

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

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

March 17, 2021 – 9:00 a.m.

This meeting will be held via videoconference pursuant to Executive Order N-25-20, issued by Governor Newsom on March 12, 2020, Executive Order N-29-20, issued by Governor Newsom on March 17, 2020, and Executive Order N-35-20, issued by Governor Newsom on March 21, 2020.

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. MANAGER REPORTS

1. Manager Overview – Jim Callahan, Callan LLC
2. TimesSquare – International Small Cap Equity – Magnus Larsson, Jenny Chou

C. NEW BUSINESS

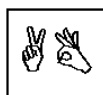
1. Emerging Markets Manager Candidates (Action) – Jim Callahan, Alex Hoy, Callan LLC
Consider, discuss, and take possible action regarding potential candidates for managing the emerging markets portfolio
2. Capital Markets Projections and Asset Allocation Review – Jay Kloepper, Callan LLC
3. Investment Manager Personnel Updates
 - a. Colchester Global Investors
 - b. UBS Realty Investors LLC

D. INVESTMENT CONSULTANT QUARTERLY REPORT

1. Summary Report as of December 31, 2020
2. Flash Performance Update

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>

B.1 Manager Overview

There is no backup for this agenda item.

TIMESSQUARE CAPITAL MANAGEMENT, LLC



An International Small Cap
Portfolio Review Presentation To

**Marin County Employees'
Retirement Association**

Magnus Larsson, Director, Portfolio Manager
Jenny Chou, Senior Vice President, Product Manager

March 17, 2021

TIMESSQUARE CAPITAL MANAGEMENT, LLC

Magnus Larsson

Director, Portfolio Manager



Jenny Chou

Senior Vice President, Product Manager



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TimesSquare Capital Management, LLC

TIMESSQUARE CAPITAL MANAGEMENT, LLC

- Investment manager focused on providing investment solutions primarily for the institutional marketplace
- Experienced team of international and U.S. equity professionals
- Time-tested investment strategies driven by internally generated research
- Significant employee ownership

We are growth equity specialists.

TIMESSQUARE CAPITAL MANAGEMENT, LLC

Management Committee

Grant Babyak
CEO, Portfolio Manager

Tony Rosenthal, CFA
Portfolio Manager

Stephen Green, CFA
Head of Business Development

International Equities	U.S. Equities	Trading	Technology/Operations/ Administration	Marketing & Product Management
Magnus Larsson <i>Head of International Equities/ Portfolio Manager</i>	Seth Bienstock <i>Analyst</i>	Joshua Bischoff <i>U.S. & International Trader</i>	David Cielusniak <i>Chief Operating Officer & Chief Compliance Officer</i>	Jeffrey Braemer, CFA <i>Product Management</i>
Daniel De Jesus, CFA <i>Analyst</i>	Sonu Chawla, CFA <i>Analyst</i>	Timothy Corliss <i>International Trader</i>	Carl Jano <i>Chief Financial Officer</i>	Jenny Chou <i>Product Management</i>
David Hirsh <i>Assistant Portfolio Manager/ Analyst</i>	Kenneth Duca, CFA <i>Portfolio Manager/Analyst</i>	William Garrison <i>U.S. Trader</i>	Joseph McComb <i>Operations & Systems</i>	Siobhan Flannery <i>Marketing</i>
David Oh <i>Portfolio Manager/Analyst</i>	David Ferreiro, Ph.D. <i>Analyst</i>	Adam Salomon, CMT <i>U.S. Trader</i>	John Metzner <i>Technology Support</i>	Brenda Le, CFA <i>Marketing</i>
Robert Purcell <i>Analyst</i>	Mark Grzynski <i>Analyst</i>		Alexa Tortora <i>Compliance Manager</i>	Joy Ragland <i>Client Servicing</i>
	Bret Jones, CFA <i>Analyst</i>		Valerie Vazquez <i>Office Manager</i>	Michael Ray <i>Product Management</i>
	Michael Russell <i>Analyst</i>			Leona Yang, CFA <i>Product Management</i>
	Edward Salib <i>Analyst</i>			
	Jason Shum, CFA <i>Analyst</i>			

GROWTH EQUITY STRATEGIES

As of December 31, 2020

U.S.	Total Assets (\$M)
Small Cap Growth	\$4,289
Small/Mid Cap Growth	\$2,474
Mid Cap Growth	\$5,557
FOCUS Growth	\$98
All-Cap Growth	\$23
International/Global	
International Small Cap	\$3,431
Global Small Cap	\$319
Emerging Markets Small Cap	\$29
Global Health Care	\$5
\$16.22 Billion	

REPRESENTATIVE CLIENT LIST

Financial Services

AMG Funds LLC
 CIBC Private Wealth Management
 GuideStone Capital Management
 Nomura Asset Management Co., Ltd.
 Nordea Asset Management
 Oppenheimer Asset Management
 Prudential Financial
 Raymond James
 Steadyhand Investment Management Ltd.
 The Vanguard Group, Inc.
 Vantagepoint Funds
 Wells Fargo Advisors

Public

City of Tallahassee
 HEB Manitoba
 Indiana Public Retirement System
 Massachusetts Pension Reserves Investment Management Board
 Public Employees Retirement Association of New Mexico
 Oakland County Employees' Retirement System
 Oklahoma City Employee Retirement System
 Oklahoma Municipal Retirement Fund
 Metropolitan St. Louis Sewer District
 Regional Transportation Authority
 Tennessee Consolidated Retirement System
 Worldwide Assurance for Employees of Public Agencies

Corporate

AMETEK
 Baxter International
 Blue Cross and Blue Shield of Minnesota
 Boeing
 Bombardier Trust Canada, U.K., U.S.
 Cox Enterprises
 DuPont and Related Companies Defined
 Contribution Plan Master Trust
 Hallmark Cards
 Jefferson Regional Medical Center
 McLaren Health Care Corporation
 Pacific Gas and Electric Company
 PCA Retirement & Benefits, Inc.
 Providence St. Joseph Health
 Sutter Health
 ViacomCBS, Inc.

Endowment & Foundation

Allegheny College
 Erie Community Foundation
 Holland Hospital
 Howard University
 Idaho Endowment Fund Investment Board
 Kemper & Ethel Marley Foundation
 Realdania
 San Diego Foundation
 Truth Initiative Foundation
 William and Mary Foundation

Taft-Hartley

Carpenters Pension Trust Fund for Northern California
 IWA – Forest Industry Pension Plan
 Laborers' District Council & Contractors Pension Fund of Ohio
 Maritime Association - I.L.A. Pension Fund
 National Electric Benefit Fund
 Northeast Carpenters Annuity Fund
 Operating Engineers Pension Trust Fund of Washington, DC
 San Diego Electrical Industry Trust
 UFCW Rocky Mountain Unions & Employers Pension Plan

Please see the Appendix for Disclosures regarding this list.

TimesSquare International Small Cap Strategy

INTERNATIONAL SMALL CAP INVESTMENT TEAM

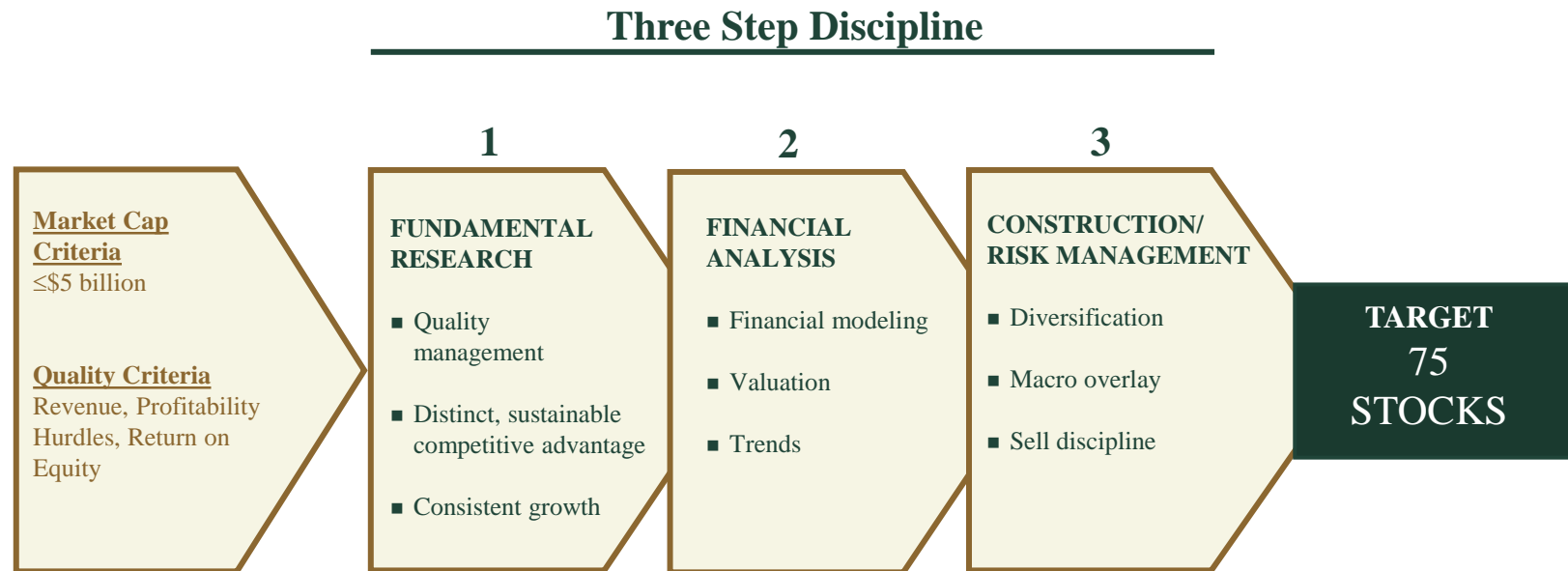
Portfolio Manager	Credentials	Investment Focus	Years of Experience
Magnus S. Larsson	BS/University of Orebro, Sweden BA/University of Orebro, Sweden	Global / Europe	25
Analysts			
Daniel De Jesus, CFA	BS/University of Pennsylvania	Global Emerging Markets	9
David A. Hirsh	BA/Lafayette College	Europe	22
David L. Oh	MBA/Harvard University BA/Yale University	Global Emerging Markets	18
Robert G. Purcell	MBA/Columbia University BS/University of Vermont	Asia	25

INTERNATIONAL SMALL CAP INVESTMENT PHILOSOPHY

“We believe that our fundamental equity growth research skills, which place a particular emphasis on the assessment of management quality, an in-depth understanding of business models, and valuation discrepancies, enable us to build a diversified portfolio of international small cap stocks that is designed to generate positive risk-adjusted relative returns.”

INTERNATIONAL SMALL CAP INVESTMENT PROCESS

Bottom-Up Research Driven



INTERNATIONAL SMALL CAP INVESTMENT PROCESS

Identifying “Quality Growth Businesses”

► Quality management

- Clear goals and viable business model
- Alignment of interests with shareholders
- Experience and integrity
- Meaningful proportion of net worth tied to company
- Track record of success
- Prudent allocation of capital



► Distinct, sustainable competitive advantage

- Proprietary products, services, distribution/manufacturing advantages
- Demonstrated franchise value
- High barriers to entry
- Relatively few competitors
- Brand name recognition
- Patents

► Consistent growth

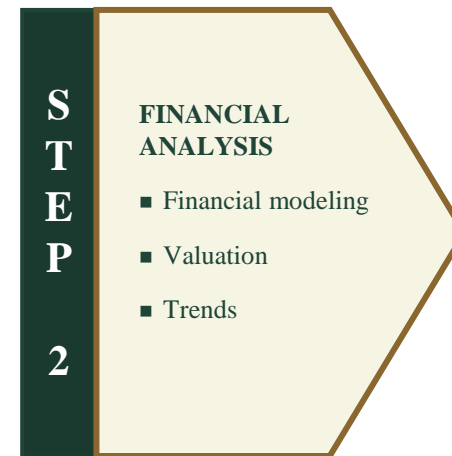
- Both top line (revenue) and bottom line (earnings)
- Strong probability of retaining or widening margins
- High proportion of recurring revenues
- Sales to many customers in multiple markets
- Strong balance sheet, conservative accounting, sufficient cash flow
- Structural growth factors

INTERNATIONAL SMALL CAP INVESTMENT PROCESS

Financial Analysis

Financial modeling

- Traditional financial analysis (income statement, balance sheet, cash flow)
- Detailed ROE breakdown (DuPont analysis)
- Models based on internally generated growth forecasts



Valuation

- Absolute valuation – DCF model (revenue, margins, working capital, CAPEX, tax, & WACC)
- Relative valuation – Multiples (price/earnings, price/revenue, price/cash flow)
- Longevity of growth rate

Trends

- Macro economics
- Earnings and price movements
- Insider transactions

INTERNATIONAL SMALL CAP INVESTMENT PROCESS

Construction/Risk Management

► Diversification

- Prudent diversification among regions and sectors
- Target 75 stocks in a portfolio
- Top 10 positions targeted to represent 25% to 35% of the portfolio



► Macro overlay

- Develop macro view
- Understand macro themes resulting from bottom-up positions
- Reconcile macro view with bottom-up positions

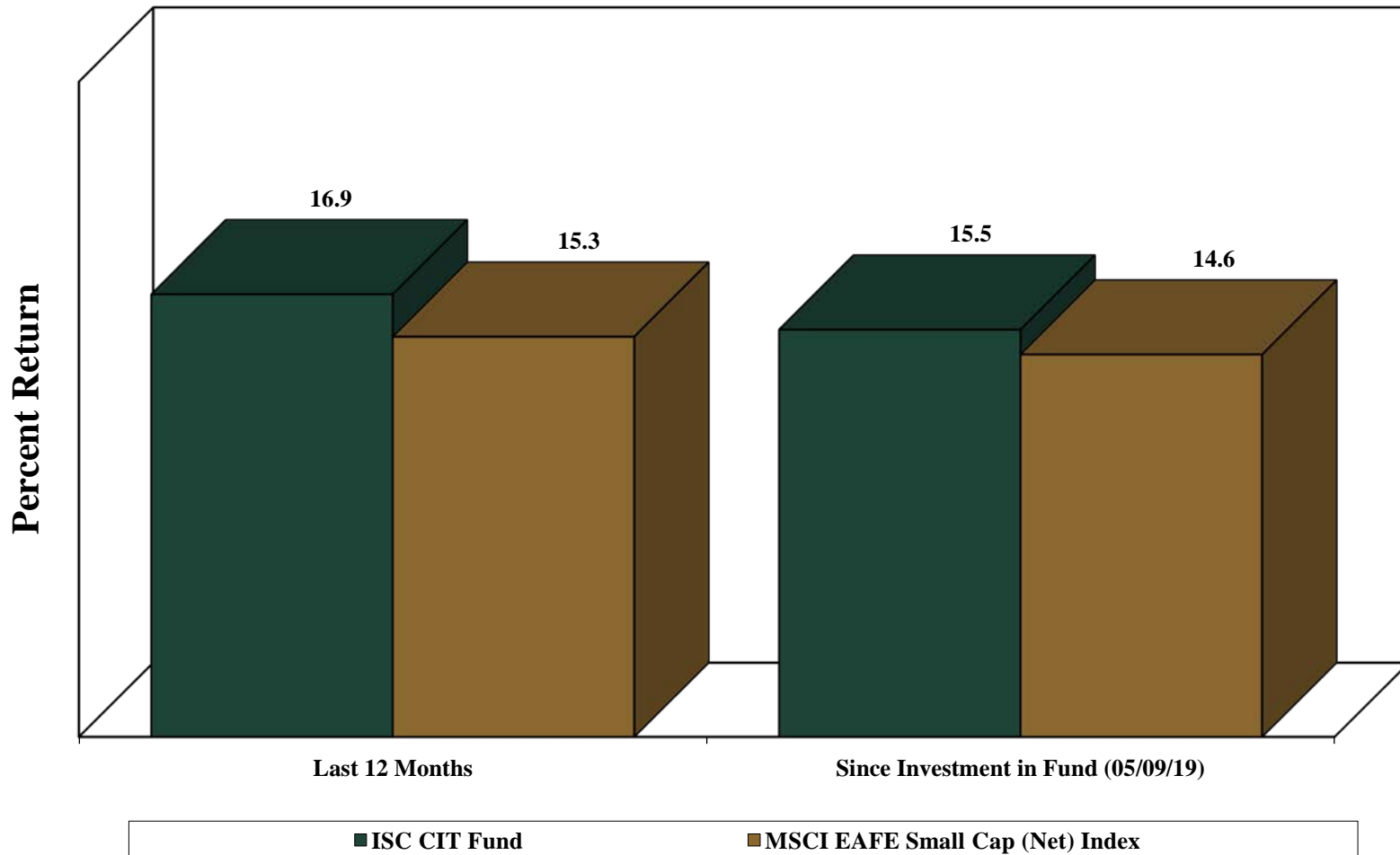
► Sell discipline

- Operating objectives not met
- Management unable to sustain competitive advantage
- Anticipated deterioration in fundamentals
- Reasons for purchase changed
- Overvaluation
- Prudent profit-taking/trimming

TimesSquare International Small Cap CIT Fund

TIMESQUARE INTERNATIONAL SMALL CAP CIT FUND

Total Returns (Net) for the Period Ending January 31, 2021*



Market Value January 31, 2021: \$128,230,934

Please see Appendix for Additional Disclosures.

**Inception Date: 5/9/19*

Returns are Annualized greater than 1 YR

MSCI EAFE SMALL CAP (NET) INDEX REGION BREAKDOWN

MSCI EAFE SMALL CAP (NET) INDEX (AS OF 01/31/21)

<u>MSCI REGIONS</u>	<u>I-T-D* INDEX RETURN (%)</u>	<u>INDEX WEIGHT (%)</u>	<u>ISC CIT FUND WEIGHT (%)</u>
Europe	29.6	55.3	55.5
Japan	20.3	28.5	28.2
Americas	N/A	0.0	0.6
Asia/Pacific Ex Japan	27.0	13.9	5.8
Middle East	32.6	2.4	0.0
Emerging Markets	N/A	0.0	9.8
Index Total	26.6	100	100

*Inception Date: 5/9/19

Please see Appendix for Additional Disclosures.

Source: FactSet

TIMESQUARE INTERNATIONAL SMALL CAP CIT FUND

COUNTRY ALLOCATION

As of January 31, 2021

<i>Region / Country</i>	<i>Fund (%)</i>	<i>MSCI EAFE SC (%)</i>	<i>Region / Country</i>	<i>Fund (%)</i>	<i>MSCI EAFE SC (%)</i>
<i>Europe</i>	55.5	55.3	<i>Americas</i>	0.6	0.0
Austria	0.0	1.0	Canada	0.6	0.0
Belgium	0.8	1.5			
Denmark	2.0	1.6	<i>Asia / Pacific Ex Japan</i>	5.8	13.9
Finland	0.8	1.7	Australia	5.2	9.0
France	7.2	3.2	Hong Kong	0.0	2.0
Germany	3.7	5.5	New Zealand	0.7	1.0
Ireland	0.6	0.5	Singapore	0.0	1.9
Italy	7.6	2.7			
Netherlands	0.0	2.7	<i>Middle East</i>	0.0	2.4
Norway	1.3	2.2	Israel	0.0	2.4
Portugal	0.0	0.2			
Spain	2.8	2.0	<i>Emerging Markets</i>	9.8	0.0
Sweden	5.9	7.4	Brazil	2.1	0.0
Switzerland	2.0	5.4	China	4.9	0.0
United Kingdom	20.7	17.6	Korea	0.8	0.0
			Taiwan	2.0	0.0
<i>Japan</i>	28.2	28.5			
Japan	28.2	28.5			

The characteristics relate to the fund as of a particular point in time and should not be regarded as predictive. Data for the MSCI EAFE Small Cap Index is sourced from FactSet. Please see Appendix for Additional Disclosures.

TIMESQUARE INTERNATIONAL SMALL CAP CIT FUND

ATTRIBUTION HIGHLIGHTS: ITD* THRU JANUARY 31, 2021

Performance Contribution by Region Relative to MSCI EAFE Small Cap (Net) Index

MSCI REGIONS	REGION ALLOCATION	STOCK SELECTION	CURRENCY EFFECT	ACTIVE CONTRIBUTION
Europe	0.08	-1.42	0.02	-1.32
Japan	-0.10	4.70	-0.01	4.59
Americas	-0.22	0.00	0.01	-0.21
Asia/Pacific Ex Japan	0.10	-1.57	-0.01	-1.48
Middle East	-0.04	0.00	0.00	-0.05
Emerging Markets	0.16	0.00	-0.65	-0.49
TOTAL (Includes Cash & Equivalents)	0.26	1.54	-0.79	1.01

Greatest Contributors

Security	Region	Contrib to Equity Return %
Kobe Bussan Co., Ltd.	Japan	1.96
Sushiro Global Holdings Ltd.	Japan	1.60
St. James's Place	Europe	1.48
Open House Co., Ltd.	Japan	1.45
Altran Technologies	Europe	1.24

Greatest Detractors

Security	Region	Contrib to Equity Return %
Regional, S.A.B.	Emerging	-1.18
Jupiter Fund Management	Europe	-0.99
Prosegur Compania de Seguridad	Europe	-0.92
SAF-HOLLAND	Europe	-0.77
Challenger Ltd.	Asia/Pacific Ex Japan	-0.76

*Inception Date: 5/9/19

Please see Appendix for Additional Disclosures.

Source: FactSet

MSCI EAFE SMALL CAP (NET) INDEX SECTOR BREAKDOWN

MSCI EAFE SMALL CAP (NET) INDEX (AS OF 01/31/21)

GICS SECTORS	I-T-D* INDEX RETURN (%)	INDEX WEIGHT (%)	ISC CIT FUND WEIGHT (%)
Communication Services	31.5	4.5	9.8
Consumer Discretionary	25.1	12.9	6.1
Consumer Staples	17.3	5.8	6.7
Energy	-27.5	1.7	0.0
Financials	10.2	10.5	20.5
Health Care	46.3	7.3	10.8
Industrials	25.8	22.6	20.6
Information Technology	60.5	10.7	17.4
Materials	34.2	9.3	2.2
Real Estate	13.4	11.7	3.3
Utilities	46.5	2.9	2.4
Index Total	28.6	100	100

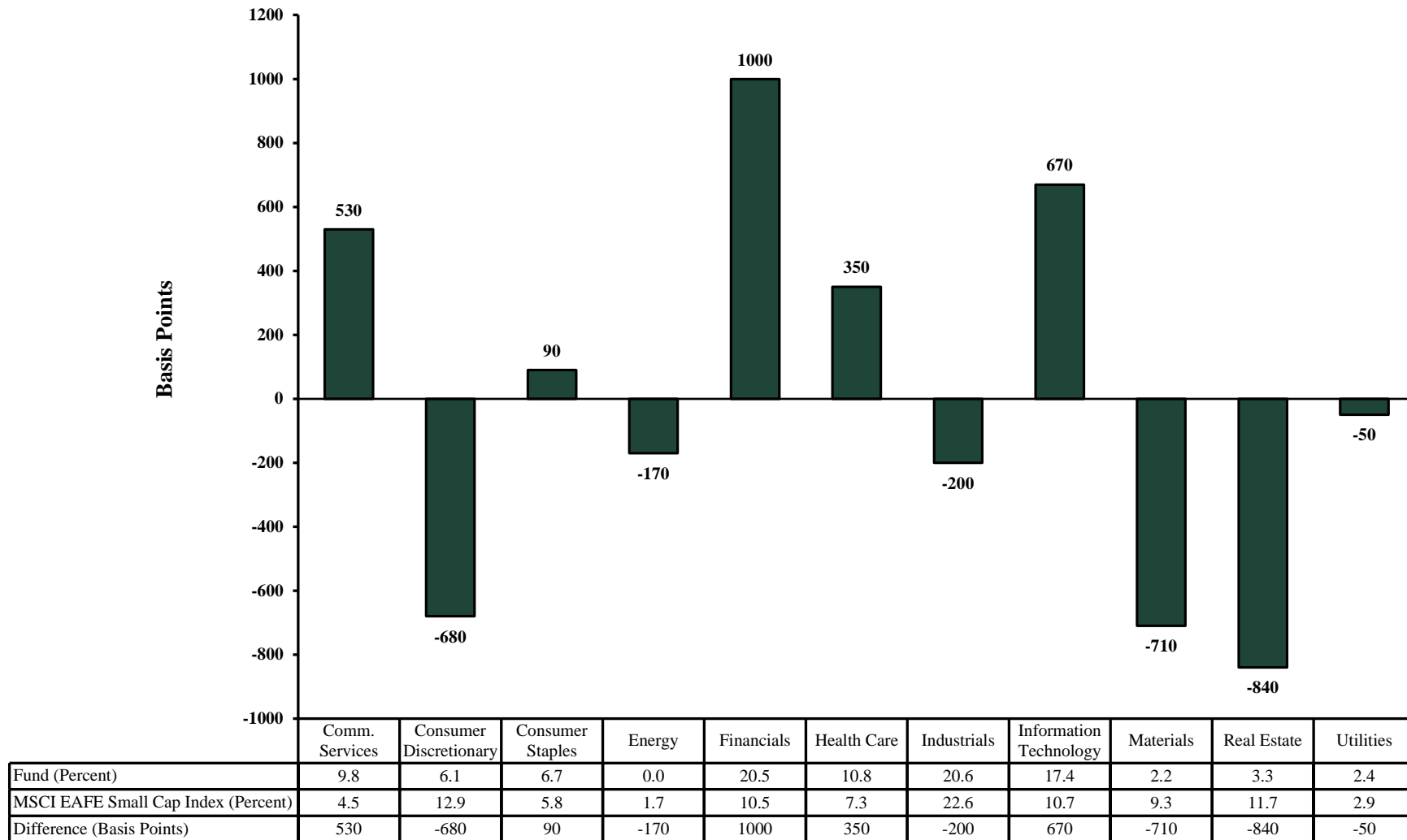
*Inception Date: 5/9/19

Please see Appendix for Additional Disclosures.

Source: FactSet

TIMESQUARE INTERNATIONAL SMALL CAP CIT FUND SECTOR OVER/UNDERWEIGHT

As of January 31, 2021



The characteristics relate to the fund as of a particular point in time and should not be regarded as predictive. Data for the MSCI EAFE Small Cap Index is sourced from FactSet. Please see Appendix for Additional Disclosures.

TIMESQUARE INTERNATIONAL SMALL CAP CIT FUND

ATTRIBUTION HIGHLIGHTS: ITD* THRU JANUARY 31, 2021

Performance Contribution by Sector Relative to MSCI EAFE Small Cap (Net) Index

GICS SECTORS	SECTOR ALLOCATION	STOCK SELECTION	CURRENCY EFFECT	ACTIVE CONTRIBUTION
Communication Services	0.16	0.27	0.01	0.43
Consumer Discretionary	-0.13	-0.05	-0.07	-0.25
Consumer Staples	-0.02	1.86	-0.08	1.75
Energy	0.41	0.28	0.02	0.72
Financials	-0.58	0.02	-0.04	-0.60
Health Care	0.14	-0.38	-0.28	-0.52
Industrials	-0.21	0.17	0.05	0.01
Information Technology	0.98	-1.77	-0.12	-0.91
Materials	-0.35	0.18	-0.08	-0.25
Real Estate	0.99	0.43	-0.07	1.35
Utilities	0.01	-0.68	0.01	-0.66
TOTAL (Includes Cash & Equivalents)	1.46	0.34	-0.79	1.01

Greatest Contributors

Security	Sector	Contrib to Equity Return %
Kobe Bussan Co., Ltd.	Consumer Staples	1.96
Sushiro Global Holdings Ltd.	Consumer Discretionary	1.60
St. James's Place	Financials	1.48
Open House Co., Ltd.	Consumer Discretionary	1.45
Altran Technologies	Information Technology	1.24

Greatest Detractors

Security	Sector	Contrib to Equity Return %
Regional, S.A.B.	Financials	-1.18
Jupiter Fund Management	Financials	-0.99
Prosegur Compania de Seguridad	Industrials	-0.92
SAF-HOLLAND	Consumer Discretionary	-0.77
Challenger Ltd.	Financials	-0.76

*Inception Date: 5/9/19

Please see Appendix for Additional Disclosures.

Source: FactSet

TIMESQUARE INTERNATIONAL SMALL CAP CIT FUND PORTFOLIO TEN LARGEST HOLDINGS

As of January 31, 2021

	Security	Country	Percent of Portfolio	Year of Initial Purchase
	St. James's Place	United Kingdom	3.1	2020
	FinecoBank	Italy	3.0	2015
	Electrocomponents	United Kingdom	3.0	2018
	Nordic Entertainment	Sweden	2.8	2016
	Keywords Studios	United Kingdom	2.4	2019
	Rubis	France	2.4	2018
	Kobe Bussan	Japan	2.3	2019
	Sushiro	Japan	2.3	2019
	Steadfast	Australia	2.3	2015
	Orpea	France	2.1	2012
			<hr/> 25.6	

Securities listed may not necessarily be held continuously in the portfolio, and may reflect prior ownership in their predecessor companies. Securities sold out of the strategy for more than 12 consecutive months will reflect the subsequent purchase date. It should not be assumed that any of the top holdings were or will prove profitable.

This information is supplemental to the International Small Cap Disclosures included in the Appendix. See Disclosures for additional information.

TIMESQUARE INTERNATIONAL SMALL CAP CIT FUND

PORTFOLIO CHARACTERISTICS

As of January 31, 2021

	International Small Cap CIT Fund	MSCI EAFE Small Cap Index
Weighted Average Market Capitalization (\$ Billions)	4.1	3.0
Weighted Average ROE ¹	18.5%	8.9%
P/E (FY1 Forecast) ¹	28.7x	19.4x
Historical EPS Growth (5 YR) ¹	20.9%	8.6%
Number of Holdings	83	2,357

Please see Appendix for Additional Disclosures.

¹ Source: FactSet Estimates

MARKET UPDATE & OUTLOOK

Positioning

- ⌘ Understand how companies are positioned to navigate through COVID and beyond
- ⌘ Capitalize on market dislocations to improve the quality of the portfolio
- ⌘ Enhance our positions, emphasizing digitalization
- ⌘ Continued focus on bottom-up research process

Outlook

- ⌘ The pandemic has created certain fundamental changes to all economies around the world and the post COVID world will not be the same for all sub-sectors
- ⌘ The European Union has pledged a green focus within its Coronavirus Recovery Program. This aligns with our efforts to identify sustainable and competitive businesses
- ⌘ Japan's newly appointed Prime Minister Yoshihide Suga is providing reform in the health care systems and promoting greater digitalization through the creation of a digital agency
- ⌘ Implications of new U.S. administration and global trade relations

Appendix

INTERNATIONAL SMALL CAP HISTORICAL PERFORMANCE

Calendar Year Returns

Calendar Years	Composite (Gross)	Composite (Net)	MSCI EAFE Small Cap (Net) Index
2020	13.92%	12.79%	12.34%
2019	30.98	29.70	24.96
2018	-23.72	-24.50	-17.89
2017	41.15	39.78	33.01
2016	1.67	0.66	2.18
2015	15.12	13.99	9.59
2014	2.80	1.78	-4.95
2013	27.71	26.48	29.30
2012*	7.92	7.12	4.47

*Return is for the period 4/01/12 to 12/31/12.

The MSCI EAFE Small Cap (Net) Index is based on gross-of-fee returns and sourced from FactSet.

Please see International Small Cap Disclosures in the Appendix.

Biographies

MANAGEMENT COMMITTEE

Grant R. Babyak

32 Years Experience

Grant is a Senior Founding Partner, Managing Director, and Portfolio Manager in TimesSquare's growth equity group. He is also a member of the three-person Management Committee that oversees TimesSquare. Prior to joining TimesSquare in 2000, Grant managed small cap and mid cap portfolios at Fiduciary Trust Company International. He previously worked for six years at Avatar Associates as an institutional portfolio manager and for two years at U.S. Trust Company of New York as an analyst covering the consumer and basic industrial sectors. Grant has a B.A. in Political Science from Yale University and an M.B.A. in Finance from the Leonard N. Stern School of Business at New York University.

Stephen Green, CFA

31 Years Experience

Stephen is a Senior Founding Partner, Managing Director, and member of the three-person Management Committee that oversees TimesSquare. He is Head of Global Business Development encompassing Marketing, Sales, and Product Management. Prior to joining TimesSquare in 2000, Stephen was Senior Vice President and Head of Global Product Management at Fiduciary Trust Company International. At Fiduciary, he was the primary architect of the Product Management division. Stephen's background also includes investment consulting roles at Mercer Investment Consulting and Stratford Advisory Group where he was a Senior Consultant and Director of Manager Research at both firms. Stephen has a B.S. in Finance and an M.B.A. from the University of Illinois. He is a member of the CFA Institute and the CFA Society New York.

Tony Rosenthal, CFA

31 Years Experience

Tony is a Senior Founding Partner, Managing Director, and Portfolio Manager in TimesSquare's growth equity group. He is also a member of the three-person Management Committee that oversees TimesSquare. Before joining TimesSquare in 2000, Tony held a similar position at Fiduciary Trust Company International. Prior experience includes three years at the Bank of New York as an equity portfolio manager and analyst and time at U.S. Trust Company of New York, where he conducted economic research. Tony has a B.A. in Economics from Wesleyan University and an M.B.A. from Columbia Business School. He is a member of the CFA Institute and the CFA Society New York.

INTERNATIONAL EQUITY INVESTMENT PROFESSIONALS

Magnus S. Larsson

25 Years Experience

Magnus is a Director, Portfolio Manager, and Partner on TimesSquare's International Small Cap team which covers Developed, Emerging, and Frontier markets. Prior to joining TimesSquare in 2012, Magnus was a Portfolio Manager at Nordea Investment Management where he focused on European small and mid cap equities. Prior to Nordea, he held a similar role at SEB Asset Management as a Portfolio Manager focusing on European small and mid caps. Magnus' prior experience also includes a Financial Analyst role specializing in small and mid cap equity research with Borsinsikt and a position as an Institutional Equity Sales Director at Beeson Gregory. Magnus holds a B.S. in Economics and Business Administration from the University of Orebro, Sweden as well as a B.A. in Social Science.

Daniel De Jesus, CFA

9 Years Experience

Daniel is a Vice President and Analyst – Emerging and Frontier Markets on TimesSquare's International Small Cap team which covers Developed, Emerging, and Frontier markets. Prior to joining TimesSquare in 2019, Daniel was a Senior Analyst at DPM Capital, where he sourced equity investment ideas on a global basis and helped manage the trading and portfolio risk functions of the firm. Prior to that, Daniel worked at Millennium Management, where he was the lead analyst for a portfolio of Latin American and Southern European equities. Daniel started his career at J.P. Morgan as an Associate in the Latin American Derivatives Structuring group, focusing on helping corporations use derivatives for risk management purposes. Mr. De Jesus graduated summa cum laude with a B.S. in Economics from the University of Pennsylvania, with a dual concentration in Finance and Statistics. He is a member of the CFA Institute. He is fluent in Spanish and Portuguese.

David A. Hirsh

22 Years Experience

David is a Director, Assistant Portfolio Manager/Analyst – Europe, and Partner on TimesSquare's International Small Cap team which covers Developed, Emerging, and Frontier markets. Prior to joining TimesSquare in 2012, David was a Senior Principal at HawkStone Capital, focusing on Europe. Prior to HawkStone, David worked at Societe Generale, Kepler Equities, and Julius Baer with a focus on small to mid cap European stocks. He holds a B.A. in International Affairs from Lafayette College and is fluent in French.

David L. Oh

18 Years Experience

David is a Senior Vice President and Portfolio Manager/Analyst on TimesSquare's International Small Cap team which covers Developed, Emerging, and Frontier markets. Prior to joining TimesSquare in 2019, David was a Principal at Sustainable Growth Advisers where he analyzed companies across a range of sectors within a global framework. Prior to Sustainable Growth Advisers, he held various senior research and investment positions at Alinda Capital Partners, Third Point, Sempra Energy Partners, and Credit Suisse First Boston. He graduated cum laude with a B.A. in both History and East Asian Studies from Yale University, and has an M.B.A. from Harvard Business School. He is fluent in Mandarin and conversant in Spanish.

INTERNATIONAL EQUITY INVESTMENT PROFESSIONALS

Robert G. Purcell

25 Years Experience

Rob is a Senior Vice President and Analyst - Asia on TimesSquare's International Small Cap team which covers Developed, Emerging, and Frontier markets. Prior to joining TimesSquare in 2019, Rob lived in Japan for 23 years, most recently as an analyst specializing in small and mid cap equities at CLSA Securities where he was ranked #2 for Japanese small cap research in the Asiamoney Brokers Poll 2017. Rob's prior experience includes tenures at Deutsche Securities, KBC Securities and Jefferies. He holds a B.S. in Finance from the University of Vermont and an M.B.A. from Columbia Business School. He is fluent in Japanese.

Joshua A. Bischoff

25 Years Experience

Joshua is a Director, Co-Head of U.S. and International Trading, and Founding Partner at TimesSquare. Joshua joined TimesSquare in 2003 from Loomis Sayles & Co. where he held a similar position. His previous experience includes trading for small capitalization equity products at Scudder Kemper and Dreman Value and working as a block trader for Bear Stearns where he concentrated on trading financial and energy stocks. Joshua has a B.S. in Business Administration from Providence College and holds FINRA Series 7 and 55 licenses.

Timothy P. Corliss

27 Years Experience

Tim is a Vice President and Co-Head of International Trading. Prior to joining TimesSquare in 2012, Tim oversaw trading, operations, and risk management at HawkStone Capital. His previous experience includes working as a Senior Trader at Bear Stearns Asset Management, a Senior Trader at the State of New Jersey Division of Investment, and a Partner at Sierra Global where he was in charge of trading. Tim was also featured in the 2006 edition of *Master Traders* and authored the section "New World Trading of Old World Markets: European Derivatives". He graduated from Rutgers University with Bachelor degrees in Economic Theory and English. Tim holds FINRA Series 7 and 63 licenses.

KEY BUSINESS PROFESSIONALS

Jeffrey D. Braemer, CFA

32 Years Experience

Jeff is a Director, Product Manager, and Partner in TimesSquare's growth equity group. His responsibilities include client servicing as well as portfolio and attribution analysis and general investment research. Prior to joining TimesSquare in 2008, Jeff was a Director, Client Service and Marketing at Jacobs Levy Equity Management where he co-led the client service and portfolio analysis department. In that capacity, he was a primary point person for all client needs. Prior to Jacobs Levy, Jeff was a Product Specialist at Batterymarch Financial Management for U.S. and non-U.S. equity portfolios. Jeff has a B.A. in Political Science from Washington University in St. Louis and an M.S. in Management from Boston University. He is a member of the CFA Institute and the CFA Society New York. He holds FINRA Series 7 and 63 licenses.

Jenny Chou

17 Years Experience

Jenny is a Senior Vice President, Product Manager in TimesSquare's growth equity group. Her responsibilities include client servicing as well as portfolio and attribution analysis and general investment research. Prior to joining TimesSquare in 2017, Jenny was a Vice President in the Asia Institutional Equity Sales and Trading team at Citigroup where she serviced and provided investment recommendations for key accounts. Prior to Citigroup, Jenny worked at UBS on the Asia Institutional Equity Sales team. Jenny also worked at Lehman Brothers (New York and Taiwan) on the Asia Technology Investment Research and the Global Mergers and Acquisitions teams. Jenny has a B.S. in Operations Research – Engineering Management from Columbia University and an M.B.A. in Finance from the Wharton School at the University of Pennsylvania. She holds FINRA Series 7, 63, 86, and 87 licenses. She is fluent in Mandarin and Taiwanese.

David M. Cielusniak

21 Years Experience

Dave is the Chief Operating and Chief Compliance Officer of TimesSquare. He leads the back office and operations team supporting the investment team and process. Prior to joining TimesSquare in 2017, Dave was the Deputy Chief Operating Officer for Credit Suisse Asset Management, Americas. Prior to Credit Suisse, Dave was one of the founding partners at MoffettNathanson, an independent equity research boutique, and served as their Chief Operating Officer, General Counsel and Chief Compliance Officer. He served in a similar capacity at Conquest Capital Group, an investment manager/commodity trading advisor. He began his career as a Corporate/M&A associate for the law firm Cadwalader, Wickersham & Taft. Dave has his B.S. in Business Administration from Georgetown University with a concentration in Finance and minor in Economics. He holds a JD from the Fordham University School of Law and is admitted to the New York State Bar.

KEY BUSINESS PROFESSIONALS

Brenda N. Le, CFA

17 Years Experience

Brenda is a Director, Head of Consultant Relations, and Partner at TimesSquare. She has lead responsibility interacting with investment consultants in regards to the firm's U.S. and International strategies. Brenda is also involved with marketing to the financial services industry as well as client servicing. Prior to joining TimesSquare in 2005, she was a Press Assistant in the New York State Executive Chamber where she assisted with media inquiries, reviewed television news summaries, and organized media requests for Governor George E. Pataki. Brenda graduated cum laude with a B.A. in Communications and a B.S.E. in Digital Media Design from the University of Pennsylvania and holds FINRA Series 7 and 63 licenses. She is a member of the CFA Institute and the CFA Society New York.

Michael B. Ray

32 Years Experience

Mike is a Director, Product Manager, and Partner in TimesSquare's growth equity group. His responsibilities include client servicing as well as portfolio and attribution analysis and general investment research. Prior to joining TimesSquare in 2008, Mike was a Vice President, Client Service Manager at Goldman Sachs Asset Management. In that position, Mike worked closely with GSAM relationship and product managers with the common goal of deepening public fund client relationships. Prior to joining Goldman Sachs, Mike was a Vice President, Portfolio Specialist with Morgan Stanley Investment Management working with institutional and retail clients with a focus on the firm's US Growth products. Mike has a B.S. in Accounting from St. John's University and holds FINRA Series 7, 63 and 3 licenses.

Leona Yang, CFA

16 Years Experience

Leona is a Vice President, Client Servicing in TimesSquare's growth equity group. Her responsibilities include client servicing as well as portfolio and attribution analysis and general investment research. Prior to joining TimesSquare in 2018, Leona was a Relationship Manager at McKinley Capital Management, where she managed and serviced institutional client relationships. Prior to McKinley Capital, Leona worked at Verizon Investment Management Corporation on investment research and strategic partnership management. Leona has a B.S. in Information Systems Management from the University of Maryland - Baltimore County, an M.B.A. in Finance and Accounting from American University and a M.S. in Management Information System from the George Washington University. Leona is a member of the CFA Institute and the CFA Society of New York and holds FINRA Series 7 and 63 licenses. She is fluent in Mandarin.

Disclosures

GENERAL DISCLOSURES

This presentation is being provided to the recipient specifically upon request and must be accompanied by the disclosures set forth below.

The opinions and information expressed and provided are for general information only and are not intended to provide specific advice or recommendations but rather, a basis from which strategies can be built, taking into account the specific objectives of each portfolio, in terms of return, time horizon, and risk constraints, as well as diverging investment perspectives and assumptions. All material has been obtained from sources believed to be reliable, but its accuracy and completeness are not guaranteed.

Representative Client List Disclosure:

The Representative Client List includes the clients of TimesSquare Capital Management, LLC ("TimesSquare") that have consented to inclusion on this list, and is not based on performance criteria. Inclusion on this list does not represent an endorsement by or of these entities or of the services provided by TimesSquare or these entities. The Representative Client List is not specific to any one of TimesSquare's products or strategies.

Portfolio Holdings:

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Representative Portfolio:

The representative portfolio is an account that we believe most closely reflects the current portfolio management style for this strategy. Performance is not a consideration in the selection of the representative portfolio. The characteristics of the representative portfolio may differ from those of other managed accounts and from those of a start-up portfolio. The characteristics relate to the portfolio as of a particular point in time and should not be regarded as predictive.

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Past performance does not guarantee future results.

This presentation is intended for institutional investors.

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INTERNATIONAL SMALL CAP DISCLOSURES

April 1, 2012 through December 31, 2019

Year	Gross-of-Fees Return (%)	Net-of-Fees Return (%)	Benchmark Return (%)	Composite 3-Yr St Dev (%)	Benchmark 3-Yr St Dev (%)	Number of Portfolios	Internal Dispersion (%)	Total Composite Assets (USD mil)	Composite Percentage of Firm Assets (%)	Total Firm Assets (USD mil)
*2012	7.92	7.12	4.47	N/A	N/A	1	N/A	5	0.03	14,738
2013	27.71	26.48	29.30	N/A	N/A	2	N/A	25	0.12	20,354
2014	2.80	1.78	-4.95	N/A	N/A	2	N/A	26	0.14	18,802
2015	15.12	13.99	9.59	9.88	11.26	2	N/A	137	0.80	16,988
2016	1.67	0.66	2.18	11.92	12.11	1	N/A	108	0.66	16,169
2017	41.15	39.78	33.01	12.30	11.60	6	0.77	1787	9.96	17,935
2018	-23.72	-24.50	-17.89	14.99	12.86	8	0.39	2013	13.93	14,449
2019	30.94	29.67	24.96	14.80	11.89	11	0.71	2963	19.26	15,382

*Returns are for the period from April 1, 2012 (inception) through December 31, 2012

INTERNATIONAL SMALL CAP DISCLOSURES

TimesSquare Capital Management, LLC claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. TimesSquare has been independently verified for the periods 10/1/2000 to 12/31/2019.

Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The International Small Cap composite has been examined for the periods April 1, 2012 to December 31, 2019. The verification and performance examination reports are available upon request.

Firm and Composite Information

TimesSquare Capital Management, LLC ("TimesSquare") is a registered investment adviser that is owned by the former equity management team of TimesSquare Capital Management, Inc. ("TimesSquare Inc.") and Affiliated Managers Group, Inc. TimesSquare was formed to manage TimesSquare Inc.'s growth equity investment advisory business which was sold to TimesSquare in a transaction that closed on November 19, 2004.

This composite generally invests in non-US stocks with market capitalizations at time of purchase generally within the range of capitalizations of stocks in the MSCI EAFE Small Cap Net Index. Portfolios will hold approximately 70-75 securities. The process is fundamental research driven. Primary selection criteria include quality management, distinct competitive advantage, and strong, sustainable growth. Historical turnover has averaged 37% per year. Composite inclusion threshold \$500,000. Fee basis is 100 points. The composite creation date is April 1, 2012.

From 04/01/2015 until 12/31/16, accounts are removed from the composites when significant cash flows occur. A significant cash flow is defined as an external flow that exceeds 10% of the composite's market value on the day of the cash flow. Effective January 1, 2017 this composite does not have a significant cash flow policy.

The opinions and information expressed and provided are for general information only and are not intended to provide specific advice or recommendations but rather, a basis from which strategies can be built, taking into account the specific objectives of each portfolio, in terms of return, time horizon, and risk constraints, as well as diverging investment perspectives and assumptions. All material has been obtained from sources believed to be reliable, but its accuracy and completeness are not guaranteed.

TimesSquare's list of composites is available upon request. Past performance does not guarantee future results.

Benchmark

Performance is measured against the MSCI EAFE Small Cap (Net) Index. MSCI EAFE Small Cap (Net) Index is a trade or service mark of MSCI Inc. The MSCI EAFE Small Cap (Net) Index is an unmanaged, market-weighted index of small companies in developed markets, excluding the U.S. and Canada. Its returns include net reinvested dividends but, unlike the Composite returns shown, do not reflect the payment of sales commissions or other expenses incurred in the purchase or sale of the securities included in the Index. All indexes, including the MSCI EAFE Small Cap (Net) Index, are based on gross-of-fee returns, including net reinvested dividends.

Benchmark returns are not covered by the report of independent verifiers.

Performance Calculations

The performance figures shown are calculated in U.S. dollars on a size-weighted basis and reflect the reinvestment of dividends and other earnings, and the deduction of brokerage commissions and other transaction costs. Performance is provided on a gross basis (before the deduction of management fees) as well as net of the highest fee level from the standard fee schedule listed for this strategy during the period presented. Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size. TimesSquare's fee schedule is available upon request and may also be found in Part 2A of our Form ADV.

Investment advisory fees generally charged by TimesSquare are described in Part 2A of its Form ADV. To illustrate performance net of fees, assume \$20,000,000 is placed under management for ten years sustaining 10% compound gross total return. If an advisory fee of 1.00% of average assets under management is charged per year, for each year of the ten-year period, the resulting compound annual return would be reduced to 9.0%. The ending dollar value of the account would be \$47,347,274 compared with the unreduced account value of \$51,874,849. Net of fee performance is available upon request.

Internal dispersion is calculated using the equal-weighted standard deviation of all accounts included in the composite for the entire year; it is not presented for periods less than one year or when there were five or fewer portfolios in the composite for the entire year.

The three-year annualized standard deviation measures the variability of the composite and the benchmark returns over the preceding 36-month period. The three-year annualized standard deviation calculation is not presented for the composite and/or benchmark for years when 36 monthly returns are not available. Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

INTERNATIONAL SMALL CAP DISCLOSURES

TSCM International Small Cap Composite Quarterly Returns, Since 3/31/2012

MSCI EAFE					MSCI EAFE				
		<u>TSCM (Gross)</u>	<u>TSCM (Net)</u>	<u>Small Cap (Net)</u>		<u>TSCM (Gross)</u>	<u>TSCM (Net)</u>	<u>Small Cap (Net)</u>	
2020					2015				
	1st Quarter	-28.40%	-28.60%	-27.52%		1st Quarter	6.58%	6.32%	5.56%
	2nd Quarter	22.62	22.34	19.88		2nd Quarter	3.94	3.68	4.34
	3rd Quarter	9.34	9.08	10.25		3rd Quarter	-3.11	-3.36	-6.83
	4th Quarter	18.66	18.38	17.27		4th Quarter	7.25	6.99	6.79
	Year	13.92	12.79	12.34		Year	15.12	13.99	9.59
					2014				
2019						1st Quarter	4.59	4.33	3.36
	1st Quarter	14.25	13.97	10.65		2nd Quarter	2.05	1.79	2.08
	2nd Quarter	3.60	3.33	1.71		3rd Quarter	-4.09	-4.33	-7.82
	3rd Quarter	-1.53	-1.78	-0.44		4th Quarter	0.43	0.18	-2.27
	4th Quarter	12.39	12.12	11.52		Year	2.80	1.78	-4.95
	Year	30.98	29.70	24.96	2013				
2018						1st Quarter	8.44	8.17	8.42
	1st Quarter	3.33	3.07	0.24		2nd Quarter	0.04	-0.21	-2.52
	2nd Quarter	-2.86	-3.10	-1.57		3rd Quarter	10.54	10.28	15.52
	3rd Quarter	-5.37	-5.61	-0.88		4th Quarter	6.52	6.25	5.91
	4th Quarter	-19.70	-19.91	-16.05		Year	27.71	26.48	29.30
	Year	-23.72	-24.50	-17.89	2012				
2017						2nd Quarter	-5.85	-6.09	-8.65
	1st Quarter	11.88	11.61	7.97		3rd Quarter	5.93	5.67	7.89
	2nd Quarter	11.01	10.74	8.10		4th Quarter	8.21	7.94	6.01
	3rd Quarter	7.86	7.60	7.46		Year	7.92	7.12	4.47
	4th Quarter	5.37	5.11	6.05					
	Year	41.15	39.78	33.01					
2016									
	1st Quarter	1.83	1.57	-0.59					
	2nd Quarter	-3.42	-3.66	-2.60					
	3rd Quarter	10.02	9.75	8.64					
	4th Quarter	-6.03	-6.27	-2.86					
	Year	1.67	0.66	2.18					

The MSCI EAFE Small Cap (Net) Index is based on gross-of-fee returns and sourced from FactSet.

Please see International Small Cap Disclosures.

INTERNATIONAL SMALL CAP HISTORICAL PERFORMANCE

Returns as of December 31, 2020

	Annualized				
	1 Year	3 Years	5 Years	7 Years	Since Inception (03/31/2012)
Composite (Gross)	13.92%	4.37%	10.28%	9.85%	11.83%
Composite (Net)	12.79%	3.36%	9.20%	8.78%	10.73%
MSCI EAFE Small Cap (Net) Index	12.34%	4.85%	9.38%	7.24%	9.45%

The MSCI EAFE Small Cap (Net) Index is based on gross-of-fee returns and sourced from FactSet.

Please see International Small Cap Disclosures in the Appendix.



March 2021

**Marin County Employees'
Retirement Association**

Investment Manager Search
Emerging Markets Equity

Emerging Markets Manager Evaluation

	Investment Manager	Strategy
The following investment manager organizations have submitted information to Callan regarding their investment management capabilities. The information has been summarized in this report for the consideration of Marin County Employees' Retirement Association.	AQR Capital Management	Emerging Markets Equity
	Artisan Partners Limited Partnership	Artisan Sustainable Emerging Markets Strategy
	BlackRock	Systematic Active Emerging Markets Alpha Tilts
	Fidelity Institutional Asset Management	FIAM Select Emerging Equity
	Wellington Management Company, LLP	Emerging Markets Research Equity
	Wellington Management Company, LLP	Emerging Markets Research Equity Core

The following investment manager organizations have submitted information to Callan regarding their investment management capabilities, for which information Callan has not necessarily verified the accuracy or completeness of or updated. The information provided to Callan has been summarized in this report for your consideration. Unless otherwise noted, performance figures reflect a commingled fund or a composite of discretionary accounts. All written comments in this report are based on Callan's standard evaluation procedures which are designed to provide objective comments based upon facts provided to Callan. Statements in this report are made as of the date they are expressed.

This report is for informational purposes only and should not be construed as legal or tax advice on any matter. Any decision you make on the basis of the content is your sole responsibility. You should consult with legal and tax advisers before applying any of this information to your particular situation. Reference to or inclusion in this report of any product, service or entity should not be construed as a recommendation, approval, affiliation or endorsement of such product, service or entity by Callan. Past performance is no guarantee of future results.

Acts, events, occurrences or accidents beyond reasonable control, including but not limited to pandemics, acts of terrorism, volatile market conditions, or other disruptions could have a negative and long-lasting impact on the business operations and financial condition of the candidate sponsor, the candidate investment vehicle, and investments and may materially adversely impact fundraising, operations, deal sourcing, management and due diligence of investments, liquidity, valuations and performance, among other potential impacts.

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Search Process, Profile & Summary

Search Process

Steps in the Manager Search Process

1 Client & Candidate
Profiles

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Assessment

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Committee

5 Semi-Finalist Review

Finalists

Candidate Profile

1. Manager Type

Only qualified investment counselors or organizations registered under the Investment Advisers Act of 1940 that are currently managing assets will be considered. This includes investment counselors and investment counseling subsidiaries of banks, brokerage houses and insurance companies.

2. Investment Style

MCERA is seeking an active emerging markets equity manager benchmarked to the MSCI Emerging Markets Index to potentially replace their existing manager, Parametric.

3. Managed Assets

It is preferred that candidates have a minimum of \$500 million in the emerging markets equity strategy. MCERA is also willing to consider otherwise qualified, compelling and viable strategies with a lower asset base on a case by case basis.

4. Professional Staff

Investment staff should be stable and of sufficient depth and breadth to perform the ongoing duties of the firm and to ensure continuity of the investment process. The firm's executive management team should be experienced and stable. Additionally, there should be a sufficient number of client service professionals relative to the firm's client base to ensure that the client has reasonable access to the firm.

5. Portfolio Manager Structure & Experience

Team approach preferred but not required. Key professionals should have at least 10 years of investment experience. Teams that have worked together for at least five years are preferred.

6. Investment Vehicle

MCERA will consider commingled funds and mutual funds.

7. Historical Performance & Risk Criteria

Performance over multiple cumulative, annual and rolling periods will be evaluated relative to the appropriate peer group and index. Risk-adjusted measures and holdings-based portfolio characteristics will also be considered.

8. Qualities Specifically Sought

- The firm must be a viable, ongoing business
- Well established organization with institutional focus

Candidate Profile (continued)

- Disciplined and time-tested investment process with risk controls
- Low turnover of personnel
- Low dispersion of returns within appropriate composite
- Commitment to client service and an ability to effectively articulate their investment process
- Willingness to visit client as needed – MCERA's managers are required to provide an annual portfolio review to the Investment Committee.

9. Qualities To Be Avoided

- Concentrated client base
- Candidates currently involved in a merger, acquisition, or recent transaction impacting the firm's senior executives
- Excessive recent personnel turnover

10. Specific Client Requests & Additional Considerations

Client would like to review 5-6 candidates at their March 2021 meeting and afterwards invite 3 to present to the Investment Committee.

Candidate Summary Matrix

	Organization/Team	Strategy/Portfolio	Summary Opinion
AQR Capital Management Emerging Markets Equity	<ul style="list-style-type: none"> Independently-owned firm founded by Clifford Asness, Ph.D., David Kabiller, CFA, Robert Krail, Ph.D., and John Liew, Ph.D. in 1998 In November 2004, Affiliated Managers Group purchased a minority share and now owns ~30% of the firm Firm managed \$140 bn, including \$13 bn in the Emerging Markets Equity strategy as of 12/31/2020 Co-Head of Global Stock Selection Jacque Friedman retired in December 2019 Investment team consists of five portfolio managers and 73 quantitative analysts 	<ul style="list-style-type: none"> Employs a combination of top-down and bottom-up multi-factor models to construct relative value portfolios Three sources of uncorrelated alpha consists of stock selection (50%), country allocation (25%), and currency selection (25%) Country views are expressed with futures and swaps, while forwards are utilized to manage currency selection All three models are centered on value and momentum Portfolio holds 200-300 names with annual turnover of 30%-80% Diversified, risk-controlled all cap core strategy with a value tilt 	<ul style="list-style-type: none"> Stable organization Firm and product AUM have decline in recent years, although it maintains a healthy level of assets Departure of Friedman is notable, but mitigated by the systematic approach and depth and breadth of the investment team Track record of enhancing its quantitative model Differentiated strategy with its three sources of alpha approach; however, the model has a history of underperformance during growth cycles Viable for a standalone or multi-manager structure given the core/value portfolio characteristics and risk/return profile
Artisan Partners Limited Partnership Sustainable Emerging Markets	<ul style="list-style-type: none"> Artisan was founded in 1994 and became a publicly traded company in 2013 The firm is comprised of nine autonomous investment teams across the U.S. with its headquarters in Milwaukee Firm managed \$158 bn, including \$679 mm in the Sustainable Emerging Markets strategy as of 12/31/2020 Investment team is led by portfolio manager Maria Negrete-Gruson Negrete-Gruson is supported by a team of five dedicated analysts 	<ul style="list-style-type: none"> Employs a bottom-up, fundamental process focused on sustainability across earnings, business model and ESG Valuation is considered relative to the stock, the industry and the country Risk management consists of country and ESG analysis Portfolio holds ~60 names with annual turnover of 25%-45% Focused, all cap core strategy with a growth tilt 	<ul style="list-style-type: none"> Stable organization Low product AUM is notable, although the product has gained traction in recent years Seasoned team under the stable leadership of Negrete-Gruson Negrete-Gruson presents key person risk Differentiated top-down and ESG risk management, which results in structural China underweight CIT will be funded with ~\$25 mm by a DC client in the second half of the year Viable for a standalone or multi-manager structure given the core/growth portfolio characteristics and risk/return profile

Candidate Summary Matrix (continued)

	Organization/Team	Strategy/Portfolio	Summary Opinion
BlackRock Systematic Active Emerging Markets Alpha Tilts	<ul style="list-style-type: none"> – Founded in 1988 and publicly-traded company under the ticker symbol “BLK” – Firm managed \$8.7 tn, including \$19 bn in the Systematic Active Emerging Markets Alpha Tilts strategy as 12/31/2020 – Raffaele Savi and Jeff Shen co-heads Systematic Active Equity platform – David Piazza has managed the strategy since 2015 after the departure of PM Jaime Lee – Investment team consists of 23 portfolio managers and 26 quantitative analysts 	<ul style="list-style-type: none"> – Employs a combination of top-down and bottom-up systematic processes to construct risk-controlled portfolios – Composition of the alpha model is dynamic and consists of value, quality, sentiment, and macro theme factors – Quant model leverages machine learning and AI techniques – Portfolio holds 200-400 names with annual turnover of 100%-160% – Diversified, risk-controlled core strategy 	<ul style="list-style-type: none"> – Stable organization – Deep and experienced investment team – Delivered consistent process and portfolio characteristics – Differentiated sources of alpha signals through machine learning and AI – Track record of enhancing its quantitative model – Viable for a standalone or multi-manager structure given the core portfolio characteristics and risk/return profile
Fidelity Institutional Asset Management FIAM Select Emerging Equity	<ul style="list-style-type: none"> – Fidelity Institutional Asset Management was established in 2015 to manage Fidelity’s institutional clients – Fidelity is 51% employee owned and 49% Johnson family owned – Firm managed \$258 bn, including \$9.2 bn in the FIAM Select Emerging Equity strategy as of 12/31/2020 – Strategy managed by John Chow – Chow is supported by 155 central research analysts 	<ul style="list-style-type: none"> – Employs a systematic process to construct risk-controlled, GARP portfolios – Leverages the research platform by optimizing the strategy with highly rated securities held in analyst-run portfolios – Country and sector exposures are +/- 5% relative to the benchmark – Portfolio holds 100-120 names with annual turnover of 60%-100% – Diversified, core strategy with a growth tilt 	<ul style="list-style-type: none"> – Stable organization – Chow has lead the strategy since 2011 – Key person risk is mitigated by the systematic nature of the process – Research team is deep with regional expertise – Robust risk management to harness stock selection and minimize top-down/macro factors – Viable for a standalone or multi-manager structure given the core/growth portfolio characteristics and risk/return profile

Candidate Summary Matrix (continued)

	Organization/Team	Strategy/Portfolio	Summary Opinion
Wellington Management Company	<ul style="list-style-type: none"> Founded in 1928 and headquartered in Boston 	<ul style="list-style-type: none"> Employs a bottom-up, fundamental process to construct diversified research portfolios 	<ul style="list-style-type: none"> Stable organization; no concerns with upcoming CEO change
Emerging Markets Research Equity	<ul style="list-style-type: none"> 100% employee-owned with 172 partners Jean Hynes will succeed Brendan Swords as CEO when he retires at the end of 2Q21; Hynes joined the firm in 1991 Firm managed \$1.3 tn, including \$6.5 bn in the Emerging Markets Research Equity strategy as of 12/31/2020 Director of Global Industry Research Mary Pryshlak has oversight responsibilities for the research portfolios Strategy is managed by 12 global industry analysts 	<ul style="list-style-type: none"> 12 experienced, career global industry analysts identify “best ideas” by leveraging their expertise Sector allocations close to that of the benchmark to allow stock selection to drive performance Portfolio typically holds 100-180 names with expected annual turnover of 60%-100% Diversified, all cap core strategy with a growth tilt 	<ul style="list-style-type: none"> High conviction in Wellington’s Global Industry Research platform Consistent return pattern driven by stock selection Limited capacity On average 11% exposure to small cap since inception in 2010; however, the exposure has declined in recent years (i.e., 4% as of 12/31/2020) Mid and large cap names (i.e., market cap between \$20 bn and \$50 bn) have driven outperformance since inception, and small cap names (i.e., market cap less than \$2 bn) had a modest impact Viable for a standalone or multi-manager structure given the core/growth portfolio characteristics and risk/return profile

Candidate Summary Matrix (continued)

	Organization/Team	Strategy/Portfolio	Summary Opinion
Wellington Management Company	<ul style="list-style-type: none"> Founded in 1928 and headquartered in Boston 	<ul style="list-style-type: none"> Employs a bottom-up, fundamental process to construct diversified research portfolios 	<ul style="list-style-type: none"> Stable organization; no concerns with upcoming CEO change
Emerging Markets Research Equity Core	<ul style="list-style-type: none"> 100% employee-owned with 172 partners Jean Hynes will succeed Brendan Swords as CEO when he retires at the end of 2Q21; Hynes joined the firm in 1991 Firm managed \$1.3 tn, including \$1.6 bn in the Emerging Markets Research Equity Core strategy as of 12/31/2020 Director of Global Industry Research Mary Pryshlak has oversight responsibilities for the research portfolios Strategy is managed by 12 global industry analysts 	<ul style="list-style-type: none"> 12 experienced, career global industry analysts identify “best ideas” by leveraging their expertise Sector allocations close to that of the benchmark to allow stock selection to drive performance Portfolio typically holds ~130 names with expected annual turnover of 60%-100% Diversified, core strategy with a growth tilt 	<ul style="list-style-type: none"> High conviction in Wellington’s Global Industry Research platform Strategy launched in January 2020 and managed by the same 12 analysts as the Emerging Markets Research Equity Estimated capacity of \$4-\$5 bn, focused on mid and large cap securities Expected holdings overlap between the Emerging Markets Research Equity and the Emerging Markets Research Equity Core is ~90% Strategy is expected to perform in line with the Emerging Markets Research Equity given the same analyst team, process and holdings overlap Viable for a standalone or multi-manager structure given the core/growth portfolio characteristics and risk/return profile

Proposed Vehicle Information

	Product / Vehicle AUM (\$mm)	Minimum Account Size (\$mm)	Proposed Fee (%)	Comments
AQR CIT	13,016 / 1,111	1	0.76 All-in	- Liquidity/Valuation: Daily - Entry/Exit fees: None - Revenue Sharing: No
Artisan CIT	679 / 0	0	0.60 All-in	- CIT currently unfunded. \$25mm contribution expected 2H21 - Potential anti-dilution levy for flows > 1% of the NAV - Liquidity/Valuation: Daily - Entry/Exit fees: None - Revenue Sharing: No
BlackRock CIT	18,611 / 2,268	1	0.73 All-in	- Optional All-in Fee : 0.33% plus 20% incentives - Liquidity/Valuation: Daily valuation, sheduled Monthly liquidity - Entry/Exit fees: PRV (Purchase and Redemption Valuation) - Revenue Sharing: No
Fidelity CIT	9,240 / 1,552	5	0.61 All-in	- Annual Fee of \$35,000 - Liquidity/Valuation: Daily - Entry/Exit fees: None - Revenue Sharing: No
Wellington: EMRE CIT	6,538 / 1,283	1	0.75 All-in	- Liquidity/Valuation: Daily - Entry/Exit fees: None - Revenue Sharing: No
Wellington: EMRE Core CIT	1,624 / 0	100*	0.60 All-in	- CIT currently unfunded - All-in Fee: 0.60% based on \$125mm mandate - * \$100mm minimum to seed CIT, \$1mm thereafter - Liquidity/Valuation: Daily - Entry/Exit fees: None - Revenue Sharing: No
Parametric (Incumbent) CIT	3,202 / 653	5	0.78 All-in	- Liquidity/Valuation: Daily - Entry/Exit fees: None - Revenue Sharing: No



Candidate Firm Information

Candidate Firm Summary

	AQR Capital Management	Artisan Partners Limited Partnership	BlackRock	Fidelity Institutional Asset Management	Wellington Management Company, LLP	Parametric Portfolio Associates LLC (Incumbent)
Headquarters	Greenwich, CT	Milwaukee, WI	New York, NY	Smithfield, RI	Boston, MA	Seattle, WA
Ownership / Parent	Partnership / AQR Capital Management Holdings, LLC	Publicly Owned / Artisan Partners Asset Management Inc. [NYSE: APAM]	Publicly Owned / None	Other / Fidelity Investments	Partnership /	Other / Eaton Vance Corp.
Minority / Women / Disabled - Owned	No	No	No	No	No	No
Total Firm Assets (\$mm)	140,348	157,776	8,676,680	257,648	1,291,419	357,650
Have any open regulatory exams/investigations been escalated to enforcement?	No	No	No	No	No	No
Date of Last SEC Exam	08/06/2019	12/01/2011	*	09/01/2018	03/06/2019	04/09/2019
GIPS Compliant	Yes	Yes	Yes	Yes	Yes	Yes
E&O Insurance	Yes	Yes	Yes	Yes	Yes	Yes
Disaster Recovery Plan in Place	Yes	Yes	Yes	Yes	Yes	Yes

*Language provided by BlackRock indicates they are routinely subject to regulatory inquiries, but did not provide an exact date.

Total Firm Assets Under Management

Total Firm Assets by Type (\$mm) as of December 31, 2020

	Corporate	Public(Govt)	Sub-Advised	Other	Total Org Assets
AQR Capital Management	39,468	32,920	10,107	57,853	140,348
Artisan Partners Limited Partnership	10,781	9,448	29,333	108,215	157,776
BlackRock	1,961,815	1,490,460	214,063	5,010,340	8,676,678
Fidelity Institutional Asset Management	107,593	33,393	70,537	46,124	257,648
Wellington Management Company, LLP	262,611	128,694	704,267	195,847	1,291,419
Parametric Portfolio Associates LLC (Incumbent)	47,188	39,051	25,563	245,848	357,650



Candidate Product Information

Candidate Product Summary

	AQR Capital Management	Artisan Partners Limited Partnership	BlackRock	Fidelity Institutional Asset Management	Wellington Management Company, LLP	Wellington Management Company, LLP
Product Name	Emerging Markets Equity	Artisan Sustainable Emerging Markets Strategy	Systematic Active Emerging Markets Alpha Tilts	FIAM Select Emerging Equity	Emerging Markets Research Equity	Emerging Markets Research Equity Core
Product Benchmark	MSCI:EM	MSCI:EM	MSCI:EM	MSCI:EM	MSCI:EM	MSCI:EM
Proposed Vehicle	CIT	CIT	CIT	CIT	CIT	CIT
Product / Vehicle Inception	2008 / 2014	2006 / TBD	2002 / 2009	2008 / 2009	2010 / 2010	2020 / TBD
Total Product Assets (\$mm)	13,016	679	18,611	9,240	6,538	1,624
Total Vehicle Assets (\$mm)	1,111	0	2,268	1,552	1,283	0
Number of Holdings	304	58	385	124	154	127
Annual Turnover	80%	23%	165%	74%	96%	-
Emerging Market Exposure*	100% (3rd)	86% (81st)	99% (5th)	98% (12th)	90% (59th)	90% (58th)
Combined Z-Score*	-0.60 (89th)	0.30 (47th)	0.05 (62nd)	0.31 (45th)	0.27 (53rd)	0.22 (57th)
Weighted Median Market Cap*	14.66 (85th)	28.87 (57th)	42.34 (44th)	46.40 (34th)	40.07 (45th)	41.34 (44th)

*Ranking vs Callan Emerging Broad in parenthesis

Candidate Product Summary (continued)

Parametric Portfolio Associates LLC (Incumbent)

Product Name	Parametric Emerging Markets Equity
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Product Benchmark	MSCI:EM
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Proposed Vehicle	CIT
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Product / Vehicle Inception	1998 / 2008
-----------------------------	-------------

Total Product Assets (\$mm)	3,202
-----------------------------	-------

Total Vehicle Assets (\$mm)	338
-----------------------------	-----

Number of Holdings	1,546
--------------------	-------

Annual Turnover	13%
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Emerging Market Exposure*	87% (72nd)
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Combined Z-Score*	-0.24 (81st)
-------------------	--------------

Weighted Median Market Cap*	7.02 (94th)
-----------------------------	-------------

*Ranking vs Callan Emerging Broad in parenthesis

Product Level Investment Professionals

	Product Level Resources				Gained (5 Yr)		Lost (5 Yr)	
	Portfolio Managers	Central Research Analysts	Dedicated Fundamental Analysts	Quantitative Analysts	Portfolio Managers	Dedicated Fundamental Analysts	Portfolio Managers	Dedicated Fundamental Analysts
AQR	5	73			1 (20%)	0	1 (20%)	0
Artisan	1		5		0 (0%)	0 (0%)	0 (0%)	0 (0%)
BlackRock	23	26			0 (0%)	0	2 (9%)	0
Fidelity	3	155			0 (0%)	0	0 (0%)	0
Wellington: EMRE			53		0 (0%)	1 (2%)	0 (0%)	4 (8%)
Wellington: EMRE Core	2		53		0 (0%)	0 (0%)	0 (0%)	0 (0%)
Parametric (Incumbent)	34	9			10 (29%)	0	3 (9%)	0

Key Investment Professionals

AQR

Key Professionals	Started with Product	Joined Firm	Investment Experience
John Liew - PM	2008	1998	1995
Cliff Asness - PM	2008	1998	1991
Jacques Friedman - PM	2008	1998	1996
Ronen Israel - PM	2008	1999	1996
Lars Nielsen - PM	2008	2000	2000
Michele Aghassi - PM	2008	2005	2001

Fidelity

Key Professionals	Started with Product	Joined Firm	Investment Experience
John Chow - PM	2011	1994	1994
Cesar Hernandez - PM	2008	1988	1980
Abhijeet Singh - Product Manager	2008	2003	1998
Matt Torrey - Product Manager	2018	1994	1993

Artisan

Key Professionals	Started with Product	Joined Firm	Investment Experience
Maria Negrete-Gruson - PM	2006	2006	1992

Wellington: EMRE

Key Professionals	Started with Product	Joined Firm	Investment Experience
Jonathan G. White - PM	1999	1999	1994
Mary Pryshlak - PM	2017	2004	1993

BlackRock

Key Professionals	Started with Product	Joined Firm	Investment Experience
Jeff Shen - PM	2009	2004	1997

Wellington: EMRE Core

Key Professionals	Started with Product	Joined Firm	Investment Experience
Jonathan G. White - PM	1999	1999	1994
Mary Pryshlak - PM	2017	2004	1993

Key Investment Professionals (continued)

Parametric (Incumbent)

Key Professionals	Started with Product	Joined Firm	Investment Experience
Thomas Lee - PM	1998	1994	1991

Product Assets Under Management

Product Assets by Vehicle (\$mm) as of December 31, 2020

	Separate Account	Commingled	MF Institutional	MF Retail	Total
AQR	8,630	4,386			13,016
Artisan	531	80	56	11	679
BlackRock	12,797	5,188		625	18,611
Fidelity	3,901	1,882		3,457	9,240
Wellington: EMRE	3,347	3,191			6,538
Wellington: EMRE Core	1,624				1,624
Parametric (Incumbent)	695	858	1,648		3,202

Product Asset Turnover

Product Asset Turnover (\$mm) as of December 31, 2020

	Total Product Assets	Largest Account	Total Accounts	5-Year Net Asset Growth	2020 Assets	2019 Assets	2018 Assets	2017 Assets	2016 Assets
AQR	13,016	2,749	62	-5,208	13,016	13,031	12,492	16,969	12,518
Artisan	679	310	6	-213	679	234	179	282	228
BlackRock	18,611	4,921	51	6,645	18,611	13,945	10,719	12,485	5,573
Fidelity	9,240	3,457	51	5,340	9,240	3,026	2,027	2,064	1,658
Wellington: EMRE	6,538	1,674	16	4,877	6,538	4,631	2,112	630	94
Wellington: EMRE Core	1,624	1,001	5	0	1,624	-	-	-	-
Parametric (Incumbent)	3,202	870	27	-10,564	3,202	6,498	7,323	11,935	11,131

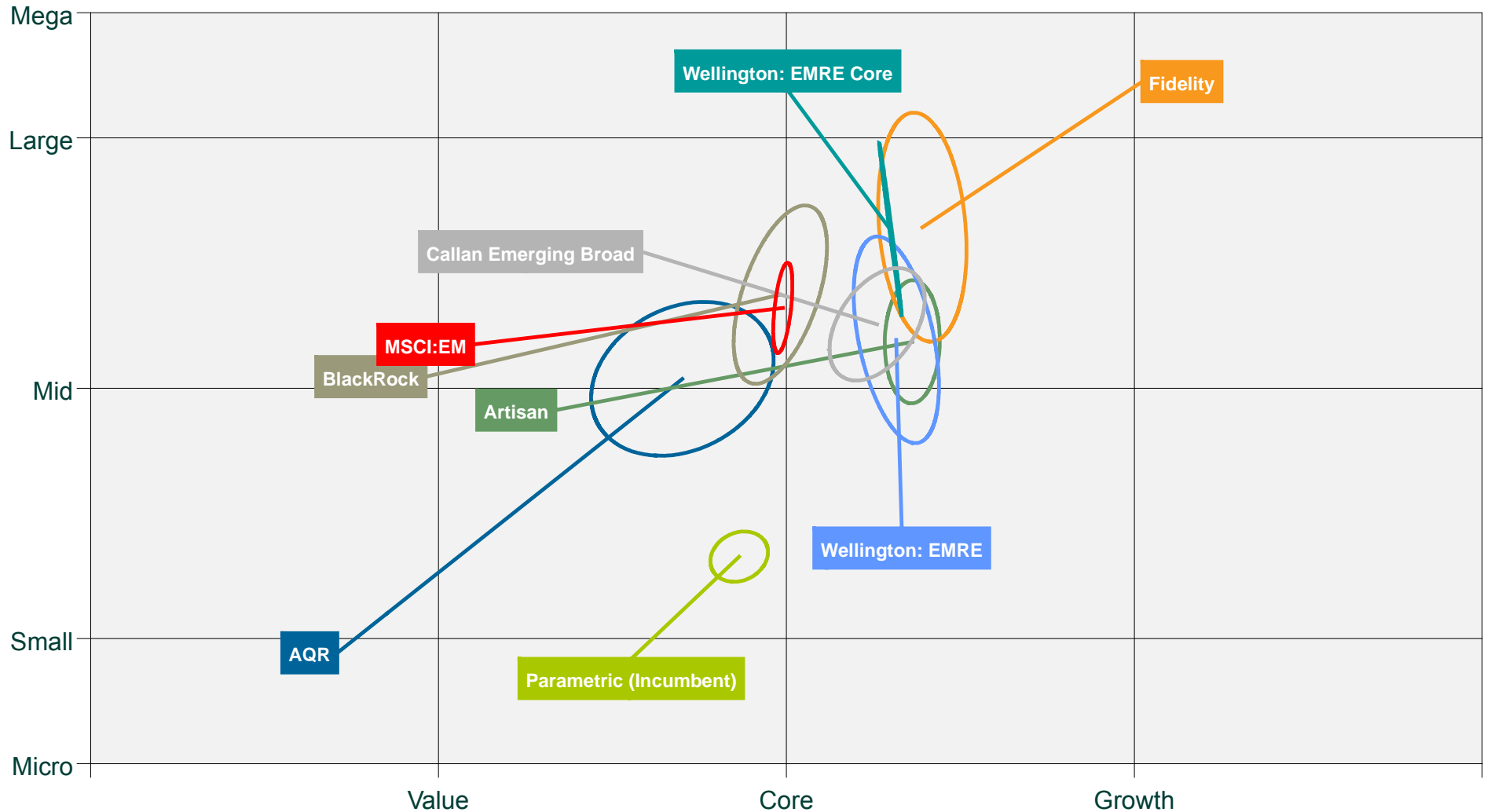


Candidate Portfolio Characteristics

Style Map

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various market capitalization and style segments. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z score", based on the eight fundamental factors used in the MSCI stock style scoring system. The style map illustrates the average historical market capitalization and style score of the portfolio.

