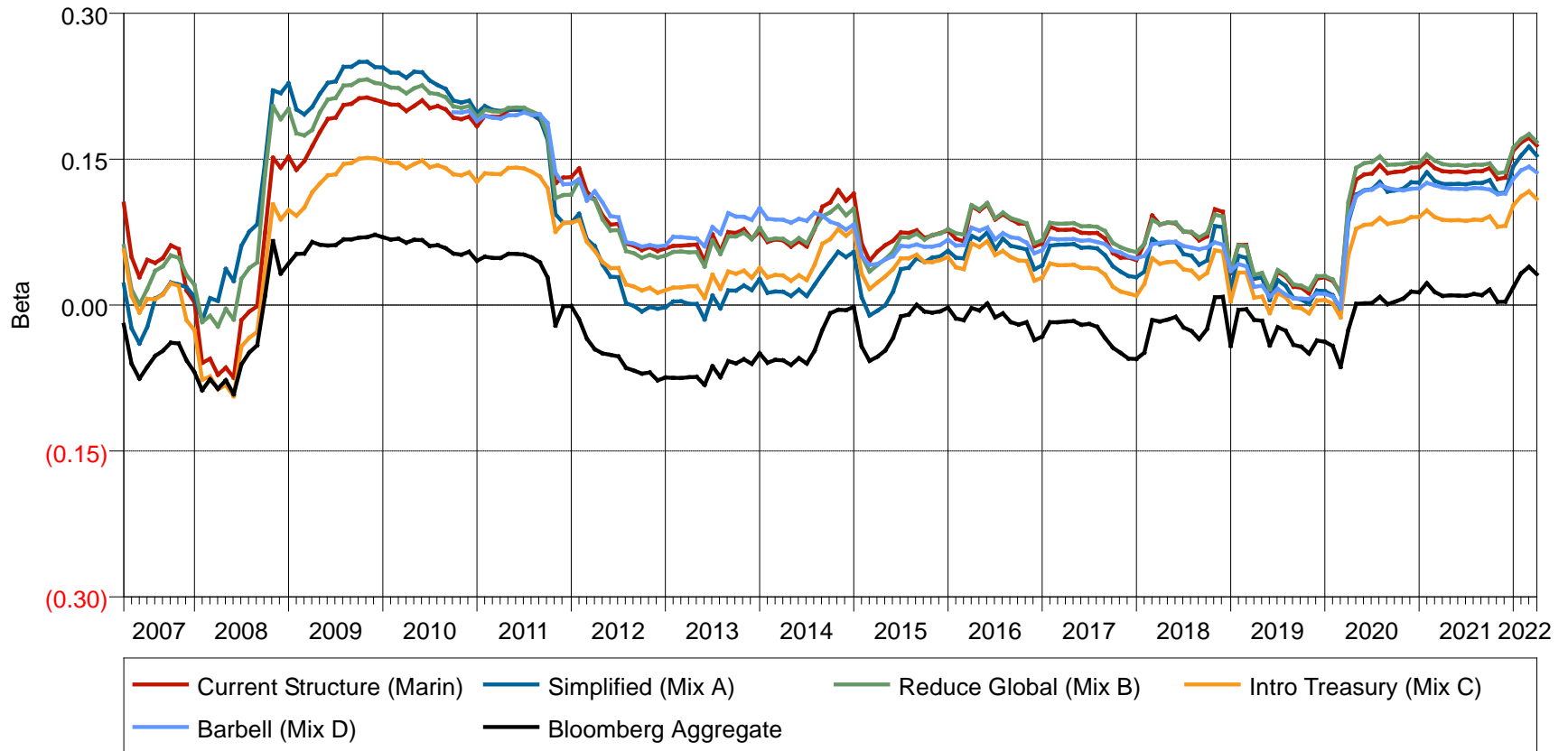
Returns

Rolling 36 Month Returns
for 15 Years Ended March 31, 2022



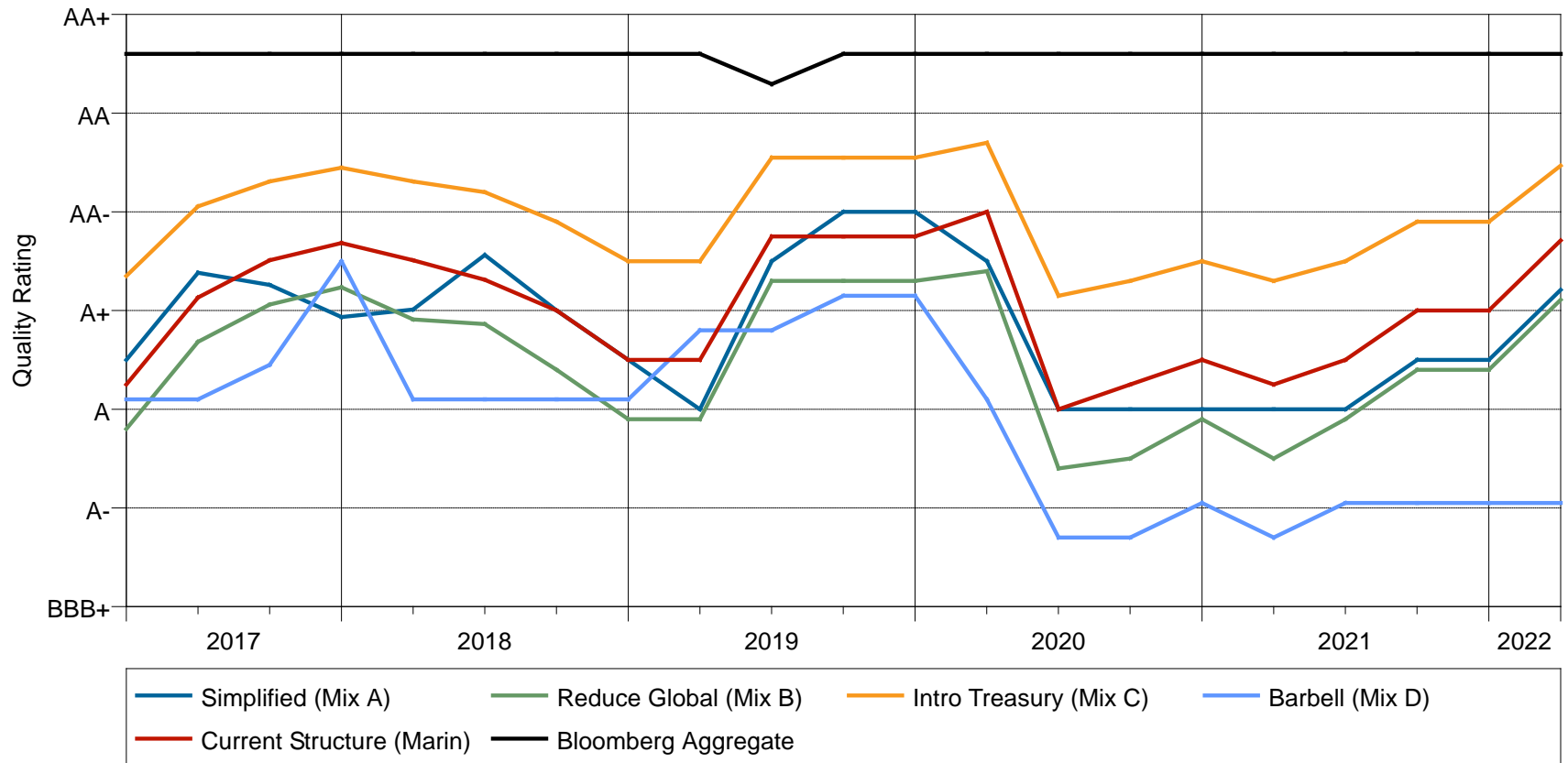
Beta to Stocks

Rolling 36 Month Beta Relative To S&P:500
for 15 Years Ended March 31, 2022



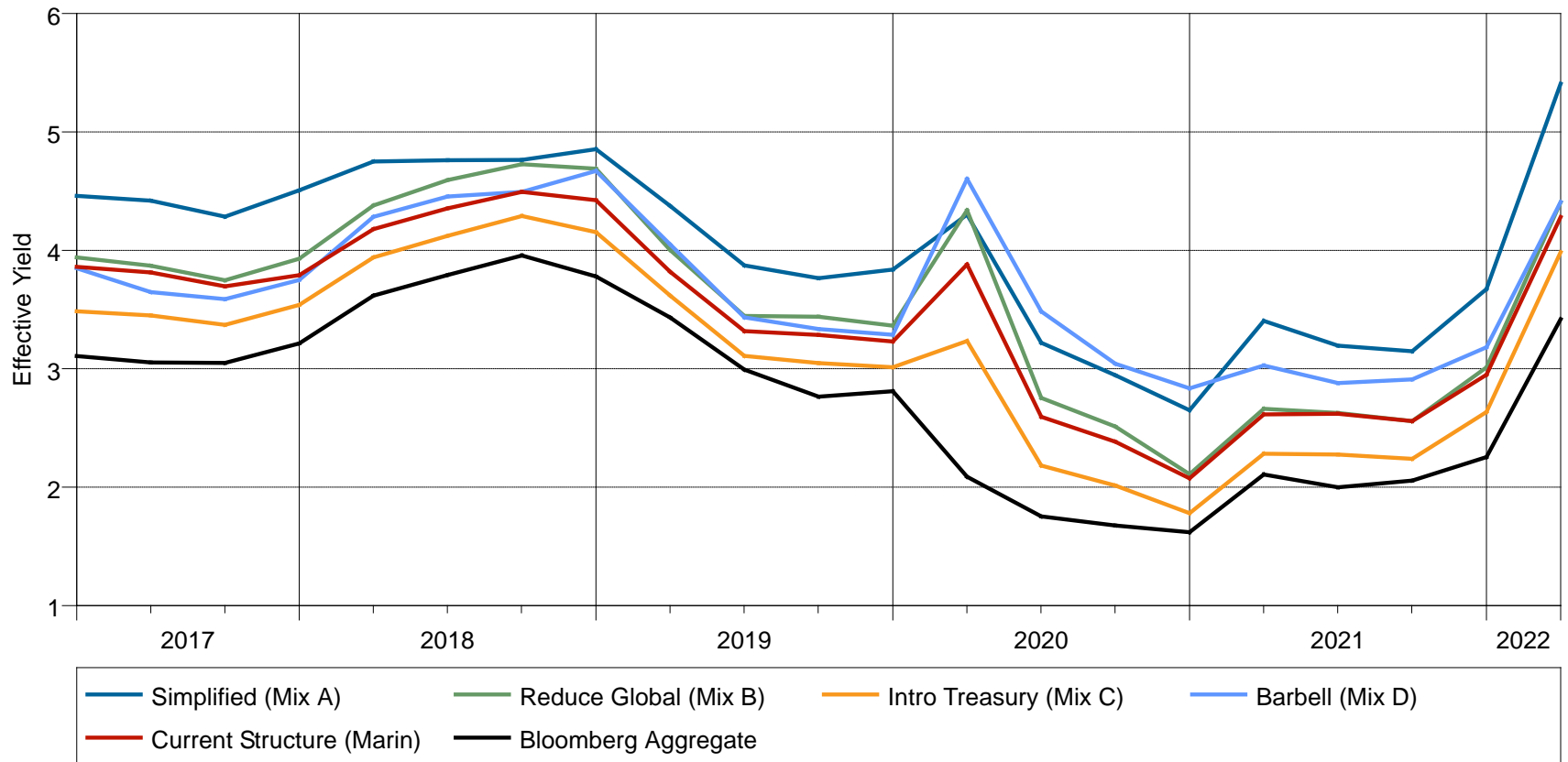
Historical Quality

Quality Rating
for 5 Years Ended March 31, 2022



Historical Yield

Effective Yield
for 5 Years Ended March 31, 2022



Fee Calculations

	Current		(Mix A)		(Mix B)		(Mix C)		(Mix D)	
	\$ Fees	Fees	\$ Fees	Fees	\$ Fees	Fees	\$ Fees	Fees	\$ Fees	Fees
Wellington	\$ 564,966	0.18%	\$ 577,785	0.18%	\$ 577,785	0.18%	\$ 481,728	0.19%	\$ -	0.00%
Western -Core Plus	\$ -	0.00%	\$ 672,399	0.21%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%
Western - Int. Credit	\$ 399,022	0.24%	\$ -	0.00%	\$ 534,228	0.21%	\$ 342,114	0.27%	\$ 486,200	0.22%
Colchester	\$ 638,164	0.39%	\$ -	0.00%	\$ 324,133	0.51%	\$ 436,200	0.45%	\$ -	0.00%
Candidate - Treasury	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ 64,038	0.04%	\$ 76,846	0.04%
Candidate - MultiSector	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$2,241,330	1.00%
Total	\$ 1,602,152	0.25%	\$ 1,250,184	0.20%	\$ 1,436,146	0.22%	\$ 1,324,080	0.21%	\$2,804,375	0.44%

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D.2 Future Meetings

This is a discussion with no backup.

Callan



June 15, 2022

**First Quarter 2022
Summary Investment
Presentation**

Jim Callahan, CFA
President

Anne Heaphy
Senior Vice President

Callan

Economic and Capital Markets Review

Down Equity and Fixed Income Markets in 1Q22

Negative returns for stocks and bonds at the same time are unusual

Global equity markets are down sharply following the invasion of Ukraine:

- Similar impact across developed markets
- Greater impact on small cap and emerging markets

Fixed income down with sharply higher inflation and interest rates:

- BImbg Aggregate: -5.9% (and much worse since, -9.5% through April)
- CPI-U: +8.5% for the year ended 1Q22
- **Number of times stocks and bonds have been down together:**
 - 37 quarters in almost 100 years, about 10% of the quarters
 - But just twice on annual basis
- **Inflation spiked to the highest rate reported in decades.**
- **Economic data show growth hit “pause” in the U.S.:**
 - GDP fell 1.4% in 1Q22, down from almost 7% GDP growth in 4Q21
 - Forecasters are revising growth estimates for 2022 down to 3% or lower.

Returns for Periods ended 3/31/22

	1 Quarter	1 Year	5 Years	10 Years	25 Years
U.S. Equity					
Russell 3000	-5.28	11.92	15.40	14.28	9.53
S&P 500	-4.60	15.65	15.99	14.64	9.44
Russell 2000	-7.53	-5.79	9.74	11.04	8.88
Global ex-U.S. Equity					
MSCI World ex USA	-4.81	3.04	7.14	6.25	5.25
MSCI Emerging Markets	-6.97	-11.37	5.98	3.36	--
MSCI ACWI ex USA Small Cap	-6.52	0.03	7.89	7.28	6.70
Fixed Income					
Bloomberg Aggregate	-5.93	-4.15	2.14	2.24	4.71
90-day T-Bill	0.04	0.06	1.13	0.63	2.01
Bloomberg Long Gov/Credit	-10.95	-3.11	4.60	4.72	6.93
Bloomberg Global Agg ex-US	-6.15	-7.89	1.27	0.06	3.40
Real Estate					
NCREIF Property	5.33	21.87	8.54	9.61	9.50
FTSE Nareit Equity	-3.86	26.49	9.63	9.81	9.69
Alternatives					
CS Hedge Fund	2.13	7.47	5.48	4.71	6.61
Cambridge Private Equity*	5.01	48.84	21.29	17.11	15.64
Bloomberg Commodity	25.55	49.25	9.00	-0.70	1.90
Gold Spot Price	6.86	13.90	9.33	1.57	7.07
Inflation - CPI-U	3.12	8.54	3.35	2.28	2.37

*Cambridge PE data through 09/30/21.

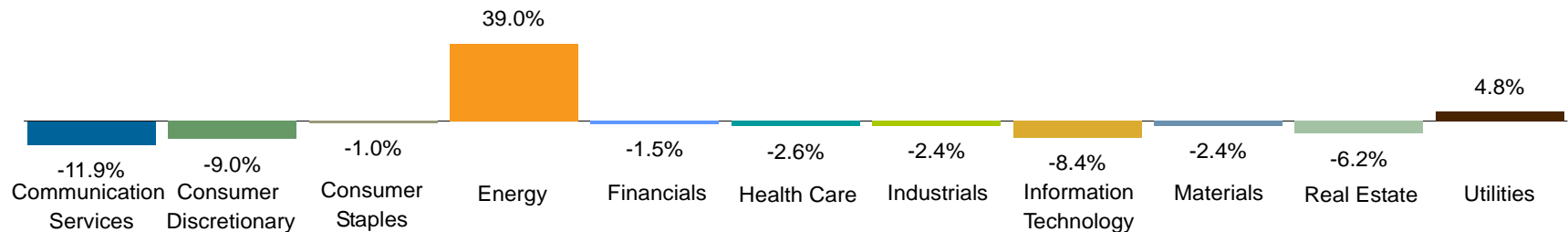
Sources: Bloomberg, Callan, Cambridge, Credit Suisse, FTSE Russell, MSCI, NCREIF, S&P Dow Jones Indices

U.S. Equity Performance: 1Q22

Returns take a step back given increased macro uncertainty

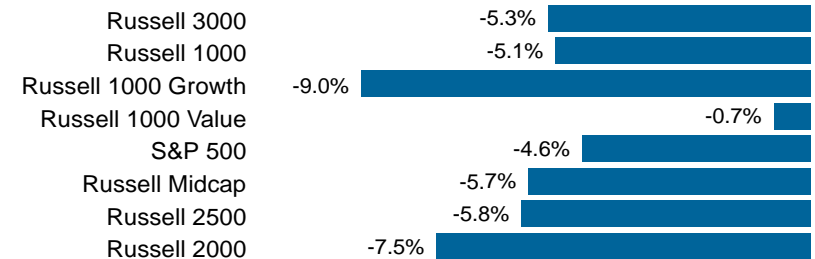
- The S&P 500 Index fell 4.6% in 1Q, but was down more than 12% early in March before staging a rally into quarter-end.
- Value stocks sharply outpaced growth across capitalizations, with the spread exceeding 10% in both mid and small caps and just over 8% in large caps.
- Energy (+39%) was the best-performing sector given a 33% spike in WTI crude oil prices. Commodity-linked Basic Materials and Utilities sectors also performed well on a relative basis.
- Communication Services (-12%), Consumer Discretionary (-9%), and Information Technology (-8%) were the worst-performing sectors.
- Uncertainty over rates, inflation, and geopolitical tensions all contributed to a volatile and risk averse environment.
- Interestingly, the Russell Dynamic Index (-4.3%) outperformed the Russell Defensive Index (-5.9%) during the 1Q downturn. Quality did not hold up as well as expected in some sectors.

