



Board of Trustees
15 Estabrooke Drive
Orono, ME 04469

Tel: 207-581-5844
Fax: 207-581-9212
www.maine.edu

February 19, 2020

TO: Members of the Investment Committee

FR: Ellen N. Doughty, Clerk of the Board

RE: **February 27, 2020 – Investment Committee Meeting**

The University of Maine

University of Maine
at Augusta

University of Maine
at Farmington

University of Maine
at Fort Kent

University of Maine
at Machias

University of Maine
at Presque isle

University of
Southern Maine

The Investment Committee will meet from **9:00 am to 12:00 pm on February 27, 2020.** The meeting will be held at the University of Maine System Executive Offices in the Rudman Conference Room, 253 Estabrooke Hall, 15 Estabrooke Drive in Orono. The following Polycom sites will also be available:

UMA – Room 125, Robinson Hall

UMF – Executive Conference Room 103, Merrill Hall

UMFK – Alumni Conference Room, Nadeau Hall

USM – Room 423/424, Glickman Library

Phone – 1-800-605-5167 Passcode 743544#

Refreshments will be provided at the UMS & USM locations. The meeting materials have been posted to the Diligent Board Portal and on the Board of Trustees website: <http://www.maine.edu/about-the-system/board-of-trustees/meeting-agendas/investment-committee/>

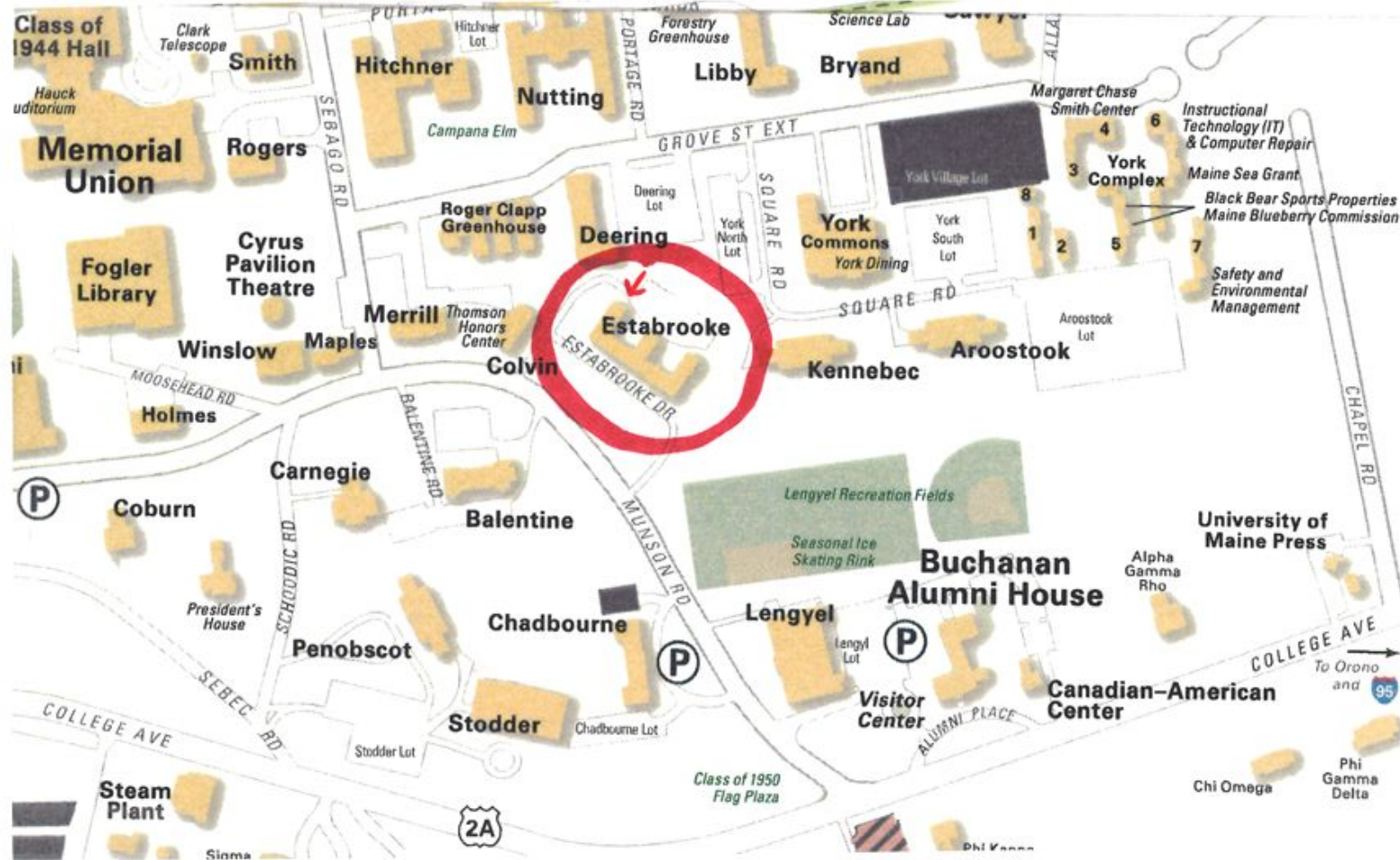
If you have questions about the meeting arrangements or accessing the meeting materials please call me at 581-5840. If you have any questions or desire additional information about the agenda items, please call Tracy Elliott at 581-5492.

cc: Chancellor Dannel Malloy
Board of Trustees
System Staff
Campus Presidents

University of Maine System

15 Estabrooke Drive, Orono

Rudman Conference Room
253 Estabrooke Hall, 2nd Floor
15 Estabrooke Drive, Orono



Directions to the UMS located on the UMaine Campus

From the South on I-95: take exit 191 to Kelly Road and turn right. Continue on Kelly Road for 1 mile until you reach the traffic light, then turn left onto Route 2 and go through downtown Orono. Cross the river. Turn left at the lights onto College Avenue. Buchanan Alumni House will be the first campus-related building on your right. Right after the Buchanan Alumni House, take a right onto Muson Road. Estabrooke Hall is the building on the right after Lengyel.

From the North on I-95: take exit 191 to Kelly Road and turn left. Continue on Kelly Road for 1 mile until you reach the traffic light, then turn left onto Route 2 and go through downtown Orono. Cross the river. Turn left at the lights onto College Avenue. Buchanan Alumni House will be the first campus-related building on your right. Right after the Buchanan Alumni House, take a right onto Muson Road. Estabrooke Hall is the building on the right after Lengyel.

The UMS is located on the 2nd floor of Estabrooke Hall. Enter Estabrooke Hall from the back of the building, the entrance closes to Deering Hall.

Board of Trustees

Investment Committee

February 27, 2020, 9:00 am to 12:00 pm
Rudman Conference Room, 253 Estabrooke Hall, Orono

AGENDA

- TAB 1 FY2021 UMS Endowment Spending Rate
- TAB 2 Asset Allocation Review
- TAB 3 Performance Review– Managed Investment Pool, Pension Fund & Operating Fund
- TAB 4 Defined Contribution Plan Quarterly Review
- TAB 5 Contributory Retirement Plans – Investment Advisory Services Contract Extension

Action items within the Committee purview are noted in green.

Items for Committee decisions and recommendations are noted in red.

Note: Times are estimated based upon the anticipated length for presentation or discussion of a particular topic. An item may be brought up earlier or the order of items changed for effective deliberation of matters before the Committee.



AGENDA ITEM SUMMARY

1. **NAME OF ITEM:** FY2021 Endowment Spending Rate
2. **INITIATED BY:** Sven P. Bartholomew, Chair Pro tem
3. **BOARD INFORMATION:** X **BOARD ACTION:**
4. **OUTCOME:** **BOARD POLICY:**
 Primary Outcome: Section 709 - Investments
 Enhance fiscal positioning
5. **BACKGROUND:**

At its December 2, 2019 meeting, the Investment Committee reviewed and supported the recommended fiscal year 2021 (FY21) endowment spending rate of 4.5%. This rate is estimated to generate nearly \$5.9 million for the fiscal year, including \$4.7 million for endowed spending and \$1.2 million for management fees. The enclosed materials provides additional summary information related to the estimated annual distributions.

**UNIVERSITY OF MAINE SYSTEM
ENDOWMENT SPENDING RATE - FY21**

Market Value - Per GL for Endowments Subject to UMSystem Spending Rule:

<u>Year</u>	<u>MV</u>
Oct-17 (for FY2019)	\$ 128,504,394
Oct-18 (for FY2020)	\$ 126,592,794
Oct-19 (for FY2021)	\$ 135,431,886
Three year average	\$ 130,176,358
Spending Rate	4.50%
Spending Amount*	<u>\$ 5,857,936</u>

Annual Distribution Rate Per Share for FY21:*

Dist. Rate Per Share for FY21 = Net Estimated Endow Amount to be Distrib/Total Shares:

FY21 Share Rate - Gift Accounts

FY21 Share Rate - Management Fee Accounts

FY21 Share Rate - Gross

	UM	USM	GUS	All Others
	\$ 10.87347	\$ 10.87347	\$ 14.21916	\$ 15.05558
	\$ 4.18211	\$ 4.18211	\$ 0.83642	\$ -
	\$ 15.05558	\$ 15.05558	\$ 15.05558	\$ 15.05558

Total Estimated Shares for FY21:

Shares subject to UMS spending rule and not underwater

Shares subject to UMS spending rule and underwater

Total Shares as of October 2019

Total	UM	USM	GUS	All Others
389,055	240,964	47,651	22,058	78,383
32	-	-	-	32
389,087	240,964	47,651	22,058	78,415

Calculation of Annual Distribution for FY21:

Amount Distributed for Endowed Spending	\$ 4,694,160	\$ 2,682,224	\$ 518,131	\$ 313,704	\$ 1,180,101
Amount Distributed for the Management Fee	1,163,290	945,622	199,282	18,386	-
Amount Distributed Including Management Fee (rate per share X number of shares)	5,857,451	3,627,847	717,413	332,090	1,180,101
Amount Reinvested Back into Underwater Investments	486	-	-	-	486
Total Allocation (Distributed Plus Amount Returned to Principal for Underwater Investments)	\$ 5,857,936	\$ 3,627,847	\$ 717,413	\$ 332,090	\$ 1,180,587

* In FY17 the UM and USM share rate for management fee accounts increased from .25% to 1.25% and remained the same for FY18 thru FY21.

Governance and University Services (GUS) stayed at .25% . No other campus applies a management fee.

** UM's shares subject to the spending rate and above water include two endowments (totaling 14,852.25 shares) that do not allow a management fee. Therefore, the amount distributed for the UM management fee differs from the amount that would be obtained simply by multiplying the management fee per share by the number of shares.

*** GUS' shares subject to the spending rate and above water include one endowment (76.08 shares) that does not allow a management fee. Therefore, the amount distributed for the GUS management fee differs from the amount that would be obtained simply by multiplying the management fee per share by the number of shares.



AGENDA ITEM SUMMARY

1. **NAME OF ITEM:** Asset Allocation Review
2. **INITIATED BY:** Sven P. Bartholomew, Chair Pro tem
3. **BOARD INFORMATION:** **BOARD ACTION:** X
4. **OUTCOME:** **BOARD POLICY:**
 Primary Outcome: Section 709 - Investments
 Enhance fiscal positioning
5. **BACKGROUND:**
 Kelly Regan and Jay Roney, with NEPC, will review the asset allocation for all three portfolios (Managed Investment Pool, Pension Fund and Operating Fund). There are no recommendations for the Pension Fund and Operating Fund. There are three recommendations for the Managed Investment Pool as outlined in the proposed resolution.
6. **TEXT OF PROPOSED RESOLUTION:**
 That the Board of Trustees, acting through the Investment Committee, approves the following asset allocation recommendations:
Managed Investment Pool
 1. Add a 10% allocation to global equity by reducing large cap equity (5%), small cap equity (1%), international developed equity (3%) and international small cap equity (1%).
 2. Implement the global equity allocation through Walter Scott's Global Equity strategy which is currently utilized in the Pension Fund.
 3. Diversify the international developed equity manager line-up with the addition of JO Hambro International Select and elimination of Globeflex International All Cap.

ASSET ALLOCATION REVIEW

UNIVERSITY OF MAINE SYSTEM



February 27, 2019

Jay Roney, Partner

Kelly Regan, Senior Consultant



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NEPC THOUGHTS TO START THE NEXT DECADE

A renewed emphasis on strategic asset allocation

10-year capital market return assumptions provide a greater focus on the strategic asset allocation process as the asset class assumptions are representative of a long-term view

Look to reassess overall portfolio return expectations in 2020

Return assumptions relative to 2019 have declined considerably both for a 10-year and a 30-year time horizon due to a significant shift in interest rates and inflation expectations

	Asset Class Return Assumptions	2020 10-Year	2019 10-Year	Annual Change
Equity	Cash	1.8%	2.6%	-0.8%
	Large Cap Equities	5.0%	6.2%	-1.2%
	International Equities (Unhedged)	6.0%	7.3%	-1.3%
	Emerging International Equities	9.0%	9.2%	-0.2%
	Global Equity*	6.2%	7.3%	-1.1%
	Private Equity*	9.4%	10.1%	-0.7%
Fixed Income	Treasuries	1.9%	2.5%	-0.6%
	Core Bonds*	2.5%	3.2%	-0.7%
	TIPS	2.2%	3.2%	-1.0%
	High Yield Bonds	4.1%	5.5%	-1.4%
Real Assets	Core Real Estate	5.2%	6.0%	-0.8%
	Private Real Assets: Infrastructure/Land	5.9%	6.4%	-0.5%
Multi- Asset	US 60/40*	4.3%	5.2%	-0.9%
	Global 60/40*	4.4%	5.1%	-0.7%
	Hedge Funds*	5.0%	6.0%	-1.0%

*Calculated as a blend of other asset classes



OPERATING & PENSION FUNDS

NEPC, LLC

OPERATING FUND ASSET ALLOCATION

	12/31/19 Allocation	Policy Targets
Total Cash	19%	30%
Global Equity	12%	10%
Hedge Funds - Long/Short	6%	5%
Total Equity	18%	15%
Core Bonds	8%	8%
Bank Loans	8%	7%
Absolute Return Fixed Income	8%	7%
Short Term Bonds	30%	26%
Total Fixed Income	54%	48%
Newton Global Real Return	5%	4%
PIMCO All Asset	5%	4%
Total Multi Asset	9%	8%
Expected Return 10 yrs	3.6%	3.3%
Expected Return 30 yrs	4.3%	4.0%
Standard Dev	4.4%	3.7%
Sharpe Ratio (10 years)	0.40	0.40

- **NEPC is not recommending any changes to the asset allocation**
- **It is important to note the Policy Target expected return supports the 4.0% return goal**
 - 30 year expected return: 4.0%
 - Alpha assumption: 0.2% - 0.3%
 - Overall assumption: 4.2% - 4.3%
- **Note**
 - Actual allocation drifts from policy targets due to sizable cash flows
 - Sizable cash inflow expected in January



Note: NEPC's Expected Returns are beta only and do not assume alpha from the Plan's active managers

PENSION FUND ASSET ALLOCATION

	12/31/19 Allocation	Policy Targets
Cash	0%	3%
Total Cash	0%	3%
Emerging Int'l Sm Cap Equities	4%	3%
Global Equity	32%	30%
Hedge Funds - Long/Short	5%	5%
Total Equity	41%	38%
TIPS	4%	4%
Core Bonds	27%	26%
Bank Loans	5%	5%
Absolute Return Fixed Income	5%	5%
Short TIPS (1-5 yr)	4%	4%
Total Fixed Income	44%	43%
Core Real Estate	8%	8%
Total Real Assets	8%	8%
Newton Global Real Return	7%	8%
Total Multi Asset	7%	8%
Expected Return 10 yrs	4.9%	4.8%
Expected Return 30 yrs	5.9%	5.7%
Standard Dev	8.8%	8.2%
Sharpe Ratio (10 years)	0.35	0.36

- **NEPC is not recommending any changes to the asset allocation**
- **It is important to note the Policy Target expected return *marginally supports* the 6.25% return goal**
 - 30 year expected return: 5.7%
 - Alpha assumption: 0.4% - 0.5%
 - Overall assumption: 6.1% - 6.2%
- **Fund Information**
 - Closed Plan
 - Annual Benefit Payments: \$4.3m/year or 16% of total assets
 - Annual Contribution: ~\$750k/year

Note: NEPC's Expected Returns are beta only and do not assume alpha from the Plan's active managers



MANAGED INVESTMENT POOL (MIP)

NEPC, LLC

MIP ASSET ALLOCATION

	12/31/19 Allocation	Policy Targets	Option 1
Total Cash	0%	0%	0%
Large Cap Equities	23%	22%	17%
Small/Mid Cap Equities	8%	8%	7%
Int'l Equities (Unhedged)	13%	13%	10%
Int'l Sm Cap Equities (Unhedged)	5%	5%	4%
Emerging Int'l Equities	4%	4%	4%
Emerging Int'l Sm Cap Equities	3%	4%	4%
Global Equity	0%	0%	10%
Hedge Funds - Long/Short	6%	6%	6%
Private Equity	1%	0%	0%
Total Equity	62%	61%	61%
TIPS	4%	4%	4%
Core Bonds	7%	7%	7%
Bank Loans	4%	5%	5%
Absolute Return Fixed Income	5%	5%	5%
Short TIPS (1-5 yr)	3%	4%	4%
Total Fixed Income	23%	24%	24%
GMO Global Balanced	7%	8%	8%
Newton Global Real Return	8%	8%	8%
Total Multi Asset	15%	15%	15%
Expected Return 10 yrs	5.4%	5.4%	5.5%
Expected Return 30 yrs	6.5%	6.5%	6.5%
Standard Dev	12.2%	12.1%	12.1%
Sharpe Ratio (10 years)	0.30	0.30	0.30

Note: NEPC's Expected Returns are beta only and do not assume alpha from the Plan's active managers



- **NEPC is not recommending wholesale changes to the asset allocation**
- **Instead, the focus should be on improving portfolio construction**
- **Recommendation:**
 - Add a 10% allocation to Global Equity with reductions across large cap, small cap and international equity
 - Hire a Global Equity manager (same manager in the Pension Fund)
 - Review/hire an International Equity manager to improve portfolio diversification
- **It is important to note the Policy Target expected return does not support the 7.5% return goal**
 - 30 year expected return: 6.5%
 - Alpha assumption: 0.4% - 0.5%
 - Overall assumption: 6.9% - 7.0%

EQUITY PORTFOLIO CONSTRUCTION SUMMARY

Objectives

- 1) **Understand composition of the current portfolio; identify each managers role and contribution to volatility**
- 2) **Evaluate manager options including the addition of Global Equity, both quantitatively and qualitatively**
- 3) **Create a balanced portfolio of well fitting managers**

Process

- **Active Risk Budgeting Analysis**
 - By estimating the level of market exposure that a particular strategy is taking over time, we can strip Beta (index exposure) away and analyze the contribution from Alpha (manager outperformance) strategies to total active risk
 - Through this exercise, we can understand a portfolio's historical quantitative profile, and pair with both qualitative manager due diligence and forward looking capital markets thoughts



CURRENT PORTFOLIO & CONSIDERATIONS

- **The current portfolio is nicely constructed, but there are other options to consider to potentially improve alpha and portfolio construction**
 - The addition of a global equity strategy has the potential to improve alpha and diversify the equity portfolio
 - The international equity portfolio has two managers with similar risk/return characteristics and there is potential to diversify and improve alpha expectations

Managers	Current Portfolio	Option 1
Total Equity	55%	55%
SSgA	22%	17%
Westfield	4%	3.5%
DFA	4%	3.5%
Morgan Stanley	6.5%	5%
Globeflex	6.5%	0%
JO Hambro	0%	5%
Kabouter	5.0%	4%
Aberdeen	3.5%	3.5%
Mondrian	3.5%	3.5%
Walter Scott	0%	10%
Portfolio Metric	Current Portfolio	Option 1
Annualized Tracking Error (Volatility of Excess Return)	1.0	1.3
Annualized Alpha (Manager Excess Return)	0.3	0.9
Information Ratio (Risk Adjusted Return)	0.3	0.7



Note: Portfolio metrics and risk allocations based on least common denominator of manager returns, reflects 8 years of history

RETURNS: ACTIVE RISK ANALYSIS

- **Introduction of new managers may bring potential alpha opportunity to the portfolio, with little change to portfolio tracking error**
 - At similar levels of alpha and tracking error, Morgan Stanley and Globeflex have similar roles within the portfolio
 - The addition of a high quality, higher tracking error strategies drives potential for outperformance over the benchmark (JO Hambro)



Note: Data based on manager's full historical track record. Information Ratio "IR" defined as alpha/tracking error

CORRELATION ANALYSIS

- **Diversifying active risk and return with unique managers improves portfolio construction**
 - JO Hambro and Walter Scott bring uncorrelated alpha to the portfolio, increasing the balance in active risk
 - Walter Scott is moderately correlated to Morgan Stanley
 - JO Hambro has no alpha correlation with managers

Correlations	SSgA	Westfield	DFA	Morgan Stanley	Globeflex	JO Hambro	Kabouter	Aberdeen	Mondrian	Walter Scott
SSgA	1.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.14	0.03	0.14
Westfield	0.00	1.00	0.40	0.00	0.00	0.00	-0.02	0.00	0.00	0.00
DFA	0.00	0.40	1.00	-0.01	0.00	0.00	-0.20	-0.08	-0.13	0.00
Morgan Stanley	0.00	0.00	-0.01	1.00	-0.01	0.13	0.26	0.14	0.07	0.32
Globeflex	0.00	0.00	0.00	-0.01	1.00	0.25	0.00	-0.28	-0.10	-0.01
JO Hambro	0.00	0.00	0.00	0.13	0.25	1.00	0.00	0.00	0.00	0.21
Kabouter	0.00	-0.02	-0.20	0.26	0.00	0.00	1.00	0.00	0.13	0.00
Aberdeen	-0.14	0.00	-0.08	0.14	-0.28	0.00	0.00	1.00	0.46	0.02
Mondrian	0.03	0.00	-0.13	0.07	-0.10	0.00	0.13	0.46	1.00	0.00
Walter Scott	0.14	0.00	0.00	0.32	-0.01	0.21	0.00	0.02	0.00	1.00

Highly Negative
(<-0.25)

Relatively Uncorrelated
(-0.25 – 0.25)

Moderately Positive
(0.25 – 0.50)

Highly Positive
(>0.50)



Note: Portfolio metrics and risk allocations based on least common denominator of manager returns, reflects 8 years of history

MANAGER SUMMARY

Firm/Product	NEPC Rating	Asset Class/ Benchmark	Investment Style/Strategy	Performance Expectations	Investment Thesis
JO Hambro International Select	1	International Equity MSCI EAFE	All-cap, bottom-up and top down, concentrated, with a growth tilt.	They will underperform in the short term after a market peak or trough as they focus on earnings revisions and share price momentum. They have demonstrated outperformance in both rising and falling markets.	Christopher Lees and Nudgem Richyal are able to leverage the transparent culture at JOHCM to get a look-through at what stocks other portfolio management teams are buying and selling. They combine those overlapping best ideas with their own fundamental research. The 2-member team deploys a bottom-up and top-down view using an innovative method that targets multiple sources of performance. Their "4-Dimensional" approach takes into account the historical influence that company, sector and country specific factors have on the movement of each individual stock and how these influences change with time.
Walter Scott Global Equity	1	Global Equity MSCI World	Bottom up stock selection with low turnover.	Being a quality growth manager, with a low downside market capture, expect to outperform in weak and volatile markets.	Walter Scott's fundamental, bottom-up investment approach combines detailed financial research with business and industry analysis. The primary focus is upon stock selection, finding companies capable of generating wealth internally at 20% per annum, and compounding at this rate into the future. Meetings with company management are central to the process. They do interesting, intensive research projects that help them identify long term trends and investment ideas.