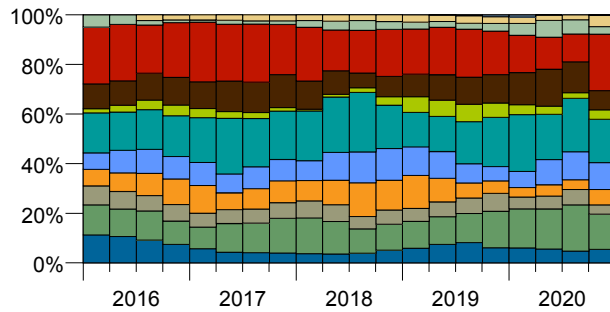
Style Map for Five Years Ended December 31, 2020



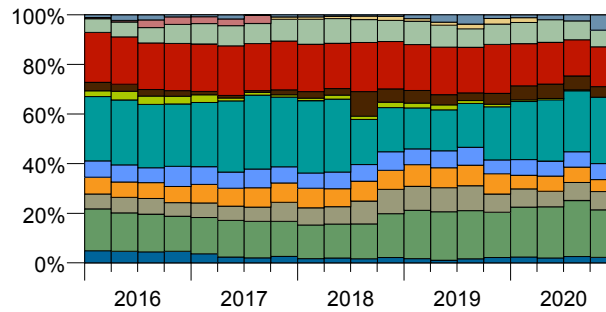
Portfolio Characteristics shown for the separate account composites

Sector Allocation

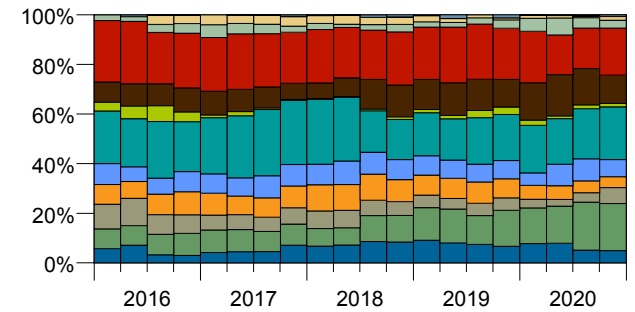
AQR



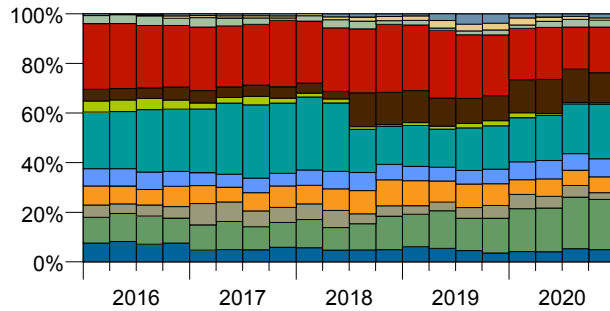
Artisan



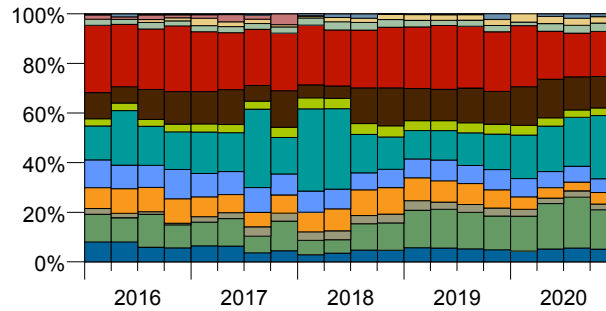
BlackRock



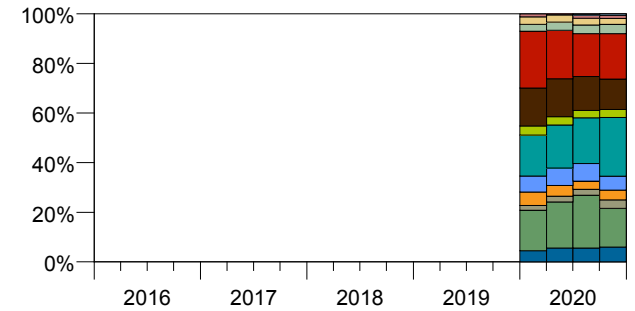
Fidelity



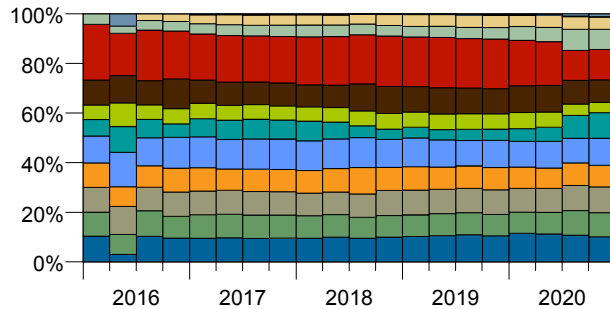
Wellington: EMRE



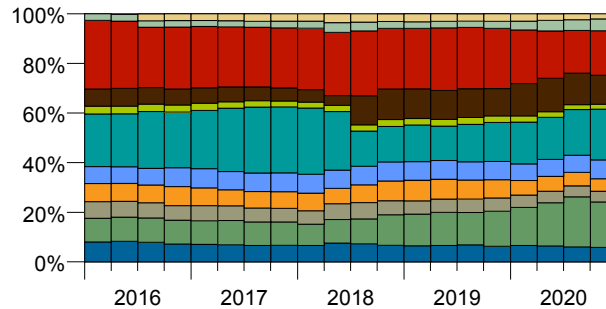
Wellington: EMRE Core



Parametric (Incumbent)

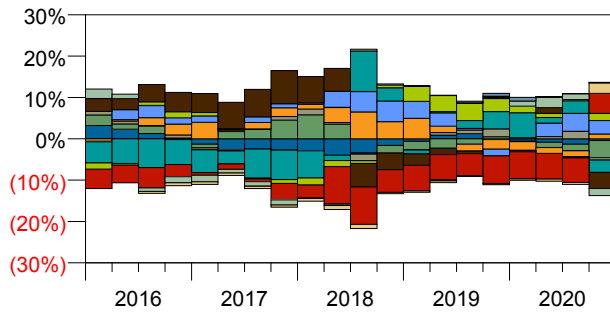


Index: MSCI EM - Emerging Mkts (USD Net Div)

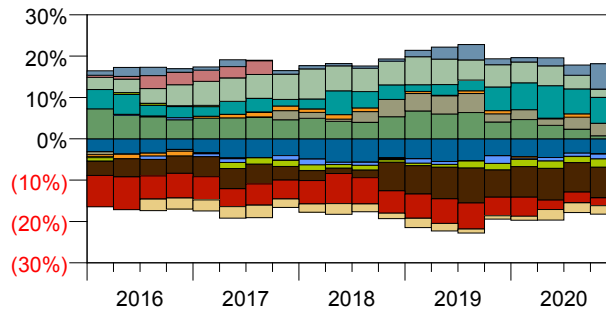


Sector Allocation Relative to MSCI:EM

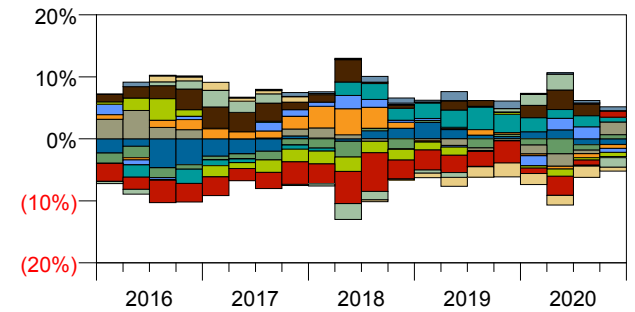
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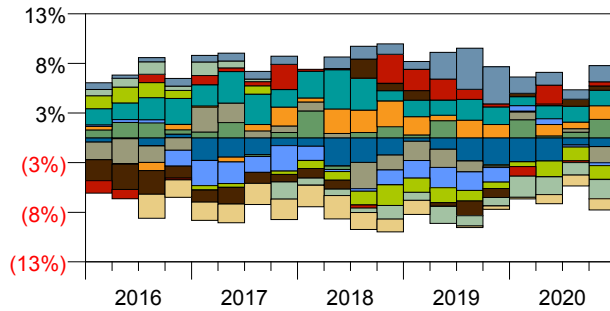
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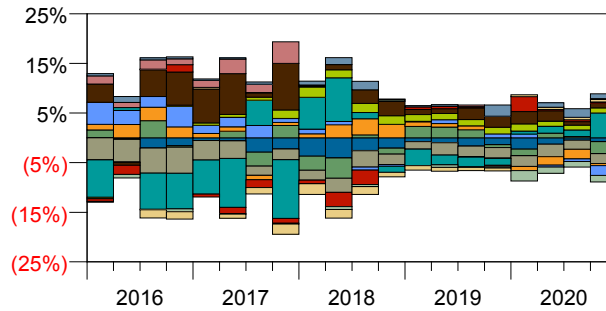
BlackRock



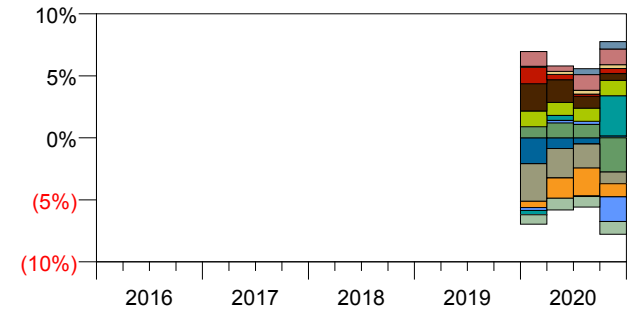
Fidelity



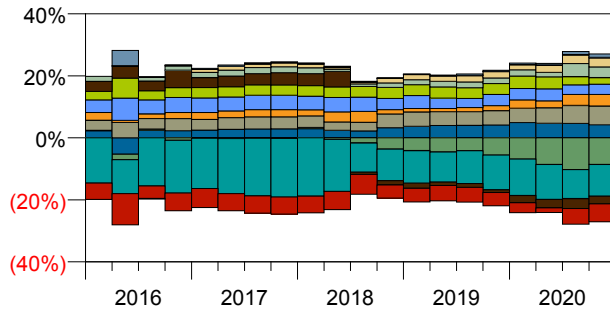
Wellington: EMRE



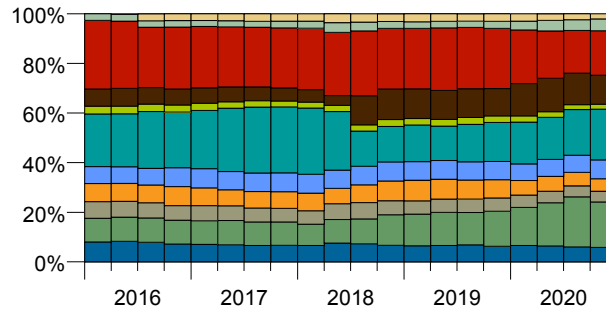
Wellington: EMRE Core



Parametric (Incumbent)

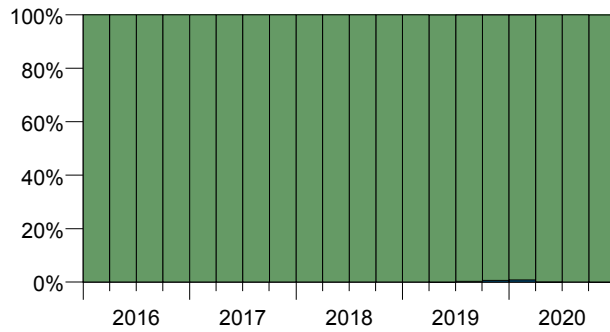


Index: MSCI EM - Emerging Mkts (USD Net Div)

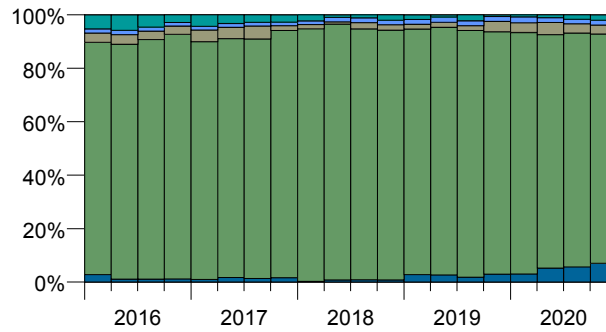


Region Exposure

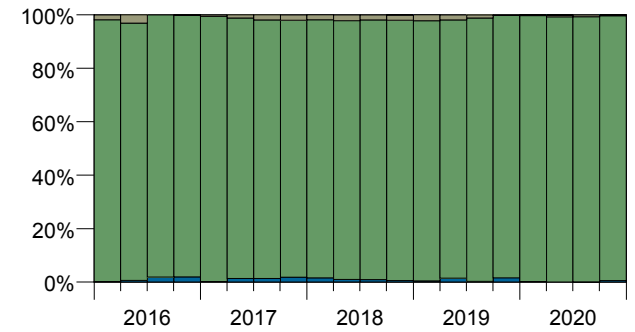
AQR



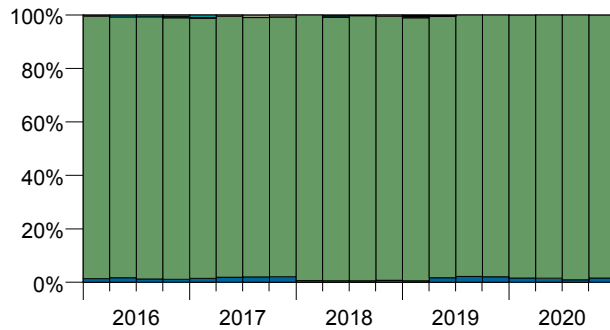
Artisan



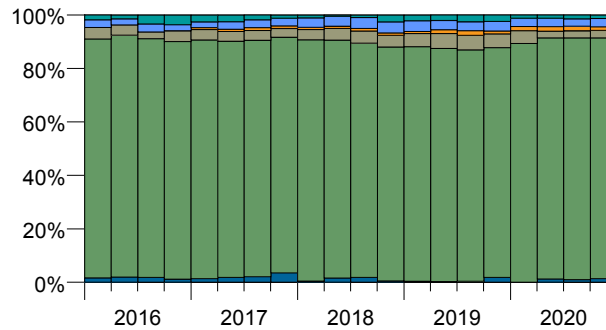
BlackRock



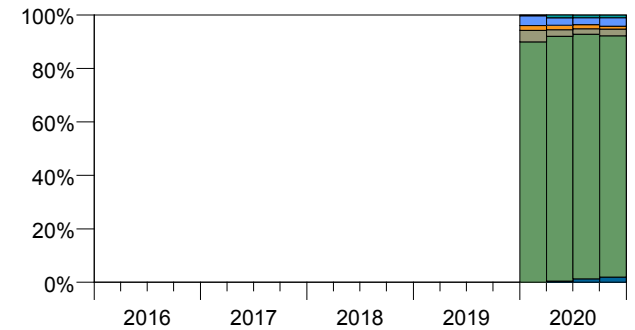
Fidelity



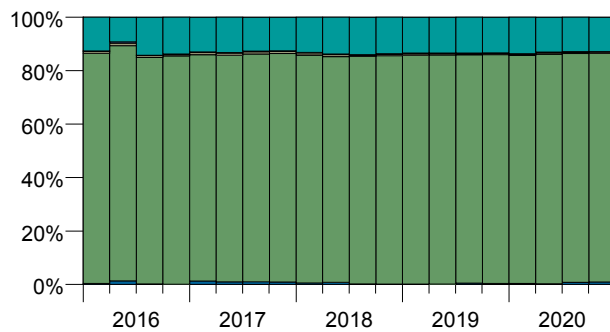
Wellington: EMRE



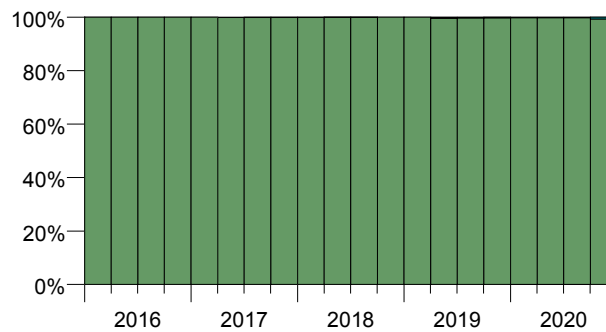
Wellington: EMRE Core



Parametric (Incumbent)

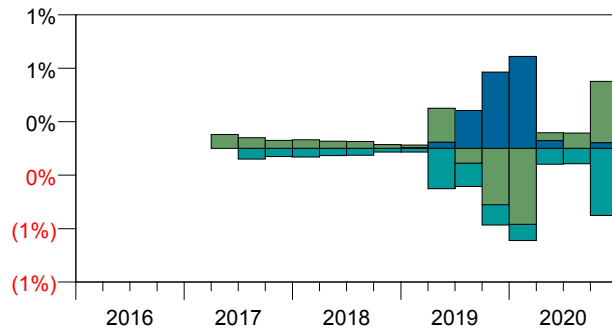


Index: MSCI EM - Emerging Mkts (USD Net Div)

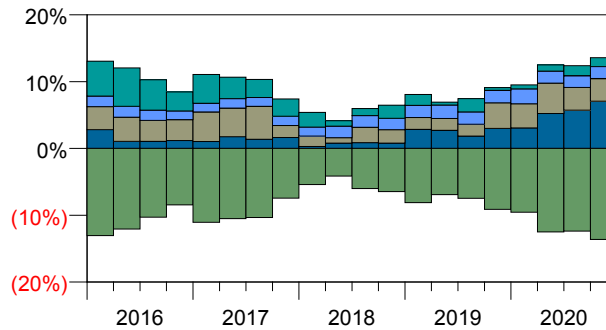


Region Exposure Relative to MSCI:EM

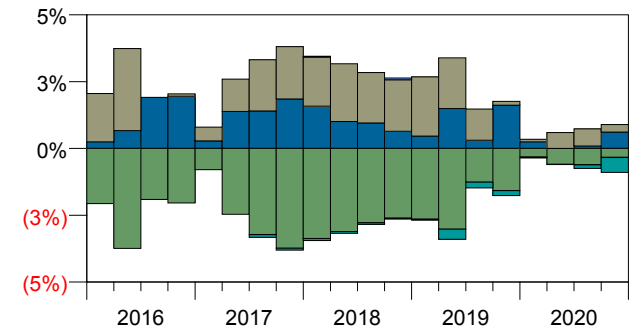
AQR



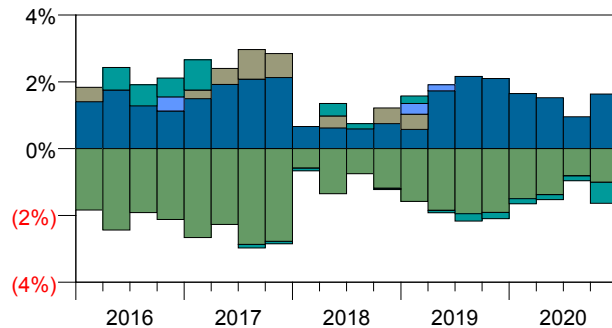
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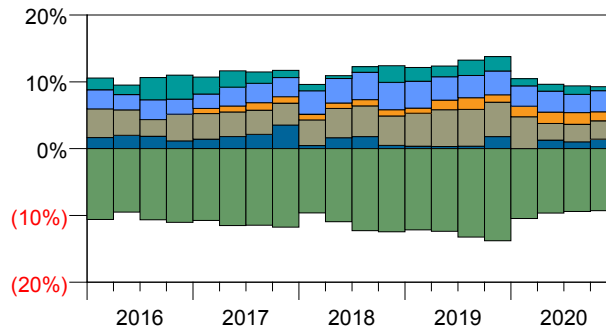
BlackRock



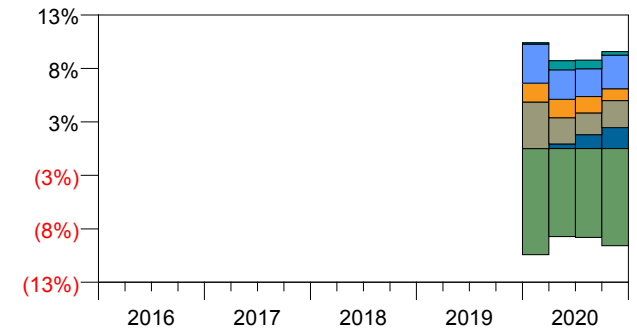
Fidelity



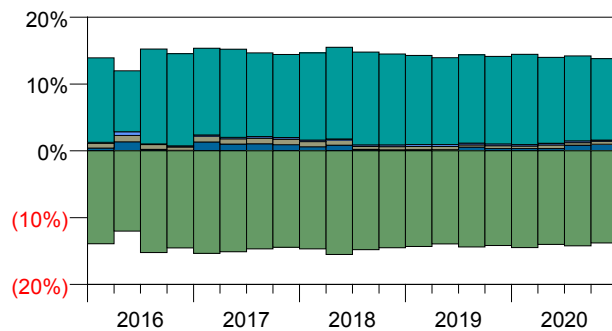
Wellington: EMRE



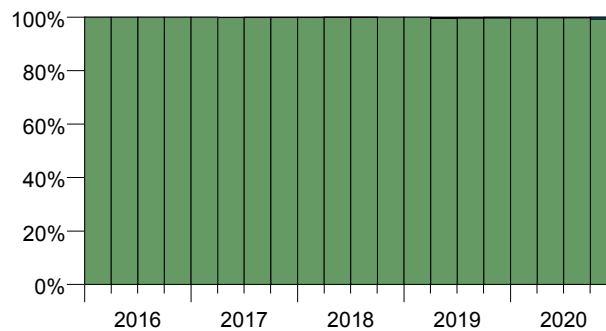
Wellington: EMRE Core



Parametric (Incumbent)

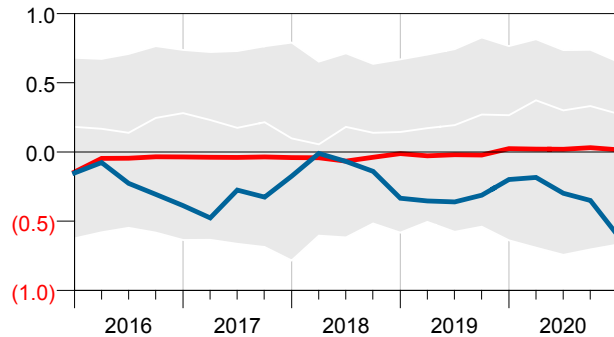
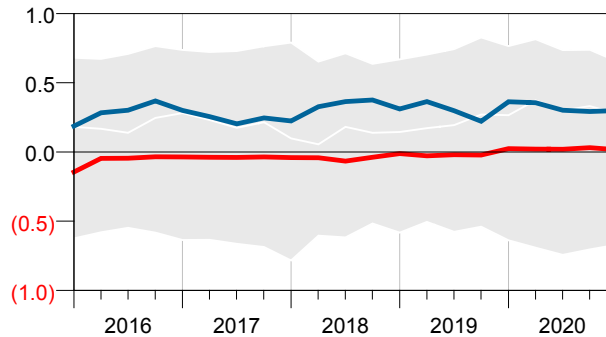
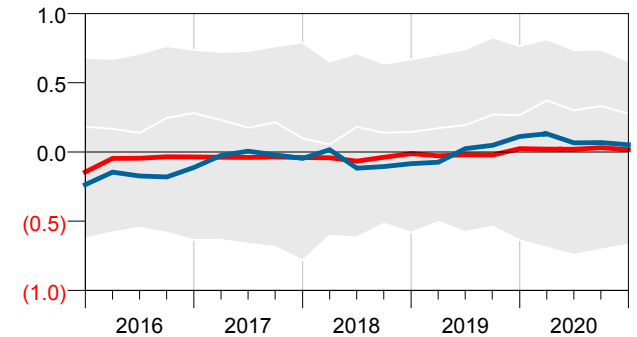
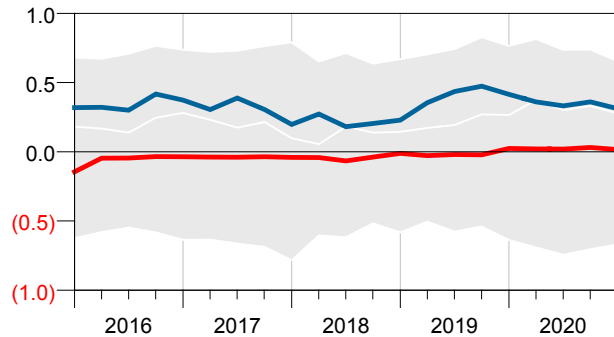
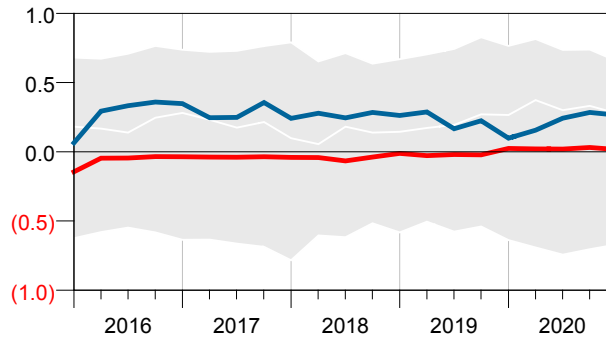
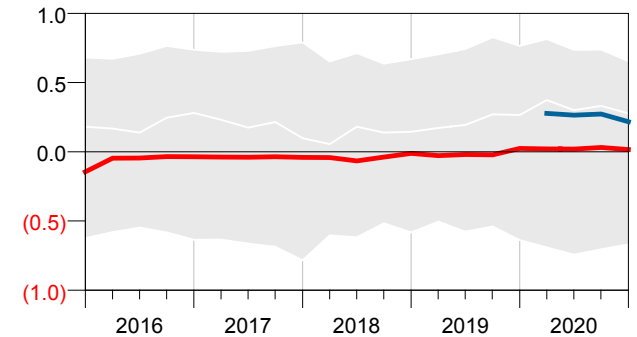
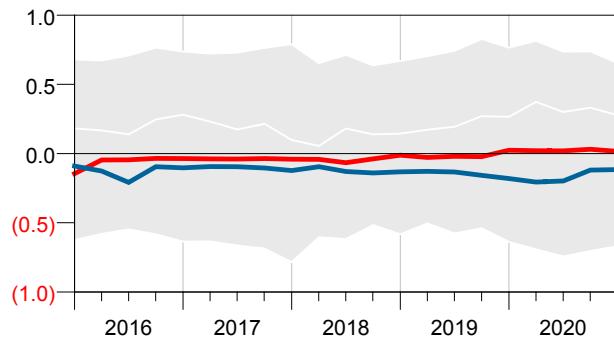


Index: MSCI EM - Emerging Mkts (USD Net Div)



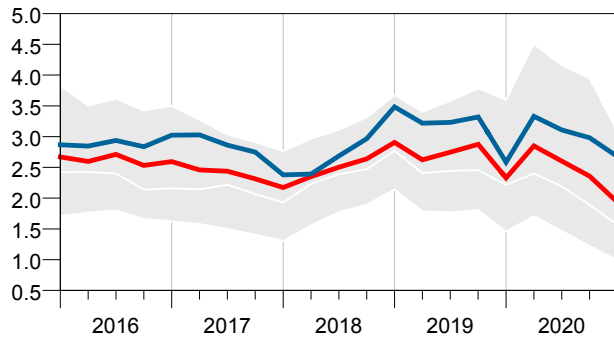
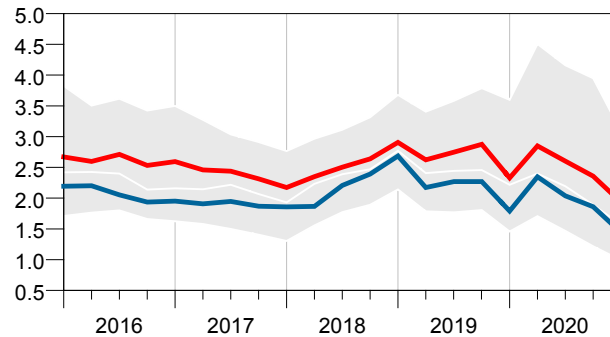
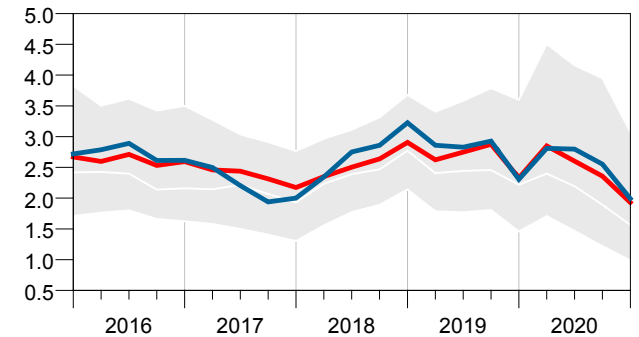
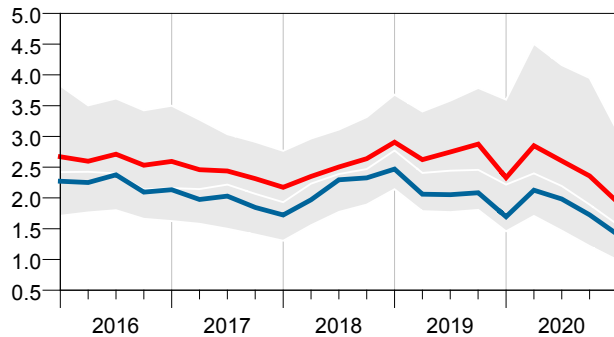
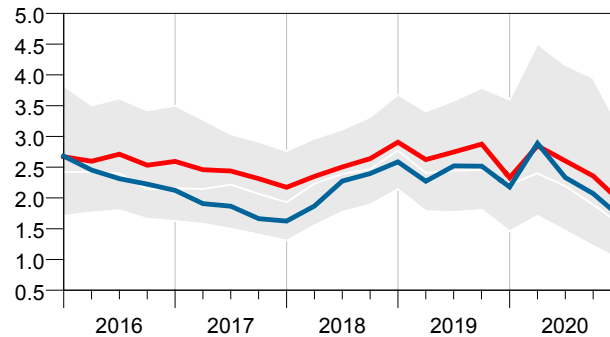
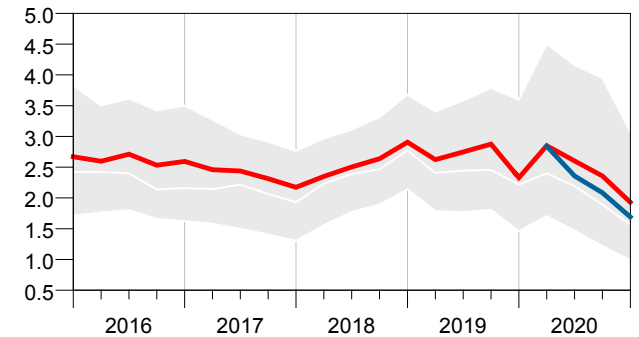
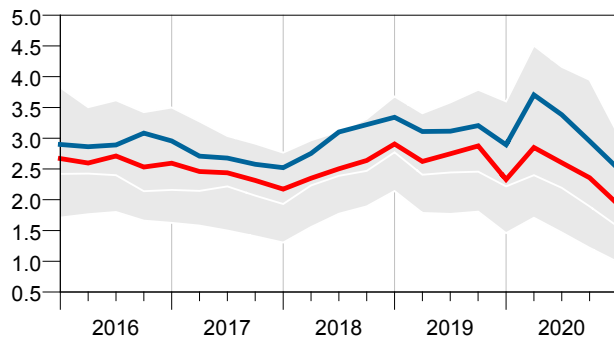
Combined Z Score

The charts below illustrate Combined Z Score for different managers over time. As a backdrop, the range (from 10th to 90th percentile) is shown for the Callan Emerging Broad group. The MSCI EM - Emerging Mkts (USD Net Div) index is shown in red for comparison.

AQR**Artisan****BlackRock****Fidelity****Wellington: EMRE****Wellington: EMRE Core****Parametric (Incumbent)**

Dividend Yield

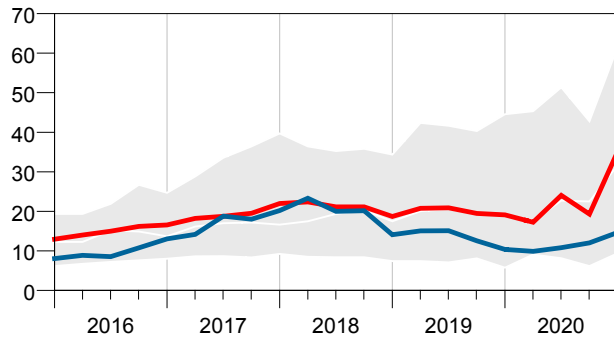
The charts below illustrate Dividend Yield for different managers over time. As a backdrop, the range (from 10th to 90th percentile) is shown for the Callan Emerging Broad group. The MSCI EM - Emerging Mkts (USD Net Div) index is shown in red for comparison.

AQR**Artisan****BlackRock****Fidelity****Wellington: EMRE****Wellington: EMRE Core****Parametric (Incumbent)**

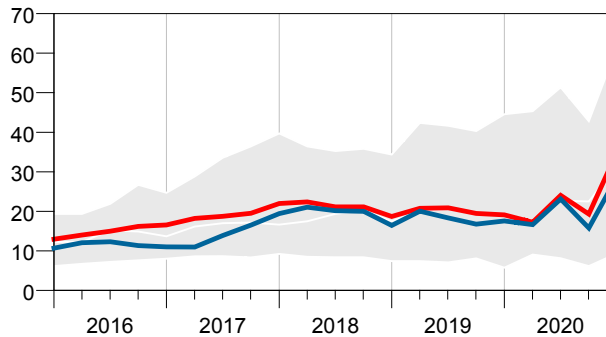
Weighted Median Market Capitalization

The charts below illustrate Weighted Median Market Capitalization for different managers over time. As a backdrop, the range (from 10th to 90th percentile) is shown for the Callan Emerging Broad group. The MSCI EM - Emerging Mkts (USD Net Div) index is shown in red for comparison.

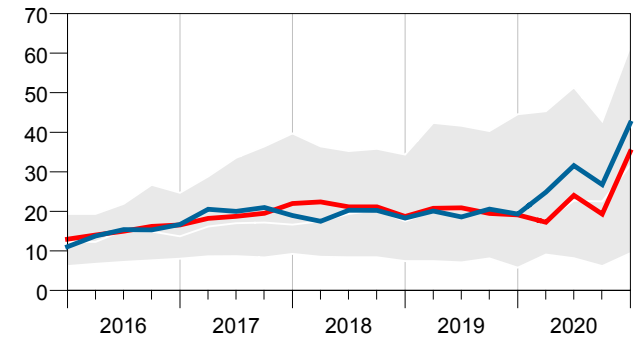
AQR



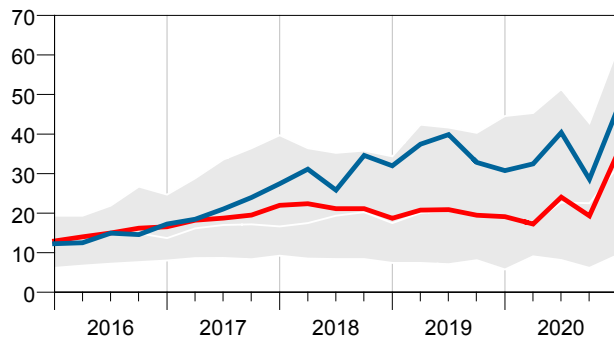
Artisan



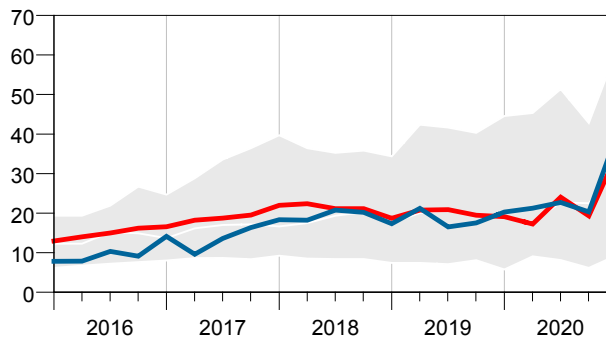
BlackRock



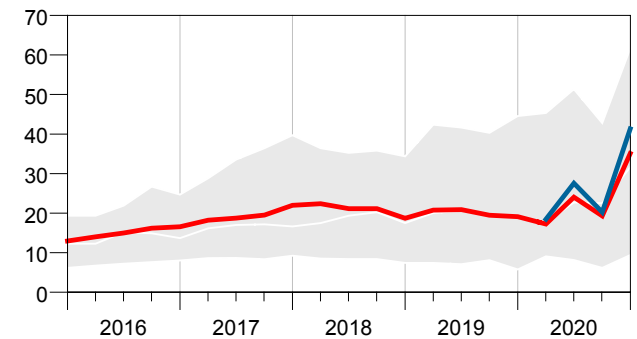
Fidelity



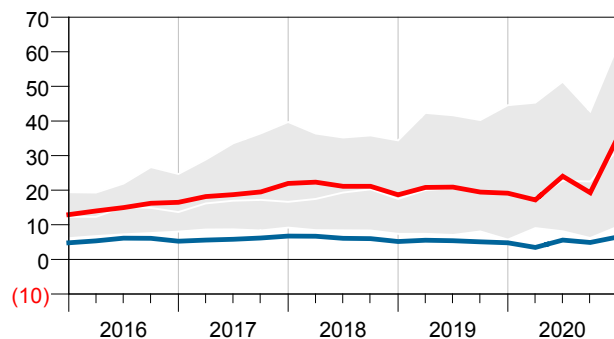
Wellington: EMRE



Wellington: EMRE Core



Parametric (Incumbent)



Historical Rankings - Combined Z Score

This page compares multiple portfolios to each other by analyzing both the historical median ranking for a given metric versus a relevant peer group, and the consistency and range (standard deviation) of that ranking over time. The midpoint of each sideways bar represents the median ranking of a given portfolio over time, and the width of the bar represents the consistency and range of that ranking (+/- 1 standard deviation). The slash-separated numbers show the median and standard deviation, respectively, of the portfolios' ranking. The current ranking of each portfolio is demarcated by a dot, while the corresponding current value of the metric is displayed on the far right.

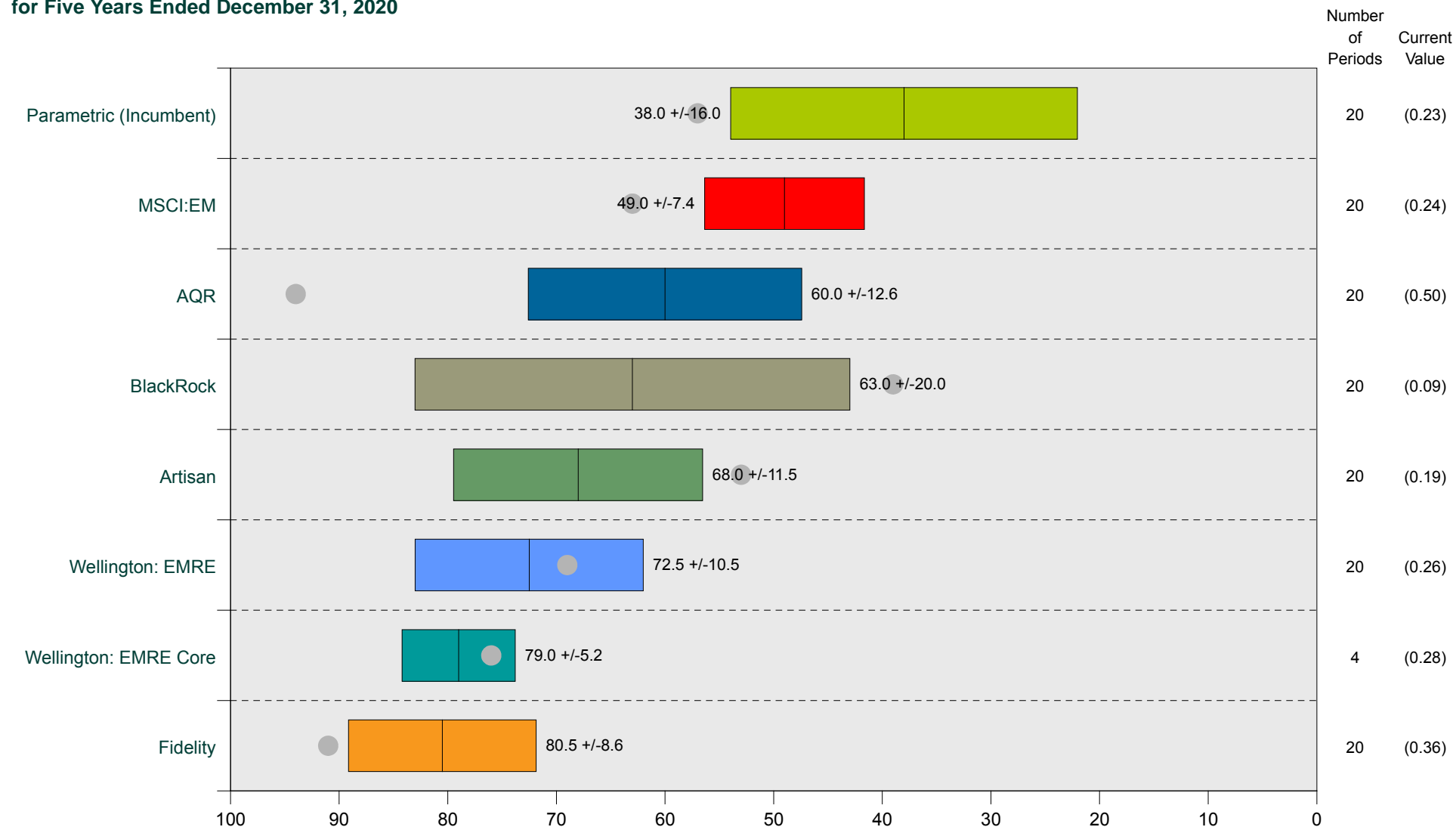
Combined Z Score Against Callan Emerging Broad for Five Years Ended December 31, 2020



Historical Rankings - Stability Score

This page compares multiple portfolios to each other by analyzing both the historical median ranking for a given metric versus a relevant peer group, and the consistency and range (standard deviation) of that ranking over time. The midpoint of each sideways bar represents the median ranking of a given portfolio over time, and the width of the bar represents the consistency and range of that ranking (± 1 standard deviation). The slash-separated numbers show the median and standard deviation, respectively, of the portfolios' ranking. The current ranking of each portfolio is demarcated by a dot, while the corresponding current value of the metric is displayed on the far right.

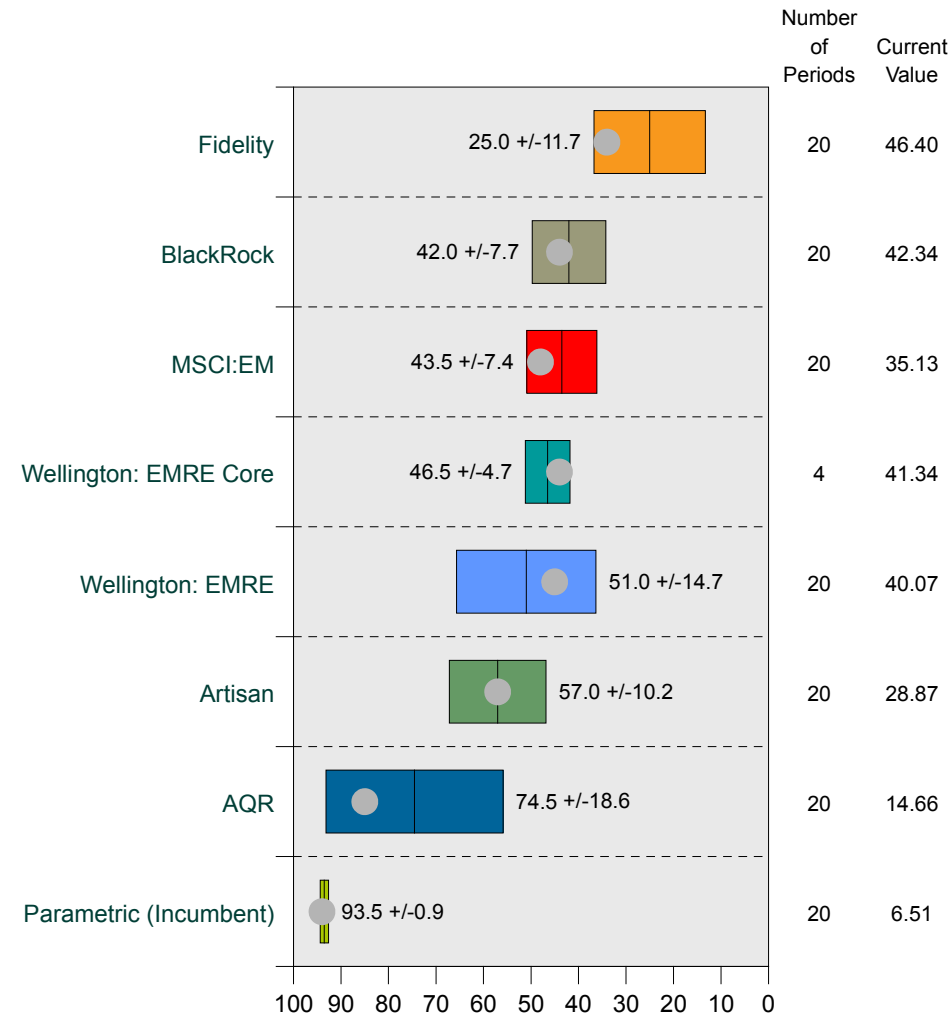
Stability Score Against Callan Emerging Broad for Five Years Ended December 31, 2020



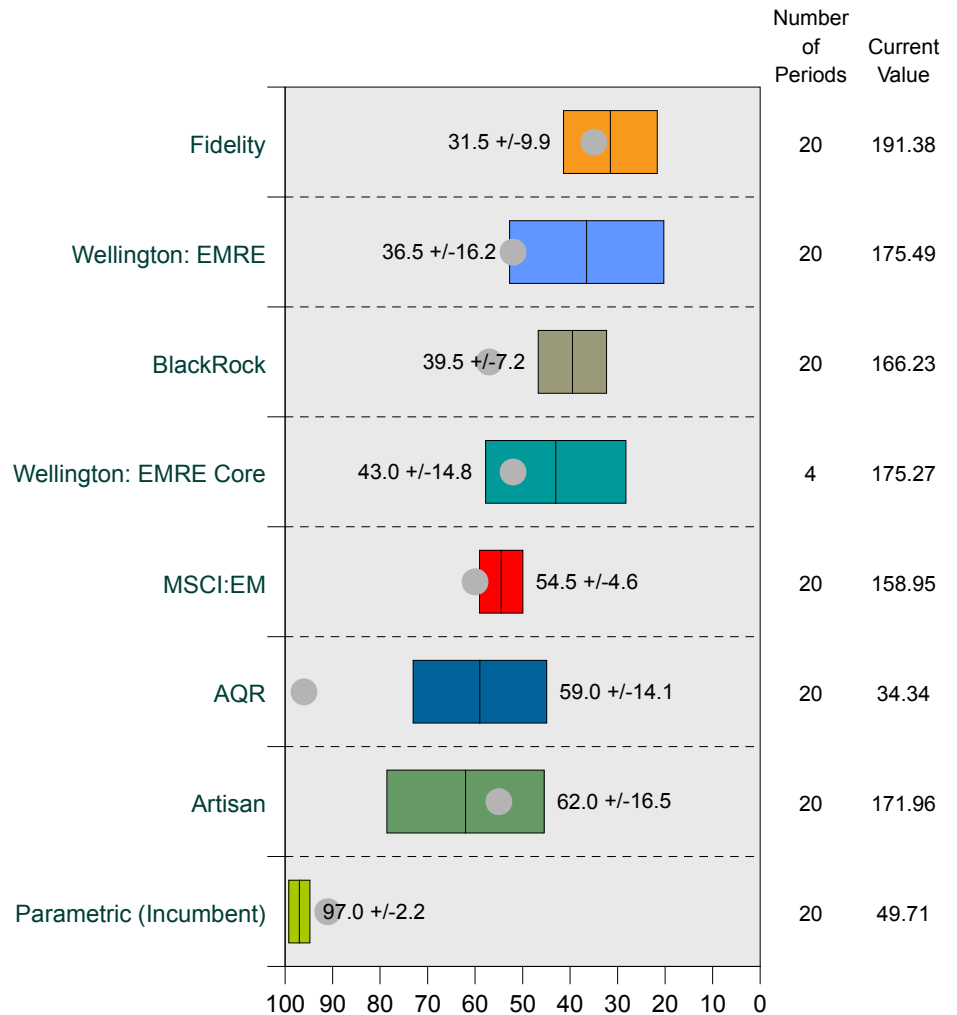
Historical Rankings - Weighted Median & Average Market Cap.

This page compares multiple portfolios to each other by analyzing both the historical median ranking for a given metric versus a relevant peer group, and the consistency and range (standard deviation) of that ranking over time. The midpoint of each sideways bar represents the median ranking of a given portfolio over time, and the width of the bar represents the consistency and range of that ranking (± 1 standard deviation). The slash-separated numbers show the median and standard deviation, respectively, of the portfolios' ranking. The current ranking of each portfolio is demarcated by a dot, while the corresponding current value of the metric is displayed on the far right.

Weighted Median Market Cap Against Callan Emerging Broad for Five Years Ended December 31, 2020



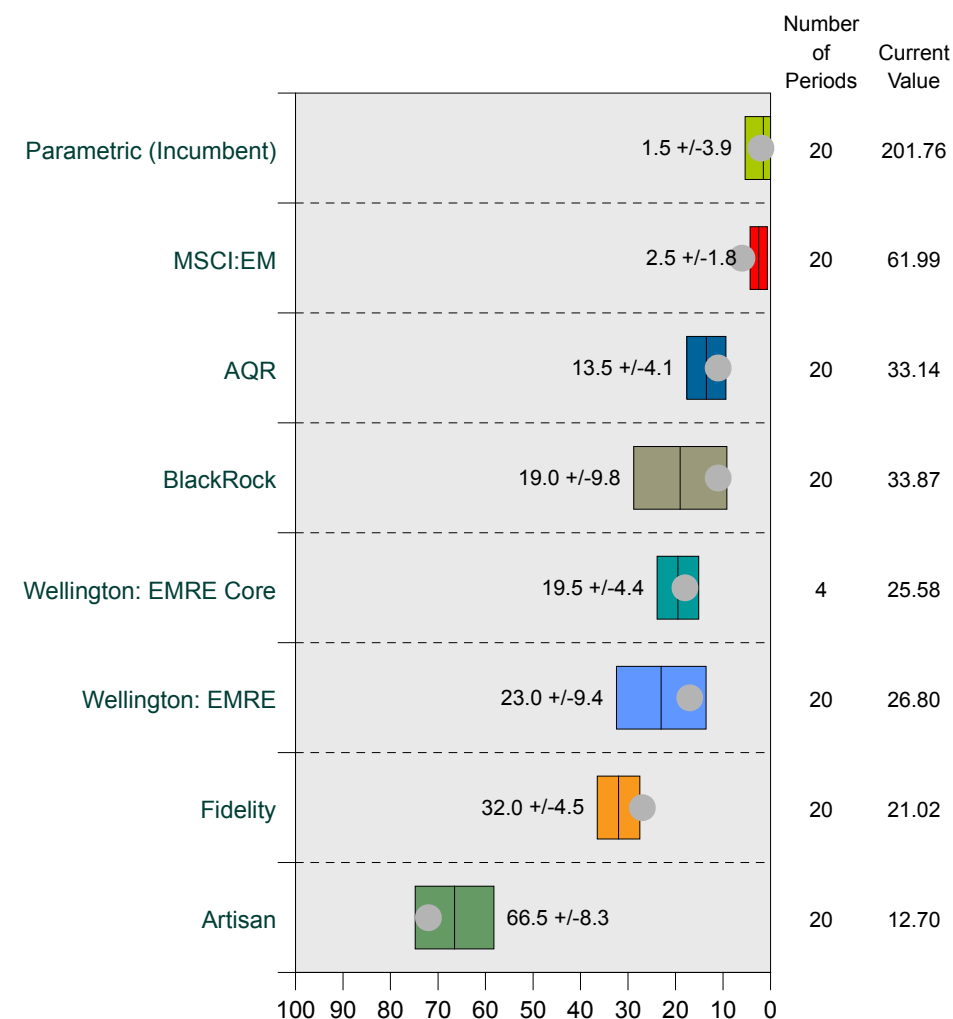
Weighted Average Market Cap Against Callan Emerging Broad for Five Years Ended December 31, 2020



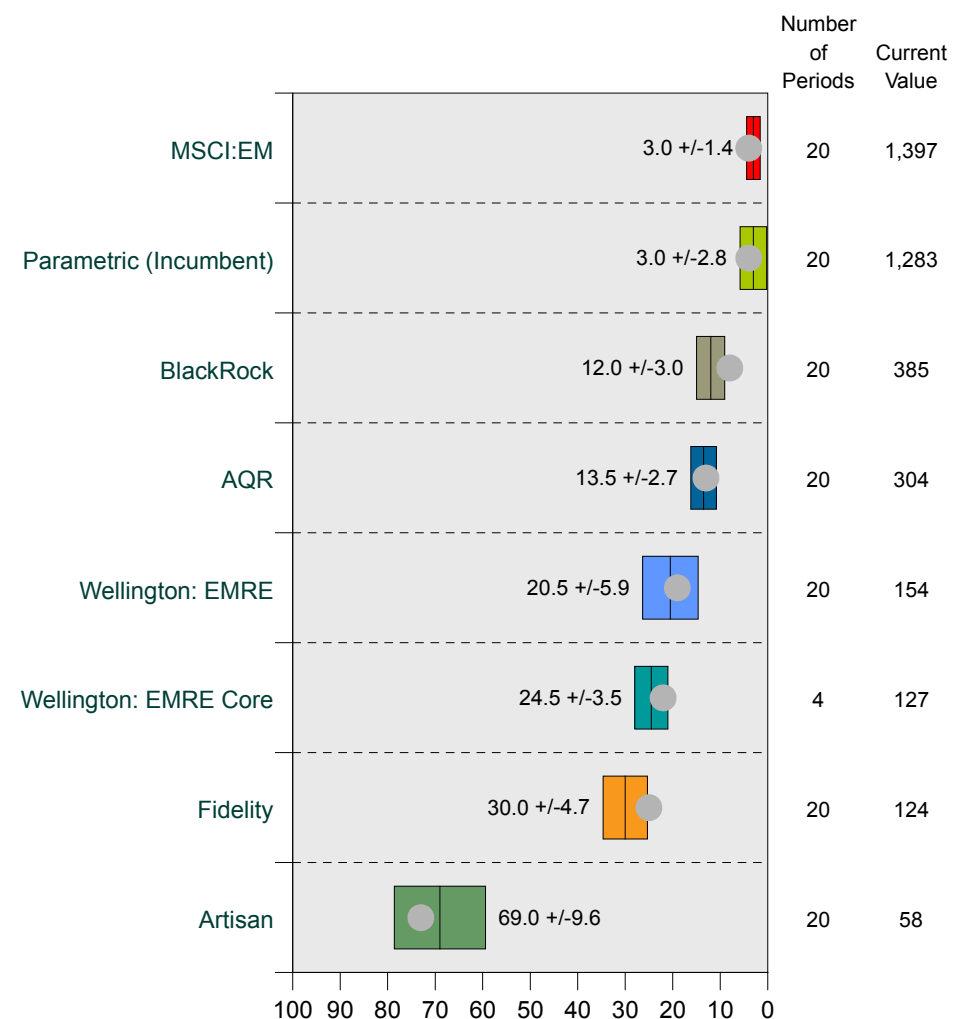
Historical Rankings - Issue Div. & Number of Holdings

This page compares multiple portfolios to each other by analyzing both the historical median ranking for a given metric versus a relevant peer group, and the consistency and range (standard deviation) of that ranking over time. The midpoint of each sideways bar represents the median ranking of a given portfolio over time, and the width of the bar represents the consistency and range of that ranking (± 1 standard deviation). The slash-separated numbers show the median and standard deviation, respectively, of the portfolios' ranking. The current ranking of each portfolio is demarcated by a dot, while the corresponding current value of the metric is displayed on the far right.

Issue Diversification Against Callan Emerging Broad for Five Years Ended December 31, 2020

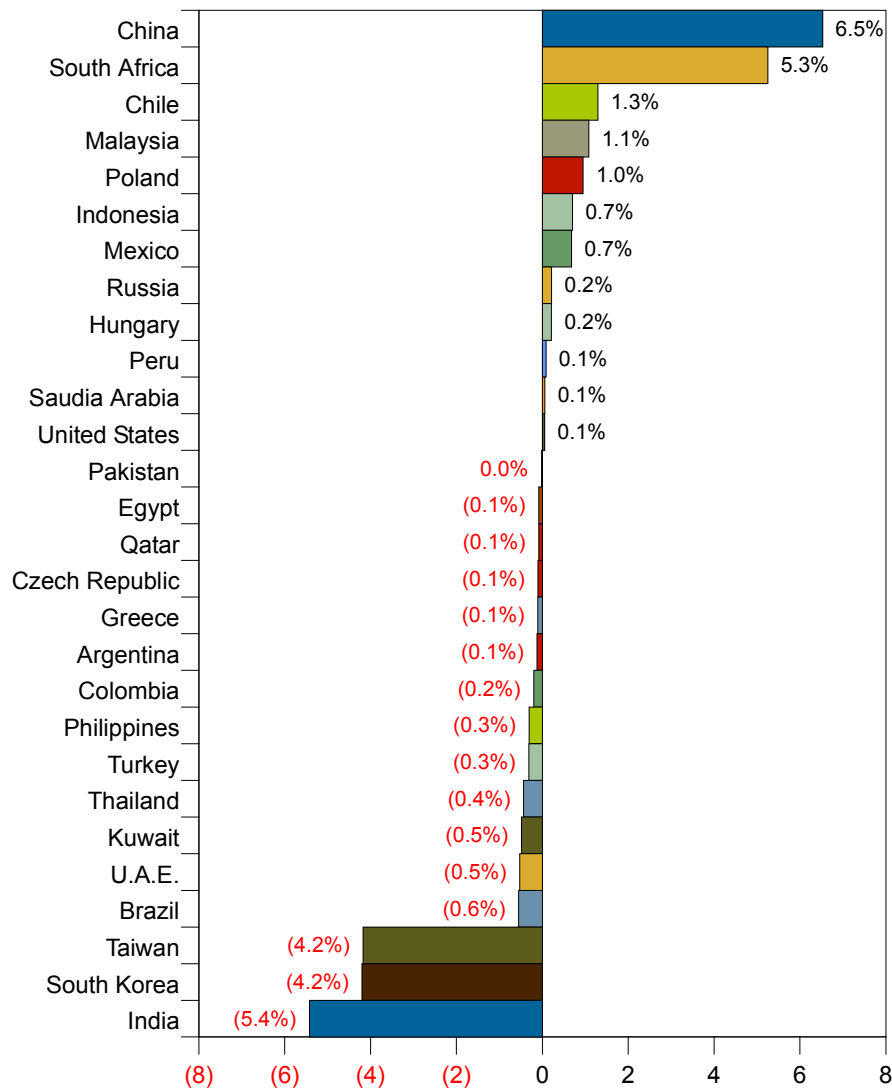


Number of Holdings Against Callan Emerging Broad for Five Years Ended December 31, 2020

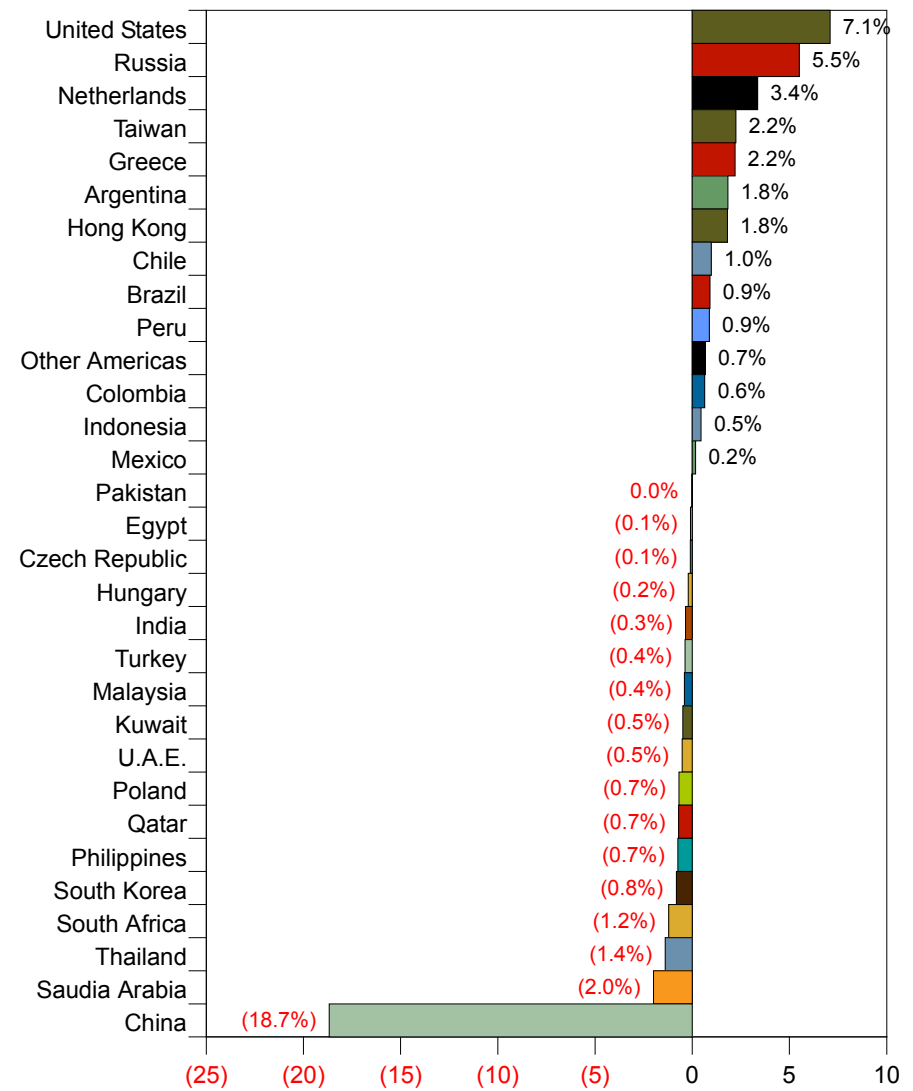


Relative Country Exposures Relative to MSCI:EM

AQR

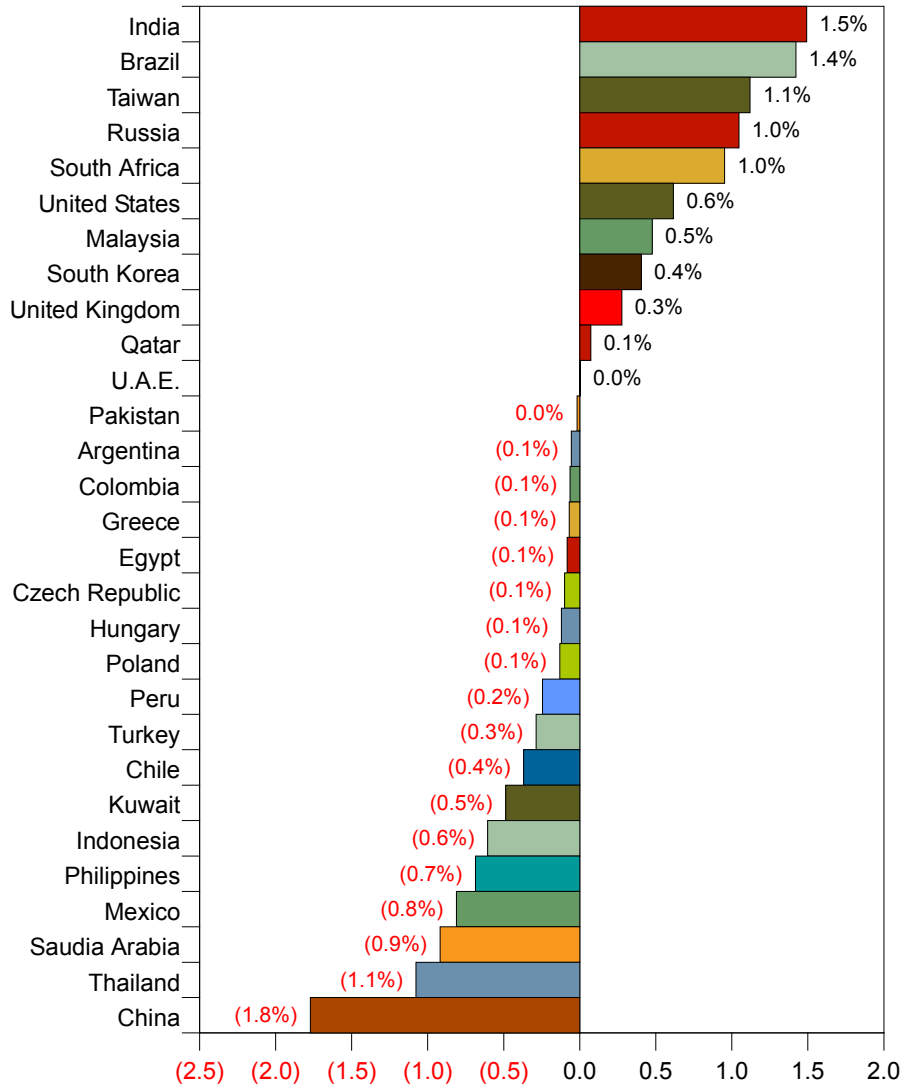


Artisan

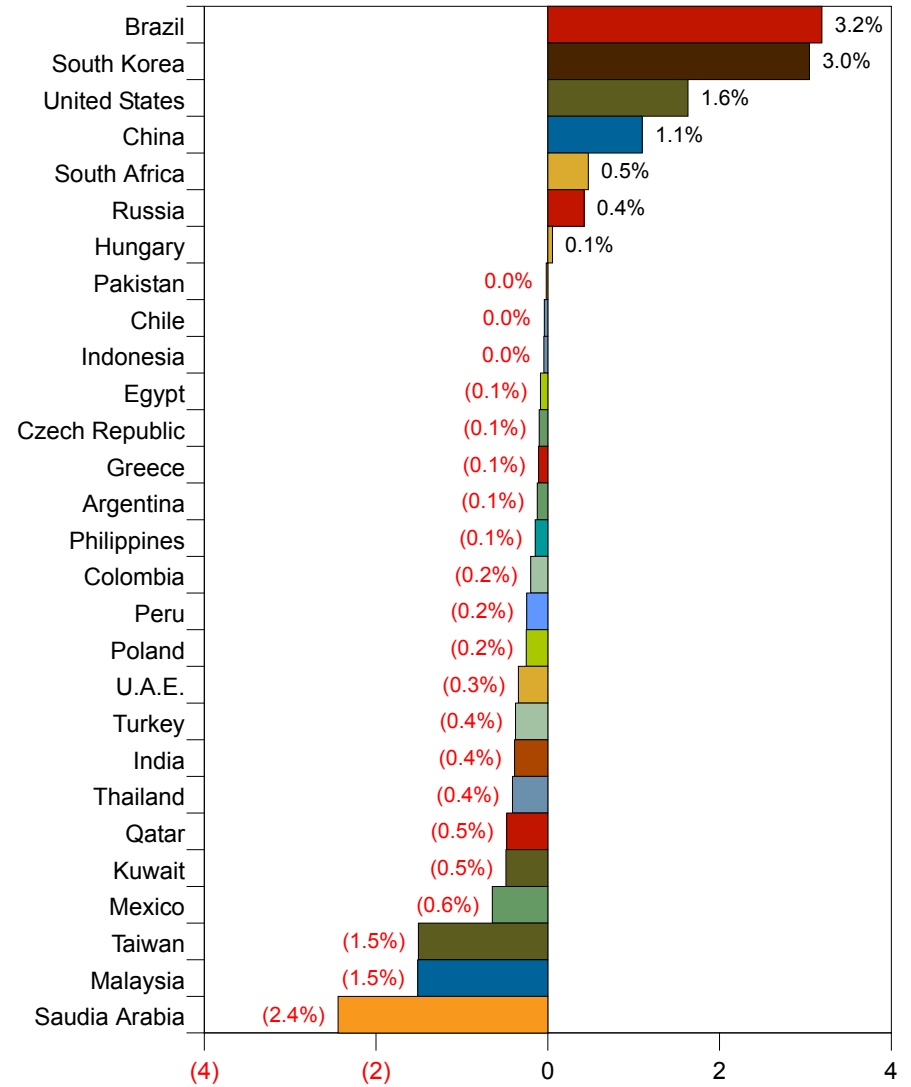


Relative Country Exposures Relative to MSCI:EM

BlackRock

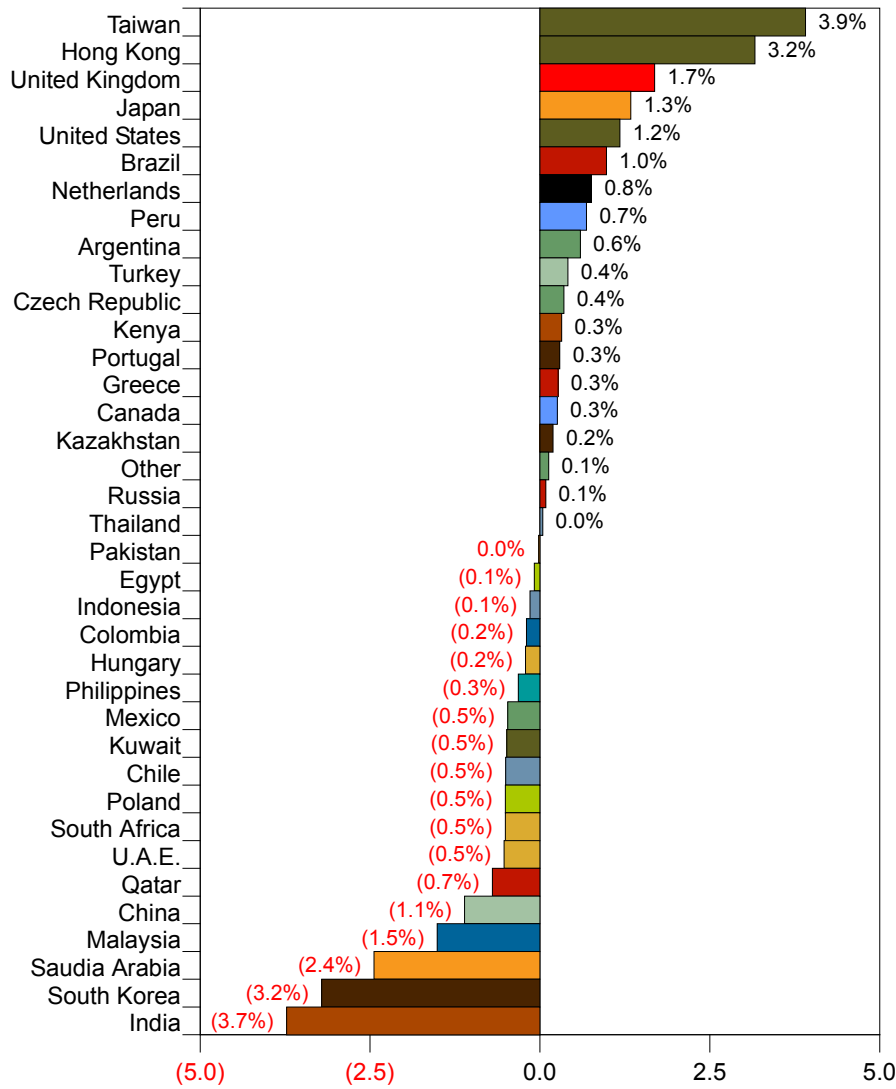


Fidelity

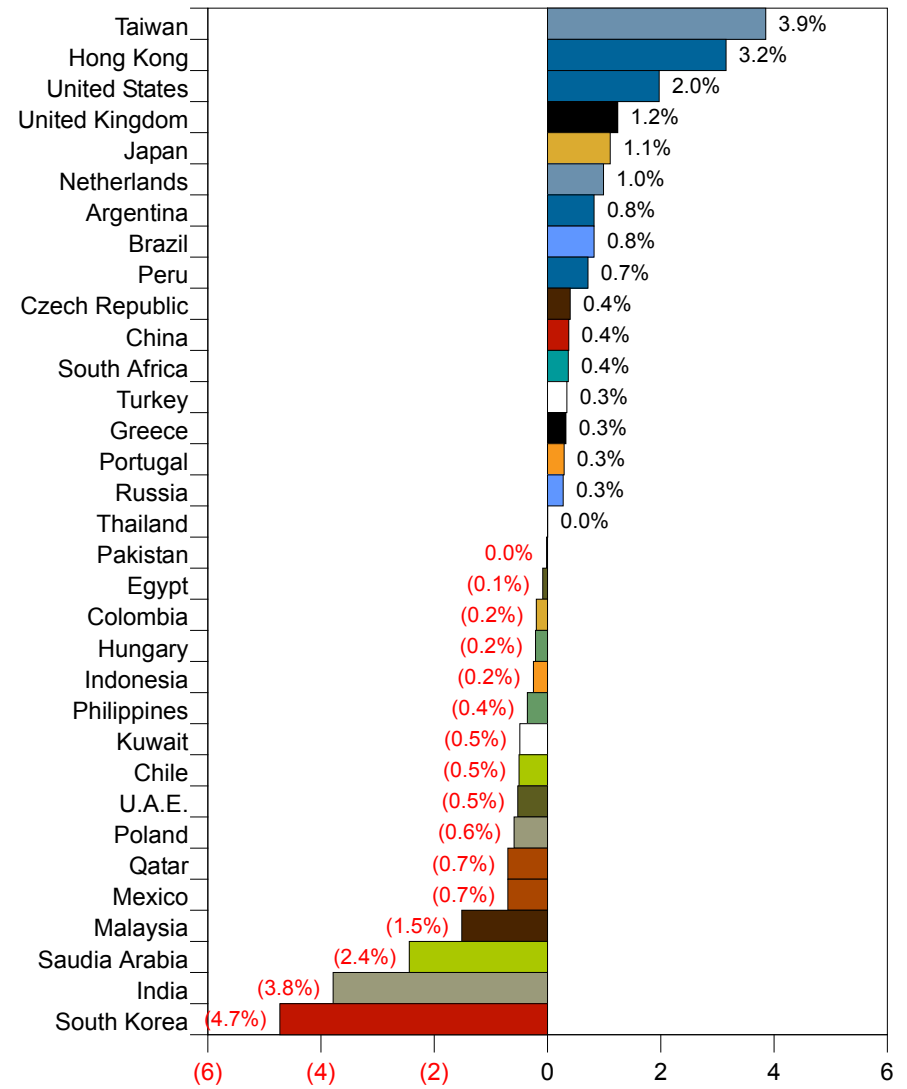


Relative Country Exposures Relative to MSCI:EM

Wellington: EMRE

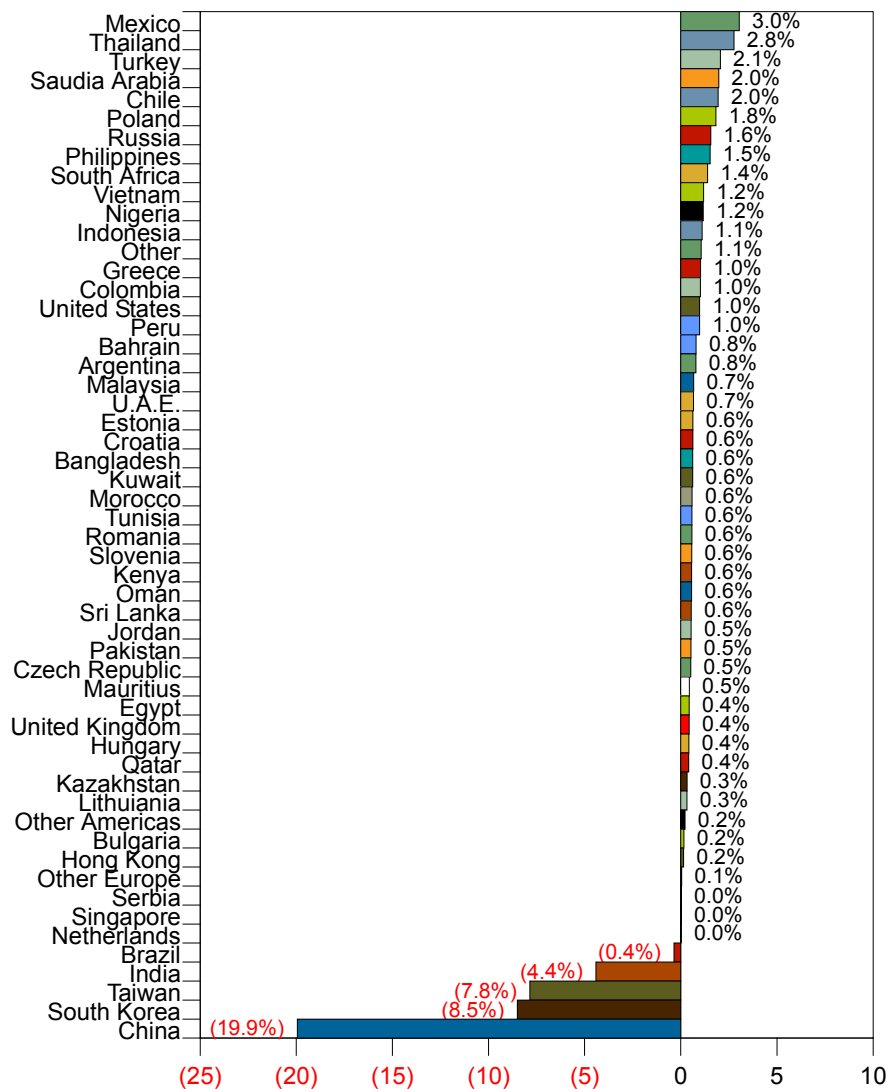


Wellington: EMRE Core



Relative Country Exposures Relative to MSCI:EM

Parametric (Incumbent)



Comparative Manager Matrix

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. The holding overlap matrices illustrate the degree of individual stock overlap between various portfolios' holdings. The number in parentheses in the lower left corner of each box is the number of stocks that a given portfolio pair hold in common. The number in the upper left corner is the total weight of these overlapping holdings in the y-axis (vertical) portfolio. The number in the lower right corner is the total weight of those same stocks in the x-axis (horizontal) portfolio.

Holding Overlap for Period Ended December 31, 2020

Wellington EMRE	89% (120) 96%	
Wellington EMRE Core		96% (120) 89%
	Wellington EMRE Core	Wellington EMRE



Candidate Performance (Gross of Fees)

Returns and Peer Group Rankings - Trailing Periods

Returns for Periods Ended December 31, 2020

Group: Callan Emerging Broad (Percentile Rankings in Parentheses)

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
AQR	19.27 (65)	18.39 (47)	5.31 (66)	12.95 (59)	6.40 (63)
Artisan	22.84 (24)	23.06 (30)	8.81 (33)	16.31 (21)	9.12 (23)
BlackRock	18.94 (68)	17.80 (52)	6.04 (61)	13.84 (45)	7.30 (55)
Fidelity	22.33 (29)	26.64 (22)	8.58 (37)	16.00 (26)	9.74 (18)
Wellington: EMRE	22.51 (26)	18.13 (50)	7.44 (44)	16.08 (25)	9.49 (19)
Wellington: EMRE Core	22.39 (28)	--	--	--	--
Parametric (Incumbent)	20.58 (47)	5.05 (90)	1.38 (93)	8.77 (99)	3.24 (97)
Callan Emerging Broad*	20.27	18.14	6.65	13.60	7.59
MSCI:EM	19.70 (55)	18.31 (48)	6.18 (61)	12.81 (62)	6.17 (68)

Performance data shown represents the separate account composites

*Results reflect group median.

Manager candidate performance shown is gross-of-fees unless otherwise noted.