Industry Sector Quarterly Performance (S&P 500)

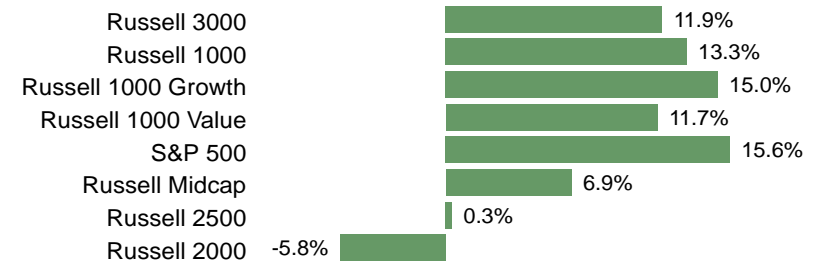


Sources: FTSE Russell, S&P Dow Jones Indices

U.S. Equity: Quarterly Returns



U.S. Equity: One-Year Returns



Global ex-U.S. Equity Performance: 1Q22

War in Ukraine stoked market volatility

- In the aftermath of invading Ukraine, Russia faced condemnation and sanctions that crippled its stocks, bonds, and currency and shocked the global markets.
- The fog of war exacerbated inflationary concerns and led energy prices to surge as Russia is the second-largest natural gas provider and the third-largest oil producer in the world.
- Energy exporters notably outperformed importers.

Fears of COVID-19

- A resurgence of COVID-19 cases in Europe and Asia, specifically in China, weighed on global recovery.
- China's zero-COVID policy has injected doubt into the 2022 GDP growth projection of 5.5%, already its lowest annual target in more than 25 years.

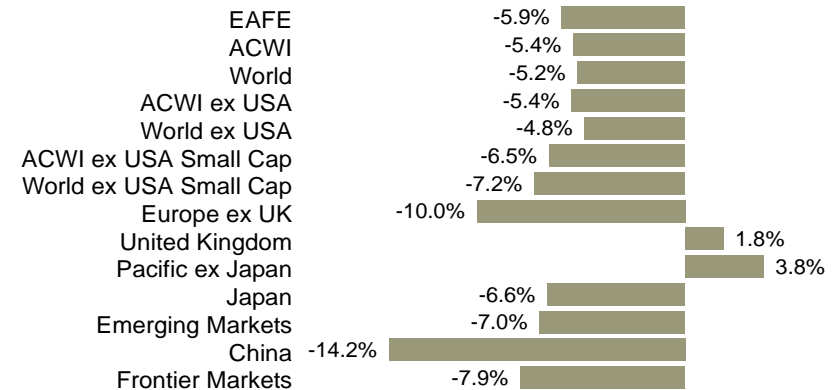
Growth vs. value

- Value sectors such as Energy, Materials, and Financials were in favor relative to growth sectors like Consumer Discretionary and Information Technology due to a combination of recession fears and tightening monetary cycle.
- *However, Energy was the worst performer within Emerging Markets due to the removal of Russia from indices with effectively zero value.*

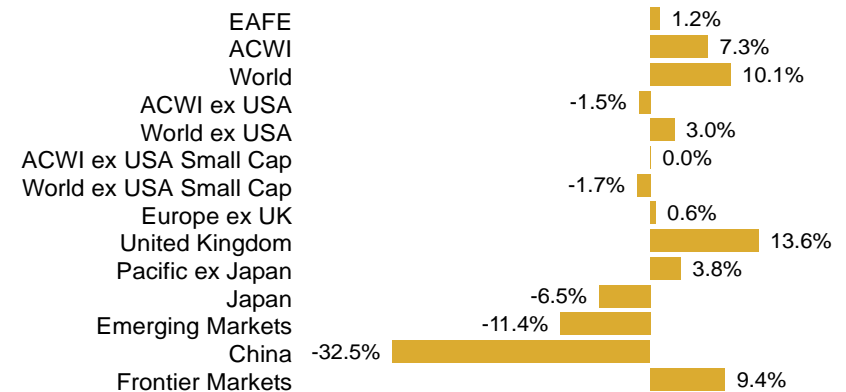
U.S. dollar vs. other currencies

- With the uncertainty of war, the U.S. dollar strengthened against other major currencies.

Global Equity: Quarterly Returns



Global Equity: One-Year Returns



Source: MSCI

U.S. Fixed Income Performance: 1Q22

Bonds hit hard as rates rose sharply

- Bloomberg Aggregate worst quarterly return since 1980
- Curve flattened; as of 3/31 5-year UST yield 10 bps higher than 10-year UST yield (2.42% vs 2.32%)
- TIPS outperformed nominal Treasuries and 10-year breakeven spreads widened to 2.84% from 2.56% as of year-end.
- Fed raised rates by 25 bps with many more hikes expected this year.

Credit sectors underperformed

- Investment grade corporates underperformed duration-matched U.S. Treasuries by 145 bps; RMBS by 71 bps.
- High yield “benefited” from less interest rate sensitivity and relatively higher exposure to the energy sector; excess return vs. U.S. Treasuries was 92 bps.
- Defaults remain low (less than 1%) and yield breeched 6%.

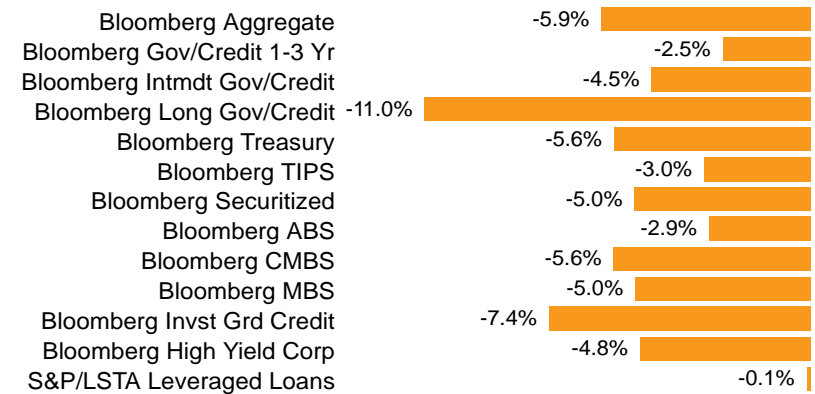
Leveraged loans performed relatively well

- Helped by floating rate coupons / low duration

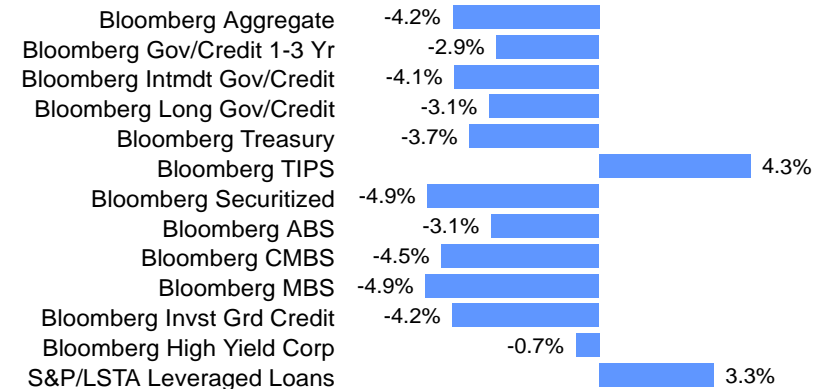
Securitized sectors performed relatively well

- Consumer ABS held up the best within the sector due to its shorter duration profile and solid consumer spending.
- Conduit CMBS traded in line as economy re-opens.
- Agency MBS saw duration extend by 0.4 yr due to higher rates (deters refinancing and slows payments to monthly mins).

U.S. Fixed Income: Quarterly Returns



U.S. Fixed Income: One-Year Returns



Sources: Bloomberg, S&P Dow Jones Indices

Global Fixed Income Performance: 1Q22

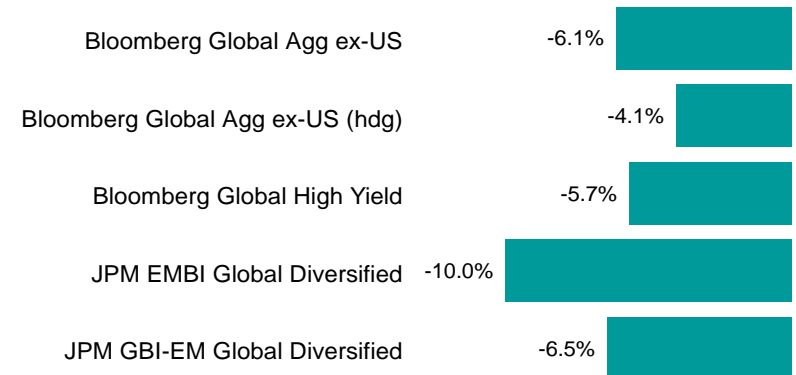
Negative returns driven by broad interest rate increases

- U.S. dollar appreciated against the Japanese yen, euro, and British pound.

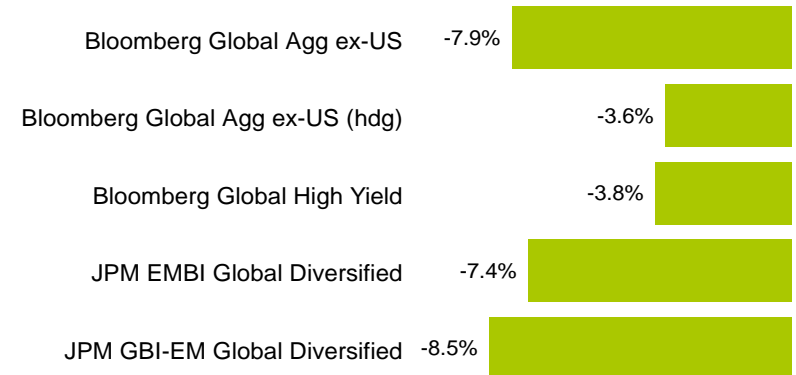
Emerging market debt not spared

- JPM Global Diversified hurt by rising rates in the U.S.
- GBI-EM hurt by rising local rates, but currency appreciation helped in Latin America and Africa.
- Russia removed from indices at a price of \$0 (-100% return); prior to the Russian invasion of Ukraine, index weight of Russia domiciled debt ranged from 3%-8%, depending on the index.

Global Fixed Income: Quarterly Returns



Global Fixed Income: One-Year Returns



Sources: Bloomberg, JP Morgan

U.S. Private Real Estate Market Trends

Continued strong performance across the asset class

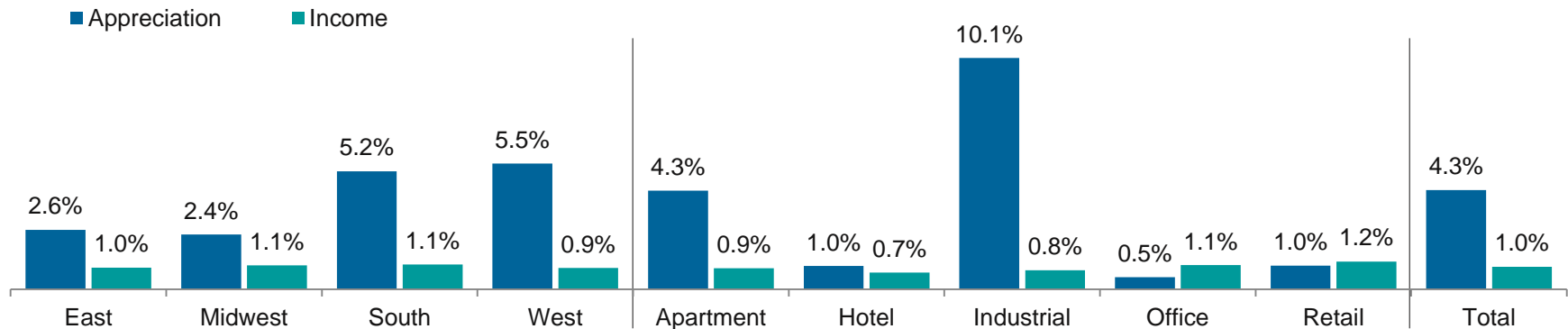
Another strong quarter for real estate

- Income returns were positive across sectors.
- Valuations are reflective of strong fundamentals in Industrial and Apartment and continued uncertainty despite a modest recovery in Office and Retail.
- Return dispersion by manager within the ODCE Index was due to the composition of underlying portfolios.
- Niche sectors such as self-storage and life sciences continued to be accretive.

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
NCREIF ODCE	7.4%	28.5%	11.3%	9.9%	10.9%
Income	0.9%	4.0%	4.0%	4.1%	4.5%
Appreciation	6.4%	23.8%	7.1%	5.6%	6.2%
NCREIF Property Index	5.3%	21.9%	9.6%	8.5%	9.6%
Income	1.0%	4.2%	4.3%	4.4%	4.6%
Appreciation	4.3%	17.2%	5.2%	4.0%	4.8%

Returns are geometrically linked

NCREIF Property Index Quarterly Returns by Region and Property Type



Source: NCREIF, ODCE return is net

Recent Trends in Private Equity

Investors brace for 1Q22 returns

- Late-stage and growth equity returns expected to drop in 1Q given the volatility in the public technology markets
- Strategies with large public securities exposures expected to be the most significantly impacted, while other strategy types may prove more resilient
- 1Q22 returns expected to erode some of the gains from 2021

Proliferation of take-privates

- Given the recent volatility in the public markets, many buyout firms have taken advantage of the opportunity to take public companies private.
- Recent large take-private transactions include Citrix Systems, Datto, Ideagen, The Nielsen Company, Anaplan, and CDK Global.

Constrained 2022 capital budgets

- With so many funds in the market or expected to come to market in 2022, many investors' pipelines for 2022 are already full with re-ups.
- Some will face difficult decisions between new allocations and re-ups to existing managers.

Fundraising timelines extended

- Given the number of funds in the market, GPs are facing greater competition for LP commitments.
- This dynamic has resulted in longer fundraising timelines as well as incentives for LPs to close quickly, such as first-closer fee discounts.

New late-stage/growth entrants

- There has been a wave of new growth equity funds being launched by a variety of sponsor types including buyout firms, venture capital firms, hedge funds, and public equity managers.
- Proliferation of new entrants is typically a signal of a market peak

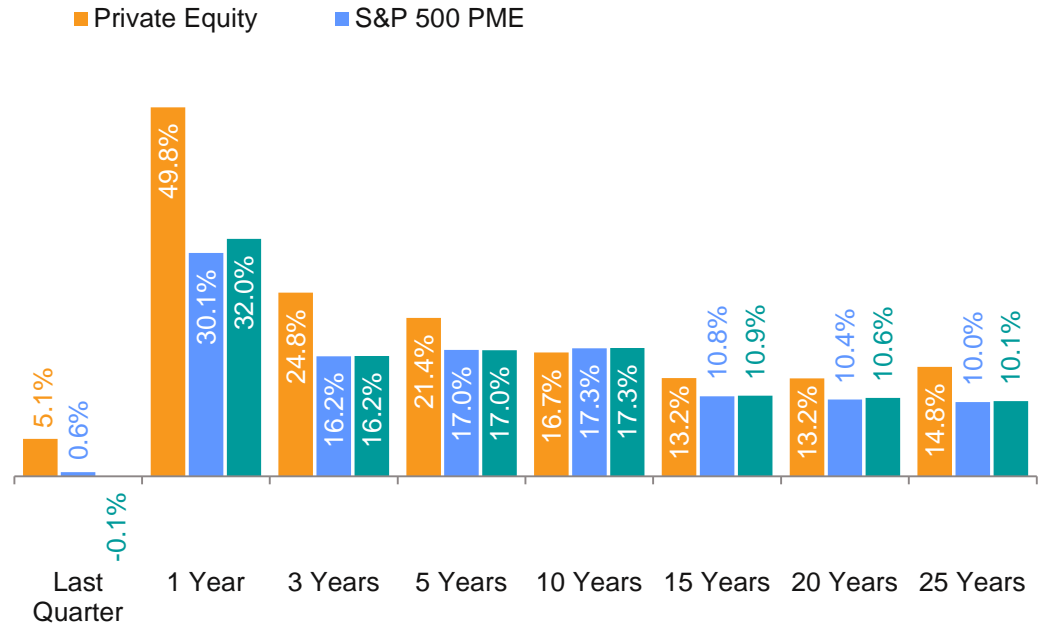
Source: PitchBook

Private Equity Performance

Huge gains over the last year, outpacing public equity

- Significant outperformance over one-year period with private equity exceeding the public markets by 18 to 20 percentage points
- Private equity 3Q21 gains ahead of those of public equity by 5 percentage points
- Private equity consistently ahead of public equity by ~2 to 4 percentage points across all longer-term time horizons, except over the last 10 years
- Volatility in recent public markets performance yet to translate to private markets performance

Net IRRs as of 09/30/21



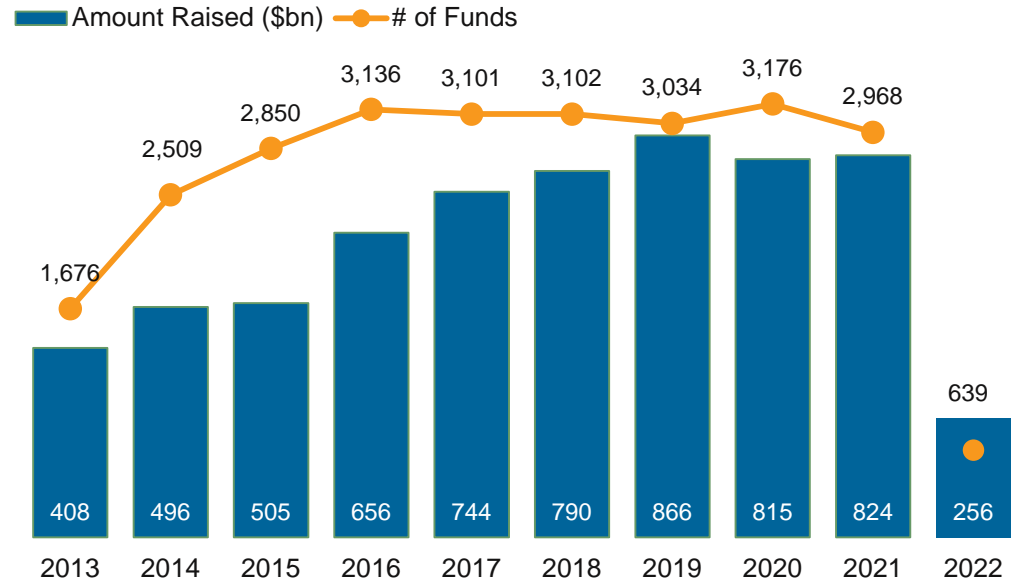
Source: Refinitiv/Cambridge

Private Equity Global Fundraising

2021 fundraising holds steady

- 2021 fundraising lagging 2019's peak by 5%, but remains consistent with 2020 fundraising
- While a large number of funds were raising in 2021, many did not hold final closes until 2022 due to LP capital budgeting constraints. Fundraising timelines have consequently become extended.
- As a result, a surge in fundraising stats is expected in 2022.