OVERALL TAKEAWAYS

1. Walter Scott

- Provide flexible exposures to US and International Equity
- Increases active management of the portfolio
- **Consider an allocation to Walter Scott (Current manager in Pension Fund)**

2. JO Hambro

- JO Hambro is a strategy that brings some core/growth exposure to balance the value/quality bias currently in the portfolio
- JO Hambro is less correlated with other managers and pairs well with Morgan Stanley and Kabouter
- **Consider an allocation to JO Hambro**
- **A full search book and an in-person meeting can be scheduled if desired**

3. Impact on Portfolio

- The addition of high quality, high tracking error strategies may create greater alpha opportunity over the current portfolio, with little projected change to overall portfolio volatility
- Further diversifying investment management styles reduces the concentration of alpha risk, creating a more risk balanced portfolio
- Shifts portfolio towards more flexible opportunities in the market (Walter Scott)
- Both Walter Scott and JO Hambro utilize ESG and have the potential to improve overall ESG scores
- Overall estimated equity managers fees would increase slightly from 0.51% to 0.55%
 - Majority of fee increase is a result of reducing passive allocation (SSgA) and increasing active management exposure



DISCLOSURES

NEPC, LLC

DISCLAIMERS

- **Past performance is no guarantee of future results.**
- **The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.**
- **Data used to prepare this report was obtained directly from various sources. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.**
- **All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.**
- **NEPC may provide background information on fund structures or the impact of taxes but you should contact your legal counsel or tax professional for specific advice on such matters.**
- **This report is provided as a management aid for the client's internal use only. This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.**



ALTERNATIVE INVESTMENT DISCLOSURES

It is important that investors understand the following characteristics of non-traditional investment strategies including hedge funds and private equity:

1. Performance can be volatile and investors could lose all or a substantial portion of their investment
2. Leverage and other speculative practices may increase the risk of loss
3. Past performance may be revised due to the revaluation of investments
4. These investments can be illiquid, and investors may be subject to lock-ups or lengthy redemption terms
5. A secondary market may not be available for all funds, and any sales that occur may take place at a discount to value
6. These funds are not subject to the same regulatory requirements as registered investment vehicles
7. Managers may not be required to provide periodic pricing or valuation information to investors
8. These funds may have complex tax structures and delays in distributing important tax information
9. These funds often charge high fees
10. Investment agreements often give the manager authority to trade in securities, markets or currencies that are not within the manager's realm of expertise or contemplated investment strategy





AGENDA ITEM SUMMARY

1. **NAME OF ITEM:** Performance Review– Managed Investment Pool, Pension Fund and Operating Fund
2. **INITIATED BY:** Sven P. Bartholomew, Chair Pro tem
3. **BOARD INFORMATION:** X **BOARD ACTION:**
4. **OUTCOME:** **BOARD POLICY:**
 Primary Outcomes: Section 709 - Investments
 Enhance fiscal positioning
5. **BACKGROUND:**
 Kelly Regan and Jay Roney of NEPC will provide a brief overview of performance for all three portfolios for the quarter ended December 30, 2019.

NEPC will refer to the enclosed executive summary performance report during the February 27, 2020 Investment Committee meeting. The supplemental performance materials for the quarter ended December 30, 2019 are for reference purposes only and will not be reviewed during the meeting.

February 19, 2020

FOURTH QUARTER 2019 INVESTMENT REVIEW

UNIVERSITY OF MAINE SYSTEM



February 27, 2020

Jay E. Roney, Partner

Kelly Regan, Senior Consultant



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO



NEPC's 25th Annual Investment Conference

- Please save the date for our 25th Annual Investment Conference on Wednesday, May 20 and Thursday, May 21 at the Renaissance Boston Waterfront Hotel.
- Our theme for the conference this year is the Future in Focus. Please join us as we and our distinguished lineup of industry experts explore the potential changes and challenges facing markets in the new decade. We look forward to discussing innovative investment ideas and concepts, and new key areas of focus such as sustainability and diversity.
- We are pleased to announce that Howard Marks, Co-Chairman of Oaktree Capital Management will be our keynote speaker.
- Please reach out to Sarah Winrow: swinrow@nepc.com if you have any questions.



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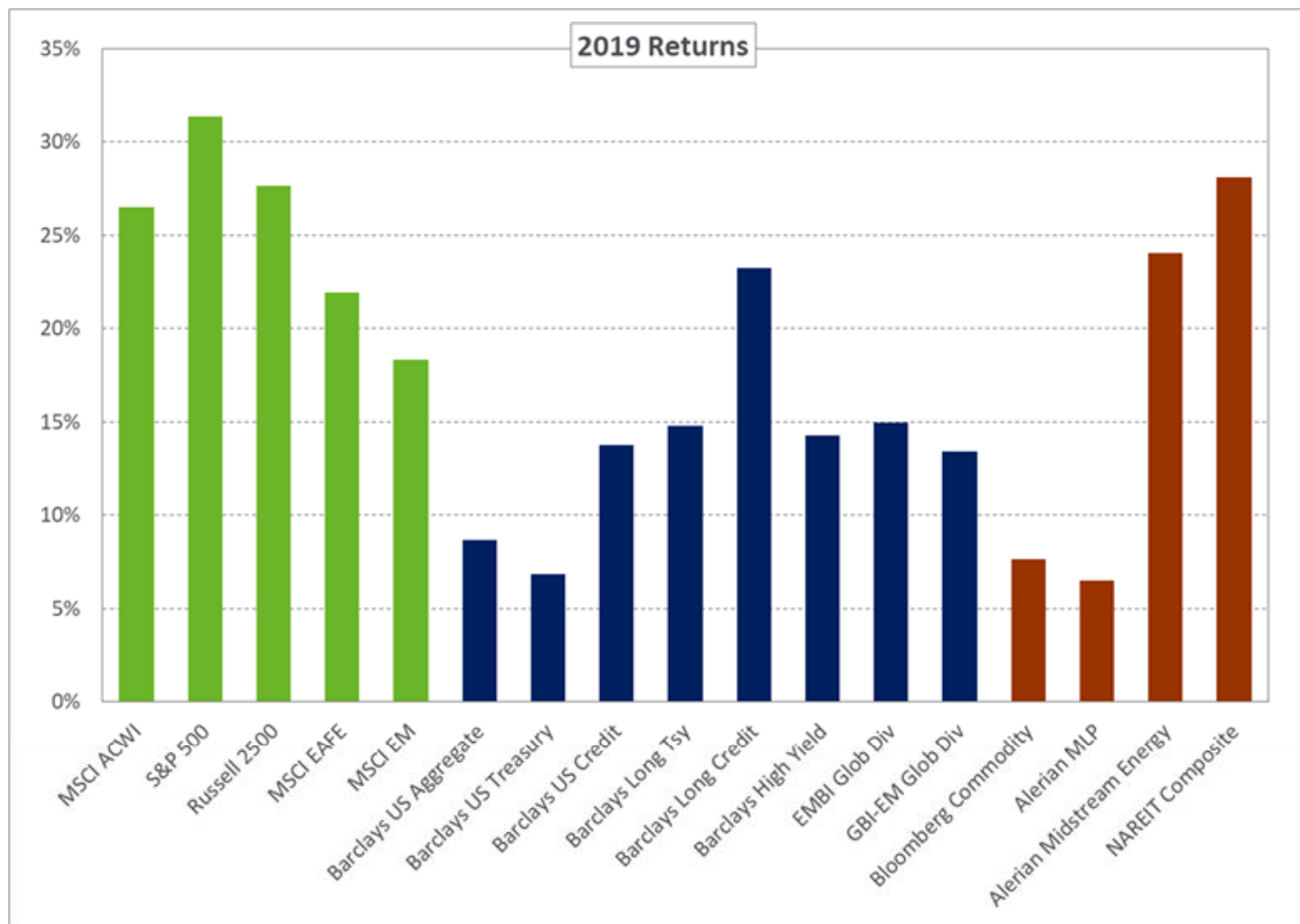
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MARKET IN REVIEW

NEPC, LLC

2019: A YEAR OF STRONG, POSITIVE RETURNS

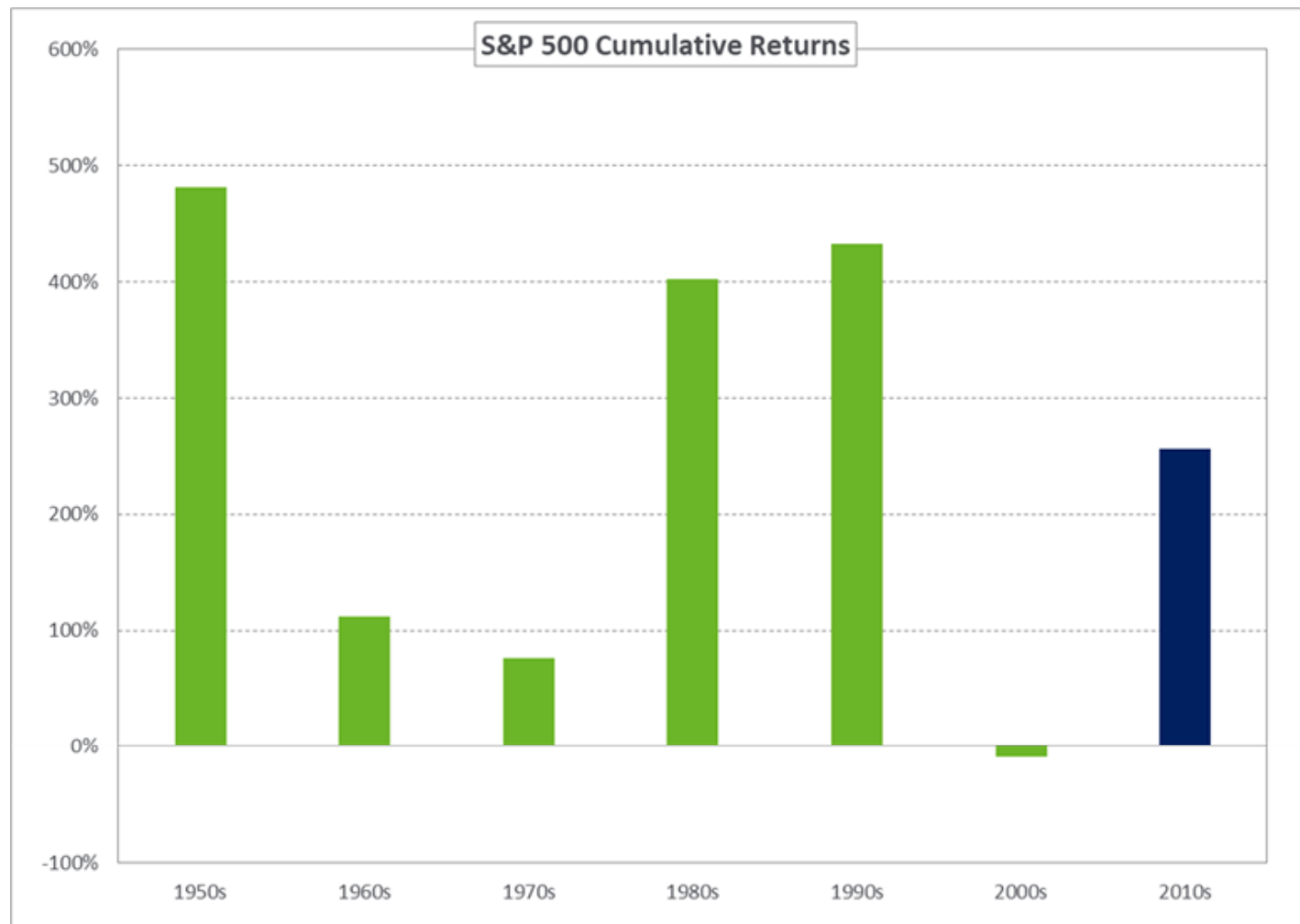


Source: S&P, MSCI, Bloomberg, JPM, Alerian, NAREIT, FactSet, NEPC



December 31, 2019

WHAT WILL THE 20'S BRING?

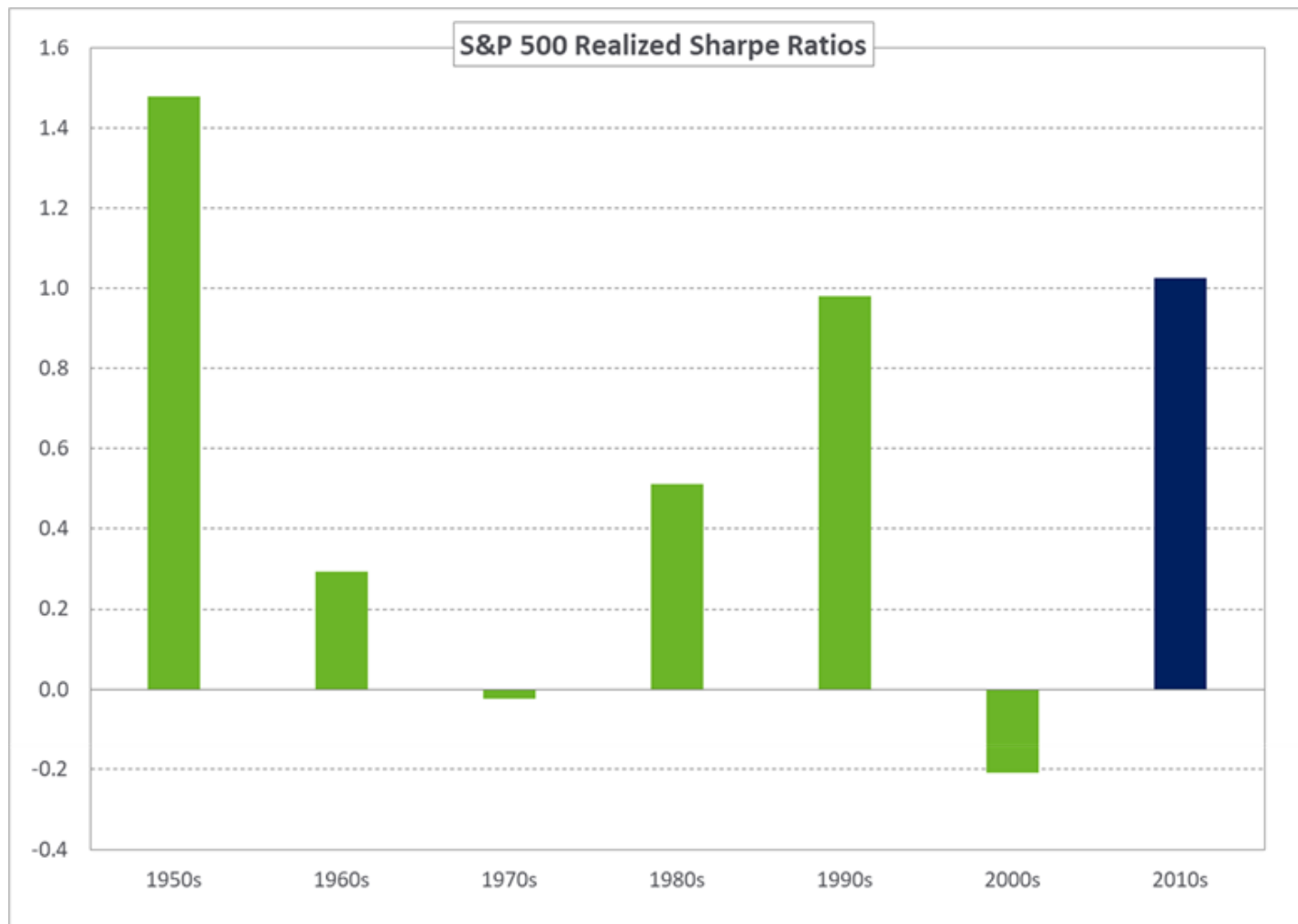


Source: S&P, FactSet



December 31, 2019

BEST RISK-ADJUSTED DECADE SINCE THE 1950S



Source: S&P, FactSet



December 31, 2019

CALENDAR YEAR INDEX PERFORMANCE

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Jan	YTD
S&P 500	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	0.0%	0.0%
Russell 1000	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	31.4%	0.1%	0.1%
Russell 2000	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	25.5%	-3.2%	-3.2%
Russell 2500	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	27.8%	-2.0%	-2.0%
MSCI EAFE	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	22.0%	-2.1%	-2.1%
MSCI EM	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	18.4%	-4.7%	-4.7%
MSCI ACWI	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	26.6%	-1.1%	-1.1%
Private Equity	19.8%	9.5%	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	11.0%	-	11.0%
BC TIPS	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	8.4%	2.1%	2.1%
BC Municipal	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	7.5%	1.8%	1.8%
BC Muni High Yield	7.8%	9.2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	10.7%	2.5%	2.5%
BC US Corporate HY	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	14.3%	0.0%	0.0%
BC US Agg Bond	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	8.7%	1.9%	1.9%
BC Global Agg	5.5%	5.6%	4.3%	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	6.8%	1.3%	1.3%
BC Long Treasuries	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	14.8%	6.8%	6.8%
BC US Long Credit	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	23.4%	4.1%	4.1%
BC US STRIPS 20+ Yr	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.1%	20.9%	9.5%	9.5%
JPM GBI-EM Global Div	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	13.5%	-1.3%	-1.3%
JPM EMBI Glob Div	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	15.0%	1.5%	1.5%
CS Hedge Fund	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	7.1%	-3.2%	9.3%	-	9.3%
BBG Commodity	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	7.7%	-7.4%	-7.4%
Alerian MLP	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	-6.5%	-12.4%	6.6%	-5.6%	-5.6%
FTSE NAREIT Equity REITs	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	26.0%	1.2%	1.2%

Source: FactSet, Barclays, Thomson One

*Private Equity return represents calendar year pooled IRR and is subject to a one quarter lag



January 31, 2020

KEY MARKET THEMES

NEPC, LLC

KEY MARKET THEMES (KMT) OVERVIEW

Key Market Themes are factors that define global markets and can be expected to both evolve and remain relevant without a clear timeline of conclusion. At times, themes may be challenged or disrupted and generate market volatility. The conclusion of a theme likely alters both market dynamics and our market outlook. Our intent is for clients to be aware of these themes and understand their implications for asset allocation and portfolio implementation.

NEPC currently has four Key Market Themes:

**Late Cycle
Dynamics**

**Permanent
Interventions**

**China
Transitions**

**Globalization
Backlash**



KMT: PERMANENT INTERVENTIONS

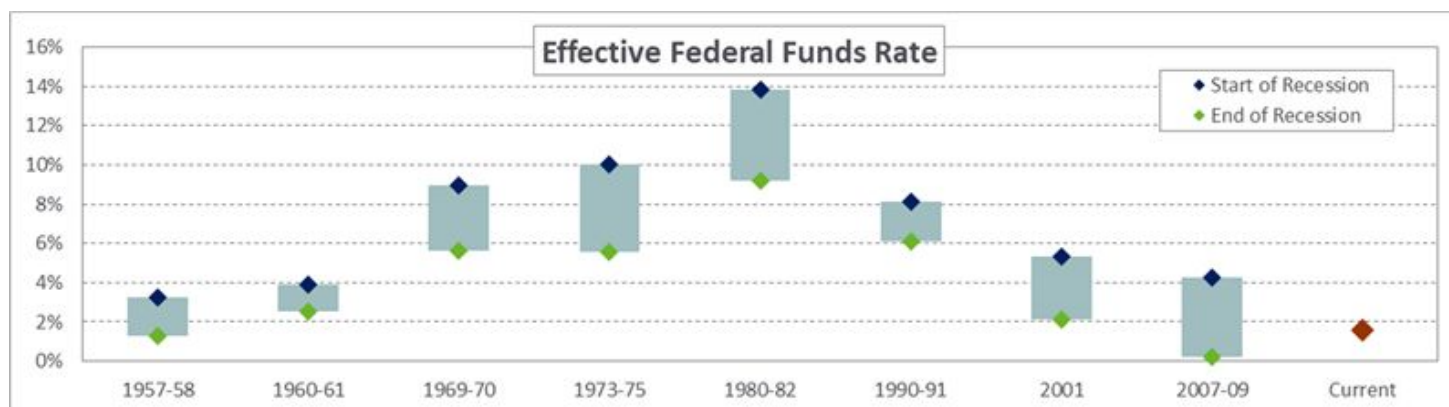
We believe central banks across the globe will continue to expand balance sheet assets to sustain an environment of excess liquidity

Low to negative interest rates and a fragile economic environment force central banks to continue to grow balance sheets and liquify the global financial system

Weak economic growth trends in the developed world underpin political tensions, which we believe will motivate significant fiscal debt expansion

Permanent Interventions suggest low yields and higher P/E multiples and a supportive policy environment would appear favorable to equities

However, there is a low margin of error if an economic downturn is on the horizon as current low interest rates can be reduced only so far



Source: FactSet, Federal Reserve



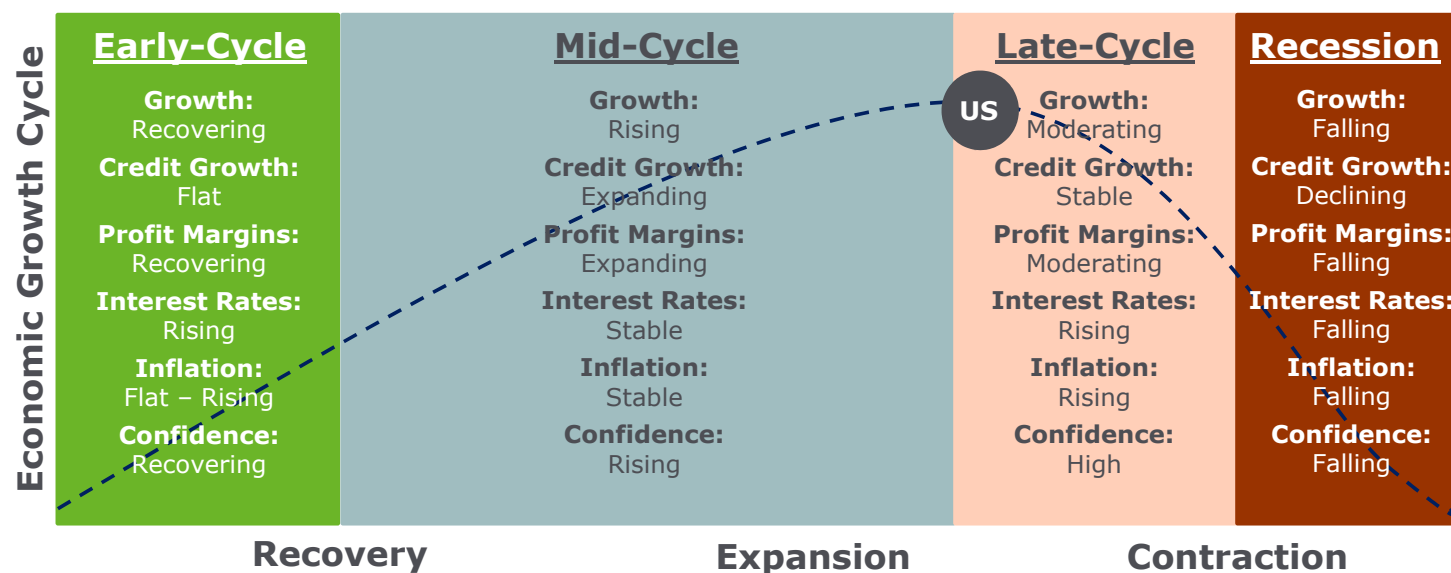
December 31, 2019

KMT: LATE CYCLE DYNAMICS

The US economy is in the late stage of the economic cycle as evidenced by classic late-cycle indicators including a tight labor market, a flat yield curve, and strong investment returns

Late cycle does not mean end of cycle; equity markets can offer strong returns and abandoning long-term allocations may detract from results

There is minimal evidence in economic/financial indicators to suggest that a US recession is imminent



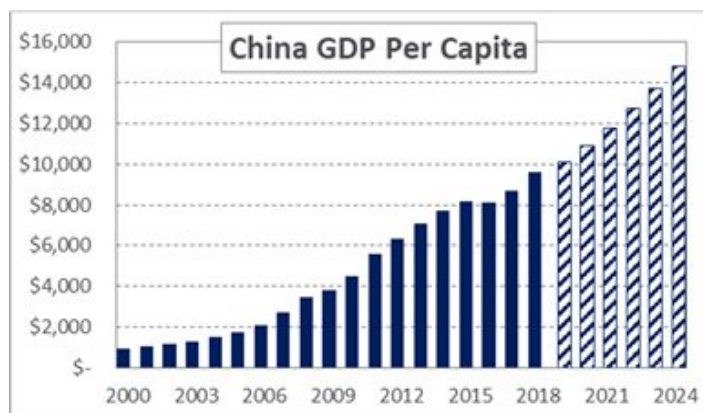
KMT: CHINA TRANSITIONS

China is undergoing a multi-faceted evolution as the economy transitions to a services and consumption-based model, while China's role on the global stage shifts to reflect its ascending geopolitical power