Returns and Peer Group Rankings - Calendar Years

Returns for Periods Ended December 31, 2020

Group: Callan Emerging Broad (Percentile Rankings in Parentheses)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
AQR	18.39 (47)	20.10 (65)	(17.85) (78)	37.31 (61)	14.64 (26)	(15.74) (82)	(0.31) (38)	2.47 (21)	22.59 (15)	(16.58) (30)
Artisan	23.06 (30)	22.03 (52)	(14.20) (28)	41.18 (41)	17.03 (14)	(10.97) (28)	(2.80) (72)	(2.69) (71)	17.67 (55)	(26.99) (97)
BlackRock	17.80 (52)	18.63 (75)	(14.68) (33)	39.99 (44)	14.55 (28)	(13.41) (48)	(1.13) (50)	(1.49) (67)	24.26 (7)	(12.15) (11)
Fidelity	26.64 (22)	23.29 (46)	(18.02) (79)	45.73 (17)	12.59 (41)	(11.51) (32)	3.12 (8)	(0.98) (62)	16.20 (82)	(20.96) (73)
Wellington: EMRE	18.13 (50)	22.63 (48)	(14.39) (29)	44.29 (19)	17.75 (13)	(9.07) (17)	(1.55) (60)	3.72 (13)	19.62 (50)	(21.01) (74)
Wellington: EMRE Core	--	--	--	--	--	--	--	--	--	--
Parametric (Incumbent)	5.05 (90)	13.86 (90)	(12.88) (14)	28.49 (95)	13.68 (34)	(15.43) (76)	(2.91) (74)	2.67 (20)	20.63 (42)	(18.07) (46)
Callan Emerging Broad*	18.14	22.16	(15.34)	39.31	11.56	(13.68)	(1.09)	0.25	19.59	(18.53)
MSCI:EM	18.31 (48)	18.44 (76)	(14.57) (32)	37.28 (61)	11.19 (55)	(14.92) (68)	(2.19) (68)	(2.60) (70)	18.23 (53)	(18.42) (47)

*Results reflect group median.

Manager candidate performance shown is gross-of-fees unless otherwise noted.

Returns and Peer Group Rankings - Rolling Three-Year Periods

Returns for Rolling Three-Year Periods Ended December 31, 2020

Group: Callan Emerging Broad (Percentile Rankings in Parentheses)

	Last 3 Yrs.	3 Yrs. Ending 12/31/19	3 Yrs. Ending 12/31/18	3 Yrs. Ending 12/31/17	3 Yrs. Ending 12/31/16
AQR	5.31 (66)	10.65 (81)	8.95 (63)	9.87 (63)	(1.25) (50)
Artisan	8.81 (33)	13.91 (36)	12.34 (13)	13.73 (9)	0.43 (10)
BlackRock	6.04 (61)	12.32 (54)	11.02 (24)	11.56 (27)	(0.65) (28)
Fidelity	8.58 (37)	13.78 (37)	10.39 (26)	13.24 (15)	0.91 (9)
Wellington: EMRE	7.44 (44)	14.85 (23)	13.30 (5)	15.60 (4)	1.77 (4)
Wellington: EMRE Core	--	--	--	--	--
Parametric (Incumbent)	1.38 (93)	8.43 (99)	8.37 (75)	7.30 (95)	(2.27) (80)
Callan Emerging Broad*	6.65	12.82	9.45	10.21	(1.25)
MSCI:EM	6.18 (61)	11.58 (63)	9.25 (54)	9.10 (77)	(2.55) (84)

*Results reflect group median.

Manager candidate performance shown is gross-of-fees unless otherwise noted.

Returns and Peer Group Rankings - Rising/Declining Periods*

Returns for Rising/Declining Periods for Ten Years Ended December 31, 2020

Group: Callan Emerging Broad (Percentile Rankings in Parentheses)

	Rising Period 4/1/20 to 12/31/20	Declining Period 1/1/20 to 3/31/20	Rising Period 1/1/19 to 12/31/19	Declining Period 10/1/18 to 12/31/18	Rising Period 7/1/16 to 9/30/18	Declining Period 7/1/14 to 6/30/16	Rising Period 10/1/11 to 6/30/14	Declining Period 7/1/11 to 9/30/11	Rising Period 1/1/11 to 6/30/11
AQR	56.54 (54)	(24.37) (44)	20.10 (65)	(11.41) (99)	14.85 (28)	(7.98) (62)	12.76 (23)	(23.22) (66)	4.00 (5)
Artisan	66.36 (22)	(26.03) (74)	22.03 (52)	(5.92) (19)	14.87 (28)	(4.52) (18)	7.51 (89)	(24.58) (86)	(4.90) (99)
BlackRock	56.25 (55)	(24.61) (48)	18.63 (75)	(7.56) (53)	15.32 (21)	(6.47) (42)	11.89 (30)	(20.19) (20)	3.98 (5)
Fidelity	64.54 (26)	(23.03) (25)	23.29 (46)	(7.40) (46)	14.64 (32)	(5.11) (23)	10.02 (68)	(22.37) (43)	(2.47) (91)
Wellington: EMRE	58.97 (45)	(25.69) (71)	22.63 (48)	(6.28) (23)	15.99 (12)	(3.92) (13)	12.77 (23)	(23.89) (76)	(0.28) (60)
Wellington: EMRE Core	59.37 (42)	--	--	--	--	--	--	--	--
Parametric (Incumbent)	50.40 (81)	(30.16) (93)	13.86 (90)	(5.75) (17)	9.74 (86)	(8.56) (72)	12.02 (28)	(20.87) (25)	0.96 (35)
Callan Emerging Broad**	58.43	(24.74)	22.16	(7.49)	13.87	(7.10)	10.64	(22.58)	0.15
MSCI:EM	54.85 (62)	(23.60) (34)	18.44 (76)	(7.46) (50)	13.30 (60)	(8.66) (73)	9.28 (77)	(22.56) (49)	0.88 (38)

*Rising/Declining Period Type: International Equity

**Results reflect group median.

Manager candidate performance shown is gross-of-fees unless otherwise noted.

Statistics and Peer Group Rankings - Up & Down Market Capture

The table below illustrates Up Market Capture and Down Market Capture for five years versus the Callan Emerging Broad group. A manager with an up-market capture greater than 100 has outperformed the index during the up market and a manager with a down-market capture less than 100 has outperformed the index during the down market. The Down Market Capture rankings are inverted.

Up Market Capture and Down Market Capture Relative to the MSCI:EM for Five Years Ended December 31, 2020

Group: Callan Emerging Broad (Percentile Rankings in Parentheses)

	Up Market Capture (%)	Down Market Capture (%)
AQR	107.83 (53)	106.41 (28)
Artisan	126.81 (19)	102.00 (61)
BlackRock	108.21 (51)	101.25 (64)
Fidelity	125.73 (22)	103.02 (54)
Wellington: EMRE	127.89 (16)	104.31 (42)
Wellington: EMRE Core	--	--
Parametric (Incumbent)	82.15 (99)	107.57 (24)
Callan Emerging Broad*	108.72	103.53

*Results reflect group median.

Manager candidate performance shown is gross-of-fees unless otherwise noted.

Excess Correlation Table

This excess correlation table shows the correlation of one portfolio's excess return to another portfolio's excess return. Excess return is the return minus a benchmark. For instance, Excess Correlation could measure the correlation of Manager A's return in excess of a benchmark with Manager B's return in excess of the same benchmark. Excess Correlation is used to indicate whether different managers outperform a market index at the same time.

Benchmark: MSCI EM - Emerging Mkts (USD Net Div) for Five Years Ended December 31, 2020

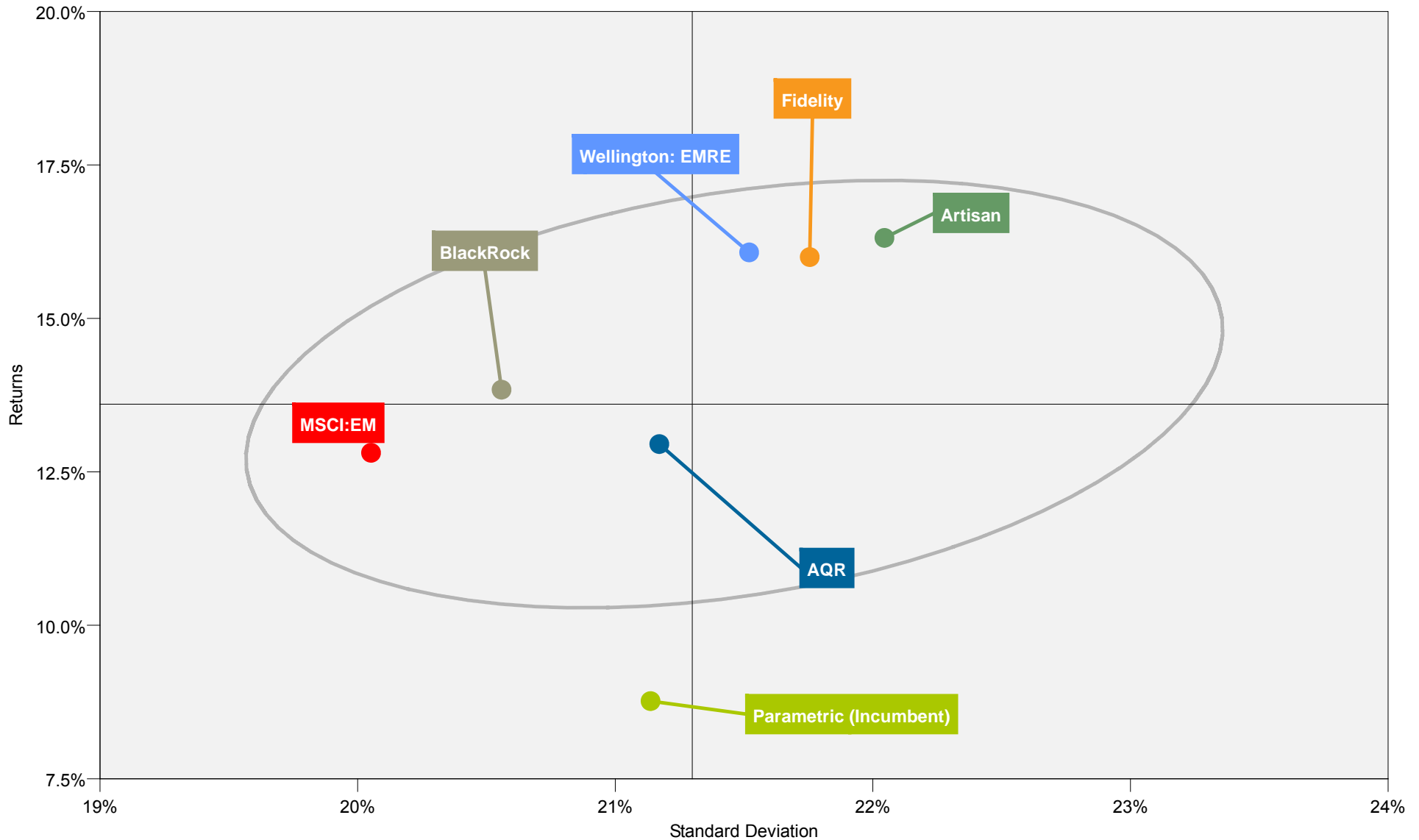
AQR	1.00						
Artisan	(0.01)	1.00					
BlackRock	0.44	0.43	1.00				
Fidelity	0.10	0.62	0.46	1.00			
Wellington: EMRE	0.08	0.66	0.33	0.50	1.00		
Wellington: EMRE Core	--	--	--	--	--	1.00	
Parametric (Incumbent)	(0.09)	0.51	0.10	(0.14)	0.33	--	1.00
	AQR	Artisan	BlackRock	Fidelity	Wellington: EMRE	Wellington: EMRE Core	Parametric (Incumbent)

Manager candidate performance shown is gross-of-fees unless otherwise noted.

Risk/Reward Structure

Risk/Reward for Five Years Ended December 31, 2020

Group: Callan Emerging Broad (Ellipse with Median at Central Axis)



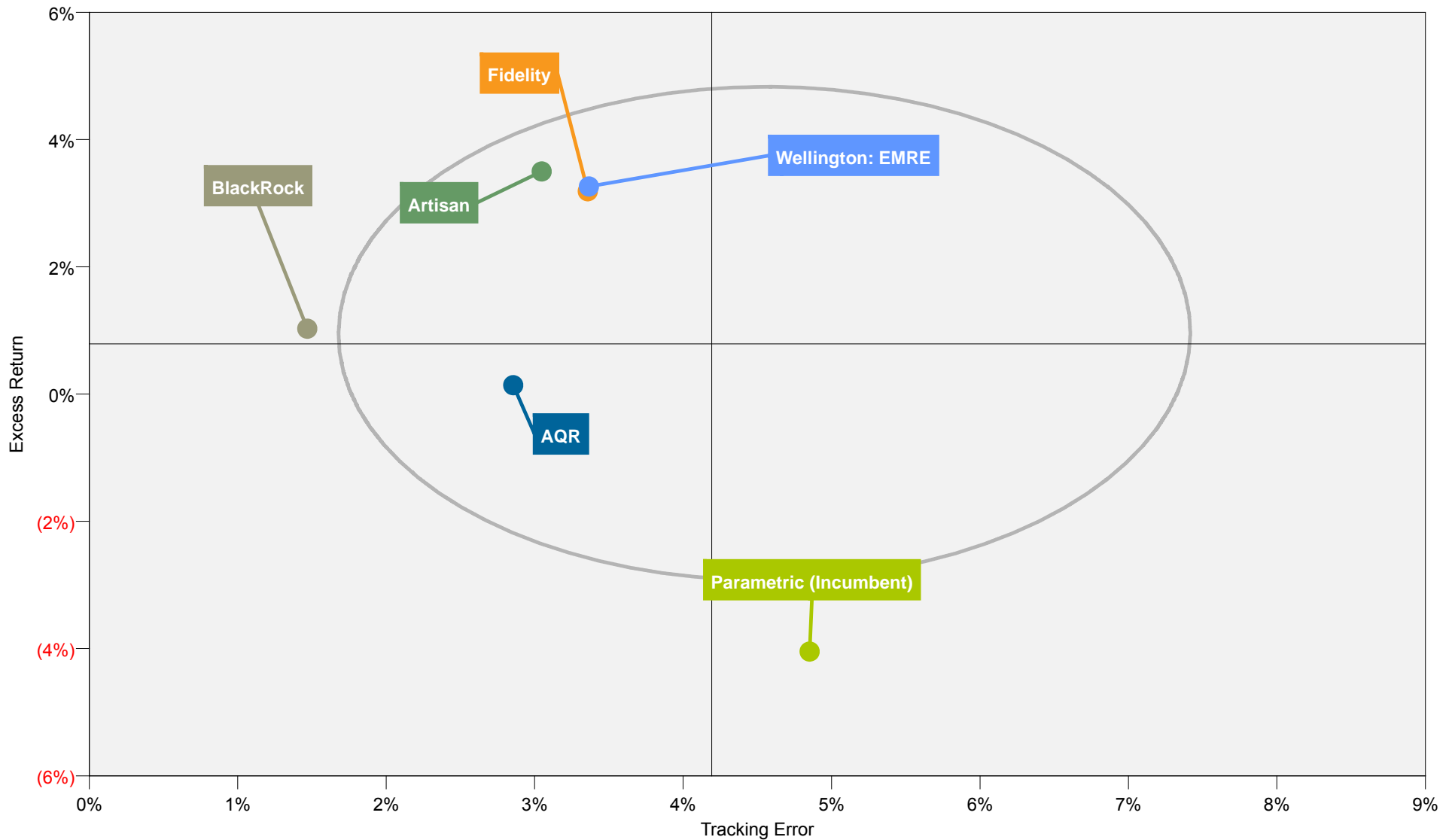
Manager candidate performance shown is gross-of-fees unless otherwise noted.

Excess Return vs. Tracking Error

Excess Return vs Tracking Error for Five Years Ended December 31, 2020

Benchmark: MSCI EM - Emerging Mkts (USD Net Div)

Group: Callan Emerging Broad (Ellipse with Median at Central Axis)



Manager candidate performance shown is gross-of-fees unless otherwise noted.

Risk Statistics

Return-Based Risk Statistics Relative to MSCI:EM for Five Years Ended December 31, 2020

Group: Callan Emerging Broad (Percentile Ranking in Parentheses)

	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Alpha	Beta	Correlation
AQR	21.17 (57)	2.19 (65)	0.56 (59)	(0.09) (65)	(0.25) (63)	1.05 (46)	0.99 (12)
Artisan	22.05 (29)	1.32 (94)	0.69 (20)	0.97 (7)	2.39 (23)	1.09 (21)	0.99 (7)
BlackRock	20.56 (80)	0.68 (99)	0.61 (42)	0.53 (25)	0.75 (44)	1.02 (67)	1.00 (1)
Fidelity	21.76 (34)	1.62 (91)	0.68 (22)	0.73 (15)	2.24 (26)	1.07 (29)	0.99 (22)
Wellington: EMRE	21.52 (40)	1.76 (82)	0.69 (19)	0.77 (12)	2.49 (22)	1.06 (36)	0.99 (25)
Wellington: EMRE Core	--	--	--	--	--	--	--
Parametric (Incumbent)	21.14 (59)	4.64 (18)	0.36 (99)	(0.75) (99)	(3.69) (99)	1.03 (63)	0.97 (71)
Callan Emerging Broad*	21.30	2.54	0.58	0.09	0.43	1.05	0.99
MSCI:EM	20.05 (86)	0.00 (100)	0.58 (50)	0.00 (56)	0.00 (56)	1.00 (77)	1.00 (1)

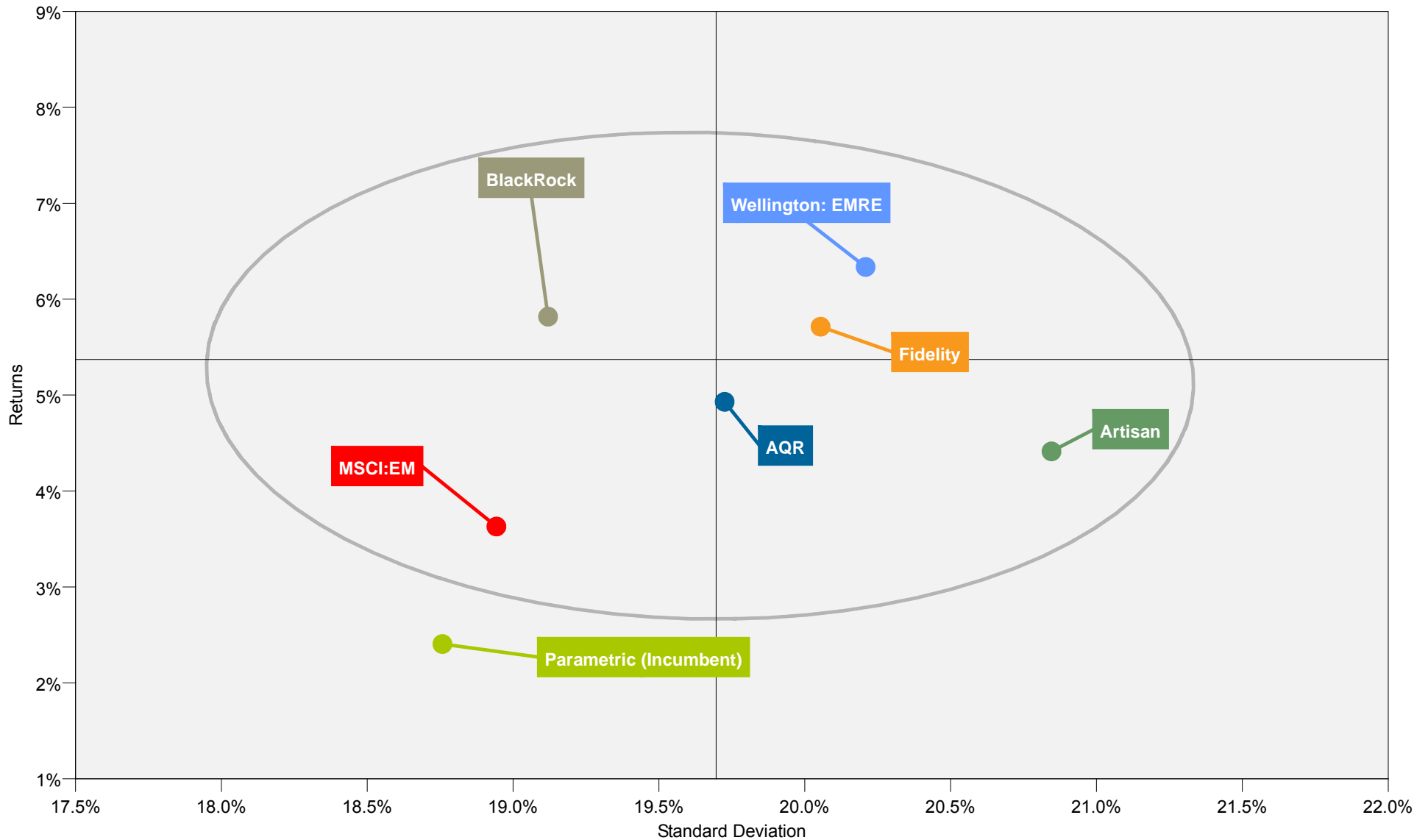
*Results reflect group median.

Manager candidate performance shown is gross-of-fees unless otherwise noted.

Risk/Reward Structure

Risk/Reward for Ten Years Ended December 31, 2020

Group: Callan Emerging Broad (Ellipse with Median at Central Axis)



Manager candidate performance shown is gross-of-fees unless otherwise noted.

Risk Statistics

Return-Based Risk Statistics Relative to MSCI:EM for Ten Years Ended December 31, 2020

Group: Callan Emerging Broad (Percentile Rankings in Parentheses)

	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Alpha	Beta	Correlation
AQR	19.73 (45)	1.59 (88)	0.22 (56)	0.51 (48)	1.26 (56)	1.03 (36)	0.99 (8)
Artisan	20.85 (14)	2.11 (54)	0.18 (74)	0.21 (68)	0.74 (71)	1.09 (9)	0.99 (29)
BlackRock	19.12 (69)	0.71 (99)	0.27 (38)	1.12 (4)	2.13 (41)	1.01 (62)	1.00 (1)
Fidelity	20.05 (31)	1.62 (83)	0.25 (45)	0.68 (28)	1.99 (45)	1.05 (25)	0.99 (19)
Wellington: EMRE	20.21 (25)	1.49 (92)	0.28 (35)	0.95 (10)	2.62 (32)	1.06 (19)	0.99 (13)
Wellington: EMRE Core	--	--	--	--	--	--	--
Parametric (Incumbent)	18.76 (81)	3.67 (16)	0.09 (92)	(0.24) (94)	(1.02) (92)	0.97 (81)	0.97 (70)
Callan Emerging Broad*	19.70	2.19	0.24	0.49	1.70	1.02	0.98
MSCI:EM	18.94 (73)	0.00 (100)	0.16 (80)	0.00 (85)	0.00 (85)	1.00 (65)	1.00 (1)

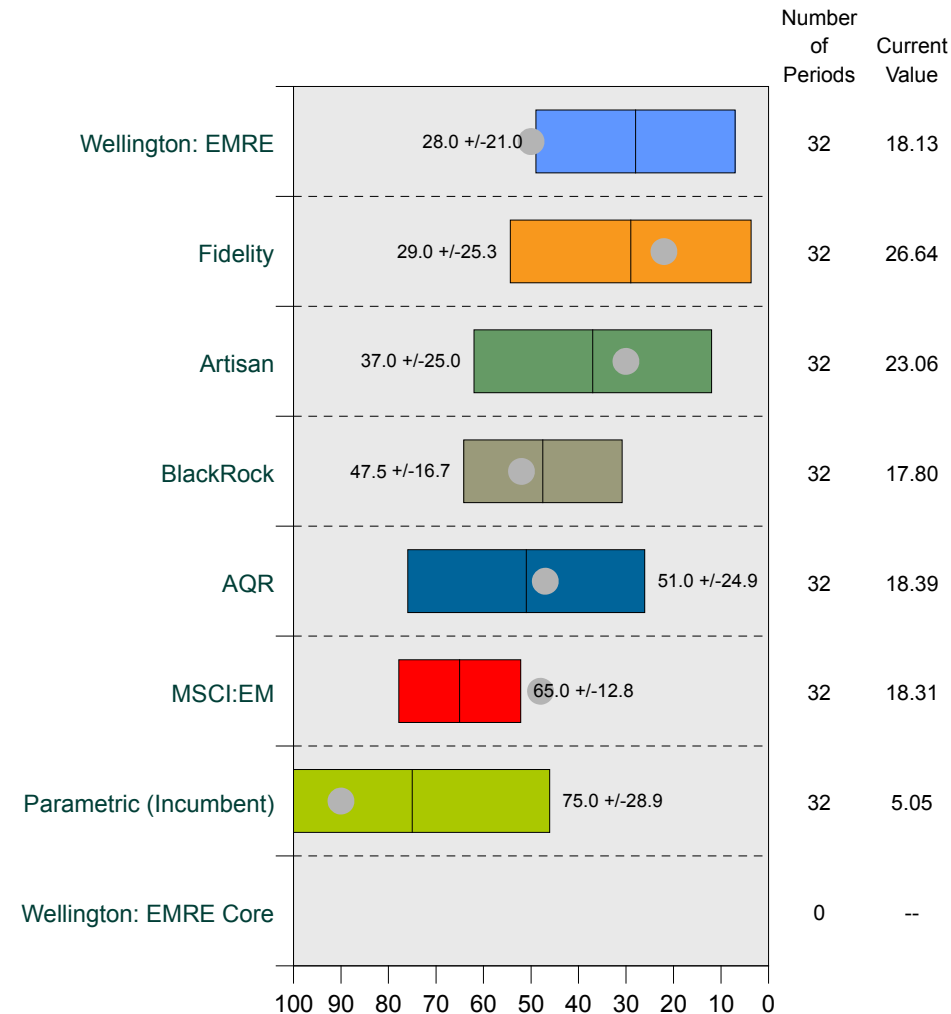
*Results reflect group median.

Manager candidate performance shown is gross-of-fees unless otherwise noted.

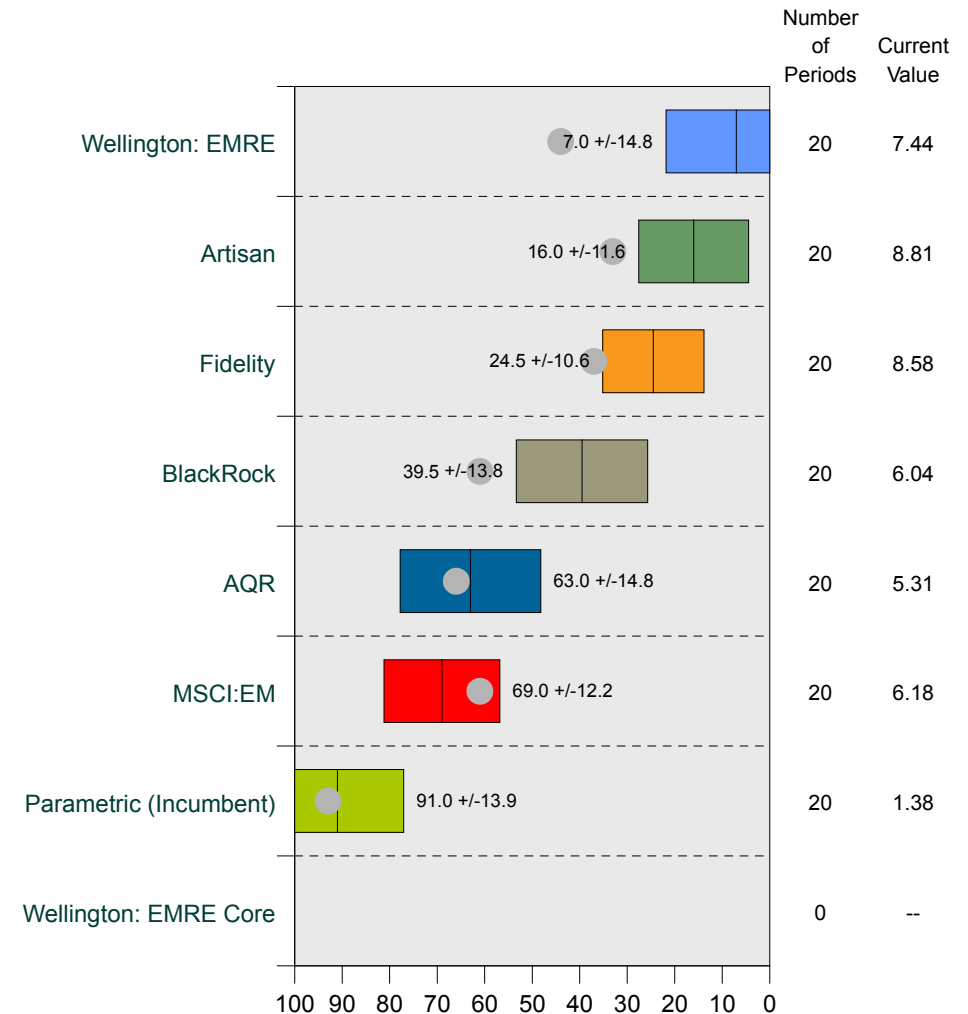
Historical Rankings - Returns

This page compares multiple portfolios to each other by analyzing both the historical median ranking for a given metric versus a relevant peer group, and the consistency and range (standard deviation) of that ranking over time. The midpoint of each sideways bar represents the median ranking of a given portfolio over time, and the width of the bar represents the consistency and range of that ranking (+/- 1 standard deviation). The slash-separated numbers show the median and standard deviation, respectively, of the portfolios' ranking. The current ranking of each portfolio is demarcated by a dot, while the corresponding current value of the metric is displayed on the far right.

Rolling One-Year Returns Against Callan Emerging Broad for Eight Years Ended December 31, 2020



Rolling Three-Year Returns Against Callan Emerging Broad for Five Years Ended December 31, 2020

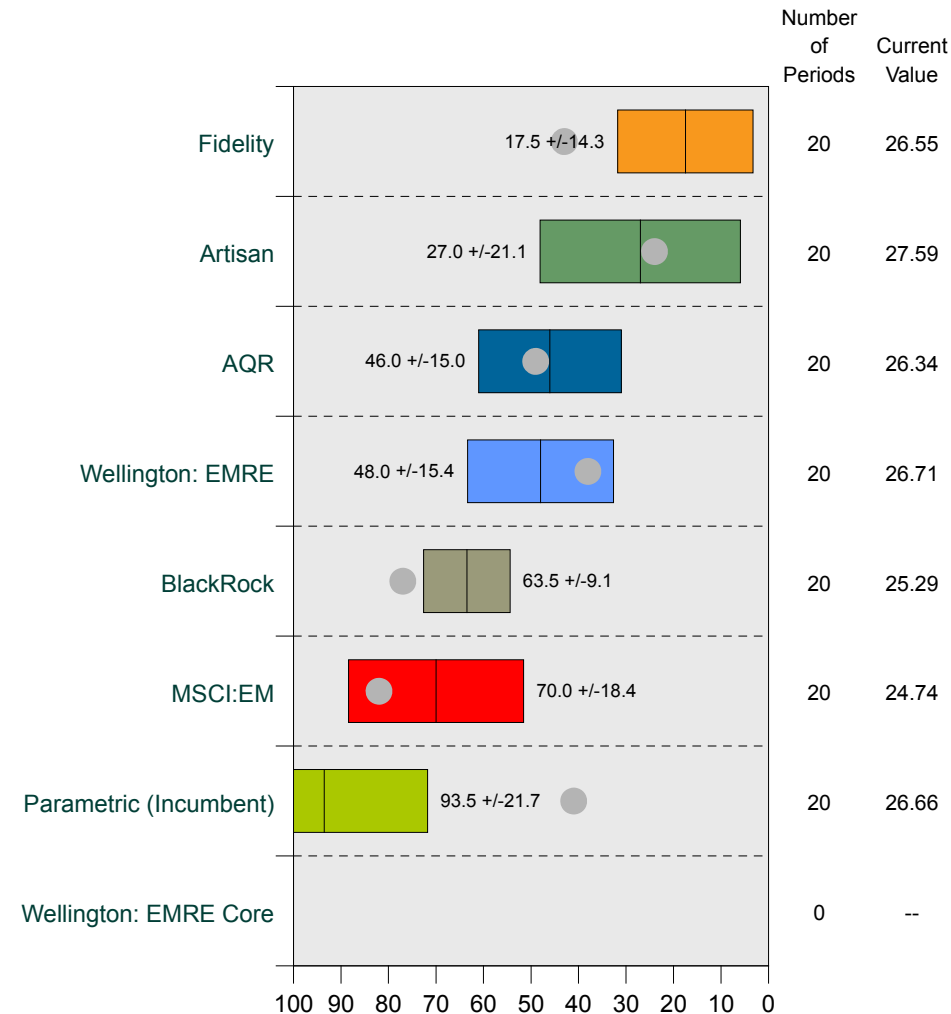


Manager candidate performance shown is gross-of-fees unless otherwise noted.

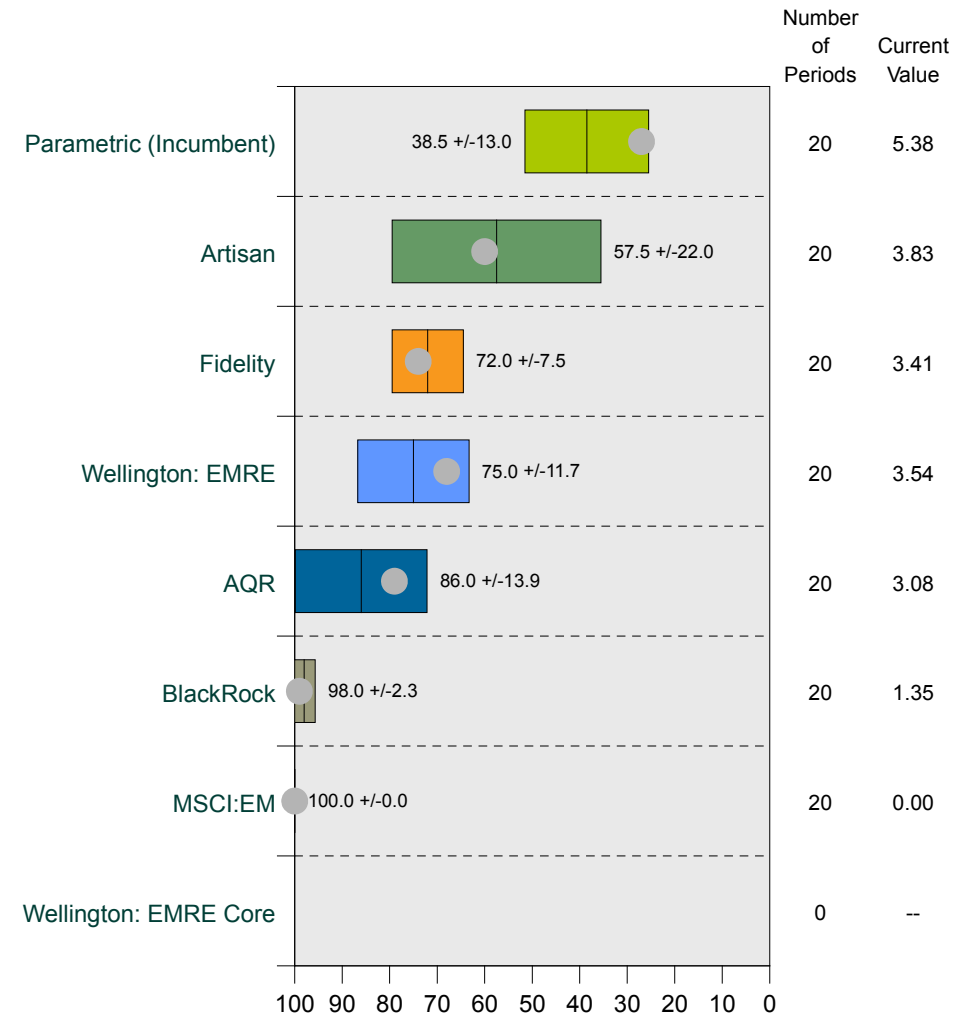
Historical Rankings - Standard Deviation & Tracking Error

This page compares multiple portfolios to each other by analyzing both the historical median ranking for a given metric versus a relevant peer group, and the consistency and range (standard deviation) of that ranking over time. The midpoint of each sideways bar represents the median ranking of a given portfolio over time, and the width of the bar represents the consistency and range of that ranking (+/- 1 standard deviation). The slash-separated numbers show the median and standard deviation, respectively, of the portfolios' ranking. The current ranking of each portfolio is demarcated by a dot, while the corresponding current value of the metric is displayed on the far right.

Rolling Three-Year Standard Deviation Against Callan Emerging Broad for Five Years Ended December 31, 2020



Rolling Three-Year Tracking Error Against Callan Emerging Broad for Five Years Ended December 31, 2020

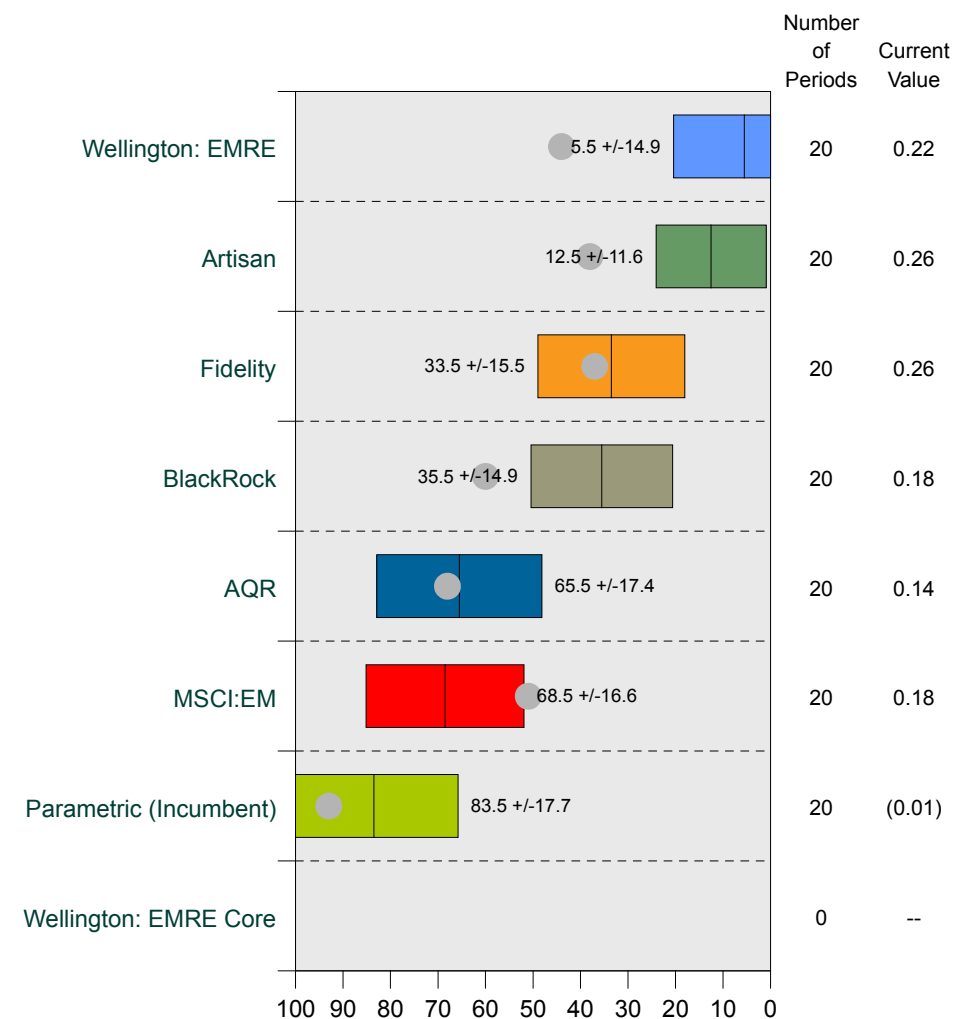


Manager candidate performance shown is gross-of-fees unless otherwise noted.

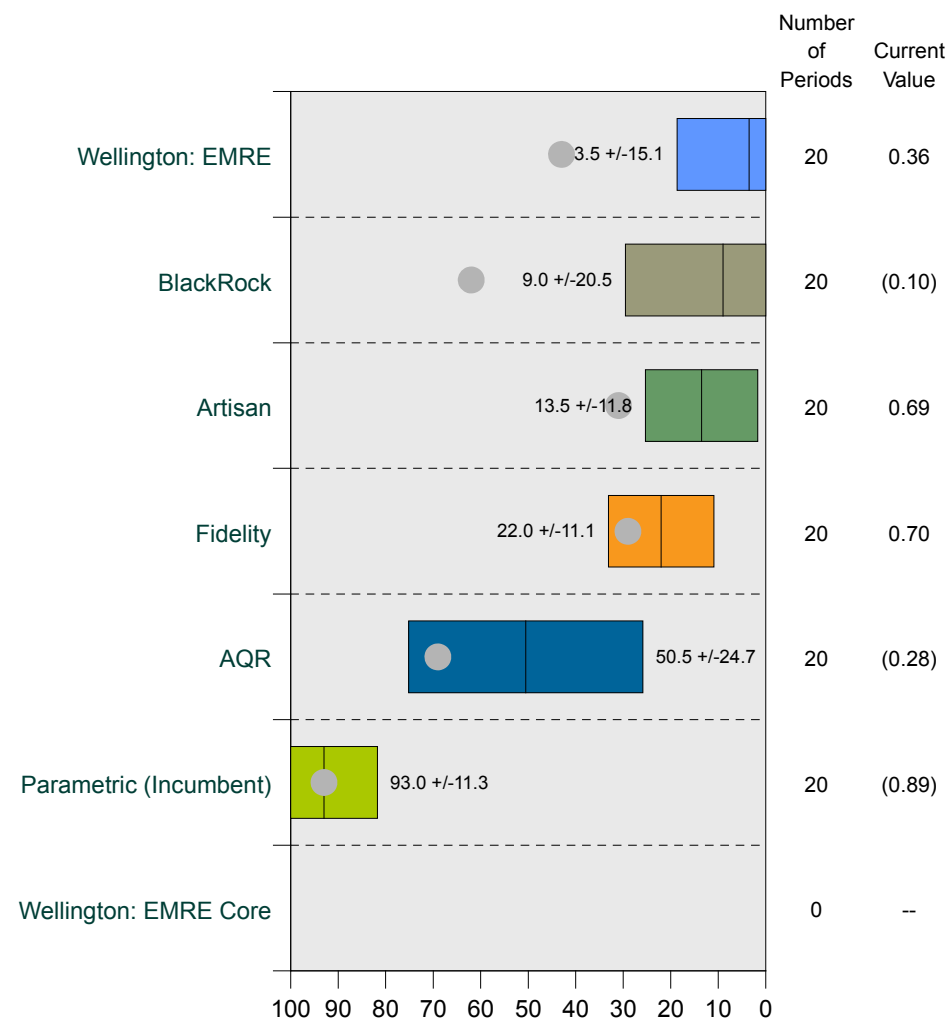
Historical Rankings - Sharpe Ratio & Excess Return Ratio

This page compares multiple portfolios to each other by analyzing both the historical median ranking for a given metric versus a relevant peer group, and the consistency and range (standard deviation) of that ranking over time. The midpoint of each sideways bar represents the median ranking of a given portfolio over time, and the width of the bar represents the consistency and range of that ranking (+/- 1 standard deviation). The slash-separated numbers show the median and standard deviation, respectively, of the portfolios' ranking. The current ranking of each portfolio is demarcated by a dot, while the corresponding current value of the metric is displayed on the far right.

Rolling Three-Year Sharpe Ratio Against Callan Emerging Broad for Five Years Ended December 31, 2020



Rolling Three-Year Excess Return Ratio Against Callan Emerging Broad for Five Years Ended December 31, 2020



Manager candidate performance shown is gross-of-fees unless otherwise noted.



Candidate Performance (Net of Fees)

Comparative Performance

Net Returns for Periods Ended December 31, 2020*

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
AQR	19.08	17.51	4.52	12.12	5.61	4.14
Artisan	22.69	22.34	8.17	15.64	8.48	3.79
BlackRock	18.75	16.96	5.27	13.03	6.52	5.06
Fidelity	22.18	25.90	7.93	15.32	9.08	5.08
Wellington EMRE	22.32	17.27	6.64	15.23	8.69	5.55
Wellington EMRE Core	22.24	--	--	--	--	--
Parametric (Incumbent)	20.38	4.22	0.59	7.93	2.44	1.61
Callan Emerging Mkts Mutual Funds	19.43	18.51	5.12	12.15	6.26	4.49
MSCI Emerging Markets Index	19.70	18.31	6.18	12.81	6.17	3.63

*Net of fee returns are approximate. Proposed fees were deducted from managers' composite returns.

Comparative Performance

Net Calendar Year Returns*

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
AQR	17.51	19.23	(18.50)	36.35	13.80	(16.41)	(1.07)	1.70	21.70	(17.25)	22.22
Artisan	22.34	21.34	(14.74)	40.41	16.36	(11.52)	(3.38)	(3.28)	16.99	(27.47)	19.79
BlackRock	16.96	17.80	(15.32)	39.05	13.74	(14.06)	(1.85)	(2.21)	23.40	(12.82)	20.99
Fidelity	25.90	22.58	(18.54)	44.93	11.92	(12.07)	2.50	(1.58)	15.52	(21.47)	15.06
Wellington EMRE	17.27	21.76	(15.05)	43.31	16.91	(9.77)	(2.29)	2.95	18.76	(21.65)	--
Wellington EMRE Core	--	--	--	--	--	--	--	--	--	--	--
Parametric	4.22	13.01	(13.58)	27.56	12.82	(16.12)	(3.67)	1.87	19.73	(18.74)	23.29
Callan Emerging Mkts Mutual Funds	18.51	21.94	(17.23)	37.43	11.52	(14.13)	(4.22)	(2.40)	17.78	(19.33)	18.31
MSCI Emerging Markets Index	18.31	18.44	(14.57)	37.28	11.19	(14.92)	(2.19)	(2.60)	18.23	(18.42)	18.88

*Net of fee returns are approximate. Proposed fees were deducted from managers' composite returns.

Comparative Performance

Net Rolling Three-Year Periods for 10 Years Ended December 31, 2020*

	Last 3 Years	3 Years Ending 12/31/19	3 Years Ending 12/31/18	3 Years Ending 12/31/17	3 Years Ending 12/31/16	3 Years Ending 12/31/15	3 Years Ending 12/31/14	3 Years Ending 12/31/13	3 Years Ending 12/31/12	3 Years Ending 12/31/11
AQR	4.52	9.83	8.14	9.05	(2.01)	(5.61)	6.98	0.80	7.17	24.18
Artisan	8.17	13.25	11.68	13.07	(0.18)	(6.14)	3.02	(6.37)	0.55	17.09
BlackRock	5.27	11.52	10.23	10.77	(1.37)	(6.22)	5.81	1.71	9.19	21.87
Fidelity	7.93	13.11	9.73	12.57	0.29	(3.92)	5.23	(3.71)	1.44	18.25
Wellington EMRE	6.64	14.02	12.48	14.77	1.01	(3.18)	6.11	(1.42)	--	--
Wellington EMRE Core	--	--	--	--	--	--	--	--	--	--
Parametric	0.59	7.60	7.54	6.48	(3.04)	(6.28)	5.52	(0.30)	6.25	19.16
Callan Emerging Mkts Mutual Funds	5.12	11.89	8.03	9.35	(2.76)	(7.26)	4.13	(1.93)	4.70	18.31
MSCI Emerging Markets Index	6.18	11.58	9.25	9.10	(2.55)	(6.76)	4.05	(2.06)	4.66	20.07

*Net of fee returns are approximate. Proposed fees were deducted from managers' composite returns.

Comparative Performance

Net Rising/Declining Returns for 10 Years Ended December 31, 2020*

	Rising Period 4/1/20 to 12/31/20	Declining Period 1/1/20 to 3/31/20	Rising Period 1/1/19 to 12/31/19	Declining Period 10/1/18 to 12/31/18	Rising Period 7/1/16 to 9/30/18	Declining Period 7/1/14 to 6/30/16	Rising Period 10/1/11 to 6/30/14	Declining Period 7/1/11 to 9/30/11	Rising Period 1/1/11 to 6/30/11
AQR	55.77	(24.56)	19.23	(11.60)	14.01	(8.69)	11.93	(23.41)	3.61
Artisan	65.73	(26.18)	21.34	(6.07)	14.20	(5.10)	6.88	(24.73)	(5.19)
BlackRock	55.52	(24.79)	17.80	(7.75)	14.51	(7.16)	11.10	(20.37)	3.61
Fidelity	63.90	(23.18)	22.58	(7.55)	13.96	(5.69)	9.37	(22.52)	(2.77)
Wellington EMRE	58.21	(25.88)	21.76	(6.47)	15.15	(4.64)	11.95	(24.08)	(0.65)
Wellington EMRE Core	58.75	--	--	--	--	--	--	--	--
Parametric	49.63	(30.35)	13.01	(5.95)	8.91	(9.29)	11.17	(21.07)	0.57
Callan Emerging Mkts Mutual Funds	57.67	(24.46)	21.94	(7.80)	12.09	(8.40)	9.56	(23.12)	(0.16)
MSCI Emerging Markets Index	54.85	(23.60)	18.44	(7.46)	13.30	(8.66)	9.28	(22.56)	0.88

*Net of fee returns are approximate. Proposed fees were deducted from managers' composite returns.



Firm Overview: AQR Capital Management

AQR Capital Management, LLC is an investment management firm employing a multi-asset, global research process. The firm's principals, Clifford S. Asness, David G. Kabiller, Robert J. Krail, and John M. Liew founded AQR in January 1998. Each of the firm's principals was formerly at Goldman Sachs, & Co., where Asness, Krail, and Liew, comprised the senior management of the Quantitative Research Group at Goldman Sachs Asset Management. In November 2004, Affiliated Managers Group (NYSE: AMG) purchased a minority share (less than 25%) of the firm. In December 2014, AMG entered into an agreement to increase its stake in AQR to "less than 30%." The agreement also changed the relationship from a revenue-sharing agreement to a bottom-line partnership model.

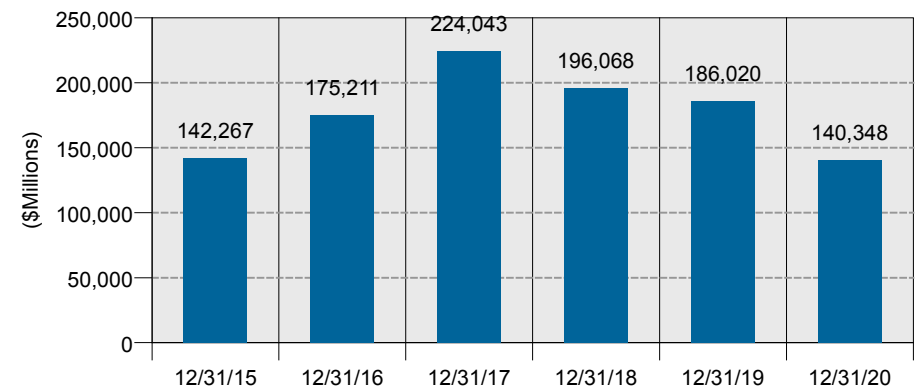
Firm	Contact
AQR Capital Management Two Greenwich Plaza Greenwich, CT 06830	Matthew Chilewich (773) 840-6602 matthew.chilewich@aqr.com

Ownership	Founded	Portfolio Managers	Analysts
Partnership	1998	44	239

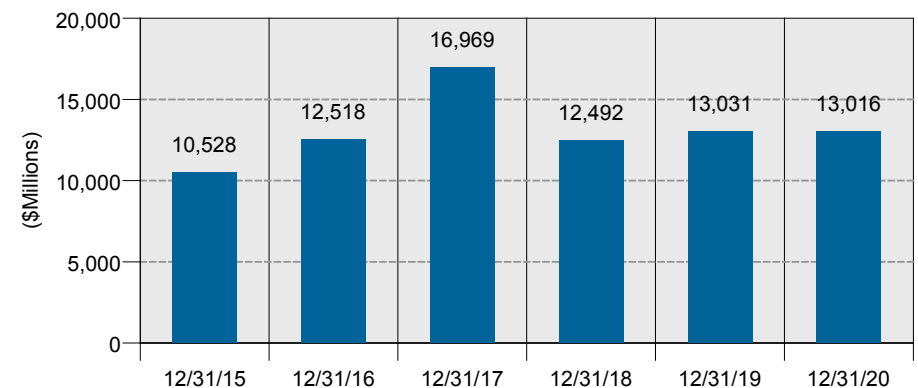
Total Firm Asset Breakdown

Domestic	\$(mm)	Client Type	\$(mm)
Equity	23,687	Corporate	39,468
Fixed Income	1,833	Public(Govt)	32,920
Balanced	2,054	Union/Multi-Employer	1,936
Alternatives	31	Foundation/Endowment	1,884
Total	27,605	Health Care	4,797
		High Net Worth	1,794
Global	\$(mm)	Wrap Account	125
Equity	68,047	Sub-Advised	10,107
Fixed Income	3,248	Sovereign Wealth Funds	22,256
Balanced	24,606	Other	25,062
Alternatives	16,843	Total Org Assets	140,348
Total	112,744		

Total Firm Asset Growth (\$mm) as of December 31, 2020



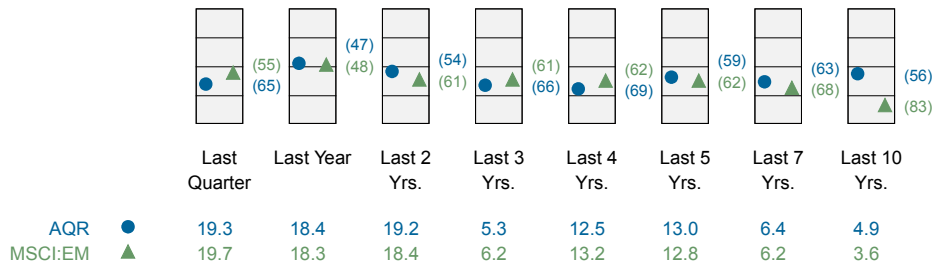
Total Product Asset Growth (\$mm) as of December 31, 2020



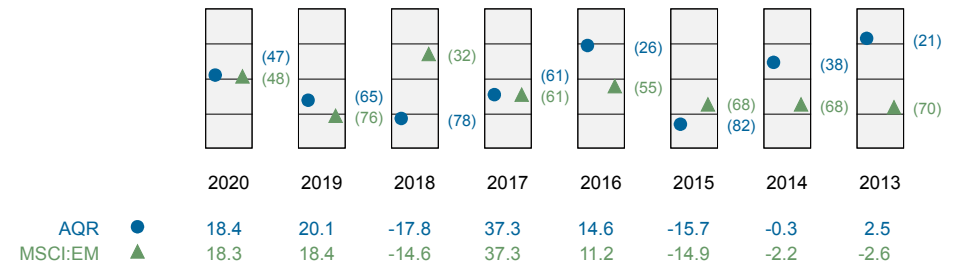
Client Type AUM Total does not include DC assets.

Product Overview: AQR

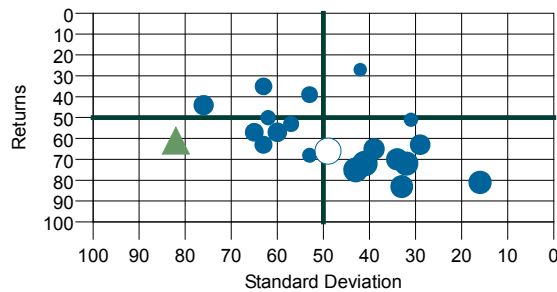
Returns vs. Callan Emerging Broad



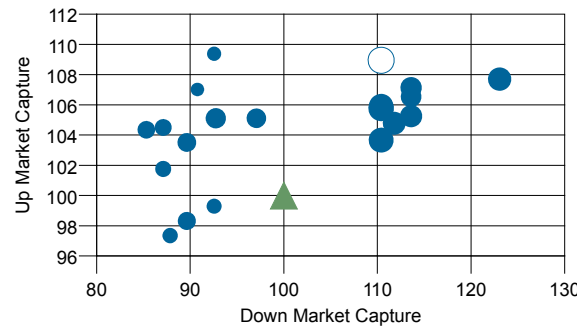
Calendar Year Returns



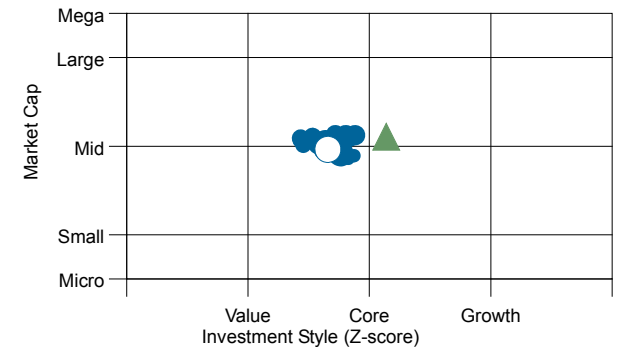
Return and Risk Rankings vs. Callan Emerging Broad Group Rolling 3 Year for 5 Years



Upside/Downside Capture Rolling 3 Year for 5 Years



Holdings Based Style Map Rolling 1 Year



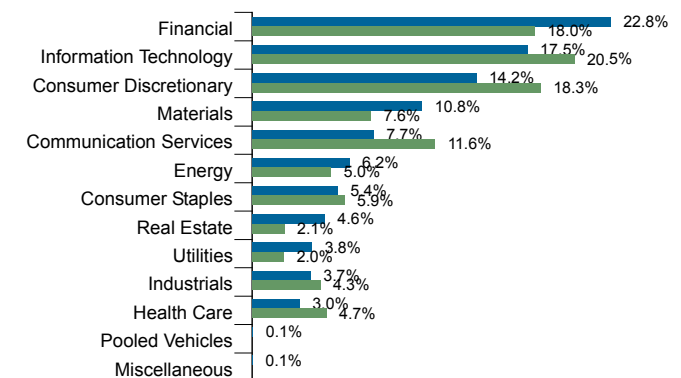
Regional Exposure (%)

	AQR	MSCI:EM	Callan Emerging Broad
Emerging Markets	100	99	92
Europe	0	0	1
Frontier Markets	0	1	0
Japan	0	0	0
North America	0	0	3
Pacific Rim	0	0	1

Portfolio Characteristics

	AQR	MSCI:EM	Callan Emerging Broad
Number of Holdings	304	1,397	80
Issue Diversification	33.1	62.0	17.2
Growth Z Score	(0.2)	0.0	0.1
Value Z Score	0.4	0.0	(0.2)
Combined Z Score	(0.6)	0.0	0.3
Wtd. Median Market Cap.	14.7	35.1	31.7
Forecasted P/E (exc neg)	19.3	15.5	15.4
Price/Book Value	1.4	1.7	2.1
Forecasted Gr. in Earnings	13.8	18.8	18.3
Return on Equity	9.3	11.7	13.6
Dividend Yield	2.7	1.9	1.6

Equity Sector Exposure vs MSCI:EM



Performance shown is gross-of-fees unless otherwise noted.

Firm Overview: Artisan Partners Limited Partnership

Artisan Partners is an investment firm formed in 1994 by Andrew A. Ziegler and Carlene Murphy Ziegler. A group of private investors led by the partners of Hellman & Friedman, a San Francisco investment banking firm, and Sutter Hill Ventures, a west coast venture capital firm, provided capital resources at inception and have a minority interest in the firm. In May 2006, Hellman & Friedman increased their ownership stake in Artisan but remained a minority owner. In June 2009, Artisan changed their legal structure from an operating company structure to a holding company/operating company structure. The change in legal structure did not have an impact on ownership. On November 1, 2012, Artisan filed a registration statement with the Securities and Exchange Commission (SEC) for a proposed initial public offering of its Class A common stock. On March 7, 2013, Artisan's Class A common stock began trading on the New York Stock Exchange under the symbol "APAM".

Firm	Contact
Artisan Partners Limited Partnership 875 East Wisconsin Avenue Suite 800 Milwaukee, WI 53202	Robert Paulson (415) 283-1053 robert.paulson@artisanpartners.com

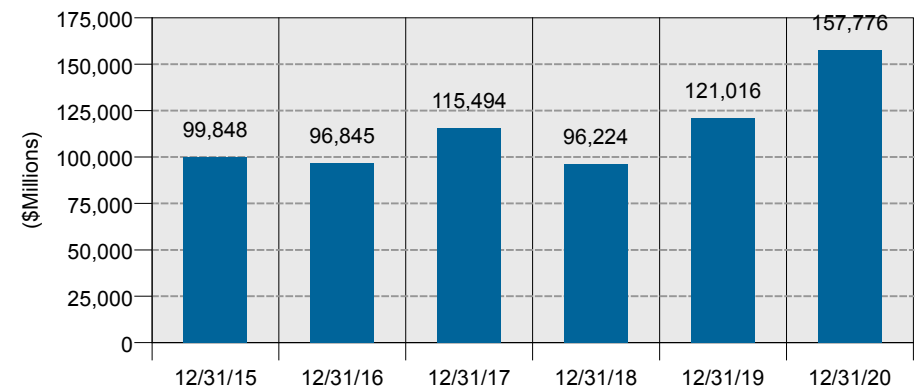
Ownership	Founded	Portfolio Managers	Analysts
Publicly Owned	1994	28	40

Total Firm Asset Breakdown

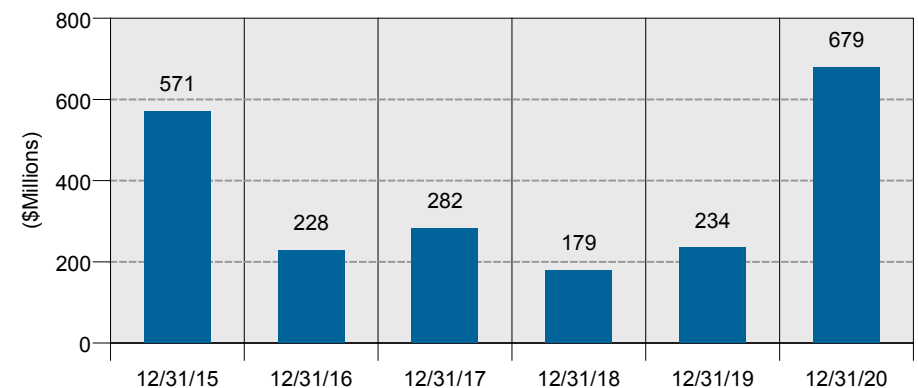
Domestic	\$(mm)	Client Type	\$(mm)
Equity	34,694	Corporate	10,781
Fixed Income	6,338	Public(Govt)	9,448
Total	41,032	Union/Multi-Employer	1,972
		Superannuation	5,872
Global	\$(mm)	Foundation/Endowment	4,676
Equity	116,745	Insurance	997
Total	116,745	High Net Worth	6,391
		Sub-Advised	29,333
		Sovereign Wealth Funds	2,754
		Other	85,554
		Total Org Assets	157,776
		Total Defined Contribution	11,851

Client Type AUM Total does not include DC assets.

Total Firm Asset Growth (\$mm) as of December 31, 2020

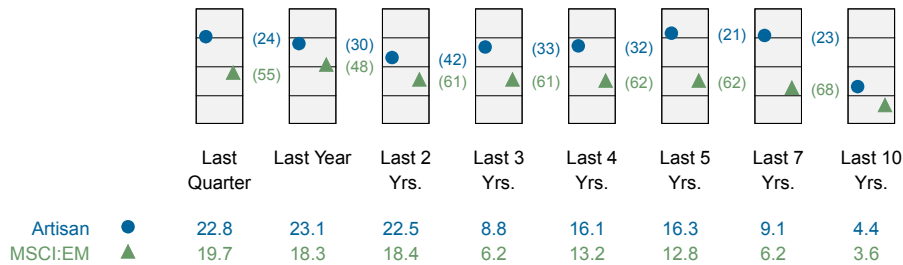


Total Product Asset Growth (\$mm) as of December 31, 2020

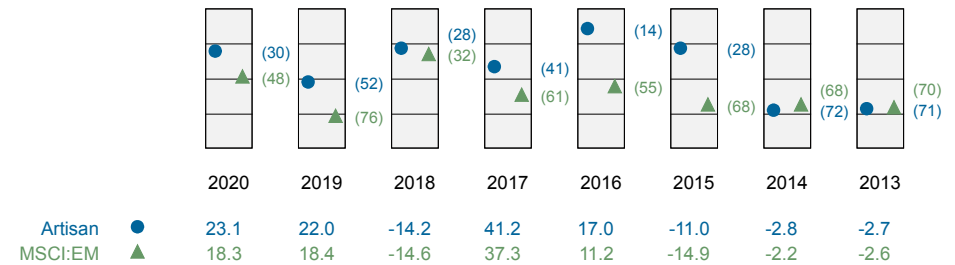


Product Overview: Artisan

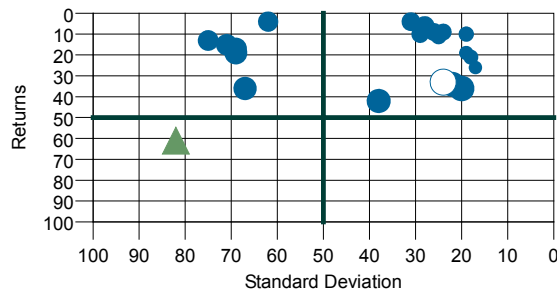
Returns vs. Callan Emerging Broad



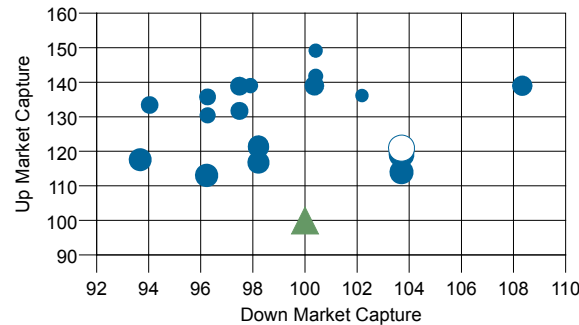
Calendar Year Returns



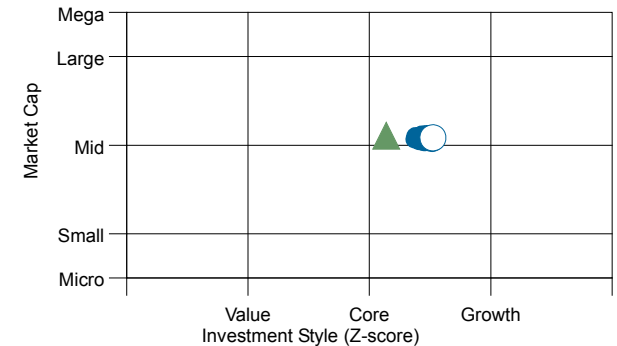
Return and Risk Rankings vs. Callan Emerging Broad Group Rolling 3 Year for 5 Years



Upside/Downside Capture Rolling 3 Year for 5 Years



Holdings Based Style Map Rolling 1 Year



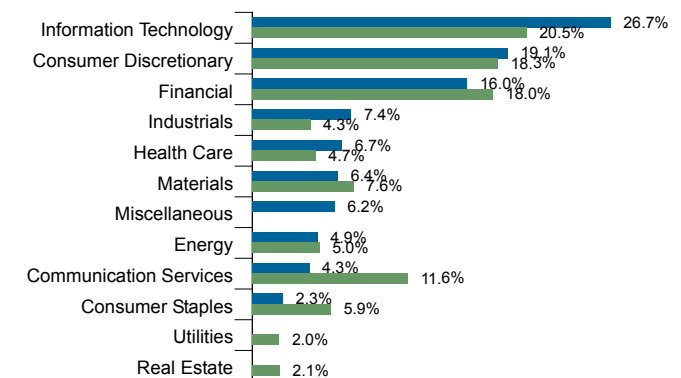
Regional Exposure (%)

	Artisan	MSCI:EM	Callan Emerging Broad
Emerging Markets	86	99	92
Europe	3	0	1
Frontier Markets	2	1	0
Japan	0	0	0
North America	7	0	3
Pacific Rim	2	0	1

Portfolio Characteristics

	Artisan	MSCI:EM	Callan Emerging Broad
Number of Holdings	58	1,397	80
Issue Diversification	12.7	62.0	17.2
Growth Z Score	0.0	0.0	0.1
Value Z Score	(0.3)	0.0	(0.2)
Combined Z Score	0.3	0.0	0.3
Wtd. Median Market Cap.	28.9	35.1	31.7
Forecasted P/E (exc neg)	17.9	15.5	15.4
Price/Book Value	2.1	1.7	2.1
Forecasted Gr. in Earnings	16.3	18.8	18.3
Return on Equity	11.0	11.7	13.6
Dividend Yield	1.4	1.9	1.6

Equity Sector Exposure vs MSCI:EM



Performance shown is gross-of-fees unless otherwise noted.

Firm Overview: BlackRock

BlackRock was founded in 1988. In February 1995, BlackRock became a wholly-owned subsidiary of The PNC Financial Services Group, Inc. and a member of the PNC Asset Mgmt. Group. In 1998, PNC consolidated its asset management subsidiary names under BlackRock. BlackRock completed an IPO in 1999 for 16% of its equity. In 2005, BlackRock acquired SSRM Holdings Inc., the holding company of State Street Research and Management and State Street Realty. In 2006, BlackRock, Inc. and Merrill Lynch Investment Managers merged to create an independent company operating under the BlackRock name. In October 2007, BlackRock acquired Quellos Group. In December 2009, BlackRock completed the acquisition of Barclays Global Investors (BGI) including its iShares exchange-traded funds.

Firm	Contact
BlackRock 55 East 52nd Street New York, NY 10055	Azim Hilmy (415) 670-2115 azim.hilmy@blackrock.com

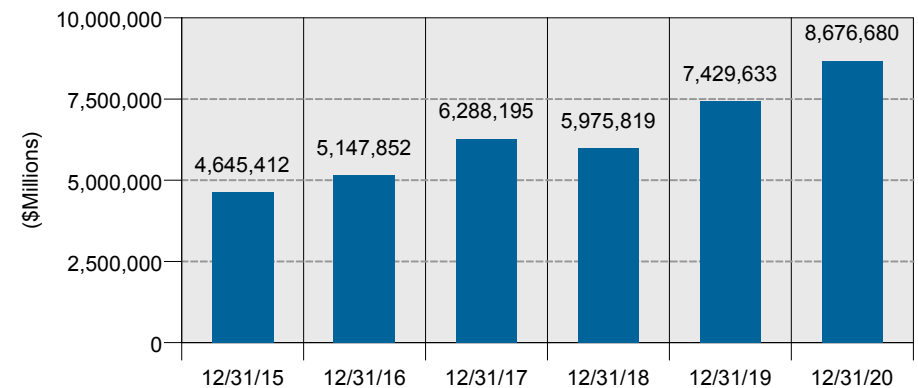
Ownership	Founded	Portfolio Managers	Analysts
Publicly Owned	1988	1,143	565

Total Firm Asset Breakdown

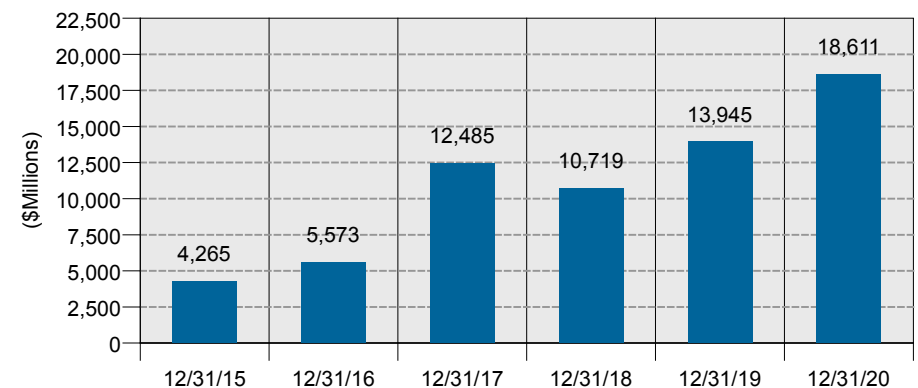
Domestic	\$(mm)	Client Type	\$(mm)
Equity	2,957,537,560,346	Corporate	1,961,815
Total	2,957,537,560,346	Public(Govt)	1,490,460
		Union/Multi-Employer	43,113
		Superannuation	190,142
Global	\$(mm)	Foundation/Endowment	33,041
Equity	713,646,813,532	Health Care	33,081
Total	713,646,813,532	Insurance	397,132
		High Net Worth	25,430
		Wrap Account	105,405
		Sub-Advised	214,063
		Supernationals	9,386
		Sovereign Wealth Funds	86,373
		Other	4,087,237
		Total Org Assets	8,676,678
		Total Defined Contribution	482,982

Client Type AUM Total does not include DC assets.

Total Firm Asset Growth (\$mm) as of December 31, 2020

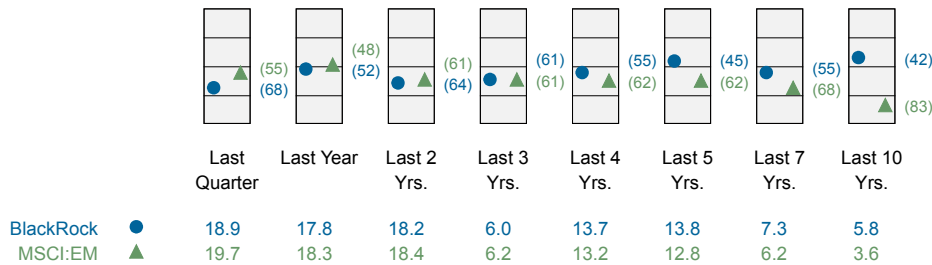


Total Product Asset Growth (\$mm) as of December 31, 2020

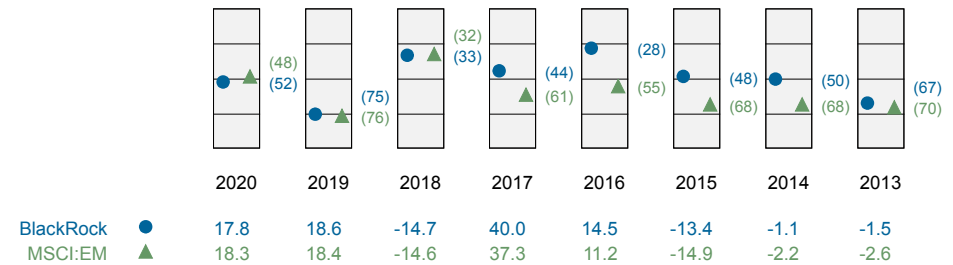


Product Overview: BlackRock

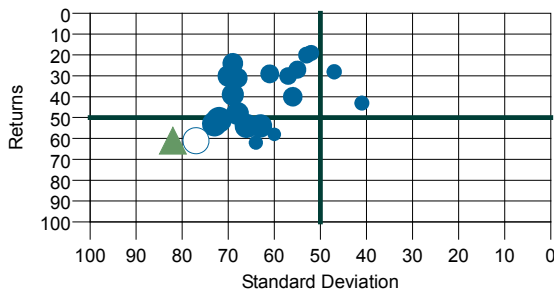
Returns vs. Callan Emerging Broad



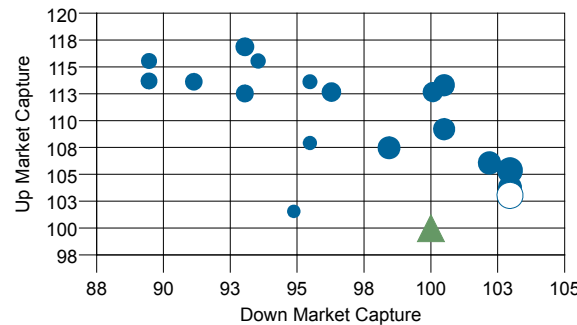
Calendar Year Returns



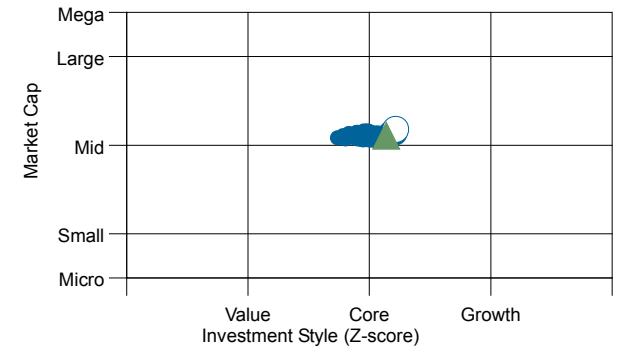
Return and Risk Rankings vs. Callan Emerging Broad Group Rolling 3 Year for 5 Years



Upside/Downside Capture Rolling 3 Year for 5 Years



Holdings Based Style Map Rolling 1 Year



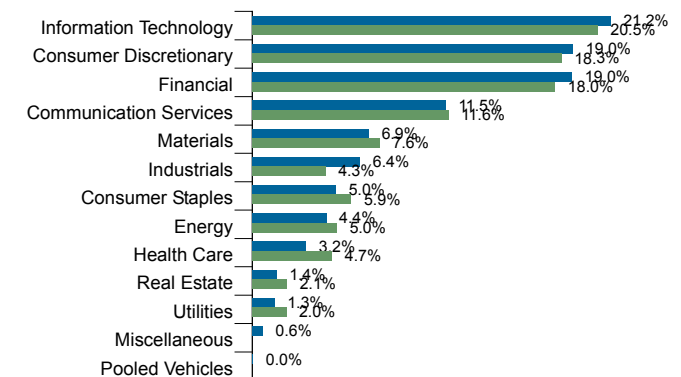
Regional Exposure (%)

	BlackRock	MSCI:EM	Callan Emerging Broad
Emerging Markets	99	99	92
Europe	0	0	1
Frontier Markets	0	1	0
Japan	0	0	0
North America	1	0	3
Pacific Rim	0	0	1

Portfolio Characteristics

	BlackRock	MSCI:EM	Callan Emerging Broad
Number of Holdings	385	1,397	80
Issue Diversification	33.9	62.0	17.2
Growth Z Score	0.0	0.0	0.1
Value Z Score	0.0	0.0	(0.2)
Combined Z Score	0.1	0.0	0.3
Wtd. Median Market Cap.	42.3	35.1	31.7
Forecasted P/E (exc neg)	15.2	15.5	15.4
Price/Book Value	1.6	1.7	2.1
Forecasted Gr. in Earnings	18.3	18.8	18.3
Return on Equity	12.6	11.7	13.6
Dividend Yield	2.0	1.9	1.6

Equity Sector Exposure vs MSCI:EM



Performance shown is gross-of-fees unless otherwise noted.

Firm Overview: Fidelity Institutional Asset Management

In 2005, FMR Corp., commonly known as Fidelity Investments, established Pyramis Global Advisors as a wholly owned subsidiary to focus on institutional clients and non-Investment Company Act of 1940 business. Pyramis' equity investment team was initially formed through the migration of investment professionals from Fidelity Management & Research Company (FMR Co.), the mutual fund division of Fidelity. Fidelity's fixed income investment team continues to manage both FMR Co. and Pyramis client assets. Fidelity Management & Research Company remains the mutual fund asset management division of Fidelity Investments. In October 2015, Pyramis Global Advisors rebranded as Fidelity Institutional Asset Management (FIAM), bringing together the distribution and client service teams from Pyramis and Fidelity Financial Advisor Solutions to create a single, integrated distribution and service organization.