Annual Fundraising



Source: PitchBook, data through April 2022

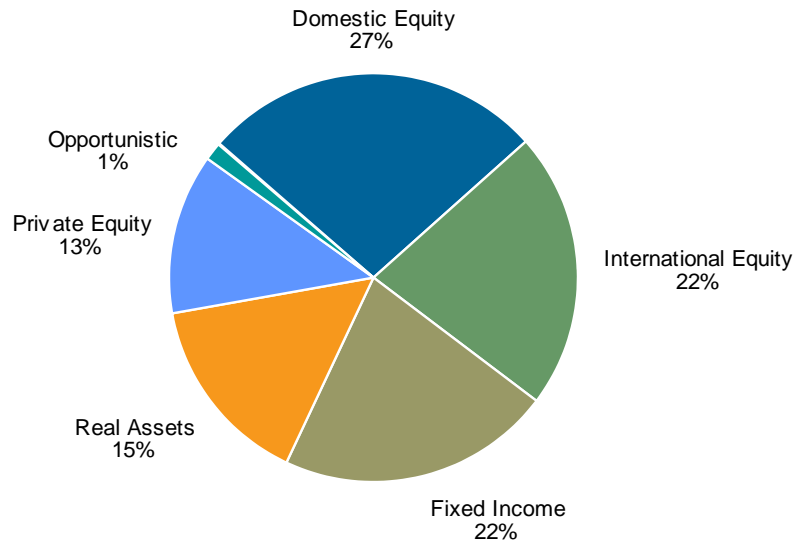
Callan

MCERA Total Fund Review

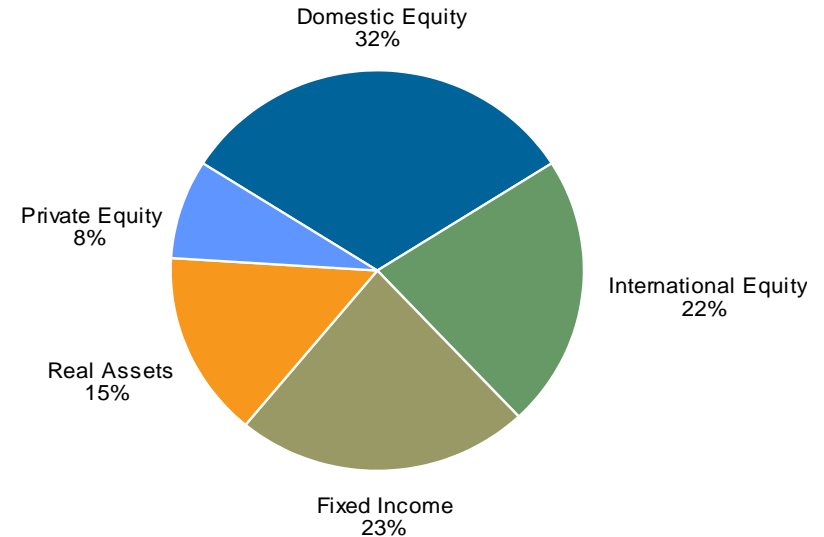
Total Fund Asset Allocation

As of March 31, 2022

Actual Asset Allocation



Target Asset Allocation

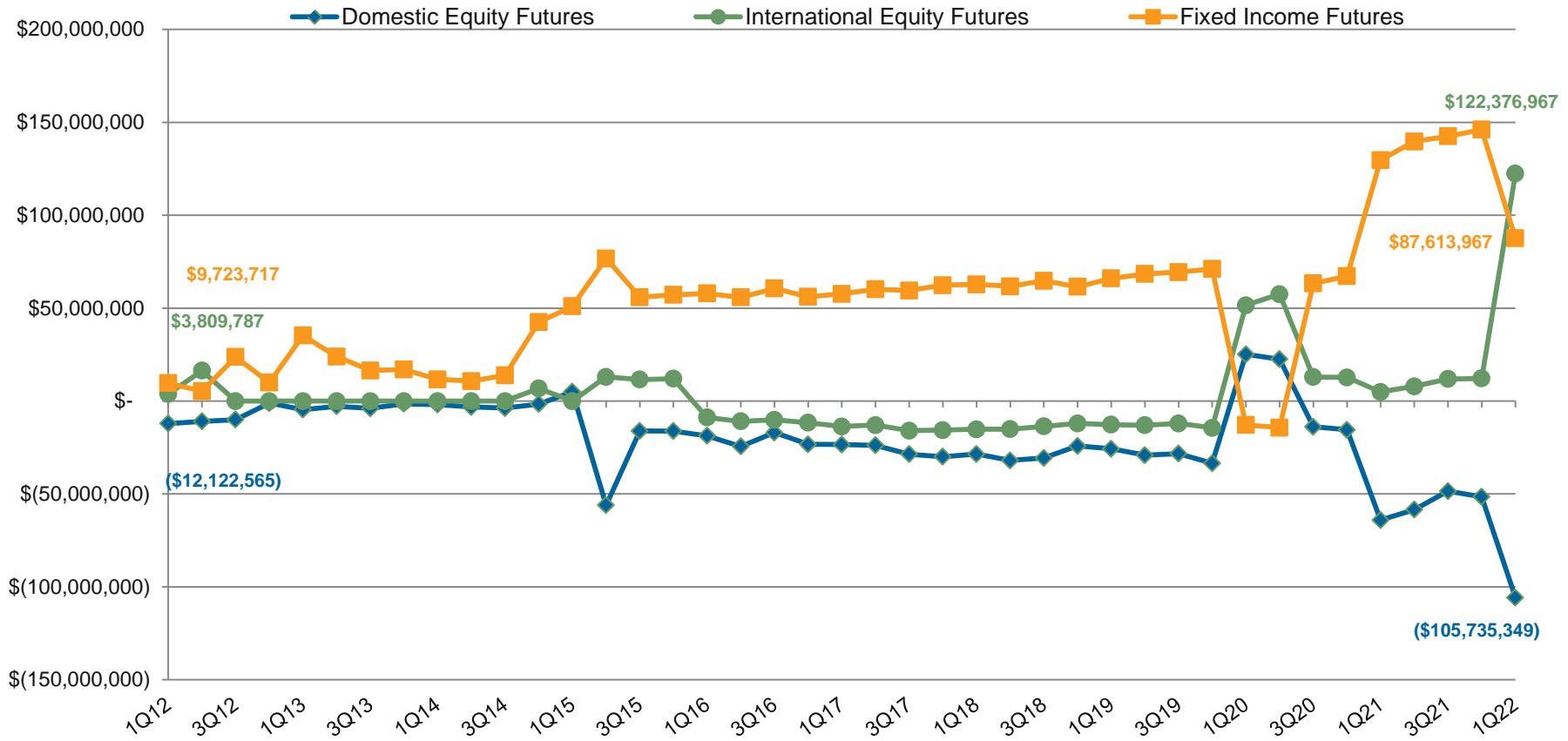


Asset Class	\$000s Actual	Weight Actual	Min Target	Target	Max Target	Percent Difference	\$000s Difference
Domestic Equity	905,471	27.0%	28.0%	32.0%	36.0%	(5.0%)	(167,473)
International Equity	735,782	21.9%	19.0%	22.0%	25.0%	(0.1%)	(1,866)
Fixed Income	727,994	21.7%	20.0%	23.0%	26.0%	(1.3%)	(43,184)
Real Assets	509,696	15.2%	12.0%	15.0%	18.0%	0.2%	6,753
Private Equity	426,824	12.7%	0.0%	8.0%	12.0%	4.7%	158,588
Opportunistic	47,182	1.4%	0.0%	0.0%	5.0%	1.4%	47,182
Total	3,352,949	100.0%		100.0%			

Total Fund Asset Distribution

	March 31, 2022				December 31, 2021	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equity	\$905,470,754	27.01%	\$(56,778,511)	\$(55,048,081)	\$1,017,297,346	28.91%
SSGA Russell 1000 Index	765,887,339	22.84%	(2,605,859)	(41,432,869)	809,926,066	23.02%
DFA Small Cap Core	245,318,765	7.32%	(541,563)	(13,030,770)	258,891,098	7.36%
Parametric Domestic Equity Futures (1)	-105,735,349	(3.15%)	(53,631,089)	(584,442)	-51,519,818	(1.46%)
International Equity	\$735,782,250	21.94%	\$103,107,405	\$(65,792,767)	\$698,467,612	19.85%
Morgan Stanley Value	196,629,539	5.86%	0	(13,178,815)	209,808,354	5.96%
Artisan Partners Growth	193,039,595	5.76%	0	(26,477,089)	219,516,684	6.24%
TimesSquare Intl Small Cap	112,394,642	3.35%	(256,364)	(18,851,620)	131,502,625	3.74%
FIAM Select Emerging Equity	111,341,508	3.32%	0	(14,117,855)	125,459,362	3.57%
Parametric International Equity Futures	122,376,967	3.65%	103,363,769	6,832,612	12,180,586	0.35%
Fixed Income	\$727,994,000	21.71%	\$(55,901,109)	\$(44,969,559)	\$828,864,668	23.56%
Wellington Core Plus	311,643,986	9.29%	(2,089,919)	(20,828,767)	334,562,672	9.51%
Western Intermediate Credit	166,014,799	4.95%	(1,360,502)	(9,125,600)	176,500,901	5.02%
Colchester Global	162,721,248	4.85%	(166,227)	(8,793,536)	171,681,011	4.88%
Parametric Fixed Income Futures	87,613,967	2.61%	(52,284,461)	(6,221,656)	146,120,084	4.15%
Real Estate	\$263,979,961	7.87%	\$(4,898,783)	\$17,744,527	\$251,134,218	7.14%
Woodmont	18,099,990	0.54%	0	0	18,099,990	0.51%
UBS Trumbull Property Fund	114,199,452	3.41%	(3,674,575)	7,862,783	110,011,244	3.13%
AEW Core Property Trust	131,680,520	3.93%	(1,224,208)	9,881,744	123,022,984	3.50%
Public Real Assets	\$245,715,665	7.33%	\$(110,751)	\$5,273,573	\$240,552,842	6.84%
INVESCO Commodities Fund	67,529,678	2.01%	(110,751)	8,763,741	58,876,689	1.67%
BlackRock TIPS Index Fund	55,103,741	1.64%	0	(1,681,583)	56,785,325	1.61%
KBI Global Resources Fund	61,270,241	1.83%	0	584,321	60,685,920	1.72%
Blackrock REIT Index Fund	61,812,004	1.84%	0	(2,392,905)	64,204,909	1.82%
Private Equity*	\$426,824,368	12.73%	\$(16,540,539)	\$(0)	\$443,364,907	12.60%
Abbott ACE VI*	49,174,382	1.47%	(6,000,000)	0	55,174,382	1.57%
Abbott ACE VII*	55,404,298	1.65%	(2,153,023)	(0)	57,557,321	1.64%
Abbott 2016*	74,206,728	2.21%	(2,133,750)	0	76,340,478	2.17%
Abbott 2017*	20,887,942	0.62%	0	0	20,887,942	0.59%
Abbott 2021*	5,821,445	0.17%	2,093,750	0	3,727,695	0.11%
Pathway PPEF 2008*	70,171,466	2.09%	(3,203,782)	0	73,375,248	2.09%
Pathway PE I-7*	44,834,781	1.34%	(2,826,120)	0	47,660,901	1.35%
Pathway PE I-8*	75,844,235	2.26%	(2,911,492)	(0)	78,755,727	2.24%
Pathway PE I-9*	18,036,063	0.54%	0	0	18,036,063	0.51%
Pathway PE I-10*	12,443,029	0.37%	593,879	(0)	11,849,150	0.34%
Opportunistic**	\$47,181,674	1.41%	\$8,278,863	\$(58,091)	\$38,960,902	1.11%
CarVal Credit Value V**	15,635,939	0.47%	8,320,304	(79,610)	7,395,245	0.21%
Fortress Credit Opps Fund V**	10,049,728	0.30%	(32,312)	326,255	9,755,785	0.28%
Varde Dislocation Fund**	21,496,007	0.64%	(9,129)	(304,736)	21,809,872	0.62%
Total Fund	\$3,352,948,672	100.0%	\$(22,843,424)	\$(142,850,399)	\$3,518,642,495	100.0%

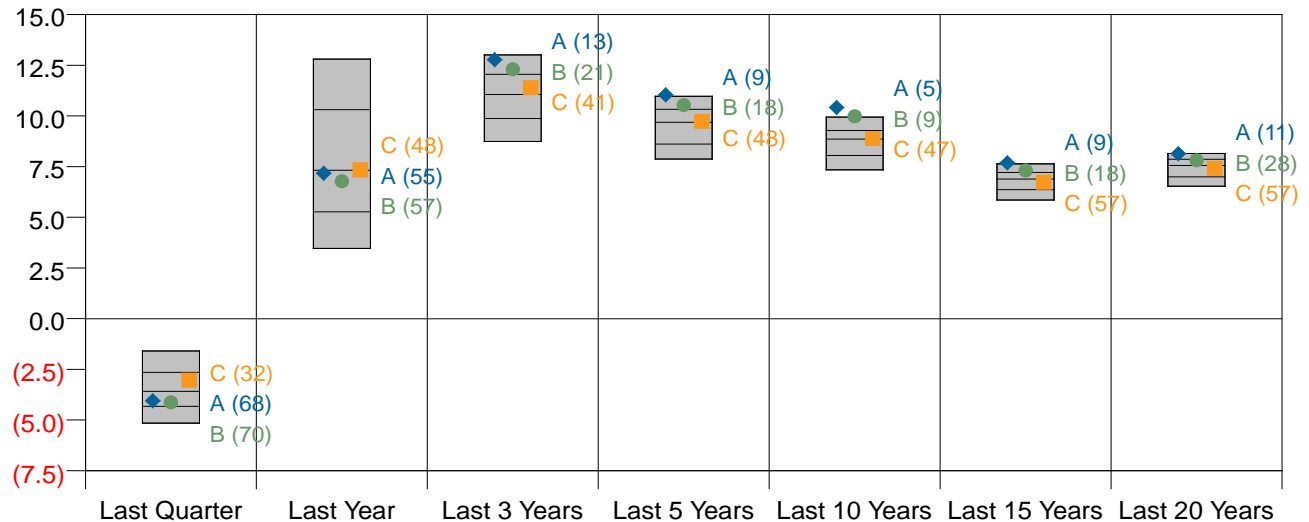
Parametric Overlay Positions – Changes Over Time



Total Fund Performance – Annualized*

Returns for Periods Ended March 31, 2022

Group: Callan Public Fund Sponsor - Large (>1B)



10th Percentile	(1.59)	12.81	13.02	10.98	9.95	7.64	8.15
25th Percentile	(2.65)	10.31	12.06	10.33	9.29	7.22	7.87
Median	(3.58)	7.32	11.06	9.69	8.86	6.89	7.56
75th Percentile	(4.32)	5.28	9.88	8.62	8.05	6.37	7.00
90th Percentile	(5.14)	3.47	8.74	7.87	7.34	5.85	6.53

MCERA Total Fund - Gross	◆ A	(4.05)	7.18	12.77	11.04	10.42	7.69	8.14
MCERA Total Fund - Net	● B	(4.12)	6.78	12.30	10.54	9.98	7.32	7.82
MCERA Total Fund Target	■ C	(3.02)	7.35	11.39	9.74	8.89	6.73	7.43

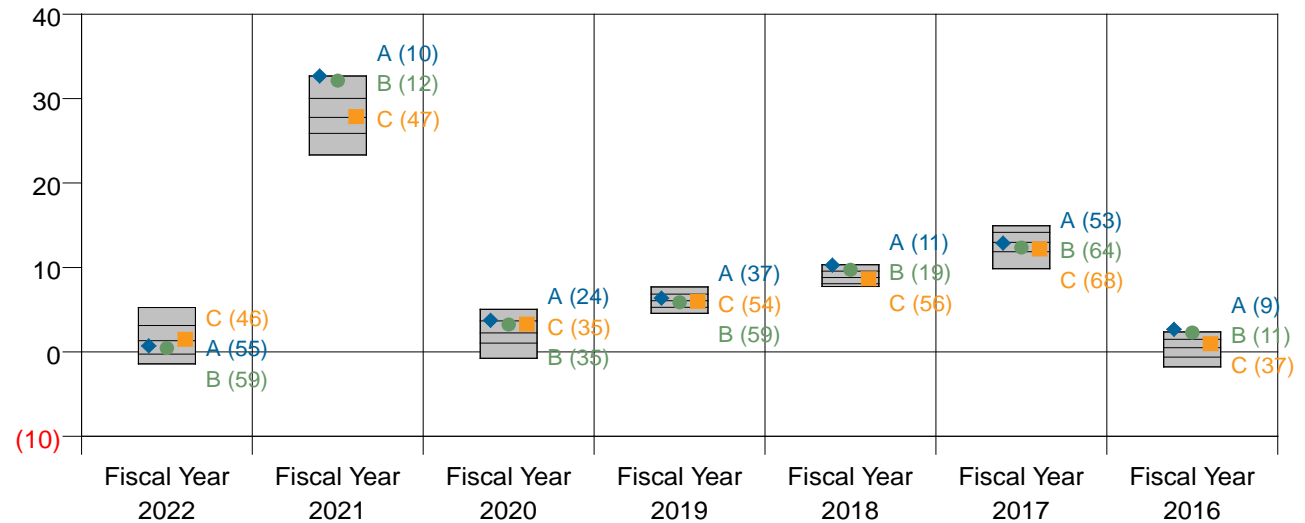
*Performance is preliminary. Private equity data is lagged a quarter and information as of December 31, 2021 is not yet available for all of the funds.