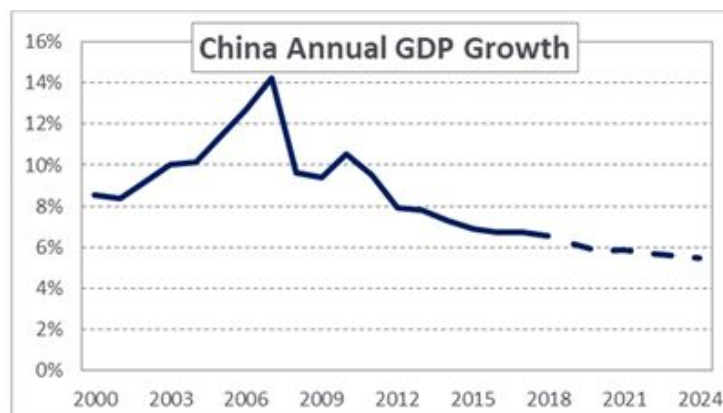
China's ascendancy as a strategic competitor to the US across innovative fields, such as artificial intelligence and 5G technologies, has provoked social and political angst regarding China's transition to a global power

China continues to experience slowing economic growth, but remains on a growth path to equal the size of the US economy over the next 25 years

China is the global growth engine and any disruption to these significant transitions will be transmitted globally due to the country's expanding role in the world economy



Source: IMF



Source: IMF



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KMT: GLOBALIZATION BACKLASH

Stagnant wage growth and growing wealth inequality are fueling political discontent across the developed and emerging world

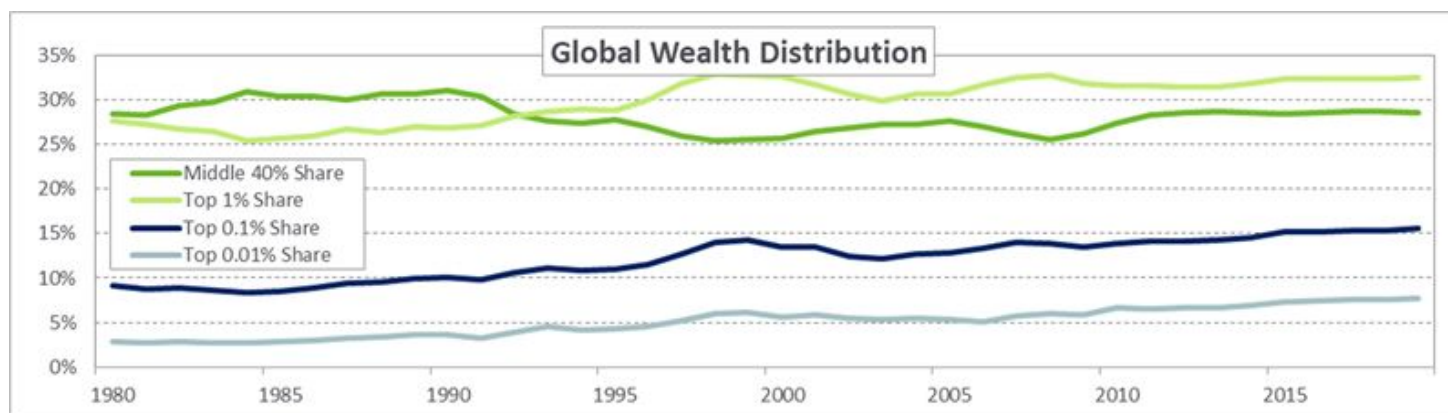
Globalization is viewed with suspicion by a growing percentage of voters, shifting multiple countries to more nationalist policies

Fatigue over globalization is changing political platforms and increasing trade tensions. A reevaluation of established multilateral relationships likely increases geopolitical risks

The growth of populist movements, on the “left” and “right”, destabilizes the political order and materializes as Globalization Backlash

The extremes of the political spectrum across the developed world are likely to have a greater role in government as moderation is stretched

US-China trade tensions are a full expression of our backlash theme



Source: World Inequality Lab



December 31, 2019

CURRENT OPPORTUNITIES

NEPC, LLC

CURRENT OPPORTUNITIES OVERVIEW

Current Opportunities are investment ideas that represent an action with the goal of improving investment outcomes relative to an investor's strategic asset allocation. It is not our intent that the full list of opportunities be implemented. Rather, we encourage a focus on the actions that offer a material benefit to each client's strategic allocation relative to their unique objectives and constraints. These investment ideas are likely to change more frequently as market dynamics and valuations shift over time.

NEPC currently has five Current Opportunities:

**Reduce Lower
Quality Credit
Exposure**

**Overweight
Emerging
Market Equities**

**Add Long
Volatility
Exposure**

**Fund Public
Midstream
Energy Exposure**

**Fund Emerging
Local Debt**



CORE GEOMETRIC RETURN ASSUMPTIONS

	Asset Class Return Assumptions	2020 10-Year	2019 10-Year	Annual Change
Equity	Cash	1.8%	2.6%	-0.8%
	Large Cap Equities	5.0%	6.2%	-1.2%
	International Equities (Unhedged)	6.0%	7.3%	-1.3%
	Emerging International Equities	9.0%	9.2%	-0.2%
	<i>Global Equity*</i>	6.2%	7.3%	-1.1%
	<i>Private Equity*</i>	9.4%	10.1%	-0.7%
Fixed Income	Treasuries	1.9%	2.5%	-0.6%
	<i>Core Bonds*</i>	2.5%	3.2%	-0.7%
	TIPS	2.2%	3.2%	-1.0%
	Municipal Bonds (1-10 Year)	1.9%	3.0%	-1.1%
	High Yield Bonds	4.1%	5.5%	-1.4%
	<i>Private Debt*</i>	6.7%	7.6%	-0.9%
Real Assets	Commodities	4.0%	4.4%	-0.4%
	REITs	5.4%	6.9%	-1.5%
	Core Real Estate	5.2%	6.0%	-0.8%
	Private Real Assets: Infrastructure/Land	5.9%	6.4%	-0.5%
Multi-Asset	<i>US 60/40*</i>	4.3%	5.2%	-0.9%
	<i>Global 60/40*</i>	4.4%	5.1%	-0.7%
	<i>Hedge Funds*</i>	5.0%	6.0%	-1.0%

*Calculated as a blend of other asset classes



December 31, 2019

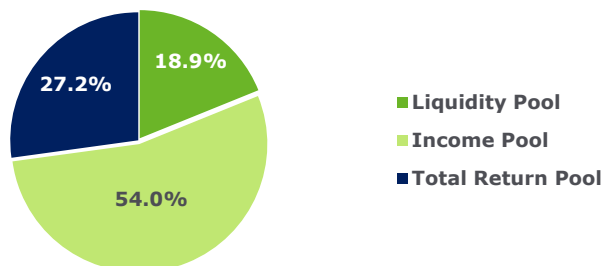
OPERATING FUND PERFORMANCE REVIEW

NEPC, LLC

EXECUTIVE SUMMARY

ASSET ALLOCATION

Plan Assets: \$259.3 Million



FUND PERFORMANCE: NET OF FEES

	QTR (%)	FYTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
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COMPOSITE	2.0	2.6	7.3	3.8	2.8	2.8
ALLOCATION INDEX	1.9	2.6	7.4	4.0	2.9	2.7

FUND COMMENTS

Asset Allocation

The Fund's assets as of December 31, 2019 were \$259.3million. This represents a \$38 million decrease from the previous quarter.

The Liquidity Pool (18.9% vs. 30.0%), Income Pool (54.0% vs. 47.5%) and Total Return Pool (27.2% vs. 22.5%) are within policy ranges. Throughout the year, asset allocation will change based on cash inflows and outflows. NEPC reviews this on a monthly basis.

Performance (Net of Fees)

The Fund returned 2.0% during the fourth quarter and 2.6% fiscal year-to-date. During these time periods, all managers posted positive returns and were in line with benchmarks (in aggregate). The Total Return Pool contributed the most to the overall Fund return.

RECENT ACTIONS/RECOMMENDATIONS

Recent Actions

Rebalancing occurred from the Total Return Pool to the Income Pool during the quarter.

Recommendations

There are no recommendations at this time.

Investment Manager Updates

Manager updates are detailed in the due diligence section of the report.



December 31, 2019

OPERATING FUND PERFORMANCE REVIEW

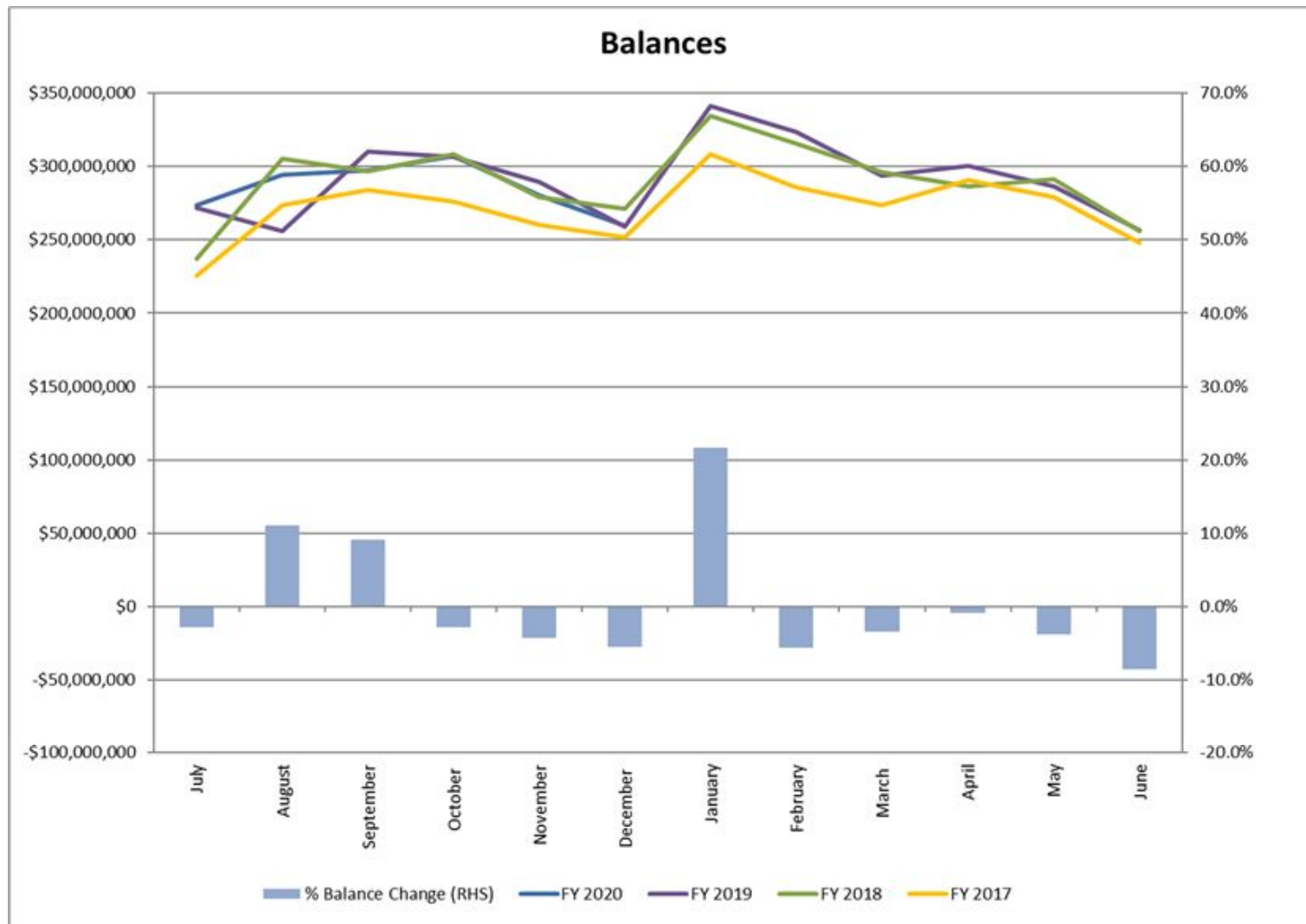
Ending December 31, 2019

	Market Value (\$)	% of Portfolio	Policy %	Universe	Qtr (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Operating Funds Composite	\$259,342,614	100.0%	100.0%		2.0		2.6		7.3		3.8		2.8		2.8	
<i>Allocation Index</i>					1.9		2.6		7.4		4.0		2.9		2.7	
Liquidity Pool Composite	\$48,962,664	18.9%	30.0%		0.5		1.0		2.1		1.5		1.0		0.6	
State Pool	\$25,011,423	9.6%			0.5		1.1		2.2		1.6		1.1		0.7	
BOA General Fund	\$1,768,743	0.7%			0.1		0.2		0.8		0.5		0.3			
Federated Gov't Obligations	\$18,902,714	7.3%			0.4		1.0		2.2		1.5					
JP Morgan US Gov't Money Market Fund	\$3,279,783	1.3%			0.4		1.0		2.1		1.5					
<i>FTSE T-Bill 3 Months TR</i>					0.5		1.0		2.3		1.7		1.0		0.6	
Income Pool Composite	\$139,950,447	54.0%	47.5%		0.7		1.8		5.9		2.9		2.5		2.9	
Income Research + Management	\$77,313,856	29.8%	26.0%	eV US Short Duration Fixed Inc	0.6	36	1.3	46	4.2	61	2.2	68	1.8	66		
<i>BBgBarc US Govt/Credit 1-3 Yr. TR</i>					0.6		1.3		4.0		2.1		1.7		1.5	
BlackRock Strategic Income Opportunities	\$20,804,435	8.0%	7.0%	eV US Enh Fixed Inc	1.6	1	2.5	21	7.8	31	4.0	30				
<i>3-Month Libor Total Return USD</i>					0.5		1.0		2.4		2.0		1.4		0.9	
Loomis Sayles Bank Loans	\$21,206,470	8.2%	7.0%	eV US Bank Loan Fixed Inc	1.0	86	2.3	77	7.8	59	3.5	89	3.8	81	4.3	90
<i>Loomis Bank Loans Custom Index</i>					1.4		2.9		9.3		4.0		4.3		5.0	
Vanguard Total Bond Market Instl' Fund	\$20,625,686	8.0%	7.5%	eV All US Fixed Inc	0.0	90	2.5	43	8.7	45	4.0	49	3.0	55	3.7	57
<i>BBgBarc US Aggregate TR</i>					0.2		2.5		8.7		4.0		3.0		3.7	
Total Return Pool Composite	\$70,429,503	27.2%	22.5%		6.4		6.0		16.7		8.0		5.4		5.7	
Lighthouse	\$15,414,608	5.9%	5.0%	eV Alt - Long/Short Equity	7.3	33	5.4	43	13.4	53	5.5	60				
<i>Credit Suisse Long Shrt Eqt USD</i>					5.1		5.2		12.2		6.7		3.9		5.2	
Newton Global Real Return	\$12,186,729	4.7%	4.0%	eV Global TAA	2.0	84	2.6	78	11.8	68	5.7	66				
<i>60% MSCI ACWI (Net)/ 40% BBgBarc Global Ag</i>					5.5		5.8		18.6		9.3		6.1		6.4	
PIMCO All Asset	\$12,314,560	4.7%	4.0%	eV Global TAA	4.3	48	3.7	66	12.2	63	6.7	49	4.7	51	5.5	62
<i>Blended Index</i>					1.9		3.1		11.3		5.1		4.3		5.1	
Vanguard Total World Stock Index	\$30,513,606	11.8%	9.5%	eV Global All Cap Equity	9.0	45	9.0	31	26.8	47	12.5	46	8.7	42		
<i>FTSE Global All Cap Index</i>					9.2		9.2		26.8		12.3		7.6		7.4	



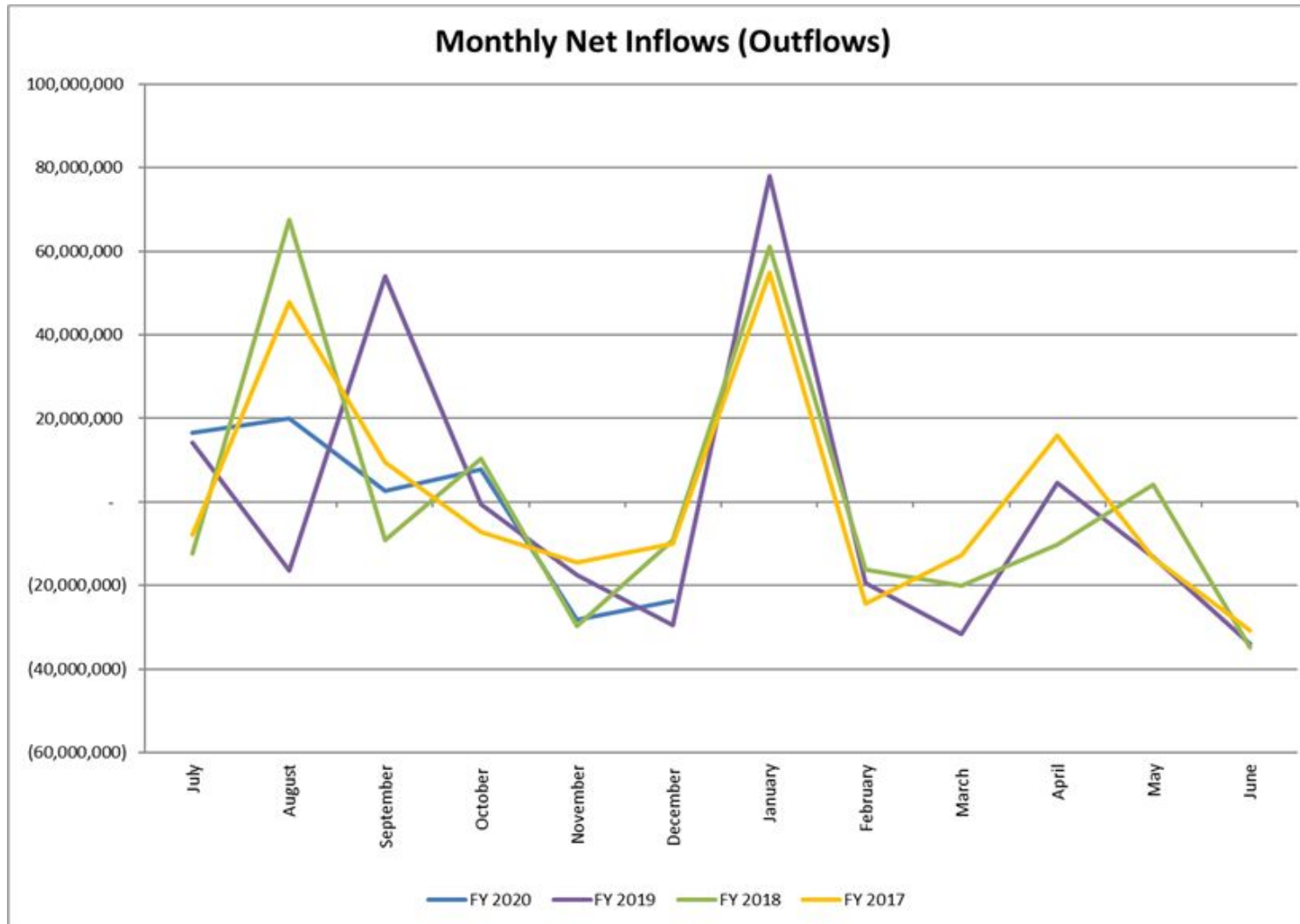
December 31, 2019

BALANCES AND MONTHLY CHANGES



December 31, 2019

MONTHLY NET INFLOWS (OUTFLOWS)



December 31, 2019

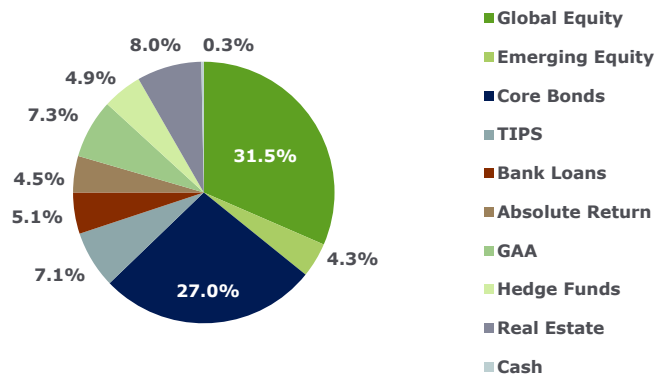
PENSION FUND PERFORMANCE REVIEW

NEPC, LLC

EXECUTIVE SUMMARY

ASSET ALLOCATION

Plan Assets: \$26.5 Million



FUND COMMENTS

Asset Allocation

The Fund's assets were \$26.5 million as of December 31, 2019 a \$90 thousand decrease during the fourth quarter. During the quarter, there was a net cash outflow of \$1.06 million and investment gains of \$970 thousand. All asset classes are within policy ranges.

Performance (Net of Fees)

The Fund returned 3.6% in the 4th quarter and 4.8% fiscal year-to-date.

Over the fiscal year-to-date period, managers in aggregate matched benchmarks (Composite vs. Allocation Index).

FUND PERFORMANCE: NET OF FEES

	QTR (%)	FYTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
COMPOSITE	3.6	4.8	13.6	6.5	4.7	6.0
ALLOC. INDEX	3.9	4.7	14.0	7.4	5.4	6.5
POLICY INDEX	3.9	4.8	14.7	7.6	5.7	6.9

RECENT ACTIONS/RECOMMENDATIONS

Recent Actions

Rebalancing was provided over the quarter to cover benefit payments and expenses.

Recommendations

There are no recommendations at this time.

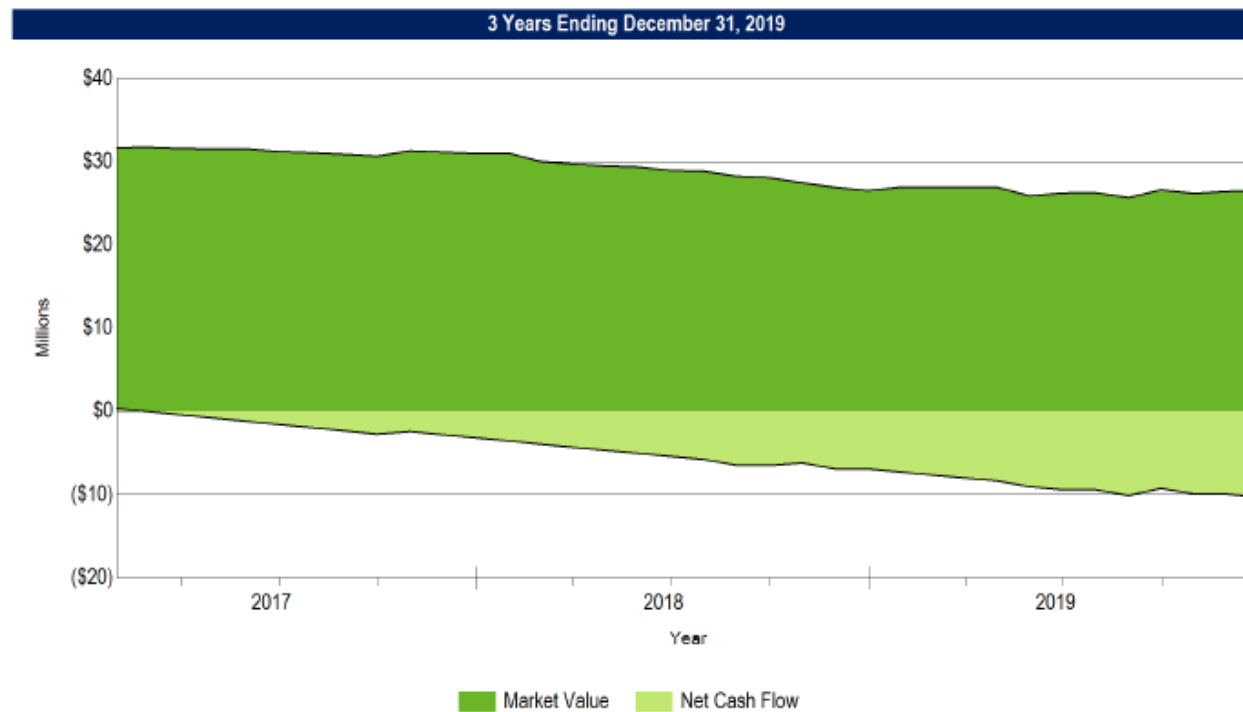
Investment Manager Updates

Manager updates are detailed in the due diligence section of the report.