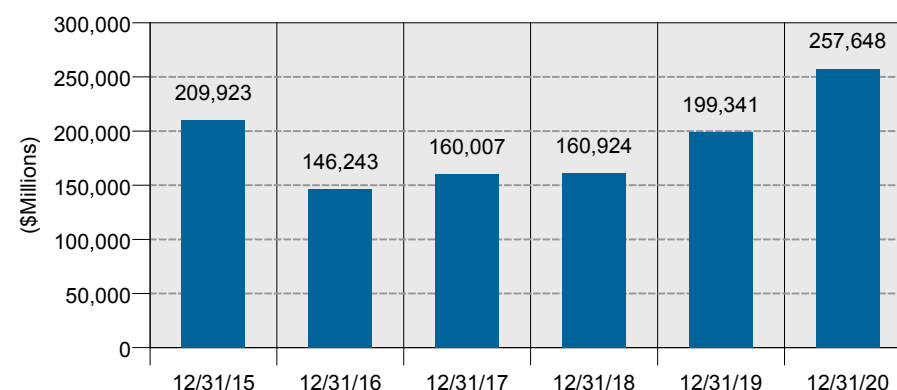
Firm	Contact
Fidelity Institutional Asset Management 900 Salem Street Smithfield, RI 02917	Jack Sholl 415-300-7382 jack.sholl@fmr.com

Ownership	Founded	Portfolio Managers	Analysts
Other	2005	184	369

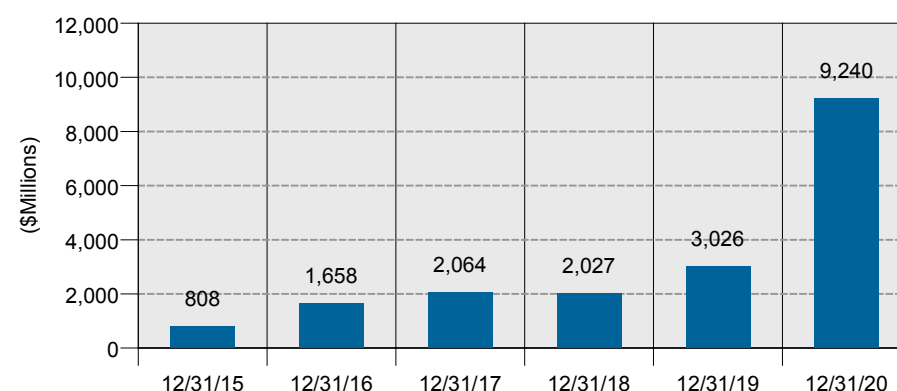
Total Firm Asset Breakdown

Domestic	\$(mm)	Client Type	\$(mm)
Equity	43,248	Corporate	107,593
Fixed Income	91,920	Public(Govt)	33,393
Balanced	87,285	Union/Multi-Employer	1,517
Alternatives	7,084	Foundation/Endowment	5,059
Other	2,468	Insurance	5,004
Total	232,006	Sub-Advised	70,537
		Other	34,545
Global	\$(mm)	Total Org Assets	257,648
Equity	23,131	Total Defined Contribution	83,581
Fixed Income	2,504		
Alternatives	8		
Total	25,643		

Total Firm Asset Growth (\$mm) as of December 31, 2020



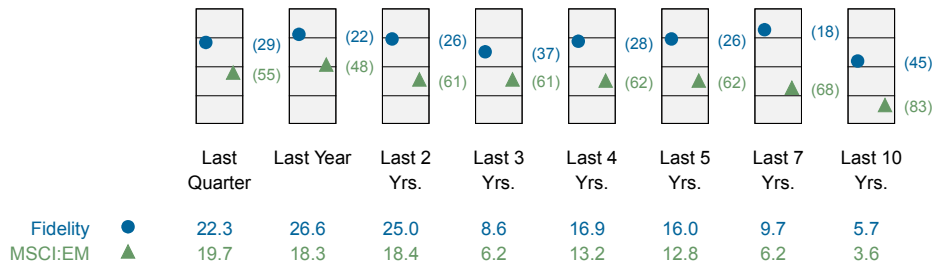
Total Product Asset Growth (\$mm) as of December 31, 2020



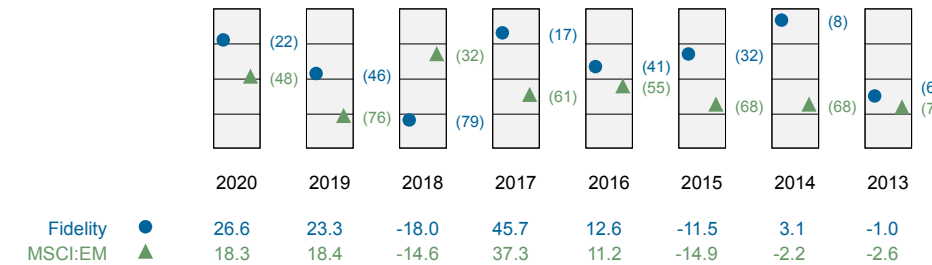
Client Type AUM Total does not include DC assets.

Product Overview: Fidelity

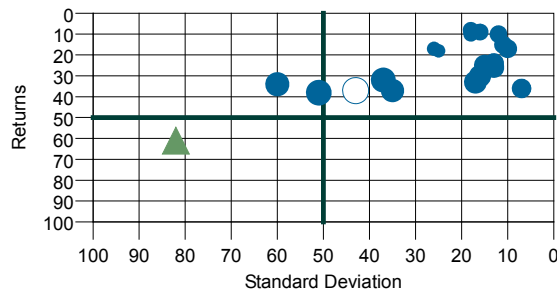
Returns vs. Callan Emerging Broad



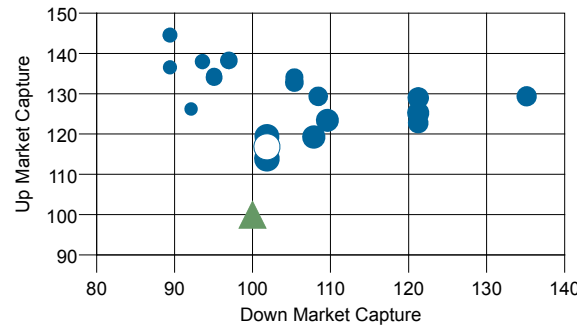
Calendar Year Returns



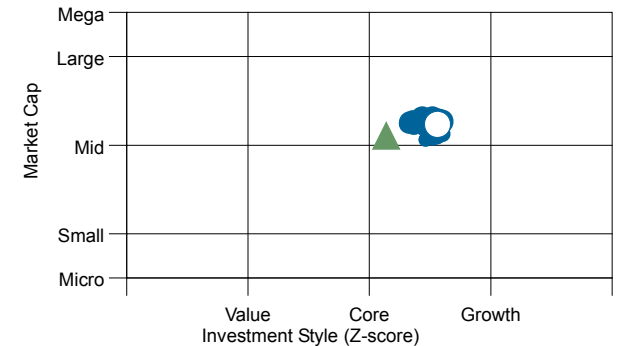
Return and Risk Rankings vs. Callan Emerging Broad Group Rolling 3 Year for 5 Years



Upside/Downside Capture Rolling 3 Year for 5 Years



Holdings Based Style Map Rolling 1 Year



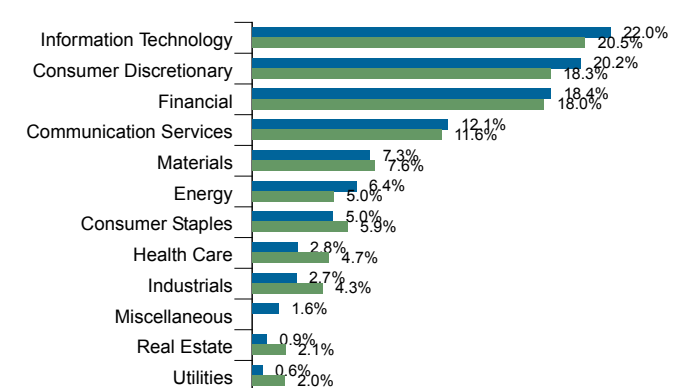
Regional Exposure (%)

	Fidelity	MSCI:EM	Callan Emerging Broad
Emerging Markets	98	99	92
Europe	0	0	1
Frontier Markets	0	1	0
Japan	0	0	0
North America	2	0	3
Pacific Rim	0	0	1

Portfolio Characteristics

	Fidelity	MSCI:EM	Callan Emerging Broad
Number of Holdings	124	1,397	80
Issue Diversification	21.0	62.0	17.2
Growth Z Score	0.1	0.0	0.1
Value Z Score	(0.2)	0.0	(0.2)
Combined Z Score	0.3	0.0	0.3
Wtd. Median Market Cap.	46.4	35.1	31.7
Forecasted P/E (exc neg)	16.5	15.5	15.4
Price/Book Value	2.0	1.7	2.1
Forecasted Gr. in Earnings	26.4	18.8	18.3
Return on Equity	11.8	11.7	13.6
Dividend Yield	1.4	1.9	1.6

Equity Sector Exposure vs MSCI:EM



Performance shown is gross-of-fees unless otherwise noted.

Firm Overview: Wellington Management Company, LLP

Wellington Management Company, LLP is an investment management partnership owned by active employees of the firm. Wellington Management (and its predecessors) registered with the SEC in 1960. The firm traces its history to the 1928 formation of a management company called the Wellington Fund, which was incorporated in 1933. In 1967, Wellington Management merged with Thorndike, Doran, Paine & Lewis, an investment counseling firm founded in 1960. Wellington Management was purchased by its key employees in 1979. On January 1, 2015, Wellington converted their existing US partnership (WMC) into a holding company, which owns all of the firm's operating subsidiaries and affiliates. WMC created new operating entities in North America and in Asia, with the aim of having clients contract with the locally registered affiliates from whom they receive client service. WMC remains a private partnership owned entirely by its active partners.

Firm

Wellington Management Company, LLP
280 Congress Street
Boston, MA 02210

Contact

Sarah Lewis
(415) 627-1814
slewis@wellington.com

Ownership

Partnership

Founded

1928

Portfolio Managers

147

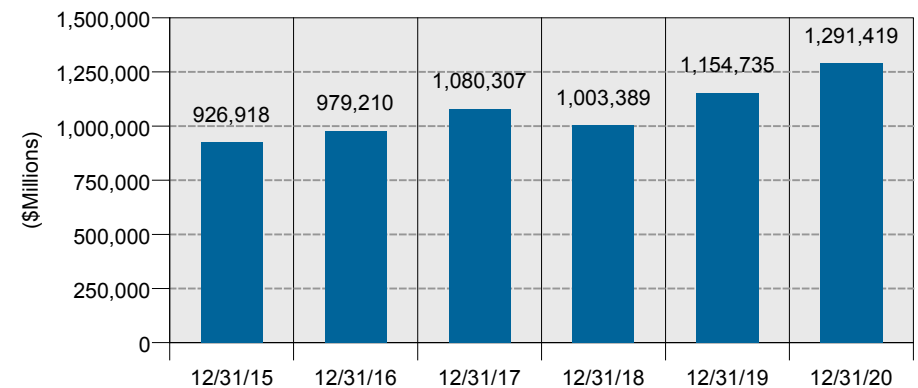
Analysts

522

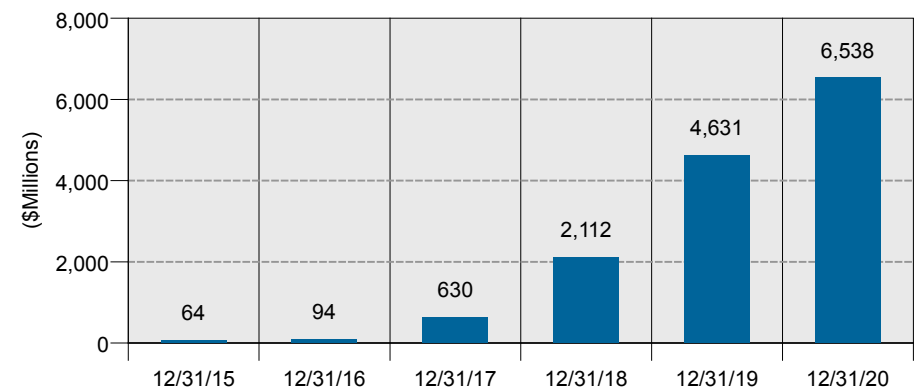
Total Firm Asset Breakdown

	\$(mm)	Client Type	\$(mm)
Domestic		Corporate	262,611
Equity	339,620	Public(Govt)	128,694
Fixed Income	322,816	Union/Multi-Employer	6,988
Balanced	190,949	Foundation/Endowment	44,260
Total	853,385	Insurance	121,580
		High Net Worth	1,932
Global	\$(mm)	Sub-Advised	704,267
Equity	233,575	Other	21,087
Fixed Income	188,849	Total Org Assets	1,291,419
Balanced	15,610	Total Defined Contribution	57,575
Total	438,034		

Total Firm Asset Growth (\$mm) as of December 31, 2020



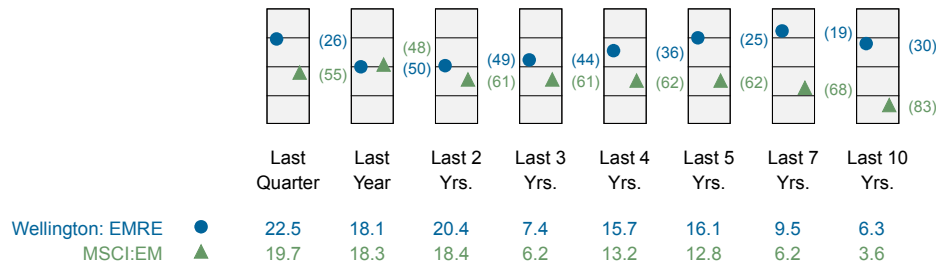
Total Product Asset Growth (\$mm) as of December 31, 2020



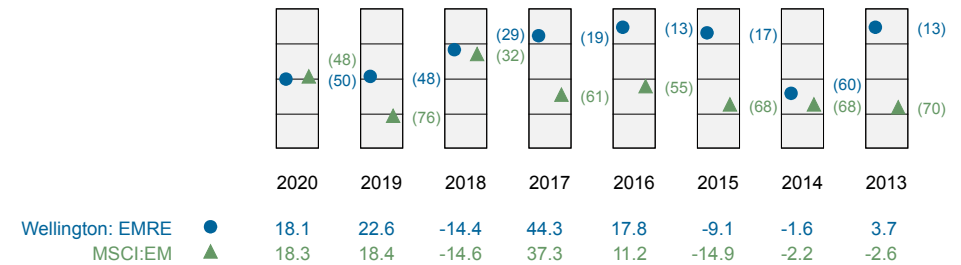
Client Type AUM Total does not include DC assets.

Product Overview: Wellington: EMRE

Returns vs. Callan Emerging Broad

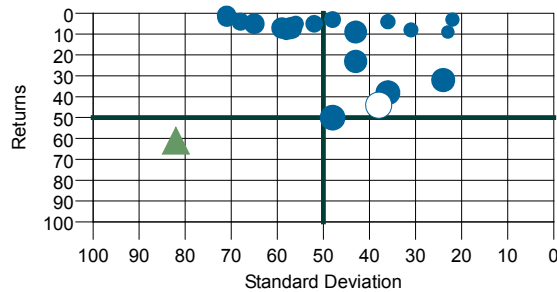


Calendar Year Returns



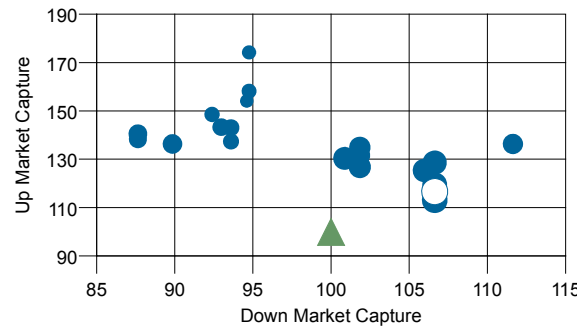
Return and Risk Rankings vs. Callan Emerging Broad Group

Rolling 3 Year for 5 Years



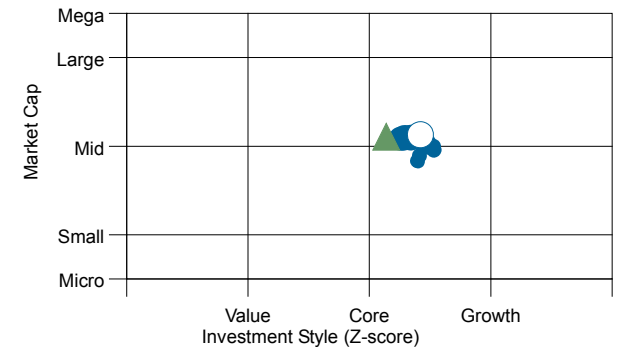
Upside/Downside Capture

Rolling 3 Year for 5 Years



Holdings Based Style Map

Rolling 1 Year



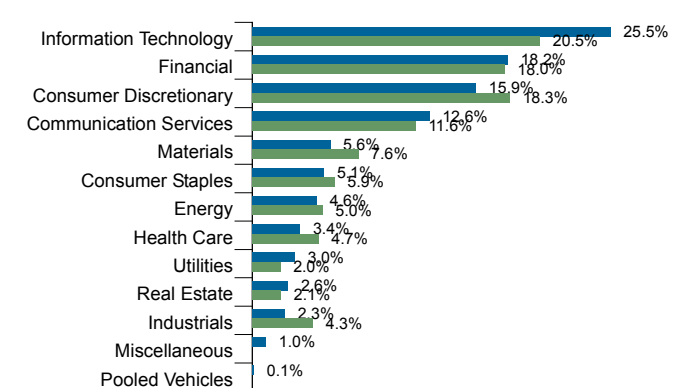
Regional Exposure (%)

	Wellington: EMRE	MSCI:EM	Callan Emerging Broad
Emerging Markets	90	99	92
Europe	3	0	1
Frontier Markets	1	1	0
Japan	1	0	0
North America	1	0	3
Pacific Rim	3	0	1

Portfolio Characteristics

	Wellington: EMRE	MSCI:EM	Callan Emerging Broad
Number of Holdings	154	1,397	80
Issue Diversification	26.8	62.0	17.2
Growth Z Score	0.1	0.0	0.1
Value Z Score	(0.1)	0.0	(0.2)
Combined Z Score	0.3	0.0	0.3
Wtd. Median Market Cap.	40.1	35.1	31.7
Forecasted P/E (exc neg)	15.9	15.5	15.4
Price/Book Value	1.9	1.7	2.1
Forecasted Gr. in Earnings	21.2	18.8	18.3
Return on Equity	12.8	11.7	13.6
Dividend Yield	1.7	1.9	1.6

Equity Sector Exposure vs MSCI:EM



Performance shown is gross-of-fees unless otherwise noted.

Firm Overview: Wellington Management Company, LLP

Wellington Management Company, LLP is an investment management partnership owned by active employees of the firm. Wellington Management (and its predecessors) registered with the SEC in 1960. The firm traces its history to the 1928 formation of a management company called the Wellington Fund, which was incorporated in 1933. In 1967, Wellington Management merged with Thorndike, Doran, Paine & Lewis, an investment counseling firm founded in 1960. Wellington Management was purchased by its key employees in 1979. On January 1, 2015, Wellington converted their existing US partnership (WMC) into a holding company, which owns all of the firm's operating subsidiaries and affiliates. WMC created new operating entities in North America and in Asia, with the aim of having clients contract with the locally registered affiliates from whom they receive client service. WMC remains a private partnership owned entirely by its active partners.

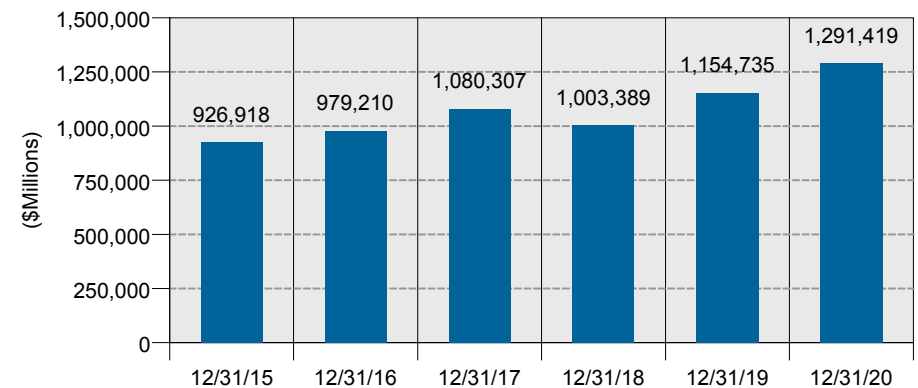
Firm	Contact
Wellington Management Company, LLP 280 Congress Street Boston, MA 02210	Sarah Lewis (415) 627-1814 slewis@wellington.com

Ownership	Founded	Portfolio Managers	Analysts
Partnership	1928	147	522

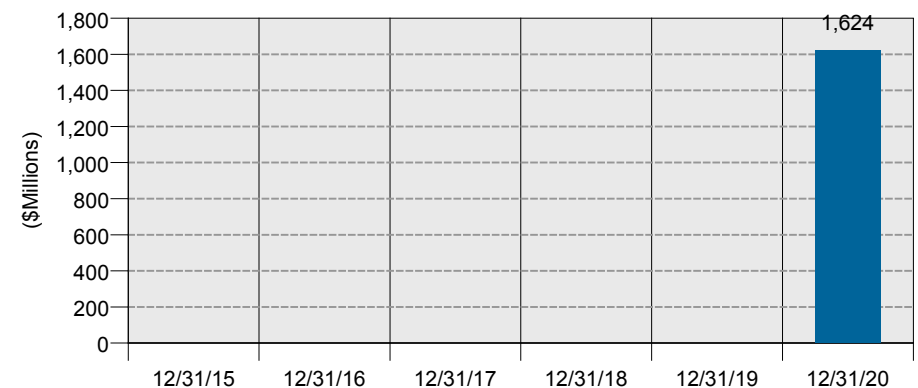
Total Firm Asset Breakdown

Domestic	\$(mm)	Client Type	\$(mm)
Equity	339,620	Corporate	262,611
Fixed Income	322,816	Public(Govt)	128,694
Balanced	190,949	Union/Multi-Employer	6,988
Total	853,385	Foundation/Endowment	44,260
		Insurance	121,580
Global	\$(mm)	High Net Worth	1,932
Equity	233,575	Sub-Advised	704,267
Fixed Income	188,849	Other	21,087
Balanced	15,610	Total Org Assets	1,291,419
Total	438,034	Total Defined Contribution	57,575

Total Firm Asset Growth (\$mm) as of December 31, 2020



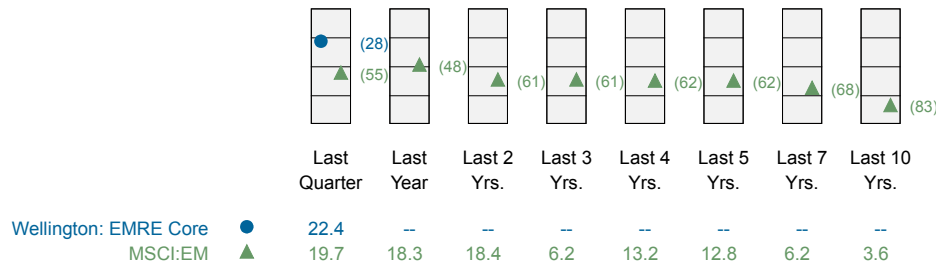
Total Product Asset Growth (\$mm) as of December 31, 2020



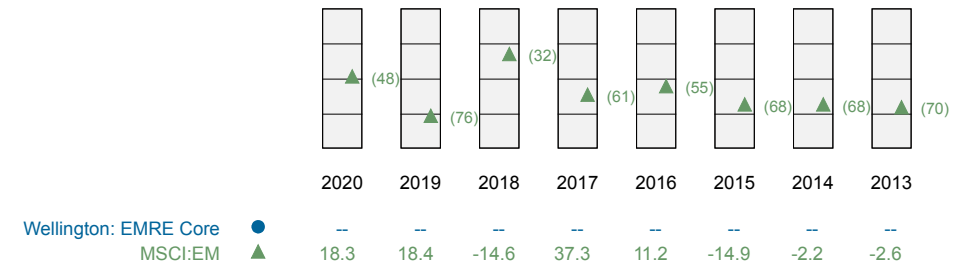
Client Type AUM Total does not include DC assets.

Product Overview: Wellington: EMRE Core

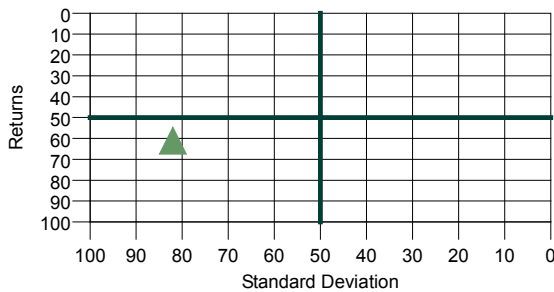
Returns vs. Callan Emerging Broad



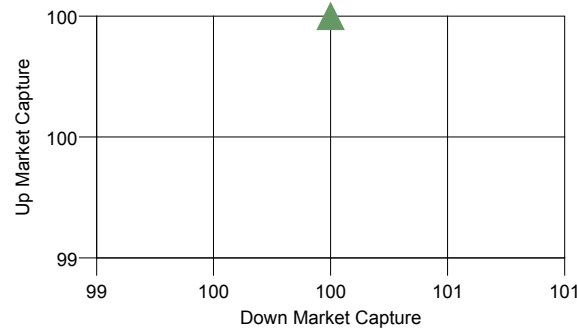
Calendar Year Returns



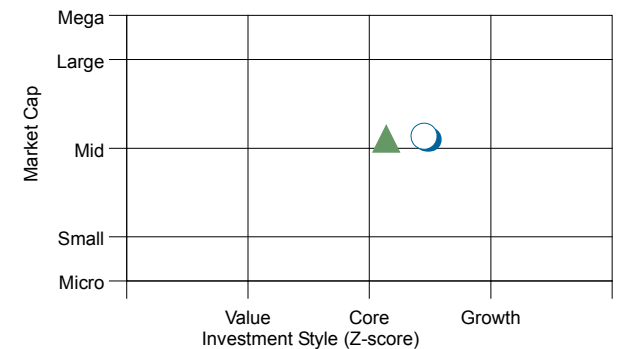
Return and Risk Rankings vs. Callan Emerging Broad Group Rolling 3 Year for 5 Years



Upside/Downside Capture Rolling 3 Year for 5 Years



Holdings Based Style Map Rolling 1 Year



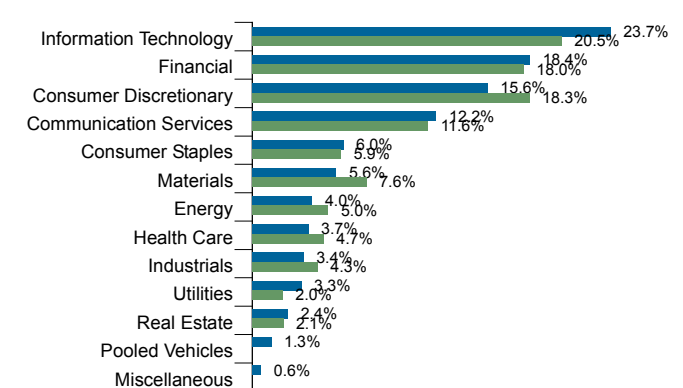
Regional Exposure (%)

	Wellington: EMRE Core	MSCI:EM	Callan Emerging Broad
Emerging Markets	90	99	92
Europe	3	0	1
Frontier Markets	1	1	0
Japan	1	0	0
North America	2	0	3
Pacific Rim	3	0	1

Portfolio Characteristics

	Wellington: EMRE Core	MSCI:EM	Callan Emerging Broad
Number of Holdings	127	1,397	80
Issue Diversification	25.6	62.0	17.2
Growth Z Score	0.1	0.0	0.1
Value Z Score	(0.1)	0.0	(0.2)
Combined Z Score	0.2	0.0	0.3
Wtd. Median Market Cap.	41.3	35.1	31.7
Forecasted P/E (exc neg)	16.1	15.5	15.4
Price/Book Value	1.9	1.7	2.1
Forecasted Gr. in Earnings	20.6	18.8	18.3
Return on Equity	12.7	11.7	13.6
Dividend Yield	1.7	1.9	1.6

Equity Sector Exposure vs MSCI:EM



Performance shown is gross-of-fees unless otherwise noted.

Firm Overview: Parametric Portfolio Associates LLC (Incumbent)

Headquartered in Seattle, Washington, Parametric and its wholly owned subsidiary, Parametric Risk Advisors LLC, offer a variety of "investment supervisory services," including customized core equity portfolios, policy implementation overlays, managed options, and Centralized Portfolio Management. The company was founded in 1987 as a subsidiary of Pacific Financial Asset Management Company ("PFAMCo"). Parametric continued as a subsidiary of PFAMCo until November 1994 when PFAMCo merged with Thompson Advisors to form PIMCO Advisor L.P. ("PALP"). In May 2000, Allianz A.G. purchased control of PALP by acquiring all of PALP's public units. In June of 2001, Parametric's management team, in conjunction with outside investors, completed a buyout from PALP/Allianz. In September of 2003, Eaton Vance Corp. acquired Parametric. On December 31, 2012, Parametric acquired The Clifton Group Investment Management Company ("Clifton") based in Minneapolis, MN.

Firm	Contact
Parametric Portfolio Associates LLC 800 Fifth Avenue, Suite 2800 Seattle, WA 98104	Jaylene Howard (206) 405-3031 jhoward@paraport.com

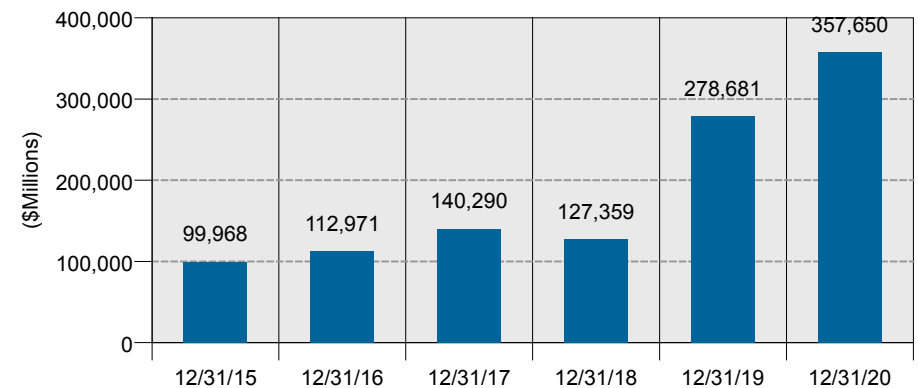
Ownership	Founded	Portfolio Managers	Analysts
Other	1987	115	17

Total Firm Asset Breakdown

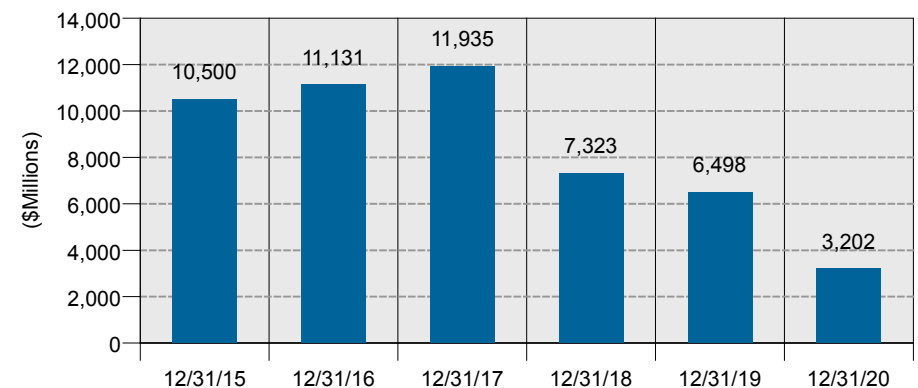
	\$(mm)	Client Type	\$(mm)
Domestic			
Equity	101,980	Corporate	47,188
Fixed Income	50,099	Public(Govt)	39,051
Balanced	2	Union/Multi-Employer	7,999
Alternatives	20,697	Superannuation	7,059
Other	107,286	Foundation/Endowment	38,683
Total	280,064	Health Care	3,351
		Insurance	309
Global	\$(mm)	High Net Worth	132,638
Equity	73,663	Wrap Account	32,277
Balanced	2	Sub-Advised	25,563
Alternatives	55	Other	23,532
Other	3,866	Total Org Assets	357,650
Total	77,586	Total Defined Contribution	2,726

Client Type AUM Total does not include DC assets.

Total Firm Asset Growth (\$mm) as of December 31, 2020

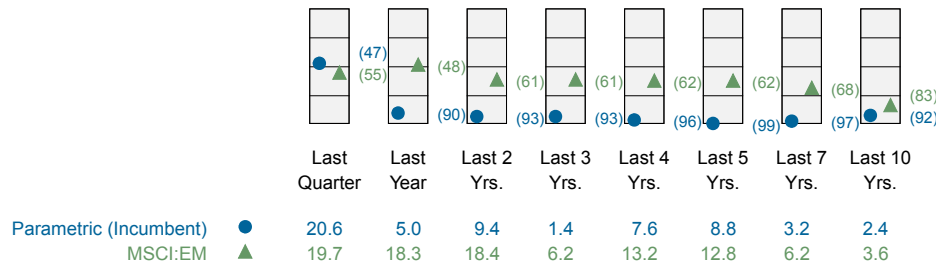


Total Product Asset Growth (\$mm) as of December 31, 2020

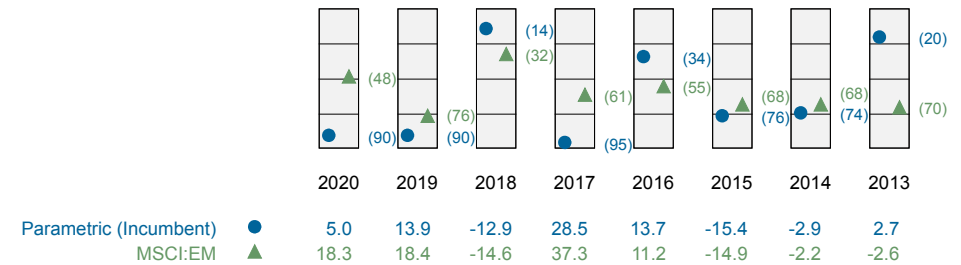


Product Overview: Parametric (Incumbent)

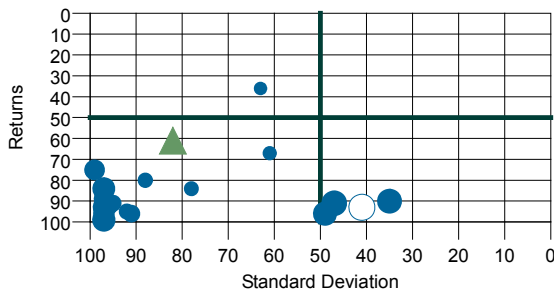
Returns vs. Callan Emerging Broad



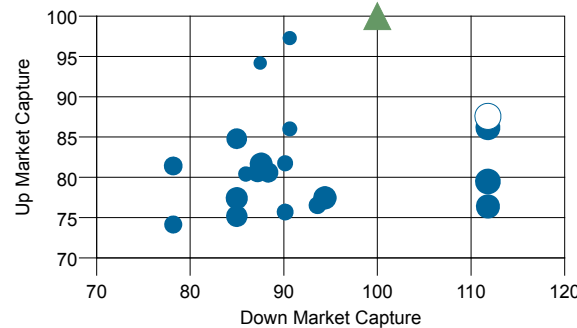
Calendar Year Returns



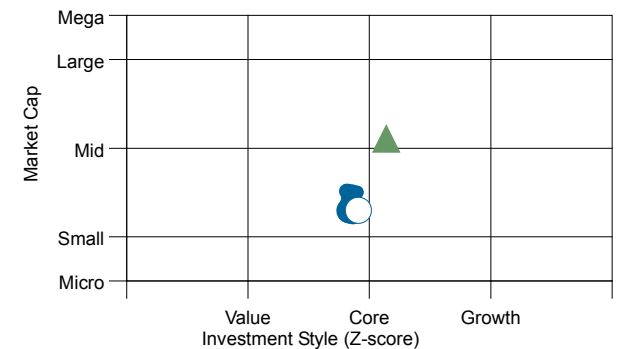
Return and Risk Rankings vs. Callan Emerging Broad Group Rolling 3 Year for 5 Years



Upside/Downside Capture Rolling 3 Year for 5 Years



Holdings Based Style Map Rolling 1 Year



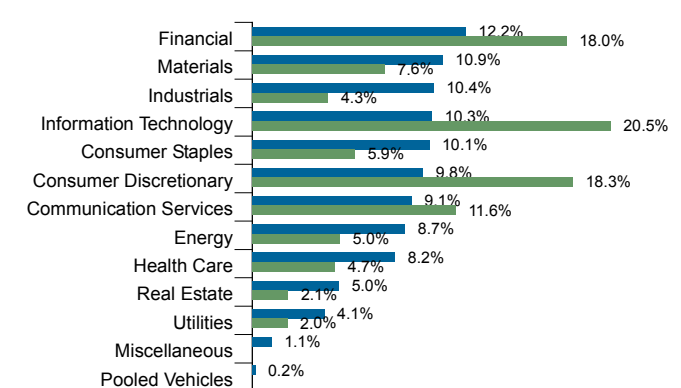
Regional Exposure (%)

	Parametric (Incumbent)	MSCI:EM	Callan Emerging Broad
Emerging Markets	86	99	92
Europe	0	0	1
Frontier Markets	13	1	0
Japan	0	0	0
North America	1	0	3
Pacific Rim	0	0	1

Portfolio Characteristics

	Parametric (Incumbent)	MSCI:EM	Callan Emerging Broad
Number of Holdings	1,283	1,397	80
Issue Diversification	201.8	62.0	17.2
Growth Z Score	(0.1)	0.0	0.1
Value Z Score	0.0	0.0	(0.2)
Combined Z Score	(0.1)	0.0	0.3
Wtd. Median Market Cap.	6.5	35.1	31.7
Forecasted P/E (exc neg)	13.7	15.5	15.4
Price/Book Value	1.5	1.7	2.1
Forecasted Gr. in Earnings	13.0	18.8	18.3
Return on Equity	11.1	11.7	13.6
Dividend Yield	2.5	1.9	1.6

Equity Sector Exposure vs MSCI:EM



Performance shown is gross-of-fees unless otherwise noted.

Definitions

Alpha measures a portfolio's return in excess of the market return adjusted for risk. It is a measure of the manager's contribution to performance with reference to security selection. A positive alpha indicates that a portfolio was positively rewarded for the residual risk which was taken for that level of market exposure.

Beta measures the sensitivity of rates of portfolio returns to movements in the market index. A portfolio's beta measures the expected change in return per 1% change in the return on the market. If a beta of a portfolio is 1.5, a 1 percent increase in the return on the market will result, on average, in a 1.5 percent increase in the return on the portfolio. The converse would also be true.

Combined Z Score is the difference between the MSCI Growth Z Score and the MSCI Value Z Score (Growth - Value). A significant positive Combined Z Score implies significant "growthiness" in the stock or portfolio. A Combined Z Score close to 0.00 (positive or negative) implies "core-like" style characteristics, and a significantly negative Combined Z Score implies more "valueyness" in the stock or portfolio.

Correlation measures the degree to which two variables are associated. Correlation is a commonly used tool for constructing a well-diversified portfolio. Traditionally, equities and fixed-income asset returns have not moved closely together. The asset returns are not strongly correlated. A balanced fund with equities and fixed-income assets represents a diversified portfolio that attempts to take advantage of the low Correlation between the two asset classes. The value for Correlation ranges from +1.0 to -1.0. A positive Correlation means that the two variables move, to a degree, in the same manner or direction, and a negative Correlation means that the variables move, to a degree, in the opposite manner or direction. A Correlation of +1.0 (-1.0) means the two variables move in exactly the same (opposite) direction.

Coupon Rate is the market value weighted average coupon of all securities in the portfolio. The total coupon payments per year are divided by the total portfolio par value.

Dividend Yield reflects the total amount of dividends paid out for a stock over the proceeding twelve months divided by the closing price of a share of the common stock.

Downside Risk differentiates between "good risk" (upside volatility) and "bad risk" (downside volatility). Whereas standard deviation captures both upside and downside volatility, downside risk measures only the volatility of returns below the target. Returns above the target are assigned a deviation of zero. Both the frequency and magnitude of underperformance affect the amount of downside risk.

Effective Yield is the actual total annualized return that would be realized if all securities in the portfolio were held to their expected maturities. Effective yield is calculated as the internal rate of return, using the current market value and all expected future interest and principal cash flows.

Effective Duration is one measure of the portfolio's exposure to interest rate risk. Generally, the higher a portfolio's duration, the more that its value will change in response to interest rate changes. The option adjusted duration for each security in the portfolio is calculated using models which determine the expected stream of cash-flows for the security based on various interest rate scenarios.

Definitions (continued)

Excess Correlation is the correlation of a portfolio's excess return to another portfolio's excess return. Excess return is the portfolio return minus the benchmark return. For instance Excess Correlation could measure the correlation of Manager A's return in excess of a benchmark with Manager B's return in excess of the same benchmark. Excess Correlation is used to indicate whether different managers outperform a market index at the same time.

Excess Return is the portfolio return minus the benchmark return.

Excess Return Ratio is a measure of risk adjusted relative return. This ratio captures the amount of active management performance (value added relative to an index) per unit of active management risk (tracking error against the index.) It is calculated by dividing the manager's annualized cumulative excess return relative to the index by the standard deviation of the individual quarterly excess returns. The Excess Return Ratio can be interpreted as the manager's active risk/reward tradeoff for diverging from the index when the index is mandated to be the "riskless" market position.

Forecasted Growth in Earnings is a measure of a company's expected long-term success in generating future year-over-year earnings growth. This growth rate is a market value weighted average of the consensus (mean) analysts' long-term earnings growth rate forecast for each company in the portfolio. The definition of long-term varies by analyst but is limited to a 3-8 year range. This value is expressed as the expected average annual growth of earnings in percent.

Forecasted P/E is a forward-looking valuation measure of a company's common stock. It encapsulates the amount of earnings estimated for next year per dollar of current share price. This value is calculated by dividing the present stock price of each company in the portfolio by the consensus (mean) analysts' earnings forecasts for the next year. These earnings estimates are for recurring, non-extraordinary earnings per primary common share. The individual P/E stock ratios are then weighted by their respective portfolio market values in order to calculate a weighted average representative of the portfolio as a whole.

Growth Z Score is a holdings-based measure of the "growthiness" of an individual stock or portfolio of stocks based on fundamental financial ratio analysis. The MSCI Growth Z Score is an aggregate score based on the growth score of five separate financial fundamentals: Long Term Forward Earnings Growth, Short Term Forward Earnings Growth, Current Internal Growth ($\text{ROE} * (1 - \text{payout ratio})$), Long Term Historical Earnings Growth, and Long Term Historical Sales Growth.

Information Ratio measures the manager's market risk-adjusted excess return per unit of residual risk relative to a benchmark. It is computed by dividing alpha by the residual risk over a given time period. Assuming all other factors being equal, managers with lower residual risk achieve higher values in the information ratio. Managers with higher information ratios will add value relative to the benchmark more reliably and consistently.

Issue Diversification is the number of stocks (largest holdings) making up half of the market value of the total portfolio.

Market Capitalization (Weighted Median / Weighted Average) - Market capitalization is the market value of a company's outstanding shares. This figure is found by taking the stock price and multiplying it by the total number of shares outstanding. The weighted median market cap is the point at which half of the market value of the portfolio is invested in stocks with a greater market cap, and consequently the other half is invested in stocks with a lower market cap. Weighted average market cap for a portfolio is defined as the sum of each of the security's weight in the portfolio multiplied by its intrinsic market capitalization.

Definitions (continued)

Price to Earnings Ratio (P/E) is a measure of value for a company. It is equal to the price of a share of common stock divided by the earnings per share for a twelve-month period.

Price to Book Value (P/B) is a measure of value for a company. It is equal to the market value of all the shares of common stock divided by the book value of the company. The book value is the sum of capital surplus, common stock, and retained earnings.

Quality Rating is a way to measure the credit quality as determined by the individual security ratings. The ratings for each security are compiled into a composite rating for the whole portfolio. Quality symbols range from AAA (highest investment quality and lowest credit risk) to D (lowest investment quality and highest credit risk).

R-Squared (R²) is a statistical measure that indicates the extent to which the variability of a security or portfolio's returns is explained by the variability of the market. The value will be between 0 and 1. The higher the number, the greater the extent to which portfolio returns are related to market return.

Residual Risk is the unsystematic, firm-specific, or diversifiable risk of a security or portfolio that can be reduced by including assets that do not have similar unique risk. It is the portion of the total risk of a security or portfolio that is unique to the security or portfolio itself and is not related to the overall market.

Return on Equity (ROE) is a measure of a company's profitability, specifically relating profits to the equity investment employed to achieve the profits. Return on Equity focuses on the returns accruing to the residual owners of a company, the equity holders. It is equal to income divided by total common equity. Income is after all expenses, including income taxes and minority interest, but before provision for dividends, extraordinary items, and discontinued operations. Common equity includes common stock outstanding, capital surplus, and retained earnings.

Rising/Declining Periods is determined by evaluating the cumulative relative sub-asset class index performance to that of the broader asset class index. For example, in determining the Growth Style cycle, the S&P 500 Growth Index (sub-asset class) performance is compared to that of the S&P 500 Index (broader asset class). The analysis determines if a significant "cycle reversal" has occurred over a period. If the magnitude of the cumulative relative return is greater than one standard deviation when the number of periods is four or more quarters-or two standard deviations for periods less than 4 quarters-a significant reversal has occurred. The process is repeated until all the different combinations of recent periods are evaluated, and a break point is determined.

Sharpe Ratio is a measure of risk-adjusted return. It is calculated by subtracting the "risk-free" return (usually 3 Month Treasury Bill) from the portfolio return and dividing the resulting "excess return" by the portfolio's risk level (standard deviation). The result is a measure of return gained per unit of risk taken.

Stability Score is calculated as the difference between the Defensive and Dynamic scores and can range from -1 to +1. A stability score of +1 indicates a Low Risk and High Quality portfolio (or stock), whereas, a stability score of -1 indicates a High Risk and Low Quality portfolio (or stock). The underlying variables that drive the stability scores are Total Return Volatility, Debt/Equity Ratio, Earnings Volatility and Return on Assets and together encompass both observed price risk and current balance sheet risk.

Definitions (continued)

Standard Deviation is a statistical measure of portfolio risk. It reflects the average deviation of the observations from their sample mean. Standard deviation is used as an estimate of risk since it measures how wide the range of returns typically is. The wider the typical range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns are normally distributed (i.e., has a bell shaped curve distribution) then approximately 2/3 of the returns would occur within plus or minus one standard deviation from the sample mean.

Style Map (Holdings Based) - Morgan Stanley Capital International (MSCI) has developed security-level style scores which are based on multiple fundamental ratios that classify stocks as "value" or "growth." On a relative basis we can match these to a manager's portfolio holdings to get a score for the portfolio that is more reliable and current than traditional returns-based regression analysis. Using the combined Z score and weighted median market cap, the holdings based style map allows for viewing manager style in a two dimensional space.

Tracking Error is a statistical measure of a portfolio's risk relative to an index. It reflects the standard deviation of a portfolio's individual quarterly or monthly returns from the index's returns. Typically, the lower the Tracking Error, the more "index-like" the portfolio.

Up Market (Down Market) Capture is a measure of relative performance in up-markets (down-markets). It is determined by the index which has an Up Capture (Down Capture) ratio of 100% when the index is performing positively (negatively). If a manager captures more than 100% of the rising (declining) market it is said to be "offensive" ("defensive").

Value Z Score is a holdings-based measure of the "valueyness" of an individual stock or portfolio of stocks based on fundamental financial ratio analysis. The MSCI Value Z Score is an aggregate score based on the value scores of three separate financial fundamentals: Price/Book, Price/Forward Earnings, and Dividend Yield.

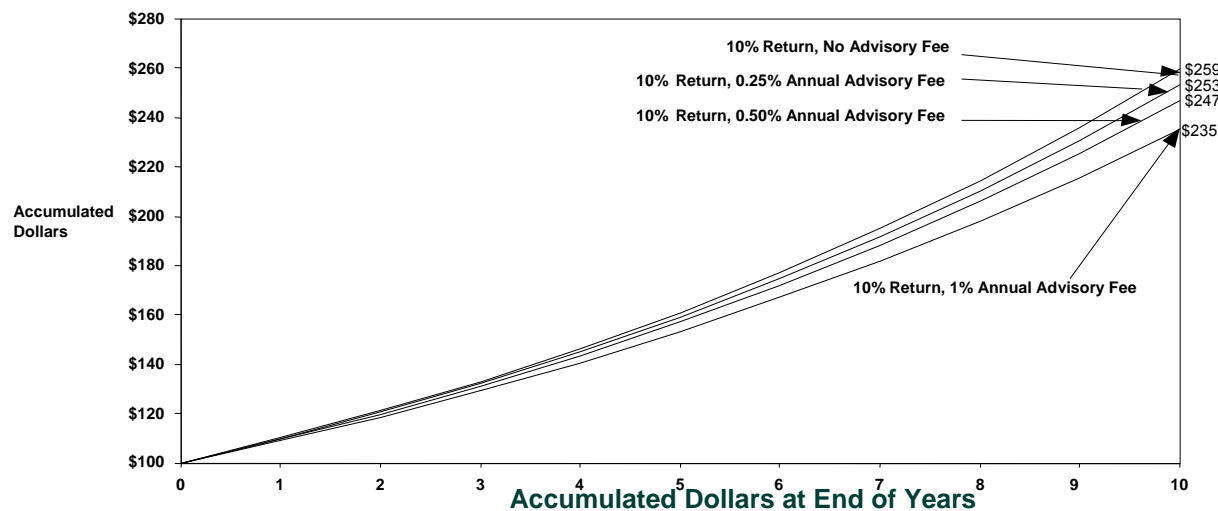
Weighted Average Life is the weighted average time remaining until the principal is paid off for all securities in a portfolio.

Disclosure Statement

The preceding report has been prepared for the exclusive use of Marin County Employees' Retirement Association. Unless otherwise noted, performance returns contained in this report do not reflect the deduction of investment advisory fees. The returns in this report will be reduced by the advisory fees and any other expenses incurred in the management of an investment account. The investment advisory fees applicable to the advisors listed in this report are described in Part II of each advisor's form ADV.

The following graphical and tabular example illustrates the cumulative effect of investment advisory fees on a \$100 investment growing at 10% over ten years. Fees are assumed to be paid monthly.

The Cumulative Effect of Advisory Fees



	1	2	3	4	5	6	7	8	9	10
No Fee	110.0	121.0	133.1	146.4	161.1	177.2	194.9	214.4	235.8	259.4
25 Basis Points	109.7	120.4	132.1	145.0	159.1	174.5	191.5	210.1	230.6	253.0
50 Basis Points	109.5	119.8	131.1	143.5	157.1	172.0	188.2	206.0	225.5	246.8
100 Basis Points	108.9	118.6	129.2	140.7	153.3	166.9	181.8	198.0	215.6	234.9

10% Annual Return Compounded Monthly, Annual Fees Paid Monthly.

List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry, and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor, and disclose potential conflicts on an ongoing basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database, or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g., attending an educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group, and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance department.

Manager Name

Aberdeen Standard Investments

Acadian Asset Management LLC

AEGON USA Investment Management Inc.

AllianceBernstein

Allianz

American Century Investments

Amundi Pioneer Asset Management

AQR Capital Management

Ares Management LLC

Ariel Investments, LLC

Aristotle Capital Management, LLC

Atlanta Capital Management Co., LLC

Manager Name

Aviva Investors Americas

AXA Investment Managers

Baillie Gifford International, LLC

Baird Advisors

Baron Capital Management, Inc.

Barrow, Hanley, Mewhinney & Strauss, LLC

BlackRock

BMO Global Asset Management

BNP Paribas Asset Management

BNY Mellon Asset Management

Boston Partners

Brandes Investment Partners, L.P.

C.1

Manager Name

Brandywine Global Investment Management, LLC

Brown Brothers Harriman & Company

Cambiar Investors, LLC

Capital Group

Carillon Tower Advisers

CastleArk Management, LLC

Causeway Capital Management LLC

Chartwell Investment Partners

ClearBridge Investments, LLC

Cohen & Steers Capital Management, Inc.

Columbia Management Investments

Columbus Circle Investors

Credit Suisse Asset Management

D.E. Shaw Investment Management, L.L.C.

DePrince, Race & Zollo, Inc.

Dimensional Fund Advisors LP

Doubleline

Duff & Phelps Investment Management Co.

DWS

EARNEST Partners, LLC

Eaton Vance Management

Epoch Investment Partners, Inc.

Fayez Sarofim & Company

Federated Hermes, Inc.

Fidelity Institutional Asset Management

Fiera Capital Corporation

First Hawaiian Bank Wealth Management Division

First Sentier Investors (formerly First State Investments)

Fisher Investments

Franklin Templeton

Manager Name

Fred Alger Management, Inc.

GAM (USA) Inc.

GCM Grosvenor

Glenmeade Investment Management, LP

GlobeFlex Capital, L.P.

Goldman Sachs

Green Square Capital Advisors, LLC

Guggenheim Investments

GW&K Investment Management

Harbor Capital Group Trust

Hartford Investment Management Co.

Heitman LLC

Hotchkis & Wiley Capital Management, LLC

Income Research + Management, Inc.

Insight Investment

Intech Investment Management, LLC

Intercontinental Real Estate Corporation

Invesco

Ivy Investments

J.P. Morgan

Janus

Jennison Associates LLC

Jobs Peak Advisors

KeyCorp

Lazard Asset Management

Legal & General Investment Management America

Lincoln National Corporation

Longview Partners

Loomis, Sayles & Company, L.P.

Lord Abbett & Company

C.1

Manager Name
Los Angeles Capital Management
LSV Asset Management
MackKay Shields LLC
Macquarie Investment Management (MIM)
Manulife Investment Management
Marathon Asset Management, L.P.
McKinley Capital Management, LLC
Mellon
MetLife Investment Management
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
Mountain Pacific Advisors, LLC
MUFG Union Bank, N.A.
Natixis Investment Managers
Neuberger Berman
Newton Investment Management
Nikko Asset Management Co., Ltd.
Nile Capital Group LLC
Ninety One North America, Inc. (formerly Investec Asset Mgmt.)
Northern Trust Asset Management
Nuveen
P/E Investments
Pacific Investment Management Company
Parametric Portfolio Associates LLC
Pathway Capital Management
Peregrine Capital Management, LLC
Perkins Investment Management

Manager Name
PFM Asset Management LLC
PGIM Fixed Income
PineBridge Investments
PNC Capital Advisors, LLC
Polen Capital Management
Principal Global Investors
Putnam Investments, LLC
QMA LLC
RBC Global Asset Management
Regions Financial Corporation
Robeco Institutional Asset Management, US Inc.
Rothschild & Co. Asset Management US
S&P Dow Jones Indices
Schroder Investment Management North America Inc.
SLC Management
Smith Graham & Co. Investment Advisors, L.P.
State Street Global Advisors
Stone Harbor Investment Partners L.P.
Strategic Global Advisors
T. Rowe Price Associates, Inc.
The TCW Group, Inc.
Thompson, Siegel & Walmsley LLC
Thornburg Investment Management, Inc.
Tri-Star Trust Bank
UBS Asset Management
USAA Real Estate
VanEck
Versus Capital Group
Victory Capital Management Inc.
Virtus Investment Partners, Inc.

Manager Name

Vontobel Asset Management, Inc.

Voya

WCM Investment Management

WEDGE Capital Management

Wellington Management Company LLP

Wells Fargo Asset Management

Western Asset Management Company LLC

Westfield Capital Management Company, LP

William Blair & Company LLC

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As a matter of policy, Callan follows strict procedures so that investment manager client relationships do not affect the outcome or process by which Callan's searches or evaluations are conducted.

Firm	Is an Investment Manager Client of Callan*	Is not an Investment Manager Client of Callan
AQR Capital Management	X	
Artisan Partners Limited Partnership		X
BlackRock	X	
Fidelity Institutional Asset Management	X	
Wellington Management Company, LLP	X	
Parametric Portfolio Associates LLC		X

*Based upon Callan manager clients as of the most recent quarter end.

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March 17, 2021

Mcera



**2021 Capital Markets
Projections and Asset
Allocation Review**

Jay Kloepfer
Capital Markets Research

Agenda

- **Creating Capital Market Projections - Process Overview**
- **Current Market Conditions**
- **Fixed Income**
- **Equity**
- **Detailed 2021 Expectations and Resulting Portfolio Returns and Risks**

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Creating Capital Market Projections - Process Overview

Why Make Capital Markets Projections?

Guiding objectives and process

Cornerstone of a prudent process is a long-term strategic investment plan

- Capital markets projections are key elements — set reasonable return and risk expectations for the appropriate time horizon
- Projections represent our best thinking regarding the long-term (10-year) outlook, recognizing our median projections represent the midpoint of a range, rather than a specific number
- Develop results that are readily defensible both for individual asset classes and for total portfolios
- Be conscious of the level of change suggested in strategic allocations for long-term investors: DB plan sponsors, foundations, endowments, trusts, DC participants, families, and individuals
- Reflect common sense and recent market developments, within reason

Callan's forecasts are informed by current market conditions, but are not built directly from them

- Balance recent, immediate performance and valuation against long-term equilibrium expectations

How Does the Process Work?

For internal consumption: how the sausage is made

Start in summer of 2020

- CMR group, input from asset class specialists, consultants, management
 - Articulate goals for the update
 - Purpose of the projections, impact of changes on investor behavior, comparison to forecasts around the industry
 - What has changed in the capital markets in one year to warrant revision to longer-term expectations?
- Agreement on inflation, path to future interest rates, targets for segments of the fixed income market
 - Bond model to test scenarios and develop range of expectations
- Equity – real returns, risk premia, relation to fixed income expectations, change in valuation (if compelling)
 - Model to incorporate income, appreciation, any valuation change
- Set path for 2021
 - Lower fixed income expectations after arrival of the pandemic, Fed return to zero interest rate policy, stimulus, recession
 - Revisit equity expectations – equity risk premium over lower fixed income expectations
 - Refine and confirm suggested advantages of diversification benefit
- Test and tune expectations for reasonable asset mixes
 - Impose long-term beliefs and practical implementation
- Release projections and present to Callan clients January 14, 2021

2021–2030 Callan Capital Markets Assumptions

Asset Class	Index	Projected Return			Projected Risk	Projected Yield
		1-Year Arithmetic	10-Year Geometric*	Real	Standard Deviation	
Equities						
Broad U.S. Equity	Russell 3000	8.00%	6.60%	4.60%	17.95%	1.95%
Large Cap U.S. Equity	S&P 500	7.85%	6.50%	4.50%	17.70%	2.00%
Smid Cap U.S. Equity	Russell 2500	8.75%	6.70%	4.70%	21.30%	1.75%
Global ex-U.S. Equity	MSCI ACWI ex USA	8.70%	6.80%	4.80%	20.70%	2.80%
Developed ex-U.S. Equity	MSCI World ex USA	8.25%	6.50%	4.50%	19.90%	3.00%
Emerging Market Equity	MSCI Emerging Markets	9.80%	6.90%	4.90%	25.15%	2.35%
Fixed Income						
Short Duration Gov't/Credit	Bloomberg Barclays 1-3 Yr Gov / Credit	1.50%	1.50%	-0.50%	2.00%	1.55%
Core U.S. Fixed	Bloomberg Barclays Aggregate	1.80%	1.75%	-0.25%	3.75%	2.50%
Long Government	Bloomberg Barclays Long Government	1.35%	0.60%	-1.40%	12.50%	3.00%
Long Credit	Bloomberg Barclays Long Credit	2.95%	2.45%	0.45%	10.50%	4.65%
Long Government/Credit	Bloomberg Barclays Long Gov / Credit	2.30%	1.80%	-0.20%	10.35%	4.00%
TIPS	Bloomberg Barclays TIPS	1.80%	1.70%	-0.30%	5.05%	2.35%
High Yield	Bloomberg Barclays High Yield	4.85%	4.35%	2.35%	10.75%	6.70%
Global ex-U.S. Fixed	Bloomberg Barclays Global Agg xUSD	1.15%	0.75%	-1.25%	9.20%	1.80%
Emerging Market Sovereign Debt	EMBI Global Diversified	3.90%	3.50%	1.50%	9.50%	5.95%
Alternatives						
Core Real Estate	NCREIF ODCE	6.60%	5.75%	3.75%	14.10%	4.40%
Private Infrastructure	MSCI Global Infra / FTSE Dev Core 50/50	7.00%	6.00%	4.00%	15.45%	4.60%
Private Equity	Cambridge Private Equity	11.50%	8.00%	6.00%	27.80%	0.00%
Private Credit	n/a	7.15%	6.25%	4.25%	14.60%	6.25%
Hedge Funds	Callan Hedge FOF Database	4.25%	4.00%	2.00%	8.00%	0.00%
Commodities	Bloomberg Commodity	3.80%	2.25%	0.25%	18.00%	2.00%
Cash Equivalents	90-Day T-Bill	1.00%	1.00%	-1.00%	0.90%	1.00%
Inflation	CPI-U		2.00%		1.50%	

* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).

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Current Market Conditions

Setting Capital Markets Expectations in an Uncertain Environment

One challenge to creating long-term forecasts is a shifting market environment.

- Where do you start?
 - Time horizon?
 - Does valuation matter?
 - What interest rate?
 - A downturn in the economy and cycles in the capital markets are fully expected over a 10-year cycle
 - Discipline in the face of uncertainty is difficult
- Arbitrary impact of plan year end dates on sponsor's results. Your funded status would look a lot different if your plan year ends on 6/30 or 9/30 rather than 12/31/20.
- Interest rate volatility wreaks havoc with LDI glidepaths

Market volatility since February 2020 is important, but we question how much it should impact a 10-year outlook used to guide strategic investment policy.

- Equity market bottomed in March, then surged through most of the second, third, and fourth quarters
- Fed cut rates to zero immediately and has no short-term plans to even think about raising rates
- Over-reliance on data at a specific starting date assigns outsized impact of current valuations on a 10-year forecast, but...
- Long-term forecast should not be moving month to month; suggests a level of precision and market timing that is not practical
- One can argue that we have pulled future returns forward from the next couple of years for both stocks and bonds in 2020

Rhetoric aside, we believe this time the shorter-term changes in the capital markets, particularly the bond market, have indeed been deep enough to change our outlook.

Stunning Recovery in Global Equity Markets in 3Q20

V-shaped equity rebound, ahead of the global economy

Global equity continued the rally in 4Q after March market bottom.

- S&P -33.5% from peak (02/19/20) to low on 3/23/20
- Rebound since March lifted the S&P 500 by 70% through December! However, the strong recovery was concentrated in a few stocks – mega cap, IT.
- Fed cut rates to zero, commenced QE, instituted multiple facilities to backstop money markets, credit markets, and economy
 - *Fed expects to get paid back*
 - *Further fiscal stimulus added at year-end*
- Economic recovery will be uncertain in 2021. Release of vaccines a huge positive development, but distribution challenges may keep widespread inoculation from being achieved until mid-year. As COVID-19 infections surge anew, re-openings may be reversed in many states and localities.

Returns for Periods ended 12/31/20

	1 Quarter	1 Year	5 Years	10 Years	25 Years
U.S. Equity					
Russell 3000	14.68	20.89	15.43	13.79	9.67
S&P 500	12.15	18.40	15.22	13.88	9.56
Russell 2000	31.37	19.96	13.26	11.20	9.05
Global ex-U.S. Equity					
MSCI World ex USA	15.85	7.59	7.64	5.19	5.17
MSCI Emerging Markets	19.70	18.31	12.81	3.63	--
MSCI ACWI ex USA Small Cap	18.56	14.24	9.37	5.95	6.49
Fixed Income					
Bloomberg Barclays Aggregate	0.67	7.51	4.44	3.84	5.16
90-day T-Bill	0.03	0.67	1.20	0.64	2.27
Bloomberg Barclays Long Gov/Credit	1.68	16.12	9.35	8.16	7.42
Bloomberg Barclays Global Agg ex-US	5.09	10.11	4.89	1.99	3.97
Real Estate					
NCREIF Property	0.74	1.19	5.82	8.96	9.08
FTSE Nareit Equity	11.57	-8.00	4.77	8.31	9.64
Alternatives					
CS:Hedge Fund Idx*	3.44	2.41	2.76	3.64	7.25
Cambridge Private Equity*	10.82	18.54	13.90	13.85	15.41
Bloomberg Commodity	10.19	-3.12	1.03	-6.50	1.00
Gold Spot Price	-0.02	24.42	12.32	2.92	6.55
Inflation - CPI-U	0.07	1.36	1.59	1.66	2.10

*Cambridge PE data through 09/30/20; CS Hedge Fund Index data through 9/30/20

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

Callan Periodic Table of Investment Returns

Monthly Returns												Annual Returns
Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	2020
U.S. Fixed Income	U.S. Fixed Income	U.S. Fixed Income	Small Cap Equity	Small Cap Equity	Emerging Market Equity	Emerging Market Equity	Large Cap Equity	U.S. Fixed Income	Small Cap Equity	Large Cap Equity	Small Cap Equity	Small Cap Equity
1.92%	1.80%	-0.59%	13.74%	6.51%	7.35%	8.94%	7.19%	-0.05%	2.09%	14.02%	8.65%	19.96%
Real Estate	Global ex-U.S. Fixed Income	Global ex-U.S. Fixed Income	Large Cap Equity	Large Cap Equity	Small Cap Equity	Large Cap Equity	Small Cap Equity	Global ex-U.S. Fixed Income	Emerging Market Equity	Small Cap Equity	Emerging Market Equity	Large Cap Equity
0.84%	-0.20%	-3.22%	12.82%	4.76%	3.53%	5.64%	5.63%	-0.58%	2.06%	10.41%	7.35%	18.40%
Global ex-U.S. Fixed Income	High Yield	High Yield	Emerging Market Equity	High Yield	Dev ex-U.S. Equity	High Yield	Dev ex-U.S. Equity	High Yield	High Yield	Emerging Market Equity	Dev ex-U.S. Equity	Emerging Market Equity
0.76%	-1.41%	-11.46%	9.16%	4.41%	3.42%	4.69%	5.16%	-1.03%	0.51%	10.20%	4.55%	18.31%
High Yield	Emerging Market Equity	Large Cap Equity	Real Estate	Dev ex-U.S. Equity	Real Estate	Global ex-U.S. Fixed Income	Real Estate	Emerging Market Equity	Global ex-U.S. Fixed Income	Global ex-U.S. Fixed Income	Large Cap Equity	Global ex-U.S. Fixed Income
0.03%	-5.27%	-12.35%	7.06%	4.25%	2.57%	4.44%	2.52%	-1.60%	0.46%	7.76%	3.84%	10.11%
Large Cap Equity	Large Cap Equity	Dev ex-U.S. Equity	Dev ex-U.S. Equity	Emerging Market Equity	Large Cap Equity	Real Estate	Emerging Market Equity	Dev ex-U.S. Equity	U.S. Fixed Income	U.S. Fixed Income	Real Estate	Dev ex-U.S. Equity
-0.04%	-8.23%	-14.12%	6.97%	0.77%	1.99%	2.78%	2.21%	-2.82%	-0.45%	7.36%	3.51%	7.59%
Dev ex-U.S. Equity	Real Estate	Emerging Market Equity	High Yield	U.S. Fixed Income	Global ex-U.S. Fixed Income	Small Cap Equity	High Yield	Real Estate	Large Cap Equity	High Yield	Global ex-U.S. Fixed Income	U.S. Fixed Income
-1.94%	-8.24%	-15.40%	4.51%	0.47%	1.01%	2.77%	0.95%	-3.11%	-2.66%	5.13%	2.17%	7.51%
Small Cap Equity	Small Cap Equity	Small Cap Equity	Global ex-U.S. Fixed Income	Global ex-U.S. Fixed Income	High Yield	Dev ex-U.S. Equity	Global ex-U.S. Fixed Income	Small Cap Equity	Real Estate	Dev ex-U.S. Equity	High Yield	High Yield
-3.21%	-8.42%	-21.73%	2.04%	0.30%	0.98%	2.66%	0.29%	-3.34%	-3.33%	2.91%	1.88%	7.11%
Emerging Market Equity	Dev ex-U.S. Equity	Real Estate	U.S. Fixed Income	Real Estate	U.S. Fixed Income	U.S. Fixed Income	U.S. Fixed Income	Large Cap Equity	Dev ex-U.S. Equity	Real Estate	U.S. Fixed Income	Real Estate
-4.66%	-8.88%	-22.76%	1.78%	0.23%	0.63%	1.49%	-0.81%	-3.80%	-3.93%	-12.12%	0.14%	-9.04%

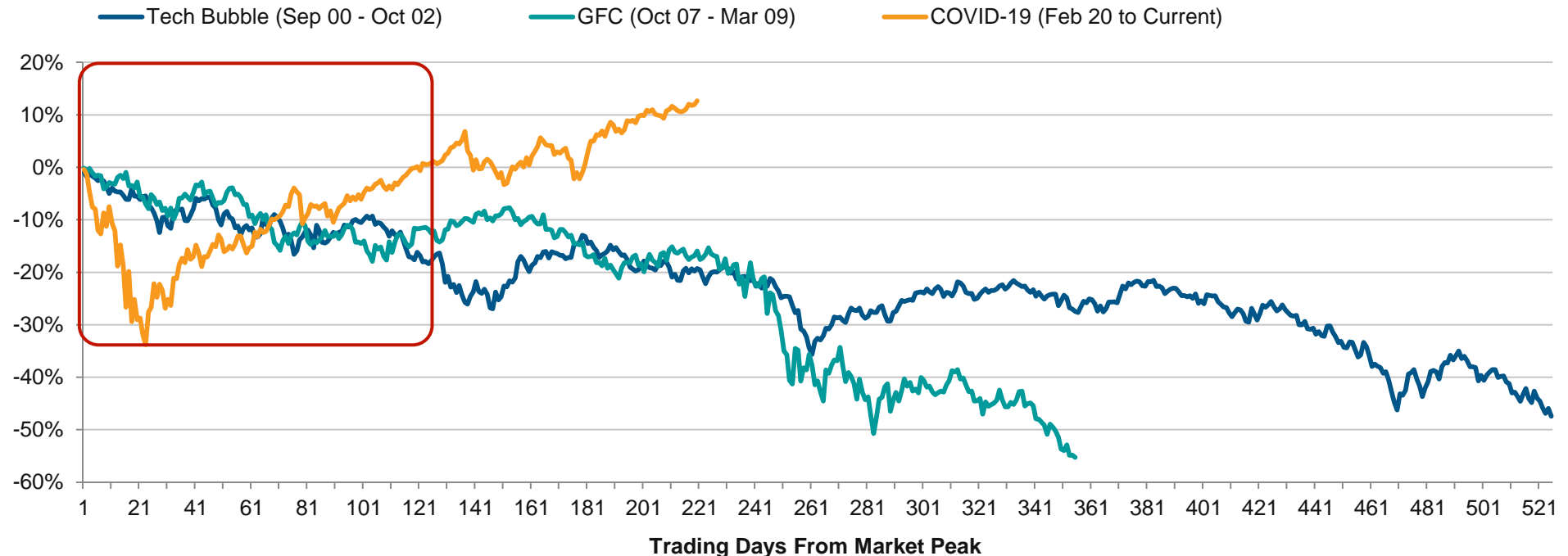
Sources: ● Bloomberg Barclays Aggregate ● Bloomberg Barclays Corp High Yield ● Bloomberg Barclays Global Aggregate ex US
 ● FTSE EPRA Nareit Developed ● MSCI World ex USA ● MSCI Emerging Markets ● Russell 2000 ● S&P 500

Unprecedented Shock to Global Capital Markets—Is It Really Over?

V-shaped recovery in equity—back in black by mid-August, up 18.4% for the year!

S&P 500 Cumulative Returns

Market Peak-to-Trough for Recent Corrections vs. Current Path of COVID-19 Correction Through 12/31/20



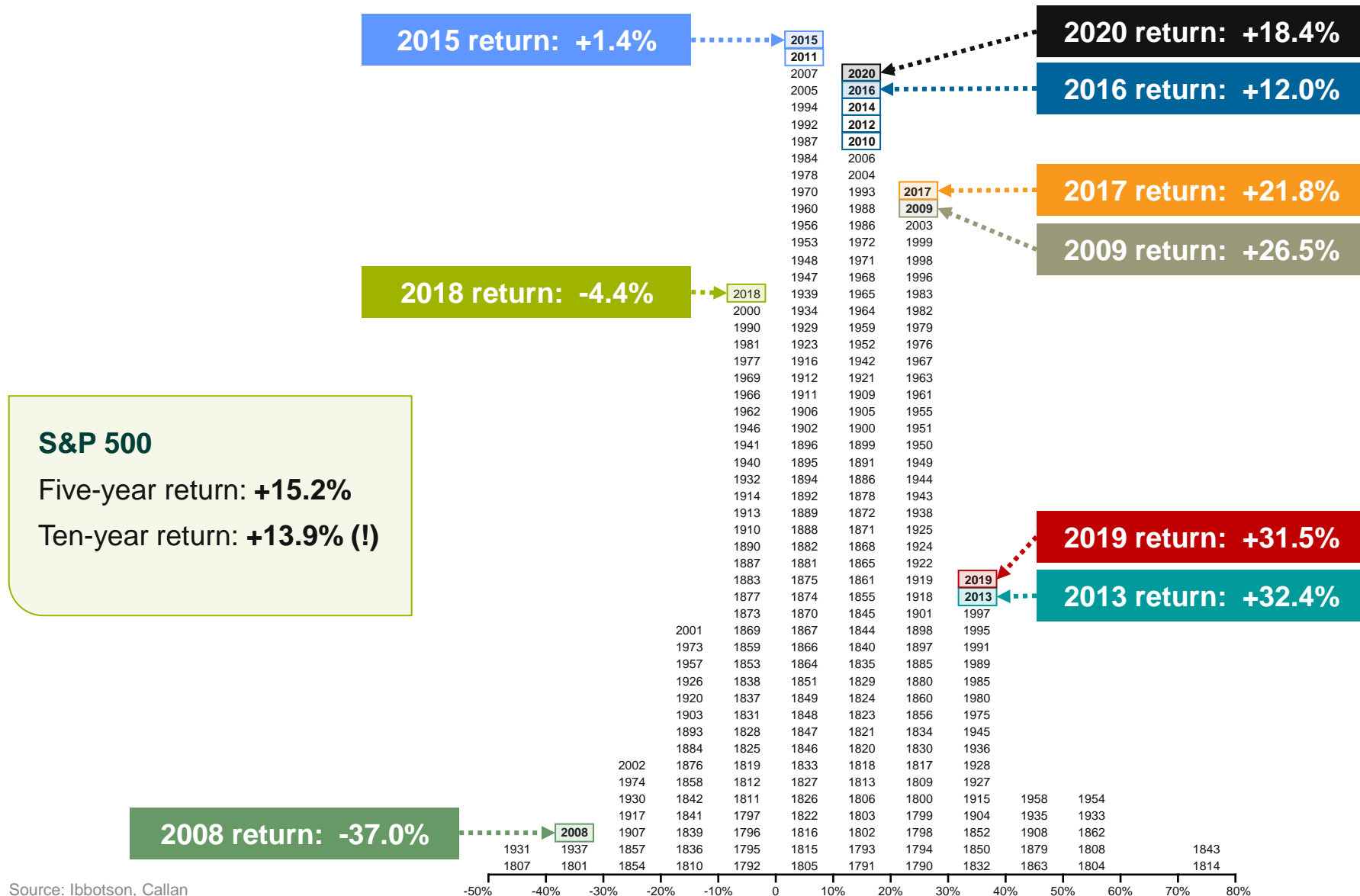
The sharpest and fastest equity market decline ever: 16 trading days to reach bear market; -33% after just 23 days

- Incredible rebound in U.S. equity market in 2Q and 3Q
 - The S&P 500 recovered all of its COVID-19 related losses by August 10, only 97 days from the bottom
 - 70% return from the market bottom through December 31, 2020
 - Positive return year-to-date (+18.4% through December 31, 2020)

Sources: Callan, S&P Dow Jones Indices

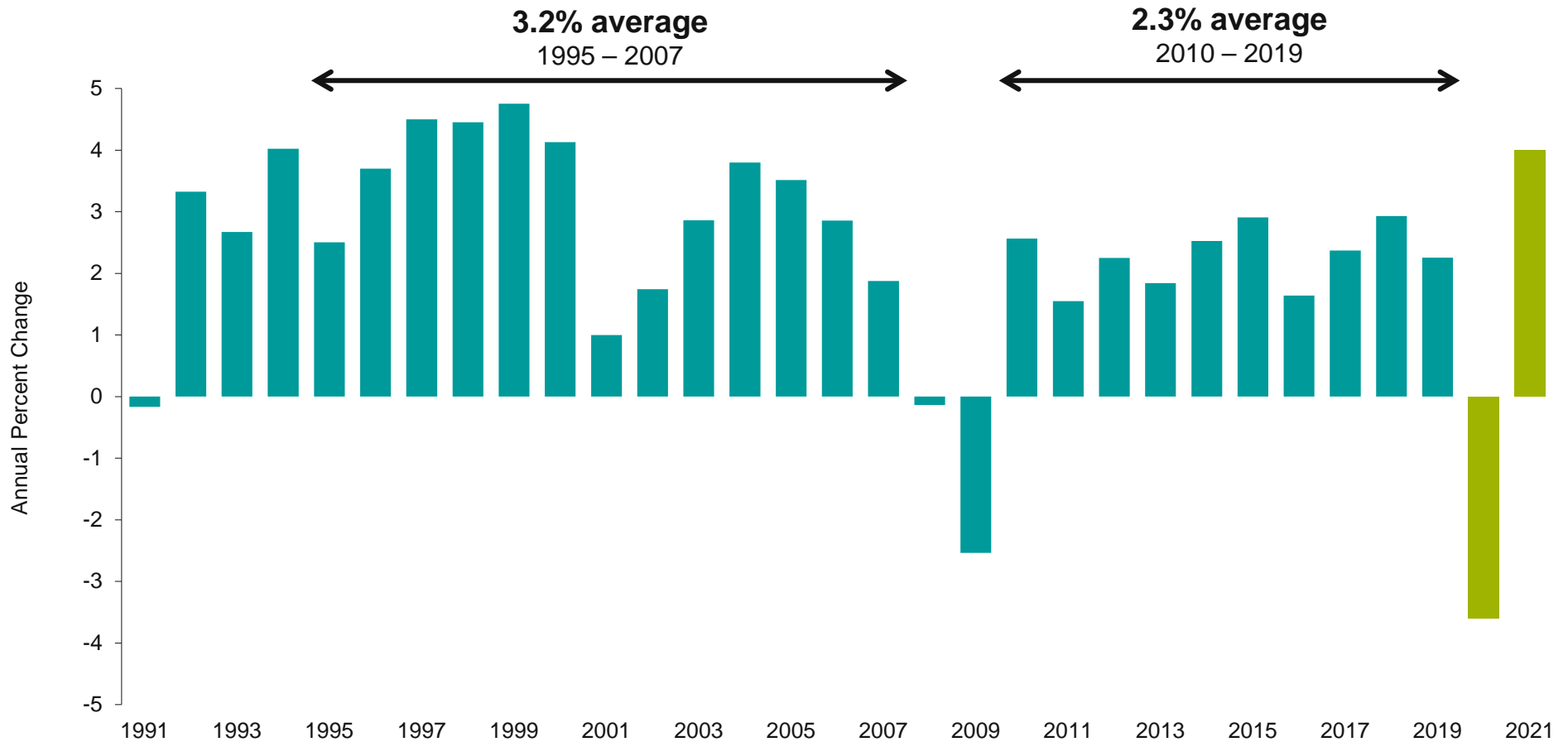
Stock Market Returns by Calendar Year

2020 performance in perspective: History of the U.S. stock market (231 years of returns)



U.S. GDP Growth on a Slower Trajectory

Real GDP growth



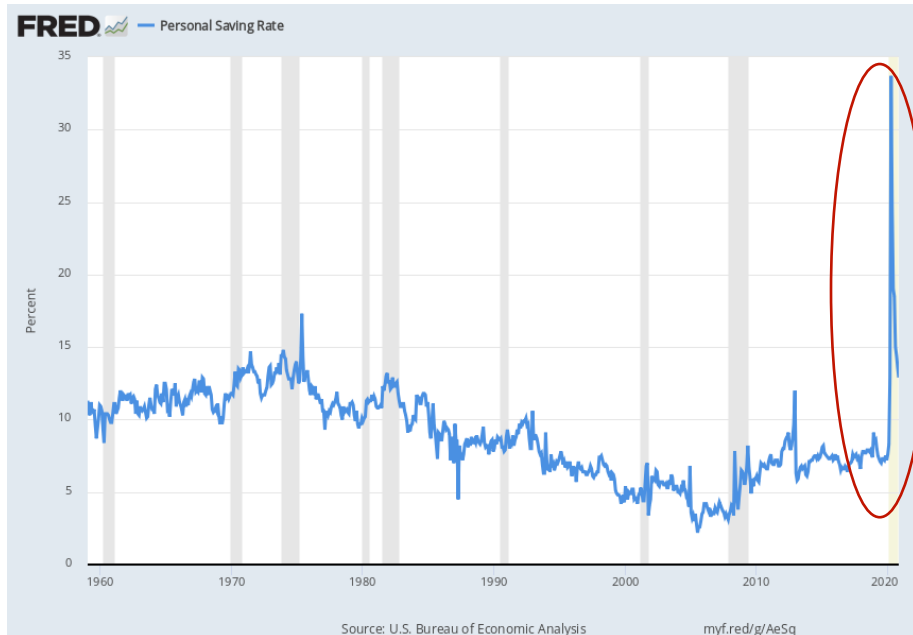
Note: 2020 and 2021 Forecast: IHS Markit

Source: IHS Markit

Liquidity Supporting Economy (and Driving Markets)

Consumers = more money, fewer problems; investors = dry powder abundant

U.S. Personal Savings Rate



Cash as % of Equity Market Cap



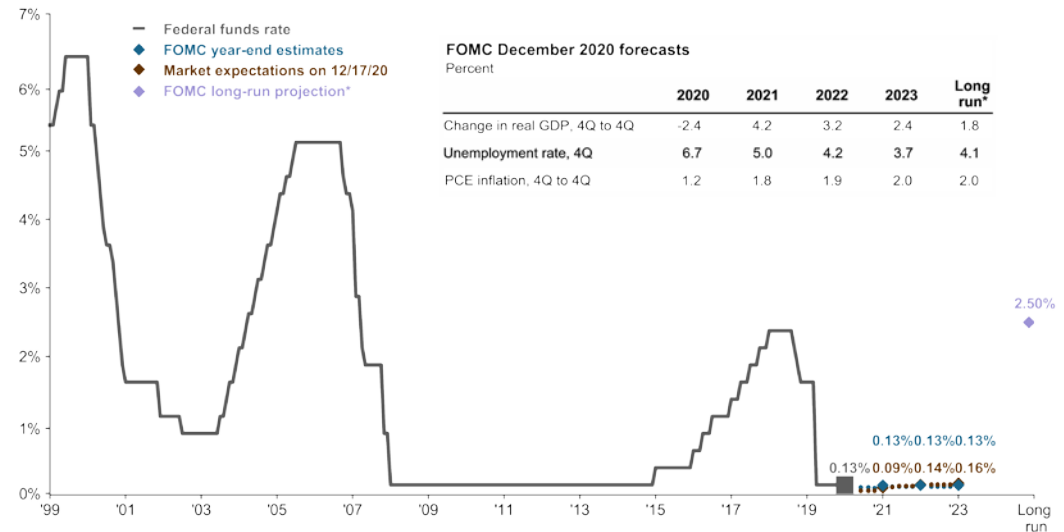
- U.S. personal savings rate far exceeds levels seen in the post-WWII era.
- Savings will help insulate consumer spending during economic wobbles and through uncertainty around future fiscal stimulus.
- Investor cash holdings at 16% of total equity market cap, highest level since 2012

Sources: ClearBridge Investments, FactSet, Federal Reserve. Cash = Institutional and Retail Money Funds – ICL; Equity = MSCI U.S. IMI

Government Intervention

Monetary policy expected to remain loose for some time

- The Federal Reserve Open Market Committee voted to continue 0% Fed Funds Rate at December meeting.
- Median FOMC member forecast expects zero interest rate policy for two more years.
- Powell: “Fed is not even **thinking** about **thinking** about raising rates.”
- Fed announced a new inflation targeting regime, with willingness to overshoot target to get desired outcome of 2%.
- Markets do not expect the Fed to raise the rate in the near future.
- “Longer run” projection of 2.5% for Fed Funds Rate has no specific anchor date.