Current Quarter Target = 32.0% Russell 3000 Index, 22.0% MSCI ACWI ex US IMI Index, 11.5% Bloomberg Aggregate Index, 5.8% Bloomberg Intermediate Credit Index, 5.8% FTSE World Government Bond Index, 8.0% NCREIF NFI-ODCE Equal Weight Net, 1.8% Bloomberg Commodity Price Index, 1.8% S&P Global Natural Resources Index, 1.8% S&P DJ US Select REIT Index, 1.8% Bloomberg US TIPS Index, 4.8% Russell 3000 Index (Lagged) and 3.2% MSCI ACWI ex US IMI Index (Lagged).

Total Fund Performance – Fiscal Year

Fiscal Year Returns

Group: Callan Public Fund Sponsor - Large (>1B)

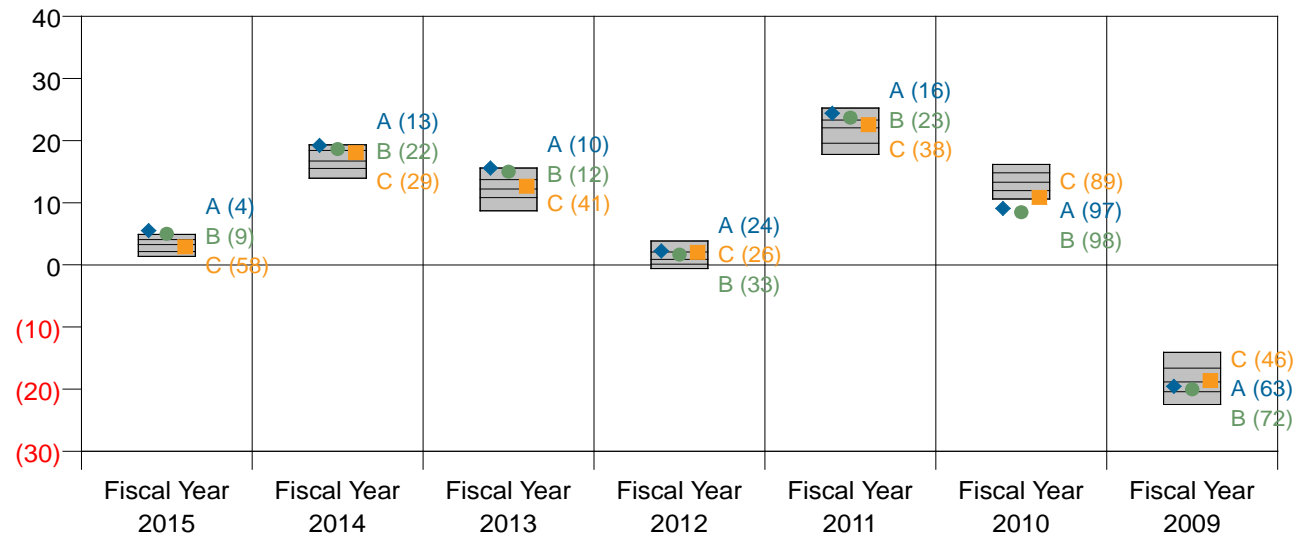


MCERA Total Fund - Gross	◆ A	0.72	32.69	3.74	6.39	10.29	12.88	2.68
MCERA Total Fund - Net	● B	0.45	32.15	3.26	5.88	9.74	12.37	2.30
MCERA Total Fund Target	■ C	1.51	27.89	3.29	5.99	8.67	12.20	0.98

Total Fund Performance – Fiscal Year

Fiscal Year Returns

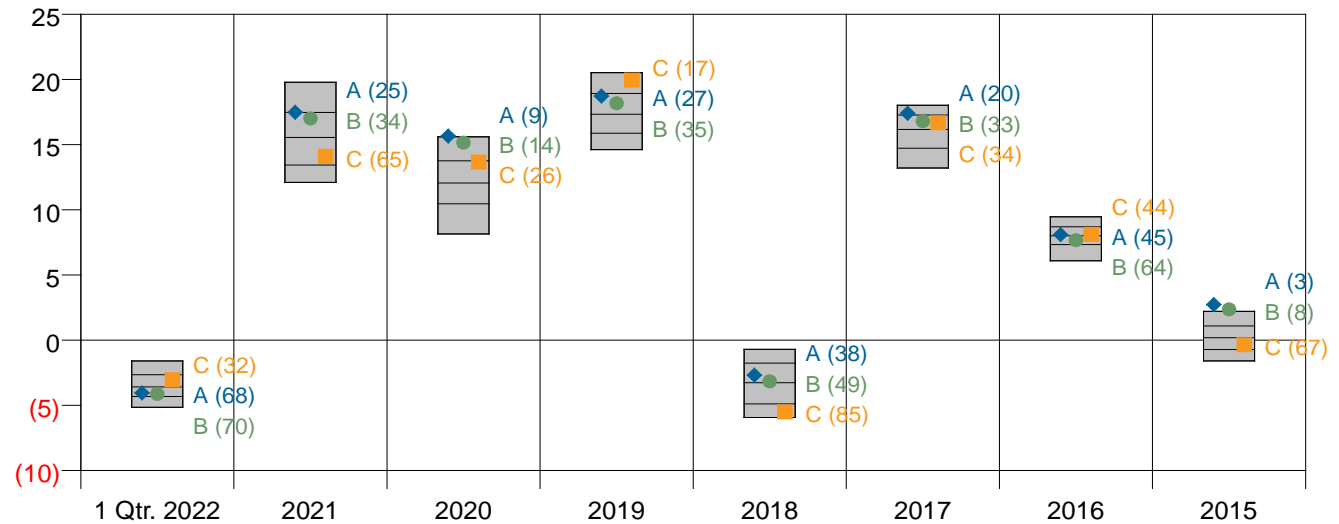
Group: Callan Public Fund Sponsor - Large (>1B)



Total Fund Performance – Calendar Years

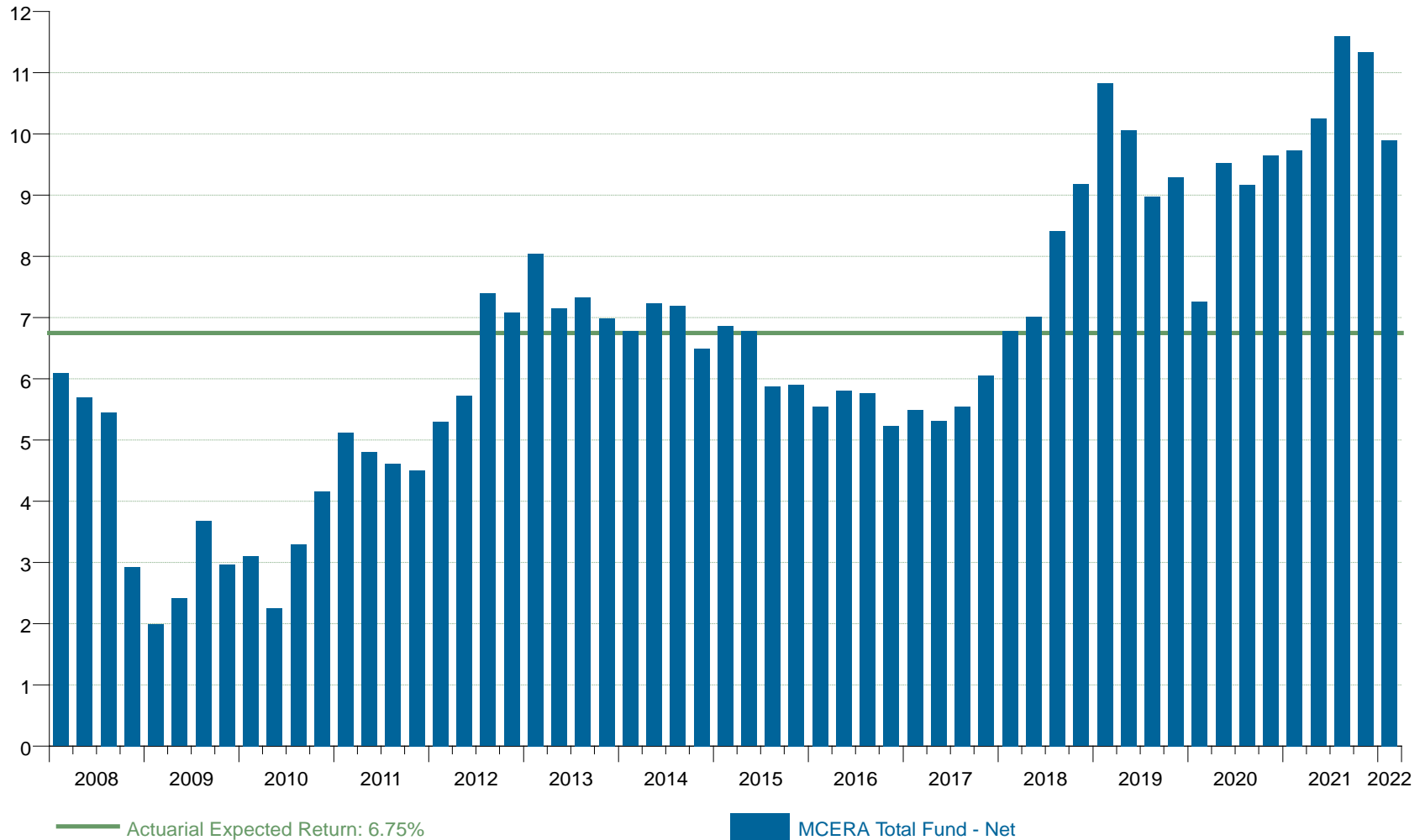
Returns for Periods Ended March 31, 2022

Group: Callan Public Fund Sponsor - Large (>1B)



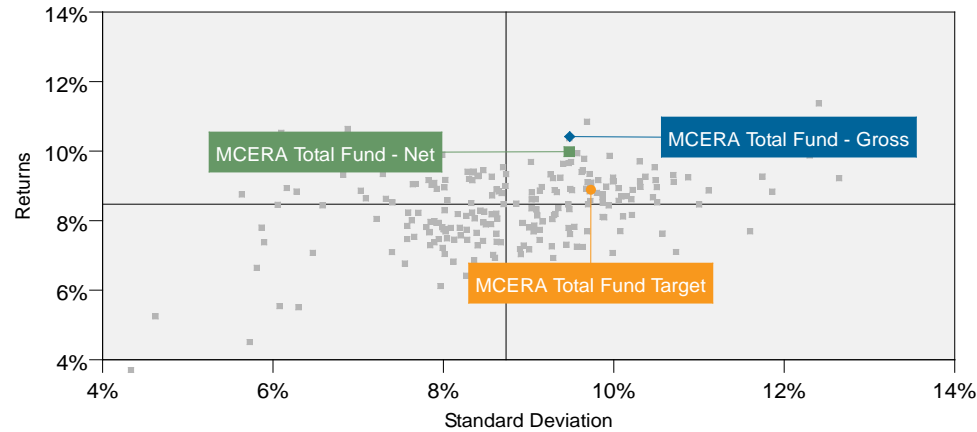
10th Percentile	(1.59)	19.79	15.61	20.52	(0.71)	18.03	9.48	2.22
25th Percentile	(2.65)	17.47	13.77	18.94	(1.75)	17.28	8.70	1.10
Median	(3.58)	15.56	12.06	17.34	(3.26)	16.18	8.02	0.20
75th Percentile	(4.32)	13.44	10.47	15.88	(4.88)	14.73	7.33	(0.71)
90th Percentile	(5.14)	12.10	8.15	14.62	(5.92)	13.22	6.10	(1.59)
Total Fund - Gross	◆ A (4.05)	17.49	15.66	18.73	(2.68)	17.41	8.10	2.73
MCERA Total Fund - Net	● B (4.12)	17.02	15.16	18.19	(3.16)	16.81	7.68	2.37
Total Fund Target	■ C (3.02)	14.12	13.68	19.97	(5.49)	16.68	8.13	(0.34)

Annualized 10 Year Total Fund Net Returns (Quarterly Roll)

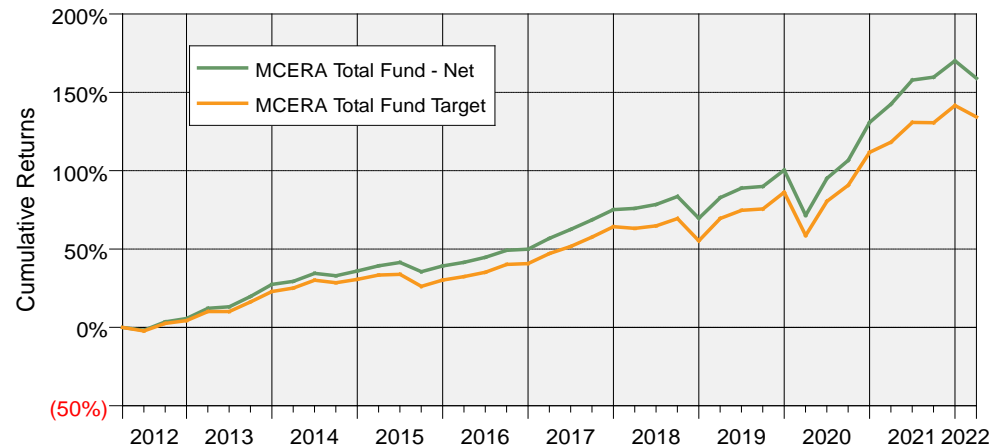


Total Fund – Cumulative Returns Relative to Target

Ten Year Annualized Risk vs. Return
As of March 31, 2022



Total Fund Cumulative Returns vs. Target
10 Years Ended March 31, 2022



Watchlist

Investment Manager Monitoring Summary Report Active Managers as of March 31, 2022

Investment Manager	Organization/ Team	3 Year Performance vs Benchmark	3 Year Performance vs Peers	5 Year Performance vs Benchmark	5 Year Performance vs Peers	Qualify for Watchlist?	Date Added
DFA Small Cap Core Equity <i>Russell 2000 Index</i>				N/A	N/A		
Morgan Stanley International Value Equity <i>MSCI EAFE Index</i>						Yes	4Q17
Artisan International Growth Equity <i>MSCI EAFE Index</i>						Yes	4Q17
TimesSquare International Small Cap Equity <i>MSCI EAFE Small Cap Index</i>		N/A	N/A	N/A	N/A		
Fidelity Emerging Markets Equity <i>MSCI Emerging Markets Index</i>		N/A	N/A	N/A	N/A		
Wellington Core Plus Fixed Income <i>Bloomberg Barclays Aggregate Index</i>						No	
Western Asset Intermediate Credit Fixed Income <i>Bloomberg Barclays Intermediate Credit Index</i>						No	
Colchester Global Fixed Income <i>FTSE World Government Bond Index</i>						Yes	4Q20
Invesco Balanced Risk Commodity Fund <i>Bloomberg Commodity Index</i>						Yes	4Q20
KBI Global Natural Resources Fund <i>S&P Global Natural Resource Index</i>			N/A		N/A	No	
UBS Trumbull Property Fund* <i>NFI-ODCE Index</i>		N/A	N/A	N/A	N/A	Under Review	4Q19

*UBS Trumbull Property Fund placed on watch for organizational concerns. Quantitative criteria for private market portfolios under review by Governance Committee.

Quantitative Criteria

If a manager trails its relevant benchmark by more than 100 basis points (net of fees) and ranks in the bottom quartile of its peer universe (gross of fees ranking) for the trailing three years, or if a manager trails its relevant benchmark (net of fees) or ranks below median of its peer universe (gross of fees ranking) for the trailing five years, then the manager may be placed on the Watchlist.