December 31, 2019

ASSET GROWTH SUMMARY



	Quarter-To-Date	Fiscal Year-To-Date	One Year	Three Years
Beginning Market Value	\$26,610,506	\$26,231,215	\$26,520,627	\$31,010,184
Net Cash Flow	-\$1,057,917	-\$898,171	-\$3,381,071	-\$10,316,805
Net Investment Change	\$969,338	\$1,188,883	\$3,382,371	\$5,828,548
Ending Market Value	\$26,521,927	\$26,521,927	\$26,521,927	\$26,521,927



December 31, 2019

PENSION PERFORMANCE OVERVIEW

Ending December 31, 2019

	Market Value(\$)	% of Portfolio	Policy %	Universe	Qtr (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Pension Composite	\$26,521,927	100.0%	100.0%		3.6		4.8		13.6		6.5		4.7		6.0	
Allocation Index					3.9		4.7		14.0		7.4		5.4		6.5	
Policy Index					3.9		4.8		14.7		7.6		5.7		6.9	
Total Global Equity	\$8,366,893	31.5%	30.0%	eA Global All Cap Equity	8.3											
MSCI World					8.6		9.1		27.7		12.6		8.7		9.5	
Walter Scott Global Equity Fund	\$8,366,893	31.5%	30.0%	eA Global All Cap Equity	8.3	62										
MSCI World					8.6		9.1		27.7		12.6		8.7		9.5	
Emerging Markets Equity	\$1,143,837	4.3%	3.0%	eV Emg Mkts Equity Net Median	8.2	86	5.9	65	9.4	96	3.5	99	-0.7	99		
MSCI Emerging Markets					11.8		7.1		18.4		11.6		5.6		3.7	
Mondrian EM Small Cap	\$1,143,837	4.3%	3.0%	eV Emg Mkts Equity	8.2	86	5.9	65	9.4	96	3.5	99	-0.7	99		
MSCI Emerging Markets Small Cap					9.5		4.5		11.5		6.7		3.0		2.9	
Total Fixed Income	\$11,570,251	43.6%	43.0%	eV All US Fixed Inc Net Median	0.5	65	2.3	49	8.3	49	4.0	51	3.1	54	4.1	48
BBGBarc US Aggregate TR					0.2		2.5		8.7		4.0		3.0		3.7	
Vanguard Total Bond Market Index	\$7,149,324	27.0%	26.0%	eV US Core Fixed Inc	0.0	70	2.5	54	8.7	69	4.0	57	3.0	72		
BBGBarc US Aggregate TR					0.2		2.5		8.7		4.0		3.0		3.7	
Vanguard Inflation-Protected Securities	\$942,397	3.6%	3.5%	eV US TIPS / Inflation Fixed Inc	0.5	87	2.0	64	8.2	64						
BBGBarc US TIPS TR					0.8		2.1		8.4		3.3		2.6		3.4	
Vanguard Short-Term Inflation-Protected Securities - VTSI	\$921,872	3.5%	3.5%	eV US TIPS / Inflation Fixed Inc	1.0	26	1.5	93								
BBGBarc US TIPS 1-5 Yr TR					1.2		1.4		5.1		2.1		1.8		1.7	
BlackRock Strategic Income Opportunities	\$1,199,069	4.5%	5.0%	eV US Enh Fixed Inc	1.6	1	2.5	21	7.8	30						
3-Month Libor Total Return USD					0.5		1.0		2.4		2.0		1.4		0.9	
Bain Capital Senior Loan Fund	\$1,357,588	5.1%	5.0%	eV US Bank Loan Fixed Inc	1.2	82	1.9	84	7.7	71						
Credit Suisse Leveraged Loans					1.7		2.6		8.2		4.5		4.5		5.2	



December 31, 2019

PENSION PERFORMANCE OVERVIEW

Ending December 31, 2019

	Market Value(\$)	% of Portfolio	Policy %	Universe	Qtr (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total GAA	\$1,945,713	7.3%	8.0%	eV Global TAA Net Median	2.0	83	2.7	78	13.9	58	6.1	57	3.7	65	4.5	73
<i>65% MSCI ACWI (Net) / 35% BBgBarc Global Agg</i>					5.9		6.2		19.6		9.7		6.4		6.7	
Newton Global Real Return	\$1,945,713	7.3%	8.0%	eV Global TAA	2.0	83	2.7	78	11.8	69	5.7	66				
<i>60% MSCI ACWI (Net) / 40% FTSE WGBI</i>					5.2		5.6		18.2		9.2		6.0		6.2	
Total Alternative Investments	\$1,288,884	4.9%	5.0%		7.3		5.4		13.4		4.2		2.7		2.7	
<i>HFRI Fund of Funds Composite Index</i>					3.0		2.1		8.3		3.9		2.4		2.8	
Lighthouse	\$1,288,884	4.9%	5.0%	eV Alt - Long/Short Equity	7.3	33	5.4	43	13.4	53	5.5	60				
<i>Credit Suisse Long Shrt Eqt USD</i>					5.1		5.2		12.2		6.7		3.9		5.2	
Total Real Assets	\$2,126,944	8.0%	8.0%													
Principal	\$2,126,944	8.0%	8.0%		1.3		2.9		5.8		7.2		8.8		11.3	
<i>NCREIF ODCE</i>					1.5		2.8		5.3		7.1		9.0		11.4	
Total Cash	\$79,405	0.3%	3.0%													
Distribution Account	\$79,405	0.3%	3.0%		0.3		0.8		1.9		1.3		0.8		0.4	
<i>91 Day T-Bills</i>					0.4		0.9		2.1		1.6		1.1		0.6	



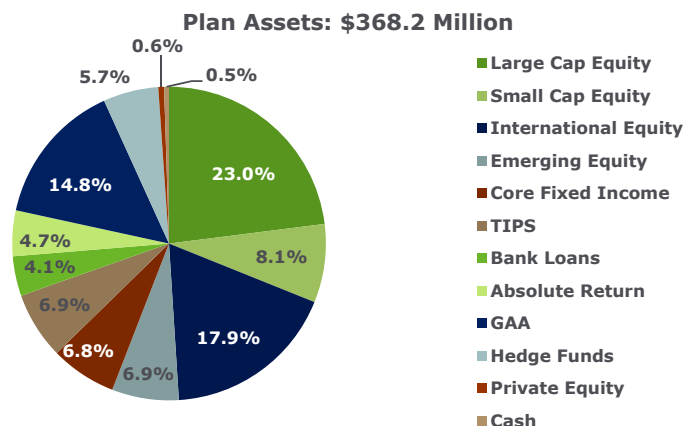
December 31, 2019

MANAGED INVESTMENT POOL PERFORMANCE REVIEW

NEPC, LLC

EXECUTIVE SUMMARY

ASSET ALLOCATION



FUND COMMENTS

Asset Allocation

MIP assets were \$368.2 million as of December 31, 2019, a \$23.5 million increase over the quarter. During the quarter there was a \$1.5 million net cash inflow and investment gains of \$22 million. All asset classes are within policy ranges.

Performance (Net of Fees)

The Fund returned 6.1% in the 4th quarter and 5.7% fiscal year-to-date, ranking in the 24th and 54th percentiles, respectively.

During these time periods, all managers posted positive returns and US Equities contributed the most to the overall Fund return.

MIP PERFORMANCE: NET OF FEES

	QTR (%)	FYTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
COMPOSITE	6.1	5.7	16.7	7.8	5.2	6.6
ALLOC. INDEX	6.1	6.3	18.2	8.8	6.1	6.8
POLICY INDEX	6.3	6.3	18.3	9.2	6.5	7.1
RANK (E&F \$100-500M)	24	54	72	83	89	87

RECENT ACTIONS/RECOMMENDATIONS

Recent Actions

Rebalancing was provided over the quarter to invest 3rd party contributions and other distributions.

Recommendations

A recommendation for the equity portfolio is provided in the separate asset allocation presentation.

Investment Manager Updates

Manager updates are detailed in the due diligence section of the report.



PRIVATE MARKETS UPDATE

- **The System invests in a number of private markets assets, committing capital for longer time periods to obtain illiquidity premiums and exposure to alternative markets**
- **Landmark Equity Partners XV**
 - Secondary Private Equity fund, purchasing interests in venture capital, growth equity and buyout funds, and to a lesser extent, special situation and energy funds
 - Strategy is diversified, investing in ~200 partnerships
 - Fund has a 4 year investment period and 10 year term
 - The System committed \$5 million in 2014 and has a remaining commitment of \$1.8 million
 - Since inception, the strategy has an IRR of 14.7%, net of fees (6/30/19)
- **Hancock Timberland VII**
 - Private Real Asset Timber Fund structured for the purpose of making direct and indirect investments in commercial timberland
 - The System has been invested in the strategy since 2005
 - The Fund distributed all remaining capital back to investors in December 2019
 - The System committed \$5 million in 2005
 - Since inception, the strategy has an IRR of 1.1%, net of fees (9/30/19)



MIP PERFORMANCE OVERVIEW

As of December 31, 2019

	Market Value(\$)	% of Portfolio	Policy %	Universe	Qtr (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
MIP Composite	\$368,154,057	100.0%	100.0%		6.1	24	5.7	54	16.7	72	7.8	83	5.2	89	6.6	92
Allocation Index					6.1	24	6.3	25	18.2	48	8.8	52	6.1	60	6.8	71
Policy Index					6.3	19	6.3	26	18.3	45	9.2	42	6.5	38	7.1	60
InvMetrics All E&F \$100mm - \$500mm Net Median					5.7		5.9		18.0		8.9		6.3		7.6	
Total Domestic Large Cap	\$84,556,334	23.0%	22.0%	eV US Large Cap Core Equity	9.1	30	10.9	25	31.4	28	15.2	26	11.6	20	13.4	15
S&P 500					9.1		10.9		31.5		15.3		11.7		13.6	
SSgA S&P 500	\$84,556,334	23.0%	22.0%	eV US Large Cap Core Equity	9.1	30	10.9	25	31.4	28	15.2	26	11.6	20	13.5	14
S&P 500					9.1		10.9		31.5		15.3		11.7		13.6	
Total Domestic Small/Mid Cap	\$29,776,947	810.0%	8.0%	eV US Small-Mid Cap Equity	11.5	9	9.4	19	28.0	56	10.8	44	8.5	47	12.5	41
Russell 2500					8.5		7.1		27.8		10.3		8.9		12.6	
Westfield Capital	\$15,569,883	4.2%	4.0%	eV US Small-Mid Cap Growth Equity	14.3	6	11.4	7	34.5	29	17.5	41	10.4	60	14.2	33
Russell 2500 Growth					10.6		7.1		32.7		15.2		10.8		14.0	
DFA	\$14,207,064	3.9%	4.0%	eV US Small Cap Value Equity	8.6	32	7.3	53	21.5	68	3.9	65	6.1	60		
Russell 2000 Value					8.5		7.9		22.4		4.8		7.0		10.6	
Total International Equity (including emerging markets)	\$91,658,759	24.9%	25.0%	eV All ACWI ex-US Equity	8.2	87	5.0	95	16.6	91	7.6	85	4.0	90	5.0	84
MSCI EAFE					8.2		7.0		22.0		9.6		5.7		5.5	
Morgan Stanley	\$23,668,907	6.4%	6.5%	eV All EAFE Equity	7.4	84	5.6	85	20.4	67	9.1	57	5.0	75	5.4	84
Globeflex	\$23,289,308	6.3%	6.5%	eV All EAFE Equity	7.6	81	4.0	96	14.2	97	6.9	87	4.5	87	5.5	80
MSCI EAFE					8.2		7.0		22.0		9.6		5.7		5.5	
Kabouter International Opportunities Offshore Fund II	\$19,126,748	5.2%	5.0%	eV EAFE Small Cap Equity	9.3	91	5.0	95	17.9	93						
MSCI EAFE Small Cap					11.5		11.0		25.0		10.9		8.9		8.7	
Emerging Markets Equity	\$25,573,796	6.9%	7.0%	eV Emg Mkts Equity	8.9	82	5.3	73	14.9	78	7.0	93	2.3	95		
MSCI Emerging Markets					11.8		7.1		18.4		11.6		5.6	46		
Aberdeen Emerging Mkts	\$13,254,683	3.6%	3.5%	eV Emg Mkts Equity	9.4	78	4.9	77	20.4	46	10.2	60	5.3	57	5.3	29
MSCI Emerging Markets					11.8		7.1		18.4		11.6		5.6		3.7	
Mondrian EM Small Cap	\$12,319,113	3.3%	3.5%	eV Emg Mkts Equity	8.2	86	5.9	65	9.4	96	3.5	99	-0.7	99		
MSCI Emerging Markets Small Cap					9.5		4.5		11.5		6.7		3.0		2.9	



December 31, 2019

MIP PERFORMANCE OVERVIEW

As of December 31, 2019

	Market Value(\$)	% of Portfolio	Policy %	Universe	Qtr (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Fixed Income	\$82,701,570	22.5%	24.0%	eV All US Fixed Inc	1.0	26	2.3	49	8.0	51	4.2	44	3.1	51	4.8	36
<i>BBgBarc US Aggregate TR</i>					<i>0.2</i>		<i>2.5</i>		<i>8.7</i>		<i>4.0</i>		<i>3.0</i>		<i>3.7</i>	
Commonfund	\$25,180,735	6.8%	7.0%	eV US Core Fixed Inc	0.8	2	2.9	6	9.4	30	4.8	5	3.5	19	4.6	15
<i>BBgBarc US Aggregate TR</i>					<i>0.2</i>		<i>2.5</i>		<i>8.7</i>		<i>4.0</i>		<i>3.0</i>		<i>3.7</i>	
Vanguard Inflation-Protected Securities	\$12,845,012	3.5%	3.5%	eV US TIPS / Inflation Fixed Inc	0.5	87	2.0	64	8.2	64	3.2	62				
<i>BBgBarc US TIPS TR</i>					<i>0.8</i>		<i>2.1</i>		<i>8.4</i>		<i>3.3</i>		<i>2.6</i>		<i>3.4</i>	
Vanguard Short-Term Inflation-Protected Securities	\$12,372,130	3.4%	3.5%	eV US TIPS / Inflation Fixed Inc Net Median	1.0	26	1.5	93								
<i>BBgBarc US TIPS 1-5 Yr TR</i>					<i>1.2</i>		<i>1.4</i>		<i>5.1</i>		<i>2.1</i>		<i>1.8</i>		<i>1.7</i>	
Blackrock Strategic Income Opportunities	\$17,178,823	4.7%	5.0%	eV US Enh Fixed Inc	1.6	1	2.5	21	7.8	31						
<i>3-Month Libor Total Return USD</i>					<i>0.5</i>		<i>1.0</i>		<i>2.4</i>		<i>2.0</i>		<i>1.4</i>		<i>0.9</i>	
Bain Capital Senior Loan Fund	\$15,124,870	4.1%	5.0%	eV US Bank Loan Fixed Inc	1.2	82	1.9	84	7.7	71						
<i>Credit Suisse Leveraged Loans</i>					<i>1.7</i>		<i>2.6</i>		<i>8.2</i>		<i>4.5</i>		<i>4.5</i>		<i>5.2</i>	
Total GAA	\$54,596,400	14.8%	15.0%	eV Global TAA	3.6	57	3.2	74	12.2	63	5.7	66	3.4	68	4.1	76
<i>65% MSCI ACWI (Net) / 35% BBgBarc Global Agg</i>					<i>5.9</i>		<i>6.2</i>		<i>19.6</i>		<i>9.7</i>		<i>6.4</i>		<i>6.7</i>	
GMO Global Absolute Return	\$27,099,707	7.4%	7.5%	eV Global TAA	5.2	34	3.7	66	10.7	71	5.7	66	3.3	69	4.5	73
<i>Blended Index</i>					<i>1.9</i>		<i>3.1</i>		<i>11.3</i>		<i>5.1</i>		<i>4.3</i>		<i>5.1</i>	
Newton Global Real Return	\$27,496,693	7.5%	7.5%	eV Global TAA	2.0	83	2.7	78	11.8	69	5.7	66				
<i>60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg</i>					<i>5.5</i>		<i>5.8</i>		<i>18.6</i>		<i>9.3</i>		<i>6.1</i>		<i>6.4</i>	
Total Hedge Funds	\$20,998,756	5.7%	6.0%		7.3	33	5.4	44	13.4	53	4.2	69	2.4	79	2.5	93
<i>HFRI Fund of Funds Composite Index</i>					<i>3.0</i>		<i>2.1</i>		<i>8.3</i>		<i>3.9</i>		<i>2.4</i>		<i>2.8</i>	
Lighthouse	\$20,998,756	5.7%	6.0%	eV Alt - Long/Short Equity	7.3	33	5.4	44	13.4	53	5.5	60				
<i>Credit Suisse Long Shrt Eqt USD</i>					<i>5.1</i>		<i>5.2</i>		<i>12.2</i>		<i>6.7</i>		<i>3.9</i>		<i>5.2</i>	
Private Equity	\$2,073,915	0.6%	0.0%		0.0		7.4		11.1		11.3		10.3			
Landmark Equity Partners XV	\$2,073,915	0.6%	0.0%		0.0		7.4		11.1		11.3		10.3			
<i>Cambridge Associates US All PE (1 Qtr Lag)</i>					<i>2.2</i>		<i>5.7</i>		<i>9.0</i>		<i>14.6</i>		<i>11.6</i>		<i>14.1</i>	
Total Cash	\$1,791,377	0.5%	0.0%													
Distribution Account	\$1,791,377	0.5%	0.0%		0.3		0.7		1.8		1.3		0.8		0.5	
<i>91 Day T-Bills</i>					<i>0.4</i>		<i>0.9</i>		<i>2.1</i>		<i>1.6</i>		<i>1.1</i>		<i>0.6</i>	



December 31, 2019

INVESTMENT MANAGER DUE DILIGENCE

NEPC, LLC

DUE DILIGENCE MONITOR

The items below summarize the recent quarter's performance and any changes or announcements from your Plan managers/funds. A "-" indicates there were no material announcements. A "Yes" indicates there was an announcement and a summary is provided separately. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determines if any action should be taken by NEPC and/or by our clients. They rate events: No Action, Watch, Hold, Client Review or Terminate. With respect to Performance, a "-" indicates the manager/fund performed in line with the majority of managers/funds in the category; only outliers (placement in the Top or Bottom Quartile) are highlighted. Your Consultant's Recommendation is refreshed quarterly in view of the recent quarter's developments (performance, manager events, and any of the longer-term trending data). NEPC considers ourselves to be a fiduciary, as ERISA defines the term in Section 3(21).

Fund	Portfolio	Manager Changes/ Announcements (Recent Quarter)	NEPC Due Diligence Committee Recommendations
Aberdeen	MIP & Pension	No	Maintain Hold
Lighthouse	MIP, Pension & Operating	No	Maintain Watch
PIMCO	Operating	Yes	No Action

NEPC Due Diligence Committee Recommendation Key	
No Action	Informational items have surfaced; no action is recommended.
Watch	Issues have surfaced to be concerned over; manager can participate in future searches, but current and prospective clients must be made aware of the issues.
Hold	Serious issues have surfaced to be concerned over; manager cannot be in future searches unless a client specifically requests, but current and prospective clients must be made aware of the issues.
Client Review	Very serious issues have surfaced with a manager; manager cannot be in future searches unless a client specifically requests. Current clients must be advised to review the manager.
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot be in future searches unless a client specifically requests. Current clients must be advised to replace the manager.



APPENDIX & DISCLAIMERS

NEPC, LLC

HIGHLIGHTS OF 2019 FOURTH QUARTER HAPPENINGS AT NEPC

NEPC INSIGHTS

- 2019 Third Quarter Market Thoughts
- White Paper: "The Late Stage of a Market Cycle: Been There, Done That?"
- White Paper: "Direct Investments"
- White Paper: "Family Office Best Practices"
- Market Chatter: "To the Venturesome Go the Spoils: Venture Capital Opportunities in China"
- Market Chatter: "To the Venturesome Go the Spoils: Venture Capital Opportunities in China (Part 2)"
- Market Chatter: "The Privates Drive It: Fiscal Year 2019 Mega Endowment Returns"
- Taking Stock: "The Other New Entrant in an Emerging Markets Benchmark"
- Taking Stock: "Draghi's Final Act"
- Taking Stock: "NEPC's Third Quarter Pension Monitor"
- Taking Stock: "Public Markets Dole Out a Dose of Reality"
- Taking Stock: "Is it Time to Worry about BBB Bonds?"
- NEPC's Fall 2019 Endowments & Foundations Survey Results & Infographic
- Diverse Manager Policy Infographic
- Diverse Manager Policy Press Release
- NEPC's 2019 Hedge Fund Operational Due Diligence Survey Results
- 2019 Defined Benefit Plan Trends Survey Results and Infographic
- 2019 Defined Benefit Plan Trends Survey Results and Infographic - Healthcare

WEBINAR REPLAYS

- NEPC's 2019 Q3 Quarterly Market Thoughts Call



To download NEPC's recent insights and webinar replays, visit: www.NEPC.com/insights

December 31, 2019

HIGHLIGHTS OF 2019 FOURTH QUARTER HAPPENINGS AT NEPC

FUTURE FUNDAMENTALS CAMPAIGN

In October, we introduced the *Future Fundamentals of Investing*. Future Fundamentals is a simple phrase that highlights what we do best: staying ahead of the curve with regards to industry trends and research. While there are many concepts and ideas floating through the investment world, we believe the following will be the largest drivers of success in the coming years:

1. Sustainability
2. Diversity and Inclusion
3. Innovation

While we expect these concepts to drive investment trends for some time, we also expect these fundamentals to evolve over time. You can rely on us to identify when these fundamentals evolve or change, and to be positioning your portfolio and our business for success.

In a Wealth Management Op-Ed, the Co-Head of NEPC's Impact Investing Committee, Krissy Pelletier, defines the three pillars that will be the largest drivers of investment success. Read more here: [New Decade, New Fundamentals for Investing](#)

To learn more about the *Future Fundamentals of Investing*, visit: <https://futurefundamentals.nepc.com/>



GLOSSARY OF TERMS

Alpha - Measures the relationship between the fund performance and the performance of another fund or benchmark index and equals the excess return while the other fund or benchmark index is zero.

Alpha Jensen - The average return on a portfolio over and above that predicted by the capital asset pricing model (CAPM), given the portfolio's beta and the average market return. Also known as the abnormal return or the risk adjusted excess return.

Annualized Excess Return over Benchmark - Annualized fund return minus the annualized benchmark return for the calculated return.

Annualized Return - A statistical technique whereby returns covering periods greater than one year are converted to cover a 12 month time span.

Beta - Measures the volatility or systematic risk and is equal to the change in the fund's performance in relation to the change in the assigned index's performance.

Information Ratio - A measure of the risk adjusted return of a financial security, asset, or portfolio.

Formula:

(Annualized Return of Portfolio - Annualized Return of Benchmark)/Annualized Standard Deviation(Period Portfolio Return - Period Benchmark Return). To annualize standard deviation, multiply the deviation by the square root of the number of periods per year where monthly returns per year equals 12 and quarterly returns is four periods per year.

R-Squared - Represents the percentage of a fund's movements that can be explained by movements in an index. R-Squared values range from 0 to 100. An R-Squared of 100 denotes that all movements of a fund are completely explained by movements in the index.

Sharpe Ratio - A measure of the excess return or risk premium per unit of risk in an investment asset or trading strategy.

Sortino Ratio - A method to differentiate between good and bad volatility in the Sharpe Ratio. The differentiation of up and down volatility allows the calculation to provide a risk adjusted measure of a security or fund's performance without upward price change penalties.

Formula:

*Calculation Average (X-Y)/Downside Deviation (X-Y) * 2
Where X=Return Series X Y = Return Series Y which is the risk free return (91 day T-bills)*

Standard Deviation - The standard deviation is a statistical term that describes the distribution of results. It is a commonly used measure of volatility of returns of a portfolio, asset class, or security. The higher the standard deviation the more volatile the returns are.

Formula:

(Annualized Return of Portfolio - Annualized Return of Risk Free) / Annualized Standard Deviation (Portfolio Returns)

Tracking Error - Tracking error, also known as residual risk, is a measure of the degree to which a portfolio tracks its benchmark. It is also a measure of consistency of excess returns. Tracking error is computed as the annualized standard deviation of the difference between a portfolio's return and that of its benchmark.

Formula:

*Tracking Error = Standard Deviation (X-Y) * $\sqrt{(\# \text{ of periods per year})}$*

Where X = periods portfolio return and Y = the period's benchmark return

For monthly returns, the periods per year = 12

For quarterly returns, the periods per year = 4

Treynor Ratio - A risk-adjusted measure of return based on systematic risk. Similar to the Sharpe ratio with the difference being the Treynor ratio uses beta as the measurement of volatility.

Formula:

(Portfolio Average Return - Average Return of Risk-Free Rate)/Portfolio Beta

Up/Down Capture Ratio - A measure of what percentage of a market's returns is "captured" by a portfolio. For example, if the market declines 10% over some period, and the manager declines only 9%, then his or her capture ratio is 90%. In down markets, it is advantageous for a manager to have as low a capture ratio as possible. For up markets, the higher the capture ratio the better. Looking at capture ratios can provide insight into how a manager achieves excess returns. A value manager might typically have a lower capture ratio in both up and down markets, achieving excess returns by protecting on the downside, whereas a growth manager might fall more than the overall market in down markets, but achieve above-market returns in a rising market.

UpsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Period Benchmark Return is > = 0

DownsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Benchmark < 0

Data Source: InvestorForce



December 31, 2019

INFORMATION DISCLAIMER AND REPORTING METHODOLOGY

Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may not be available from the source or may be preliminary and subject to change.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodial bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- This report is provided as a management aid for the client's internal use only. Performance contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of Return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.



FOURTH QUARTER 2019 SUPPLEMENTAL PERFORMANCE

UNIVERSITY OF MAINE SYSTEM MANAGED INVESTMENT POOL



February 27, 2020

Jay E. Roney, Partner

Kelly Regan, Senior Consultant



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

ASSET GROWTH SUMMARY



	Last Three Months	Fiscal Year-To-Date	One Year	Three Years
Beginning Market Value	\$344,884,241	\$345,152,104	\$305,625,905	\$271,766,432
Net Cash Flow	\$1,494,255	\$1,911,648	\$7,353,209	\$16,459,130
Net Investment Change	\$21,775,561	\$21,090,306	\$55,174,943	\$79,928,496
Ending Market Value	\$368,154,057	\$368,154,057	\$368,154,057	\$368,154,057



December 31, 2019

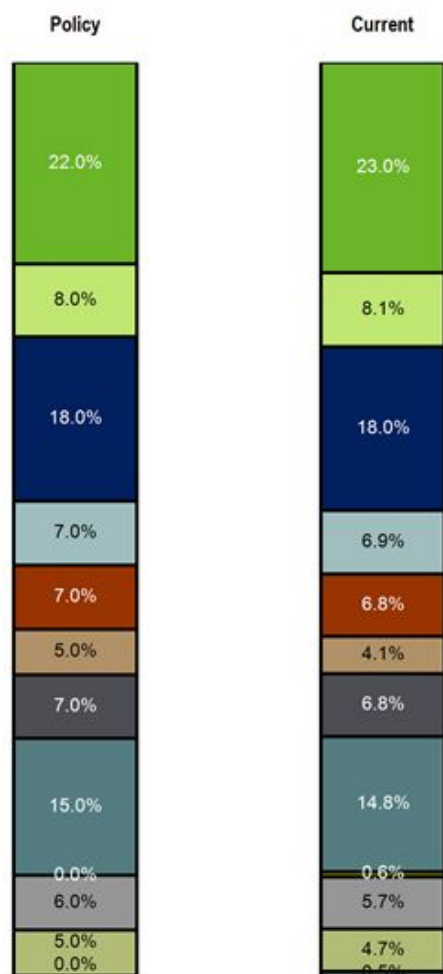
CASH FLOW SUMMARY

	3 Months Ending December 31, 2019					
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Aberdeen Emerging Mkts	\$12,111,153	\$0	-\$34,860	-\$34,860	\$1,178,390	\$13,254,683
Bain Capital Senior Loan Fund	\$14,942,871	\$0	-\$18,781	-\$18,781	\$200,780	\$15,124,870
Blackrock Strategic Income Opportunities	\$16,905,812	\$0	-\$22,592	-\$22,592	\$295,602	\$17,178,823
Commonfund	\$24,976,992	\$0	-\$10,051	-\$10,051	\$213,794	\$25,180,735
DFA	\$13,082,879	\$0	-\$14,073	-\$14,073	\$1,138,257	\$14,207,064
Distribution Account	\$251,721	\$4,203,283	-\$2,666,668	\$1,536,615	\$3,041	\$1,791,377
Globeflex	\$21,032,599	\$636,000	-\$42,617	\$593,383	\$1,663,326	\$23,289,308
GMO Global Absolute Return	\$25,696,969	\$0	-\$66,212	-\$66,212	\$1,468,950	\$27,099,707
John Hancock Timber Fund	\$1,522,388	\$0	-\$1,522,388	-\$1,522,388	\$0	\$0
Kabouter International Opportunities Offshore Fund II	\$17,500,592	\$0	-\$46,436	-\$46,436	\$1,672,593	\$19,126,748
Landmark Equity Partners XV	\$2,103,352	\$57,375	-\$86,812	-\$29,437	\$0	\$2,073,915
Lighthouse	\$18,586,057	\$1,000,000	\$0	\$1,000,000	\$1,412,698	\$20,998,756
Mondrian EM Small Cap	\$10,901,483	\$500,000	-\$57,648	\$442,352	\$975,278	\$12,319,113
Morgan Stanley	\$21,627,219	\$400,000	-\$54,891	\$345,109	\$1,696,578	\$23,668,907
Newton Global Real Return	\$26,956,854	\$0	-\$54,426	-\$54,426	\$594,264	\$27,496,693
SSgA S&P 500	\$78,021,514	\$0	-\$543,395	-\$543,395	\$7,078,215	\$84,556,334
Vanguard Inflation-Protected Securities	\$12,779,009	\$0	-\$2,240	-\$2,240	\$68,243	\$12,845,012
Vanguard Short-Term Inflation-Protected Securities	\$12,244,139	\$0	-\$1,231	-\$1,231	\$129,222	\$12,372,130
Westfield Capital	\$13,640,637	\$17,383	-\$74,467	-\$57,084	\$1,986,330	\$15,569,883
Total	\$344,884,241	\$6,814,041	-\$5,319,787	\$1,494,255	\$21,775,561	\$368,154,057



December 31, 2019

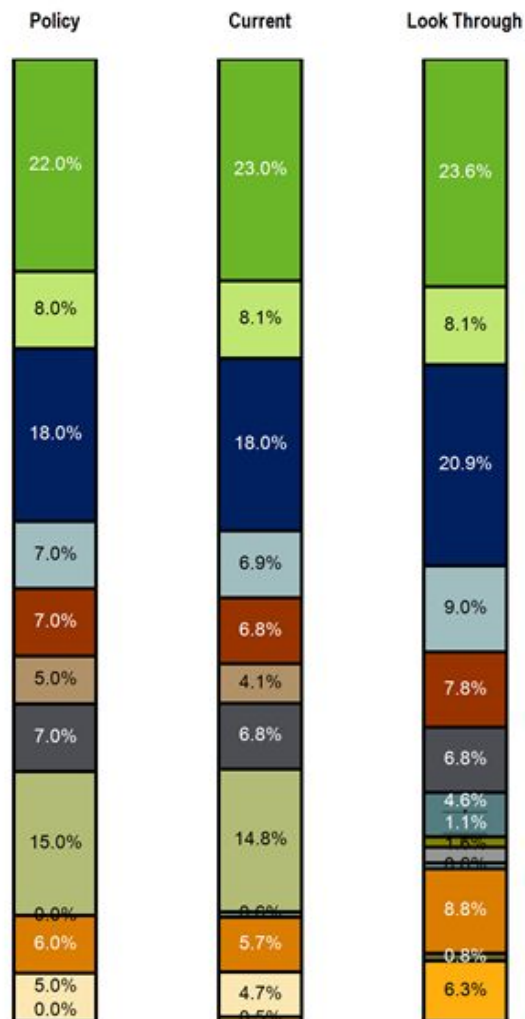
ASSET CLASS ALLOCATIONS



Asset Allocation vs. Target						
	Current	Policy	Current	Difference	Policy Range	Within Range
<div></div> Large Cap Equity	\$84,556,334	22.0%	23.0%	1.0%	17.0% - 27.0%	Yes
<div></div> Small/Mid Cap Equity	\$29,776,947	8.0%	8.1%	0.1%	3.0% - 13.0%	Yes
<div></div> International Equity	\$66,084,963	18.0%	18.0%	0.0%	8.0% - 28.0%	Yes
<div></div> Emerging Markets Equity	\$25,573,796	7.0%	6.9%	-0.1%	0.0% - 14.0%	Yes
<div></div> Core Bonds	\$25,180,735	7.0%	6.8%	-0.2%	2.0% - 12.0%	Yes
<div></div> Bank Loans	\$15,124,870	5.0%	4.1%	-0.9%	0.0% - 10.0%	Yes
<div></div> TIPS	\$25,217,143	7.0%	6.8%	-0.2%	0.0% - 14.0%	Yes
<div></div> Global Asset Allocation	\$54,596,400	15.0%	14.8%	-0.2%	10.0% - 20.0%	Yes
<div></div> Private Equity	\$2,073,915	0.0%	0.6%	0.6%	0.0% - 5.0%	Yes
<div></div> Hedge Funds	\$20,998,756	6.0%	5.7%	-0.3%	0.0% - 10.0%	Yes
<div></div> Absolute Return	\$17,178,823	5.0%	4.7%	-0.3%	0.0% - 10.0%	Yes
<div></div> Cash	\$1,791,377	0.0%	0.5%	0.5%	0.0% - 10.0%	Yes
Total	\$368,154,057	100.0%	100.0%			

Note: International equity policy targets and ranges include international small cap equity. Emerging market equity policy targets and ranges include emerging market small cap equity. TIPS policy targets and ranges include short-term TIPS.

ASSET CLASS ALLOCATIONS



Asset Allocation			
	Policy	Current	Look Through
Large Cap Equity	22.0%	23.0%	23.6%
Small/Mid Cap Equity	8.0%	8.1%	8.1%
International Equity	18.0%	18.0%	20.9%
Emerging Markets Equity	7.0%	6.9%	9.0%
Core Bonds	7.0%	6.8%	7.8%
Bank Loans	5.0%	4.1%	--
TIPS	7.0%	6.8%	6.8%
Multi-Sector Fixed Income	--	--	4.6%
Fixed Income - Emerging	--	--	1.1%
Global Bonds	--	--	1.6%
Global Asset Allocation	15.0%	14.8%	--
Private Equity	0.0%	0.6%	0.6%
Hedge Funds	6.0%	5.7%	8.8%
Absolute Return	5.0%	4.7%	--
Real Assets	--	--	0.8%
Cash	0.0%	0.5%	6.3%
Total	100.0%	100.0%	100.0%

Net Asset Allocation breaks out the exposure of GAA managers.

Asset class weights may not add up to 100% due to rounding.

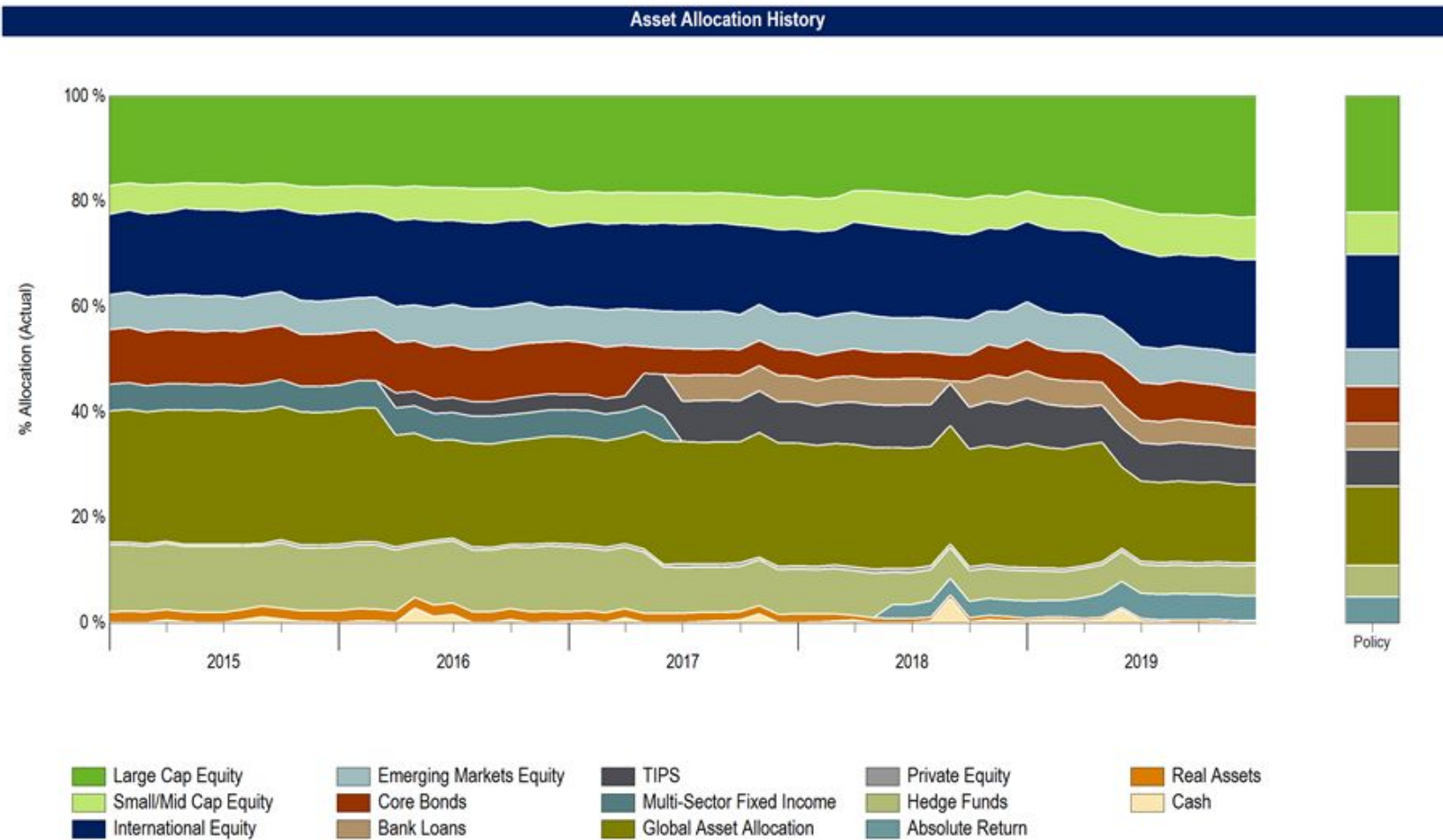
The 60% MSCI ACWI/40% CITI WGBI Index is broken down into the following categories: 33.4% Domestic Equities, 19.3% Int'l Equities, 7.3% Emerging Equities, 15.6% US Treasury Bonds, 12.3% European Government Bonds, 7.4% Japanese Debt, 2.1% United Kingdom Bonds and 2.6% Developing Markets Bonds.

Diversified Fixed Income bucket includes: multi-sector fixed income., non-U.S. fixed income, and emerging fixed income.



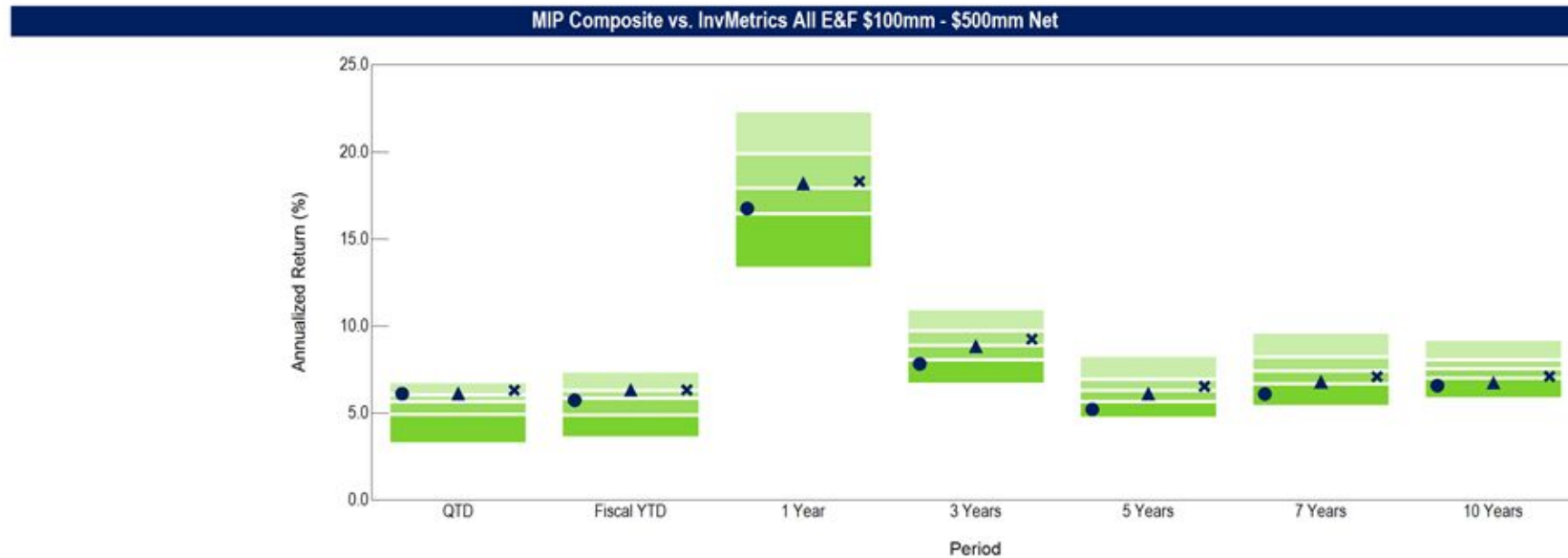
December 31, 2019

ASSET ALLOCATION HISTORY



December 31, 2019

RETURNS VS. PEER UNIVERSE

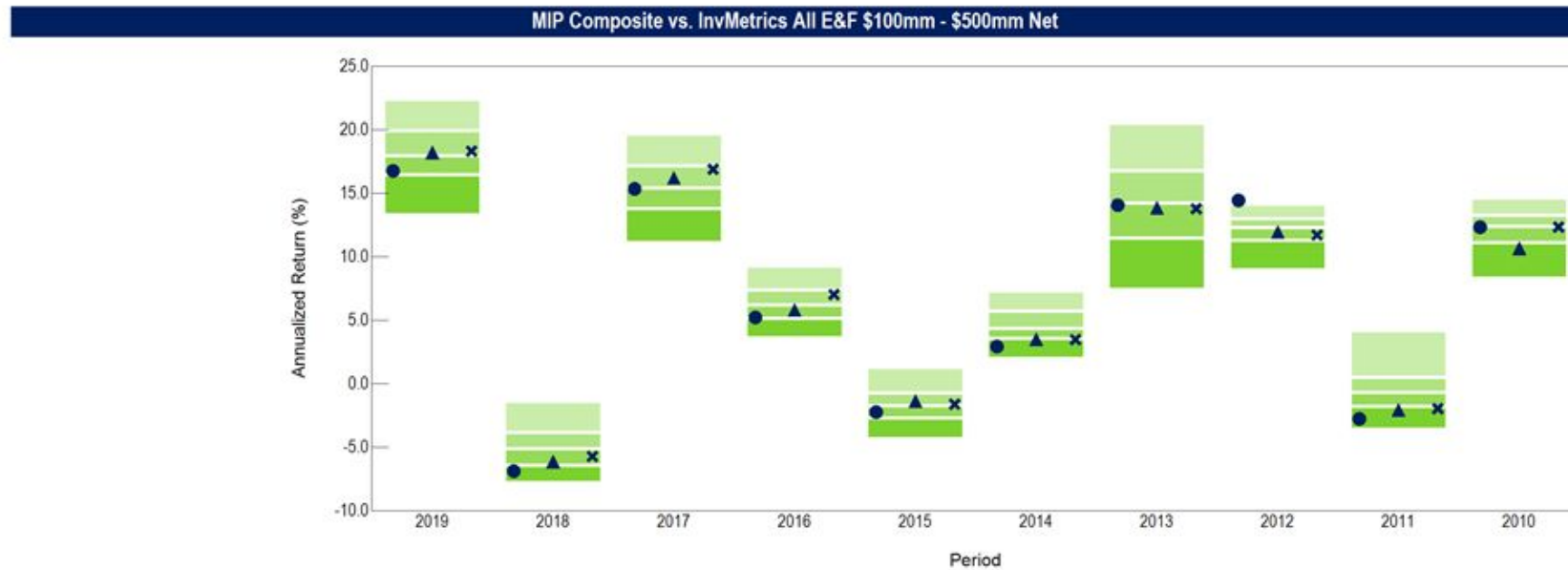


	Return (Rank)											
5th Percentile	6.8	7.4	22.4	11.0	8.3	9.6	9.2					
25th Percentile	6.0	6.3	19.9	9.7	7.0	8.2	8.1					
Median	5.7	5.9	18.0	8.9	6.3	7.4	7.6					
75th Percentile	4.9	4.9	16.5	8.1	5.7	6.7	7.0					
95th Percentile	3.2	3.6	13.3	6.7	4.7	5.4	5.8					
# of Portfolios	163	163	159	154	141	126	116					
● MIP Composite	6.1	(24)	5.7 (54)	16.7 (72)	7.8 (83)	5.2 (89)	6.1 (92)	6.6 (87)				
▲ Allocation Index	6.1	(24)	6.3 (25)	18.2 (48)	8.8 (52)	6.1 (60)	6.8 (71)	6.8 (83)				
× Policy Index	6.3	(19)	6.3 (26)	18.3 (45)	9.2 (42)	6.5 (38)	7.1 (60)	7.1 (71)				



December 31, 2019

RETURNS VS. PEER UNIVERSE

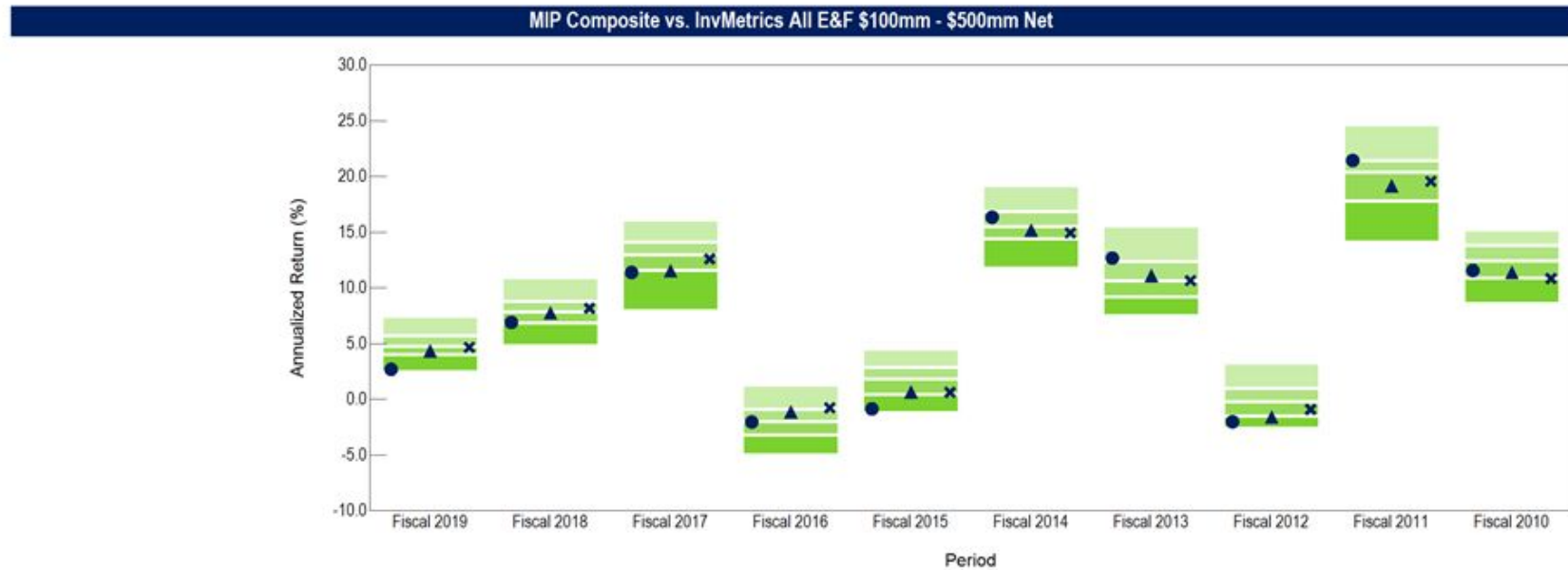


	Return (Rank)									
5th Percentile	22.4	-1.4	19.6	9.2	1.3	7.3	20.5	14.1	4.2	14.6
25th Percentile	19.9	-3.8	17.2	7.4	-0.7	5.7	16.8	13.0	0.5	13.3
Median	18.0	-5.1	15.4	6.2	-1.7	4.4	14.2	12.3	-0.6	12.4
75th Percentile	16.5	-6.4	13.8	5.2	-2.7	3.6	11.5	11.3	-1.8	11.1
95th Percentile	13.3	-7.8	11.1	3.6	-4.3	2.0	7.4	9.0	-3.6	8.3
# of Portfolios	159	231	177	186	142	98	75	78	75	70
● MIP Composite	16.7 (72)	-6.9 (86)	15.3 (53)	5.2 (75)	-2.2 (64)	2.9 (86)	14.1 (54)	14.4 (3)	-2.8 (90)	12.3 (53)
▲ Allocation Index	18.2 (48)	-6.1 (71)	16.2 (37)	5.8 (58)	-1.4 (44)	3.5 (77)	13.9 (57)	11.9 (58)	-2.1 (79)	10.7 (83)
× Policy Index	18.3 (45)	-5.7 (61)	16.9 (29)	7.0 (36)	-1.6 (48)	3.5 (78)	13.8 (57)	11.7 (64)	-2.0 (78)	12.3 (51)