Sources: Federal Reserve, J.P. Morgan Guide to the Markets – U.S. Data are as of 12/31/20

Market Environment: 3Q20

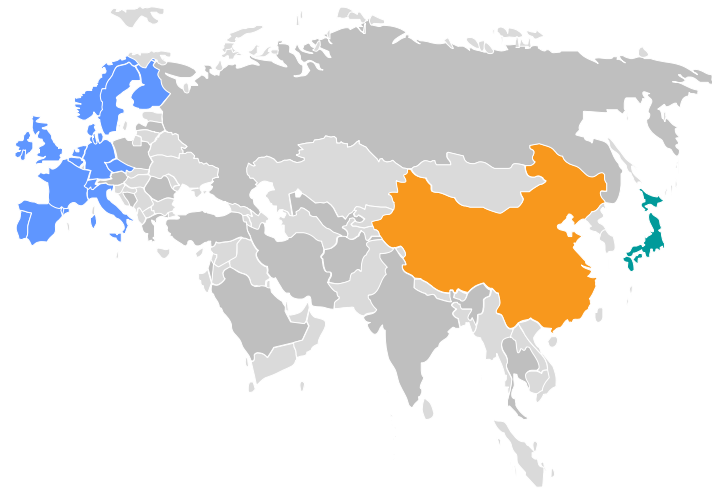
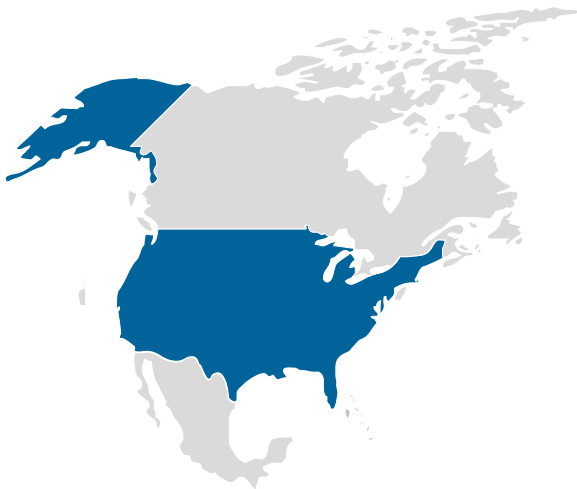
High degree of uncertainty

U.S.

- 2Q GDP fell -31.4%, largest decline on record; 3Q gain of 33%, solid growth of 3% estimated for 4Q
- Retail sales, durable goods, and personal spending rebounded in 2Q and 3Q, but growth slowed in August and September as stimulus waned
- Unemployment dropped to 6.7% in November from 14.7% April peak
 - Jobless claims decelerated to less than 1 million per week, but are still elevated relative to prior recession peaks.
- Housing benefiting from relatively low mortgage rates
- Fed left rates close to 0% and expects to be on hold until at least 2023

Overseas

- Euro zone 1Q GDP contracted 3.7 (-14% annualized), followed by 11.7% drop (-39.2% annualized) in 2Q; largest Q drop on record; 12.5% jump (60% annualized!) in 3Q
- U.K. GDP sank 18.8% in 2Q (-57% annualized)—most ever, rebounded 16% (81% annualized) in 3Q
- Japan's economy shrank 8.3% (-29% annualized) in 2Q; third straight quarterly drop, dating back to 2019; 5.3% growth (22.9% annualized) in 3Q
- China's GDP fell 10% (-34% annualized) in 1Q, but rebounded 11.7% (+56%) in 2Q and is up 2.7% (11.3% annualized) in 3Q; only country expected to grow in 2020

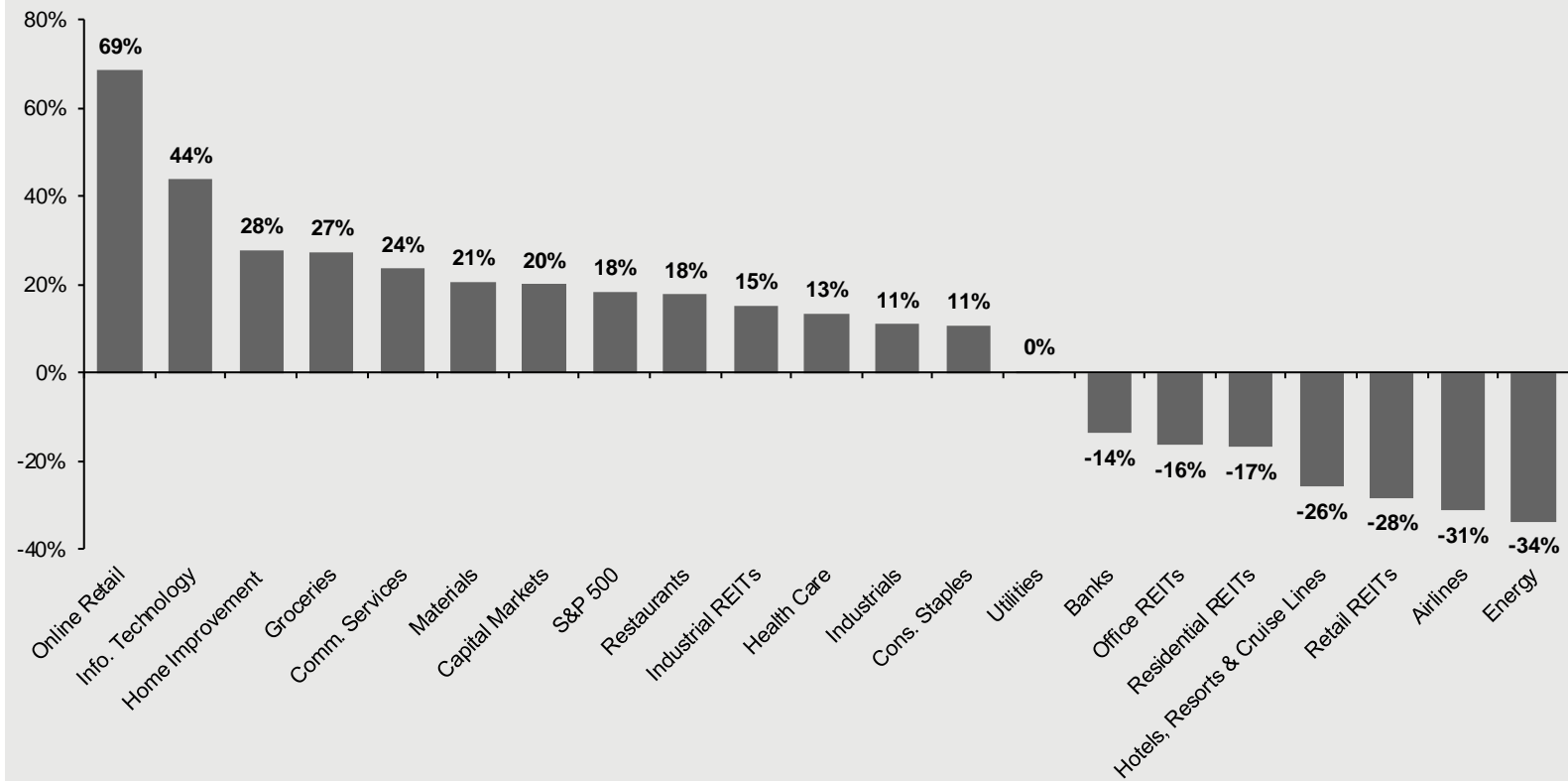


U.S. Stock Market Returns in 2020 Were Widely Dispersed

Concentration of outperformance in technology, online retail, and supporting industries

Returns since December 31, 2019

Total returns by sector and industry

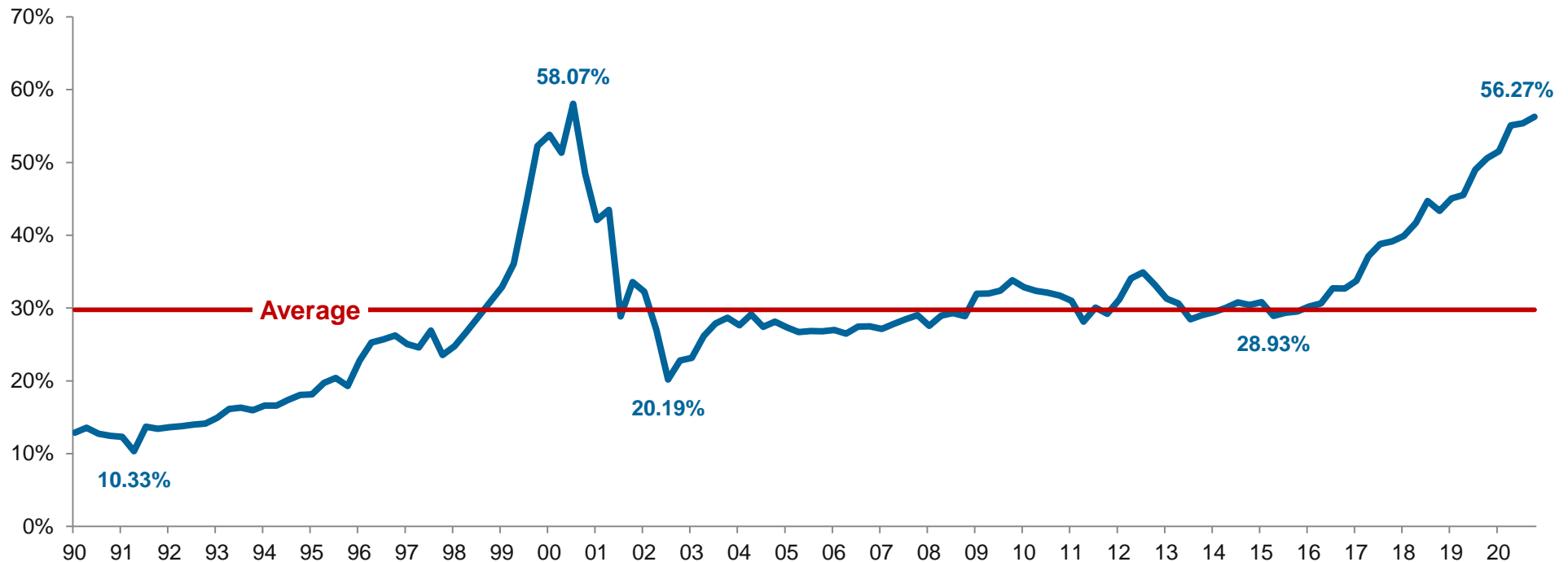


Best-performing sectors employ far fewer workers than many of the underperforming sectors (health care, capital markets, banks, hospitality, transportation, energy).

Sources: FactSet, J.P. Morgan Asset Management Guide to the Markets – U.S., S&P Dow Jones Indices; Data are as of 12/31/20.

IT and Communications Concentration Rivaling That of the Dot-Com Bubble

Sector Concentration in Technology and Communications
Russell 1000 Growth Index



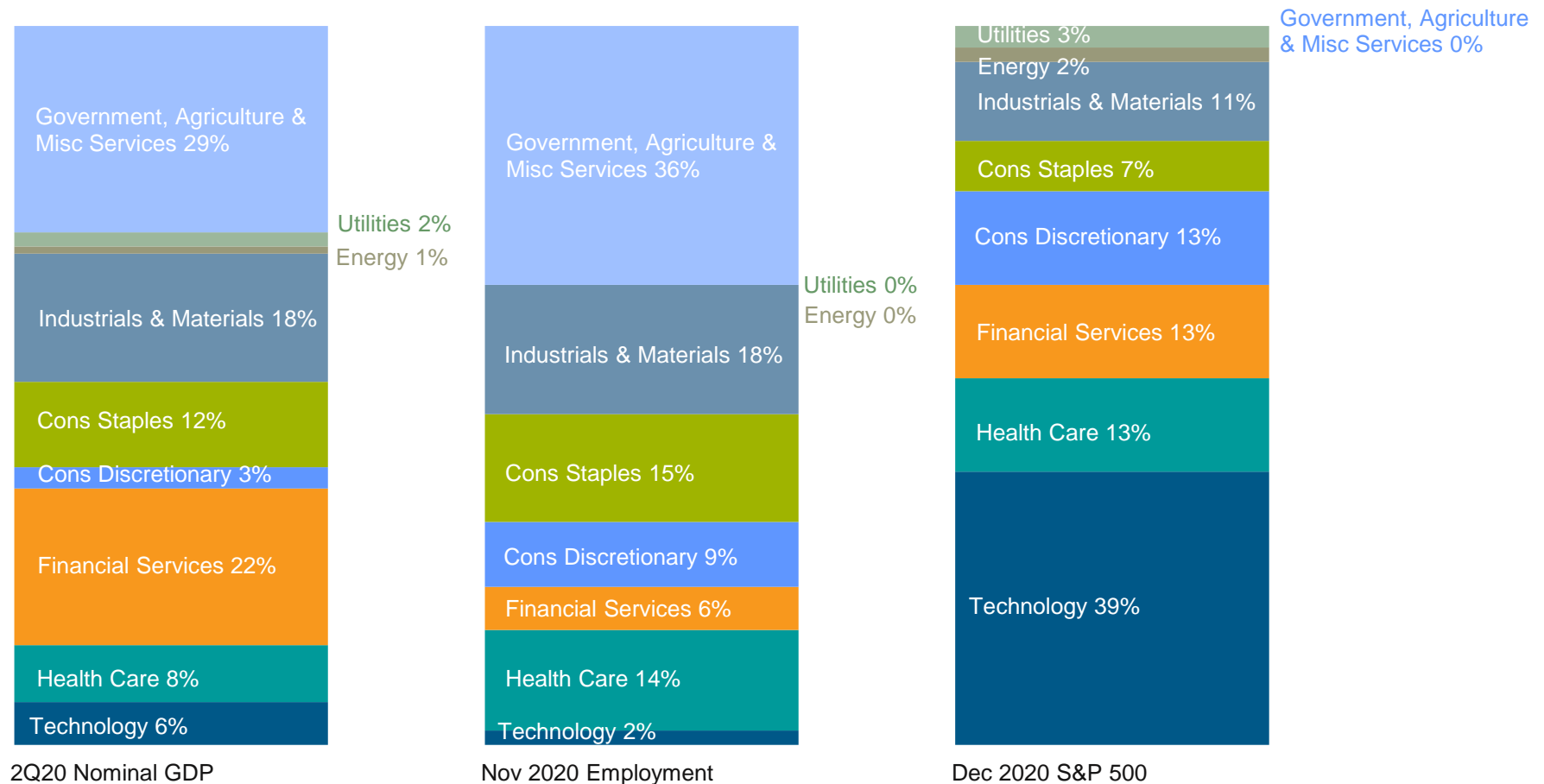
Growth has dominated value and driven returns in the U.S. equity market.

Information Technology and Communications now make up almost 60% of the growth index, a concentration last seen in the Dot-Com Bubble that burst in 2000-02

Sources: Callan, FTSE Russell

The Stock Market Is Not the Economy

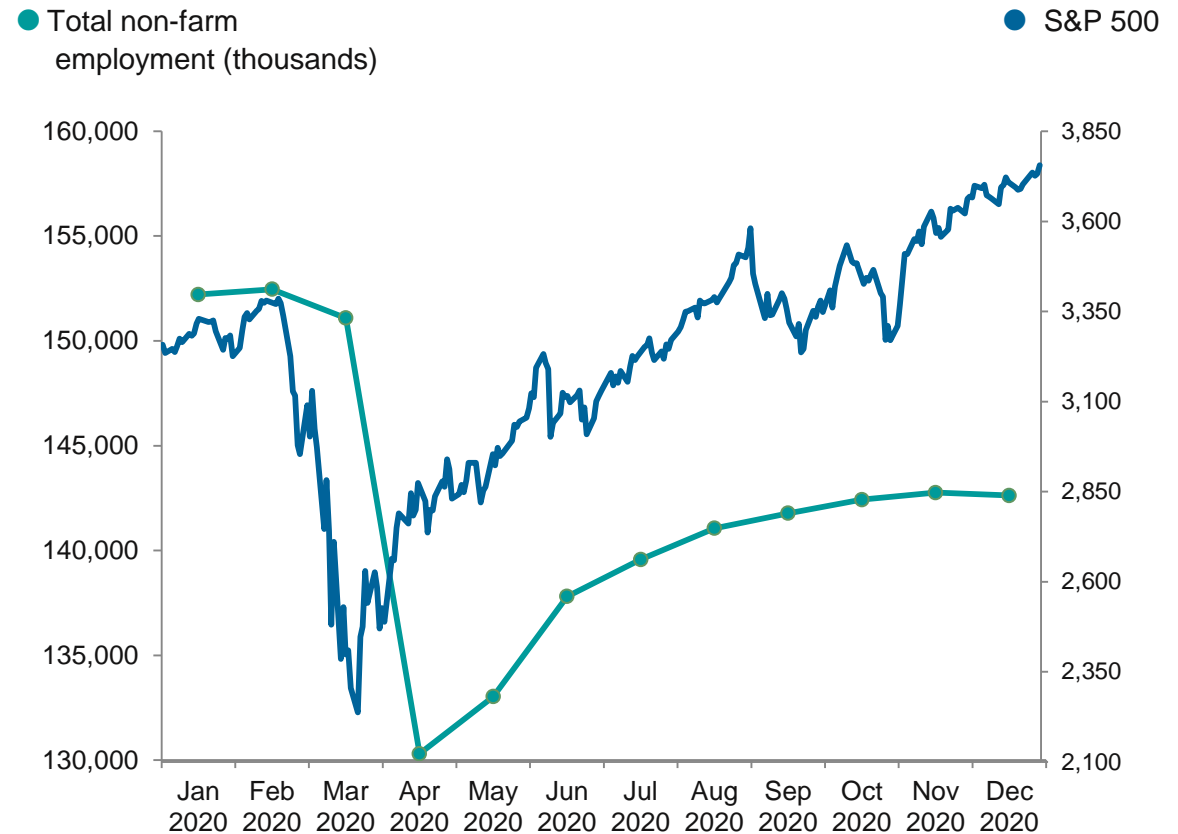
Sector share of GDP, employment, and S&P 500



Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, S&P Dow Jones Indices, J.P. Morgan Asset Management Guide to the Markets – U.S. Data are as of 12/31/20. Technology: information (economy, employment), technology and communication services (S&P 500). Financial services includes real estate (S&P 500). Consumer discretionary: Arts, entertainment, recreation, accommodation, and food services (economy), leisure and hospitality (employment). Consumer staples: wholesale trade and retail trade (economy, employment). Industrials and materials: construction, manufacturing, transportation and warehousing (economy, employment). Energy: mining (economy), mining and logging (employment). Government, agriculture & misc. services: government, other services, professional and business services, education and agriculture, forestry, fishing, and hunting (economy), government, other services, professional and business services, and education (employment).

The Stock Market Is Not the Economy

- U.S. equity market has already recovered from the March 2020 plunge and was up 18.4% through December 2020.
- The job market lost over 22 million jobs in March and April, and has recovered just over half (12 million) since May.
- GDP is projected to remain below the February 2020 pre-COVID peak until mid-to late 2021.
- Steep structural challenges face many job-laden sectors of the economy that are underrepresented in the current stock market valuation.
- Stimulus benefit to unemployed and to employers carried through 3Q; extension of benefits at year-end 2020 helped, but growth slowed in 4Q20 and the recovery faces a serious slowdown in 1Q21 and perhaps into 2Q.
- Containment of COVID-19 surges and rollout of the vaccines are key to retaining confidence in the recovery.

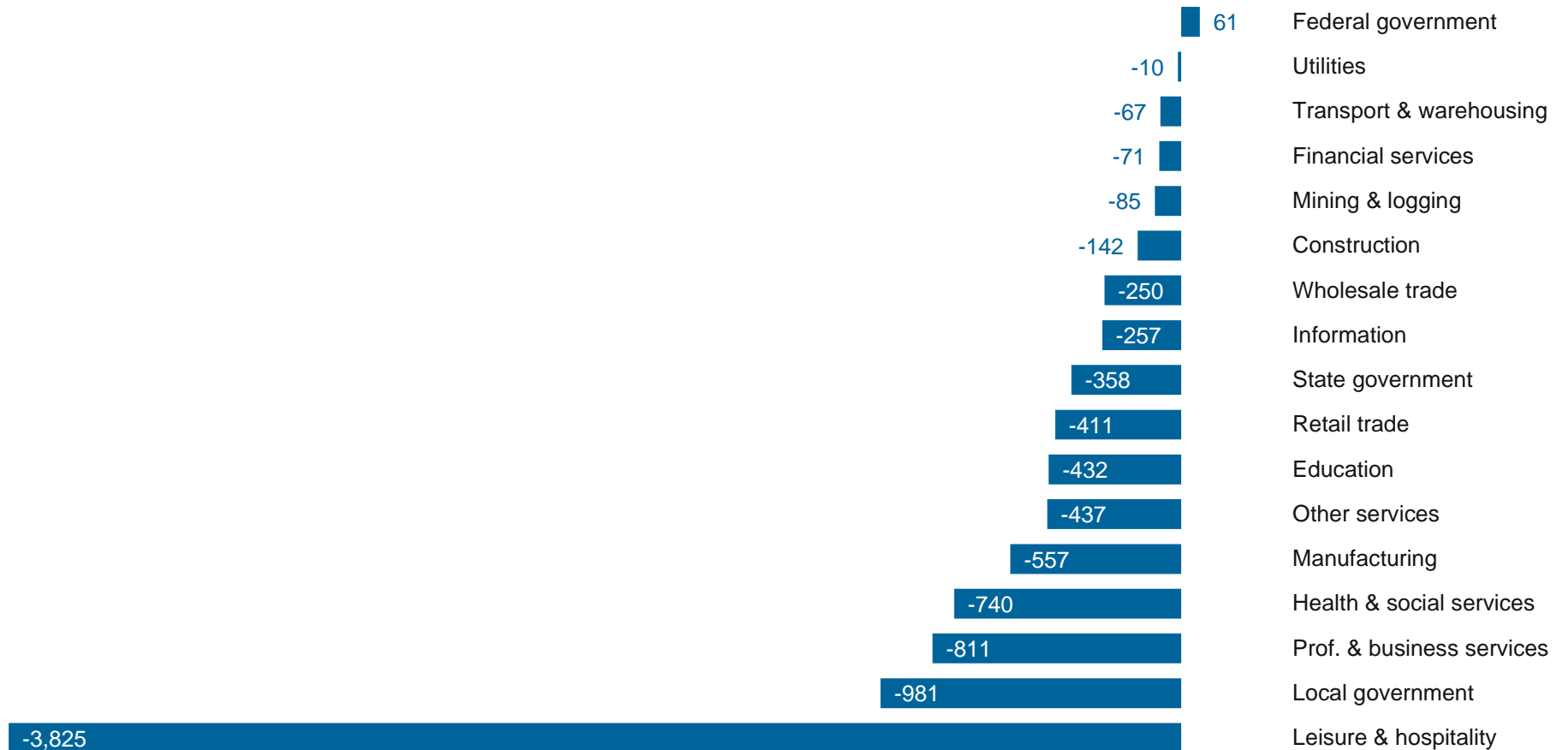


Sources: St. Louis FRED, S&P Dow Jones Indices

While the Recovery Continues, Employment Landscape Remains Depressed

Leisure/hospitality remains by far the hardest-hit sector for job losses

12-Month Change in Payroll Employment (thousands)



Source: IHS Markit, Department of Labor

Economic Outlook

Role of economic variables

GDP and Inflation

GDP forecasts provide a very rough estimate of future earnings growth.

Inflation forecasts provide an approximate path for short-term yields.

Inflation is added to the real return forecasts for equity and fixed income.

GDP Forecasts

- 2% to 2.5% for the U.S.
- 1.5% to 2.0% for developed ex-U.S. markets
- 4% to 5% for emerging markets

All forecasts are below long-term averages.

Path to longer-term growth will include cycles with recessions.

Inflation Forecasts

- 1.75% to 2.25% for the U.S.
- 1.5% to 2.0% for developed ex-U.S. markets
- 2.25% to 2.75% for emerging markets

Callan

Fixed Income

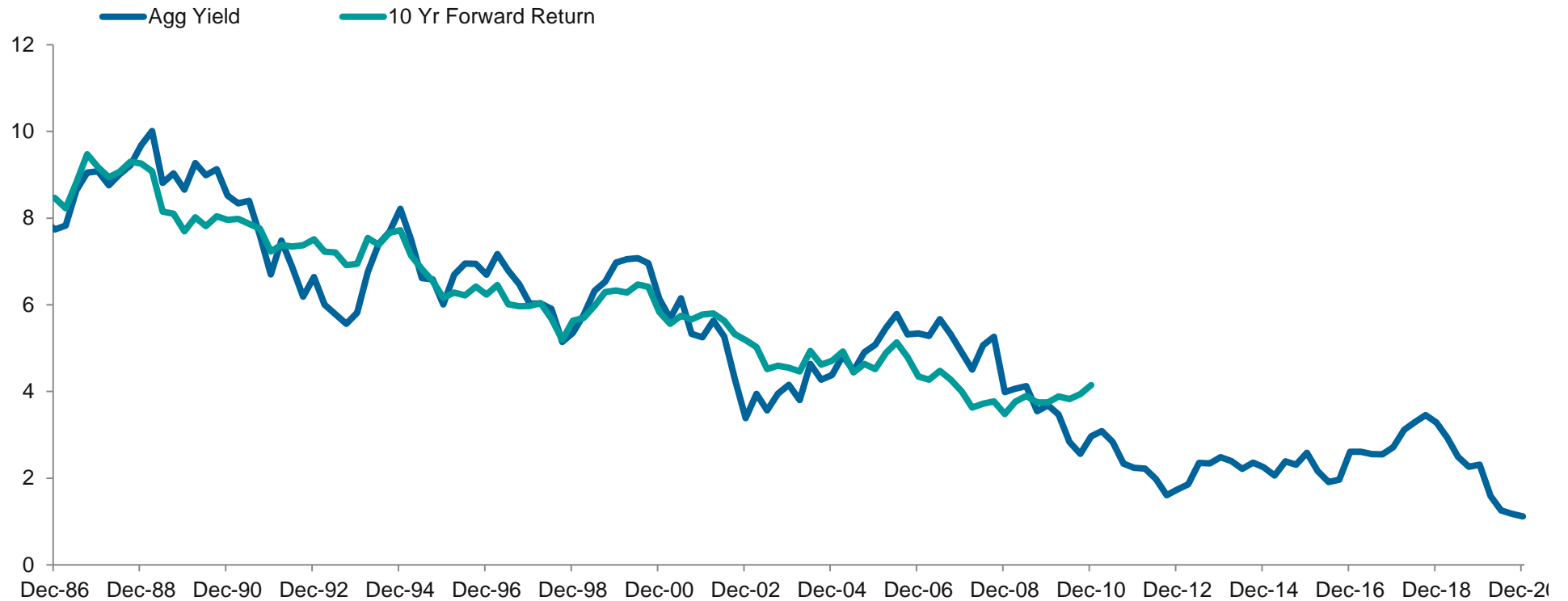
2021 Bond Assumptions

	Income Return	+	Capital Gain / Loss	+	Credit Default	+	Roll Return	=	2021 Expected Return
Cash	1.00%		0.00%		0.00%		0.00%		1.00%
Short Duration 1-3 Year G/C	1.55%		-0.30%		0.00%		0.25%		1.50%
1-3 Year Government	1.45%		-0.30%		0.00%		0.25%		1.40%
1-3 Year Credit	2.10%		-0.30%		-0.20%		0.25%		1.85%
Intermediate G/C	1.85%		-0.50%		-0.10%		0.25%		1.50%
Intermediate Government	1.55%		-0.50%		0.00%		0.25%		1.30%
Intermediate Credit	2.50%		-0.60%		-0.30%		0.25%		1.85%
Aggregate	2.50%		-0.90%		-0.10%		0.25%		1.75%
Government	2.15%		-1.20%		0.00%		0.25%		1.20%
Securitized	2.05%		-0.30%		0.00%		0.25%		2.00%
Credit	3.35%		-1.20%		-0.40%		0.25%		2.00%
Long Duration G/C	4.00%		-2.50%		-0.30%		0.60%		1.80%
Long Government	3.00%		-3.00%		0.00%		0.60%		0.60%
Long Credit	4.65%		-2.30%		-0.50%		0.60%		2.45%
TIPS	2.35%		-0.90%		0.00%		0.25%		1.70%
Global ex-U.S. Fixed (unhedged)	1.80%		-1.20%		-0.10%		0.25%		0.75%
High Yield	6.70%		-0.40%		-2.20%		0.25%		4.35%
Emerging Market Debt	5.95%		-1.30%		-1.40%		0.25%		3.50%
Bank Loans	6.00%		-0.10%		-1.60%		0.00%		4.30%

- Yields declined significantly in 2020
- Rising yields in Callan's baseline are especially supportive of shorter duration fixed income

Starting Yield Strongly Predicted Returns

Bloomberg Barclays Aggregate Starting Yield vs. 10-Year Forward Return

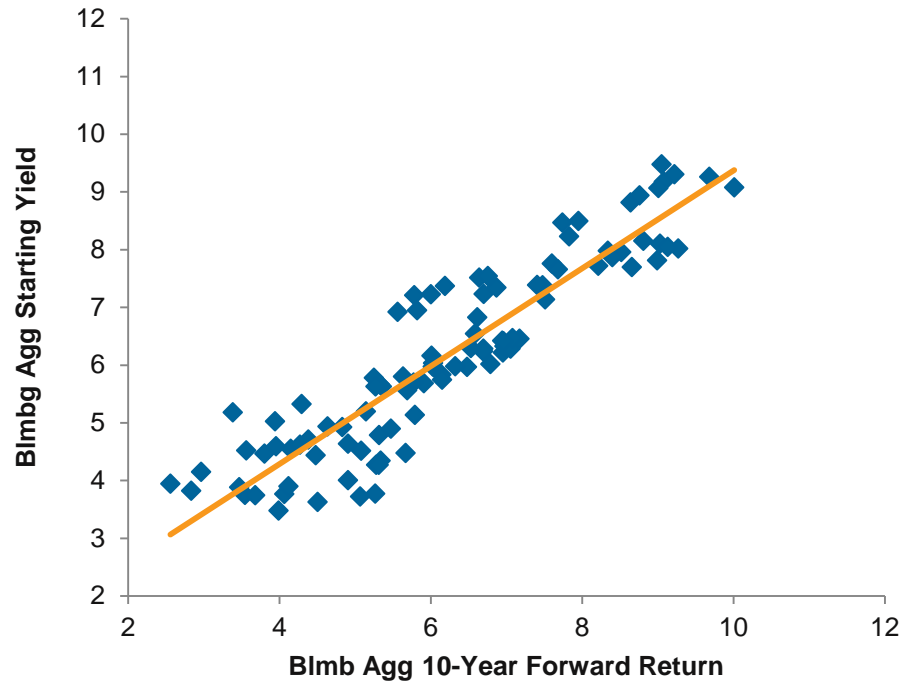


- There is a strong relationship between starting yields and subsequent 10-Year returns.

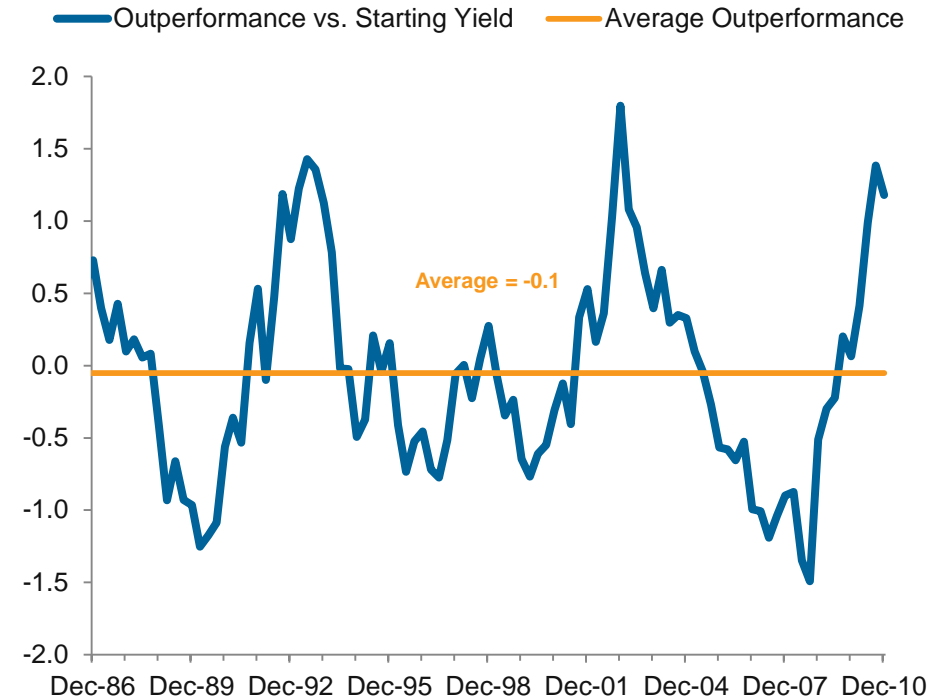
Sources: Bloomberg Barclays

Starting Yield Strongly Predicted Forward Return

Bloomberg Barclays Agg Starting Yield vs. 10-Yr Forward Return



Bloomberg Barclays Agg Outperformance vs. Starting Yield



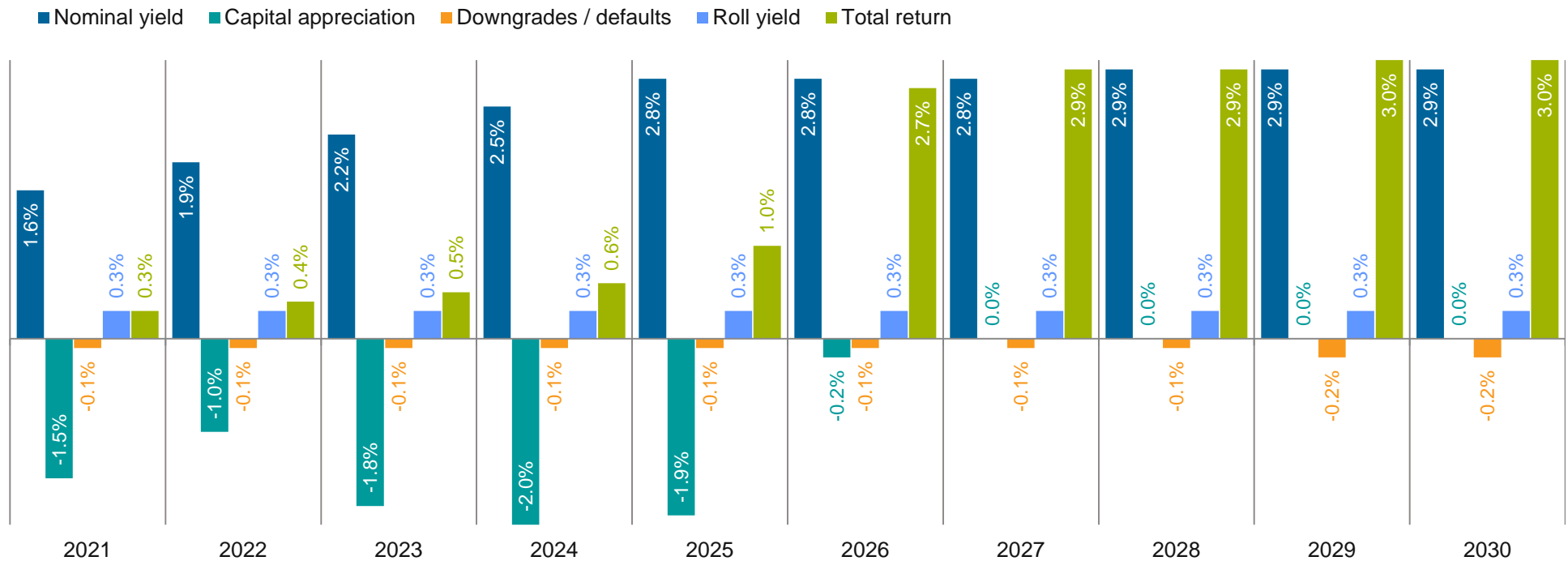
Outperformance vs. Starting Yield Summary Statistics

Min	Percentile							Max
	1%	5%	25%	50%	75%	95%	99%	
-1.49	-1.35	-1.10	-0.56	-0.05	0.39	1.19	1.44	1.80

Sources: Bloomberg Barclays

2021–2030 Aggregate Return = 1.75%

Total Return Attribution



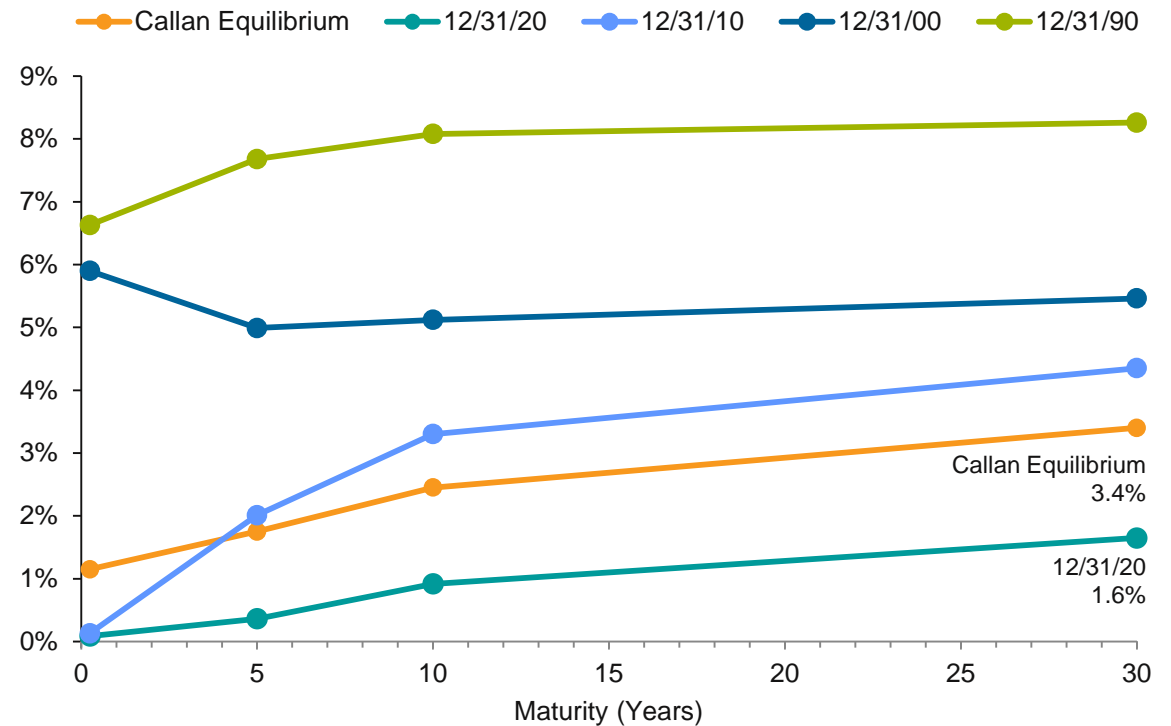
- Above chart shows return components of the aggregate over the next 10 years
 - Aggregate yield rises about 120 bps over five years
- We examined a variety of scenarios to test their impact on assumed return for the aggregate
 - Fixed income duration falls slightly in a rising rate environment
 - Narrowing of credit and securitized spreads

Callan Equilibrium Yield Curve

The Callan equilibrium yield curve is higher and steeper than the current yield curve

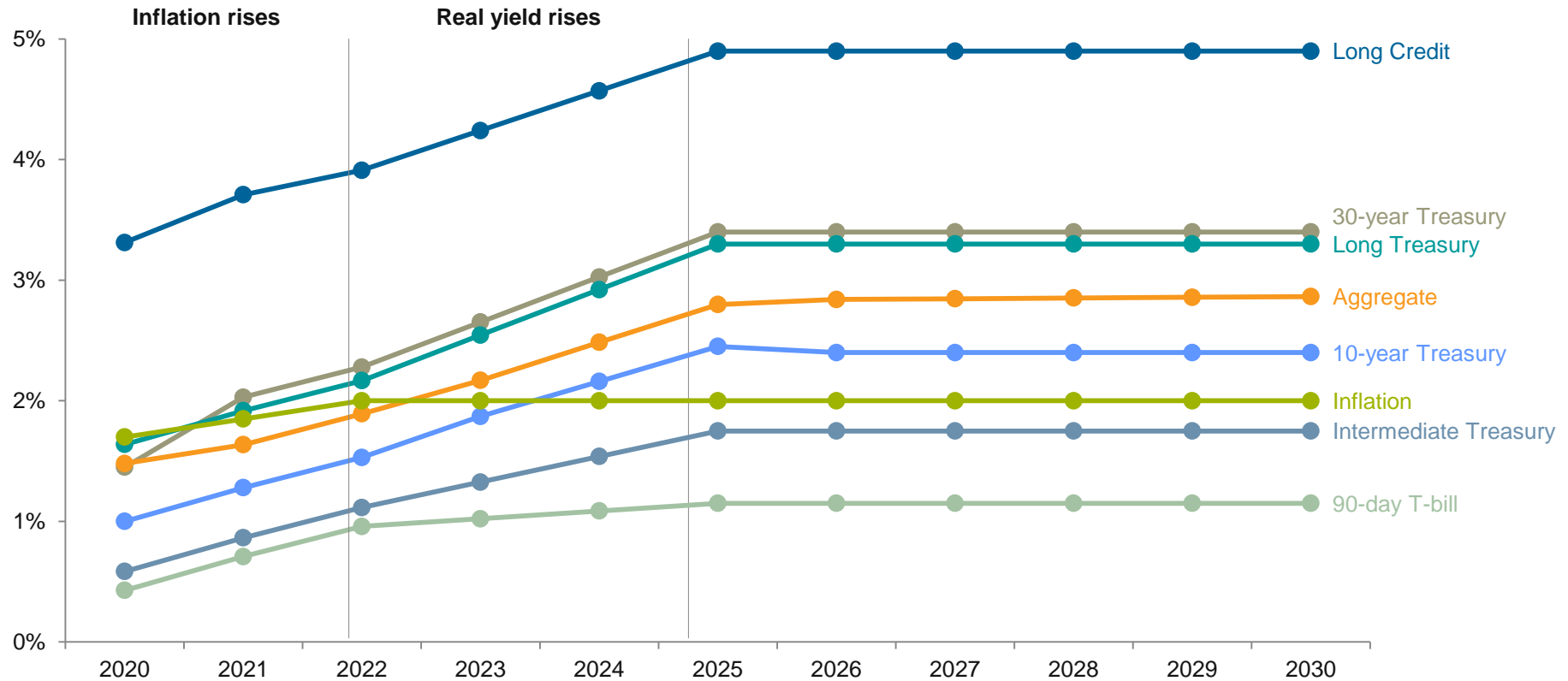
	Callan Equilibrium
90-day T-bill	1.15%
Intermediate Treasury	1.75%
10-year Treasury	2.45%
30-year Treasury	3.40%

Yield Curves (Callan Equilibrium vs. U. S Treasury)



Sources: FRED

Base Case Yield Curve Path



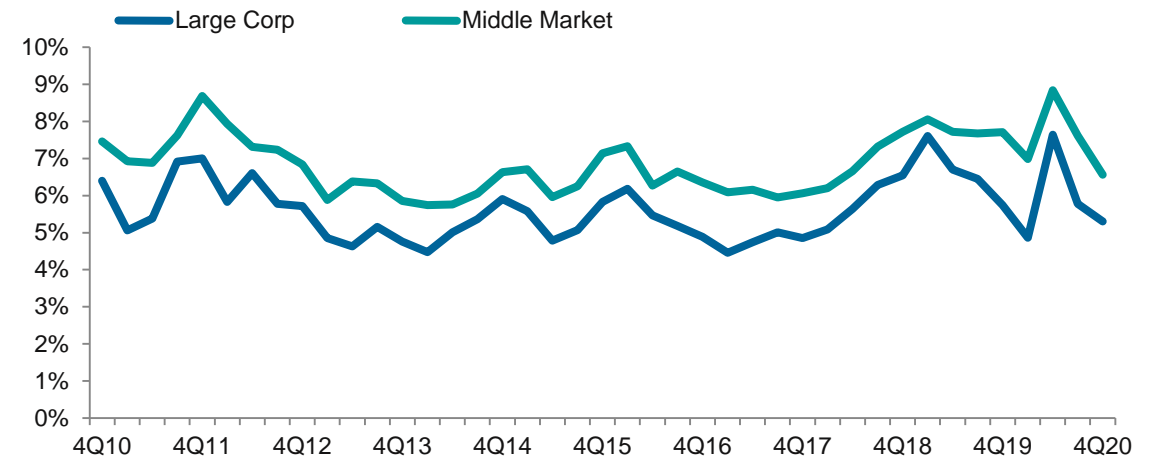
- Rate rise in first two years is due to inflation only
 - Inflation rises from 1.7% to 2.0% over 2 years – 15 bps per year
- Cash and Intermediate Treasury have negative real yields over the next 10 years

Private Credit

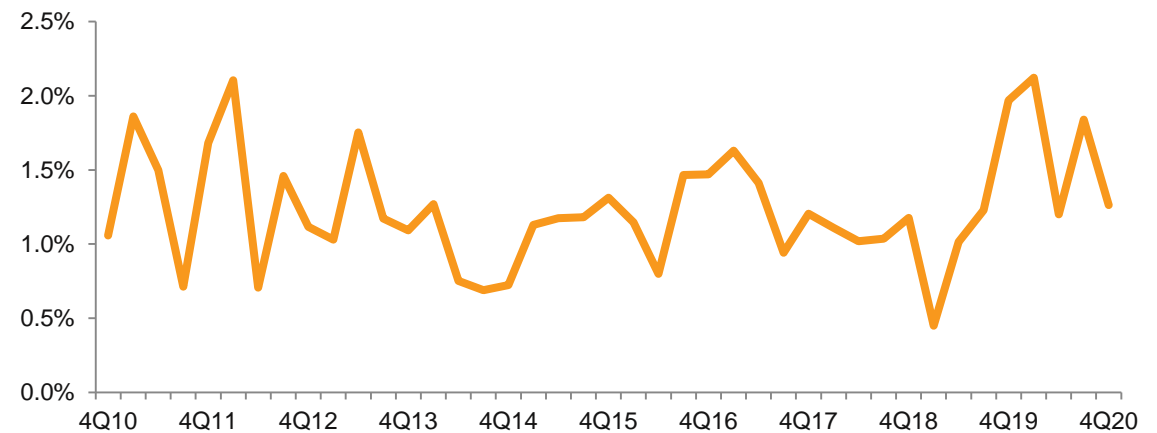
- Return calculations assume 2.5% cost of leverage and 0.75% unlevered loss ratio
- Corresponds to 6.25% geometric

Unlevered Yield	7.5%
Leverage	0.85x
Levered Yield	11.6%
Management Fee and Operating Expense	2%
Incentive Rate	15%
Hurdle	4%
Incentive Fee	1%
Total Fee	3%
Loss Ratio	1.4%
Net Arithmetic	7%

Loan Yields



Middle Market Premium



Source: Refinitiv LPC. All-in yield (LIBOR + Spread + OID) assuming 3-year takeout

Note: 2Q20 was deemed less reliable due to lack of data points to calculate a MM institutional all-in yield statistic

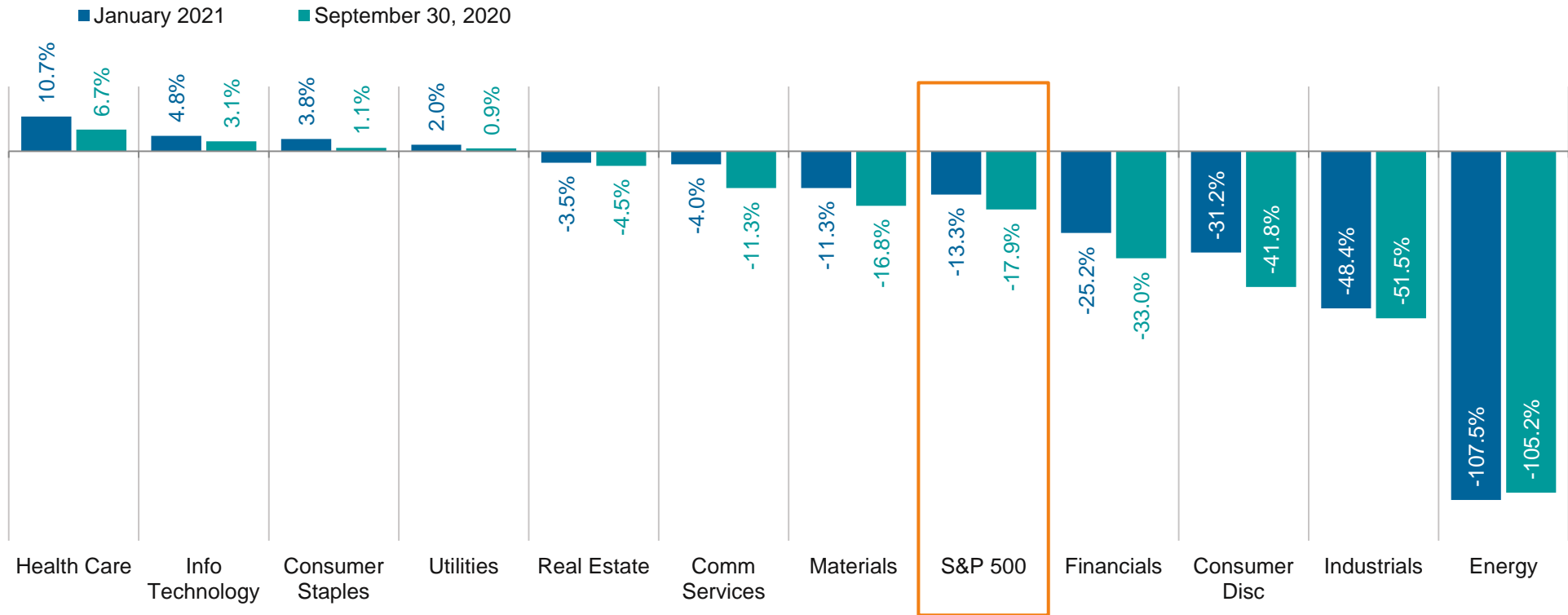
Callan

Equity

U.S. Equity Projections

Large cap earnings

S&P 500 Earnings Growth: Calendar Year 2020



Earnings likely took a significant hit across most sectors in calendar year 2020

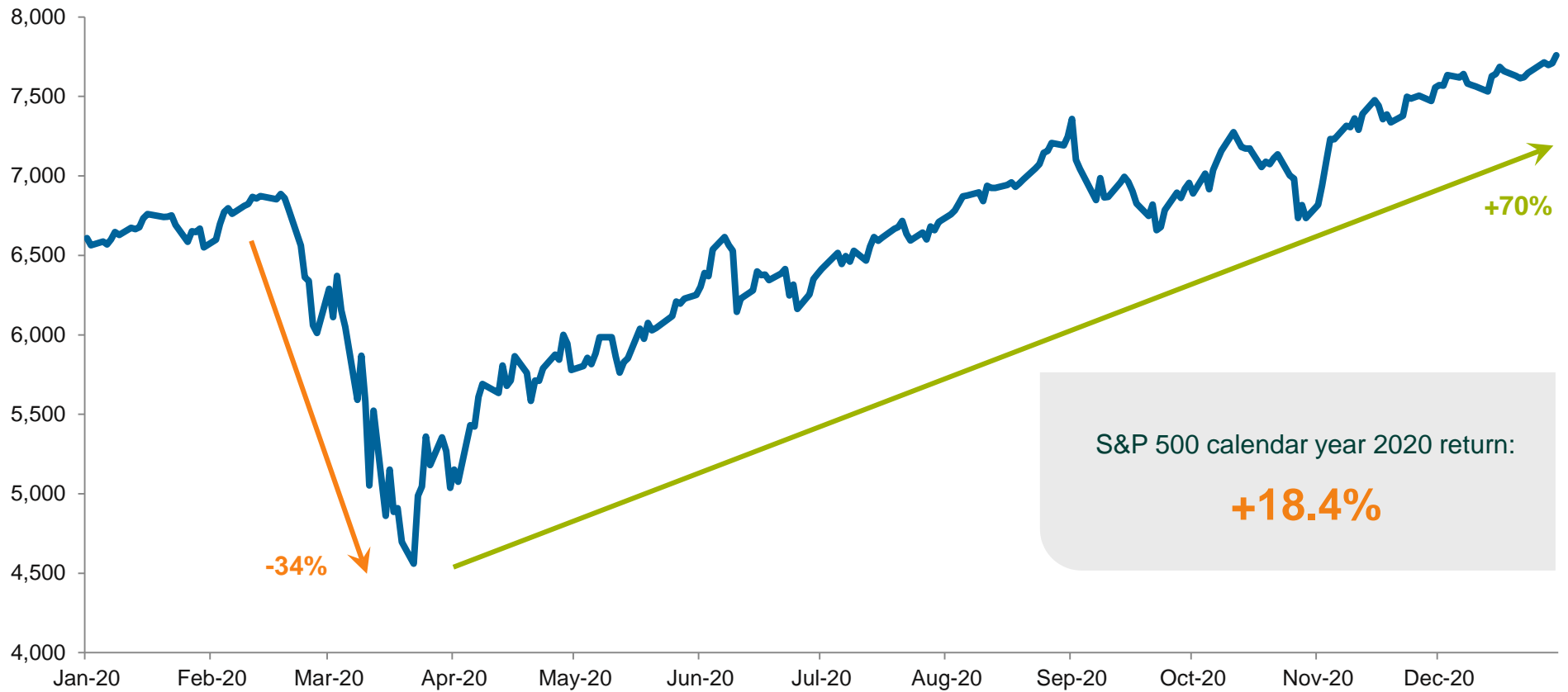
- Earnings for the S&P as a whole are expected be down over 13%
- Health Care, Information Technology, Consumer Staples, and Utilities were the only sectors expected to have positive 2020 earnings
- 5 sectors expected to have double-digit declines

Source: FactSet Earnings Insight as of January 8, 2021.

U.S. Equity Projections

Large cap valuations

S&P 500 Total Return Price Index Calendar Year 2020



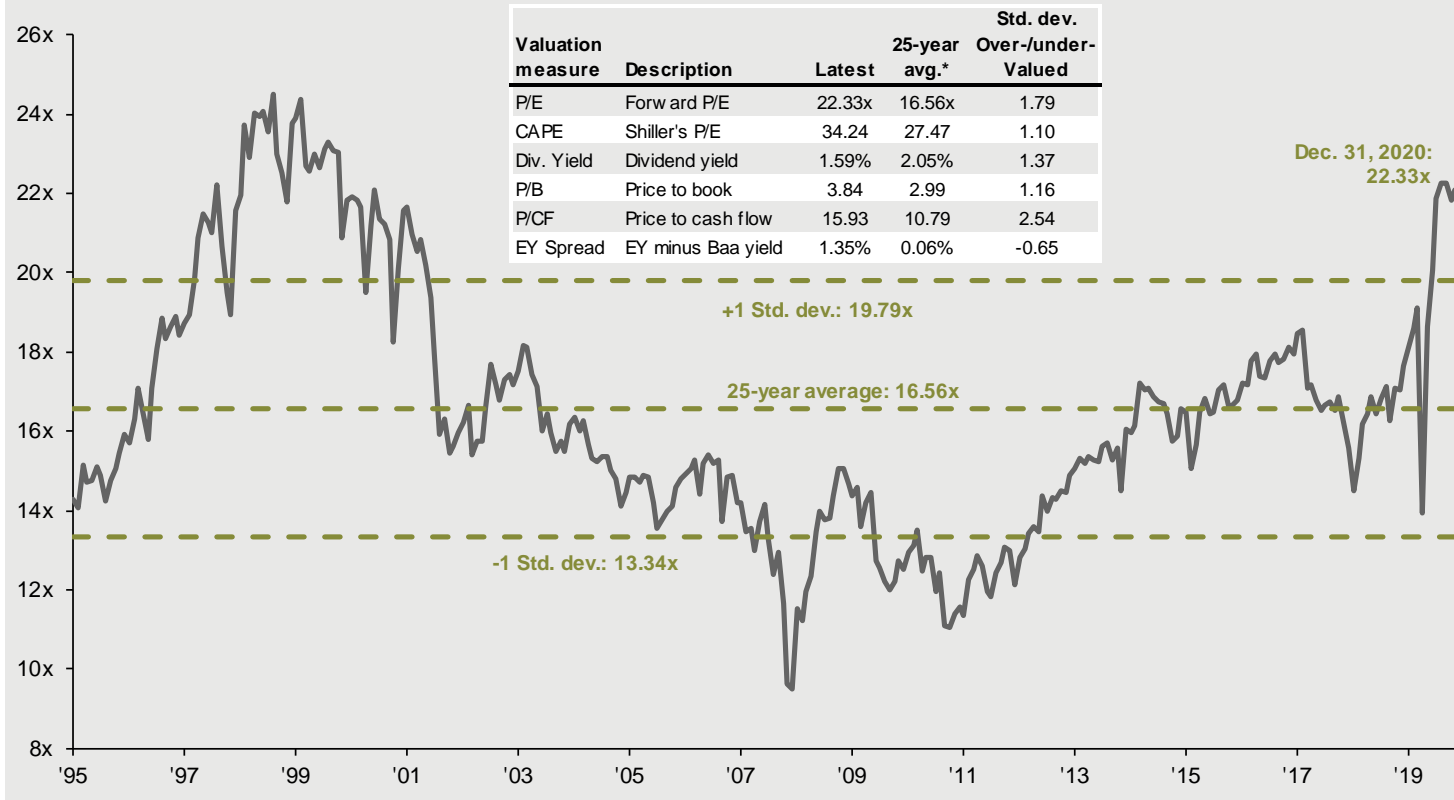
- Substantial price appreciation has occurred in spite of poor earnings
- Low Treasury yields are helping to support valuations

Source: S&P Dow Jones Indices.

U.S. Equity Projections

Large cap valuations

S&P 500 Index: Forward P/E ratio



Price-to-earnings is price divided by consensus analyst estimates of earnings per share for the next 12 months as provided by IBES since December 1995, and FactSet for December 31, 2020. Current next 12-months consensus earnings estimates are \$167. Average P/E and standard deviations are calculated using 25 years of IBES history. Shiller's P/E uses trailing 10-years of inflation-adjusted earnings as reported by companies. Dividend yield is calculated as the next 12-months consensus dividend divided by most recent price. Price-to-book ratio is the price divided by book value per share. Price-to-cash flow is price divided by NTM cash flow. EY minus Baa yield is the forward earnings yield (consensus analyst estimates of EPS over the next 12 months divided by price) minus the Moody's Baa seasoned corporate bond yield. Std. dev. over-/under-valued is calculated using the average and standard deviation over 25 years for each measure.

Guide to the Markets – U.S. Data are as of December 31, 2020.

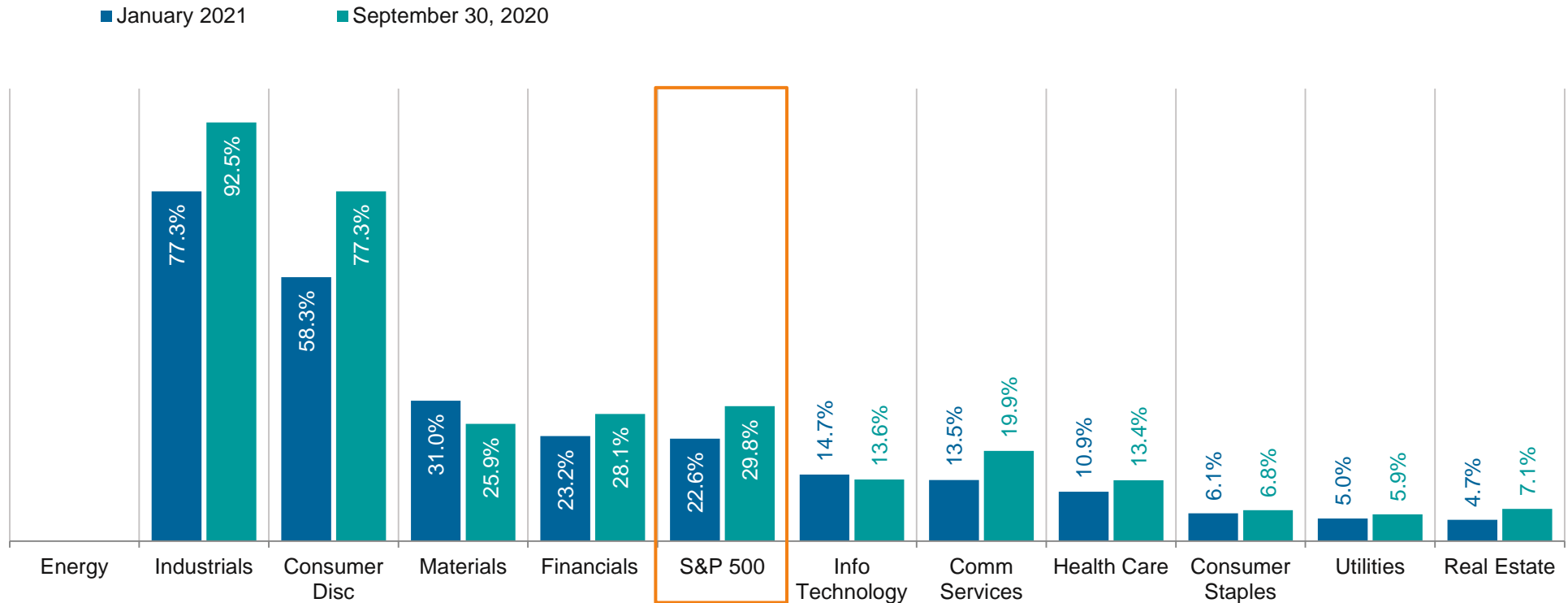
- Valuations are 1.8 standard deviations above the 25-year average based on forecast earnings
- Longer term historical valuations are also elevated
 - Shiller's cyclically adjusted price earnings (CAPE) ratio is 1.1 standard deviation above average
- Stock prices reflect anticipated rather than historical earnings

Sources: FactSet, FRB, Robert Shiller, S&P Dow Jones Indices, Thomson Reuters, J.P. Morgan Asset Management.

U.S. Equity Projections

Large cap earnings

S&P 500 Earnings Growth: Calendar Year 2021



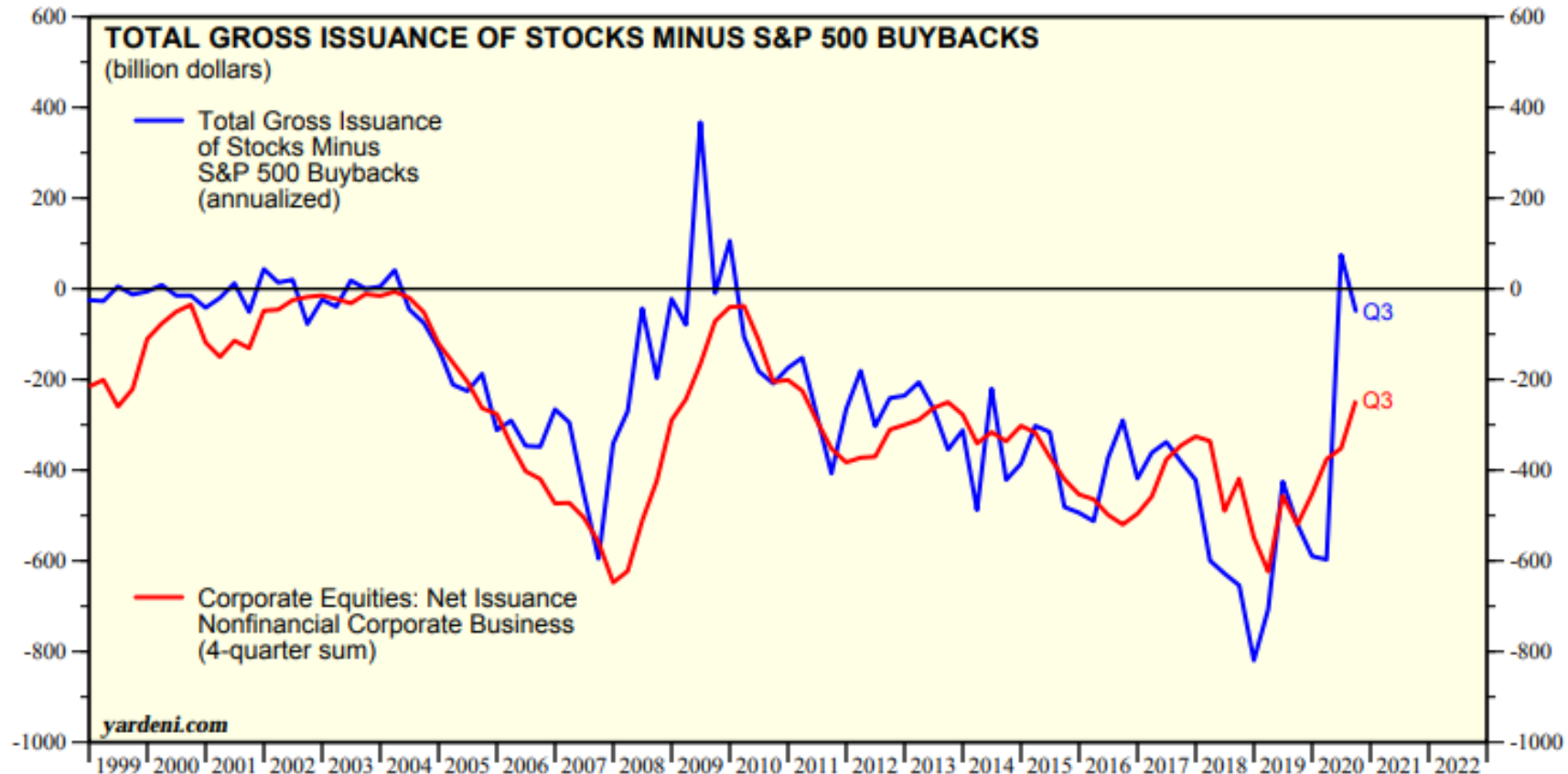
- Earnings expected to continue their bounce back
- S&P 500 earnings growth in excess of 20% is projected in 2021
 - 7 sectors expected to realized double-digit earnings growth
- However confidence is eroding
 - Earnings estimates in many sectors are down from the end of 3Q, some significantly

Source: FactSet Earnings Insight as of January 8, 2021.

Note: Energy earnings estimates are negative for 2020; cannot compute a growth rate over 2021. Analysts expect energy to show the highest growth in earnings among all sectors.