Color Code

	meets watch list criteria, no concerns, no actions recommended
	concerns exist, no actions recommended
	violates watch list criteria, concerns exist, action to be determined

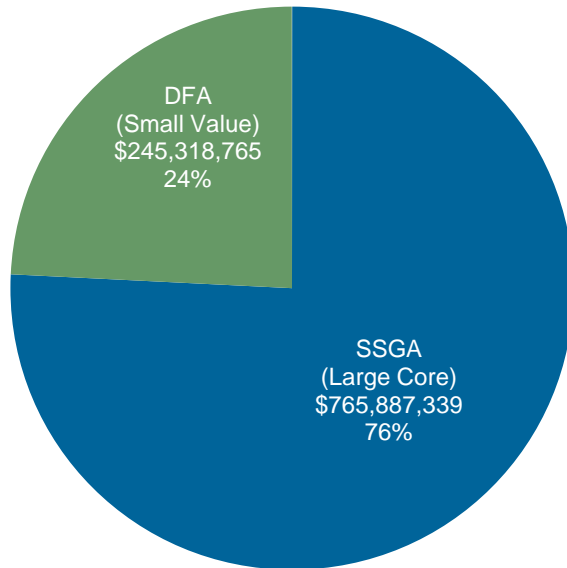
Watchlist

Investment Manager	3 Year Net Return Trails Benchmark by more than 100 bps (relative return shown in bps)	<u>AND</u>	3 Year Gross Return Ranks 75th - 100th%	<u>OR</u>	5 Year Net Return Trails Benchmark (relative return shown in bps)	<u>OR</u>	5 Year Gross Return Ranks 50th - 100th%	Qualify for Watchlist (Quantitative)
DFA Small Cap Core Equity <i>Russell 2000 Index</i>	229		39		N/A		N/A	No
Morgan Stanley International Value Equity <i>MSCI EAFE Index</i>	-174		74th		-88		33rd	Yes
Artisan International Growth Equity <i>MSCI EAFE Index</i>	-119		90th		86		64th	Yes
TimesSquare International Small Cap Equity <i>MSCI EAFE Small Cap Index</i>	N/A		N/A		N/A		N/A	No
Fidelity Emerging Markets Equity <i>MSCI Emerging Markets Index</i>	N/A		N/A		N/A		N/A	No
Wellington Core Plus Fixed Income <i>Bloomberg Barclays Aggregate Index</i>	110		41st		86		41st	No
Western Asset Intermediate Credit Fixed Income <i>Bloomberg Barclays Intermediate Credit Index</i>	102		1st		68		1st	No
Colchester Global Fixed Income <i>FTSE World Government Bond Index</i>	85		55th		29		61st	Yes
Invesco Balanced Risk Commodity Fund <i>Bloomberg Commodity Index</i>	-205		87th		-189		94th	Yes
KBI Global Natural Resources Fund <i>S&P Global Natural Resource Index</i>	724		N/A		330		N/A	No
UBS Trumbull Property Fund <i>NCREIF NFI-ODCE Index</i>	Quantitative criteria for private markets portfolios under review by Governance Committee. On watch due to organizational changes.							Under Review

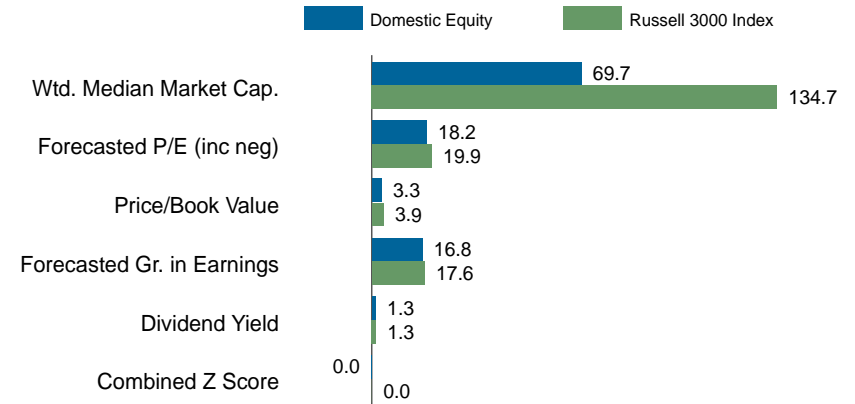
Callan

MCERA Asset Class Review

Domestic Equity Composite



Portfolio Characteristics as of March 31, 2022



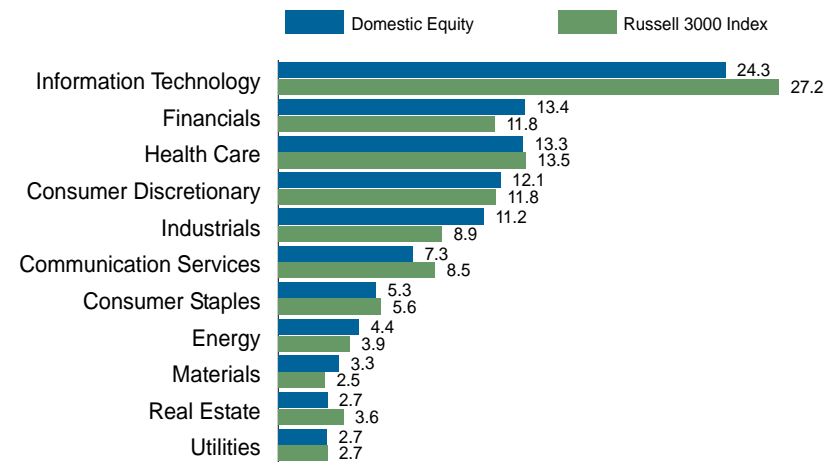
Style Exposure Matrix

Holdings as of March 31, 2022

-- Domestic Equity
-- Russell 3000 Index

	Value	Core	Growth	Total
Large	15.8% (104) 19.5% (104)	15.3% (96) 18.9% (96)	32.3% (103) 39.9% (103)	63.3% (303) 78.2% (303)
Mid	4.4% (176) 4.9% (178)	5.5% (216) 5.3% (223)	5.7% (197) 5.1% (205)	15.6% (589) 15.3% (606)
Small	4.6% (241) 1.5% (296)	6.7% (372) 2.2% (513)	6.5% (336) 2.1% (404)	17.8% (949) 5.8% (1213)
Micro	1.7% (415) 0.3% (300)	1.1% (250) 0.3% (446)	0.6% (126) 0.2% (164)	3.4% (791) 0.7% (910)
Total	26.4% (936) 26.1% (878)	28.6% (934) 26.7% (1278)	45.0% (762) 47.2% (876)	100.0% (2632) 100.0% (3032)

Sector Allocation as of March 31, 2022



Domestic Equity Composite

Returns and Rankings for Periods Ended March 31, 2022

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Equity - Net	(5.29)	10.64	18.04	15.12	13.93
Domestic Equity Target	(5.28)	11.92	18.24	15.40	14.28
Large Cap Equity - Net	(5.39)	13.41	18.28	15.56	14.43
SSGA - Net	(5.12)	13.62	18.21	15.56	14.44
Large Cap Blended Benchmark	(5.13)	13.61	18.22	15.58	14.43
Ranking vs. Large Cap Equity	49	41	49	53	53
Small Cap Equity - Net	(4.73)	4.71	16.72	13.19	12.15
DFA Small Core - Net	(5.11)	3.35	14.03	--	--
Russell 2000 Index	(7.53)	(5.79)	11.74	9.74	11.04
Ranking vs. Small Cap Equity	28	31	39	--	--

Returns and Rankings for Calendar Years

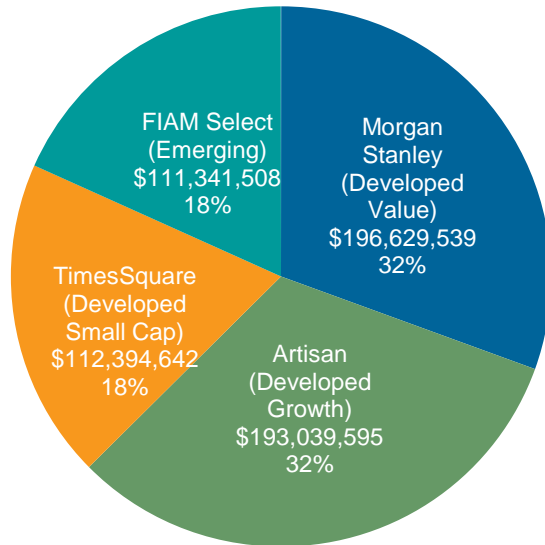
	1 Qtr. 2022	2021	2020	2019	2018	2017
Domestic Equity - Net	(5.29)	29.74	17.85	28.77	(5.34)	20.61
Domestic Equity Target	(5.28)	25.66	20.89	31.02	(5.24)	21.13
Large Cap Equity - Net	(5.39)	27.29	18.64	31.64	(4.59)	21.86
SSGA - Net	(5.12)	27.16	18.33	31.43	(4.38)	21.83
Large Cap Blended Benchmark	(5.13)	27.15	18.40	31.49	(4.38)	21.83
Ranking vs. Large Cap Equity	49	49	53	43	46	51
Small Cap Equity - Net	(4.73)	34.91	14.26	21.89	(8.76)	17.46
DFA Small Core - Net	(5.11)	29.22	11.74	21.77	--	--
Russell 2000 Index	(7.53)	14.82	19.96	25.52	(11.01)	14.65
Ranking vs. Small Cap Equity	28	21	54	71	--	--

- The domestic equity composite performed in line with the benchmark.
- DFA has handily outperformed its index over the last quarter and last year in part from its exclusion of stocks with the lowest profitability and highest relative prices.

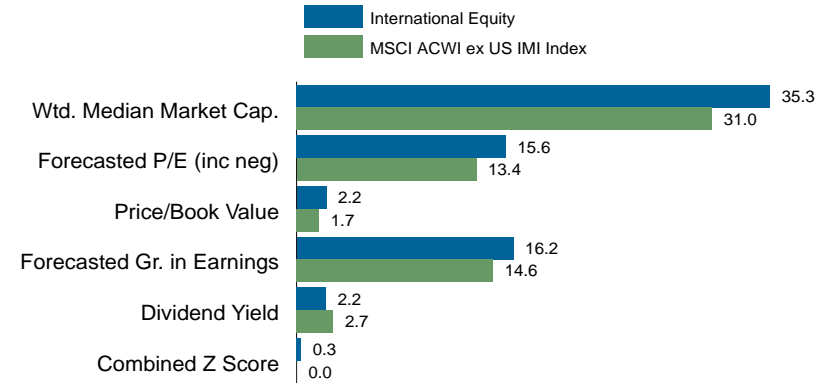
The Domestic Equity Target is comprised of 51.1% S&P/BARRA Value, 22.2% S&P 500, 15.6% Russell 2000 and 11.1% S&P/BARRA Growth through 12/31/1999, 80% S&P 500 and 20% Russell 2000 from 12/31/1999 to 06/30/2010, and 100% Russell 3000 from 06/30/2010 to present.

The Large Cap Blended Benchmark consists of the S&P 500 Index to 7/31/2021 and the Russell 1000 Index thereafter.

International Equity Composite



Portfolio Characteristics as of March 31, 2022

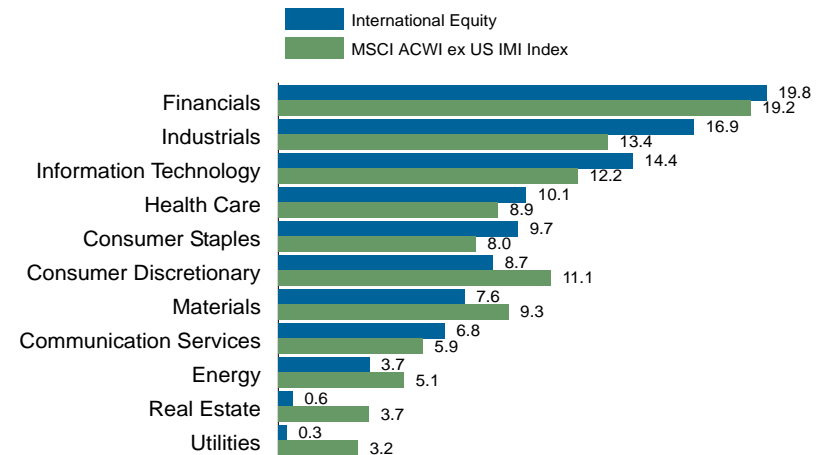


Region & Style Exposure Matrix

Holdings as of March 31, 2022

	<div> <div>International Equity</div> <div>MSCI ACWI ex US IMI Index</div> </div>			
Europe	11.5% (25)	27.5% (46)	19.7% (46)	58.6% (117)
N. America	--	1.8% (3)	5.0% (7)	6.8% (10)
Pacific	0.8% (2)	3.5% (11)	7.3% (21)	11.6% (34)
Emerging	3.2% (25)	8.4% (40)	11.5% (51)	23.0% (116)
Total	15.4% (52)	41.2% (100)	43.4% (125)	100.0% (277)
	Value	Core	Growth	Total

Sector Allocation as of March 31, 2022



International Equity Composite

Returns and Rankings for Periods Ended March 31, 2022

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
International Equity - Net	(9.67)	(5.69)	5.75	5.90	5.99
International Equity - Target	(5.60)	(1.27)	7.87	6.92	5.78
MSIM - Net	(6.41)	(2.90)	6.04	5.84	5.71
MSCI EAFE Index	(5.91)	1.16	7.78	6.72	6.27
Ranking vs. Non-US Developed Value Equity	99	95	74	33	43
Artisan - Net	(12.06)	(4.92)	6.59	7.58	6.38
MSCI EAFE Index	(5.91)	1.16	7.78	6.72	6.27
Ranking vs. Non-US Developed Growth Equity	66	60	90	64	68
TimesSquare - Net	(14.34)	(12.40)	4.28	--	--
MSCI EAFE Small Cap	(8.53)	(3.63)	8.51	7.42	8.30
Ranking vs. International Small Cap Equity	76	90	91	--	--
FIAM Select EM - Net	(11.25)	--	--	--	--
MSCI Emerging Markets Index	(6.97)	(11.37)	4.94	5.98	3.36
Ranking vs. Emerging Markets Equity	67	--	--	--	--

Returns and Rankings for Periods Ended March 31, 2022

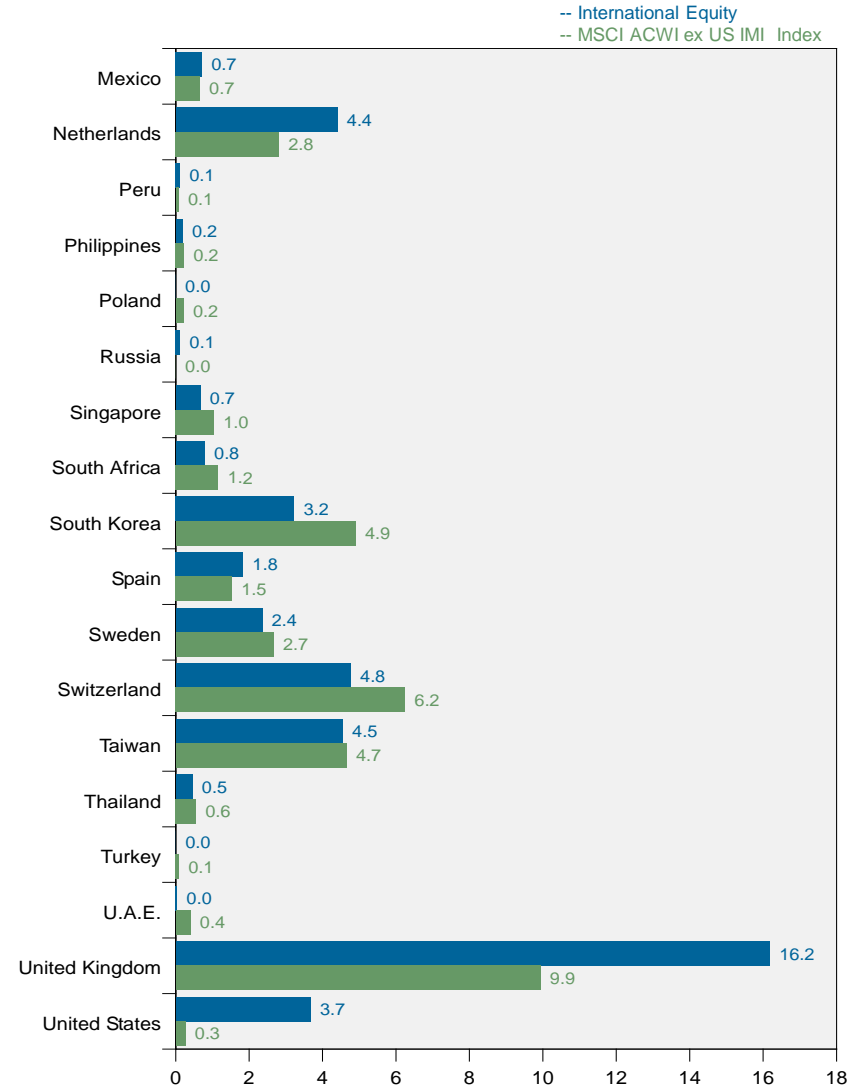
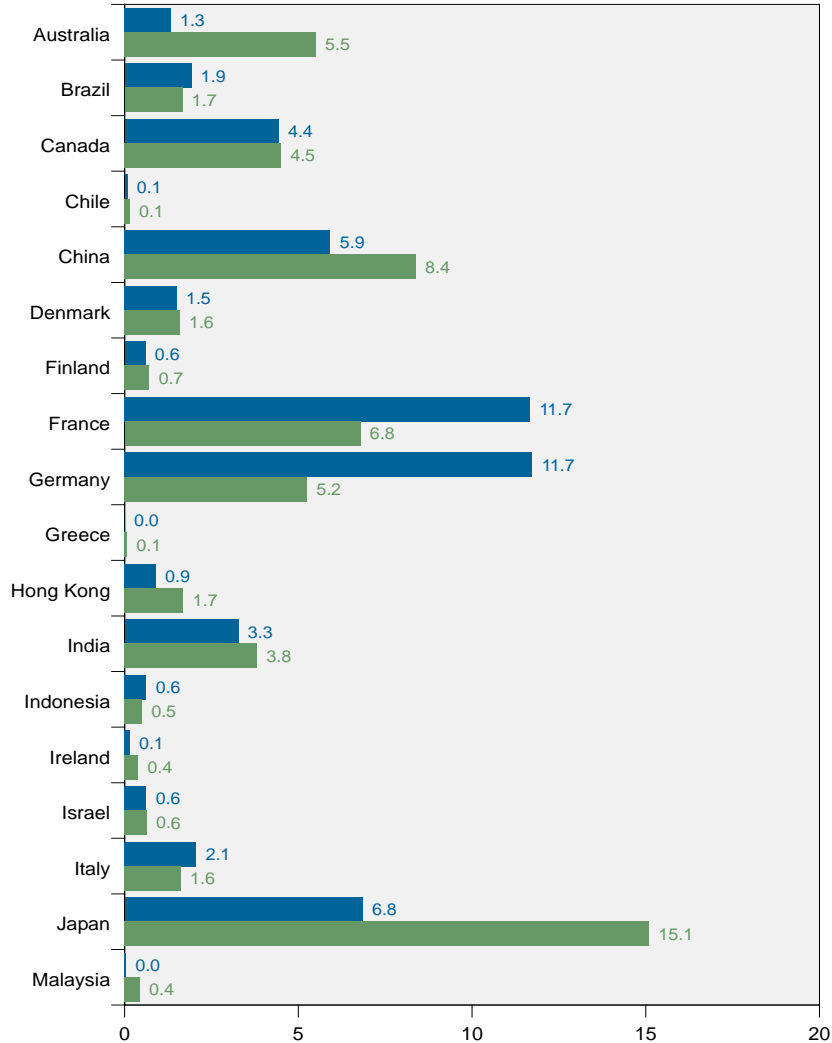
	1 Qtr. 2022	2021	2020	2019	2018
International Equity - Net	(9.67)	5.28	10.79	23.52	(13.50)
International Equity - Target	(6.43)	7.37	12.40	21.83	(15.06)
MSIM - Net	(6.41)	4.70	12.00	20.93	(13.46)
MSCI EAFE Index	(5.91)	11.26	7.82	22.01	(13.79)
Ranking vs. Non-US Developed Value Equity	99	98	1	34	14
Artisan - Net	(12.06)	8.59	8.09	29.62	(10.53)
MSCI EAFE Index	(5.91)	11.26	7.82	22.01	(13.79)
Ranking vs. Non-US Developed Growth Equity	66	60	96	26	13
TimesSquare - Net	(14.34)	2.18	13.87	--	--
MSCI EAFE Small Cap	(8.53)	10.10	12.34	24.96	(17.89)
Ranking vs. International Small Cap Equity	76	93	39	--	--