December 31, 2019

RETURNS VS. PEER UNIVERSE

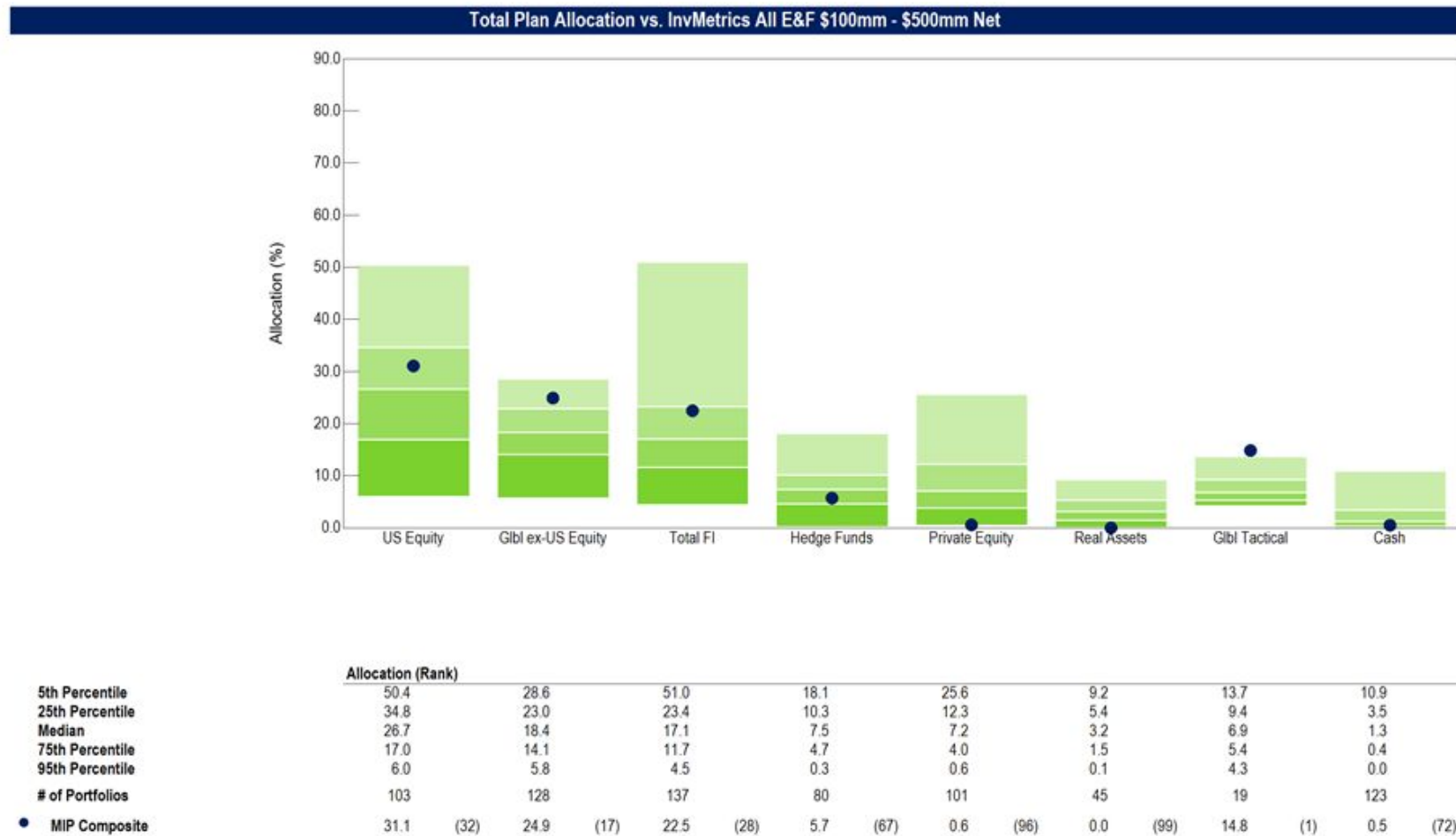


	Return (Rank)									
5th Percentile	7.4	10.9	16.1	1.2	4.5	19.2	15.5	3.3	24.7	15.2
25th Percentile	5.8	8.8	14.1	-0.9	2.9	16.9	12.4	1.0	21.4	13.8
Median	4.8	7.9	13.0	-2.0	1.9	15.5	10.7	-0.2	20.4	12.4
75th Percentile	4.0	6.9	11.6	-3.2	0.4	14.5	9.2	-1.5	17.8	10.9
95th Percentile	2.5	4.8	8.0	-4.9	-1.2	11.8	7.6	-2.6	14.1	8.6
# of Portfolios	273	170	180	157	130	83	81	75	73	69
● MIP Composite	2.7 (94)	6.9 (74)	11.4 (78)	-2.0 (52)	-0.9 (94)	16.3 (32)	12.7 (23)	-2.0 (88)	21.4 (24)	11.6 (64)
▲ Allocation Index	4.4 (68)	7.8 (54)	11.6 (76)	-1.1 (29)	0.7 (70)	15.2 (63)	11.1 (45)	-1.6 (83)	19.2 (66)	11.4 (68)
× Policy Index	4.7 (54)	8.2 (43)	12.6 (59)	-0.8 (24)	0.6 (70)	14.9 (65)	10.7 (50)	-0.9 (66)	19.6 (60)	10.8 (80)



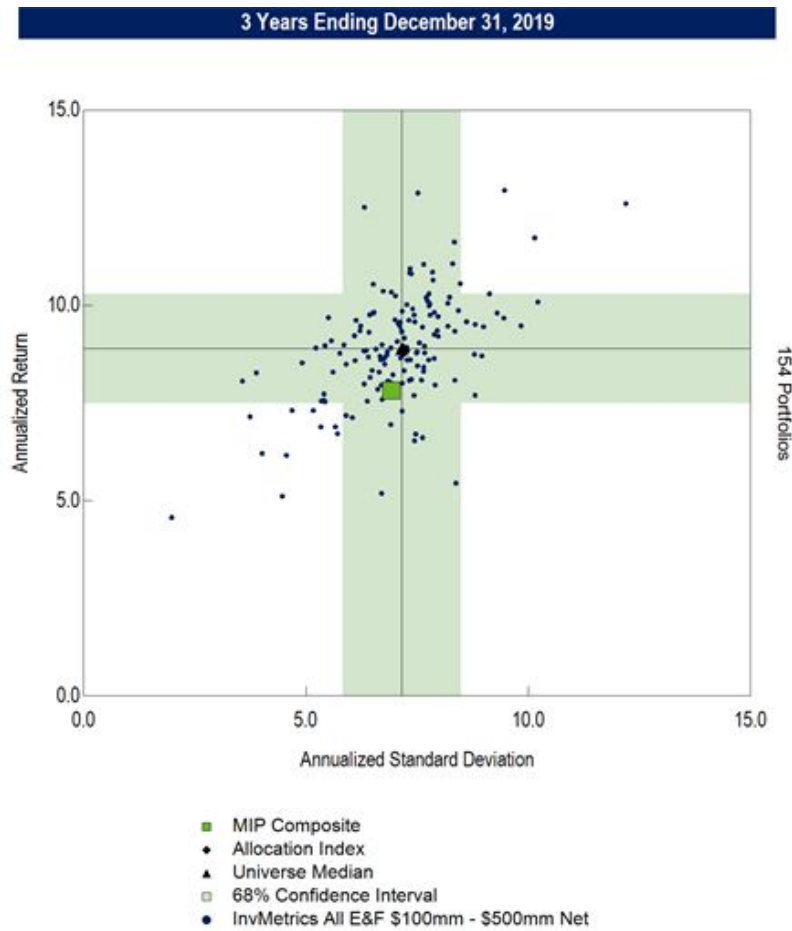
December 31, 2019

ALLOCATIONS VS. PEER UNIVERSE



December 31, 2019

TOTAL PLAN RISK/RETURN - 3 YEAR



3 Years Ending December 31, 2019				
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
MIP Composite	7.8%	83	6.9%	43
Allocation Index	8.8%	52	7.2%	53
Policy Index	9.2%	42	7.4%	61
InvMetrics All E&F \$100mm - \$500mm Net Median	8.9%	--	7.2%	--

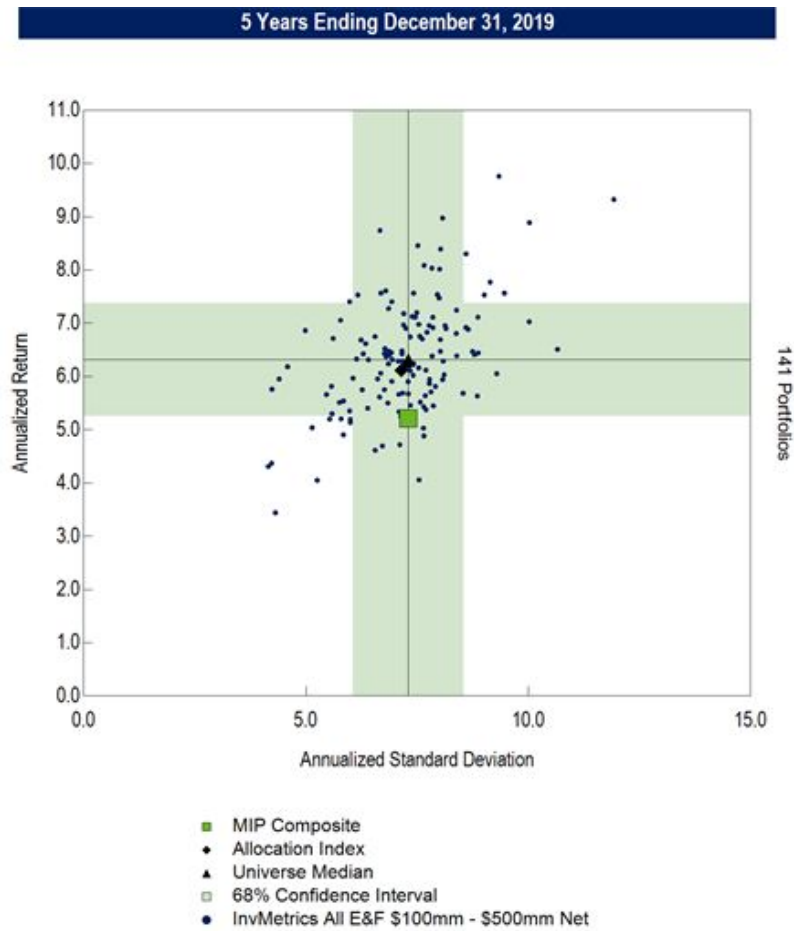
3 Years Ending December 31, 2019				
	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
MIP Composite	0.9	82	1.0	74
Allocation Index	1.0	58	1.1	47
Policy Index	1.0	53	1.1	45
InvMetrics All E&F \$100mm - \$500mm Net Median	1.0	--	1.1	--

*Returns are net of fees.



December 31, 2019

TOTAL PLAN RISK/RETURN - 5 YEAR



5 Years Ending December 31, 2019				
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
MIP Composite	5.2%	89	7.3%	50
Allocation Index	6.1%	60	7.1%	43
Policy Index	6.5%	38	7.3%	50
InvMetrics All E&F \$100mm - \$500mm Net Median	6.3%	--	7.3%	--

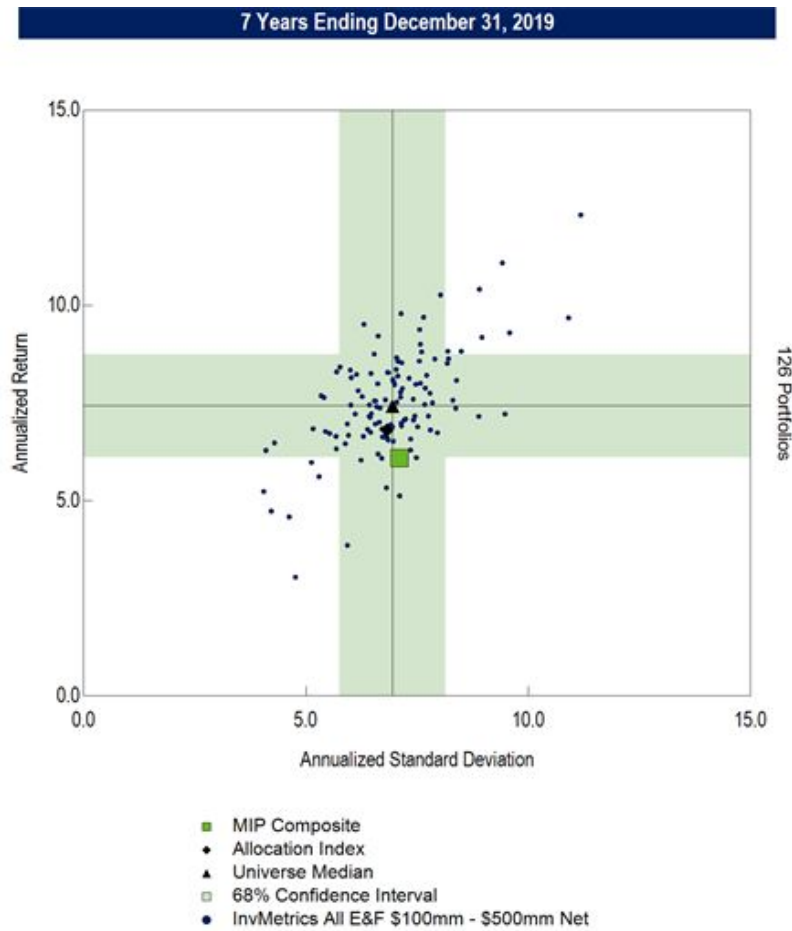
5 Years Ending December 31, 2019				
	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
MIP Composite	0.6	91	0.8	87
Allocation Index	0.7	57	0.9	52
Policy Index	0.8	43	1.0	35
InvMetrics All E&F \$100mm - \$500mm Net Median	0.7	--	0.9	--

*Returns are net of fees.



December 31, 2019

TOTAL PLAN RISK/RETURN - 7 YEAR



7 Years Ending December 31, 2019				
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
MIP Composite	6.1%	92	7.1%	60
Allocation Index	6.8%	71	6.8%	45
Policy Index	7.1%	60	6.9%	48
InvMetrics All E&F \$100mm - \$500mm Net Median	7.4%	--	7.0%	--

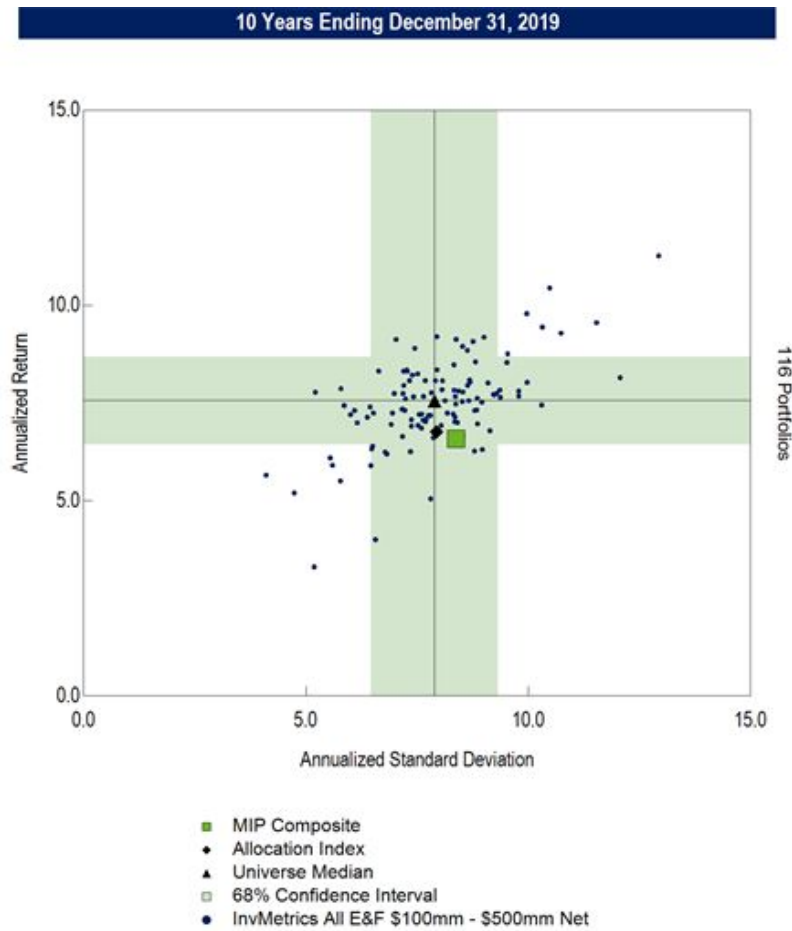
7 Years Ending December 31, 2019				
	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
MIP Composite	0.8	95	1.1	88
Allocation Index	0.9	69	1.2	65
Policy Index	0.9	65	1.3	58
InvMetrics All E&F \$100mm - \$500mm Net Median	1.0	--	1.3	--

*Returns are net of fees.



December 31, 2019

TOTAL PLAN RISK/RETURN - 10 YEAR



10 Years Ending December 31, 2019				
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
MIP Composite	6.6%	87	8.4%	65
Allocation Index	6.8%	83	7.9%	52
Policy Index	7.1%	71	7.9%	52
InvMetrics All E&F \$100mm - \$500mm Net Median	7.6%	--	7.9%	--

10 Years Ending December 31, 2019				
	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
MIP Composite	0.7	93	1.0	90
Allocation Index	0.8	78	1.1	72
Policy Index	0.8	69	1.2	50
InvMetrics All E&F \$100mm - \$500mm Net Median	0.9	--	1.2	--

*Returns are net of fees.



December 31, 2019

TOTAL PLAN PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
MIP Composite	368,154,057	100.0	100.0	6.1	5.7	16.7	7.8	5.2	6.1	6.6
Allocation Index				6.1	6.3	18.2	8.8	6.1	6.8	6.8
Policy Index				6.3	6.3	18.3	9.2	6.5	7.1	7.1
Total Domestic Large Cap	84,556,334	23.0	22.0	9.1	10.9	31.4	15.2	11.6	14.4	13.4
S&P 500				9.1	10.9	31.5	15.3	11.7	14.7	13.6
SSgA S&P 500	84,556,334	23.0	22.0	9.1	10.9	31.4	15.2	11.6	14.7	13.5
S&P 500				9.1	10.9	31.5	15.3	11.7	14.7	13.6
Total Domestic Small/Mid Cap	29,776,947	8.1	8.0	11.5	9.4	28.0	10.8	8.5	12.1	12.5
Russell 2500				8.5	7.1	27.8	10.3	8.9	12.3	12.6
Westfield Capital	15,569,883	4.2	4.0	14.3	11.4	34.5	17.5	10.4	13.5	14.2
Russell 2500 Growth				10.6	7.1	32.7	15.2	10.8	14.1	14.0
DFA	14,207,064	3.9	4.0	8.6	7.3	21.5	3.9	6.1	10.2	--
Russell 2000 Value				8.5	7.9	22.4	4.8	7.0	10.1	10.6
Total International Equity (including emerging markets)	91,658,759	24.9	25.0	8.2	5.0	16.6	7.6	4.0	3.9	5.0
MSCI EAFE				8.2	7.0	22.0	9.6	5.7	6.3	5.5
Morgan Stanley	23,668,907	6.4	6.5	7.4	5.6	20.4	9.1	5.0	5.4	5.4
Globeflex	23,289,308	6.3	6.5	7.6	4.0	14.2	6.9	4.5	5.6	5.5
MSCI EAFE				8.2	7.0	22.0	9.6	5.7	6.3	5.5
Kabouter International Opportunities Offshore Fund II	19,126,748	5.2	5.0	9.3	5.0	17.9	--	--	--	--
MSCI EAFE Small Cap				11.5	11.0	25.0	10.9	8.9	9.4	8.7
Emerging Markets Equity	25,573,796	6.9	7.0	8.9	5.3	14.9	7.0	2.3	0.5	--
MSCI Emerging Markets				11.8	7.1	18.4	11.6	5.6	3.3	3.7
Aberdeen Emerging Mkts	13,254,683	3.6	3.5	9.4	4.9	20.4	10.2	5.3	2.2	5.3
MSCI Emerging Markets				11.8	7.1	18.4	11.6	5.6	3.3	3.7
Mondrian EM Small Cap	12,319,113	3.3	3.5	8.2	5.9	9.4	3.5	-0.7	--	--
MSCI Emerging Markets Small Cap				9.5	4.5	11.5	6.7	3.0	2.4	2.9
Total Fixed Income	82,701,570	22.5	24.0	1.0	2.3	8.0	4.2	3.1	3.4	4.8
BBgBarc US Aggregate TR				0.2	2.5	8.7	4.0	3.0	2.7	3.7
Commonfund	25,180,735	6.8	7.0	0.8	2.9	9.4	4.8	3.5	3.4	4.6
BBgBarc US Aggregate TR				0.2	2.5	8.7	4.0	3.0	2.7	3.7
Vanguard Inflation-Protected Securities	12,845,012	3.5	3.5	0.5	2.0	8.2	3.2	--	--	--
BBgBarc US TIPS TR				0.8	2.1	8.4	3.3	2.6	1.1	3.4
Vanguard Short-Term Inflation-Protected Securities	12,372,130	3.4	3.5	1.0	1.5	--	--	--	--	--
BBgBarc US TIPS 1-5 Yr TR				1.2	1.4	5.1	2.1	1.8	0.9	1.7
Blackrock Strategic Income Opportunities	17,178,823	4.7	5.0	1.6	2.5	7.8	--	--	--	--
3-Month Libor Total Return USD				0.5	1.0	2.4	2.0	1.4	1.1	0.9
Bain Capital Senior Loan Fund	15,124,870	4.1	5.0	1.2	1.9	7.7	--	--	--	--
Credit Suisse Leveraged Loans				1.7	2.6	8.2	4.5	4.5	4.4	5.2



December 31, 2019

TOTAL PLAN PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Total GAA	54,596,400	14.8	15.0	3.6	3.2	12.2	5.7	3.4	3.7	4.1
65% MSCI ACWI (Net) / 35% BBgBarc Global Agg				5.9	6.2	19.6	9.7	6.4	6.9	6.7
GMO Global Absolute Return	27,099,707	7.4	7.5	5.2	3.7	10.7	5.7	3.3	4.0	4.5
Blended Index				1.9	3.1	11.3	5.1	4.3	3.8	5.1
Newton Global Real Return	27,496,693	7.5	7.5	2.0	2.7	11.8	5.7	--	--	--
60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg				5.5	5.8	18.6	9.3	6.1	6.5	6.4
Total Hedge Funds	20,998,756	5.7	6.0	7.3	5.4	13.4	4.2	2.4	2.9	2.5
HFRI Fund of Funds Composite Index				3.0	2.1	8.3	3.9	2.4	3.4	2.8
Lighthouse	20,998,756	5.7	6.0	7.3	5.4	13.4	5.5	--	--	--
Credit Suisse Long Shrt Eqt USD				5.1	5.2	12.2	6.7	3.9	6.0	5.2
Private Equity	2,073,915	0.6	0.0	0.0	7.4	11.1	11.3	10.3	--	--
Landmark Equity Partners XV	2,073,915	0.6	0.0	0.0	7.4	11.1	11.3	10.3	--	--
Cambridge Associates US All PE (1 Qtr Lag)				2.2	5.7	9.0	14.6	11.6	13.3	14.1
Total Cash	1,791,377	0.5	0.0							
Distribution Account	1,791,377	0.5	0.0	0.3	0.7	1.8	1.3	0.8	0.6	0.5
91 Day T-Bills				0.4	0.9	2.1	1.6	1.1	0.8	0.6

Notes:

Fiscal YTD begins 7/1

Blended Index: 40% BC Aggregate, 30% BC U.S. TIPS 1-10YR, 10% S&P 500, 10% BC High Yield, 10% JPM EMBI+

Returns are net of manager fees.