U.S. Equity Projections

Stock net issuance



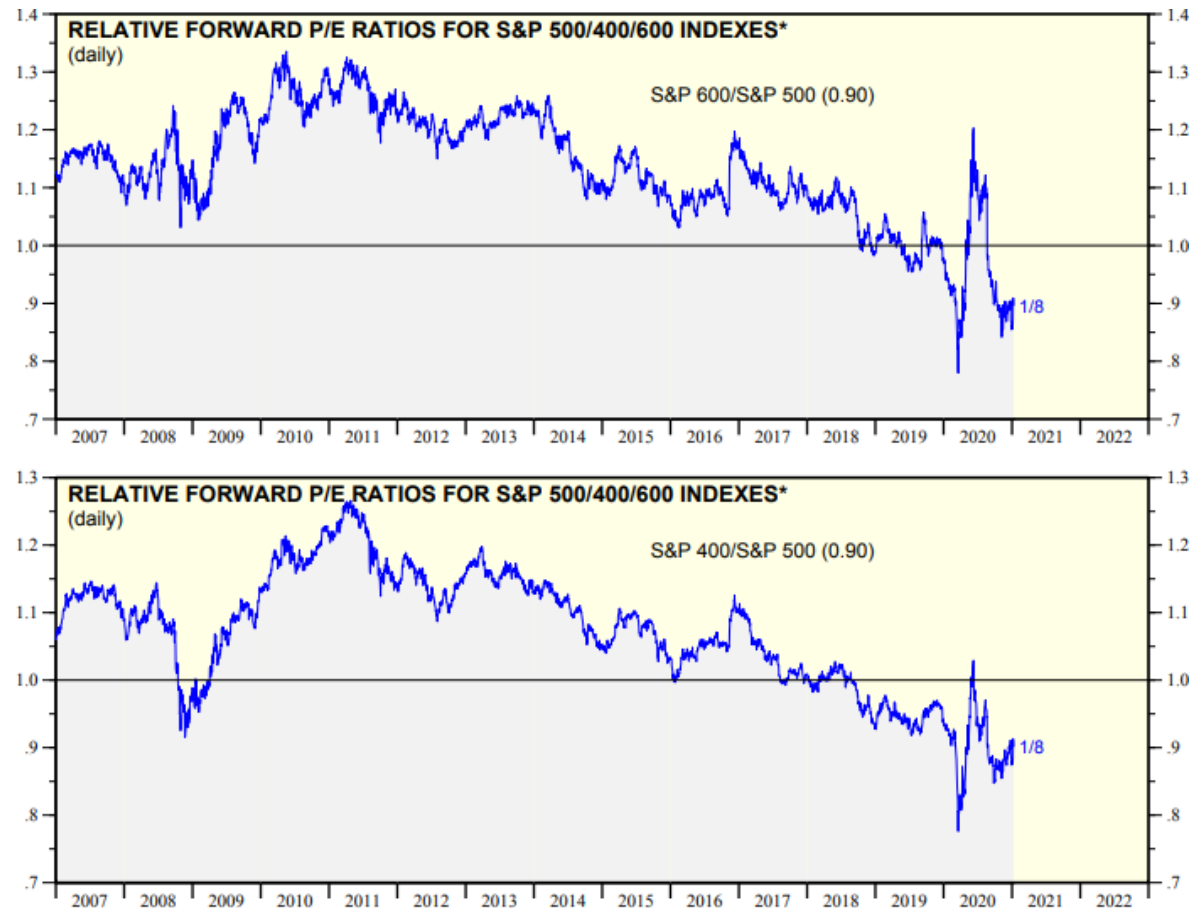
- Net issuance has generally been negative for almost 20 years
- Negative net new issuance has boosted EPS
- Recent increases in net new issuance reflect similar patterns near the GFC
 - Could provide a head wind for future returns

Source: Yardeni.com (Federal Reserve Board and Standard & Poor's Corporation)

U.S. Equity Projections

Mid and small cap relative valuations

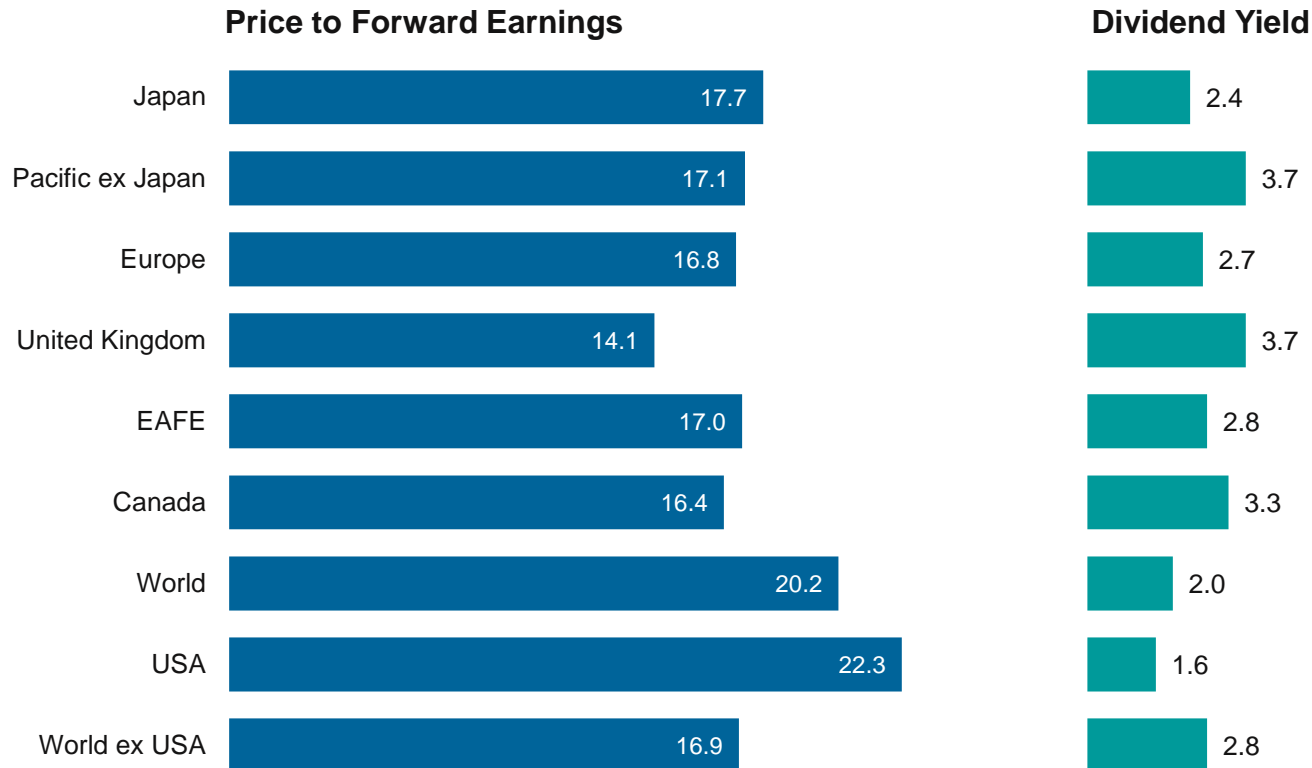
- Large capitalization stocks have relatively high valuations
- Historically, smaller cap stocks have had higher valuations than large caps
 - Investors buying future rather than historical earnings
- The small cap S&P 600 P/E is only 90% of the S&P 500 P/E
- The mid cap S&P 400 P/E is only 90% of the S&P 500 P/E
- Lower valuations improve the potential for higher returns relative to large cap going forward



Source: Yardeni.com

Global ex-U.S. Equity Projections

Developed market valuations and dividend yield



- Valuations are generally high in developed markets
 - U.S. has the highest valuations
 - U.K. has the lowest valuations most likely due to Brexit
- Low dividend yields have a direct impact on returns
 - Depressed in the current environment

Source: MSCI

Global ex-U.S. Equity Projections

Emerging market valuations and dividend yield



- Emerging markets also have elevated valuations
 - Among the BRICs, India has the highest valuation metrics while Russia is lagging
 - Asia has the highest regional valuations, Europe the lowest
- Significant dilution as growing companies issue more shares

Source: MSCI

U.S. Equity Projections

Large and smid cap

- S&P 500
 - Arithmetic return = 7.85%
 - Compound return = 6.50%
 - Standard deviation = 17.70%
 - Compound return falls by 50 bps relative to 2020
 - Valuation adjustment and lower inflation are drags on the nominal return
- Russell 2500
 - Arithmetic return = 8.75%
 - Compound return = 6.70%
 - Standard deviation = 21.30%
 - Compound return reduced by 55 bps from 2020 projection
 - Low earnings and dividends as well as inflation weigh on returns

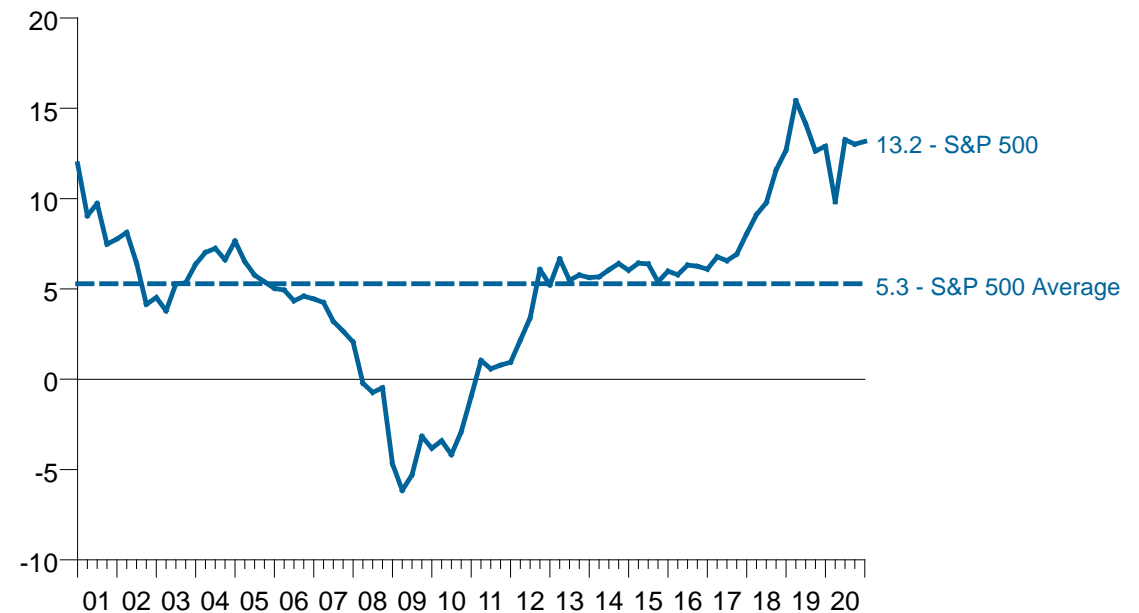
Index	S&P 500	Russell 2500
Dividend yield	2.00%	1.75%
Net buyback yield	0.50%	0.00%
Real earnings growth	2.25%	2.95%
Valuation adjustment	-0.25%	0.00%
Inflation	2.00%	2.00%
2021 compound return	6.50%	6.70%
2020 compound return	7.00%	7.25%
Change	-0.50%	-0.55%

U.S. Equity Projections

Equity risk premium: S&P 500 vs. T-bills

- Over the very long term, the equity risk premium (ERP) vs. cash is around 6%.
- Callan equity projection is at T-bills + 5.5%, a conservative estimate relative to long-term history.
- Over the past 20 years ERP vs. cash is lower at around 5%.
- Cash at 1.0%, ERP at 5.5% = Equity Return of 6.50%

Rolling 40-Quarter Relative Returns Relative to 90-day T-bill for 20 Years Ended 12/31/20



Source: Ibbotson

Global ex-U.S. Equity Projections

Developed and emerging markets

- Developed ex-U.S.
 - Arithmetic return = 8.25%
 - Compound return = 6.50%
 - Standard deviation = 19.90%
 - Compound return declines by 50 bps relative to 2020
 - Substantial decline in dividend yield partly offset by improved earnings growth
- Emerging Markets
 - Arithmetic return = 9.80%
 - Compound return = 6.90%
 - Standard deviation = 25.15%
 - 35 bps drop in compound return relative to 2020 projection
 - High earnings growth dented by significant share dilution
 - Relatively high expected inflation increases nominal return

Index	MSCI World ex USA	MSCI Emerging Markets
Dividend yield	3.00%	2.35%
Net buyback yield	0.00%	-2.35%
Real earnings growth	1.75%	4.50%
Valuation adjustment	0.00%	0.00%
Inflation	1.75%	2.40%
2021 compound return	6.50%	6.90%
2020 compound return	7.00%	7.25%
Change	-0.50%	-0.35%

Callan

**Detailed 2021 Expectations and
Resulting Portfolio Returns and Risks**

2021 vs. 2020 Callan Capital Markets Assumptions

Asset Class	Index	Projected Return			Projected Risk	2020–2029		
		1-Year Arithmetic	10-Year Geometric*	Real	Standard Deviation	1-Year Arithmetic	10-Year Geometric*	Standard Deviation
Equities								
Broad U.S. Equity	Russell 3000	8.00%	6.60%	4.60%	17.95%	8.55%	7.15%	18.10%
Large Cap U.S. Equity	S&P 500	7.85%	6.50%	4.50%	17.70%	8.35%	7.00%	17.70%
Smid Cap U.S. Equity	Russell 2500	8.75%	6.70%	4.70%	21.30%	9.25%	7.25%	21.20%
Global ex-U.S. Equity	MSCI ACWI ex USA	8.70%	6.80%	4.80%	20.70%	9.10%	7.25%	20.50%
Developed ex-U.S. Equity	MSCI World ex USA	8.25%	6.50%	4.50%	19.90%	8.70%	7.00%	19.70%
Emerging Market Equity	MSCI Emerging Markets	9.80%	6.90%	4.90%	25.15%	10.25%	7.25%	25.70%
Fixed Income								
Short Duration Gov't/Credit	Bloomberg Barclays 1-3 Yr Gov / Credit	1.50%	1.50%	-0.50%	2.00%	2.70%	2.70%	2.10%
Core U.S. Fixed	Bloomberg Barclays Aggregate	1.80%	1.75%	-0.25%	3.75%	2.80%	2.75%	3.75%
Long Government	Bloomberg Barclays Long Government	1.35%	0.60%	-1.40%	12.50%	2.55%	1.80%	12.50%
Long Credit	Bloomberg Barclays Long Credit	2.95%	2.45%	0.45%	10.50%	3.75%	3.25%	10.50%
Long Government/Credit	Bloomberg Barclays Long Gov / Credit	2.30%	1.80%	-0.20%	10.35%	3.25%	2.75%	10.60%
TIPS	Bloomberg Barclays TIPS	1.80%	1.70%	-0.30%	5.05%	2.50%	2.40%	5.05%
High Yield	Bloomberg Barclays High Yield	4.85%	4.35%	2.35%	10.75%	5.10%	4.65%	10.25%
Global ex-U.S. Fixed	Bloomberg Barclays Global Agg xUSD	1.15%	0.75%	-1.25%	9.20%	1.30%	0.90%	9.20%
Emerging Market Sovereign Debt	EMBI Global Diversified	3.90%	3.50%	1.50%	9.50%	4.70%	4.35%	9.50%
Alternatives								
Core Real Estate	NCREIF ODCE	6.60%	5.75%	3.75%	14.10%	7.05%	6.25%	14.00%
Private Infrastructure	MSCI Glb Infra / FTSE Dev Core 50/50	7.00%	6.00%	4.00%	15.45%	n/a	n/a	n/a
Private Equity	Cambridge Private Equity	11.50%	8.00%	6.00%	27.80%	12.00%	8.50%	27.80%
Private Credit	n/a	7.15%	6.25%	4.25%	14.60%	n/a	n/a	n/a
Hedge Funds	Callan Hedge FOF Database	4.25%	4.00%	2.00%	8.00%	5.25%	5.00%	8.70%
Commodities	Bloomberg Commodity	3.80%	2.25%	0.25%	18.00%	4.30%	2.75%	18.00%
Cash Equivalents	90-Day T-Bill	1.00%	1.00%	-1.00%	0.90%	2.25%	2.25%	0.90%
Inflation	CPI-U		2.00%		1.50%		2.25%	1.50%

* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).

- Relationships between asset classes are as important as standard deviation
- To determine portfolio mixes, Callan employs mean-variance optimization
- Return, standard deviation, and correlation determine the composition of efficient asset mixes

Summary of Important Changes for 2021 Capital Markets Assumptions

- Cash return lowered to 1.0%
- Core fixed income return down 1.0%, to 1.75%
- Public equity returns down 45-55 bps; equity risk premium over both cash and fixed income widened
- Inflation lowered 25 bps to 2.0%
- Efficient smid cap weight set to 15% of broad U.S. equity
- Efficient emerging market equity weight set to 30% of global ex-U.S. equity
- Efficient U.S. / global ex-U.S. equity split to 60/40 neutral weight (not a change, but the market has now caught up to us!)
- Private markets returns lowered commensurate with public equity; hedge funds reflect starting cash return
- Ever-broadening set of diversifying asset classes to consider
 - Private credit
 - Private infrastructure
 - Inflation sensitive equity – REITs, natural resources, global listed infrastructure

MCERA Asset Classes - Return and Risk

Asset Class	10-Year Compound Return	Projected Standard Deviation	Real Return
Broad Domestic Equity	6.60%	17.95%	4.60%
Global ex-US Equity	6.80%	20.70%	4.80%
Domestic Fixed Income	1.75%	3.75%	-0.25%
Private Equity	8.00%	27.80%	6.00%
Real Assets	5.55%	12.20%	3.55%
Cash Equivalents	1.00%	0.90%	-1.00%

Total Real Assets portfolio:

- 8% private real estate, 7% public real assets
- Public real assets = 25% TIPS, 25% Commodities, 25% REITs, 25% Natural Resource Equity

The new Opportunistic allocation has a 0% target, so it is not included in these projections.

Source: Callan LLC

MCERA Asset Classes - Correlation

	Broad Domestic Equity	Global Ex-U.S. Equity	Domestic Fixed	Real Assets	Private Equity	Cash Equivalents	Inflation
Broad Domestic Equity	1.00						
Global Ex-U.S. Equity	0.82	1.00					
Domestic Fixed	-0.10	-0.12	1.00				
Real Assets	0.81	0.79	-0.07	1.00			
Private Equity	0.80	0.78	-0.19	0.71	1.00		
Cash Equivalents	-0.06	-0.10	0.15	-0.01	0.00	1.00	
Inflation	-0.01	0.01	-0.25	0.20	0.06	0.05	1.00

- Total Real Assets portfolio:
 - 8% private real estate, 7% public real assets
- Public real assets = 25% TIPS, 25% Commodities, 25% REITs, 25% Natural Resource Equity

Source: Callan LLC

MCERA - 2021 Efficient Mixes

Real Assets Constrained to 15% of Portfolio

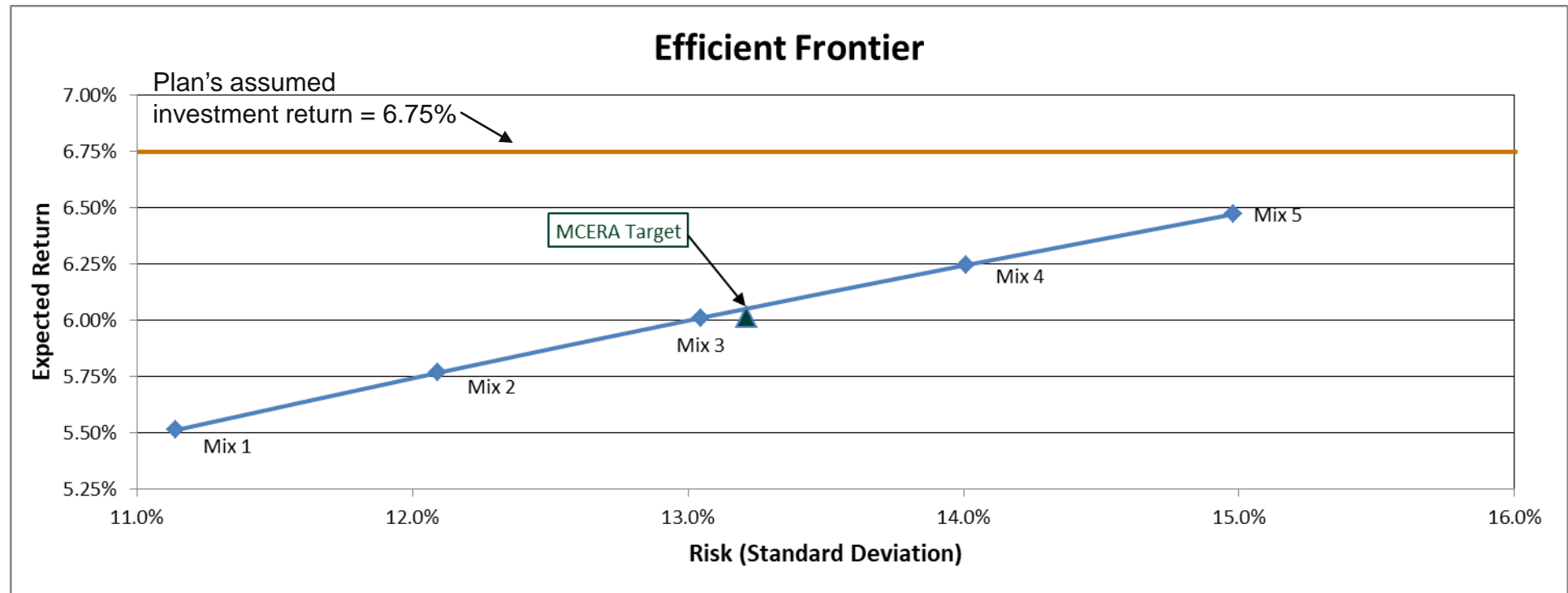
				Alternative Asset Mixes - 15% Real Assets				
Asset Class	MCERA Target	Min Alloc	Max Alloc	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Broad US Equity	32%	0%	100%	24%	27%	29%	32%	34%
Broad International Equity	22%	0%	100%	16%	17%	19%	20%	22%
Broad US Fixed Income	23%	0%	100%	35%	30%	25%	20%	15%
Real Assets	15%	15%	15%	15%	15%	15%	15%	15%
Private Equity	8%	0%	100%	10%	11%	12%	13%	14%
Totals	100%			100%	100%	100%	100%	100%
Expected Return	6.0%			5.5%	5.8%	6.0%	6.2%	6.5%
Real Return	4.0%			3.5%	3.8%	4.0%	4.2%	4.5%
Risk (Standard Deviation)	13.2%			11.1%	12.1%	13.0%	14.0%	15.0%
% equity	62%			50%	55%	60%	65%	70%
% fixed income	23%			35%	30%	25%	20%	15%
% real assets	15%			15%	15%	15%	15%	15%

- Mixes are constrained to hold 15% real assets
- Maximum private equity allocation = 25% of public equity exposure
- No new asset classes included
- The current target mix is efficient and lies on the efficient frontier
- Real assets expands the real estate allocation category to include other real assets, all publicly traded: TIPS, commodities, natural resource equity and REITs. Real estate remains the core, with added diversification.

Source: Callan LLC

MCERA - 2021 Efficient Frontier – Nominal Return

Maximum Private Equity Allocation = 25% of Public Equity Exposure

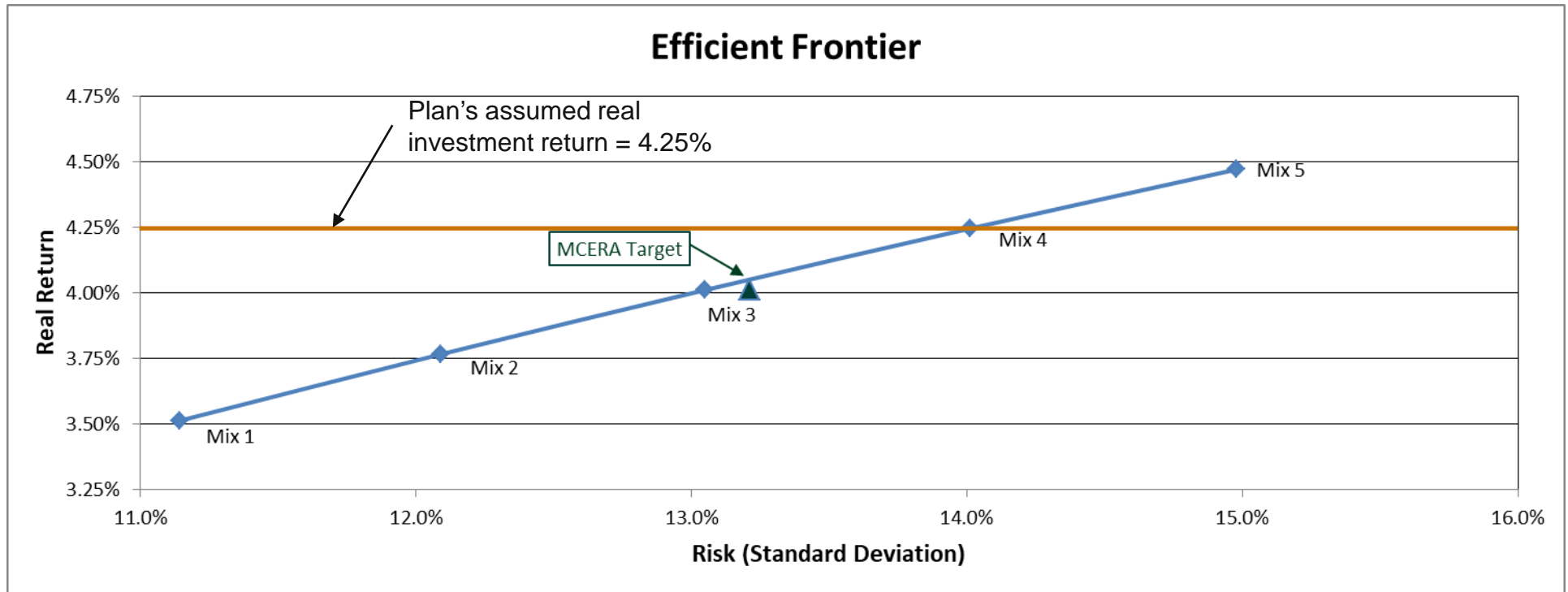


- MCERA's asset allocation target is an optimal allocation, since it lies on the efficient frontier depicting risk and return.
- Current target is a well-diversified portfolio that includes fixed income, public equity, private equity and real assets, including private real estate.

Source: Callan LLC

MCERA - 2021 Efficient Frontier – Real Return

Maximum Private Equity Allocation = 25% of Public Equity Exposure



MCERA's long term nominal return assumption of 6.75% and inflation assumption of 2.5% suggest a long term real return target of 4.25%.

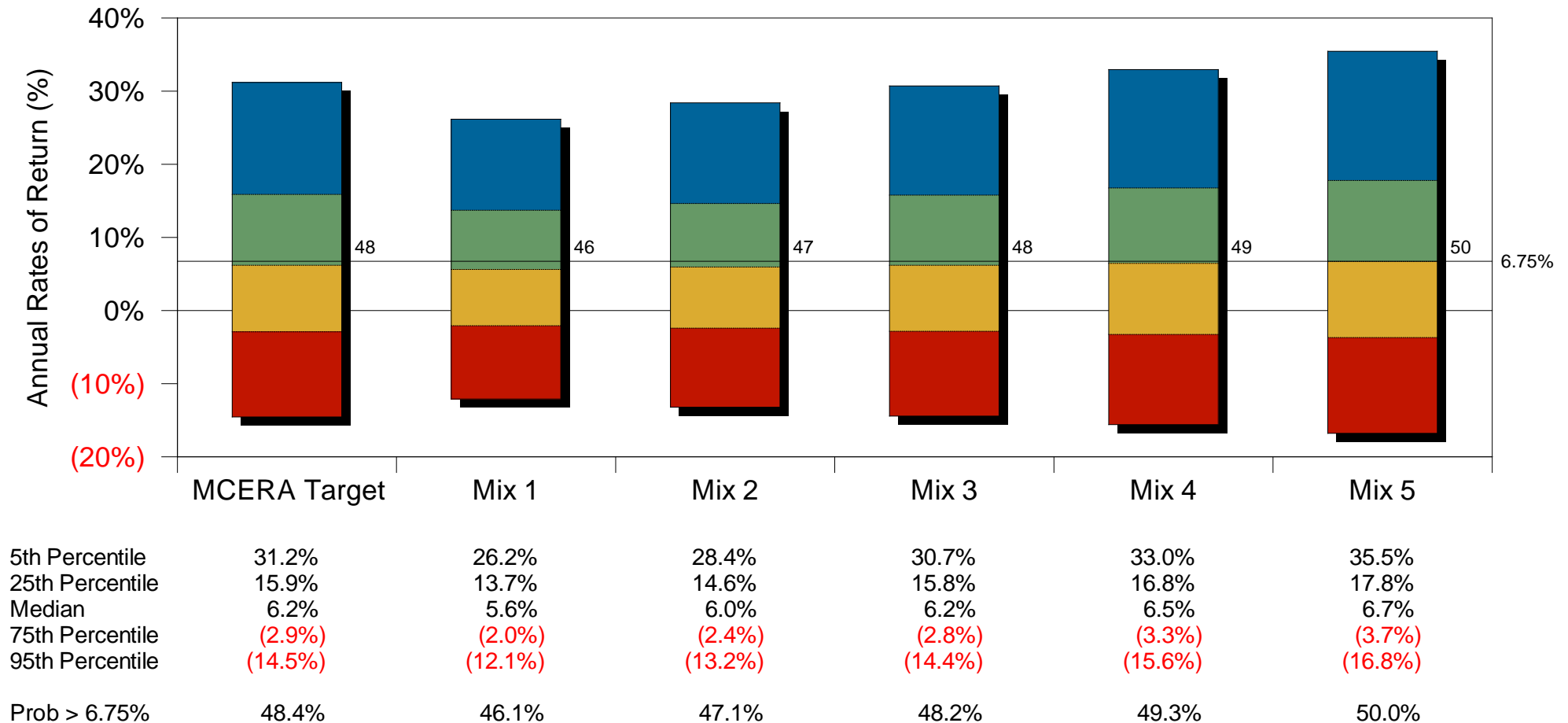
Callan's 10-year return expectation for the target asset allocation is 6.0%, and combined with our inflation assumption of 2.0%, yields a real return expectation of 4.0%, lower than the 4.25% assumed in the actuarial valuation.

Source: Callan LLC

Projected Rates of Return – One Year

Maximum Private Equity Allocation = 25% of Public Equity Exposure

Range of Projected Rates of Return
Projection Period: 1 Year
Optimization Set: 2021

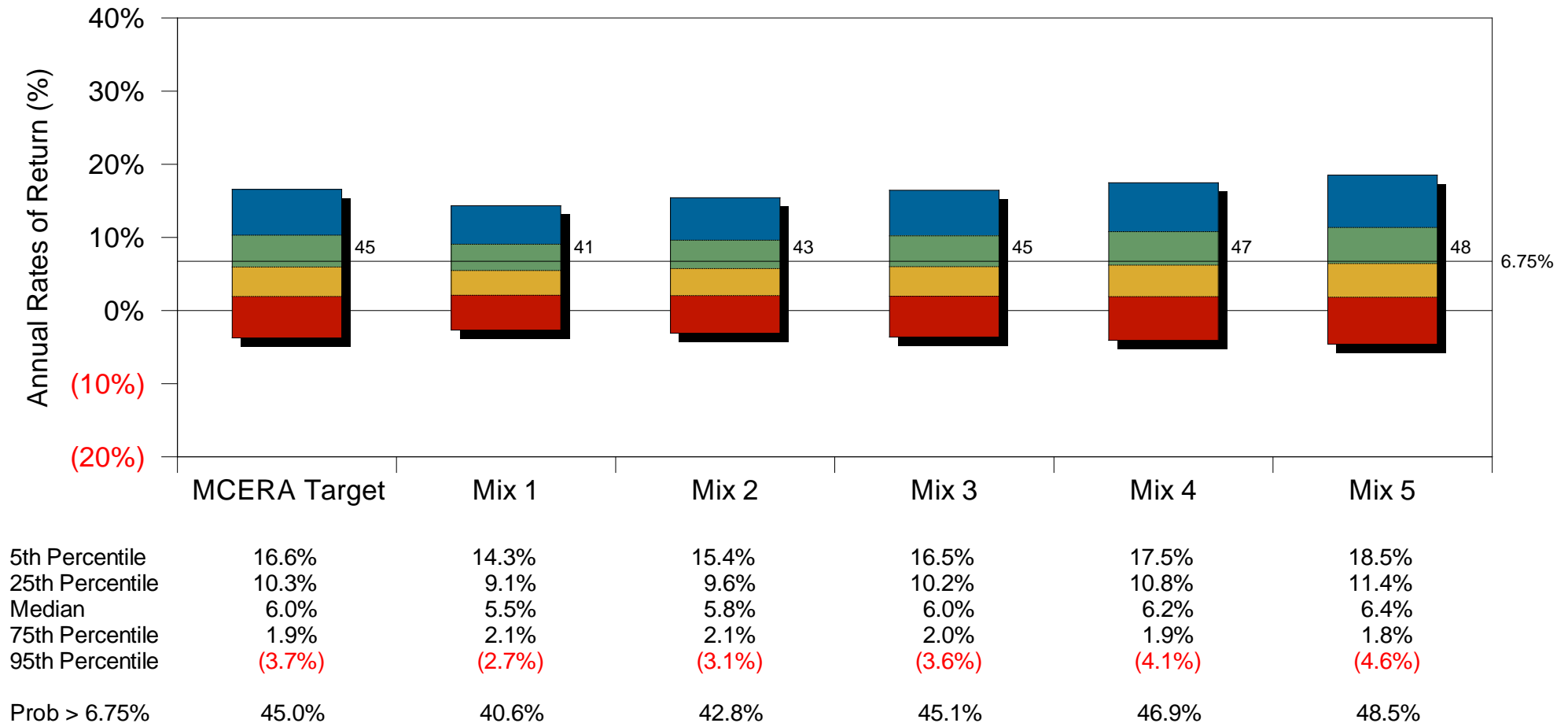


Source: Callan LLC

Projected Rates of Return – Five Years

Maximum Private Equity Allocation = 25% of Public Equity Exposure

Range of Projected Rates of Return
Projection Period: 5 Years
Optimization Set: 2021

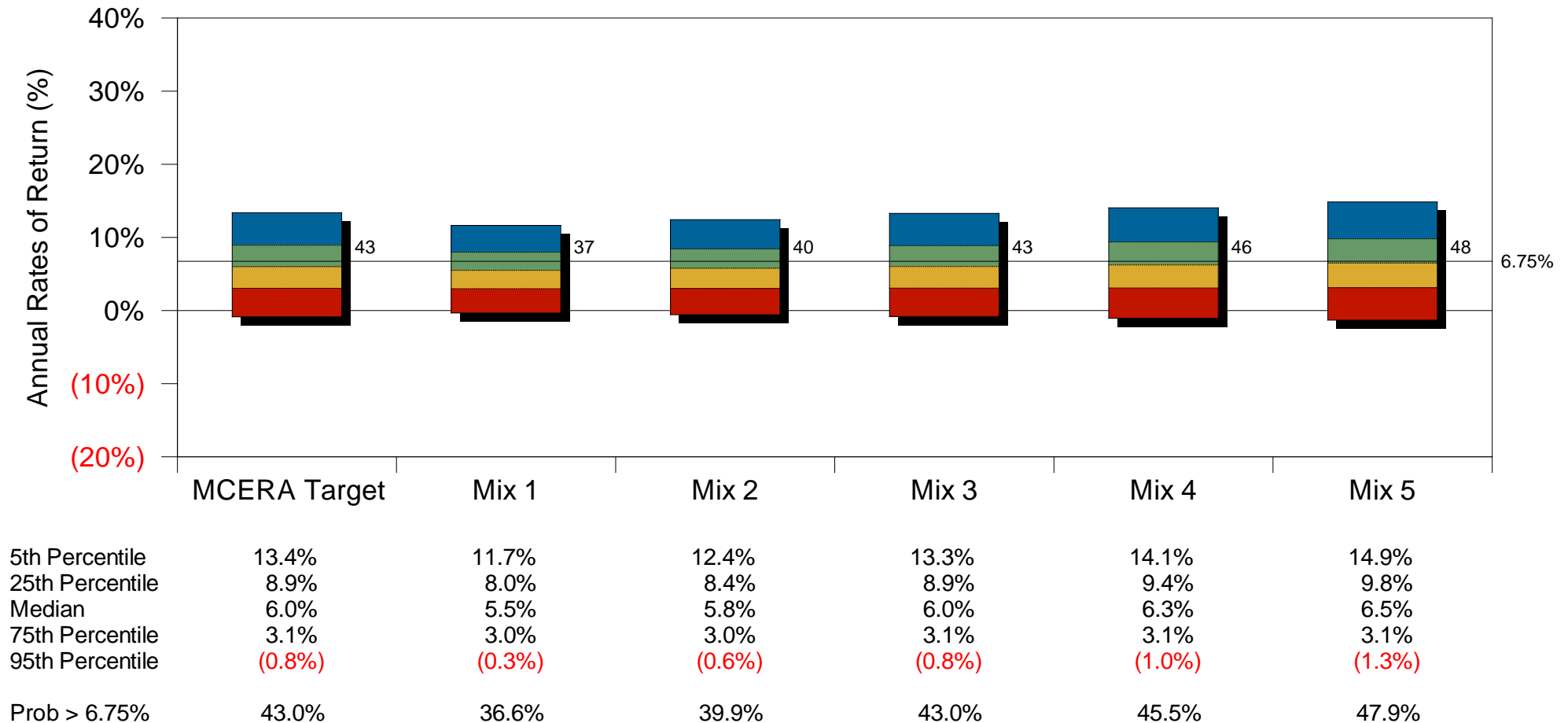


Source: Callan LLC

Projected Rates of Return – Ten Years

Maximum Private Equity Allocation = 25% of Public Equity Exposure

Range of Projected Rates of Return
Projection Period: 10 Years
Optimization Set: 2021



Source: Callan LLC

2021 Capital Market Expectations – Nominal vs Real

Modest Return Expectations Across All Asset Classes

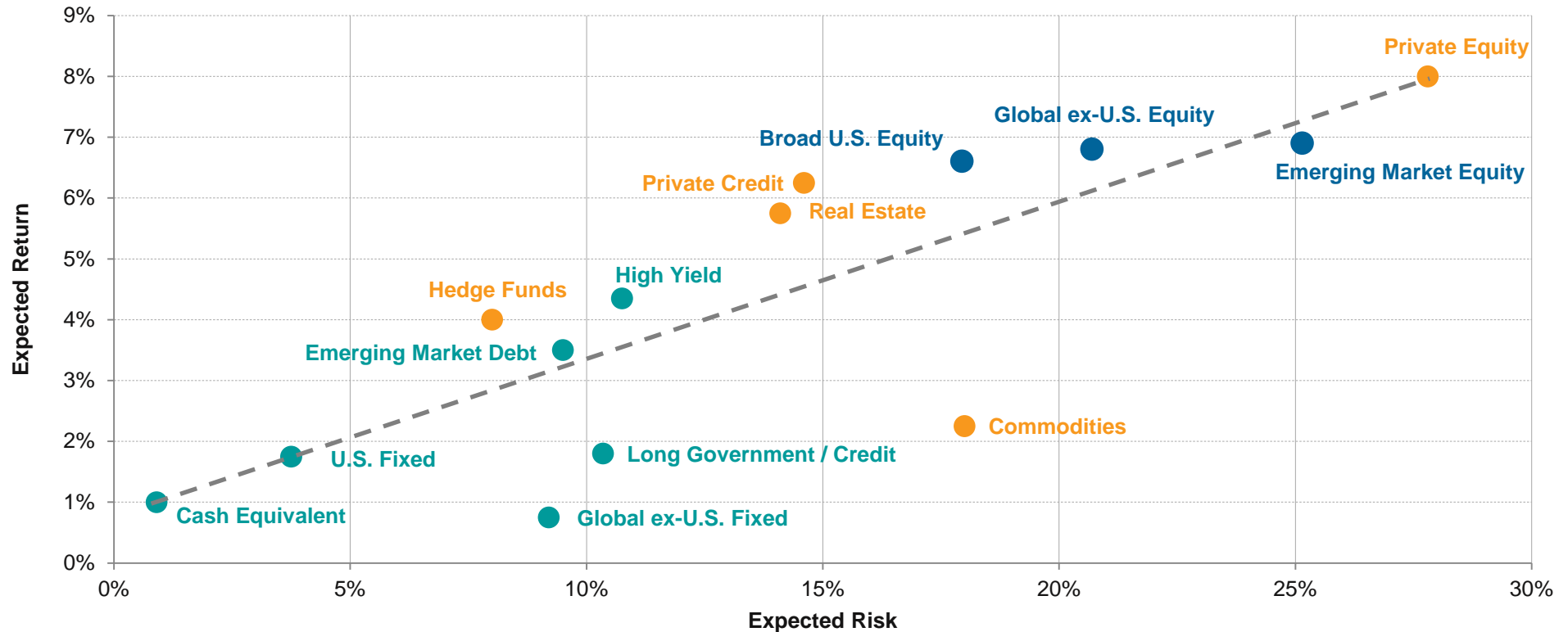
The expected return for the MCERA Policy Target Mix is 6.0%, 75 bps below the 6.75% return assumed in the actuarial valuation. The Plan has a reasonable chance of achieving this result over 10 years (43% probability). Looking to the real return, the gap is smaller. The real return embedded in the valuation ($6.75\% - 2.5\% \text{ inflation} = 4.25\%$) is 25 bps higher than Callan's expected real return ($6.0\% - 2.0\% \text{ inflation} = 4.0\%$).

While return expectations are low relative to long-term history for the next five- to ten-year horizon, MCERA will need to retain a strong orientation toward risk assets (equity) in pursuit of return to achieve its funding goals.

Whether the plan should pursue more or less exposure to risk assets than the current policy target mix should not be unduly influenced by subdued expectations for the shorter-term 5-10 year horizon. We do not believe investors are likely to be compensated for greater risk taking in the shorter term.

Relationship Between Expected Return and Risk – Capital Market Line

Visualizing Callan's 2021–2030 capital markets assumptions



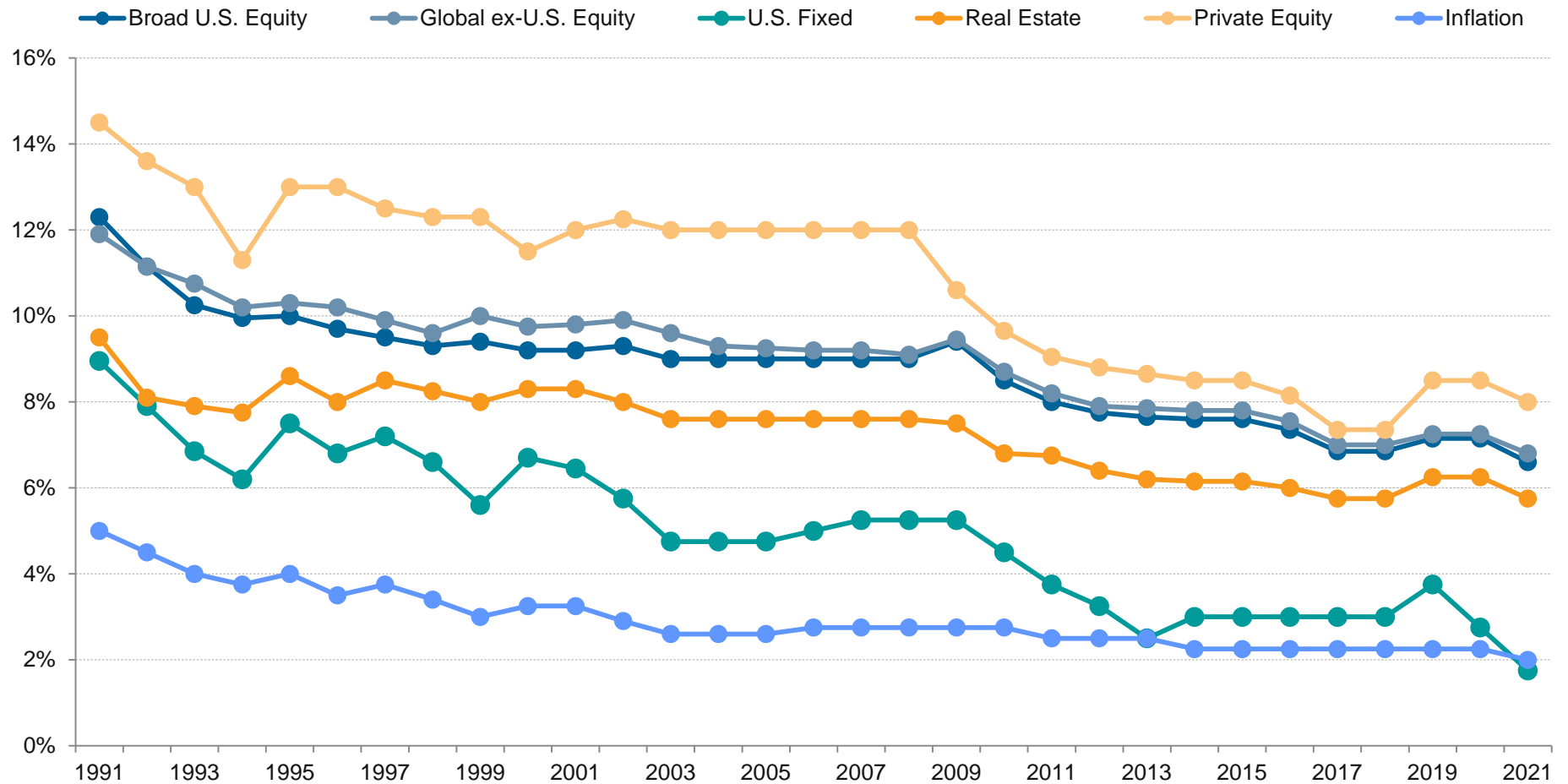
Our forecasts link expected return to risk

For example, investors demand a greater return from private equity than public equity as compensation for higher risk

Source: Callan LLC

Return Projections: Major Asset Classes

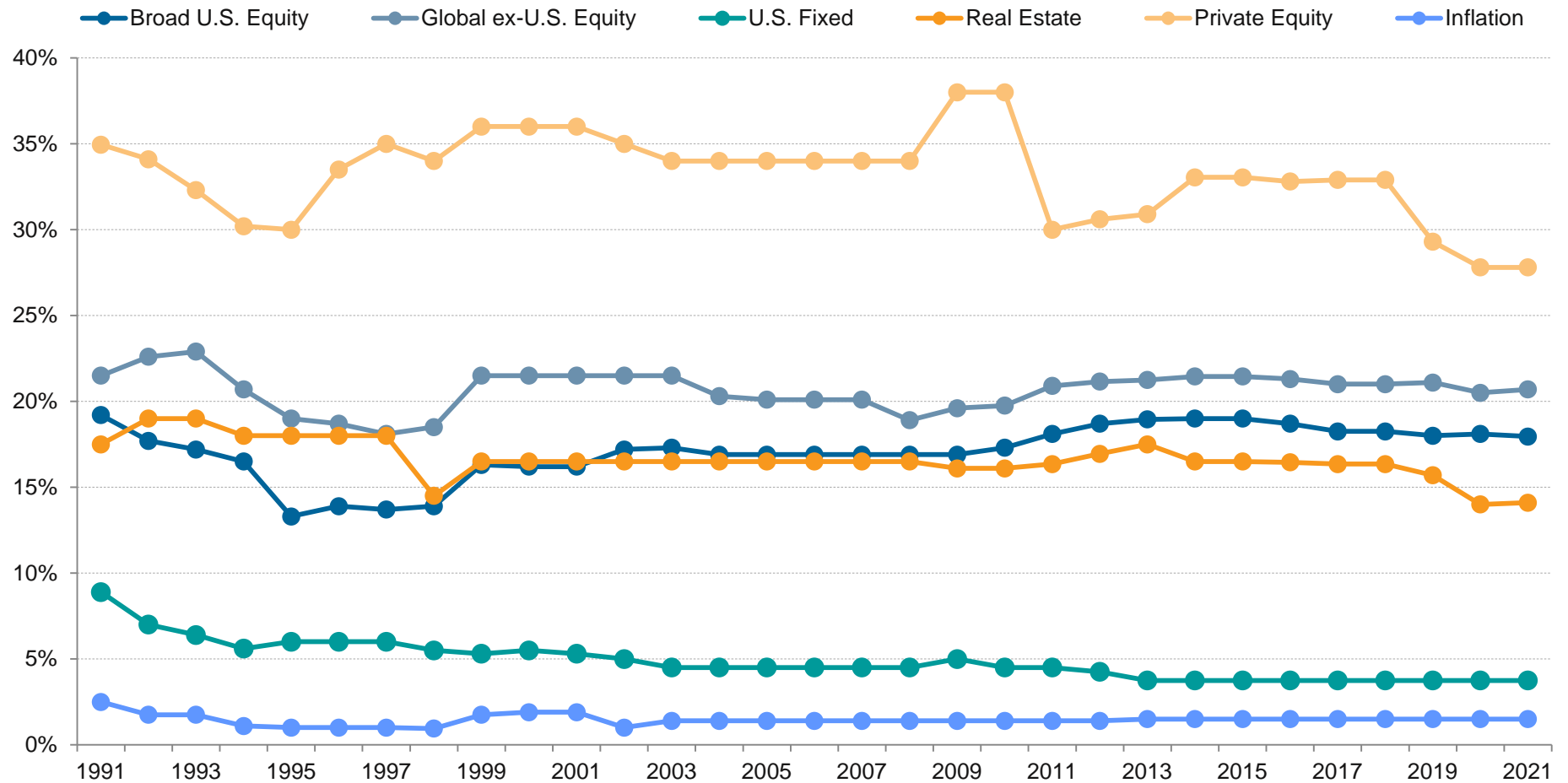
1991–2021



Source: Callan LLC

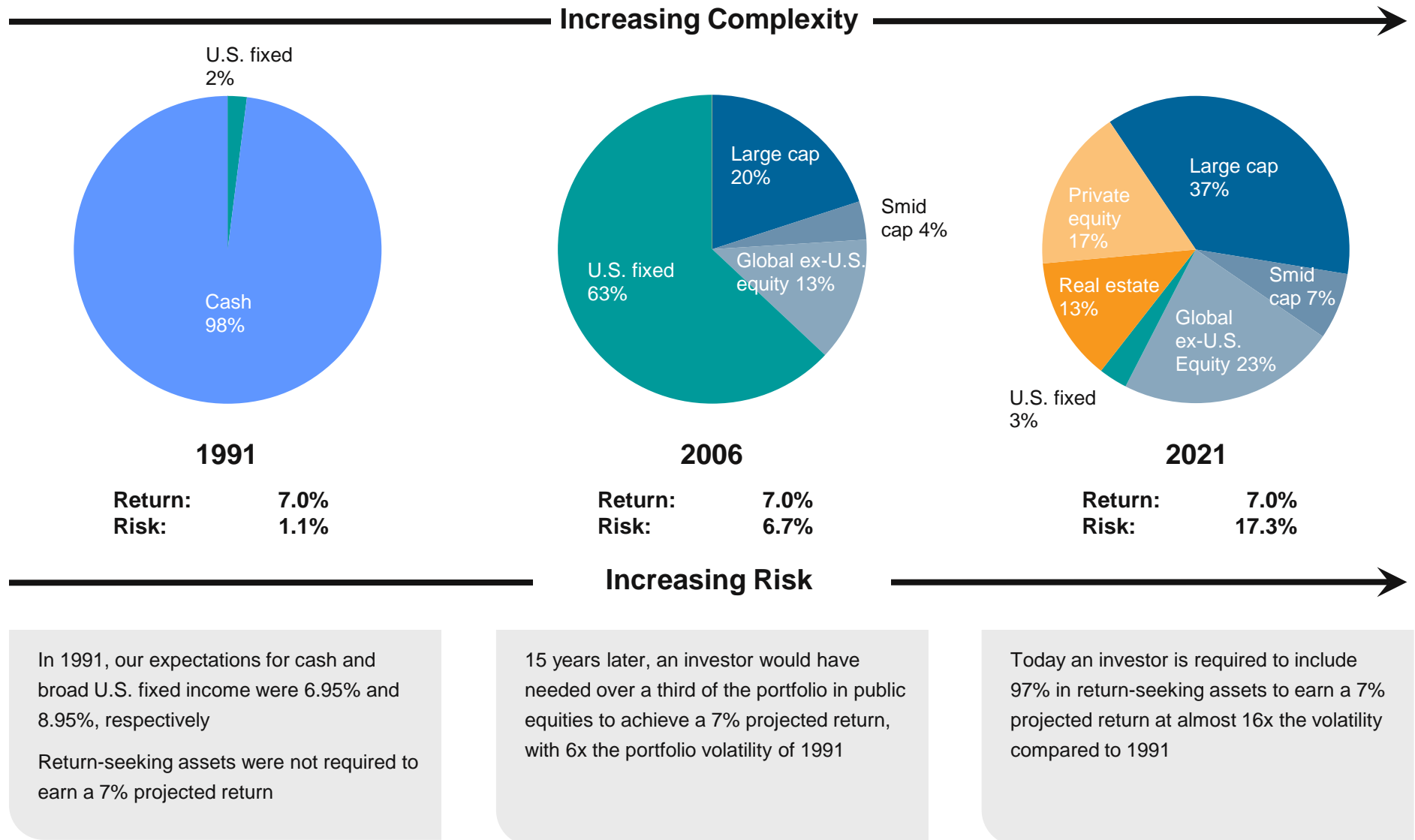
Risk Projections: Major Asset Classes

1991–2021



Source: Callan LLC

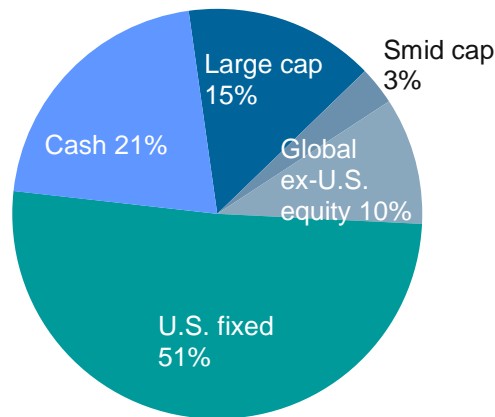
7% Expected Returns Over Past 30+ Years



Source: Callan LLC

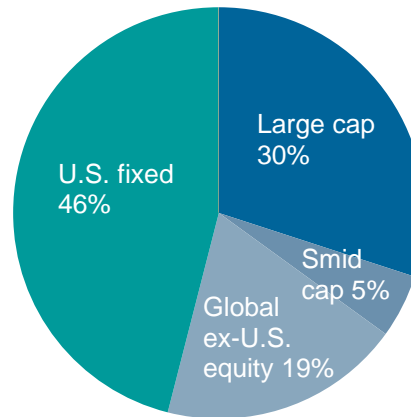
5% Expected Real Returns Over Past 30+ Years

Increasing Complexity →



1991

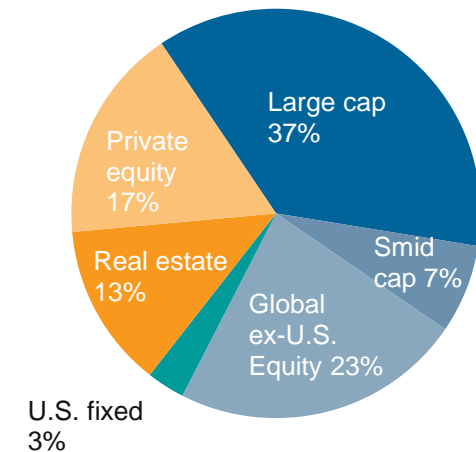
Inflation: 5.00%
Real Return: 5.0%
Risk: 6.6%



2006

Inflation: 2.75%
Real Return: 5.0%
Risk: 9.3%

Increasing Risk →



2021

Inflation: 2.00%
Real Return: 5.0%
Risk: 17.3%

Despite a 5% inflation projection, an investor could have almost three-quarters of the portfolio in low-risk assets (cash and fixed income) and still earn a 5% projected real return in 1991

15 years later, an investor would have needed over half of the portfolio in public equities to achieve a 5% projected real return

Today an investor must have 97% in return-seeking assets to earn a 5% projected real return at over 2.5x the volatility compared to 1991

Disclaimers

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Memorandum

To: MCERA Board and Staff
From: Jim Callahan, CFA
Anne Heaphy
Date: March 8, 2021
Subject: Colchester Personnel Update

It was recently announced that Vi-Minh Tran joined Colchester as a Senior Investment Officer. Prior to joining Colchester, Tran worked at Franklin Templeton for 22 years where he was a portfolio manager on global fixed income portfolios. Colchester's investment team has generally been quite stable. They consistently look to hire ahead of anticipated growth and as more and more countries are added to their respective product benchmarks. Tran has an expertise in Asian countries, which is where his efforts will be focused initially. The investment team now consists of 10 professionals led by Ian Sims, Chief Investment Officer, and Keith Lloyd, Chief Executive Officer.

Memorandum

To: MCERA Board of Trustees
From: Jim Callahan, CFA
Anne Heaphy
Date: March 8, 2021
Subject: UBS Trumbull Property Fund Personnel Update

UBS recently announced the addition of Portfolio Manager Jason Lewis to the Trumbull Property Fund (TPF) team. Lewis joins from CA Residential, a national multifamily property developer, where he was Head of Portfolio and Asset Management. His responsibilities will include asset management activities, including responsibility for asset strategies, property operations, and net operating income forecasting, as well as managing dispositions within the long-term strategic assets categorization of TPF.

Last year, TPF categorized assets within the fund as either long-term strategic assets ("TPF Core Diversified Portfolio") that are overseen by Senior Portfolio Manager Paul Canning (\$13.8 billion¹) and non-strategic assets designated for sale ("Non-Strategic Portfolio") that are overseen by Senior Portfolio Manager Mario Maturo (\$3.9 billion¹). Pam Thompson is also a Portfolio Manager on TPF and is now joined by Lewis. Lewis is a positive addition and adds to the Team's depth.

TPF is in the process of repositioning the Fund during a pandemic, in a market where transaction volume has dropped by 81% year-over-year.² Compounding this issue, the Team is taking approximately \$3.2 billion of the Fund's non-strategic assets to market in the most challenged and uncertain sectors: hotel, retail and office. There is minimal demand for assets in these sectors and the value at which the assets will transact is unknown but certainly challenged as we move through this crisis. TPF will continue to face challenges in the near- to mid-term.

¹Source: UBS - Gross asset values as of December 31, 2020

²Source: NCREIF Property Index Q3 2019 vs Q3 2020 4-quarter rolling average

Callan

Mcera



March 17, 2021

**Fourth Quarter 2020
Summary Investment
Presentation**

Jim Callahan, CFA
President

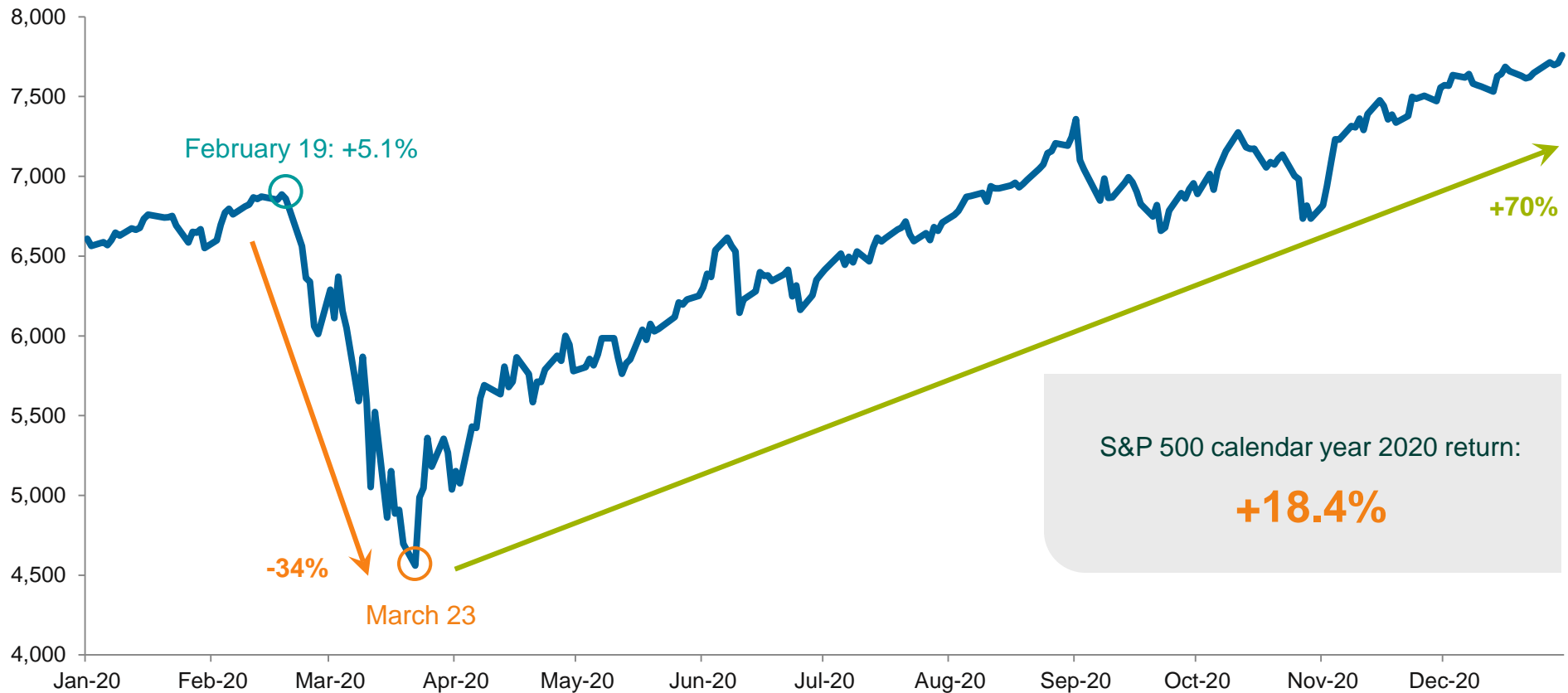
Anne Heaphy
Senior Vice President

Callan

Economic and Capital Markets Review

U.S. Equity Markets Rebound Over 70%

S&P 500 Total Return Price Index Calendar Year 2020



- Substantial price appreciation in spite of poor earnings
- Low Treasury yields helping to support valuations

Source: S&P Dow Jones Indices
Data as of 12/31/20

Stunning Recovery in Global Equity Markets in 4Q20

V-shaped rebound, ahead of the global economy

Global equity continued rally in 4Q

- S&P -33.5% from peak (02/19/20) to low on 3/23/20
- Rebound since March bottom lifted the S&P 500 by 70% through December! However, the strong recovery was concentrated in a few stocks: mega cap, IT.
- Fed cut rates to zero, commenced QE, instituted multiple facilities to backstop money markets, credit markets, and the economy.
 - *Fed expects to get paid back.*
 - *Further fiscal stimulus added at year-end*
- Economic recovery will be uncertain in 2021.
- Release of vaccines a huge positive development
- Distribution challenges may keep widespread inoculation from being achieved until mid-year.
- As COVID-19 infections surge anew, re-openings may be reversed in many states and localities.

Returns for Periods ended 12/31/20

	1 Quarter	1 Year	5 Years	10 Years	25 Years
U.S. Equity					
Russell 3000	14.68	20.89	15.43	13.79	9.67
S&P 500	12.15	18.40	15.22	13.88	9.56
Russell 2000	31.37	19.96	13.26	11.20	9.05
Global ex-U.S. Equity					
MSCI World ex USA	15.85	7.59	7.64	5.19	5.17
MSCI Emerging Markets	19.70	18.31	12.81	3.63	--
MSCI ACWI ex USA Small Cap	18.56	14.24	9.37	5.95	6.49
Fixed Income					
Bloomberg Barclays Aggregate	0.67	7.51	4.44	3.84	5.16
90-day T-Bill	0.03	0.67	1.20	0.64	2.27
Bloomberg Barclays Long Gov/Credit	1.68	16.12	9.35	8.16	7.42
Bloomberg Barclays Global Agg ex-US	5.09	10.11	4.89	1.99	3.97
Real Estate					
NCREIF Property	0.74	1.19	5.82	8.96	9.08
FTSE Nareit Equity	11.57	-8.00	4.77	8.31	9.64
Alternatives					
CS:Hedge Fund Idx*	3.44	2.41	2.76	3.64	7.25
Cambridge Private Equity*	10.82	18.54	13.90	13.85	15.41
Bloomberg Commodity	10.19	-3.12	1.03	-6.50	1.00
Gold Spot Price	-0.02	24.42	12.32	2.92	6.55
Inflation - CPI-U	0.07	1.36	1.59	1.66	2.10

*Cambridge PE data through 09/30/20; CS Hedge Fund Index data through 9/30/20

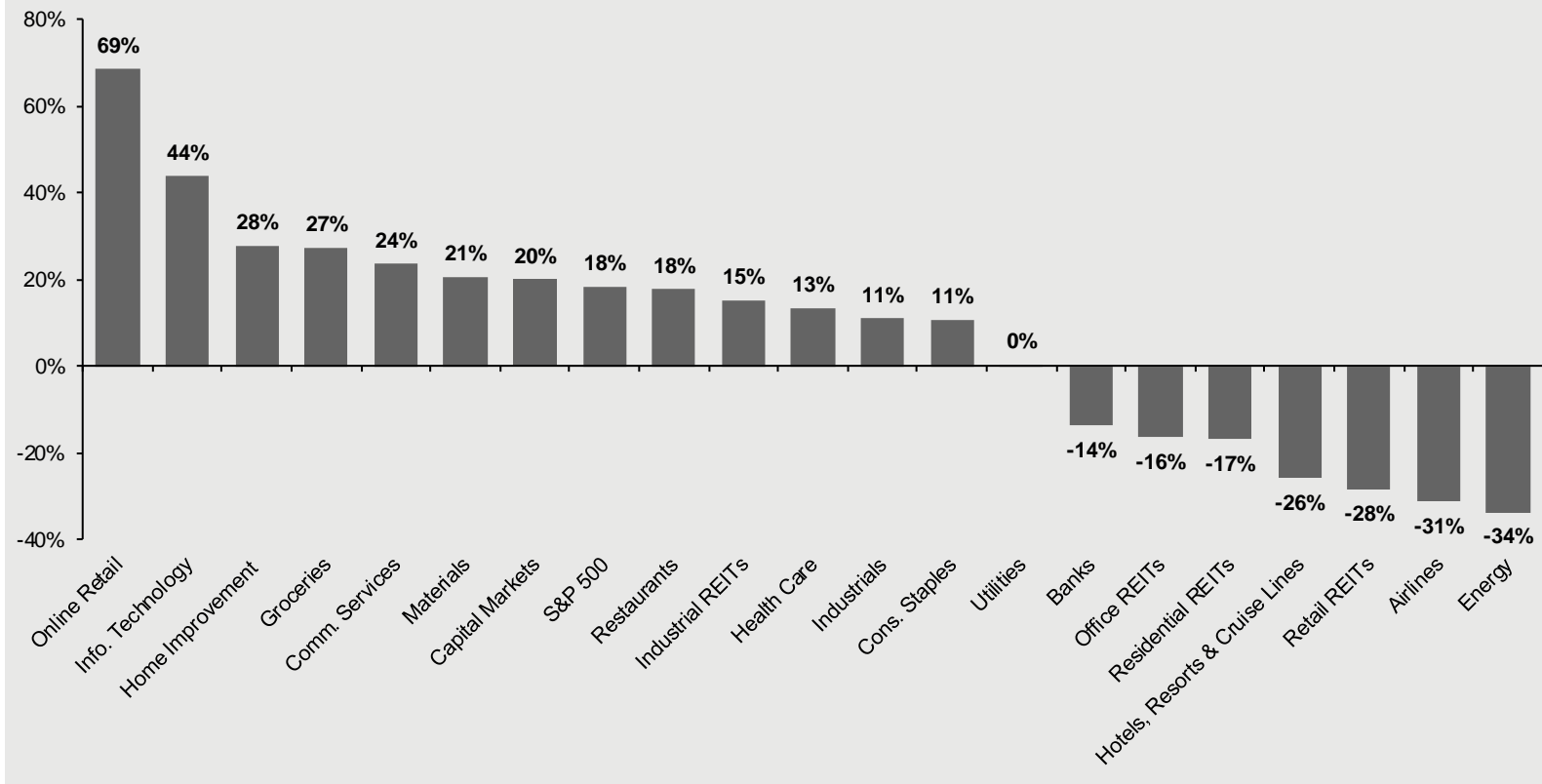
Sources: Bloomberg, Bloomberg Barclays, Callan, Cambridge, Credit Suisse, FTSE Russell, MSCI, NCREIF, S&P Dow Jones Indices

U.S. Stock Market Returns in 2020 Were Widely Dispersed

Concentration of outperformance in technology, online retail, and supporting industries

Returns since December 31, 2019

Total returns by sector and industry

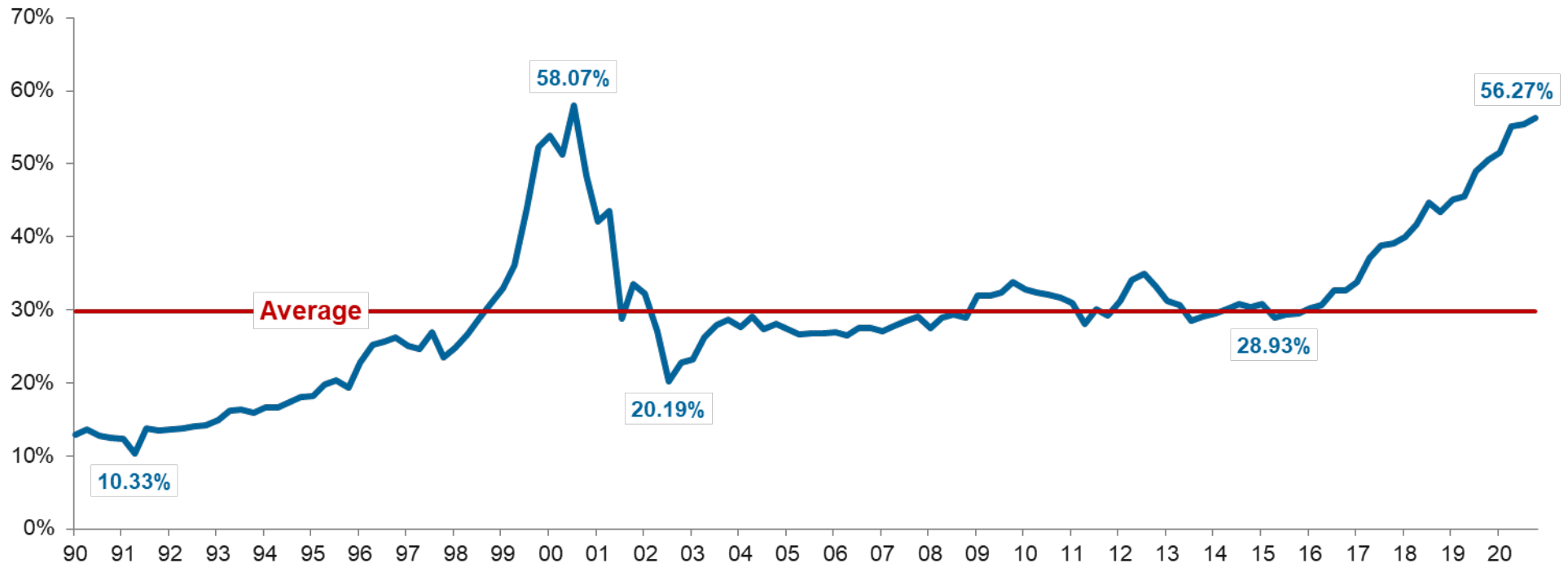


Best-performing sectors employ far fewer workers than many of the underperforming sectors (health care, capital markets, banks, hospitality, transportation, energy).

Sources: FactSet, J.P. Morgan Asset Management Guide to the Markets – U.S., S&P Dow Jones Indices; Data are as of 12/31/20.

IT and Communications Concentration Rivaling That of the Dot-Com Bubble

Sector Concentration in Technology and Communications
Russell 1000 Growth Index



Growth has dominated value and driven returns in the U.S. equity market.

Information Technology and Communications now make up almost 60% of the growth index, a concentration last seen in the Dot-Com Bubble that burst in 2000-02

Sources: Callan, FTSE Russell

U.S. Equity Performance

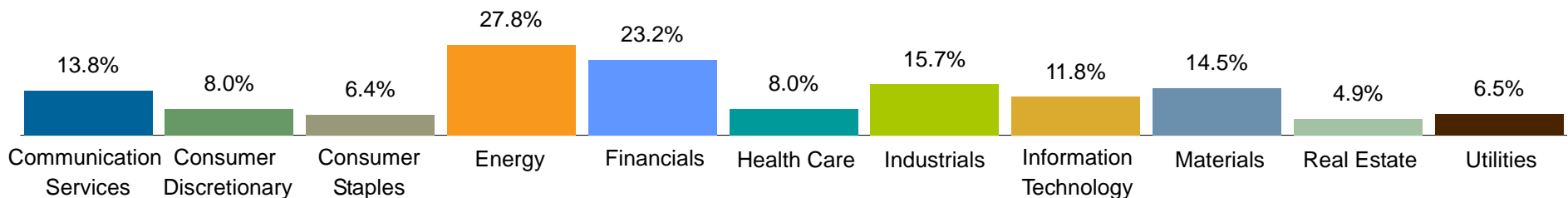
Record highs in 2020

- The S&P 500 Index hit a record high in 4Q20. The Index was up 12.1% for the quarter, bringing the 2020 gain to 18.4%.
 - Since March low, S&P is up over 70%, with all sectors posting increases greater than 40%.
 - 4Q winner: Energy (+28%), but down 34% for the year.
 - Technology (+12% in 4Q) top 2020 sector with 44% gain.
 - Pandemic has cast a pall over certain sectors while rewarding others: online retail soared 69% in 2020, while hotels/cruise lines, airlines, and retail REITs dropped ~30%.
 - Apple, Microsoft, Amazon, Facebook, Alphabet made up 22% of S&P 500 at year-end, and for 2020, accounted for 12.1% of 18.4% Index return.

Anti-momentum rally

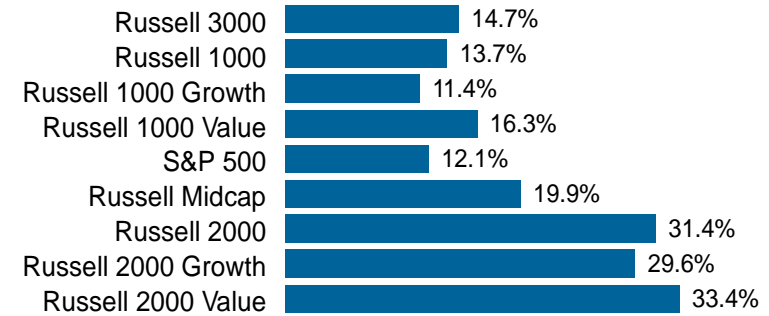
- In 4Q, driven by vaccine progress, political clarity, and further stimulus, value outperformed growth across the cap spectrum. However, value trails growth by significant margin for the full year.
- Fueled by the prospect of an economic recovery, small caps outperformed large in 4Q but were even on the year. Small value was the best performer for 4Q, but 2020 gain is a mere 4.6%.

Industry Sector Quarterly Performance (S&P 500)

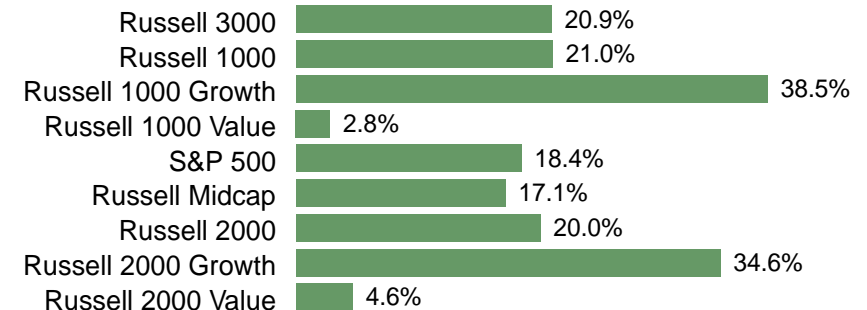


Sources: FTSE Russell, S&P Dow Jones Indices

U.S. Equity: Quarterly Returns



U.S. Equity: One-Year Returns



Global ex-U.S. Equity Performance

COVID-19 vaccine rollouts extend and expand risk-on rally

- Prospects of global economic recovery propelled by COVID-19 vaccination fueled double-digit returns broadly across developed and emerging markets.
- Expectations of reverting back to normal economic activity by late 2021 enabled risk assets to thrive.
- Emerging markets outperformed developed markets, led by Latin America—specifically Brazil.
- Small cap outperformed large as business confidence improved with news of vaccination.

Market rotates to cyclical

- Positive outlook on reflation trade stoked Energy, Materials, and Financials to drive the market.
- Beta and volatility led factor performance due to market rotation.

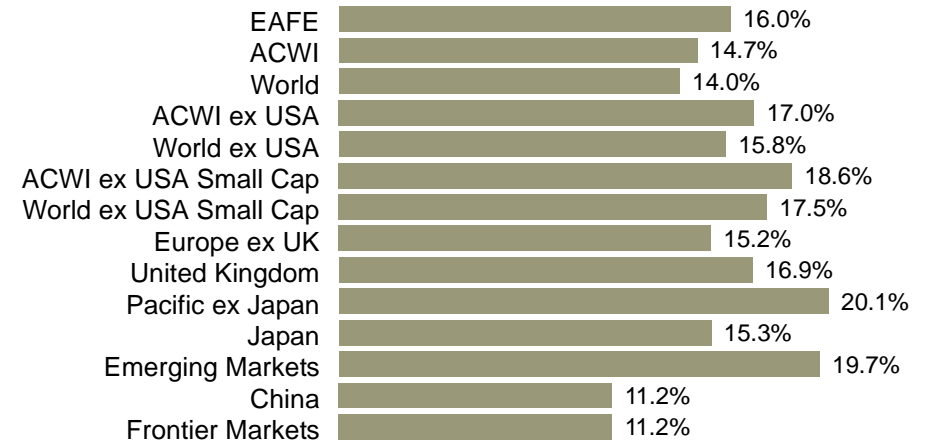
U.S. dollar vs. other currencies

- U.S. dollar continued to lose ground as appetite for risk increased with the expectation that a path to global economic recovery is on the horizon.

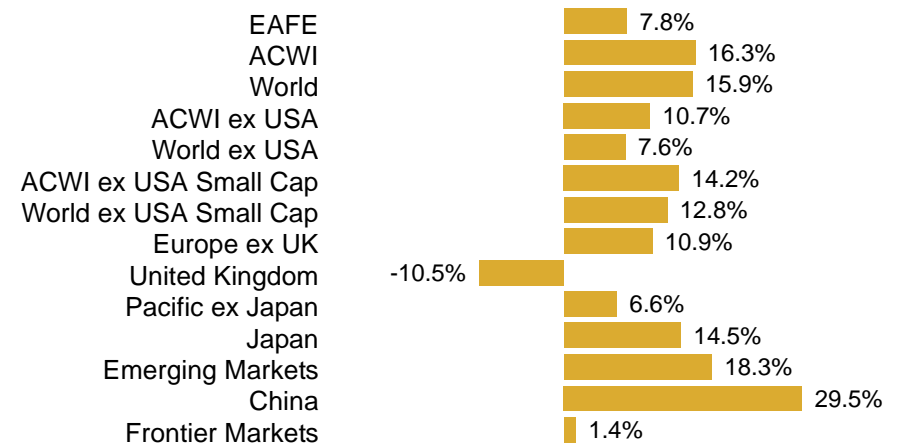
Growth vs. value

- Value outpaced growth as sentiment shifted to cyclical sectors.

Global Equity: Quarterly Returns



Global Equity: One-Year Returns



Source: MSCI

U.S. Fixed Income Performance

Treasury yields rose

- The 10-year U.S. Treasury yield closed 4Q20 at 0.93%, up 24 bps from 3Q20 but off from the year-end level of 1.92%.
- TIPS outperformed nominal U.S. Treasuries as 10-year breakeven spreads widened from 163 bps to 199 bps.
- No rate hikes are expected until at least 2023.

Bloomberg Barclays Aggregate gained slightly

- Corporate credit outperformed treasuries as investors continued to hunt for yield.
- Corporate credit ended the year up 9.89% despite record issuance in 2020.

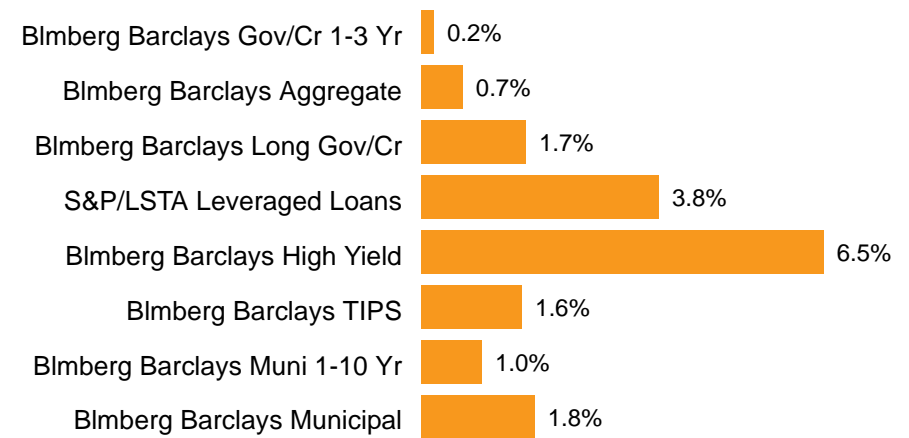
High yield bonds gained on the quarter as rally extended

- High yield bonds outperformed investment grade (IG) bonds in 4Q, returning 6.48%, but trailed IG for the year.
- Leveraged loans gained 3.8% as demand remained strong to finish the year.

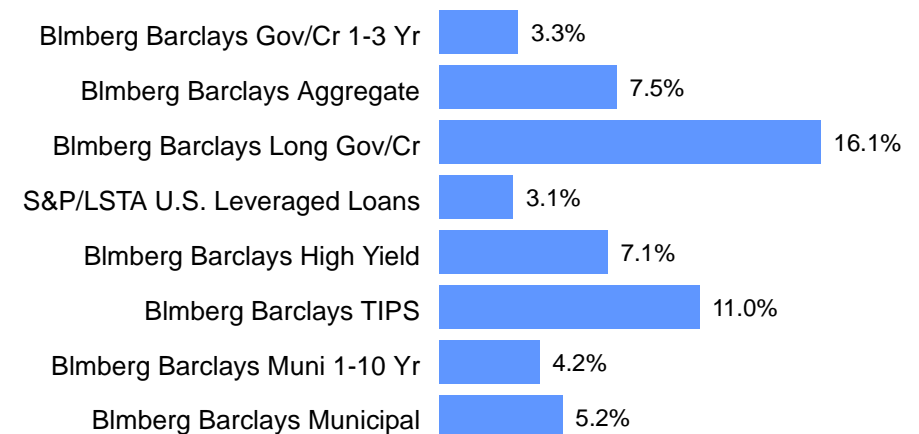
Munis boosted by favorable supply/demand dynamics

- Municipals outperformed Treasuries for the quarter, but remained down for the year.
- Tax-exempt issuance was muted amid strong demand.
- Lower quality outperformed for the quarter; however, higher quality outperformed for the year.

U.S. Fixed Income: Quarterly Returns



U.S. Fixed Income: One-Year Returns



Global Fixed Income Performance

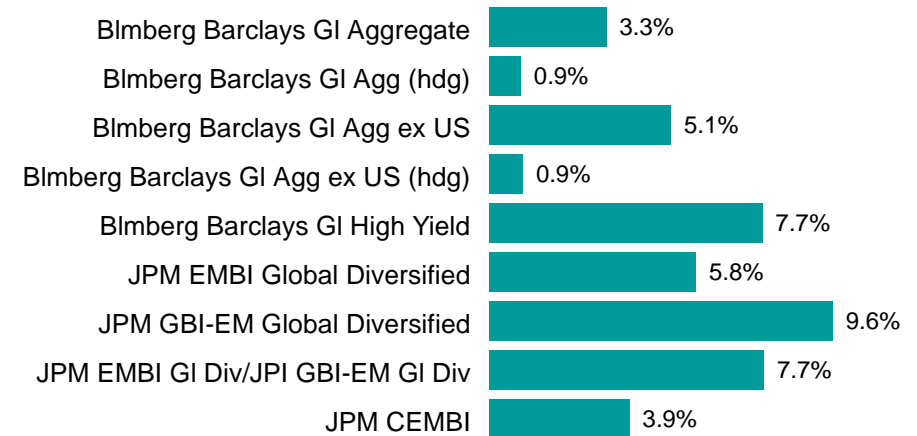
Global fixed income rose amid monetary backdrop

- Low rates and asset purchase programs continued to prop up the global bond market.
- Broad-based U.S. dollar weakness resulting from continued confidence in risk assets dampened hedged returns as the USD lost 4.27% versus the euro, 5.43% versus the British pound, and 2.02% versus the yen.

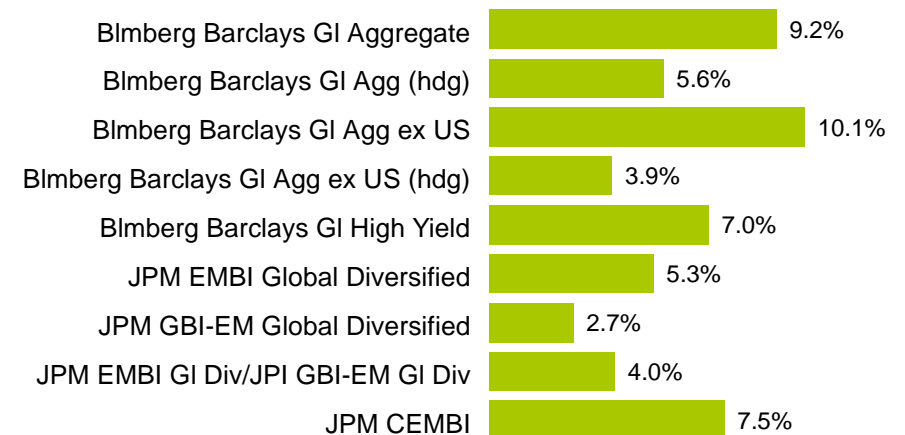
Emerging market debt ended the year positive

- Emerging market debt indices gained in 4Q20, finishing the year in positive territory amid a global search for yield and renewed growth expectations.
- U.S. dollar-denominated index (EMBI Global Diversified) underperformed local currency EMD as U.S. rates rose; returns were mixed across the 70+ constituents.
- Local currency index (GBI-EM Global Diversified) was up significantly, with broad-based gains across constituents.