- The International Equity composite underperformed on a relative basis during the last quarter and year.
 - Morgan Stanley: underweights to energy and materials and an overweight to IT detracted from relative returns.
 - Artisan: underperformance was primarily due to their growth bias in a strong value market as well as holdings in two Russian stocks (Sberbank and Norilsk Nickel).
 - TimesSquare: quality growth style detracted along with stock selection in materials and industrials.
 - FIAM: Chinese stock selection plus an overweight to Russian stock Yandex weighed on relative returns.

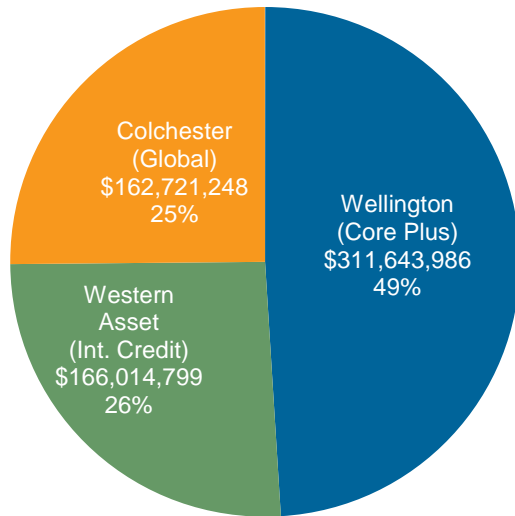
The International Equity Target is comprised of 100% MSCI EAFE Index through 06/30/2010, and 100% MSCI ACWI ex-US IMI Index thereafter.

International Equity Composite

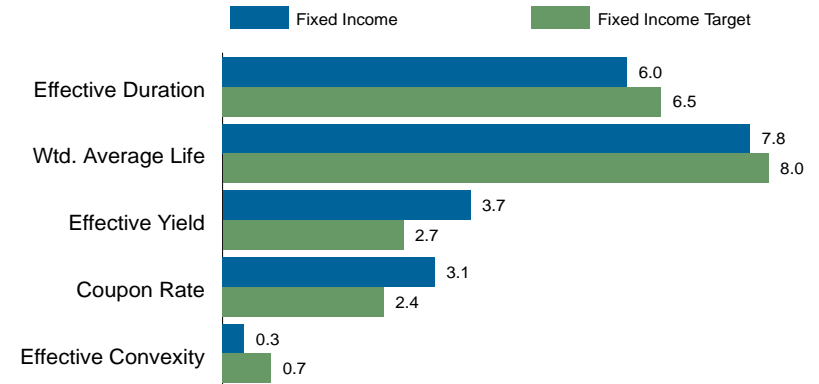
Country Allocations as of March 31, 2022



Fixed Income Composite

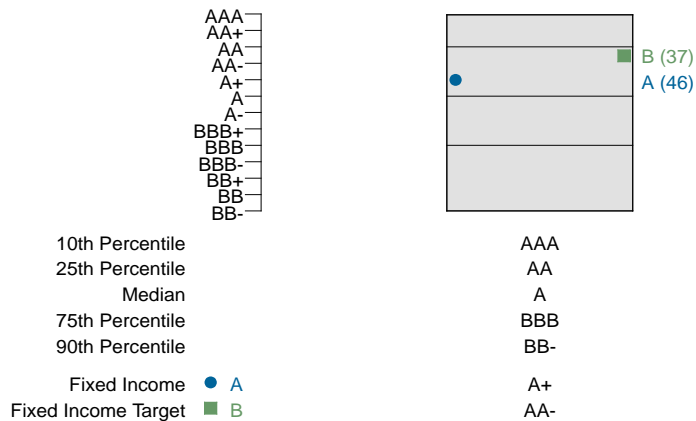


Portfolio Characteristics as of March 31, 2022

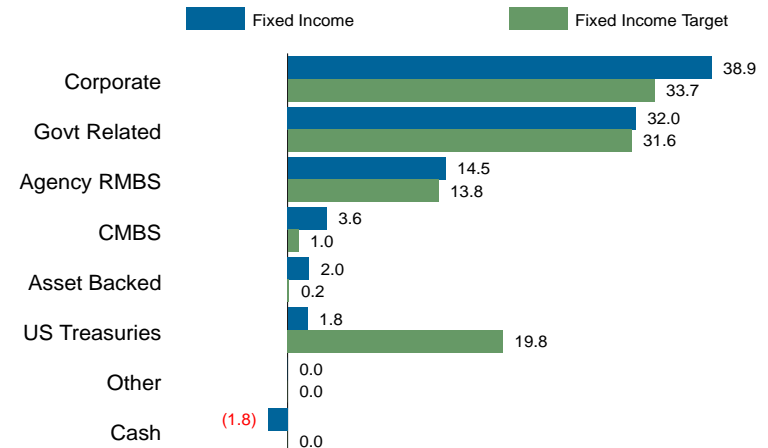


Quality Rating as of March 31, 2022

Total Domestic Fixed Income Database



Sector Allocation as of March 31, 2022



Fixed Income Composite

Returns and Rankings for Periods Ended March 31, 2022

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Fixed Income - Net	(5.64)	(4.56)	2.64	2.79	2.91
Fixed Income Target	(5.85)	(5.03)	1.36	2.02	1.90
Wellington - Net	(6.29)	(3.99)	2.79	3.00	3.36
Bloomberg Aggregate Index	(5.93)	(4.15)	1.69	2.14	2.24
Ranking vs. Core Plus Fixed Income	85	77	41	41	44
Western Asset - Net	(5.25)	(4.17)	3.12	3.15	3.40
Bloomberg Intermediate Credit Index	(5.07)	(4.05)	2.10	2.47	2.74
Ranking vs. Intermediate Fixed Income	96	59	1	1	1
Colchester - Net	(5.22)	(7.24)	0.76	1.56	--
FTSE World Government Bond Index	(6.46)	(7.74)	(0.09)	1.27	0.34
Ranking vs. Global Fixed Income (Uhedged)	29	72	55	61	--

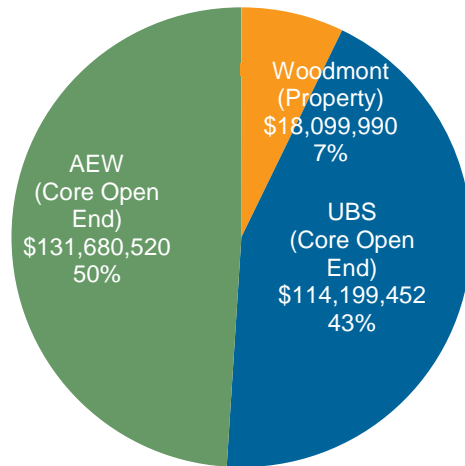
Returns and Rankings for Calendar Years

	1 Qtr. 2022	2021	2020	2019	2018	2017
Fixed Income - Net	(5.64)	(2.50)	11.47	8.60	(0.34)	5.15
Fixed Income Target	(5.85)	(2.79)	8.10	8.21	(0.17)	4.55
Wellington - Net	(6.29)	(0.71)	9.93	9.95	(0.39)	4.87
Bloomberg Aggregate Index	(5.93)	(1.54)	7.51	8.72	0.01	3.54
Ranking vs. Core Plus Fixed Income	85	63	26	44	42	41
Western Asset - Net	(5.25)	(0.43)	10.03	9.82	(0.35)	4.13
Bloomberg Intermediate Credit Index	(5.07)	(1.03)	7.08	9.52	0.01	3.67
Ranking vs. Intermediate Fixed Income	96	2	2	1	99	2
Colchester - Net	(5.22)	(8.01)	11.12	7.55	(0.90)	8.20
FTSE World Government Bond Index	(6.46)	(6.97)	10.11	5.90	(0.84)	7.49
Ranking vs. Global Fixed Income (Uhedged)	29	97	26	59	19	35

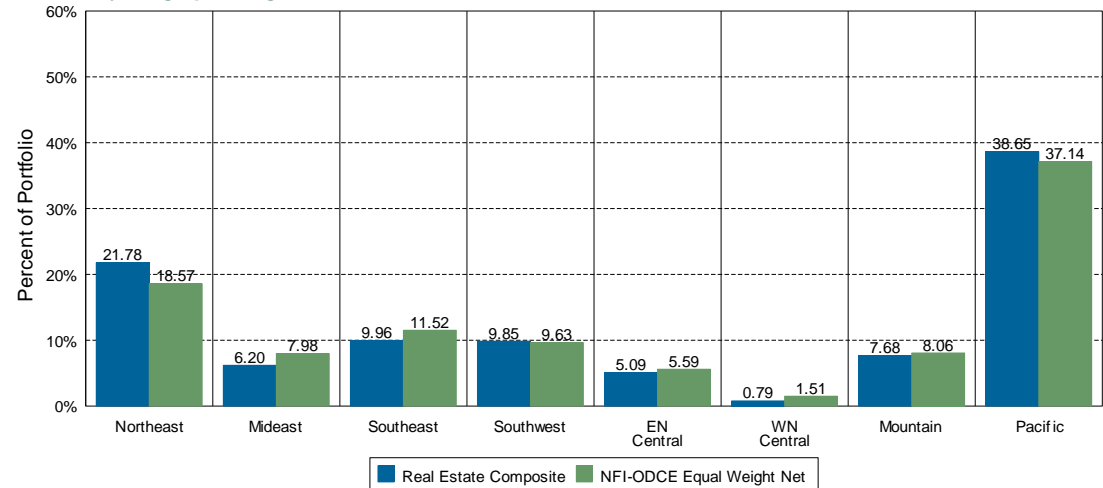
- The Fixed Income composite outperformed its target over the last quarter and year.
 - Wellington: underperformed last quarter due to an overweight to mortgage backed securities and an allocation to emerging markets debt.
 - Western Asset: issue selection within the energy sector detracted as well as an overweight to lower quality.
 - Colchester: outperformed due to underweights to US, UK, and Eurozone bonds as these markets were negatively impacted by the inflation and policy environment. Currency overweights in Colombian and Mexican Pesos were positive as Latin countries benefitted from their commodity exposure.

Fixed Income Target is comprised of 100% Bloomberg Aggregate Index until 03/31/2014 and 50% Bloomberg Aggregate Index, 25% Bloomberg Intermediate Credit Index, and 25% FTSE World Government Bond Index thereafter.

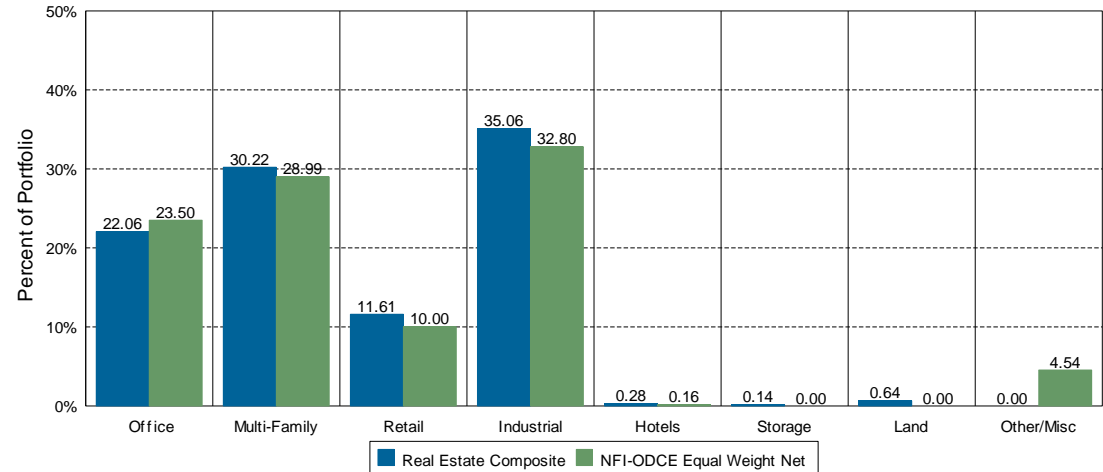
Real Estate Composite



Diversification by Geographic Region as of March 31, 2022



Diversification by Property Type as of March 31, 2022



Real Estate Composite

Returns and Rankings for Periods Ended March 31, 2022

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Real Estate - Net	6.96	22.57	6.62	6.31	10.64
Real Estate Target	7.77	28.69	11.11	9.46	10.22
AEW Core Property Trust - Net	7.78	27.96	10.82	9.16	--
NFI-ODCE Equal Wt Net Index	7.77	28.69	11.11	9.46	10.24
Ranking vs. Core Open End Funds	9	29	43	53	--
UBS Trumbull Property Fund - Net	7.21	22.38	4.46	4.88	--
NFI-ODCE Equal Wt Net Index	7.77	28.69	11.11	9.46	10.24
Ranking vs. Core Open End Funds	14	79	94	94	--

Returns and Rankings for Calendar Years

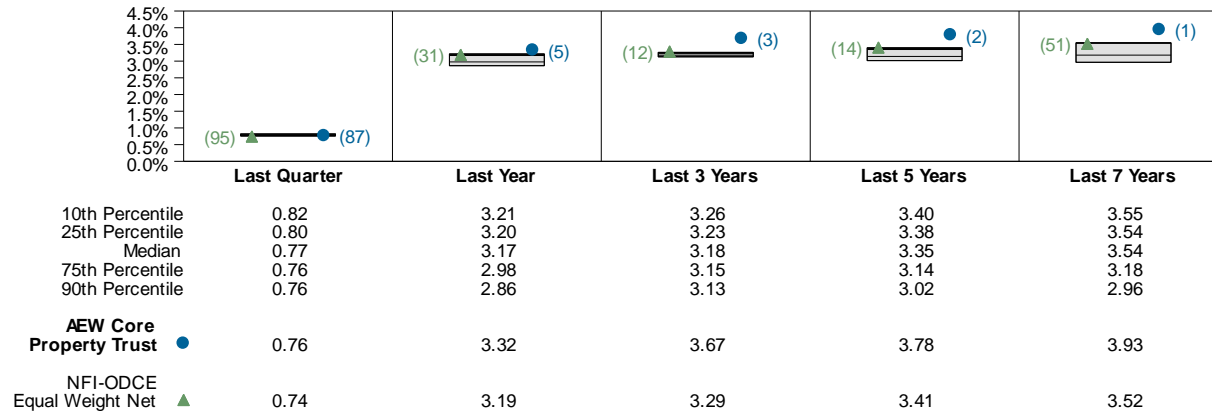
	1 Qtr. 2022	2021	2020	2019	2018	2017
Real Estate - Net	6.96	16.16	(2.29)	0.64	6.46	5.66
Real Estate Target	7.77	21.88	0.75	5.18	7.30	6.92
AEW Core Property Trust - Net	7.78	21.00	0.57	5.29	6.77	6.99
NFI-ODCE Equal Wt Net Index	7.77	21.88	0.75	5.18	7.30	6.92
Ranking vs. Core Open End Funds	9	56	66	71	76	43
UBS Trumbull Property Fund - Net	7.21	15.41	(4.68)	(2.88)	6.12	5.32
NFI-ODCE Equal Wt Net Index	7.77	21.88	0.75	5.18	7.30	6.92
Ranking vs. Core Open End Funds	14	89	96	96	89	85

- The AEW Core Property Trust's current leverage is 23.4% (NFI-ODCE leverage: 22.1%).
 - All sectors produced positive returns for the quarter. The industrial sector continues to lead performance for AEW. Multi-family was also a strong contributor followed by retail and office.
- The UBS Trumbull Property Fund's current leverage is 16.7%.
 - During the quarter, the industrial sector contributed the most to returns followed by multi-family, office, and retail.