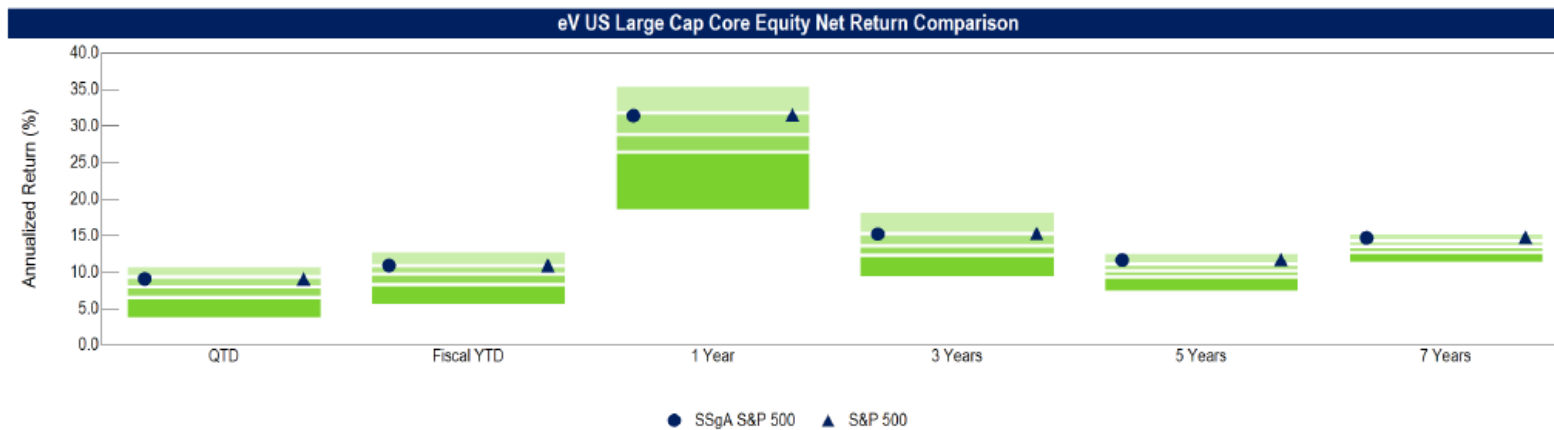
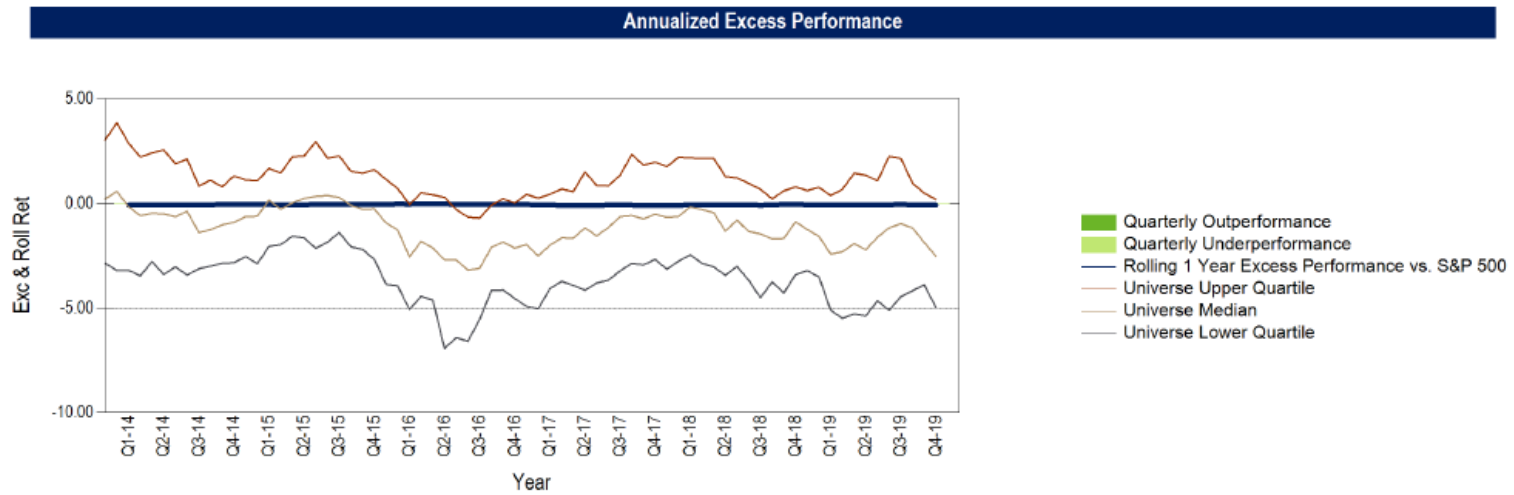
John Hancock Timber fully liquidated on 12/27/2019.

Landmark market value estimated as of 12/31/19.

Cash account includes \$434 currently being held in the TCW account.

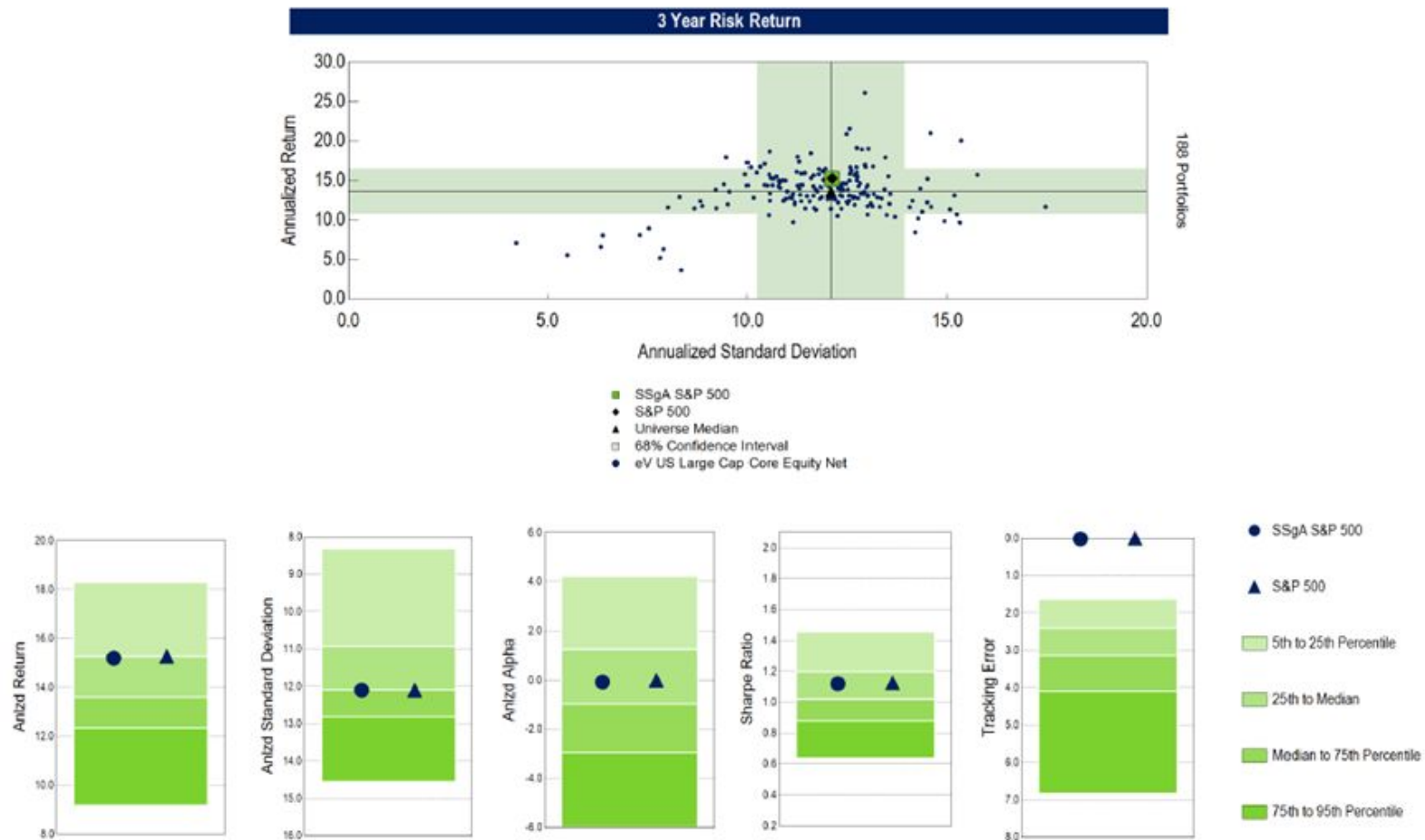
December 31, 2019

SSGA S&P 500



December 31, 2019

SSGA S&P 500



December 31, 2019

SSGA S&P 500

Characteristics		
	Portfolio	S&P 500
Number of Holdings	505	505
Weighted Avg. Market Cap. (\$B)	269.8	272.0
Median Market Cap. (\$B)	23.6	23.6
Price To Earnings	23.0	23.0
Price To Book	3.9	3.9
Price To Sales	2.1	2.1
Return on Equity (%)	26.1	26.1
Yield (%)	1.9	1.8
Beta		1.0
R-Squared		1.0

	Equity Sector Attribution				Returns		Ending Sector Weights	
	Total Effects	Selection Effect	Attribution Effects		Portfolio	Benchmark	Portfolio	Benchmark
			Allocation Effect	Interaction Effects				
Energy	0.0%	0.0%	0.0%	0.0%	5.5%	5.6%	4.3%	4.2%
Materials	0.0%	0.0%	0.0%	0.0%	6.3%	6.4%	2.6%	2.6%
Industrials	0.0%	0.0%	0.0%	0.0%	5.5%	5.5%	9.1%	9.0%
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	4.3%	4.4%	9.8%	10.1%
Consumer Staples	0.0%	0.0%	0.0%	0.0%	3.5%	3.6%	7.2%	7.8%
Health Care	0.0%	0.0%	0.0%	0.0%	14.3%	14.5%	14.2%	13.8%
Financials	0.0%	0.0%	0.0%	0.0%	10.5%	10.7%	13.0%	13.3%
Information Technology	0.0%	0.0%	0.0%	0.0%	14.5%	14.5%	23.2%	22.8%
Communication Services	0.0%	0.0%	0.0%	0.0%	9.0%	9.1%	10.4%	10.4%
Utilities	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%	3.3%	3.2%
Real Estate	0.0%	0.0%	0.0%	0.0%	-0.5%	-0.5%	2.9%	2.8%
Cash	-0.1%	0.0%	-0.1%	0.0%	0.4%	—	0.0%	0.0%
Unclassified	0.0%	—	—	—	—	—	—	—
Portfolio	-0.2%	=	-0.1%	+	9.0%	9.2%	100.0%	100.0%

*Attribution on manager pages is holdings based, using buy-and-hold assumptions from the beginning of period portfolio. Results may differ from actual performance. Returns are net of fees.



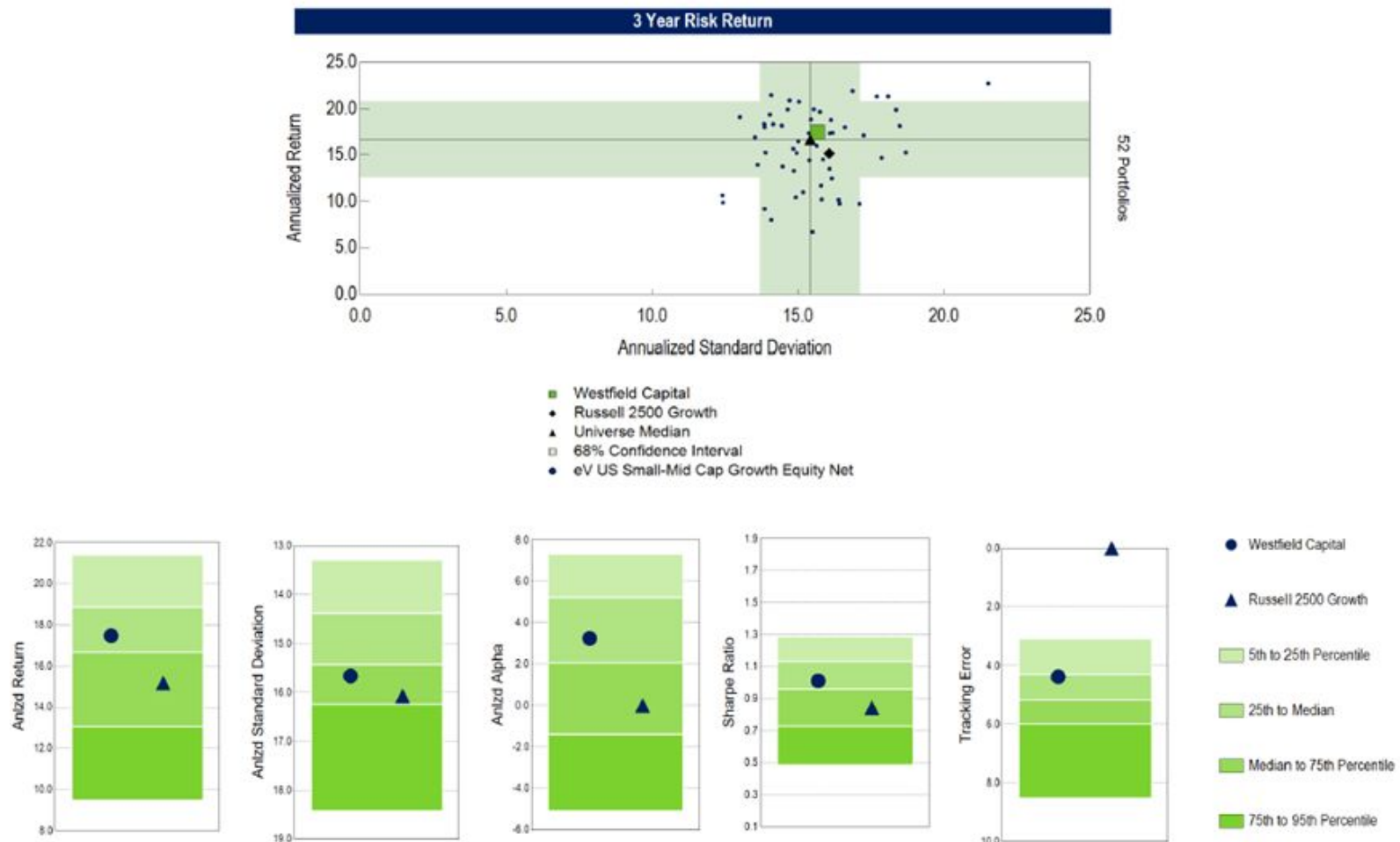
December 31, 2019

WESTFIELD CAPITAL



December 31, 2019

WESTFIELD CAPITAL



December 31, 2019

WESTFIELD CAPITAL

Characteristics		
	Portfolio	Russell 2500 Growth
Number of Holdings	69	1,409
Weighted Avg. Market Cap. (\$B)	9.2	5.9
Median Market Cap. (\$B)	7.1	1.3
Price To Earnings	26.2	28.4
Price To Book	4.6	5.5
Price To Sales	1.9	2.0
Return on Equity (%)	11.6	5.4
Yield (%)	0.7	0.7
Beta		1.0
R-Squared		1.0

Top Positive Contributors		
	Relative Contribution %	Return %
MEDICINES COMPANY	2.6%	69.9%
DEXCOM	0.8%	46.6%
SAREPTA THERAPEUTICS	0.8%	71.3%
ELDORADO RESORTS	0.7%	49.6%
FORTINET	0.6%	39.1%
LUMENTUM HOLDINGS	0.5%	48.1%
CERIDIAN HCM HOLDING	0.5%	37.5%
ALNYLAM PHARMACEUTICALS	0.5%	43.2%
ACCELERON PHARMA	0.4%	34.2%
ON SEMICONDUCTOR	0.4%	26.9%

Top Negative Contributors		
	Relative Contribution %	Return %
SAGE THERAPEUTICS	-0.5%	-48.5%
REALPAGE	-0.3%	-14.5%
HAEMONETICS	-0.1%	-8.9%
TWILIO 'A'	-0.1%	-10.6%
8X8	-0.1%	-11.7%
WORLD WRESTLING ENTM.'A'	0.0%	-8.6%
TREX	0.0%	-1.2%
GRAND CANYON EDUCATION	0.0%	-2.5%
ROGERS	0.0%	-8.8%
BRIXMOR PROPERTY GROUP	0.0%	8.0%

Equity Sector Attribution								
	Total Effects	Selection Effect	Attribution Effects		Returns		Ending Sector Weights	
			Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.1%	0.0%	-0.1%	0.2%	13.5%	7.2%	3.5%	0.5%
Materials	0.1%	0.1%	0.0%	0.0%	10.5%	8.3%	3.4%	3.6%
Industrials	0.3%	0.3%	0.1%	0.0%	8.2%	6.7%	15.4%	17.3%
Consumer Discretionary	0.6%	0.8%	0.1%	-0.3%	14.1%	8.1%	12.0%	12.9%
Consumer Staples	0.1%	0.1%	0.0%	0.0%	11.9%	5.7%	1.5%	2.2%
Health Care	1.3%	1.2%	0.1%	0.0%	26.0%	20.4%	22.1%	24.3%
Financials	0.2%	0.2%	-0.1%	0.0%	10.5%	7.5%	8.3%	6.1%
Information Technology	0.6%	0.6%	0.0%	0.0%	12.2%	10.0%	24.4%	25.0%
Communication Services	0.0%	-0.1%	0.0%	0.0%	6.7%	8.6%	3.2%	3.2%
Utilities	0.1%	--	0.1%	--	--	-1.6%	0.0%	0.8%
Real Estate	0.1%	0.0%	0.0%	0.0%	4.2%	3.3%	2.8%	4.2%
Cash	-0.3%	0.0%	-0.3%	0.0%	0.4%	--	3.4%	0.0%
Portfolio	3.3%	=	3.3%	+	0.0%	+	0.0%	
					13.9%	10.7%	100.0%	100.0%

*Attribution on manager pages is holdings based, using buy-and-hold assumptions from the beginning of period portfolio. Results may differ from actual performance. Returns are net of fees.

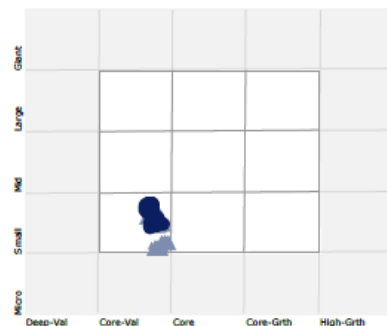


December 31, 2019

DFA US TARGETED VALUE I

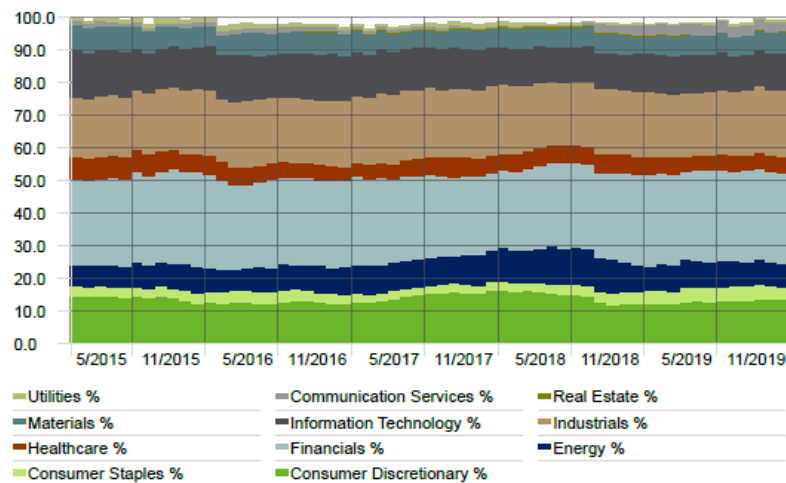
Holdings Based Style Trail (5 Years)

Time Period: 1/31/2015 to 12/31/2019



• DFA US Targeted Value I • Russell 2000 Value TR USD

Historical Sector Allocations (5 Years)



Portfolio Statistics

	Fund	Index
# of Holdings	1,489	1,402
% Asset in Top 10 Holdings	6.2	4.9
Turnover Ratio %	16.0	
P/E Ratio	13.7	14.9
P/B Ratio	1.3	1.4
LT Earn Growth	11.4	10.0
Hist Earn Growth	8.2	10.8
12 Mo Yield	1.3	

Market Capitalization Breakdown

	Fund	Index
Market Cap Giant %	0.5	0.0
Market Cap Large %	0.9	0.0
Market Cap Mid %	34.5	11.4
Market Cap Small %	53.5	72.4
Market Cap Micro %	10.6	16.2
Average Market Cap (mil)	2,535.2	1,651.8

Top 10 Holdings

	Portf Weight %	3 Month Ret %
E-mini S&P 500 Futures Dec19	0.87	
Reliance Steel & Aluminum Co	0.69	20.72
Arrow Electronics Inc	0.66	13.62
People's United Financial Inc	0.62	9.23
Tech Data Corp	0.59	37.76
AECOM	0.59	14.83
Post Holdings Inc	0.55	3.08
Genesee & Wyoming Inc Class A	0.55	1.94
Toll Brothers Inc	0.54	-3.48
Quanta Services Inc	0.53	7.83

Attribution (Quarter)

	Portfolio Weights	Benchmark Weights	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Active Return
Communication Services	3.05	2.32	5.01	2.88	-0.04	0.06	0.02
Consumer Discretionary	13.73	9.77	5.14	7.74	-0.03	-0.37	-0.40
Consumer Staples	4.08	2.54	7.82	9.51	0.00	-0.07	-0.07
Energy	7.40	5.58	9.98	7.95	0.04	0.15	0.19
Financials	27.57	30.48	6.49	7.30	0.03	-0.23	-0.20
Health Care	4.82	5.15	11.47	17.55	-0.02	-0.29	-0.30
Industrials	20.38	12.63	8.94	9.38	0.07	-0.09	-0.02
Information Technology	10.91	9.04	16.70	21.22	0.25	-0.47	-0.22
Materials	6.35	4.55	10.95	13.02	0.09	-0.13	-0.05
Real Estate	0.21	11.56	6.95	3.31	0.59	0.01	0.60
Utilities	0.20	6.24	0.92	-1.65	0.64	0.01	0.65
Attribution Total	98.71	99.86	8.71	8.50	1.64	-1.43	0.21
Cash	0.59	0.00					
Other	0.61	0.00					
Missing Performance	0.10	0.14					
Total	100.01	100.00					
Expense Ratio			0.10	0.00			
Residual(Reported - Attribution + Expense)			-0.01	-0.01			



Source: Morningstar

December 31, 2019

DFA US TARGETED VALUE I

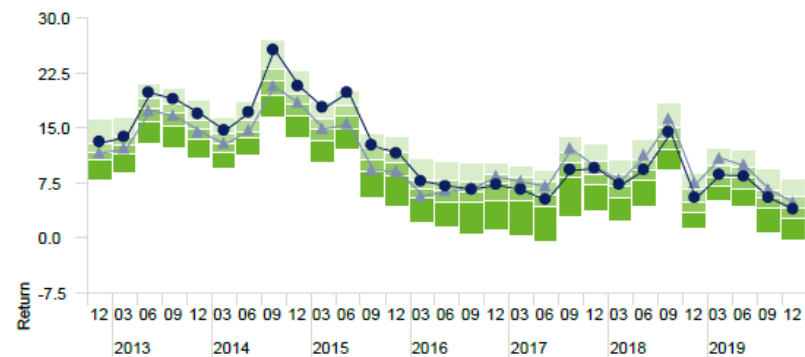
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	96.9	100.0
Alpha	-0.8	0.0
Beta	1.0	1.0
Std Dev	14.8	14.7
Up Capture Ratio	94.4	100.0
Down Capture Ratio	101.5	100.0
Sharpe Ratio (geo)	0.3	0.4
Information Ratio (geo)	-0.3	
Tracking Error	2.6	0.0
Correlation	1.0	1.0

Rolling Return (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—DFA US Targeted Value I

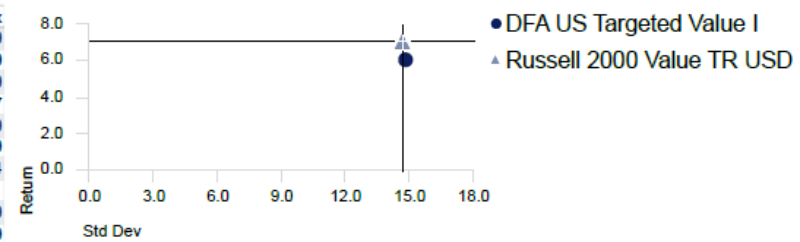
—Russell 2000 Value TR USD

Calendar Year Returns

	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
DFA US Targeted Value I	29.0	24	-6.3	72	19.2	23	43.0	10	2.9	65	-5.7	46	26.9	40	9.6	40	-15.8	55	21.5	52
Russell 2000 Value TR USD	24.5		-5.5		18.1		34.5		4.2		-7.5		31.7		7.8		-12.9		22.4	