Global Fixed Income: Quarterly Returns



Global Fixed Income: One-Year Returns



Sources: Bloomberg Barclays, JPMorgan Chase

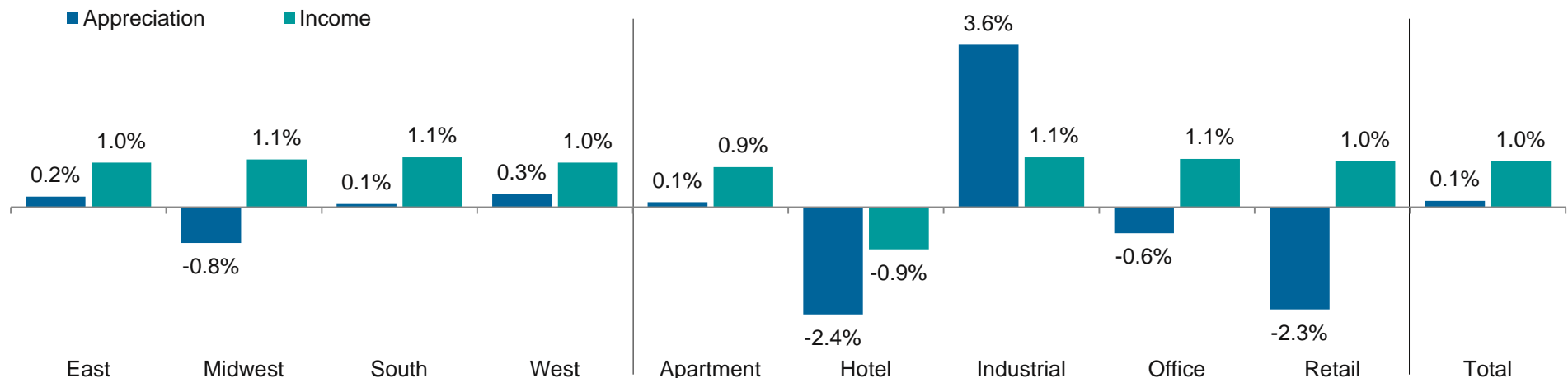
U.S. Private Real Estate Market Trends

Results

- Hotel and Retail are the most challenged sectors while Office faces uncertainty; Industrial remains the best performer.
- Income remains positive except in Hotel sector.
- Appraisers have more certainty on pandemic's impact on valuations.
- Return dispersion by manager within the ODCE Index due to composition of underlying portfolios

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
NCREIF ODCE	1.3%	1.2%	4.9%	6.2%	9.9%
Income	0.9%	3.9%	4.1%	4.2%	4.8%
Appreciation	0.4%	-2.6%	0.8%	1.9%	5.0%
NCREIF Property Index	1.1%	1.6%	4.9%	5.9%	9.0%
Income	1.0%	4.2%	4.4%	4.6%	5.1%
Appreciation	0.1%	-2.5%	0.4%	1.3%	3.8%

NCREIF Property Index Returns by Region and Property Type



Source: NCREIF

Private Equity Performance

Gains YTD

- Private equity 3Q20 gains ahead of those of public equity
- Private equity performance positive YTD, notably outperforming public equity
- Private equity outperforms public equity across all longer-term time horizons, except over the last 10 years.

Net IRRs as of 9/30/20

■ Private Equity ■ S&P 500 PME ■ Russell 3000 PME



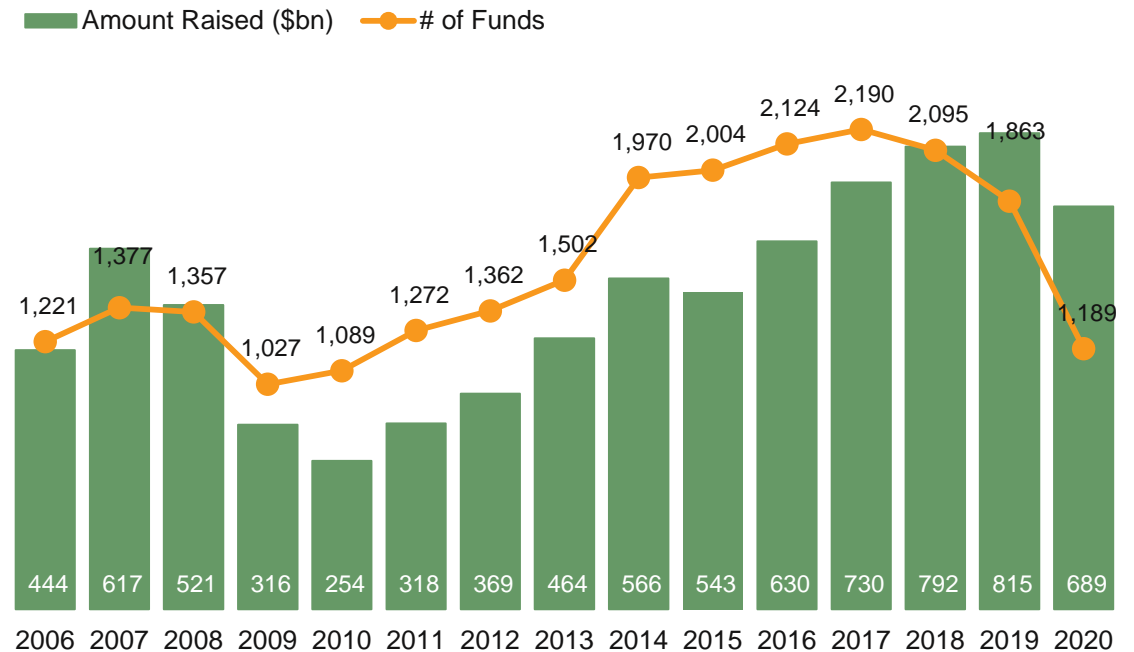
Source: Refinitiv/Cambridge

Private Equity Global Fundraising

Slowdown during pandemic

- Fundraising for 2020 at 85% of 2019 levels
- Many fundraises pushed out to 2021 due to worries over investor appetite and inability of funds to deploy capital during the onset of the pandemic.
- Fundraising expected to pick up in 2021

Annual Fundraising



Source: PitchBook, includes private equity and private debt

Callan Periodic Table of Investment Returns

Annual Returns												
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
U.S. Fixed Income	Emerging Market Equity	Small Cap Equity	U.S. Fixed Income	Real Estate	Small Cap Equity	Real Estate	Large Cap Equity	Small Cap Equity	Emerging Market Equity	U.S. Fixed Income	Large Cap Equity	Small Cap Equity
5.24%	78.51%	26.85%	7.84%	27.73%	38.82%	15.02%	1.38%	21.31%	37.28%	0.01%	31.49%	19.96%
Global ex-U.S. Fixed Income	High Yield	Real Estate	High Yield	Emerging Market Equity	Large Cap Equity	Large Cap Equity	U.S. Fixed Income	High Yield	Dev ex-U.S. Equity	High Yield	Small Cap Equity	Large Cap Equity
4.39%	58.21%	19.63%	4.98%	18.23%	32.39%	13.69%	0.55%	17.13%	24.21%	-2.08%	25.52%	18.40%
High Yield	Real Estate	Emerging Market Equity	Global ex-U.S. Fixed Income	Dev ex-U.S. Equity	Dev ex-U.S. Equity	U.S. Fixed Income	Real Estate	Large Cap Equity	Large Cap Equity	Global ex-U.S. Fixed Income	Dev ex-U.S. Equity	Emerging Market Equity
-26.16%	37.13%	18.88%	4.36%	16.41%	21.02%	5.97%	-0.79%	11.96%	21.83%	-2.15%	22.49%	18.31%
Small Cap Equity	Dev ex-U.S. Equity	High Yield	Large Cap Equity	Small Cap Equity	High Yield	Small Cap Equity	Dev ex-U.S. Equity	Emerging Market Equity	Small Cap Equity	Large Cap Equity	Real Estate	Global ex-U.S. Fixed Income
-33.79%	33.67%	15.12%	2.11%	16.35%	7.44%	4.89%	-3.04%	11.19%	14.65%	-4.38%	21.91%	10.11%
Large Cap Equity	Small Cap Equity	Large Cap Equity	Small Cap Equity	Large Cap Equity	Real Estate	High Yield	Small Cap Equity	Real Estate	Global ex-U.S. Fixed Income	Real Estate	Emerging Market Equity	Dev ex-U.S. Equity
-37.00%	27.17%	15.06%	-4.18%	16.00%	3.67%	2.45%	-4.41%	4.06%	10.51%	-5.63%	18.44%	7.59%
Dev ex-U.S. Equity	Large Cap Equity	Dev ex-U.S. Equity	Real Estate	High Yield	U.S. Fixed Income	Emerging Market Equity	High Yield	Dev ex-U.S. Equity	Real Estate	Small Cap Equity	High Yield	U.S. Fixed Income
-43.56%	26.46%	8.95%	-6.46%	15.81%	-2.02%	-2.19%	-4.47%	2.75%	10.36%	-11.01%	14.32%	7.51%
Real Estate	Global ex-U.S. Fixed Income	U.S. Fixed Income	Dev ex-U.S. Equity	U.S. Fixed Income	Emerging Market Equity	Global ex-U.S. Fixed Income	Global ex-U.S. Fixed Income	U.S. Fixed Income	High Yield	Dev ex-U.S. Equity	U.S. Fixed Income	High Yield
-48.21%	7.53%	6.54%	-12.21%	4.21%	-2.60%	-3.08%	-6.02%	2.65%	7.50%	-14.09%	8.72%	7.11%
Emerging Market Equity	U.S. Fixed Income	Global ex-U.S. Fixed Income	Emerging Market Equity	Global ex-U.S. Fixed Income	Global ex-U.S. Fixed Income	Dev ex-U.S. Equity	Emerging Market Equity	Global ex-U.S. Fixed Income	U.S. Fixed Income	Emerging Market Equity	Global ex-U.S. Fixed Income	Real Estate
-53.33%	5.93%	4.95%	-18.42%	4.09%	-3.08%	-4.32%	-14.92%	1.49%	3.54%	-14.57%	5.09%	-9.04%

Sources: ● Bloomberg Barclays Aggregate ● Bloomberg Barclays Corp High Yield ● Bloomberg Barclays Global Aggregate ex US
 ● FTSE EPRA Nareit Developed ● MSCI World ex USA ● MSCI Emerging Markets ● Russell 2000 ● S&P 500

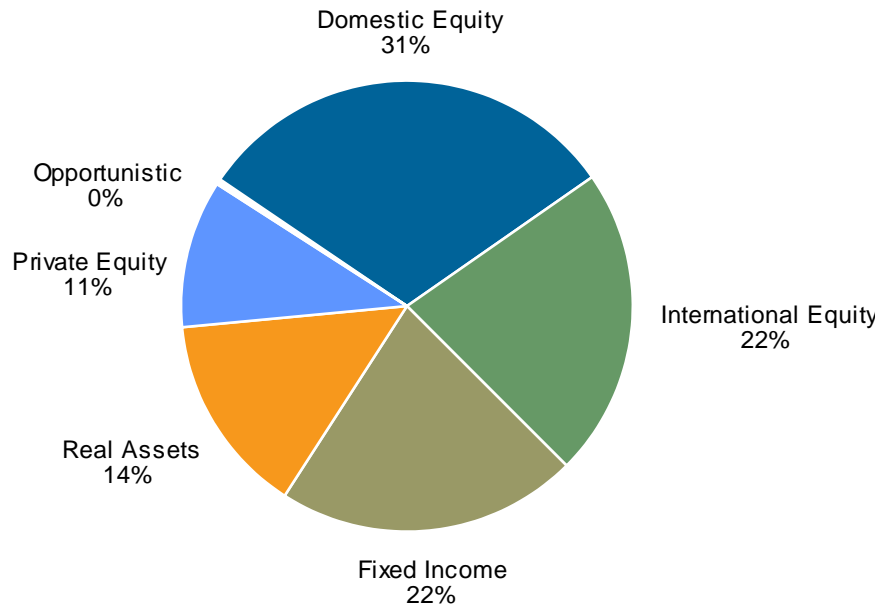
Callan

MCERA Total Fund Review

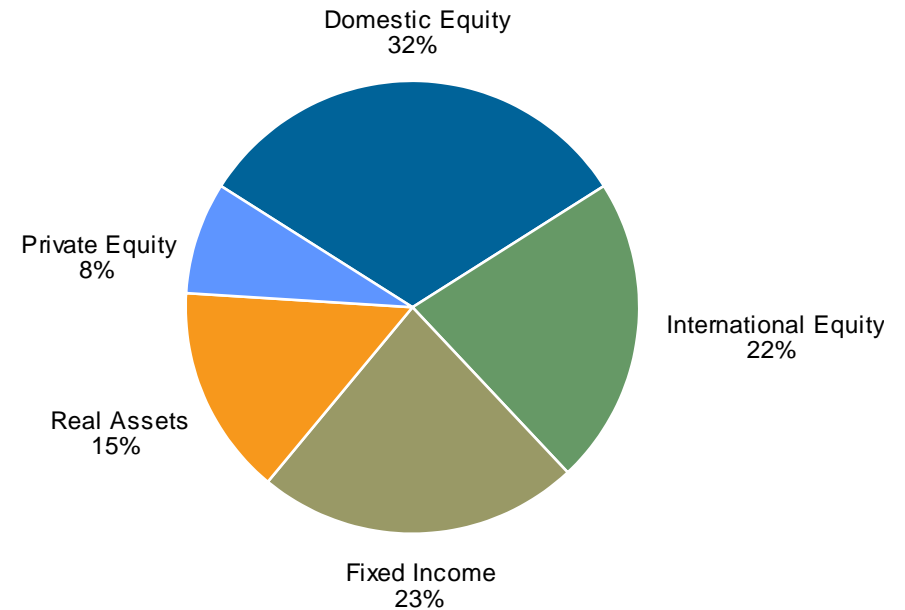
Total Fund Asset Allocation

As of December 31, 2020

Actual Asset Allocation



Target Asset Allocation

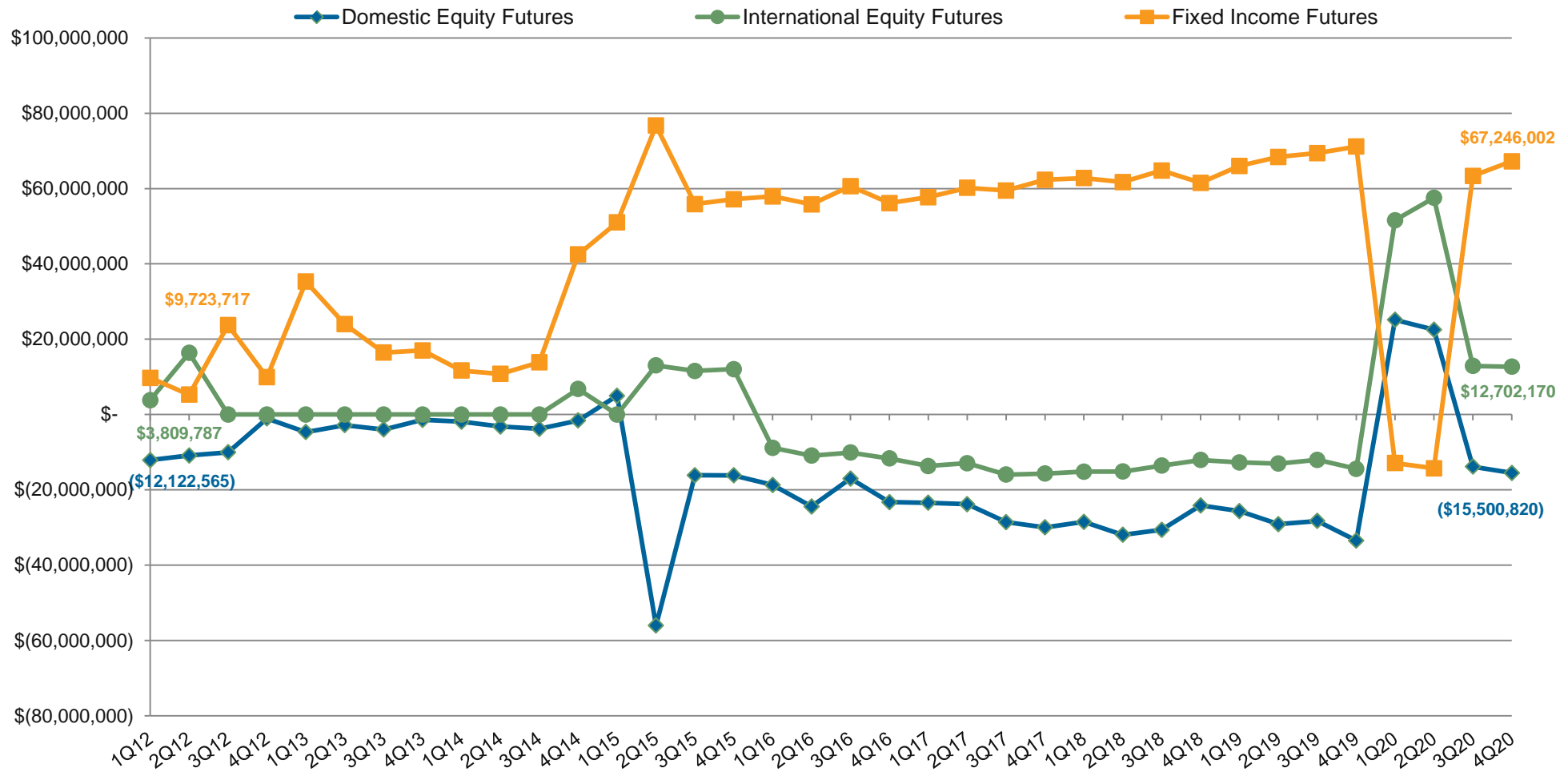


Asset Class	\$000s Actual	Weight Actual	Min Target	Target	Max Target	Percent Difference	\$000s Difference
Domestic Equity	922,674	30.8%	28.0%	32.0%	36.0%	(1.2%)	(35,565)
International Equity	666,135	22.2%	19.0%	22.0%	25.0%	0.2%	7,345
Fixed Income	646,102	21.6%	20.0%	23.0%	26.0%	(1.4%)	(42,632)
Real Assets	431,464	14.4%	12.0%	15.0%	18.0%	(0.6%)	(17,711)
Private Equity	318,097	10.6%	0.0%	8.0%	12.0%	2.6%	78,537
Opportunistic	10,025	0.3%	0.0%	0.0%	5.0%	0.3%	10,025
Total	2,994,496	100.0%		100.0%			

Total Fund Asset Distribution

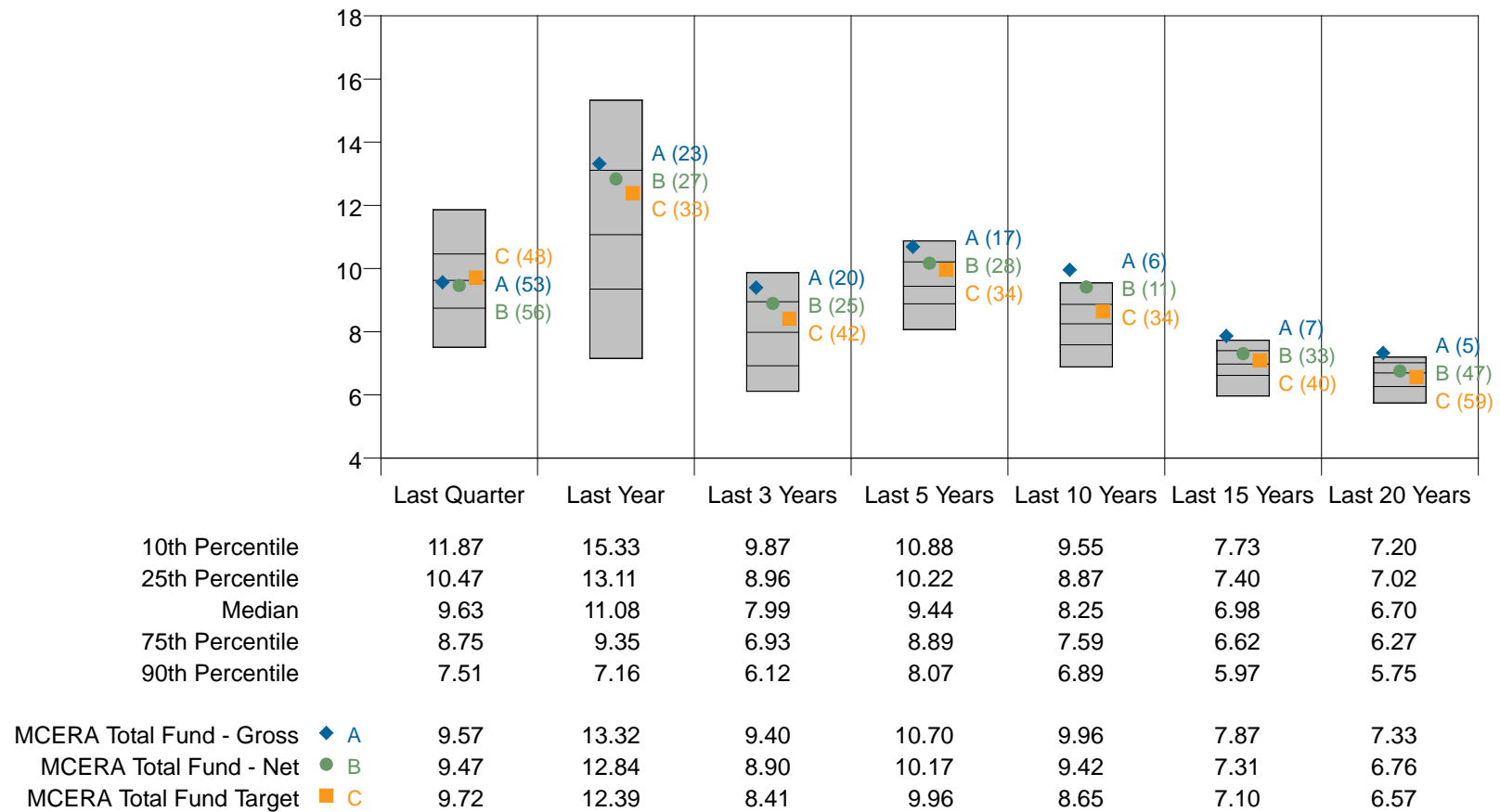
	December 31, 2020				September 30, 2020	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equity	\$922,673,679	30.81%	\$(7,982,031)	\$139,032,014	\$791,623,696	28.80%
SSGA S&P 500 Index Fund	658,057,065	21.98%	(2,791,759)	71,446,658	589,402,166	21.44%
DFA Small Cap Core	280,117,435	9.35%	(1,032,664)	65,073,957	216,076,142	7.86%
Parametric Domestic Equity Futures	-15,500,821	(0.52%)	(4,157,608)	2,511,399	-13,854,612	(0.50%)
International Equity	\$666,134,514	22.25%	\$(2,508,083)	\$84,189,490	\$584,453,106	21.26%
Morgan Stanley Value	199,287,469	6.66%	0	25,092,001	174,195,468	6.34%
Artisan Partners Growth	211,859,763	7.07%	0	17,625,486	194,234,277	7.07%
TimesSquare Intl Small Cap	129,805,181	4.33%	(236,921)	20,463,531	109,578,571	3.99%
Parametric Emerging Markets	112,479,930	3.76%	0	18,939,467	93,540,463	3.40%
Parametric International Equity Futures	12,702,170	0.42%	(2,271,162)	2,069,005	12,904,327	0.47%
Fixed Income	\$646,102,285	21.58%	\$1,189,232	\$16,341,594	\$628,571,460	22.87%
Wellington Core Plus	272,626,921	9.10%	(1,702,702)	4,433,850	269,895,773	9.82%
Western Intermediate Credit	151,840,240	5.07%	(1,414,083)	4,401,215	148,853,109	5.42%
Colchester Global	154,389,122	5.16%	(157,041)	8,078,524	146,467,639	5.33%
Parametric Fixed Income Futures	67,246,002	2.25%	4,463,058	(571,995)	63,354,939	2.31%
Real Estate	\$237,890,724	7.94%	\$(2,661,207)	\$(714,518)	\$241,266,449	8.78%
Woodmont	18,199,993	0.61%	875,908	(1,497,508)	18,821,592	0.68%
UBS Trumbull Property Fund	114,726,248	3.83%	(1,366,198)	(2,220,301)	118,312,747	4.30%
AEW Core Property Trust	104,953,310	3.50%	(1,102,656)	1,934,745	104,121,221	3.79%
AEW Partners V, LP **	11,173	0.00%	0	285	10,888	0.00%
Public Real Assets	\$193,572,850	6.46%	\$(79,036)	\$24,347,983	\$169,303,903	6.16%
INVESCO Commodities Fund	49,196,852	1.64%	(79,036)	7,060,611	42,215,278	1.54%
BlackRock TIPS Index Fund	42,864,081	1.43%	0	694,143	42,169,938	1.53%
KBI Global Resources Fund	61,840,368	2.07%	0	12,062,952	49,777,416	1.81%
Blackrock REIT Index Fund	39,671,548	1.32%	0	4,530,277	35,141,271	1.28%
Private Equity*	\$318,096,789	10.62%	\$(15,219,304)	\$0	\$333,316,093	12.13%
Abbott ACE VI*	50,294,757	1.68%	(11,597,499)	0	61,892,256	2.25%
Abbott ACE VII*	43,862,201	1.46%	(3,060,000)	0	46,922,201	1.71%
Abbott 2016*	44,452,548	1.48%	2,452,917	0	41,999,631	1.53%
Abbott 2017*	10,235,684	0.34%	710,625	0	9,525,059	0.35%
Pathway PPEF 2008*	65,722,244	2.19%	(3,232,591)	(0)	68,954,835	2.51%
Pathway PE I-7*	40,990,304	1.37%	(881,060)	(0)	41,871,364	1.52%
Pathway PE I-8*	53,722,966	1.79%	(116,108)	(0)	53,839,074	1.96%
Pathway PE I-9*	8,816,085	0.29%	504,412	(0)	8,311,673	0.30%
Opportunistic**	\$10,025,000	0.33%	\$10,146,042	\$(121,042)	-	-
CarVal Credit Value V**	3,350,000	0.11%	3,422,955	(72,955)	-	-
Fortress Credit Opps Fund V**	1,650,000	0.06%	1,650,000	0	-	-
Varde Dislocation Fund**	5,025,000	0.17%	5,073,087	(48,087)	-	-
Total Fund	\$2,994,495,840	100.0%	\$(17,114,387)	\$263,075,521	\$2,748,534,707	100.0%

Parametric Overlay Positions – Changes Over Time



Total Fund Performance - Annualized

Returns for Periods Ended December 31, 2020
Group: Callan Public Fund Sponsor - Large (>1B)

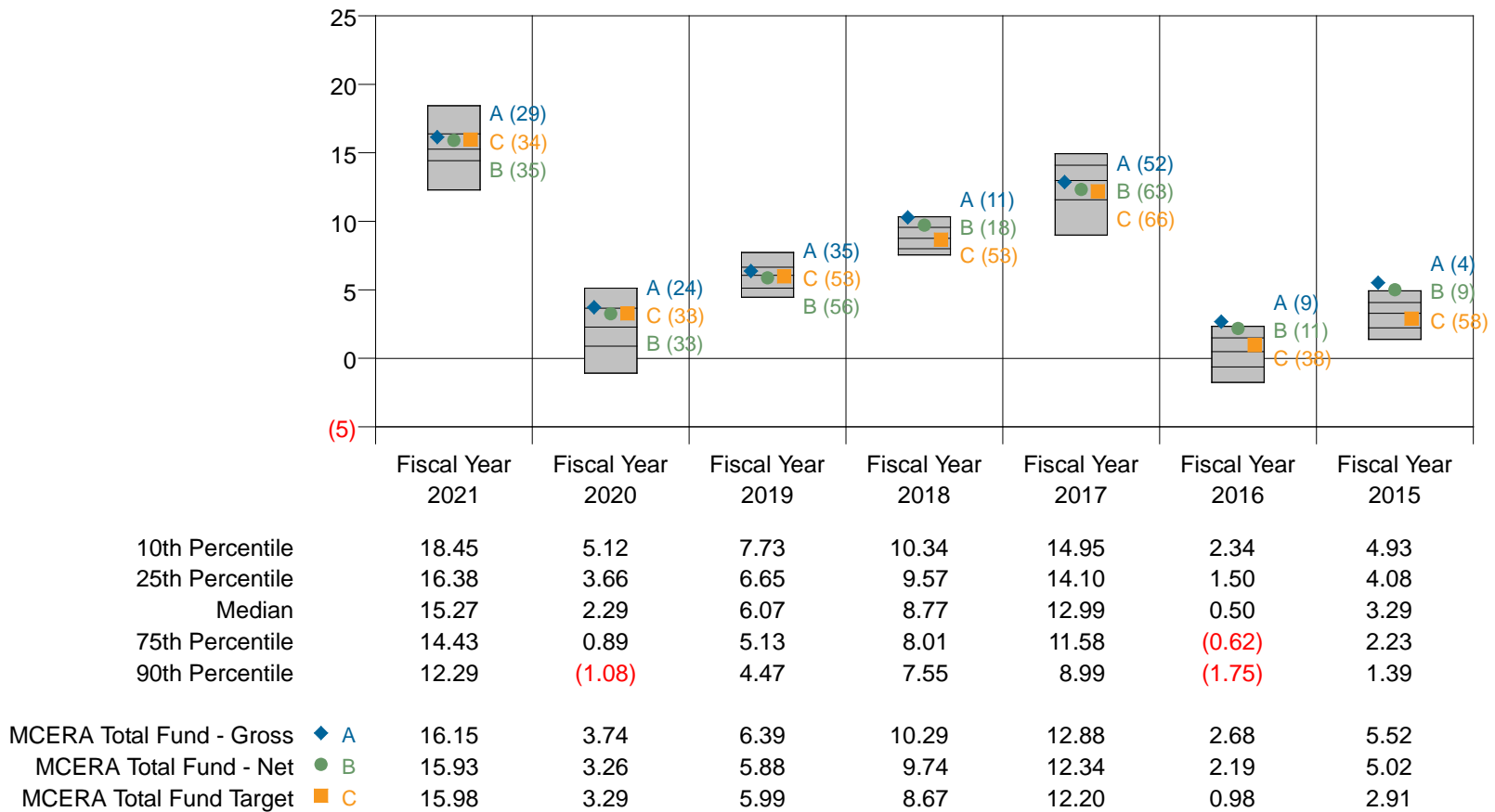


Current Quarter Target = 32.0% Russell 3000 Index, 22.0% MSCI ACWI ex US IMI Index, 11.5% Bloomberg Aggregate Index, 5.8% Bloomberg Intermediate Credit Index, 5.8% FTSE World Government Bond Index, 8.0% NCREIF NFI-ODCE Equal Weight Net, 1.8% Bloomberg Commodity Price Index, 1.8% S&P Global Natural Resources 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

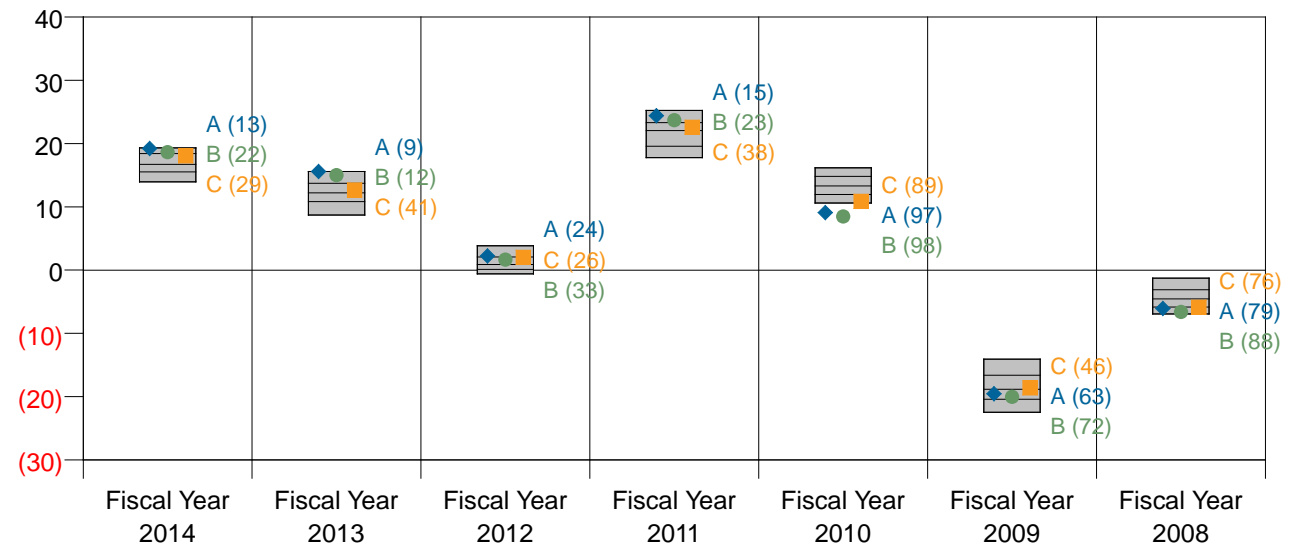
Group: Callan Public Fund Sponsor - Large (>1B)



Total Fund Performance – Fiscal Year

Fiscal Year Returns

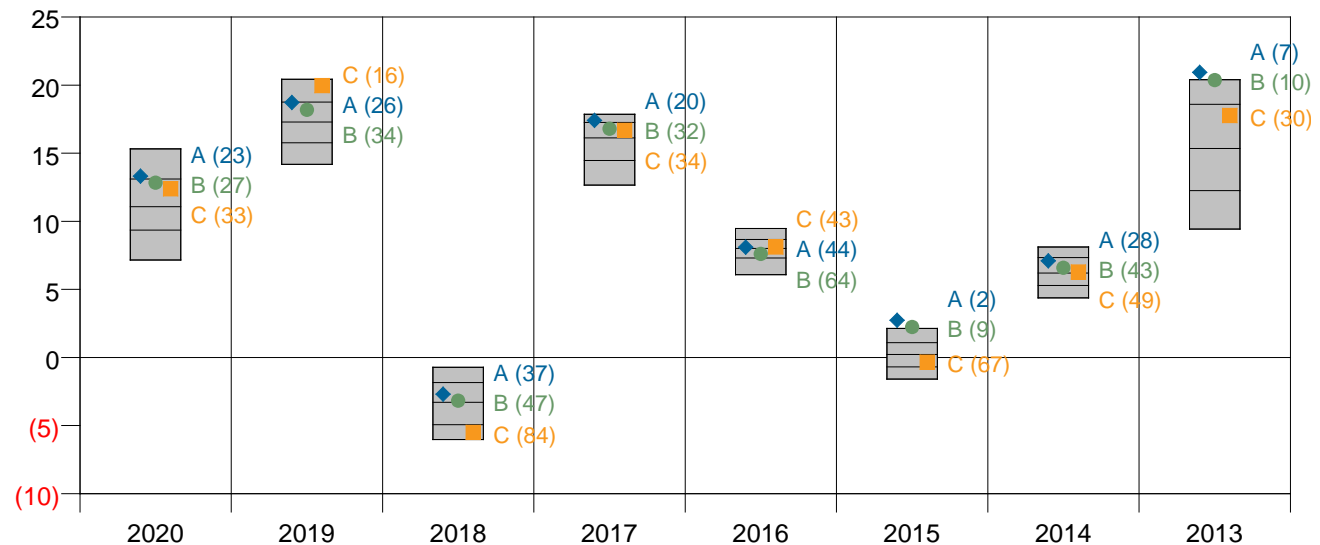
Group: Callan Public Fund Sponsor - Large (>1B)



Total Fund Performance – Calendar Years

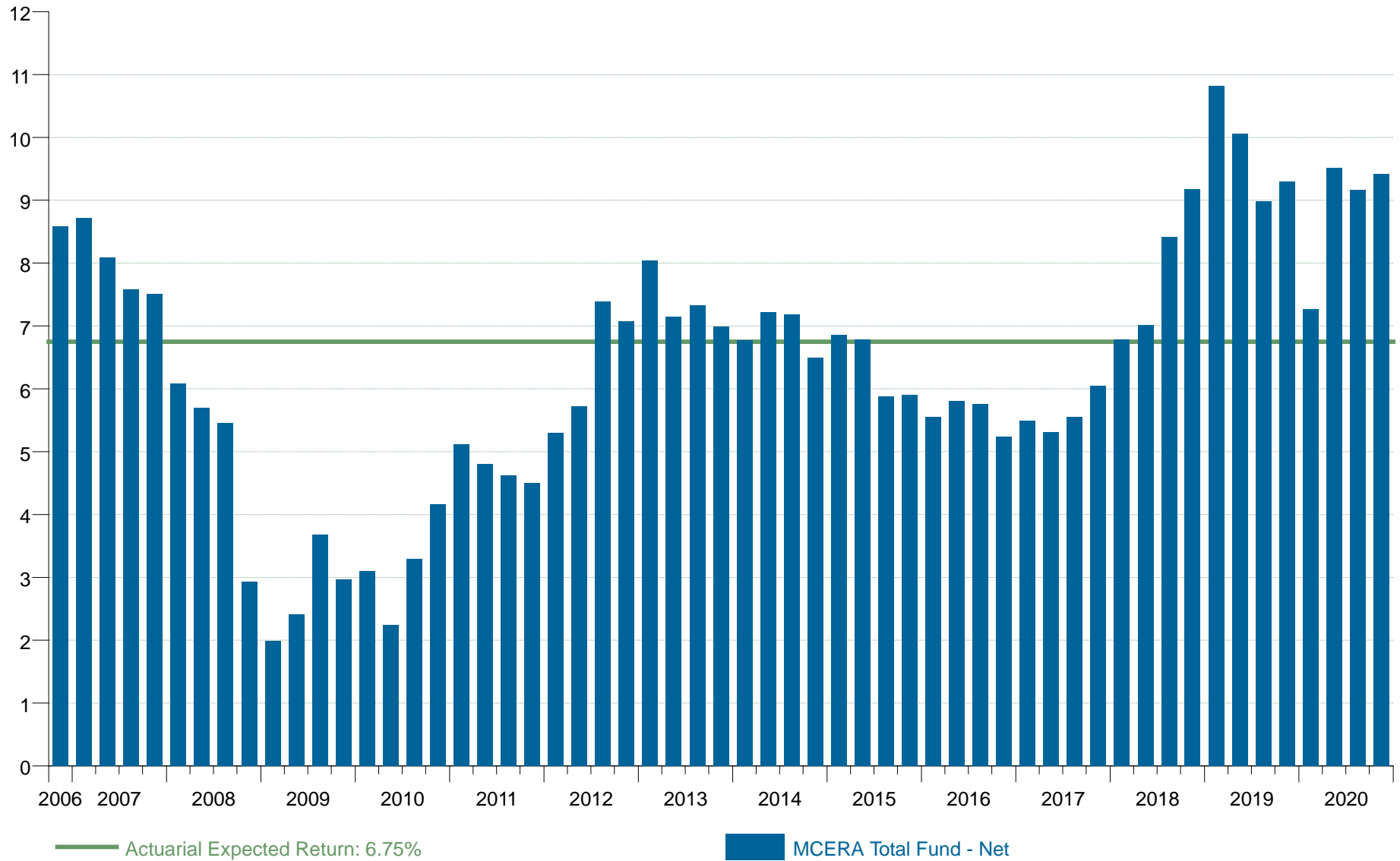
Returns for Periods Ended December 31, 2020

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



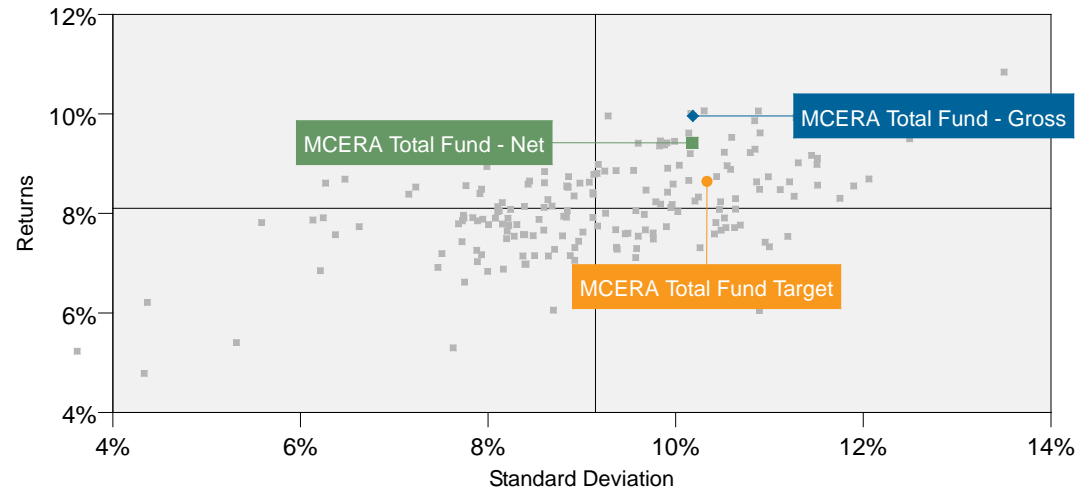
		2020	2019	2018	2017	2016	2015	2014	2013	
	10th Percentile	15.33	20.44	(0.71)	17.86	9.47	2.15	8.11	20.41	
	25th Percentile	13.11	18.76	(1.83)	17.27	8.67	1.10	7.34	18.59	
	Median	11.08	17.30	(3.28)	16.13	8.01	0.22	6.21	15.35	
	75th Percentile	9.35	15.77	(4.93)	14.47	7.31	(0.67)	5.30	12.26	
	90th Percentile	7.16	14.18	(6.02)	12.66	6.08	(1.58)	4.38	9.44	
MCERA Total Fund - Net	Total Fund - Gross	◆ A	13.32	18.73	(2.68)	17.41	8.10	2.73	7.10	20.94
	MCERA Total Fund - Net	● B	12.84	18.19	(3.16)	16.81	7.61	2.24	6.59	20.37
	Total Fund Target	■ C	12.39	19.97	(5.49)	16.68	8.13	(0.34)	6.28	17.78

Annualized 10 Year Total Fund Net Returns (Quarterly Roll)

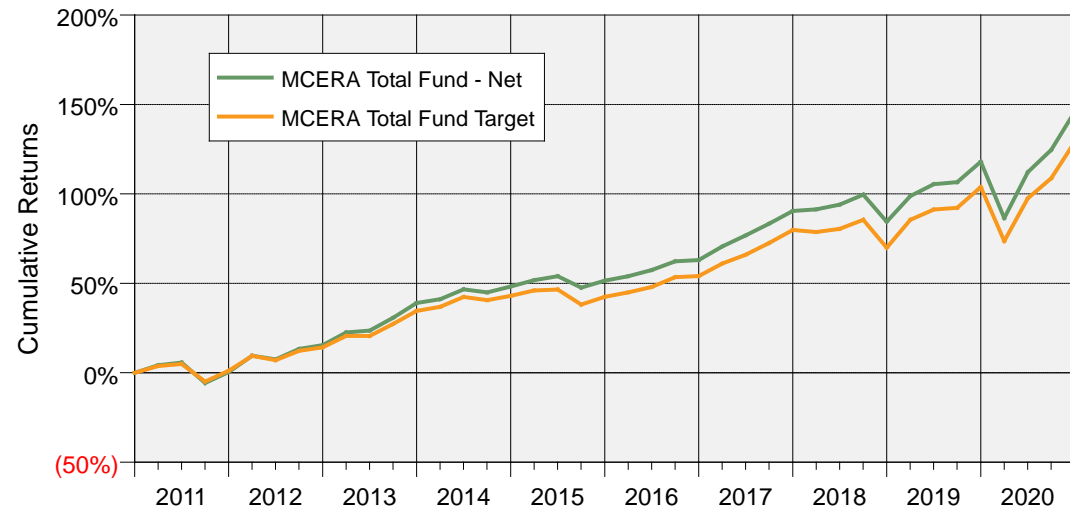


Total Fund – Cumulative Returns Relative to Target

Ten Year Annualized Risk vs. Return
As of December 31, 2020



Total Fund Cumulative Returns vs. Target
10 Years Ended December 31, 2020



Watchlist

Investment Manager Monitoring Summary Report Active Managers as of December 31, 2020

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	N/A	N/A		
Morgan Stanley International Value Equity <i>MSCI EAFE Index</i>						Yes - Org/Team	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		
Parametric Emerging Markets Equity <i>MSCI Emerging Markets Index</i>						Yes	1Q15
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>						No	
Invesco Balanced Risk Commodity Fund <i>Bloomberg Commodity Index</i>				N/A	N/A	No	
KBI Global Natural Resources Fund <i>S&P Global Natural Resource Index</i>			N/A	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

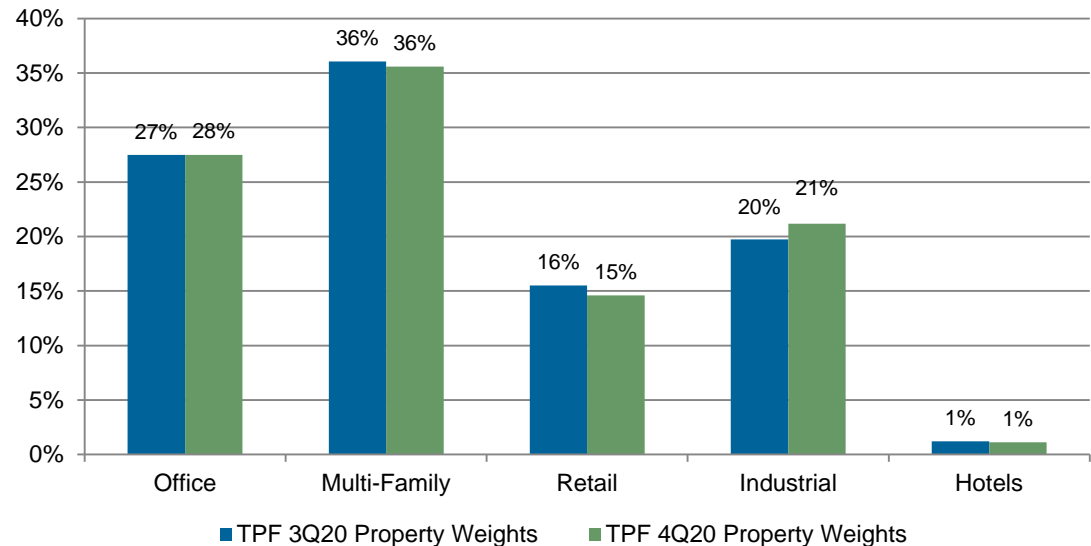
Investment Manager	3 Year Net Return Trails Benchmark by more than 100 bps (relative return shown in bps)	<u>AND</u>	3 Year Gross Return Ranks 75th - 100th%	<u>OR</u>	5 Year Net Return Trails Benchmark (relative return shown in bps)	<u>OR</u>	5 Year Gross Return Ranks 50th - 100th%	Qualify for Watchlist (Quantitative)
DFA Small Cap Core Equity <i>Russell 2000 Index</i>	N/A		N/A		N/A		N/A	No
Morgan Stanley International Value Equity <i>MSCI EAFE Index</i>	116		1st		24		1st	No
Artisan International Growth Equity <i>MSCI EAFE Index</i>	354		66th		86		84th	Yes
TimesSquare International Small Cap Equity <i>MSCI EAFE Small Cap Index</i>	N/A		N/A		N/A		N/A	No
Parametric Emerging Markets Equity <i>MSCI Emerging Markets Index</i>	-577		88th		-496		88th	Yes
Wellington Core Plus Fixed Income <i>Bloomberg Barclays Aggregate Index</i>	126		19th		152		30th	No
Western Asset Intermediate Credit Fixed Income <i>Bloomberg Barclays Intermediate Credit Index</i>	89		1st		87		1st	No
Colchester Global Fixed Income <i>FTSE World Government Bond Index</i>	84		25th		111		24th	No
Invesco Balanced Risk Commodity Fund <i>Bloomberg Commodity Index</i>	263		23rd		N/A		N/A	No
KBI Global Natural Resources Fund <i>S&P Global Natural Resource Index</i>	1087		N/A		N/A		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

UBS Trumbull Property Fund Snapshot

As of December 31, 2020

As of 4Q 2020	
Gross Asset Value	\$18.2 B
Net Asset Value	\$14.5 B
Leverage	19.0%
Number of Investments	182
Number of Investors	444
Redemption Queue	\$8.0 billion
4Q20 Redemption Queue Payout	\$30 million
Contribution Queue	\$0 million

Property Type Weights (Change from Prior Quarter)



- The Fund has a current redemption pool of \$8.0 billion. Following a 4Q 2020 redemption payment of \$30 million, the Fund paid out \$480 million in 2020, below its initial forecast of \$1.5 billion. The Fund anticipates a higher level of liquidity for redemption payments in 2021 as sales activity increases, and is targeting total 2021 redemption payments of \$1.5 billion. In January 2021, the Fund made a \$175 million redemption payment.
 - MCERA submitted a partial redemption request for \$20 million in January 2020 and received \$301,570.38 on 9/30/20.
 - Redemption requests must be submitted at least 60 days prior to the end of the quarter and may be withdrawn no later than 14 days prior to the end of the quarter.
- In September 2019, the fund announced investors would have a choice between two fee incentives: loyalty incentive (discounted fees of 15% over 3 years or 25% over 4 years) and top-up incentive (\$0 base fee on additional dollars deposited). These are available for election until January 2021.
 - The amount of client assets in the Loyalty Fee Program is \$4.6 billion.
 - MCERA elected for the 4 year/25% discount loyalty incentive on approximately \$100 million NAV.

NFI-ODCE Funds - Net of Fee Returns

As of December 31, 2020

Fund	Last Quarter	Last Year	Last 3 Years	Last 5 Years
AEW	1.65%	0.62%	4.25%	5.48%
AFL-CIO	n/a	n/a	n/a	n/a
ARA	1.17%	0.58%	4.46%	5.28%
ASB	0.90%	1.51%	3.77%	3.97%
Barings	0.28%	-0.12%	4.20%	5.65%
BGO	0.90%	0.98%	4.25%	5.38%
Blackrock	0.81%	2.10%	5.09%	6.76%
CBRE	1.91%	3.55%	6.79%	8.38%
CIM Group	1.54%	-2.93%	4.78%	--
Clarion	1.83%	1.45%	5.49%	6.54%
DWS	0.78%	1.12%	4.90%	5.84%
Everwest	1.25%	1.34%	4.05%	5.72%
GSAM	2.24%	0.68%	4.41%	6.07%
Heitman	1.66%	-1.04%	2.33%	4.43%
Intercontinental	0.48%	1.05%	6.13%	7.38%
Invesco	1.44%	-2.31%	3.90%	5.51%
JP Morgan	1.69%	0.42%	3.55%	4.81%
LaSalle	n/a	n/a	n/a	n/a
MetLife	1.13%	-0.03%	4.65%	5.85%
MSIM	1.46%	1.25%	5.08%	6.62%
NYLIM	0.97%	1.74%	5.60%	6.80%
PGIM	1.32%	1.70%	4.95%	5.88%
Principal	1.63%	0.40%	4.65%	6.10%
Stockbridge	1.22%	2.19%	5.52%	6.77%
TA Realty	3.51%	5.52%	-	-
UBS	-2.08%	-4.74%	-0.60%	1.90%

Rent Collections

AEW 4Q:

Multifamily: 97%

Industrial: 96%

Office: 95%

Retail: 97%

UBS 4Q:

Multifamily: 95%

Industrial 99%

Office: 97%

Retail: 85%

NFI-ODCE Funds - Gross of Fee All Sector Returns

As of December 31, 2020

Fund	Retail 4Q 2020	Apartment 4Q 2020	Industrial 4Q 2020	Office 4Q 2020
AEW	-3.22%	0.52%	5.41%	1.13%
AFL-CIO	n/a	n/a	n/a	n/a
ARA	0.16%	-0.14%	4.27%	0.82%
ASB	-0.89%	0.50%	5.27%	0.37%
Barings	-0.09%	0.59%	6.43%	-2.10%
BGO	1.42%	-0.97%	3.98%	0.80%
Blackrock	0.70%	0.50%	0.70%	0.03%
CBRE	0.36%	1.04%	2.81%	1.02%
CIM Group	2.06%	2.56%	4.43%	-0.42%
Clarion	-0.22%	1.23%	4.81%	-0.39%
DWS	-1.71%	1.11%	2.39%	0.68%
Everwest	-0.04%	2.24%	3.62%	-0.81%
GSAM	1.23%	2.28%	7.32%	0.21%
Heitman	0.88%	1.27%	2.63%	0.41%
Intercontinental	0.05%	0.65%	3.24%	0.29%
Invesco	0.42%	1.27%	4.40%	0.28%
JP Morgan	-0.21%	1.01%	4.89%	1.79%
LaSalle	n/a	n/a	n/a	n/a
MetLife	1.02%	1.09%	2.81%	-0.51%
MSIM	-3.96%	0.81%	3.92%	0.12%
NYLIM	-1.04%	0.88%	4.32%	-0.92%
PGIM	-0.40%	0.56%	5.07%	0.31%
Principal	0.67%	0.62%	3.18%	2.15%
Stockbridge	0.80%	0.07%	3.40%	0.44%
TA Realty	1.52%	1.82%	6.63%	-1.94%
UBS	-7.78%	0.23%	2.60%	-3.04%

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

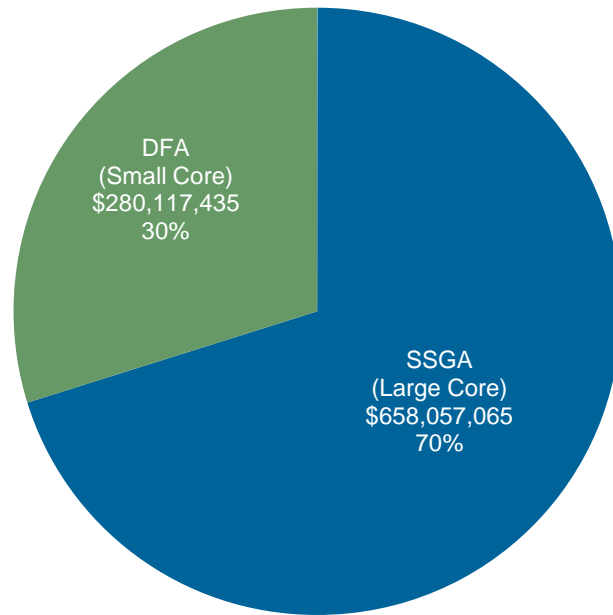
As of December 31, 2020

Fund	Fund Allocation Weight	Retail 4Q 2020	Retail 3Q 2020	Retail 2Q 2020	Retail 1Q 2020
AEW	16.49%	-3.22%	-1.07%	-0.06%	-8.01%
AFL-CIO	n/a	n/a	-0.48%	-4.26%	-0.08%
ARA	17.09%	0.16%	-1.19%	-2.60%	-0.09%
ASB	14.07%	-0.89%	-1.74%	-1.77%	-2.72%
Barings	15.45%	-0.09%	-0.87%	-0.76%	0.56%
BGO	10.29%	1.42%	1.05%	-1.57%	0.63%
Blackrock	15.97%	0.70%	0.49%	-0.64%	1.03%
CBRE	14.30%	0.36%	0.59%	-6.22%	-2.30%
CIM Group	11.83%	2.06%	n/a	n/a	n/a
Clarion	11.10%	-0.22%	-1.72%	-6.01%	-1.04%
DWS	15.53%	-1.71%	-1.13%	-3.72%	-0.85%
Everwest	19.43%	-0.04%	-0.26%	-5.13%	-0.05%
GSAM	11.00%	1.23%	0.90%	-4.03%	-0.33%
Heitman	17.27%	0.88%	-0.08%	-8.29%	-14.08%
Intercontinental	2.20%	0.05%	0.13%	-3.48%	2.00%
Invesco	13.40%	0.42%	-0.70%	-6.40%	-0.22%
JP Morgan	22.72%	-0.21%	-0.76%	-10.42%	-0.63%
LaSalle	n/a	n/a	-2.42%	-3.38%	-1.10%
MetLife	11.60%	1.02%	-0.86%	-5.63%	-1.96%
MSIM	11.50%	-3.96%	0.18%	-9.23%	-5.21%
NYLIM	3.29%	-1.04%	1.17%	-1.20%	-0.98%
PGIM	12.55%	-0.40%	-1.76%	-3.34%	0.21%
Principal	13.91%	0.67%	-0.82%	-2.33%	-1.62%
Stockbridge	15.89%	0.80%	0.66%	-4.87%	0.86%
TA Realty	6.67%	1.52%	0.69%	-3.85%	0.98%
UBS	14.60%	-7.78%	-3.30%	-5.34%	-2.90%

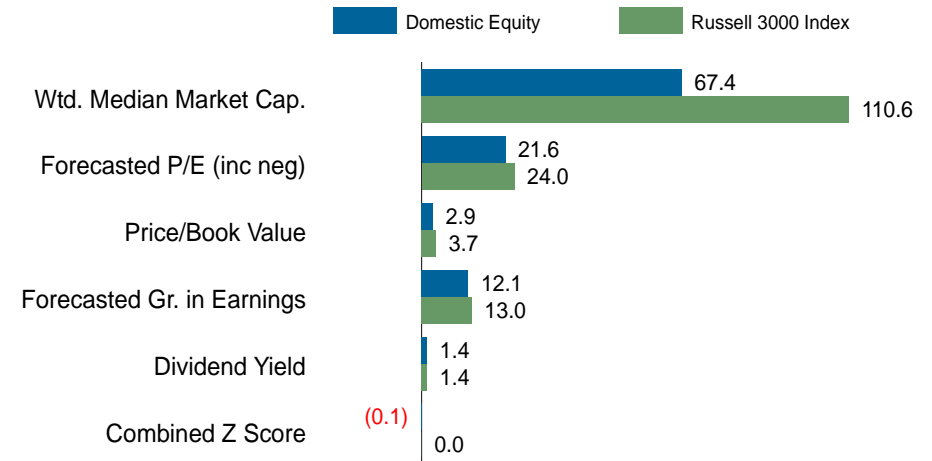
Callan

MCERA Asset Class Review

Domestic Equity Composite



Portfolio Characteristics as of December 31, 2020

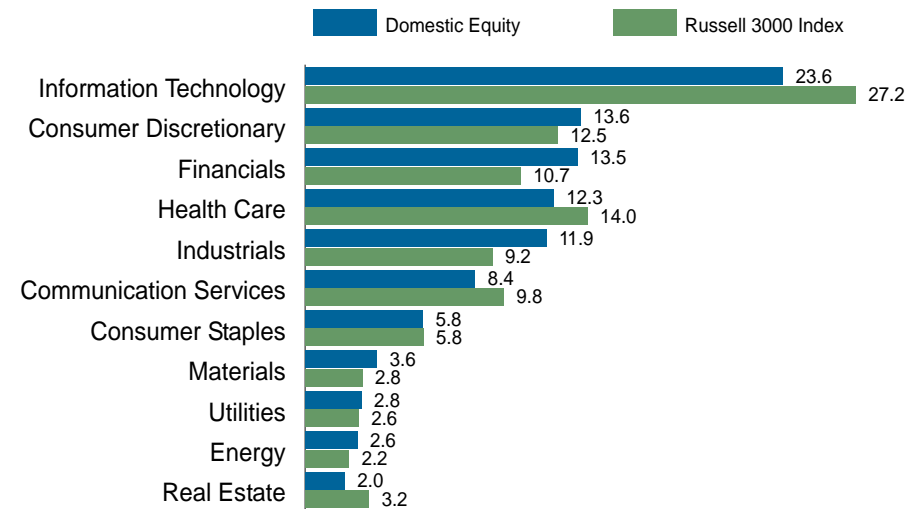


Style Exposure Matrix

Holdings as of December 31, 2021

	-- Domestic Equity -- Russell 3000 Index			
Large	14.1% (85)	19.8% (103)	32.8% (85)	66.8% (273)
	16.1% (86)	22.6% (105)	40.4% (109)	79.2% (300)
Mid	3.3% (120)	3.1% (109)	5.0% (129)	11.4% (358)
	4.1% (154)	4.7% (198)	6.1% (248)	14.9% (600)
Small	4.7% (227)	7.9% (352)	6.8% (300)	19.4% (879)
	1.3% (293)	2.2% (513)	1.8% (396)	5.4% (1202)
Micro	1.2% (325)	0.8% (195)	0.5% (92)	2.5% (612)
	0.2% (371)	0.2% (380)	0.1% (150)	0.6% (901)
Total	23.3% (757)	31.6% (759)	45.2% (606)	100.0% (2122)
	21.8% (904)	29.7% (1196)	48.5% (903)	100.0% (3003)
	Value	Core	Growth	Total

Sector Allocation as of December 31, 2020



Domestic Equity Composite

Returns and Rankings for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Equity - Net	17.58	17.85	12.83	14.43	12.81
Domestic Equity Target	14.68	20.89	14.49	15.43	13.79
Large Cap Equity - Net	12.16	18.65	14.22	15.26	13.59
SSGA - Net	12.15	18.33	14.14	15.20	13.88
S&P 500 Index	12.15	18.40	14.18	15.22	13.88
Ranking vs. Large Cap Equity	62	53	52	50	52
Small Cap Equity - Net	30.43	14.26	8.30	11.60	10.17
DFA Small Core - Net	30.07	11.74	--	--	--
Russell 2000 Index	31.37	19.96	10.25	13.26	11.20
Ranking vs. Small Cap Equity	30	55	--	--	--

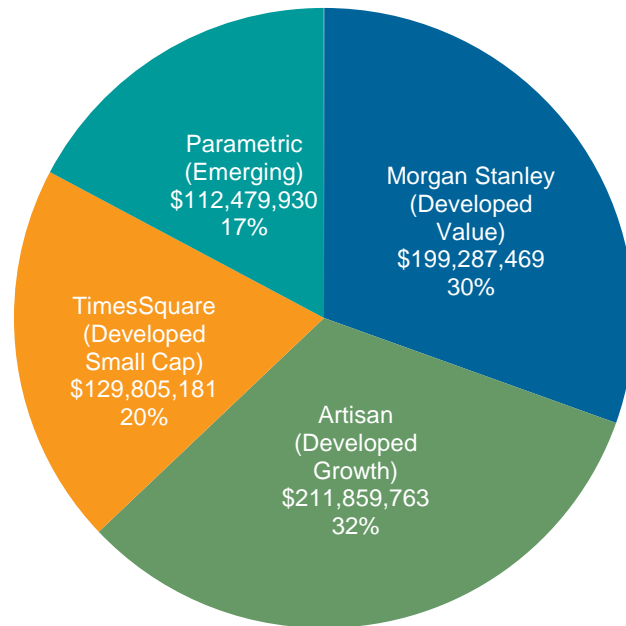
Returns and Rankings for Calendar Years

	2020	2019	2018	2017	2016	2015
Domestic Equity - Net	17.85	28.76	(5.34)	20.61	13.26	(1.69)
Domestic Equity Target	20.89	31.02	(5.24)	21.13	12.74	0.48
Large Cap Equity - Net	18.65	31.63	(4.59)	21.86	12.01	1.43
SSGA - Net	18.33	31.43	(4.39)	21.82	12.00	1.41
S&P 500 Index	18.40	31.49	(4.38)	21.83	11.96	1.38
Ranking vs. Large Cap Equity	53	43	46	51	35	50
Small Cap Equity - Net	14.26	21.86	(8.79)	17.50	15.99	(6.82)
DFA Small Core - Net	11.74	21.80	--	--	--	--
Russell 2000 Index	19.96	25.52	(11.01)	14.65	21.31	(4.41)
Ranking vs. Small Cap Equity	55	69	--	--	--	--

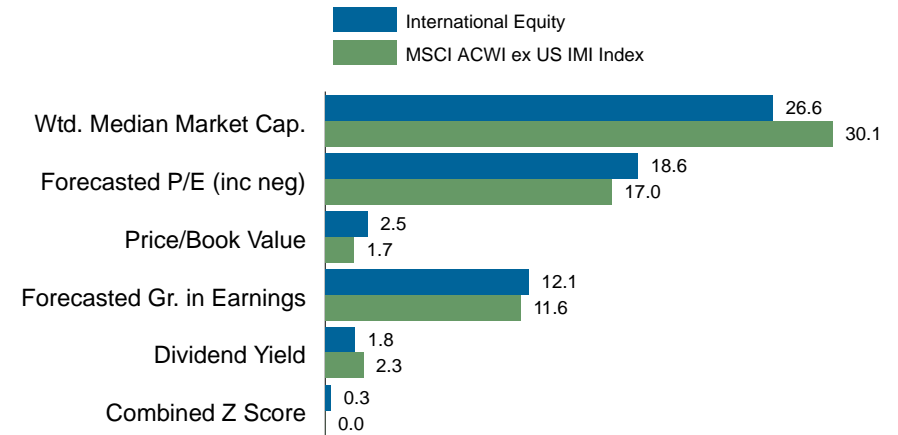
- The domestic equity composite outperformed the index in the fourth quarter. DFA lagged the Russell 2000 benchmark for the quarter and year. The majority of relative underperformance came from the fund's holdings in Industrials and Consumer Discretionary as well as the exclusion of stocks with the lowest profitability and highest relative price.

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.

International Equity Composite



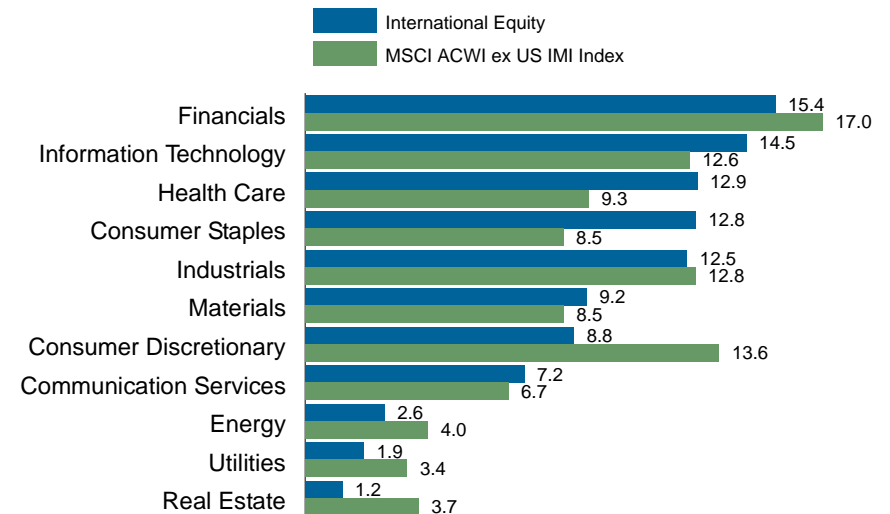
Portfolio Characteristics as of December 31, 2020



Region & Style Exposure Matrix Holdings as of December 31, 2021

	<div>-- International Equity</div> <div>-- MSCI ACWI ex US IMI Index</div>			
	Value	Core	Growth	Total
Europe	7.5% (20) 9.6%	19.4% (47) 11.9%	27.7% (55) 19.1%	54.6% (122) 40.6%
N. America	0.0% (2) 1.0%	0.9% (2) 1.3%	4.3% (8) 1.6%	5.2% (12) 3.8%
Pacific	1.0% (7) 7.6%	2.6% (12) 7.7%	11.3% (27) 10.5%	14.9% (46) 25.8%
Emerging	5.2% (604) 7.4%	6.7% (528) 7.9%	13.5% (299) 14.5%	25.3% (1431) 29.8%
Total	13.6% (633) 25.6%	29.6% (589) 28.8%	56.8% (389) 45.6%	100.0% (1611) 100.0%

Sector Allocation as of December 31, 2020



International Equity Composite

Returns and Rankings for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
International Equity - Net	14.37	10.79	5.78	8.69	6.83
International Equity Target	17.22	11.12	4.83	8.98	5.06
 Morgan Stanley - Net	 14.24	 11.99	 5.43	 7.69	 6.25
MSCI EAFE Index	16.05	7.82	4.28	7.45	5.51
Ranking vs. Non-US Developed Value Equity	99	1	1	1	11
 Artisan - Net	 9.07	 8.08	 7.81	 8.30	 7.64
MSCI EAFE Index	16.05	7.82	4.28	7.45	5.51
Ranking vs. Non-US Developed Growth Equity	98	96	66	84	45
 TimesSquare - Net	 18.70	 13.87	 --	 --	 --
MSCI EAFE Small Cap	17.27	12.34	4.85	9.40	7.85
TimesSquare - Gross (unlinked)	27	40	--	--	--
 Parametric EM - Net	 20.25	 4.02	 0.41	 7.85	 1.73
MSCI Emerging Markets Index	19.70	18.31	6.18	12.81	3.63
Ranking vs. Emerging Markets Equity	43	88	88	88	91

Returns and Rankings for Periods Ended December 31, 2020

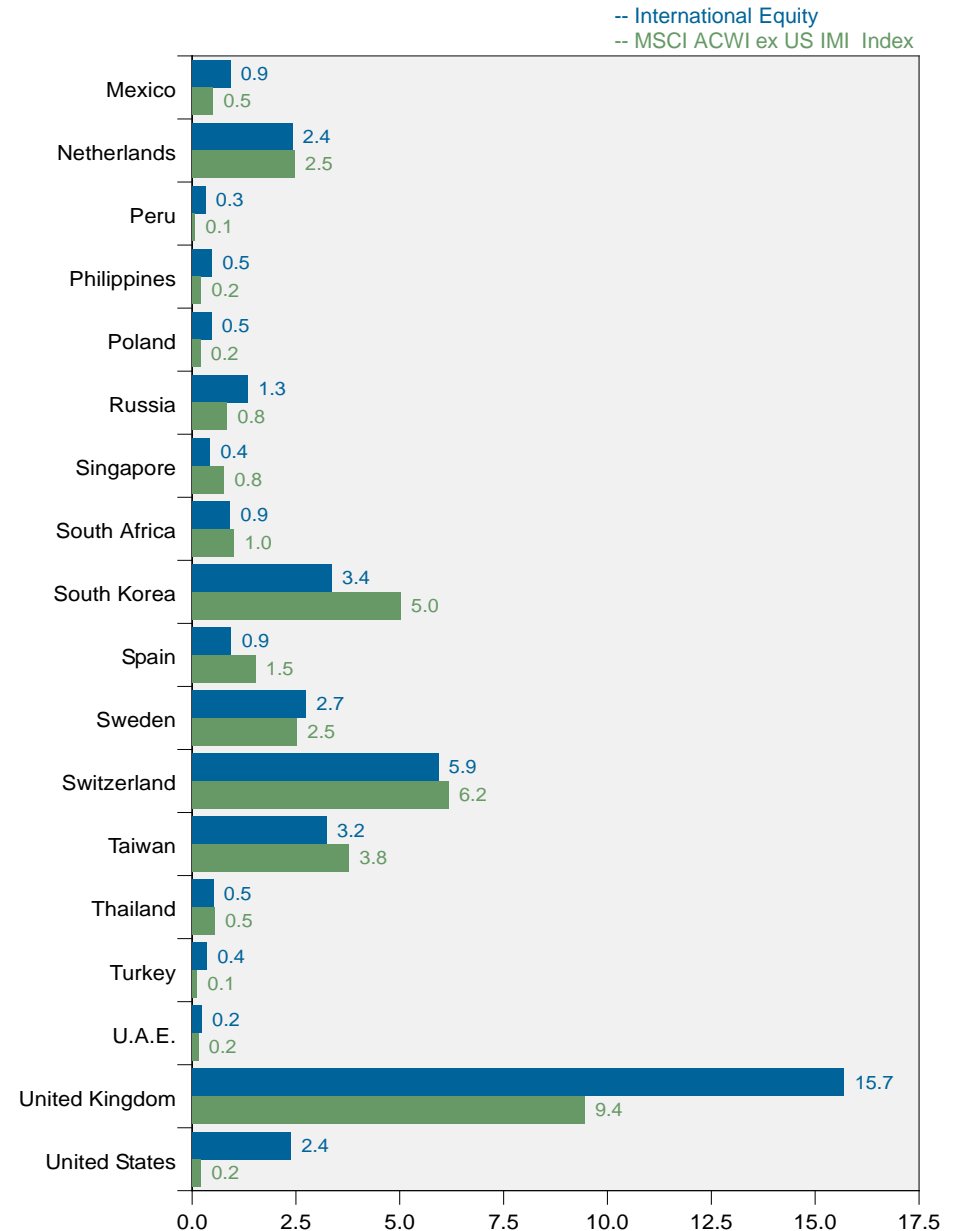
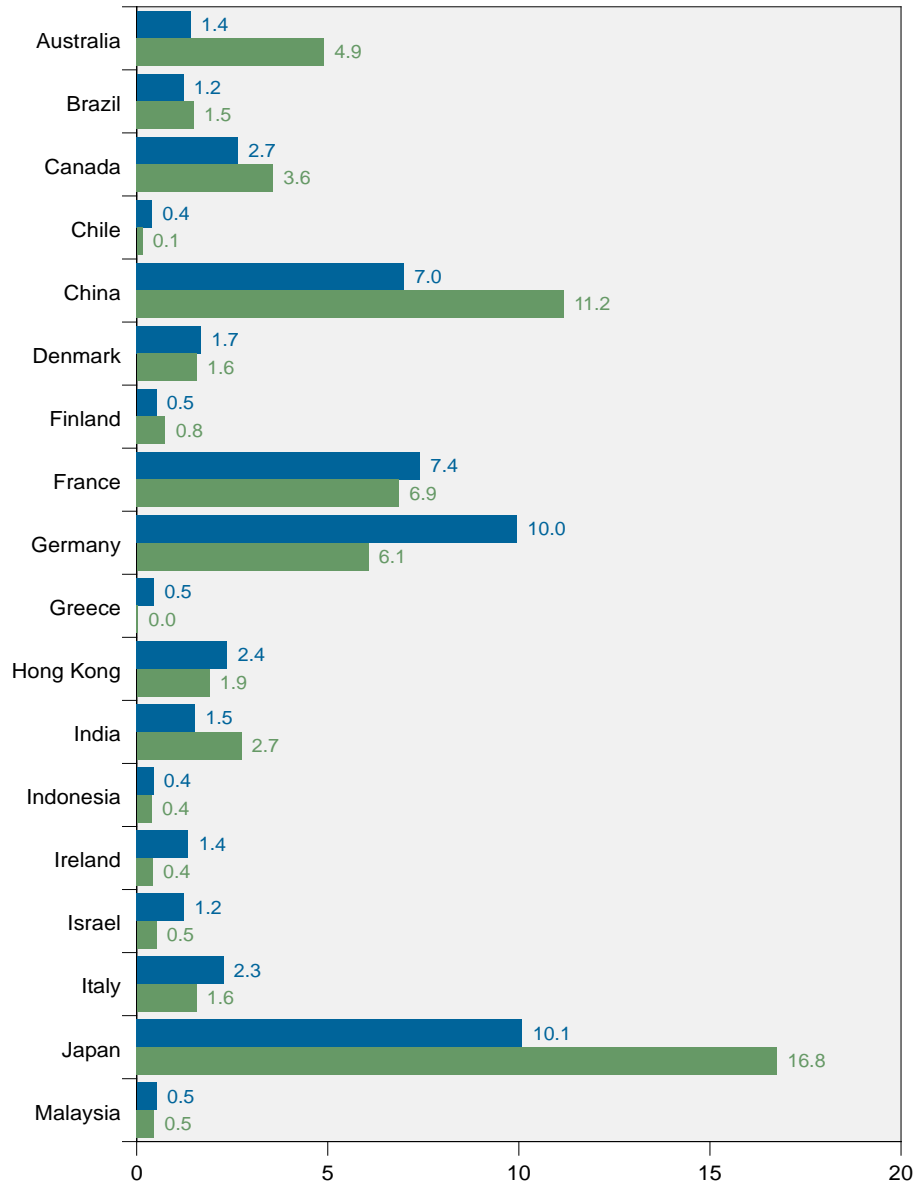
	2020	2019	2018	2017	2016
International Equity - Net	10.79	23.52	(13.51)	28.92	(0.61)
International Equity Target	11.12	21.63	(14.76)	27.81	4.41
 Morgan Stanley - Net	 11.99	 20.92	 (13.46)	 25.42	 (1.45)
MSCI EAFE Index	7.82	22.01	(13.79)	25.03	1.00
Ranking vs. Non-US Developed Value Equity	1	34	14	41	95
 Artisan - Net	 8.08	 29.61	 (10.56)	 31.24	 (9.41)
MSCI EAFE Index	7.82	22.01	(13.79)	25.03	1.00
Ranking vs. Non-US Developed Growth Equity	96	26	13	25	99
 TimesSquare - Net	 13.87	 --	 --	 --	 --
MSCI EAFE Small Cap	12.34	24.96	(17.89)	33.01	2.18
TimesSquare - Gross (unlinked)	40	--	--	--	--
 Parametric EM - Net	 4.02	 12.61	 (13.57)	 27.62	 12.95
MSCI Emerging Markets Index	18.31	18.44	(14.57)	37.28	11.19
Ranking vs. Emerging Markets Equity	88	83	25	83	22

- The International Equity composite underperformed on a relative basis for the quarter and slightly lagged for the year.
 - Morgan Stanley: poor stock selection within materials was a significant detractor along with the fund's overweight and selection within health care. A relative overweight and poor stock selection within Germany was also a headwind in the fourth quarter.
 - Artisan: holdings within Europe and Emerging Markets were the major driving factors in the fund's underperformance. Poor selection within Financials proved to be a major headwind for relative performance as well.
 - TimesSquare: Outperformance was mainly from stock selection in Japan and Australia.
 - Parametric: An underweight to China had a positive impact on performance this quarter as potential new domestic regulations to curb online platform monopolies as well as international regulations from the U.S. banning trading in certain Chinese securities weighed on the country's returns.

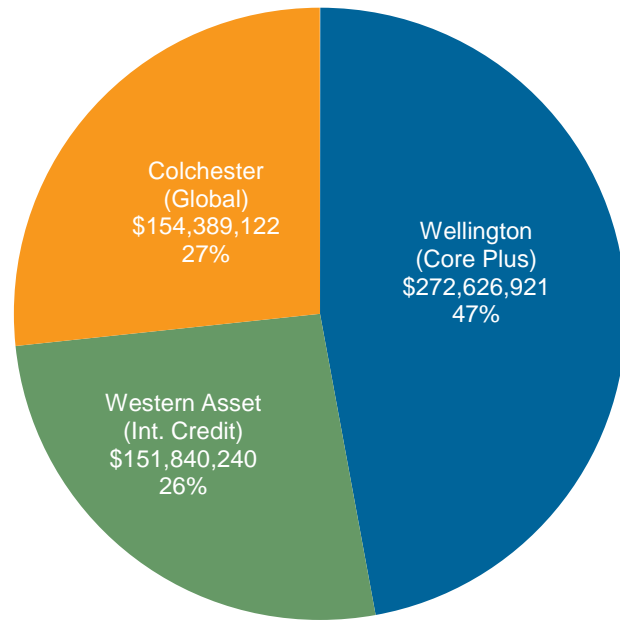
The International Equity Target is comprised of 100% MSCI EAFE Index through 06/30/2010, and 100% MSCI ACWI ex-US IMI Index thereafter.