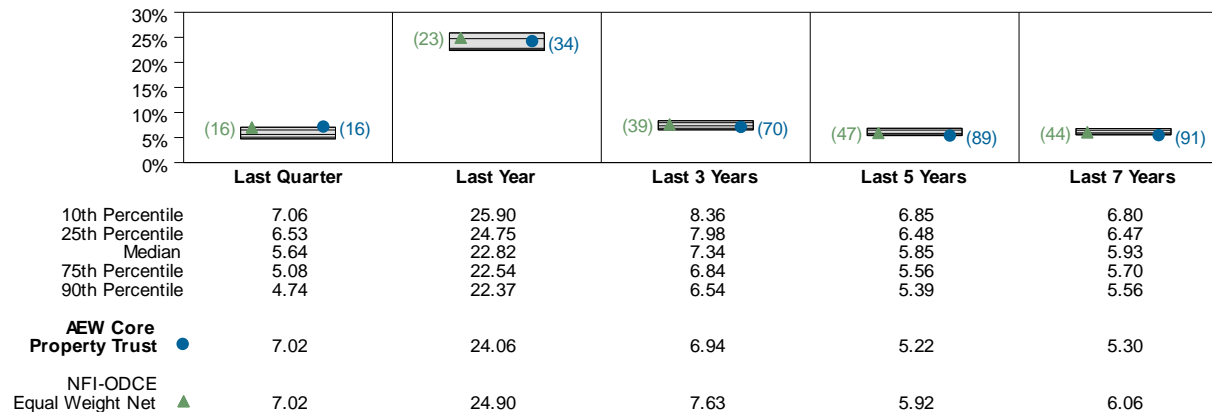
The Real Estate Target is comprised of the NCREIF Classic Index through 12/31/2004, NCREIF Total Property Index through 12/31/2014, and the NFI-ODCE Equal Weight Net thereafter.

AEW Income and Appreciation Returns

Income Rankings vs Callan Real Estate ODCE Periods ended March 31, 2022

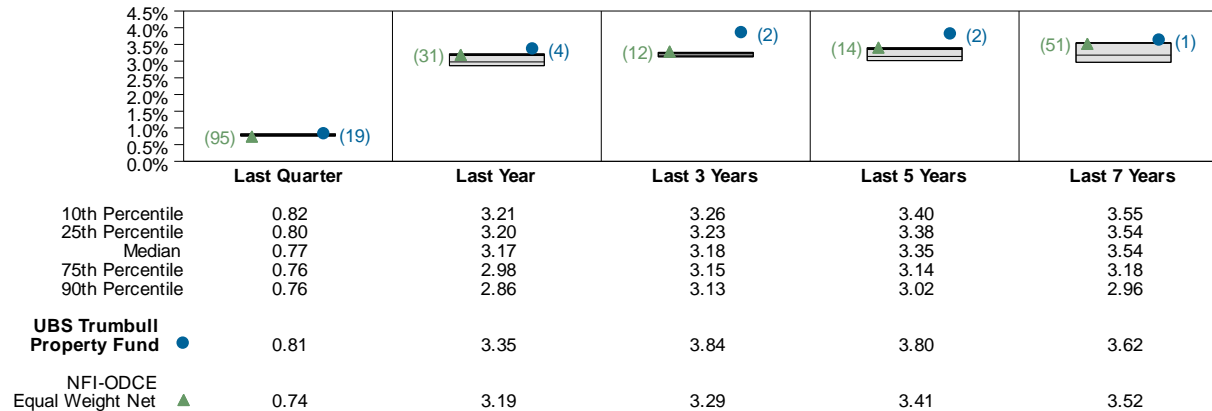


Appreciation Rankings vs Callan Real Estate ODCE Periods ended March 31, 2022

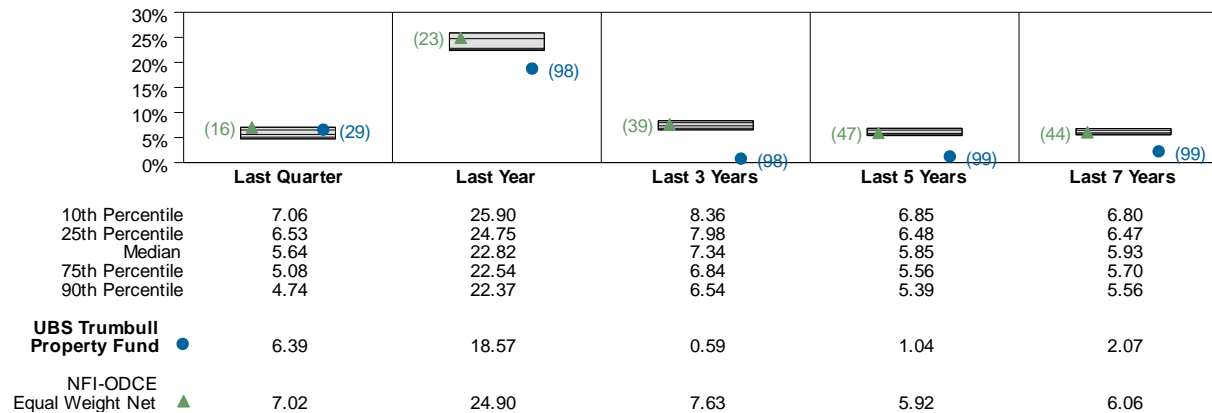


UBS Income and Appreciation Returns

Income Rankings vs Callan Real Estate ODCE Periods ended March 31, 2022



Appreciation Rankings vs Callan Real Estate ODCE Periods ended March 31, 2022

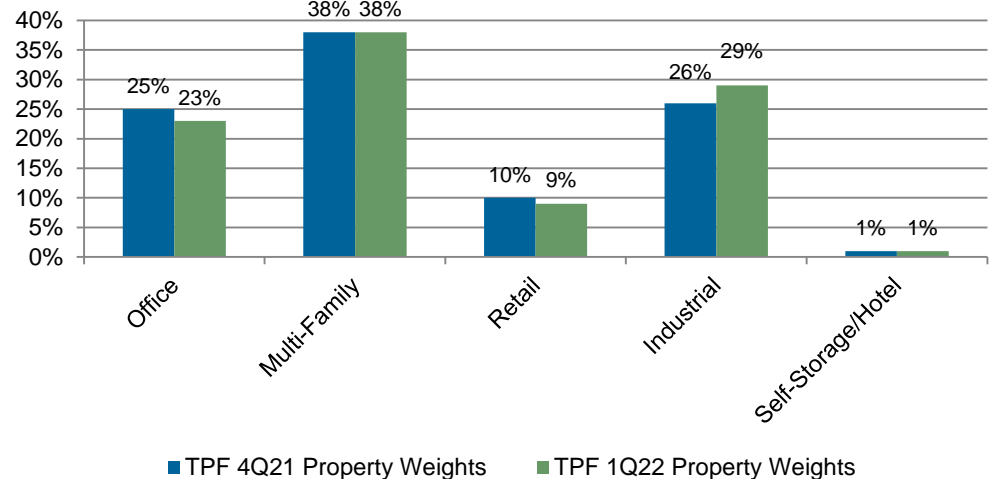


UBS Trumbull Property Fund Snapshot

As of March 31, 2022

As of 1Q 2022	
Gross Asset Value	\$18.2B
Net Asset Value	\$15.0B
Leverage	16.7%
Number of Investments	157
Number of Investors	441
Redemption Queue	\$7.3 billion
1Q22 Redemption Queue Payout	\$600 million
Contribution Queue	\$0 million

Property Type Weights (Change from Prior Quarter)



- The Fund has a current redemption pool of \$7.3 billion. The Fund made a 1Q 2022 redemption payment of \$600 million, following 2021 redemption payments of \$1.5 billion, above the initial plan of \$1.2 billion. The Fund has successfully sold 56% of the Non-Strategic Asset pool to date. Including the targeted dispositions in 2022, the Non-Strategic Asset pool is expected to be 81% divested by year-end 2022, with the final dispositions occurring in 2023.
- MCERA submitted a partial redemption request for \$20 million in January 2020 and has now received the full amount.
- Callan does not recommend submitting further redemption requests at this time. We want to discuss the overall real assets structure first and will do so at an upcoming meeting.
- For now, we are comfortable with UBS as they carry out the fund restructuring and sell off their non-strategic assets and would like to continue to monitor that progress.

NFI-ODCE Funds - Net of Fee Returns

As of March 31, 2022

Fund Name	Last Quarter	Last Year	Last 3 Years	Last 5 Years
AEW Core Property Trust	7.78%	27.96%	10.82%	9.16%
AFL-CIO Building Investment Trust	3.72%	15.83%	5.80%	5.91%
ARA Core Property Fund	8.20%	28.40%	10.83%	9.30%
ASB Allegiance Real Estate Fund	7.67%	20.06%	8.10%	7.11%
Bailard Real Estate Fund	8.84%	29.30%	13.65%	12.80%
Barings Core Property Fund	6.58%	24.95%	9.79%	8.67%
BentallGreenOak BGO Diversified	5.84%	26.30%	10.16%	8.84%
BlackRock U.S. Core Property Fund	7.73%	24.76%	10.91%	9.64%
CBRE U.S. Core Partners LP	10.92%	43.76%	17.21%	13.87%
CIM Urban Income Investments	9.05%	31.32%	11.96%	11.05%
Clarion Lion Property Fund	6.86%	28.27%	11.54%	10.16%
DWS RREEF America REIT II	6.16%	29.00%	11.62%	9.80%
GWL U.S. Property Fund L.P.	9.45%	33.45%	12.68%	10.07%
Heitman America Real Estate Trust	9.05%	31.79%	10.19%	8.72%
Intercontinental U.S. Real Estate Investment Fund	5.59%	23.99%	10.88%	9.97%
Invesco Core Real Estate USA	6.35%	26.15%	9.39%	8.54%
J.P. Morgan Strategic Property Fund	6.26%	25.27%	9.66%	8.09%
LaSalle US Property Fund	12.59%	30.62%	11.75%	9.94%
MetLife Core Property Fund	7.85%	33.43%	13.16%	10.98%
Morgan Stanley Prime Property Fund	7.01%	27.55%	11.31%	9.97%
NYL Madison Core Property Fund	10.22%	33.25%	13.21%	11.04%
PGIM PRISA	6.41%	26.26%	10.74%	9.37%
Principal U.S. Core Property	7.33%	28.59%	11.42%	10.04%
Stockbridge Smart Markets Fund	10.59%	35.51%	14.27%	11.51%
TA Realty	8.18%	36.88%	16.25%	--
UBS Trumbull Property Fund	7.21%	22.38%	4.46%	4.88%

NFI-ODCE Funds - Gross of Fee All Sector Returns

As of March 31, 2022

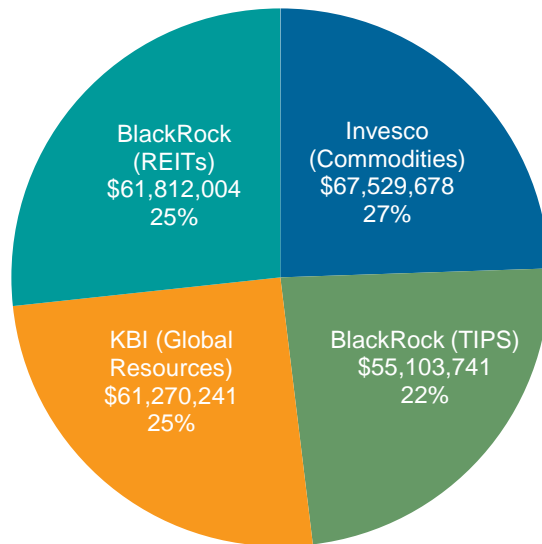
Fund	Retail 1Q 2022	Apartment 1Q 2022	Industrial 1Q 2022	Office 1Q 2022
AEW	3.95%	5.91%	12.11%	1.36%
AFL-CIO	-0.26%	3.91%	10.63%	2.23%
ARA	2.41%	6.13%	13.91%	1.85%
ASB	0.66%	1.35%	16.64%	1.26%
Bailard	2.90%	8.20%	17.28%	-6.51%
BGO	1.18%	2.95%	10.03%	-1.39%
Blackrock	1.49%	3.79%	14.62%	2.25%
CBRE	1.30%	9.18%	9.53%	2.27%
CIM Group	2.59%	4.71%	15.47%	2.02%
Clarion	0.73%	5.82%	10.95%	0.72%
DWS	1.71%	3.26%	11.43%	-0.25%
Everwest	2.20%	3.47%	14.26%	0.13%
Heitman	1.97%	5.10%	16.44%	2.09%
Intercontinental	2.16%	4.49%	8.18%	1.86%
Invesco	2.56%	4.26%	11.16%	1.25%
JP Morgan	3.02%	6.52%	9.62%	1.13%
MetLife	2.63%	6.75%	9.48%	2.71%
MSIM	1.05%	7.77%	10.01%	0.72%
NYLIM	1.33%	9.06%	11.09%	2.39%
PGIM	2.21%	3.99%	11.51%	0.96%
Principal	2.64%	4.65%	9.65%	1.24%
Stockbridge	3.97%	5.06%	16.22%	2.81%
TA Realty	2.46%	6.19%	10.88%	-4.00%
UBS	0.61%	6.55%	12.89%	2.16%

NFI-ODCE Funds - Gross of Fee Retail Returns (trailing 4 quarters)

As of March 31, 2022

Fund Allocation					
Fund	Weight	Retail 1Q 2022	Retail 4Q 2021	Retail 3Q 2021	Retail 2Q 2021
AEW	13.60%	3.95%	3.00%	2.17%	2.01%
AFL-CIO	11.95%	-0.26%	2.11%	2.57%	1.14%
ARA	13.80%	2.41%	2.26%	2.01%	1.23%
ASB	10.71%	0.66%	-5.77%	1.35%	0.27%
Bailard	9.62%	2.90%	3.26%	3.51%	1.75%
BGO	1.95%	1.18%	2.93%	3.14%	1.99%
BlackRock	13.89%	1.49%	1.73%	1.55%	1.06%
CBRE	6.70%	1.30%	3.26%	1.69%	1.35%
CIM Group	8.74%	2.59%	3.89%	5.38%	-2.93%
Clarion	7.09%	0.73%	2.26%	-0.91%	0.90%
DWS	11.85%	1.71%	1.54%	0.23%	1.20%
Everwest	10.99%	2.20%	1.05%	1.66%	1.38%
Heitman	14.48%	1.97%	2.50%	0.91%	0.35%
Intercontinental	1.53%	2.16%	3.23%	3.25%	3.04%
Invesco	13.00%	2.56%	2.15%	2.28%	1.07%
JP Morgan	16.86%	3.02%	2.73%	3.30%	1.08%
MetLife	9.12%	2.63%	1.75%	2.75%	1.65%
MSIM	8.80%	1.05%	0.65%	0.83%	0.21%
NYLIM	2.51%	1.33%	9.38%	3.28%	1.06%
PGIM	10.02%	2.21%	1.33%	2.04%	1.44%
Principal	10.31%	2.64%	1.70%	1.71%	1.12%
Stockbridge	15.99%	3.97%	3.42%	3.02%	1.48%
TA Realty	5.07%	2.46%	0.94%	4.97%	0.24%
UBS	9.00%	0.61%	-1.46%	2.44%	0.29%

Real Assets Composite



- The BlackRock TIPS and REITs Funds are passive.
- The Invesco Balanced Risk Commodities Fund underperformed during the quarter due to its strategic underweight to energy, including natural gas and oil whose prices have soared.
- Two of three strategies within the KBI Global Resources Solutions Fund (agribusiness and energy solutions) produced positive absolute returns for the quarter. Water underperformed. Performance versus the index has detracted due to the lack of traditional energy exposure that dominates the index.

Returns and Rankings for Periods Ended March 31, 2022

	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Real Assets - Net	2.09	18.76	14.25	9.94
Real Assets Target	8.85	28.06	12.77	9.30
BlackRock TIPS Index Fund - Net	(2.97)	4.30	6.29	4.53
Bloomberg US TIPS Index	(3.02)	4.29	6.22	4.43
Ranking vs. Real Returns Database	65	53	53	47
BlackRock REIT Index Fund - Net	(3.74)	27.62	9.84	9.05
S&P Dow Jones US Select REIT	(3.71)	27.72	9.90	8.89
MSCI US REIT Index	(4.06)	26.20	11.14	9.65
Ranking vs. Real Estate Mutual Funds	20	15	81	74
Invesco Commodity Fund - Net	14.70	28.13	14.07	7.80
Bloomberg Commodity Index	25.55	49.25	16.12	9.00
Ranking vs. Commodities Funds	99	95	87	94
KBI Global Resources Fund - Net	0.75	14.32	21.81	15.03
S&P Global Natural Resources Index	16.59	29.96	14.57	11.73
KBI Custom Benchmark	(1.56)	1.58	21.35	14.83

Returns and Rankings Calendar Years

	1 Qtr. 2022	2021	2020	2019
Real Assets - Net	2.09	23.96	11.08	15.51
Real Assets Target	8.85	25.60	0.57	14.08
BlackRock TIPS Index Fund - Net	(2.97)	5.92	11.17	8.49
Bloomberg US TIPS Index	(3.02)	5.96	10.99	8.43
Ranking vs. Real Returns Database	65	41	18	32
BlackRock REIT Index Fund - Net	(3.74)	45.80	(11.21)	23.08
S&P Dow Jones US Select REIT Index	(3.71)	45.91	(11.20)	23.10
MSCI US REIT Index	(4.06)	43.06	(7.57)	25.84
Ranking vs. Real Estate Mutual Funds	20	17	96	89
Invesco Commodity Fund - Net	14.70	19.68	7.58	5.49
Bloomberg Commodity Index	25.55	27.11	(3.12)	7.69
Ranking vs. Commodities Funds	99	87	1	81
KBI Global Resources Fund - Net	0.75	24.08	29.17	24.81
S&P Global Natural Resources Index	16.59	24.40	(0.05)	16.41
KBI Custom Benchmark	(1.56)	7.22	46.83	28.74

The Real Assets Target is comprised of 25% Bloomberg US TIPS Index, 25% Bloomberg Commodity Index, 25% S&P Dow Jones US Select REIT Index, and 25% S&P Global Natural Resources Index.

The KBI Custom Benchmark consists of 1/3 each: S-Network Global Water Index, Wilderhill New Energy Global Innovation Index, and Dax Global Agribusiness Index.

Private Equity Portfolio (Data as of 12/31/21 not yet available)

- 86% Paid-In through 9/30/21.
- When ranked against the Thomson-Cambridge Private Equity Database, MCERA is ranked in the second quartile for Total Value to Paid-In (TVPI) basis.
- The total portfolio is well diversified by vintage year and investment type.

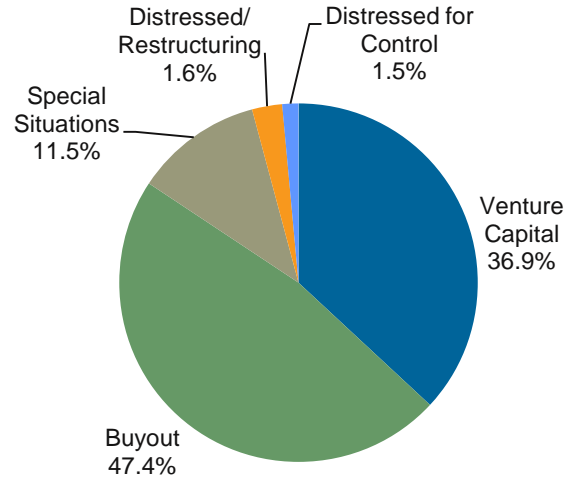
	September 30, 2021	Quarter Change	June 30, 2021
Summary			
Vintage Years	14 in 2008-2021		14 in 2008-2021
# Total Partnerships	457	56	401
# Active Partnerships	444	50	394
# Liquidated Partnerships	13	6	7
Changes in Value			
Capital Commitments	\$450,000,000	-	\$450,000,000
Paid-In Capital	\$386,691,808	\$5,860,537	\$380,831,271
Uncalled Capital	\$77,021,251	\$(5,453,889)	\$82,475,140
% Paid-In	85.93%	1.30%	84.63%
Distributed Capital	\$380,097,447	\$29,334,359	\$350,763,089
Net Asset Value	\$452,600,383	\$8,591,330	\$444,009,053
Total Realized and Unrealized Value	\$832,697,830	\$37,925,689	\$794,772,142
Ratios and Performance			
Distributions to Paid-In Capital (DPI)	0.98x	0.06x	0.92x
Residual Value to Paid-In Capital (RVPI)	1.17x	0.00x	1.17x
Total Value to Paid-In Capital (TVPI)	2.15x	0.07x	2.09x
Quartile Ranking	2nd		2nd
Net IRR	17.93%	0.30%	17.63%
Additional Performance Metrics			
Distribution Rate, as % of Beginning NAV		6.61%	
Unrealized Gain/(Loss), Dollars		\$32,065,151	
Unrealized Gain/(Loss), %		7.22%	

Quartile Rankings against the All Private Equity, All Regions Refinitiv/Cambridge Database.

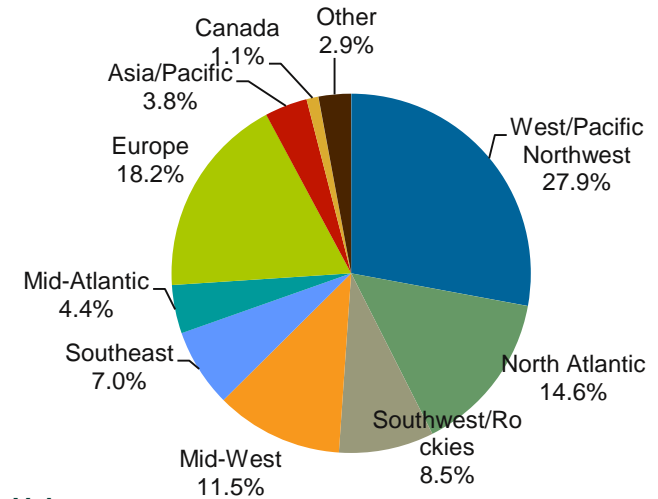
Uncalled capital above does not reflect currency fluctuations for Pathway's investments in foreign partnerships.

Private Equity Portfolio Exposure

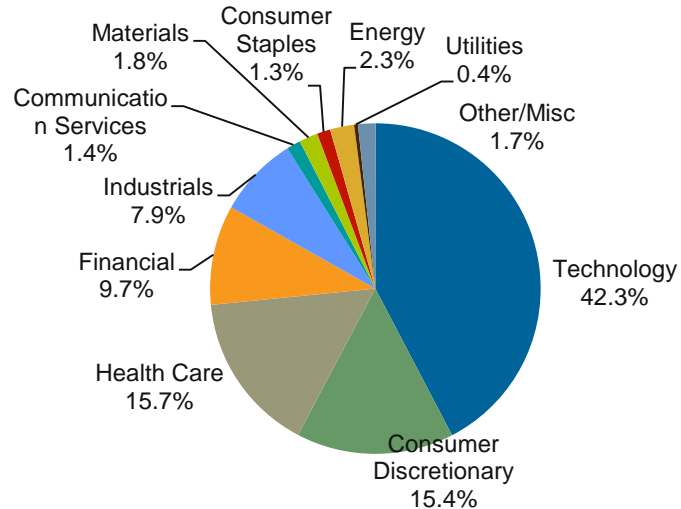
Strategy Mix by Net Asset Value



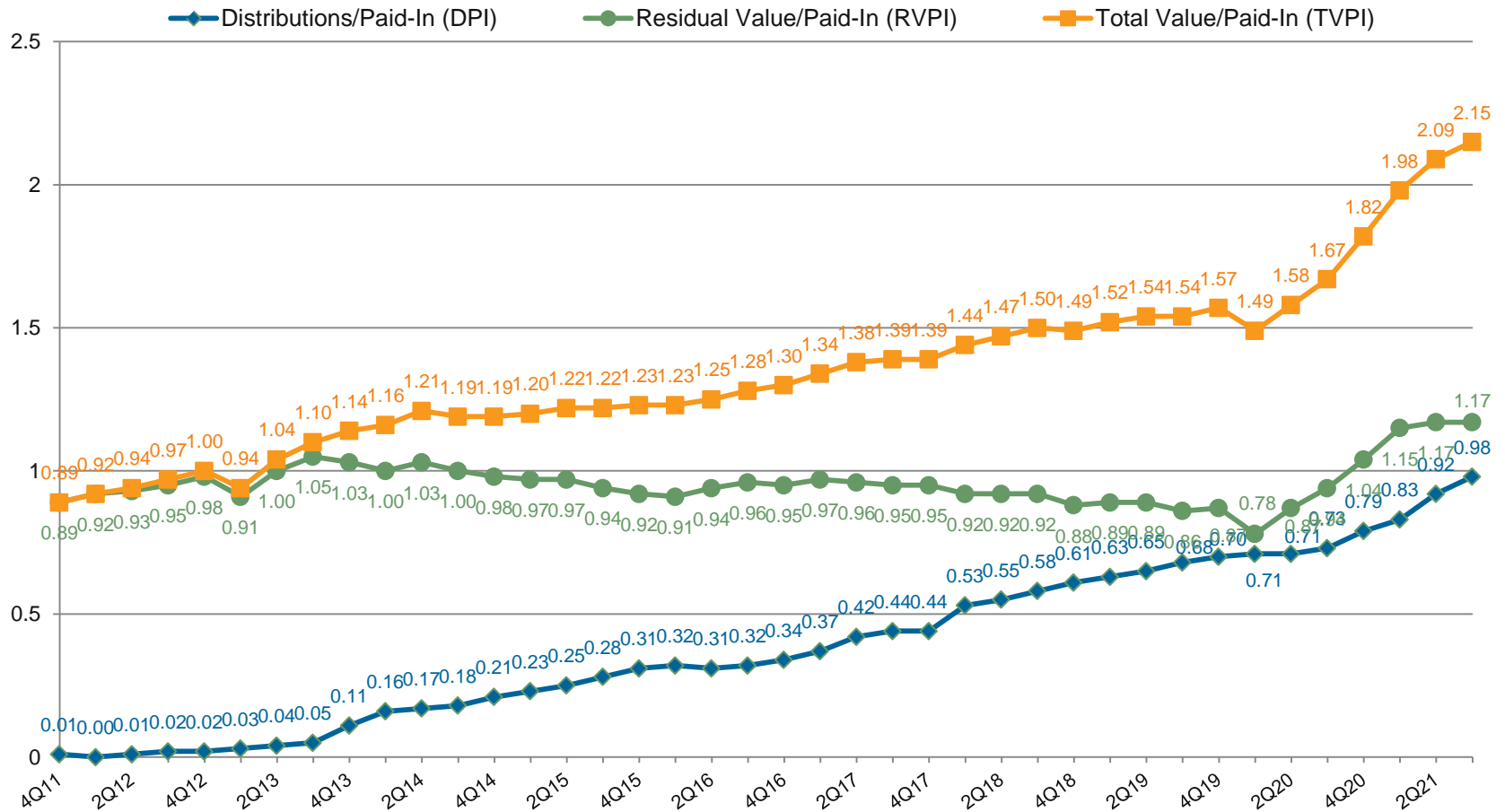
Geographic Mix by Net Asset Value



Industry Mix by Net Asset Value



Private Equity Ratios – Changes Over Time



Opportunistic Portfolio

- 43.4% Paid-In through 03/31/2022.
- The total portfolio is diversified by industry type and geographic location.

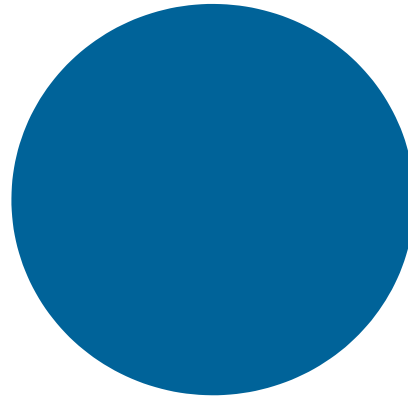
	March 31, 2022	Quarter Change	December 31, 2021
Summary			
Vintage Year	2020		2020
# Total Partnerships	183	-	183
# Active Partnerships	183	-	183
# Liquidated Partnerships	0	-	0
Changes in Value			
Capital Commitments	\$100,000,000	-	\$100,000,000
Paid-In Capital	\$43,368,450	\$8,375,000	\$34,993,450
Uncalled Capital	\$56,704,505	\$(8,375,000)	\$65,079,505
% Paid-In	43.37%	8.38%	34.99%
Distributed Capital	\$386,587	-	\$386,587
Net Asset Value	\$47,181,674	\$8,220,772	\$38,960,902
Total Realized and Unrealized Value	\$47,568,261	\$8,220,772	\$39,347,489
Ratios and Performance			
Distributions to Paid-In Capital (DPI)	0.01x	(0.00)x	0.01x
Residual Value to Paid-In Capital (RVPI)	1.09x	(0.03)x	1.11x
Total Value to Paid-In Capital (TVPI)	1.10x	(0.03)x	1.12x
Quartile Ranking	3rd		2nd
Net IRR	11.87%	(4.89%)	16.76%
Additional Performance Metrics			
Distribution Rate, as % of Beginning NAV		0.00%	
Unrealized Gain/(Loss), Dollars		\$(154,228)	
Unrealized Gain/(Loss), %		(0.40%)	

Quartile rankings against the 2020 vintage Control Oriented Distressed and Credit Opportunities Refinitiv/Cambridge Database.

Opportunistic Portfolio Exposure

Strategy Mix by Net Asset Value

Special Situations
100.0%



Industry Mix by Net Asset Value

Other/Misc	54.44%
Financial	15.66%
Consumer Discretionary	11.48%
Communication Services	7.08%
Energy	4.24%
Industrials	2.40%
Consumer Staples	1.83%
Materials	1.64%
Utilities	0.67%
Technology	0.56%

Geographic Mix by Net Asset Value

United States	65.51%
Europe	20.42%
Other	2.65%
Asia/Pacific	8.29%
Latin America & Caribbean	2.88%
Middle East	0.26%

**Marin County Employees' Retirement Association
Defined Benefit Plan**

Managers	May 2022 Market Value	Fiscal Year To Date 7/1/21 -5/31/22	Calendar Year To Date 1/1/22 - 5/31/22
Domestic Equity	\$974,286,765	-5.7%	-13.0%
<i>Russell 3000 Index</i>		-6.0%	-13.9%
Large Cap Equity	\$727,952,687	-4.7%	-13.7%
SSGA Russell 1000 Index	\$695,391,529	-4.7%	-13.7%
<i>SSGA Blended Benchmark</i>		-4.8%	-13.7%
Parametric Large Cap Overlay	\$32,561,158		
Small Cap Equity	\$246,334,078	-7.7%	-10.8%
Dimensional Fund Advisors	\$230,202,040	-7.7%	-10.8%
<i>Russell 2000 Index</i>		-18.5%	-16.6%
Parametric Small Cap Overlay	\$16,132,038		
International Equity	\$679,765,752	-17.3%	-16.0%
<i>MSCI ACWI ex-US IMI Index</i>		-12.0%	-11.1%
Morgan Stanley	\$187,559,925	-13.1%	-10.8%
Artisan Partners	\$181,624,727	-15.2%	-17.3%
<i>MSCI EAFE Index</i>		-9.3%	-11.3%
TimesSquare	\$102,950,731	-23.6%	-21.4%
<i>MSCI EAFE Small Cap Index</i>		-14.6%	-15.4%
FIAM/Parametric Emerging Markets*	\$104,772,783	-20.7%	-16.5%
<i>MSCI Emerging Markets Index</i>		-20.0%	-11.8%
Parametric International Overlay	\$102,857,585		
Fixed Income	\$710,322,643	-9.8%	-9.1%
<i>Blended Benchmark</i>		-9.7%	-9.2%
Wellington	\$299,546,338	-9.2%	-9.5%
<i>Bloomberg US Aggregate Index</i>		-8.9%	-8.9%
Western Asset	\$161,748,704	-7.8%	-7.2%
<i>Bloomberg US Intermediate Credit Index</i>		-7.3%	-6.9%
Colchester	\$153,029,551	-13.1%	-10.3%
<i>FTSE World Government Bond Index</i>		-13.9%	-12.0%
Parametric Fixed Income Overlay	\$95,998,050		

*FIAM was funded in multiple tranches beginning in mid-August 2021 and completed in mid-October 2021.

All market values and returns shown are preliminary and subject to revision.

**Marin County Employees' Retirement Association
Defined Benefit Plan**

Managers	May 2022 Market Value	Fiscal Year To Date 7/1/21 -5/31/22	Calendar Year To Date 1/1/22 - 5/31/22
Public Real Assets	\$212,741,113	6.9%	-1.5%
<i>Blended Benchmark</i>		14.5%	6.4%
BlackRock TIPS Index Fund	\$53,436,584	-2.0%	-5.9%
<i>Bloomberg US TIPS Index</i>		-2.0%	-6.0%
BlackRock REIT Index Fund	\$54,888,371	1.4%	-14.5%
<i>DJ S&P US Select REIT Index</i>		1.4%	-14.5%
Invesco Balanced Risk Commodities Fund	\$70,921,594	24.3%	19.0%
<i>Bloomberg Commodities Index</i>		37.2%	29.3%
KBI Global Resources Fund	\$58,599,059	2.9%	-3.4%
<i>S&P Global Natural Resources Index</i>		21.5%	16.7%
Parametric Real Assets Overlay	-\$25,104,495		
Real Estate(1)	\$258,751,930	24.5%	12.0%
<i>NFI-ODCE Equal Weight Net(1)</i>		30.0%	13.4%
Woodmont	\$18,099,990	-	-
UBS Trumbull Property Fund	\$110,011,244	-	-
AEW Core Property Trust	\$123,022,984	-	-
Parametric Real Estate Overlay	\$7,617,712		
Private Equity(2)	\$308,485,456	10.6%	0.0%
Abbott ACE VI	\$55,174,382	-	-
Abbott ACE VII	\$57,557,321	-	-
Abbott AP 2016	\$76,340,478	-	-
Abbott AP 2017	\$20,887,942	-	-
Abbott AP 2021	\$3,727,695	-	-
Pathway PPEF 2008	\$73,375,248	-	-
Pathway PPEF I-7	\$47,660,901	-	-
Pathway PPEF I-8	\$78,755,727	-	-
Pathway PPEF I-9	\$18,036,063	-	-
Pathway PPEF I-10	\$11,849,150	-	-
Parametric Private Equity Overlay	-\$134,879,451		
Opportunistic(3)	\$38,960,902	2.1%	-0.6%
CarVal Credit Value Fund V	\$7,395,245	-	-
Fortress Credit Opportunities Fund V Expansion	\$9,755,785	-	-
Varde Dislocation Fund	\$21,809,872	-	-
Total Fund	\$3,183,314,561	-3.8%	-8.3%

(1)Market values as of March 31, 2022. FYTD and YTD returns use MCERA's and ODCE's pro-rata performance of prior quarter.

(2)Market values as of March 31, 2022. FYTD and YTD returns use MCERA's pro-rata performance of prior quarter.

(3)Market values as of March 31, 2022. FYTD and YTD returns use MCERA's pro-rata performance of prior quarter.

All market values and returns shown are preliminary and subject to revision.