International Equity Composite

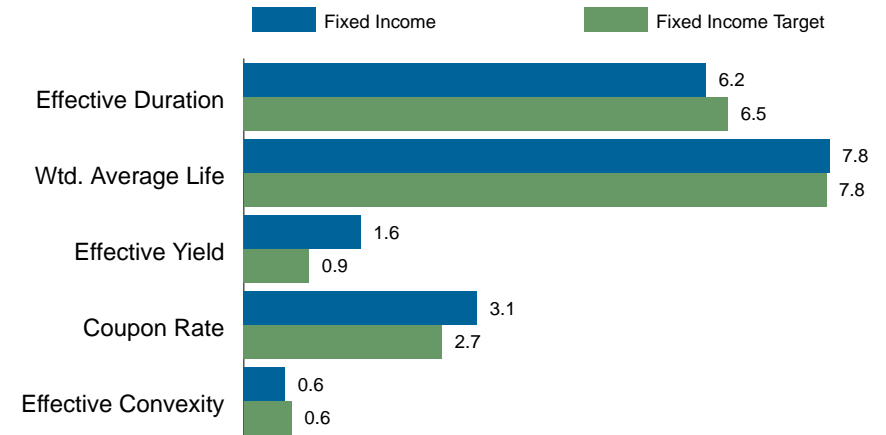
Country Allocations as of December 31, 2020



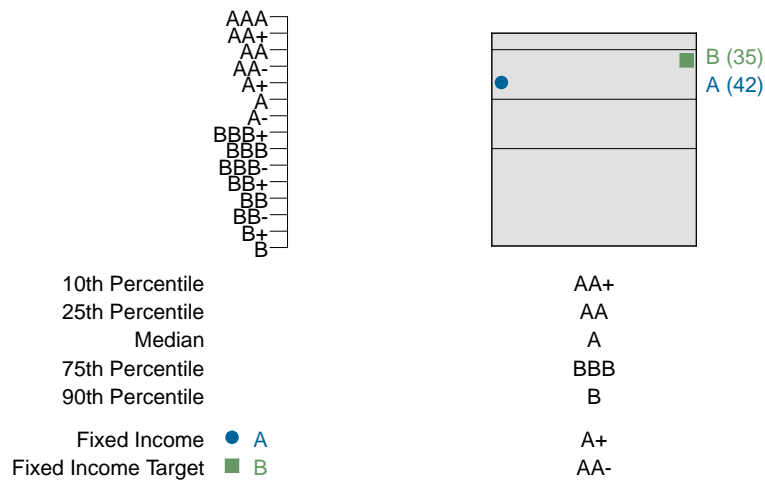
Fixed Income Composite



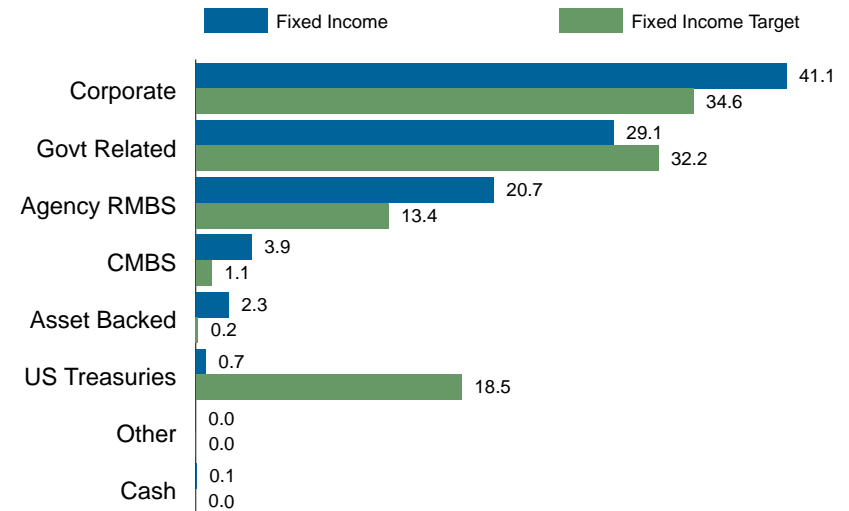
Portfolio Characteristics as of December 31, 2020



Quality Rating as of December 31, 2021 Total Domestic Fixed Income Database



Sector Allocation as of December 31, 2020



Fixed Income Composite

Returns and Rankings for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Fixed Income - Net	2.53	11.47	6.47	5.76	4.62
Fixed Income Target	1.41	8.10	5.30	4.63	3.62
Wellington - Net	1.60	9.91	6.38	5.75	4.90
Bloomberg Aggregate Index	0.67	7.51	5.34	4.44	3.84
Ranking vs. Core Plus Fixed Income	73	26	19	30	37
Western Asset - Net	2.90	9.96	6.34	5.61	4.86
Bloomberg Intermediate Credit Index	1.55	7.08	5.46	4.74	4.18
Ranking vs. Intermediate Fixed Income	1	2	1	1	1
Colchester - Net	5.41	11.12	5.80	5.89	--
FTSE World Government Bond Index	2.77	10.11	4.96	4.78	2.32
Ranking vs. Global Fixed Income (Uhedged)	13	30	25	24	--

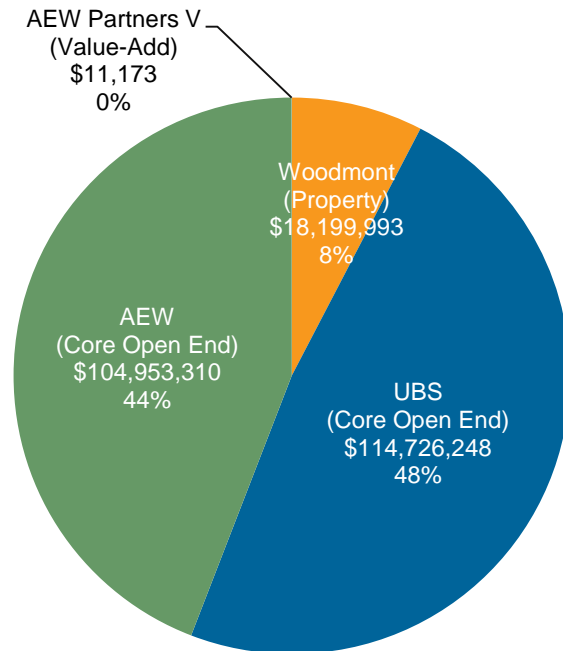
Returns and Rankings for Calendar Years

	2020	2019	2018	2017	2016	2015
Fixed Income - Net	11.47	8.65	(0.35)	5.14	4.26	(0.89)
Fixed Income Target	8.10	8.21	(0.17)	4.55	2.70	(0.39)
Wellington - Net	9.91	9.94	(0.37)	4.90	4.72	0.09
Bloomberg Aggregate Index	7.51	8.72	0.01	3.54	2.65	0.55
Ranking vs. Core Plus Fixed Income	26	44	42	41	43	51
Western Asset - Net	9.96	9.78	(0.37)	4.12	4.89	0.95
Bloomberg Intermediate Credit Index	7.08	9.52	0.01	3.67	3.68	0.90
Ranking vs. Intermediate Fixed Income	2	1	99	2	1	59
Colchester - Net	11.12	7.56	(0.90)	8.20	3.87	(5.95)
FTSE World Government Bond Index	10.11	5.90	(0.84)	7.49	1.60	(3.57)
Ranking vs. Global Fixed Income (Uhedged)	30	58	18	35	15	90

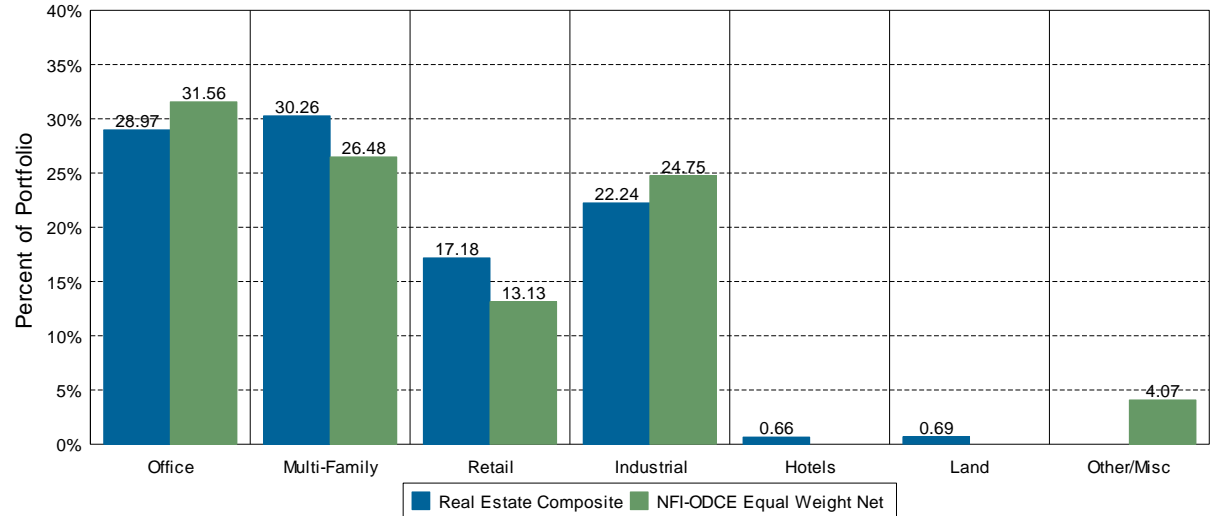
- The Fixed Income composite outperformed its target in the fourth quarter.
 - Wellington: overweight allocations to industrials, high yield credit, and emerging markets debt were tailwinds to performance.
 - Western Asset: issue selection within financials and consumer non-cyclicals added to the fund's outperformance. An overweight to lower quality issues also continued to benefit relative returns.
 - Colchester: currency exposure continues to be a large contributor - particularly the Swedish Krona and Norwegian Krone. A relative overweight to Mexican bonds and US TIPS also boosted returns.

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.

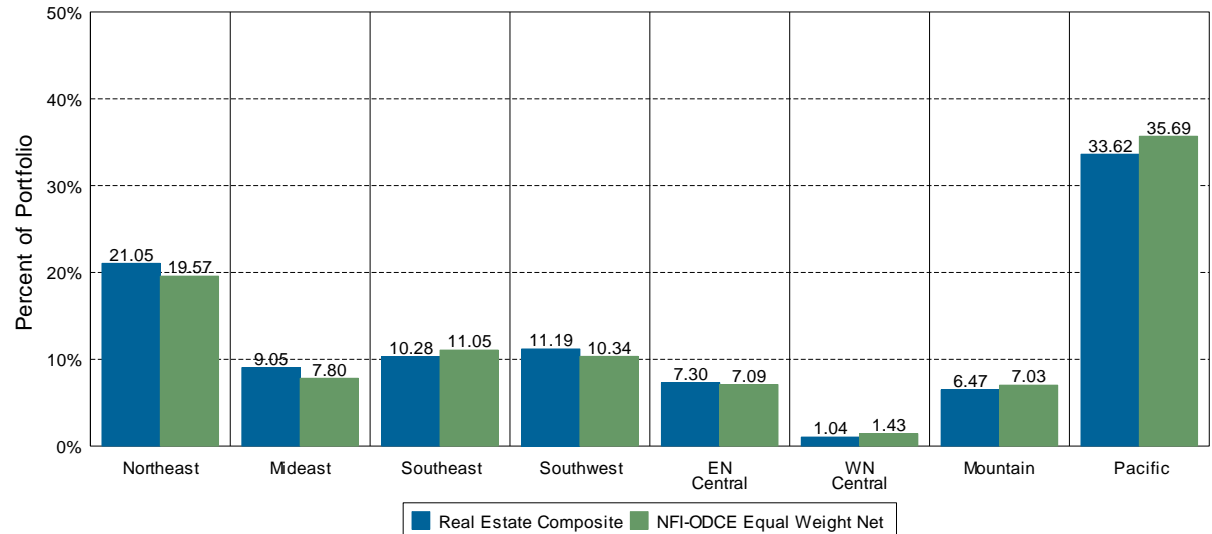
Real Estate Composite



Diversification by Property Type as of December 31, 2020



Diversification by Geographic Region as of December 31, 2020



Real Estate Composite

Returns and Rankings for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Real Estate - Net	(0.92)	(2.29)	1.54	3.46	9.82
Real Estate Target	1.16	0.75	4.38	5.67	9.01
AEW Core Property Trust - Net	1.63	0.57	4.18	5.40	--
NFI-ODCE Equal Wt Net Index	1.16	0.75	4.38	5.67	9.06
Ranking vs. Core Open End Funds	16	59	70	69	--
UBS Trumbull Property Fund - Net	(2.05)	(4.67)	(0.59)	1.90	--
NFI-ODCE Equal Wt Net Index	1.16	0.75	4.38	5.67	9.06
Ranking vs. Core Open End Funds	96	96	96	96	--

Returns and Rankings for Calendar Years

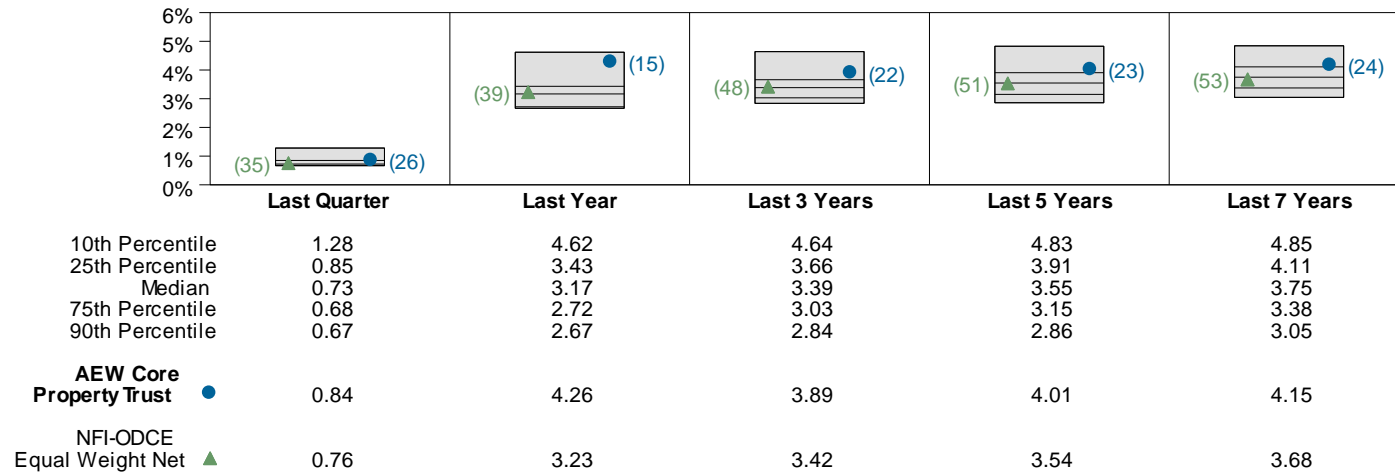
	2020	2019	2018	2017	2016	2015
Real Estate - Net	(2.29)	0.64	6.46	5.66	7.14	28.12
Real Estate Target	0.75	5.18	7.30	6.92	8.36	14.18
AEW Core Property Trust - Net	0.57	5.29	6.77	6.99	7.51	12.71
NFI-ODCE Equal Wt Net Index	0.75	5.18	7.30	6.92	8.36	14.18
Ranking vs. Core Open End Funds	56	72	72	46	82	78
UBS Trumbull Property Fund - Net	(4.67)	(2.88)	6.12	5.32	6.16	11.79
NFI-ODCE Equal Wt Net Index	0.75	5.18	7.30	6.92	8.36	14.18
Ranking vs. Core Open End Funds	96	97	83	88	90	83

- The AEW Core Property Trust's current leverage is 26.11% (NFI-ODCE leverage: 22%) and has an occupancy rate of 94%.
 - The industrial sector continues to lead performance for AEW while the office, and multifamily sectors also posted a positive appreciation return in the fourth quarter.
- The UBS Trumbull Property Fund's current leverage is 19.0% and has an occupancy rate of 91.0%.
 - UBS' performance this quarter was mainly impacted by negative appreciation for retail and office assets.

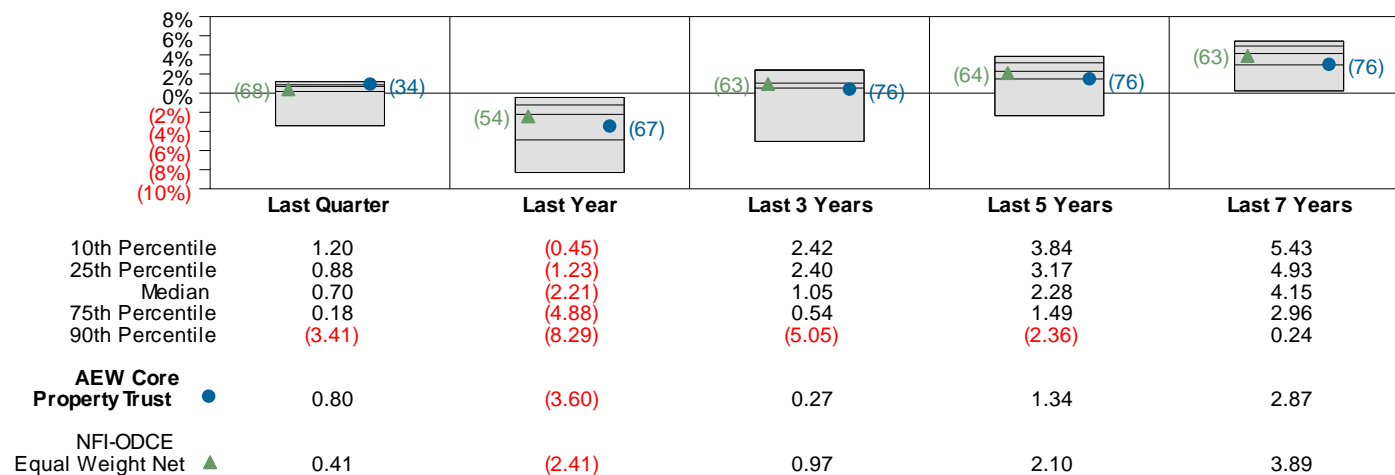
The Real Estate Target is comprised of the NCREIF Classic Index through 12/31/2004, NCREIF Total Property Index through 12/31/2014, and the NFI-ODCE Equal Weight Net thereafter.

AEW Income and Appreciation Returns

Income Rankings vs Callan Real Estate ODCE Periods ended December 31, 2020

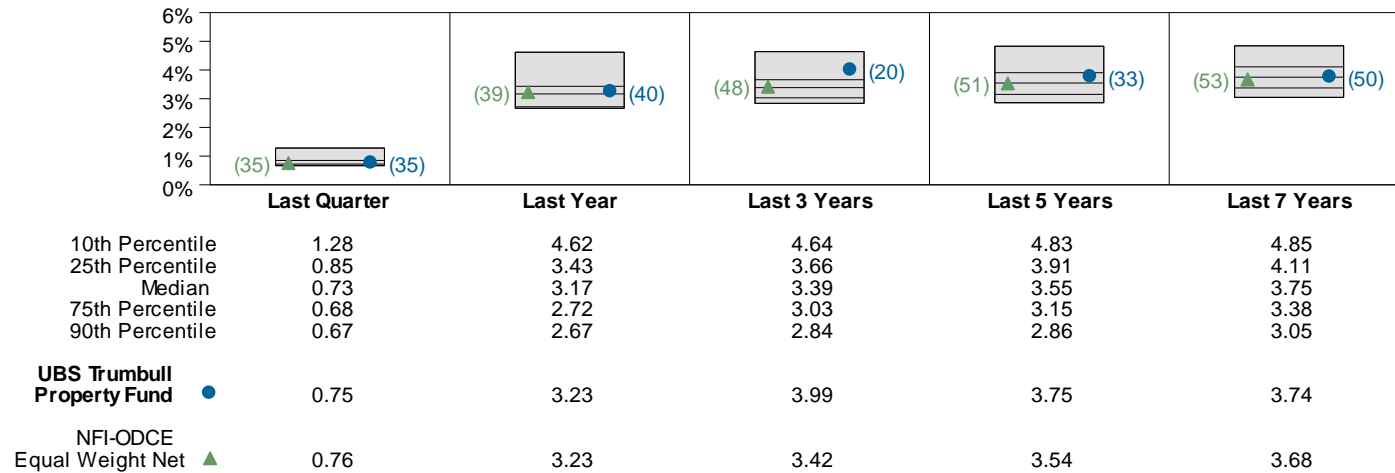


Appreciation Rankings vs Callan Real Estate ODCE Periods ended December 31, 2020

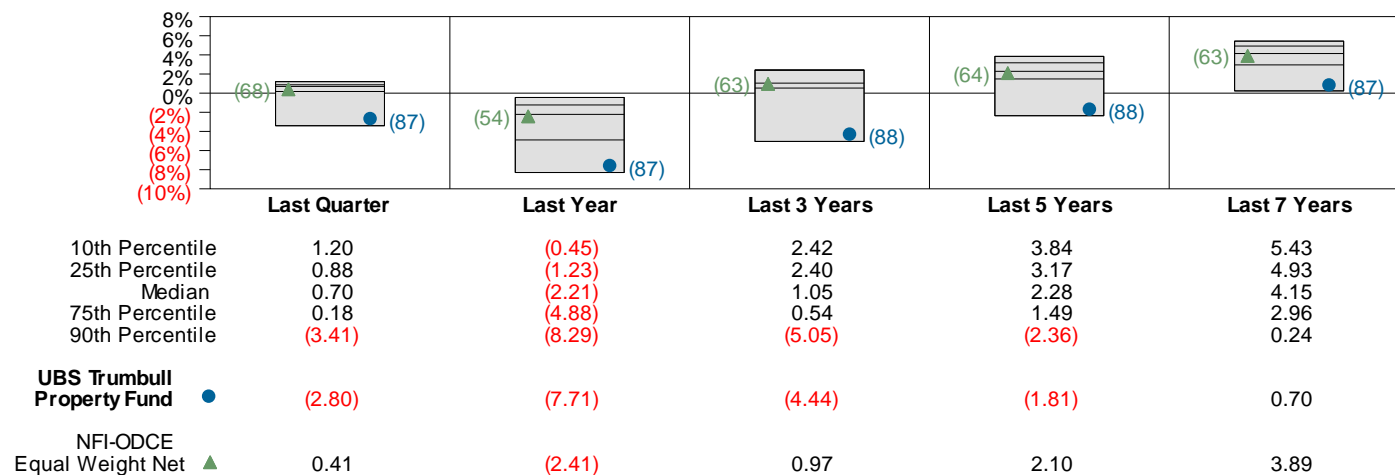


UBS Income and Appreciation Returns

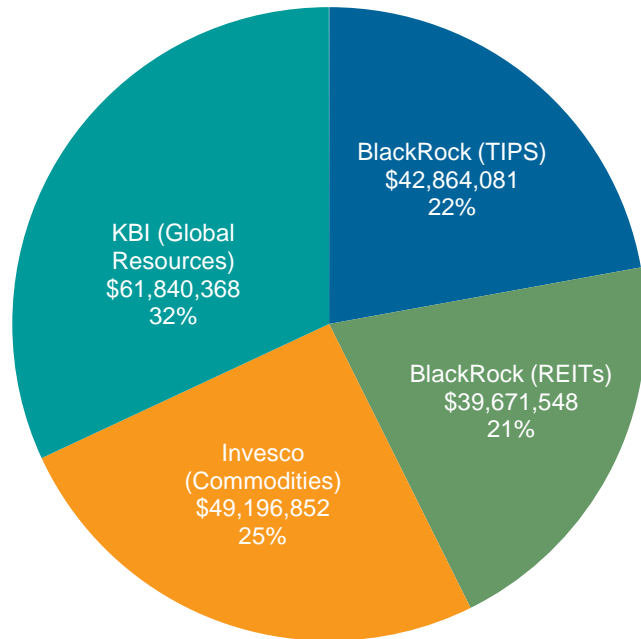
Income Rankings vs Callan Real Estate ODCE Periods ended December 31, 2020



Appreciation Rankings vs Callan Real Estate ODCE Periods ended December 31, 2020



Real Assets Composite



- The BlackRock TIPS and REITs Funds are passive.
- The Invesco Balanced Risk Commodities Fund outperformed primarily due to its holdings within agriculture and energy.
- All three strategies within the KBI Global Resources Solutions Fund (energy solutions, water, and agribusiness) outperformed the S&P Global Natural Resources Index with the energy efficiency (electric vehicle related names) and renewable energy (benefit from Biden administration) sub-segments continuing to contribute greatly to returns.

Returns and Rankings for Periods Ended December 31, 2020

	Last Quarter	Last Year	Last 3 Years	Last 4 Years
Real Assets - Net	14.26	11.08	5.70	6.66
Real Assets Target	11.62	0.57	2.08	3.52
BlackRock TIPS Index Fund - Net	1.64	11.17	6.04	5.32
Bloomberg US TIPS Index	1.62	10.99	5.92	5.18
Ranking vs. Real Returns Database	94	6	15	5
BlackRock REITs Index Fund - Net	12.87	(11.21)	1.53	2.63
S&P Dow Jones US Select REIT	12.92	(11.20)	1.54	2.10
MSCI US REIT Index	11.52	(7.57)	3.54	3.92
Ranking vs. Real Estate Mutual Funds	13	96	94	88
Invesco Commodities Fund - Net	16.54	7.58	0.10	1.39
Bloomberg Commodity Index	10.19	(3.12)	(2.53)	(1.49)
Ranking vs. Commodities Funds	34	2	32	33
KBI Global Resources - Net	23.98	29.17	11.25	14.45
S&P Global Natural Resources Index	21.74	(0.05)	0.38	5.39
KBI Custom Benchmark	29.93	46.83	17.69	18.74

Returns and Rankings Calendar Years

	2020	2019	2018	2017
Real Assets - Net	11.56	15.95	(7.59)	10.03
Real Assets Target	0.57	14.08	(7.27)	7.95
BlackRock TIPS Index Fund - Net	11.20	8.53	(1.12)	3.24
Bloomberg US TIPS Index	10.99	8.43	(1.26)	3.01
Ranking vs. Real Returns Database	24	37	43	47
BlackRock REITs Index Fund - Net	(11.16)	23.15	(4.16)	6.10
S&P Dow Jones US Select REIT Index	(11.20)	23.10	(4.22)	3.76
MSCI US REIT Index	(7.57)	25.84	(4.57)	5.07
Ranking vs. Real Estate Mutual Funds	96	89	23	41
Invesco Commodities Fund - Net	8.33	6.23	(10.99)	5.91
Bloomberg Commodity Index	(3.12)	7.69	(11.25)	1.70
Ranking vs. Commodities Funds	6	81	46	28
KBI Global Resources - Net	30.27	25.87	(13.86)	25.66
S&P Global Natural Resources Index	(0.05)	16.41	(13.08)	21.98
KBI Custom Benchmark	46.83	28.74	(13.77)	21.96

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

- 89% Paid-In through 9/30/20.
- 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.

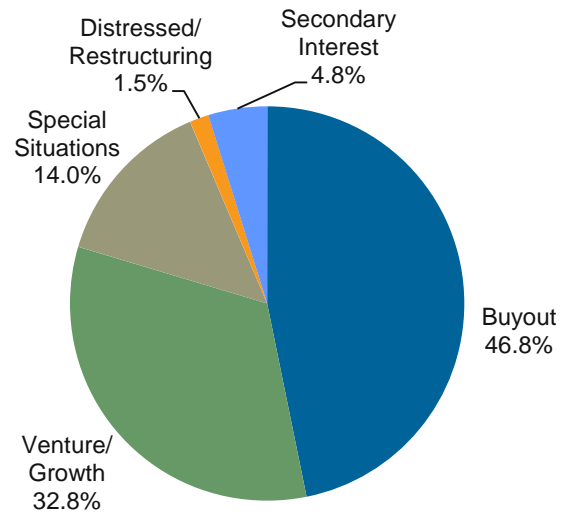
	September 30, 2020	Quarter Change	June 30, 2020
Summary			
Vintage Years	13 in 2008-2020		13 in 2008-2020
# Total Partnerships	360	-	360
# Active Partnerships	356	(1)	357
# Liquidated Partnerships	4	1	3
Changes in Value			
Capital Commitments	\$400,000,000	-	\$400,000,000
Paid-In Capital	\$356,093,592	\$8,476,454	\$347,617,138
Uncalled Capital	\$43,965,757	\$(8,476,454)	\$52,442,211
% Paid-In	89.02%	2.12%	86.90%
Distributed Capital	\$260,894,935	\$12,391,699	\$248,503,236
Net Asset Value	\$333,316,093	\$31,892,582	\$301,423,511
Total Realized and Unrealized Value	\$594,211,028	\$44,284,281	\$549,926,747
Ratios and Performance			
Distributions to Paid-In Capital (DPI)	0.73x	0.02x	0.71x
Residual Value to Paid-In Capital (RVPI)	0.94x	0.07x	0.87x
Total Value to Paid-In Capital (TVPI)	1.67x	0.09x	1.58x
Quartile Ranking	2nd		2nd
Net IRR	13.71%	1.02%	12.70%
Additional Performance Metrics			
Distribution Rate, as % of Beginning NAV		4.11%	
Unrealized Gain/(Loss), Dollars		\$35,807,827	
Unrealized Gain/(Loss), %		11.88%	

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

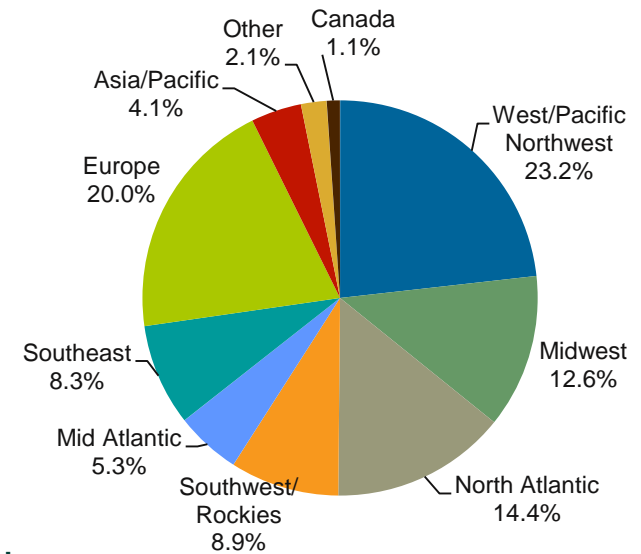
Uncalled capital above does not reflect currency fluctuations for Pathway's investments in foreign partnerships.

Private Equity Portfolio Exposure

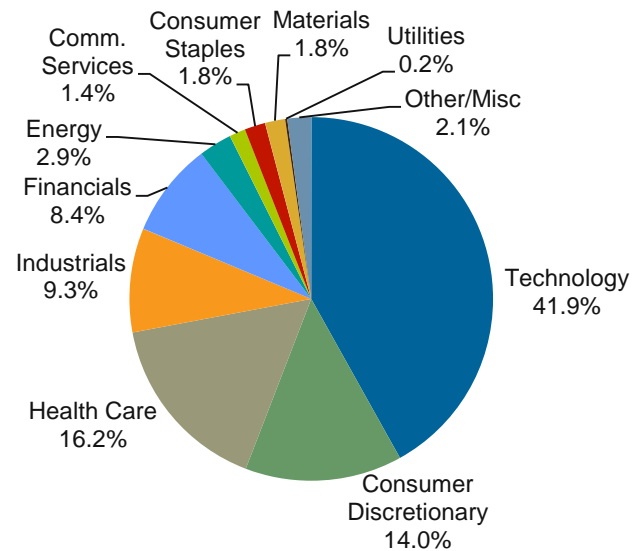
Strategy Mix by Net Asset Value



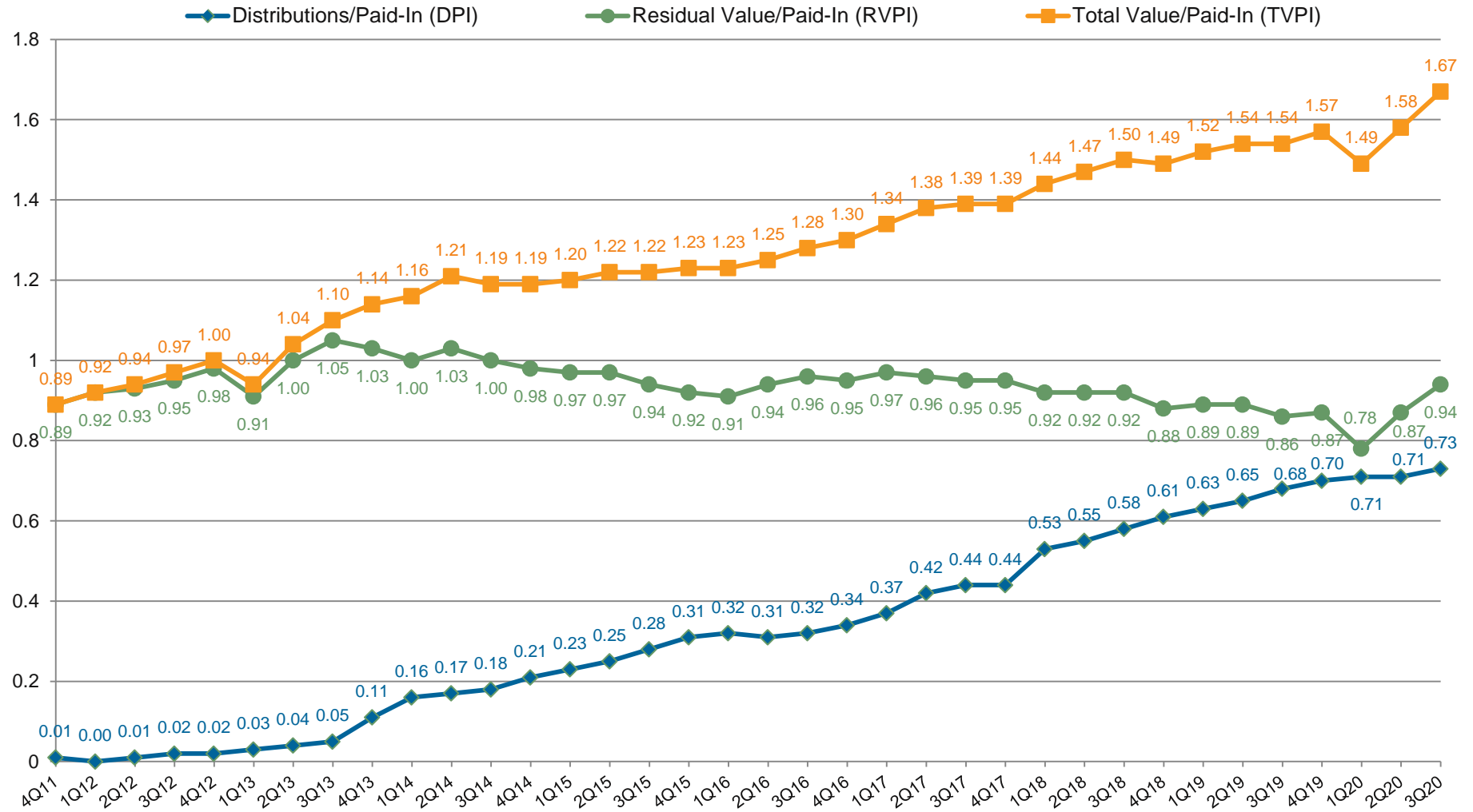
Geographic Mix by Net Asset Value



Industry Mix by Net Asset Value



Private Equity Ratios – Changes Over Time



Callan

Appendix

SSGA S&P 500 Index Portfolio

Inception Date: 12/31/2010

Strategy AUM: \$6151.2B

Vehicle AUM: \$57.0B

Fee Schedule:

0.05% on the first \$50 million

0.04% on the next \$50 million

0.02% on the balance

Returns for Periods Ended December 31, 2020

Group: Callan Large Capitalization



		Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since 12/31/10	Last 10 Years
10th Percentile		19.33	42.13	25.08	21.29	17.57	17.57
25th Percentile		16.53	34.66	21.96	19.25	16.41	16.41
Median		13.06	19.74	14.39	15.28	14.16	14.16
75th Percentile		11.06	4.48	6.75	10.56	11.19	11.19
90th Percentile		9.43	0.82	4.35	9.19	10.16	10.16
SSGA - Gross	◆ A	12.15	18.37	14.17	15.23	13.91	13.91
SSGA - Net	● B	12.15	18.33	14.14	15.20	13.88	13.88
S&P 500 Index	■ C	12.15	18.40	14.18	15.22	13.88	13.88

DFA Small Cap Core Equity

Inception Date: 12/31/2018

Strategy AUM: \$24.1B

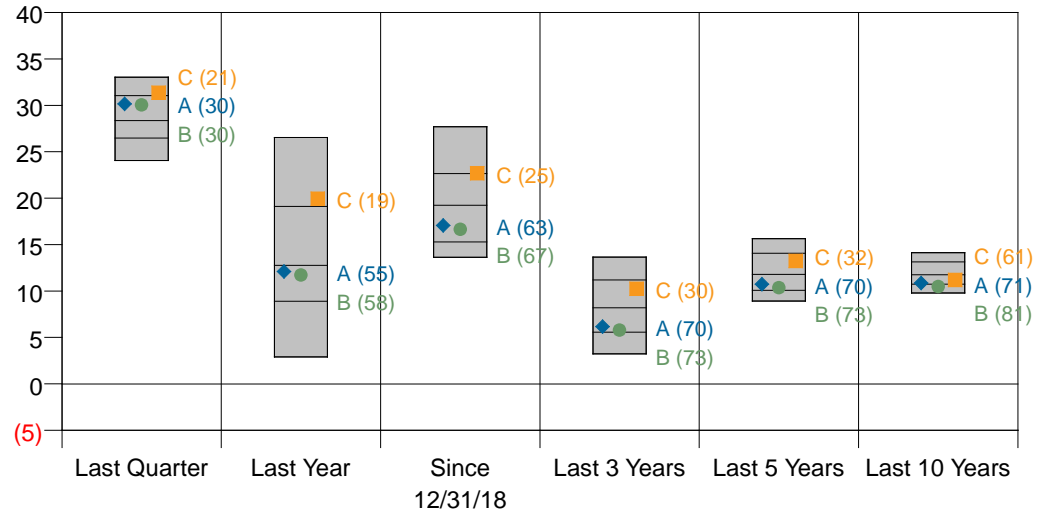
Vehicle AUM: \$2.1B

Fee Schedule:

0.33% on all assets

Returns for Periods Ended December 31, 2020

Group: Callan Small Cap Core



10th Percentile	33.04	26.56	27.70	13.67	15.66	14.14	
25th Percentile	31.05	19.13	22.66	11.21	14.07	13.14	
Median	28.37	12.77	19.25	8.21	11.80	11.77	
75th Percentile	26.48	8.90	15.29	5.58	10.08	10.76	
90th Percentile	24.07	2.91	13.63	3.24	8.93	9.79	
<hr/>							
DFA Small Core - Gross	◆ A	30.17	12.11	17.08	6.18	10.76	10.88
DFA Small Core - Net	● B	30.07	11.74	16.66	5.80	10.37	10.50
S&P 500 Index	■ C	31.37	19.96	22.71	10.25	13.26	11.20

Morgan Stanley International Value Equity

Inception Date: 9/30/2001

Strategy AUM: \$7.1B

Vehicle AUM: \$2.2B

Fee Schedule:

0.75% on the first \$25 million

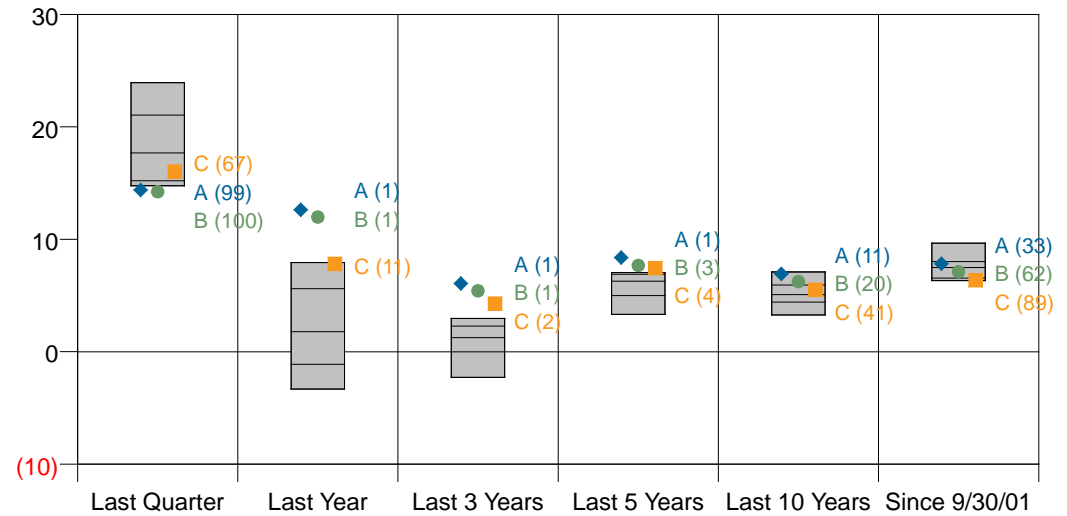
0.65% on the next \$50 million

0.60% on the next \$25 million

0.45% on the balance

Returns for Periods Ended December 31, 2020

Group: Callan Non-US Developed Value Equity



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Since 9/30/01
10th Percentile	23.94	7.94	2.98	7.06	7.11	9.66
25th Percentile	21.05	5.62	2.29	6.89	5.94	8.02
Median	17.69	1.79	1.26	6.29	5.09	7.50
75th Percentile	15.22	(1.11)	0.01	5.01	4.43	6.56
90th Percentile	14.77	(3.32)	(2.27)	3.34	3.29	6.34
Morgan Stanley - Gross	14.40	12.65	6.08	8.38	6.93	7.84
Morgan Stanley - Net	14.24	11.99	5.43	7.69	6.25	7.13
MSCI EAFE Index	16.05	7.82	4.28	7.45	5.51	6.37

Artisan International Growth Equity

Inception Date: 12/31/2002

Strategy AUM: \$21.6B

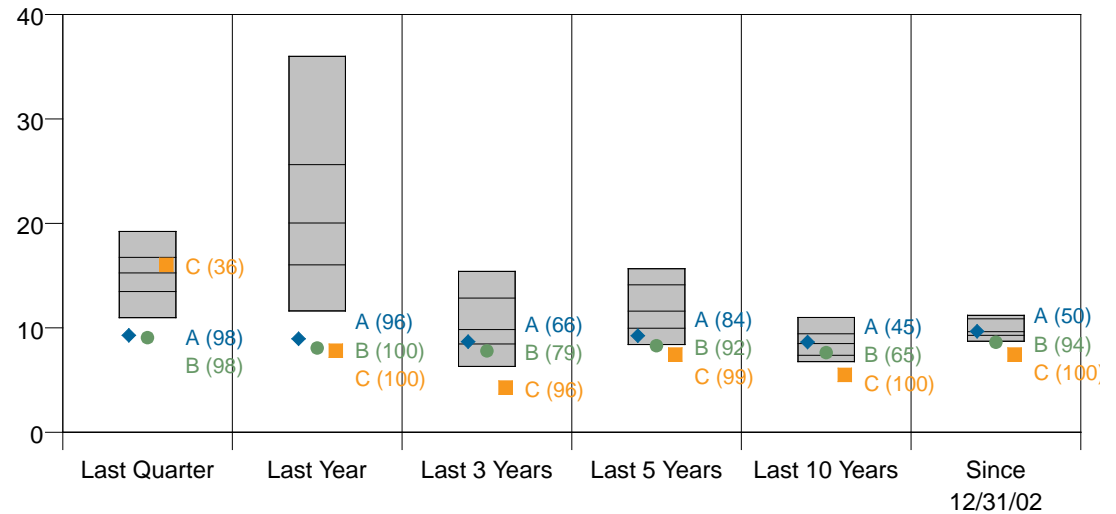
Vehicle AUM: \$1.3B

Fee Schedule:

0.80% on all assets

Returns for Periods Ended December 31, 2020

Group: Callan Non-US Broad Growth Equity



10th Percentile	19.23	36.01	15.42	15.67	11.01	11.21	
25th Percentile	16.75	25.63	12.86	14.13	9.43	10.88	
Median	15.27	20.05	9.84	11.62	8.50	9.64	
75th Percentile	13.49	16.03	8.47	9.97	7.38	9.30	
90th Percentile	10.98	11.63	6.31	8.41	6.77	8.72	
<hr/>							
Artisan - Gross	◆ A	9.29	8.96	8.69	9.25	8.65	9.67
Artisan - Net	● B	9.07	8.08	7.81	8.30	7.64	8.63
MSCI EAFE Index	■ C	16.05	7.82	4.28	7.45	5.51	7.46

TimesSquare International Small Cap Equity

Inception Date: 3/31/2019

Strategy AUM: \$3.4B

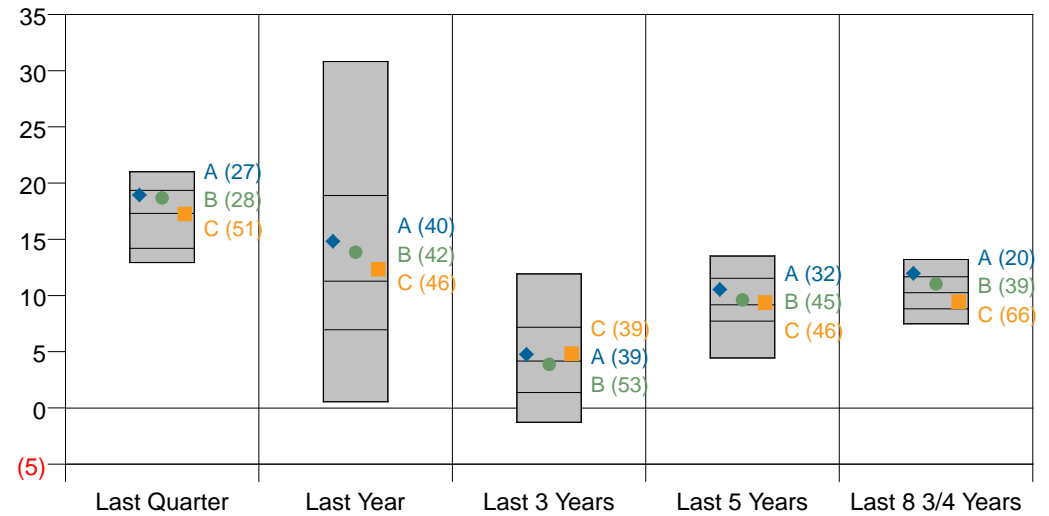
Vehicle AUM: \$219.2M

Fee Schedule:

0.85% on all assets

Returns for Periods Ended December 31, 2020

Group: Callan International Small Cap



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 8 3/4 Years
10th Percentile	21.02	30.82	11.93	13.52	13.21
25th Percentile	19.36	18.91	7.18	11.55	11.68
Median	17.32	11.29	4.19	9.19	10.26
75th Percentile	14.21	6.97	1.38	7.74	8.82
90th Percentile	12.93	0.56	(1.26)	4.45	7.50
TimesSquare - Gross	18.95	14.84	4.78	10.55	11.98
TimesSquare - Net	18.70	13.87	3.89	9.62	11.05
EAFE Small Cap Index	17.27	12.34	4.85	9.40	9.46

Parametric Emerging Markets Equity

Inception Date: 9/30/2010

Strategy AUM: \$3.2B

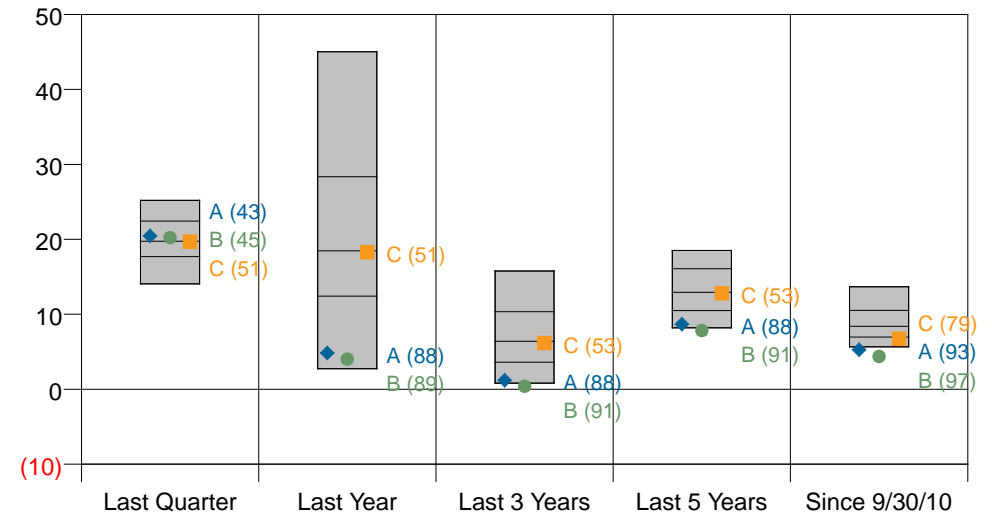
Vehicle AUM: \$858.4M

Fee Schedule:

0.78% on all assets

Returns for Periods Ended December 31, 2020

Group: Emerging Markets Equity DB



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since 9/30/10
10th Percentile	25.23	45.03	15.79	18.53	13.68
25th Percentile	22.45	28.37	10.36	16.08	10.53
Median	19.76	18.46	6.41	12.93	8.40
75th Percentile	17.72	12.44	3.63	10.51	6.96
90th Percentile	14.06	2.74	0.83	8.20	5.67
Parametric - Gross ◆ A	20.48	4.84	1.20	8.70	5.29
Parametric - Net ● B	20.25	4.02	0.41	7.85	4.38
MSCI Emerging Markets Index ■ C	19.70	18.31	6.18	12.81	6.74

Wellington Core Plus Fixed Income

Inception Date: 9/30/2002 (Core)

Inception Date: 3/31/2012 (Core Plus)

Strategy AUM: \$12.6B

Vehicle AUM: \$10.2B

Fee Schedule:

0.30% on the first \$25 million

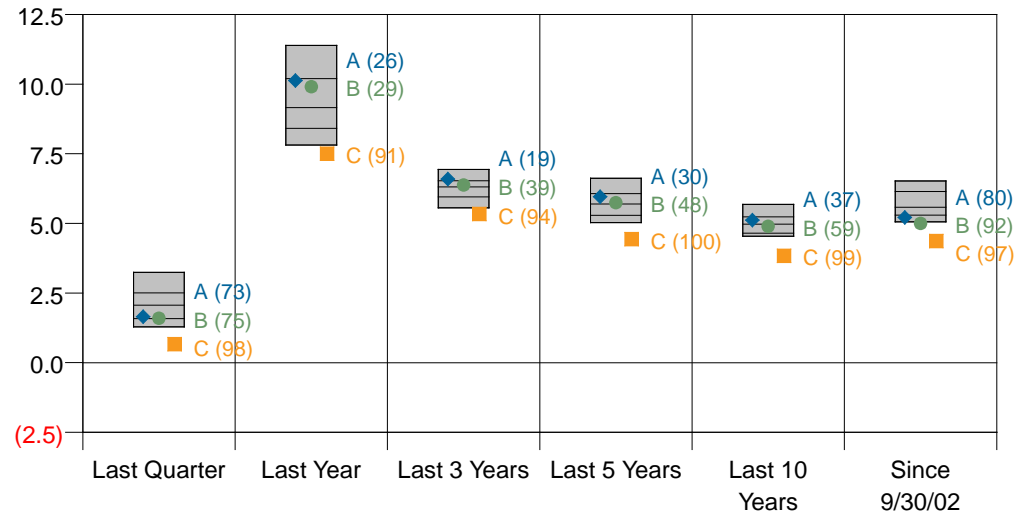
0.25% on the next \$25 million

0.22% on the next \$50 million

0.15% on the balance

Returns for Periods Ended December 31, 2020

Group: Callan Core Plus Fixed Income



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Since 9/30/02
10th Percentile	3.25	11.39	6.94	6.62	5.68	6.52
25th Percentile	2.51	10.20	6.54	6.08	5.24	6.15
Median	2.06	9.16	6.31	5.70	4.98	5.58
75th Percentile	1.59	8.41	5.95	5.29	4.65	5.30
90th Percentile	1.29	7.82	5.56	5.03	4.54	5.06
Wellington - Gross	1.65	10.13	6.60	5.96	5.12	5.22
Wellington - Net	1.60	9.91	6.38	5.75	4.90	5.00
Bloomberg Aggregate Index	0.67	7.51	5.34	4.44	3.84	4.37

Western Asset Intermediate Credit Fixed Income

Inception Date: 9/30/2001 (Core Plus)

Inception Date: 3/31/2014 (Int. Credit)

Strategy AUM: \$24.3B

Vehicle AUM: \$21.2B

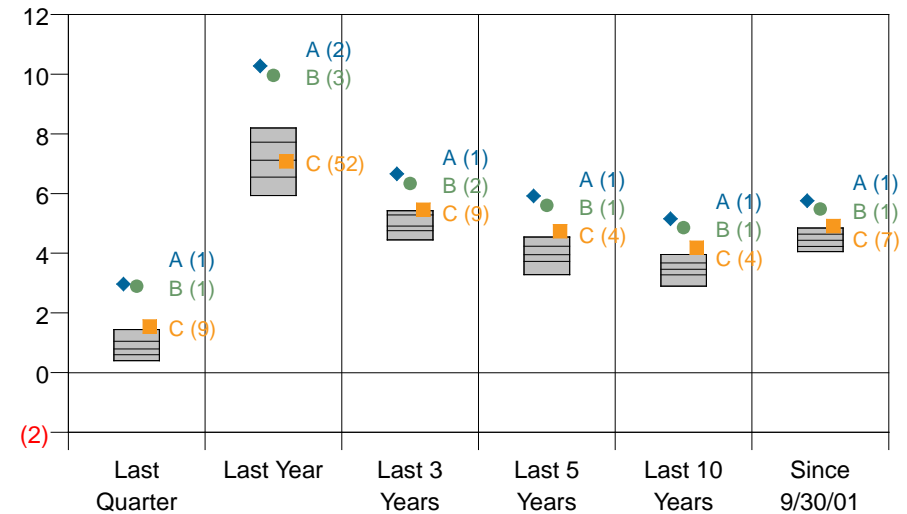
Fee Schedule:

0.30% on the first \$100 million

0.15% on the balance

Returns for Periods Ended December 31, 2020

Group: Callan Intermediate Fixed Income



	(2)	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Since 9/30/01
10th Percentile		1.45	8.20	5.43	4.54	3.96	4.85
25th Percentile		1.05	7.73	5.28	4.24	3.68	4.64
Median		0.80	7.12	4.91	3.96	3.47	4.44
75th Percentile		0.60	6.55	4.76	3.73	3.28	4.23
90th Percentile		0.40	5.93	4.45	3.28	2.90	4.06
Western Asset - Gross	◆ A	2.97	10.28	6.66	5.92	5.15	5.76
Western Asset - Net	● B	2.90	9.96	6.34	5.61	4.86	5.48
Bloomberg Intermediate Credit Index	■ C	1.55	7.08	5.46	4.74	4.18	4.92

Colchester Global Fixed Income

Inception Date: 3/31/2014

Strategy AUM: \$20.7B

Vehicle AUM: \$3.5B

Fee Schedule:

0.60% on the first \$25 million

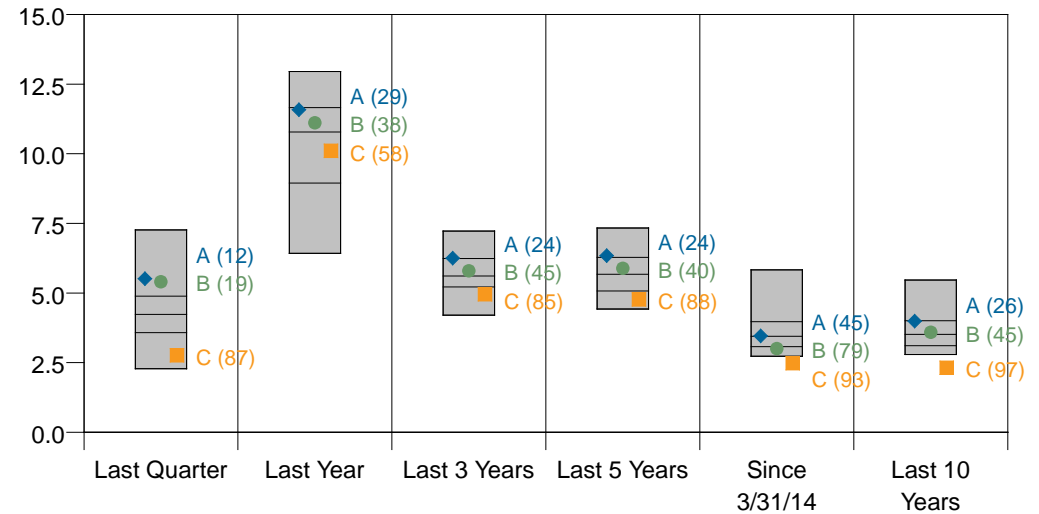
0.50% on the next \$25 million

0.35% on the next \$100 million

0.30% on the balance

Returns for Periods Ended December 31, 2020

Group: Callan Global Fixed Income (Unhedged)



10th Percentile	7.27	12.95	7.23	7.33	5.84	5.47	
25th Percentile	4.89	11.66	6.24	6.29	3.97	4.01	
Median	4.24	10.79	5.61	5.68	3.45	3.52	
75th Percentile	3.58	8.95	5.22	5.08	3.07	3.11	
90th Percentile	2.29	6.43	4.21	4.43	2.73	2.79	
Colchester - Gross	◆ A	5.52	11.58	6.26	6.35	3.46	3.99
Colchester - Net	● B	5.41	11.12	5.80	5.89	3.01	3.59
Citi World Govt Bond Index	■ C	2.77	10.11	4.96	4.78	2.49	2.32

UBS Trumbull Property Fund

Inception Date: 3/31/2013

Fund NAV: \$14.5B

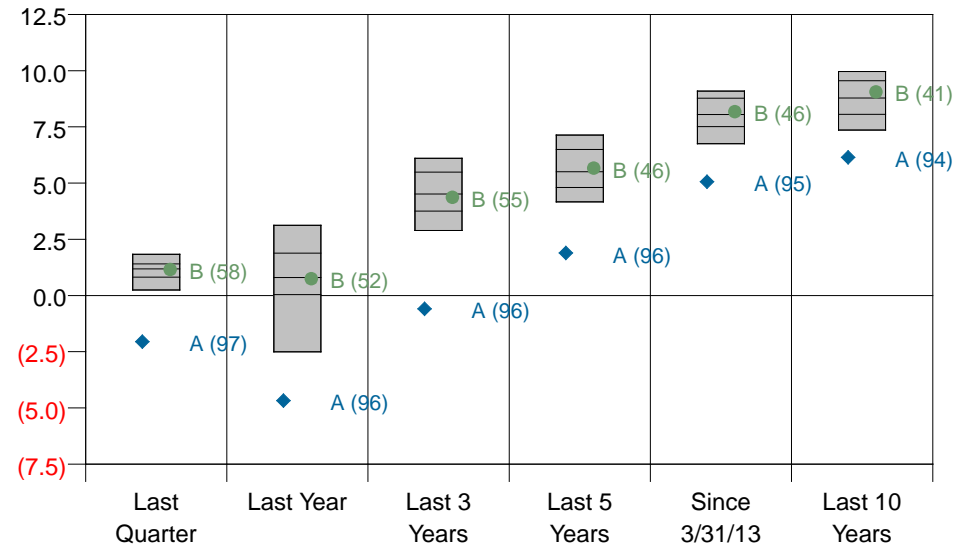
Fee Schedule:

0.955% on the first \$10 million
 0.825% on the next \$15 million
 0.805% on the next \$25 million
 0.79% on the next \$50 million
 0.67% on the next \$150 million
 0.60% on the next \$150 million
 0.56% on the next \$200 million
 0.52% on the balance

25% Loyalty Incentive Fee for 4 years
 Effective 1/1/20

Returns for Periods Ended December 31, 2020

Group: Callan Open End Core Cmmingled Real Est



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since 3/31/13	Last 10 Years
10th Percentile	1.84	3.13	6.11	7.14	9.10	9.97
25th Percentile	1.41	1.89	5.49	6.50	8.78	9.56
Median	1.19	0.80	4.52	5.51	8.06	8.79
75th Percentile	0.83	0.05	3.76	4.81	7.52	8.07
90th Percentile	0.25	(2.50)	2.90	4.17	6.76	7.36

UBS Trumbull Property Fund - Net	◆ A	(2.05)	(4.67)	(0.59)	1.90	5.06	6.15
NFI-ODCE Equal Weight Index	● B	1.16	0.75	4.38	5.67	8.19	9.06

AEW Core Property Trust

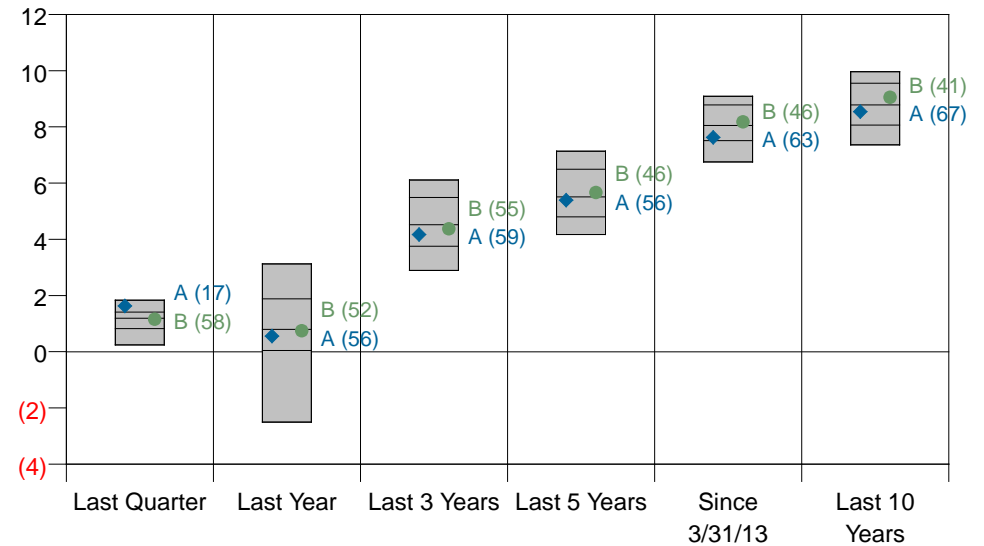
Inception Date: 3/31/2013

Fund NAV: \$7.2B

Fee Schedule:

1.10% on the first \$10 million
 1.00% on the next \$15 million
 0.85% on the next \$25 million
 0.80% on the next \$50 million
 0.75% on the balance

Returns for Periods Ended December 31, 2020
 Group: Callan Open End Core Cmmingled Real Est



10th Percentile	1.84	3.13	6.11	7.14	9.10	9.97
25th Percentile	1.41	1.89	5.49	6.50	8.78	9.56
Median	1.19	0.80	4.52	5.51	8.06	8.79
75th Percentile	0.83	0.05	3.76	4.81	7.52	8.07
90th Percentile	0.25	(2.50)	2.90	4.17	6.76	7.36

AEW Core Property Trust - Net	◆ A	1.63	0.56	4.17	5.39	7.63	8.55
NFI-ODCE Equal Weight Index	● B	1.16	0.75	4.38	5.67	8.19	9.06

BlackRock TIPS Index Fund

Inception Date: 6/30/2015

Strategy AUM: \$50.0B

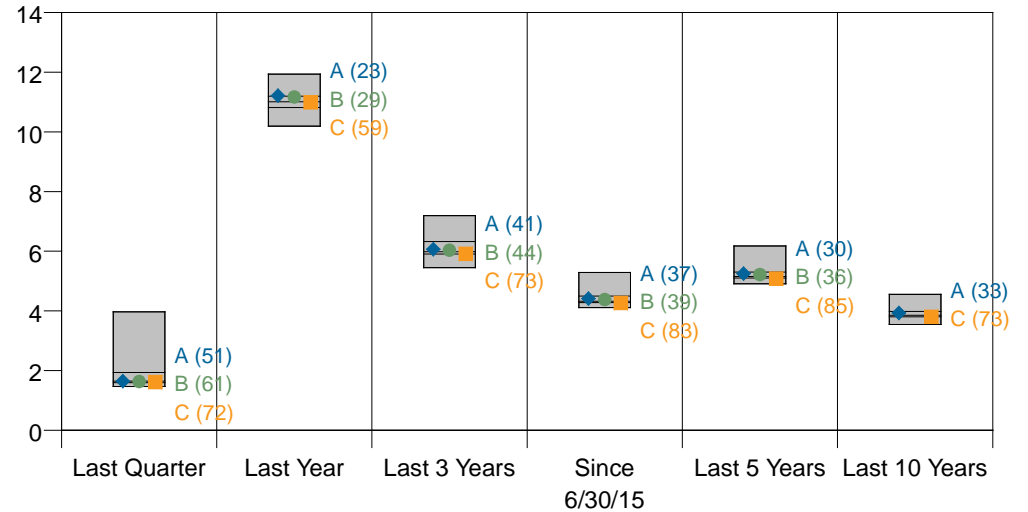
Vehicle AUM: \$13.4B

Fee Schedule:

0.03% on all assets

Returns for Periods Ended December 31, 2020

Group: Real Returns Database



10th Percentile	3.97	11.94	7.19	5.29	6.18	4.56	
25th Percentile	1.94	11.20	6.33	4.50	5.30	3.99	
Median	1.65	11.01	5.99	4.33	5.16	3.86	
75th Percentile	1.60	10.82	5.91	4.28	5.10	3.81	
90th Percentile	1.47	10.19	5.45	4.11	4.91	3.55	
BlackRock TIPS - Gross	◆ A	1.65	11.22	6.07	4.42	5.25	3.93
BlackRock TIPS - Net	● B	1.64	11.17	6.04	4.38	5.22	--
Bloomberg US TIPS Index	■ C	1.62	10.99	5.92	4.27	5.08	3.81

BlackRock REITs Index Fund

Inception Date: 9/30/2017

Strategy AUM: \$1.5M

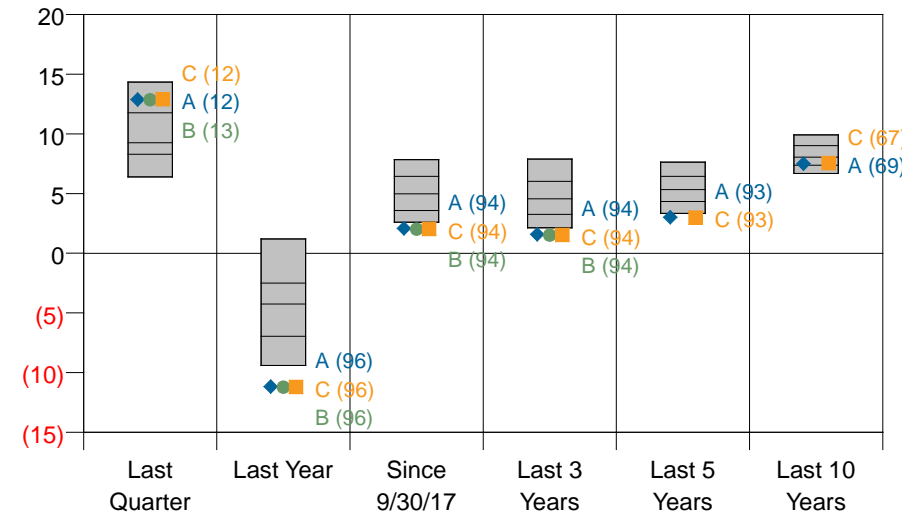
Vehicle AUM: \$1.5M

Fee Schedule:

0.06% on all assets

Returns for Periods Ended December 31, 2020

Group: Callan Real Estate Mutual Funds



	Last Quarter	Last Year	Since 9/30/17	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	14.35	1.20	7.85	7.90	7.64	9.92
25th Percentile	11.77	(2.50)	6.45	6.03	6.45	9.01
Median	9.26	(4.25)	4.99	4.57	5.35	8.06
75th Percentile	8.30	(6.94)	3.58	3.27	4.34	7.38
90th Percentile	6.41	(9.40)	2.61	2.14	3.35	6.69

BlackRock REITs - Gross	◆ A	12.89	(11.17)	2.08	1.59	3.02	7.52
BlackRock REITs - Net	● B	12.87	(11.21)	2.02	1.53	--	--
S&P Dow Jones US Select REIT Index	■ C	12.92	(11.20)	2.04	1.54	3.00	7.56

Invesco Balanced Risk Commodities Fund

Inception Date: 6/30/2016

Strategy AUM: \$1.8B

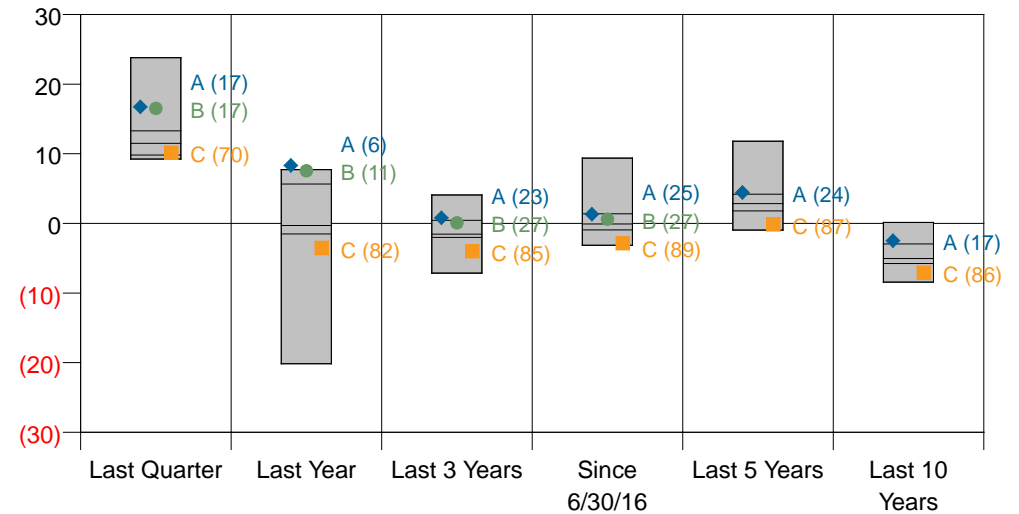
Vehicle AUM: \$0.6B

Fee Schedule:

0.70% on all assets

Returns for Periods Ended December 31, 2020

Group: Callan Commodities



10th Percentile		23.82	7.72	4.10	9.38	11.82	0.15
25th Percentile		13.29	5.66	0.46	1.38	4.21	(2.94)
Median		11.51	(0.29)	(1.53)	(0.06)	2.85	(5.03)
75th Percentile		9.83	(1.49)	(2.01)	(0.94)	1.81	(5.74)
90th Percentile		9.25	(20.15)	(7.13)	(3.14)	(0.94)	(8.41)
Invesco - Gross	◆ A	16.74	8.34	0.80	1.33	4.44	(2.46)
Invesco - Net	● B	16.54	7.57	0.10	0.61	--	--
Bloomberg Commodity Index	■ C	10.17	(3.50)	(3.98)	(2.84)	(0.13)	(7.06)

KBI Global Resources Fund

Inception Date: 9/30/2016

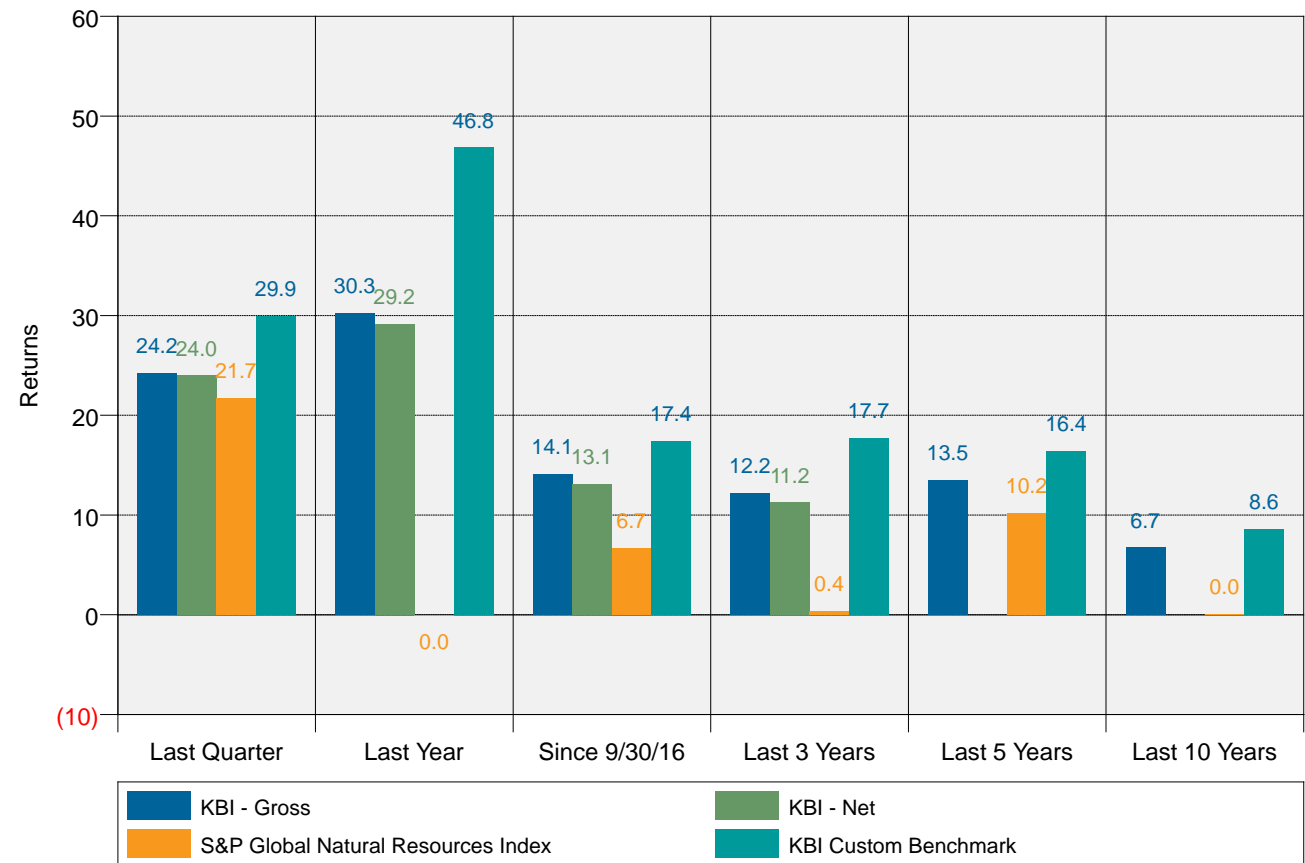
Strategy AUM: \$286.3M

Vehicle AUM: \$90.1M

Fee Schedule:

0.85% on all assets

Returns for Periods Ended December 31, 2020



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

Managers	February 2021 Market Value	Fiscal Year To Date 7/1/20 - 2/28/21	Year to Date Through 2/28/21
Domestic Equity	\$923,946,327	32.3%	5.3%
<i>Russell 3000 Index</i>		28.6%	2.7%
Large Cap Equity	\$641,470,170	24.2%	1.7%
SSgA S&P 500 Index Fund	\$668,150,888	24.2%	1.7%
<i>S&P 500 Index</i>		24.3%	1.7%
Parametric S&P 500 Futures	-\$26,680,718		
Small Cap Equity	\$282,476,157	53.3%	13.9%
Dimensional Fund Advisors	\$318,505,779	53.3%	13.9%
<i>Russell 2000 Index</i>		53.8%	11.6%
Parametric Russell 2000 Futures	-\$36,029,622		
International Equity	\$653,806,085	20.0%	-0.5%
<i>MSCI ACWI ex-US IMI Index</i>		28.2%	2.4%
Morgan Stanley	\$195,519,521	16.1%	-2.0%
Artisan Partners	\$200,739,565	14.3%	-0.6%
<i>MSCI EAFE Index</i>		22.8%	1.2%
TimesSquare	\$129,549,191	29.8%	-0.1%
<i>MSCI EAFE Small Cap Index</i>		32.2%	2.3%
Parametric Emerging Markets	\$124,084,400	27.9%	1.6%
<i>MSCI Emerging Markets Index</i>		36.2%	3.9%
Parametric International Futures	\$3,913,408		
Fixed Income	\$694,161,741	2.6%	-2.3%
<i>Blended Benchmark</i>		0.4%	-2.3%
Wellington	\$265,402,098	0.5%	-2.3%
<i>Bloomberg Barclays US Aggregate Index</i>		-0.9%	-2.2%
Western Asset	\$149,816,529	3.5%	-0.9%
<i>Bloomberg Barclays US Intermediate Credit Index</i>		1.6%	-1.2%
Colchester	\$148,722,495	5.5%	-3.7%
<i>FTSE World Government Bond Index</i>		1.9%	-3.7%
Parametric Fixed Income Futures	\$130,220,619		

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

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

Managers	February 2021 Market Value	Fiscal Year To Date 7/1/20 - 2/28/21	Year to Date Through 2/28/21
Public Real Assets	\$203,127,272	28.8%	4.5%
<i>Blended Benchmark</i>		22.5%	5.6%
BlackRock TIPS Index Fund	\$46,255,991	3.5%	-1.3%
<i>Barclays US TIPS Index</i>		3.4%	-1.3%
BlackRock REIT Index Fund	\$51,967,311	19.7%	5.1%
<i>DJ S&P US Select REIT Index</i>		19.7%	5.1%
Invesco Balanced Risk Commodities Fund	\$53,761,962	40.5%	9.3%
<i>Bloomberg Commodities Index</i>		31.3%	9.3%
KBI Global Resources Fund	\$51,142,009	49.7%	5.5%
<i>S&P Global Natural Resources Index</i>		35.7%	9.3%
Real Estate(1)	\$237,890,724	-1.3%	-0.6%
<i>NFI-ODCE Equal Weight Net(1)</i>		2.4%	0.8%
Woodmont	\$18,199,993	-	-
UBS Trumbull Property Fund	\$114,726,248	-	-
AEW Core Property Trust	\$104,953,310	-	-
AEW Partners V, LP	\$11,173	-	-
Private Equity(2)	\$318,096,789	12.1%	0.0%
Abbott ACE VI	\$50,294,757	-	-
Abbott ACE VII	\$43,862,201	-	-
Abbott AP 2016	\$44,452,548	-	-
Abbott AP 2017	\$10,235,684	-	-
Abbott AP 2021	-	-	-
Pathway PPEF 2008	\$65,722,244	-	-
Pathway PPEF I-7	\$40,990,304	-	-
Pathway PPEF I-8	\$53,722,966	-	-
Pathway PPEF I-9	\$8,816,085	-	-
Pathway PPEF I-10	-	-	-
Opportunistic(3)	\$10,025,000	n/a	n/a
CarVal Credit Value Fund V	\$3,350,000	-	-
Fortress Credit Opportunities Fund V Expansion	\$1,650,000	-	-
Varde Dislocation Fund	\$5,025,000	-	-
Total Fund	\$3,041,053,938	17.8%	1.3%

(1)Market values as of December 31, 2020. FYTD and YTD returns use MCERA's pro-rata performance of prior quarter.

(2)Market values as of December 31, 2020. FYTD and YTD returns use MCERA's pro-rata performance of prior quarter.

(3)Market values as of December 31, 2020.

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