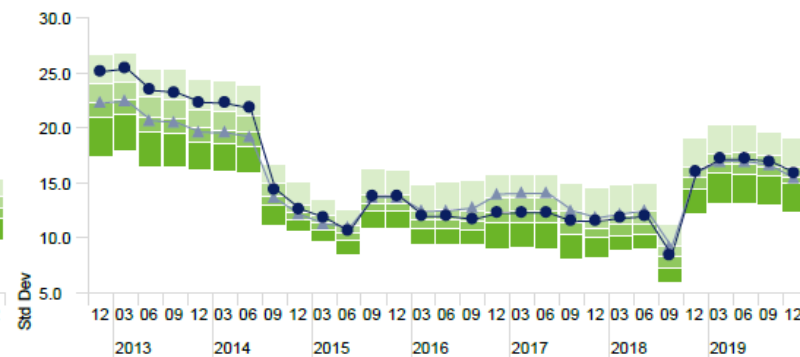
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—DFA US Targeted Value I

—Russell 2000 Value TR USD



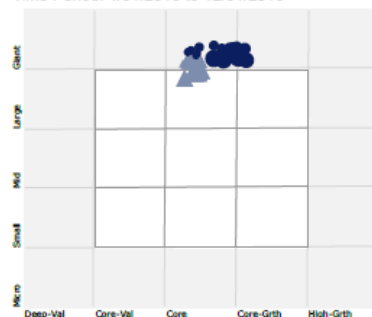
Source: Morningstar

December 31, 2019

MORGAN STANLEY INTERNATIONAL EQUITY I

Holdings Based Style Trail (5 Years)

Time Period: 1/31/2015 to 12/31/2019



Morgan Stanley Int International Eq I MSCI EAFE NR USD

Portfolio Statistics

	Fund	Index
# of Holdings	65	918
% Asset in Top 10 Holdings	33.5	11.6
Turnover Ratio %	34.0	
P/E Ratio	18.7	17.4
P/B Ratio	2.1	1.6
LT Earn Growth	7.7	7.9
Hist Earn Growth	4.3	4.8
12 Mo Yield	2.0	

Market Capitalization Breakdown

	Fund	Index
Market Cap Giant %	57.2	49.4
Market Cap Large %	35.9	36.7
Market Cap Mid %	6.8	13.7
Market Cap Small %	0.0	0.1
Market Cap Micro %	0.0	0.0
Average Market Cap	51,119.8	35,741.4
Equity Region Developed %	96.3	99.3
Equity Region Emerging %	3.7	0.7

Top Ten Holdings

	Port Weight %	3 Month Return
Reckitt Benckiser Group PLC	4.31	3.86
Henkel AG & Co KGaA Participating Preferred	3.52	4.55
Unilever NV	3.47	-3.59
GlaxoSmithKline PLC	3.40	10.79
Safran SA	3.21	-1.88
SAP SE	3.21	14.84
Sanofi SA	3.18	8.48
RELX PLC	3.16	6.00
Constellation Software Inc	3.02	-2.58
Pernod Ricard SA	3.01	1.66

Sector Attribution (Quarter)

	Portfolio Weights	Benchmark Weights	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Active Return
Communication Services	2.37	5.32	15.41	4.86	0.10	0.25	0.35
Consumer Discretionary	2.54	11.60	2.51	9.41	-0.11	-0.18	-0.29
Consumer Staples	29.54	11.65	3.63	1.95	-1.15	0.52	-0.63
Energy	4.82	4.98	2.62	3.84	0.01	-0.06	-0.06
Financials	14.77	18.48	9.45	8.10	0.00	0.20	0.21
Health Care	17.86	11.83	12.46	12.41	0.27	0.01	0.28
Industrials	13.13	15.00	4.24	9.99	-0.02	-0.77	-0.80
Information Technology	10.12	6.80	11.11	12.66	0.15	-0.16	-0.01
Materials	3.50	7.01	5.92	10.56	-0.08	-0.16	-0.25
Real Estate	0.00	3.59		4.34	0.14	0.00	0.14
Utilities	0.00	3.73		5.33	0.11	0.00	0.11
Attribution Total	98.66	99.98	7.18	8.14	-0.60	-0.35	-0.96
Cash	1.34	0.00					
Missing Performance	0.00	0.02					
Total	100.00	100.00					

Region Attribution (Quarter)

	Portfolio Weights	Benchmark Weights	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Active Return
Asia - Developed	8.24	4.60	10.94	7.88	-0.01	0.25	0.24
Asia - Emerging	3.55	0.48	8.23	13.01	0.15	-0.17	-0.02
Australasia	0.00	7.16		4.72	0.25	0.00	0.25
Canada	6.43	0.00	1.12		-0.47	0.00	-0.47
Europe - ex Euro	5.19	14.41	9.47	8.95	-0.07	0.03	-0.04
Eurozone	41.69	31.05	6.41	7.97	-0.02	-0.66	-0.68
Japan	12.24	24.74	4.86	7.65	0.06	-0.35	-0.29
Latin America	0.00	0.03		-0.85	0.00	0.00	0.00
Middle East	0.00	0.45		8.13	0.00	0.00	0.00
United Kingdom	19.96	15.93	9.36	9.73	0.07	-0.07	0.00
United States	1.35	1.13	14.49	12.00	0.01	0.03	0.04
Attribution Total	98.66	99.98	7.18	8.14	-0.03	-0.93	-0.96
Cash	1.34	0.00					
Missing Performance	0.00	0.02					
Total	100.00	100.00					



Source: Morningstar

December 31, 2019

MORGAN STANLEY INTERNATIONAL EQUITY I

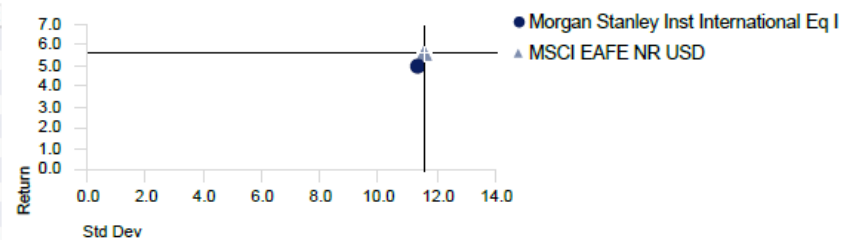
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	93.4	100.0
Alpha	-0.4	0.0
Beta	0.9	1.0
Std Dev	11.3	11.6
Up Capture Ratio	90.9	100.0
Down Capture Ratio	93.1	100.0
Sharpe Ratio (geo)	0.3	0.4
Information Ratio (geo)	-0.2	
Tracking Error	3.0	0.0
Correlation	1.0	1.0

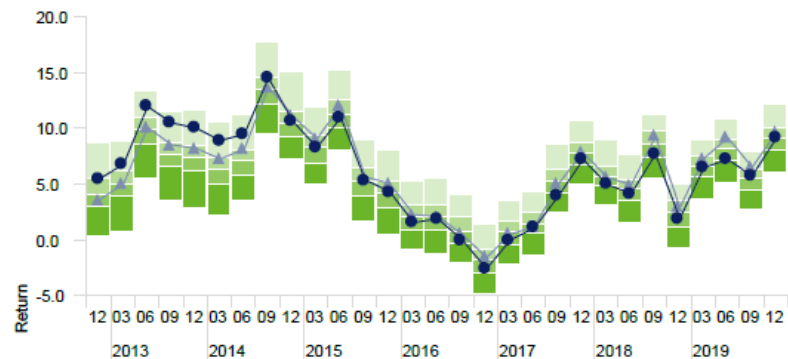
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile

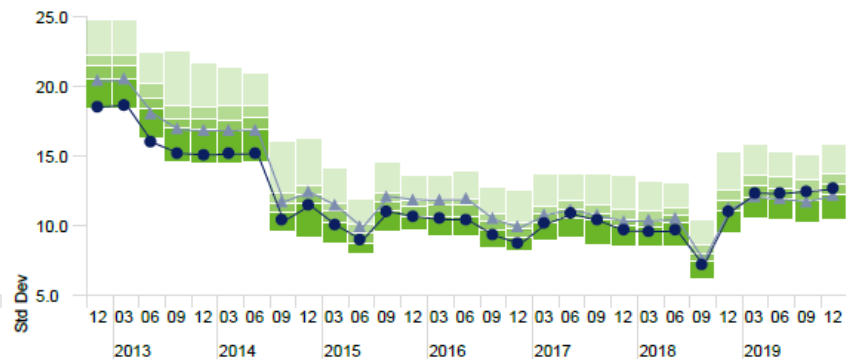


—Morgan Stanley Inst International Eq I

—MSCI EAFE NR USD

Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—Morgan Stanley Inst International Eq I

—MSCI EAFE NR USD

Calendar Year Returns

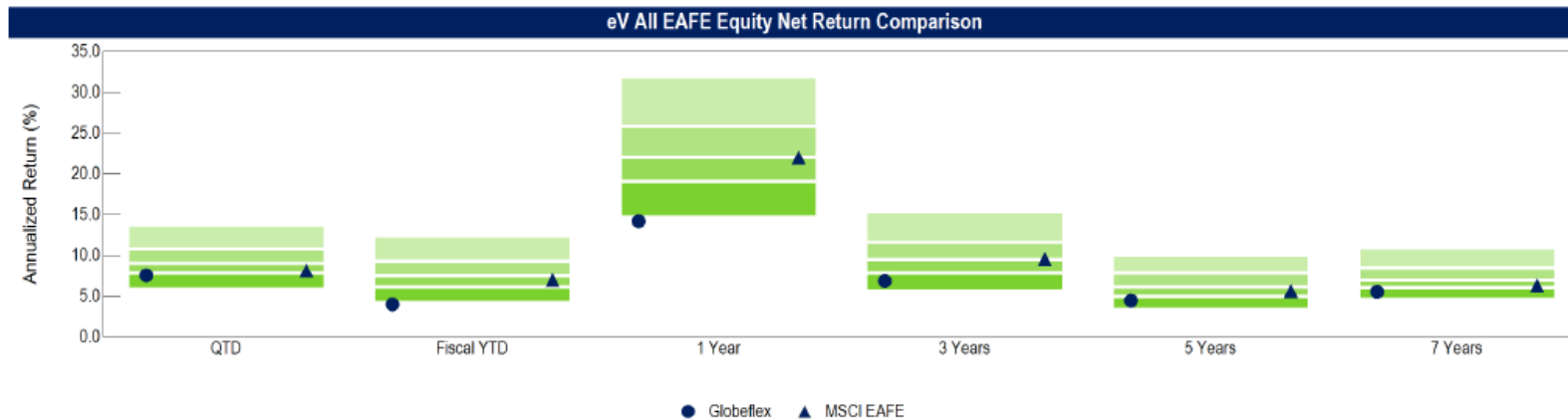
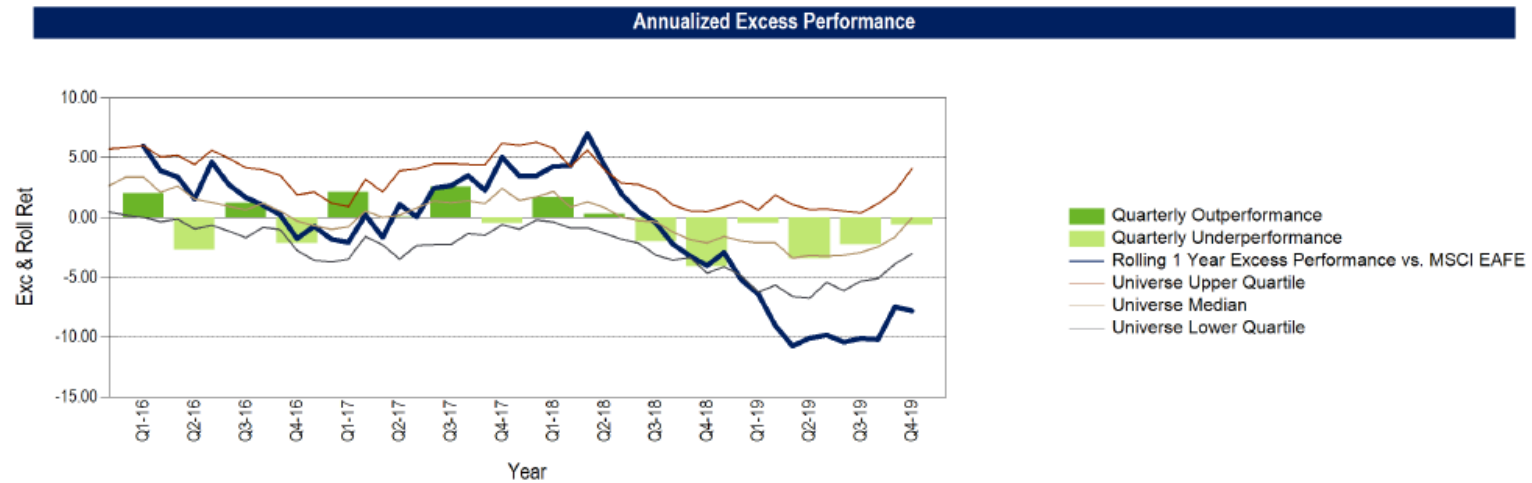
	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
Morgan Stanley Inst International Eq I	6.1	87	-7.6	5	19.6	26	20.4	43	-6.1	64	0.4	30	-2.0	82	25.2	53	-13.8	37	20.4	69
MSCI EAFE NR USD	7.8		-12.1		17.3		22.8		-4.9		-0.8		1.0		25.0		-13.8		22.0	



Source: Morningstar

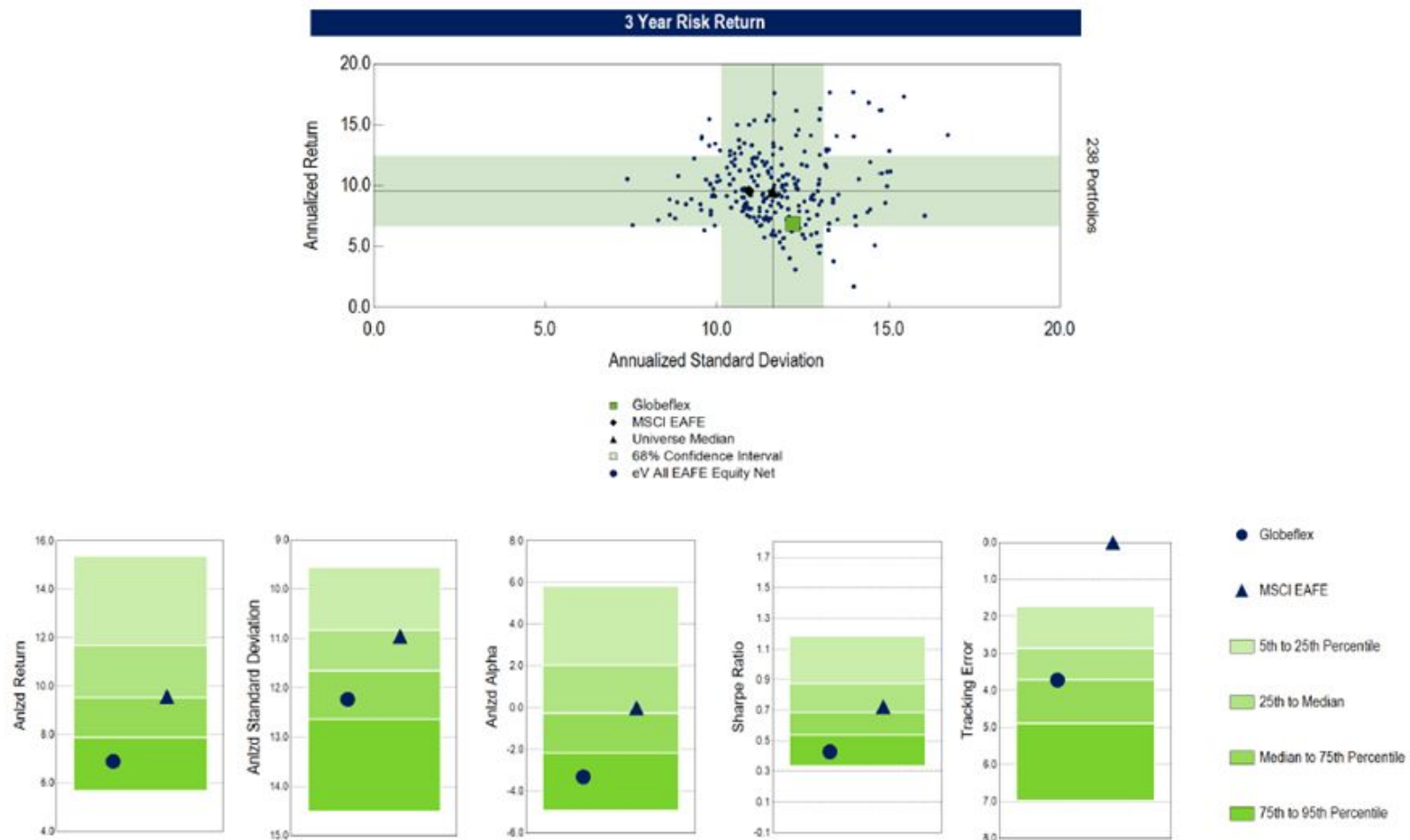
December 31, 2019

GLOBEFLEX



December 31, 2019

GLOBEFLEX



December 31, 2019

GLOBEFLEX

Characteristics		
	Portfolio	MSCI EAFE
Number of Holdings	141	918
Weighted Avg. Market Cap. (\$B)	30.2	63.7
Median Market Cap. (\$B)	7.7	10.8
Price To Earnings	13.8	17.2
Price To Book	2.3	2.4
Price To Sales	0.8	1.1
Return on Equity (%)	19.4	14.4
Yield (%)	3.3	3.2
Beta		1.0
R-Squared		1.0

Top Positive Contributors		
	Relative Contribution %	Return %
ASTELLAS PHARMA	0.3%	20.9%
BARRATT DEVELOPMENTS	0.3%	31.6%
EXOR ORD	0.3%	16.2%
SAMSUNG ELECTRONICS	0.2%	17.7%
ATLAS COPCO B	0.2%	29.4%
CSL	0.2%	23.0%
REDROW	0.2%	29.6%
FORTESCUE METALS GP.	0.2%	26.6%
CANADIAN NATURAL RES.	0.2%	22.8%
FERGUSON	0.2%	26.0%

Top Negative Contributors		
	Relative Contribution %	Return %
EMPIRE 'A'	-0.2%	-13.0%
NOVARTIS 'R'	-0.1%	9.4%
SOMPO HOLDINGS	-0.1%	-5.3%
PEUGEOT	-0.1%	-4.1%
HKT TRUST & HKT	-0.1%	-11.2%
EVRAZ	-0.1%	-7.1%
IPSEN	-0.1%	-6.6%
HKBN	-0.1%	-6.6%
DEUTSCHE TELEKOM	0.0%	-2.7%
MEIJI HOLDINGS	0.0%	-6.9%

Equity Sector Attribution								
	Total Effects	Selection Effect	Attribution Effects		Returns		Ending Sector Weights	
			Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.2%	0.2%	-0.3%	0.3%	6.5%	4.0%	8.4%	4.9%
Materials	-0.2%	-0.2%	0.0%	0.1%	8.0%	10.6%	7.3%	7.1%
Industrials	0.5%	0.2%	0.0%	0.3%	12.5%	10.1%	20.6%	15.1%
Consumer Discretionary	0.0%	0.1%	-0.1%	0.1%	12.1%	9.2%	7.4%	11.6%
Consumer Staples	0.1%	-0.3%	0.5%	-0.1%	-0.8%	2.0%	3.6%	11.2%
Health Care	0.4%	0.1%	0.2%	0.1%	12.3%	12.4%	17.7%	12.2%
Financials	-0.3%	0.1%	0.0%	-0.4%	7.1%	8.5%	12.1%	18.6%
Information Technology	-0.1%	0.1%	-0.1%	-0.1%	13.9%	12.6%	6.9%	7.0%
Communication Services	-0.5%	-0.3%	-0.1%	-0.1%	-0.3%	5.0%	7.6%	5.2%
Utilities	0.0%	0.0%	0.0%	0.0%	5.1%	5.3%	4.2%	3.7%
Real Estate	0.0%	0.0%	0.0%	0.1%	4.9%	4.3%	3.2%	3.4%
Cash	0.0%	--	--	--	--	--	0.0%	0.0%
Portfolio	0.2%	=	-0.1%	+	0.1%	+	0.2%	
					8.4%	8.2%	99.1%	100.0%

*Attribution on manager pages is holdings based, using buy-and-hold assumptions from the beginning of period portfolio. Results may differ from actual performance. Returns are net of fees.



December 31, 2019

GLOBEFLEX

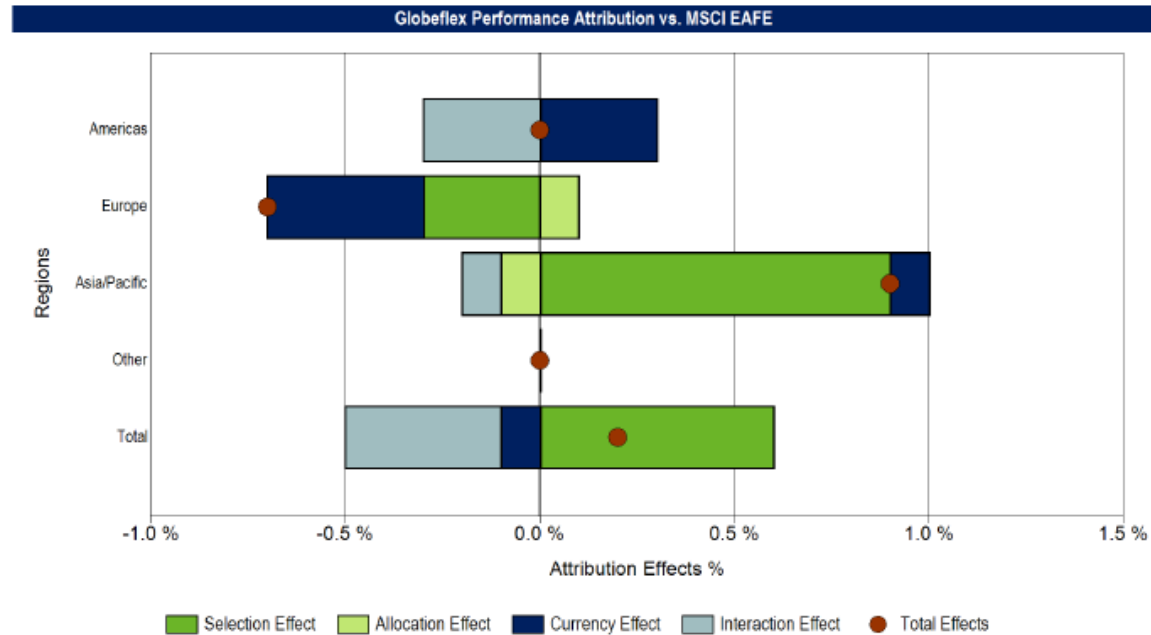
Country Allocation				
	Manager Ending Allocation (USD)	Index Ending Allocation (USD)	Manager Return (USD)	Index Return (USD)
Americas				
Canada	11.6%	0.0%	5.0%	5.3%
Total-Americas	11.7%	0.0%	5.0%	--
Europe				
Austria	2.2%	0.2%	5.6%	8.2%
Belgium	0.3%	1.0%	--	-1.5%
Denmark	1.2%	1.8%	13.0%	13.2%
Finland	0.4%	0.9%	--	3.1%
France	8.2%	11.4%	2.6%	8.6%
Germany	6.2%	8.6%	5.5%	9.5%
Ireland	0.6%	0.6%	--	18.7%
Italy	5.8%	2.3%	8.3%	8.5%
Netherlands	4.7%	4.0%	10.9%	7.4%
Norway	1.1%	0.6%	6.3%	4.5%
Portugal	1.0%	0.2%	4.6%	8.6%
Spain	3.1%	2.8%	-1.3%	6.1%
Sweden	2.5%	2.7%	23.2%	13.6%
Switzerland	4.7%	9.3%	10.2%	7.7%
United Kingdom	12.4%	16.5%	11.4%	10.1%
Total-Europe	54.9%	63.0%	8.2%	8.9%

Country Allocation				
	Manager Ending Allocation (USD)	Index Ending Allocation (USD)	Manager Return (USD)	Index Return (USD)
AsiaPacific				
Australia	6.5%	6.8%	12.9%	4.4%
Hong Kong	1.7%	3.5%	0.0%	7.7%
Japan	21.9%	24.5%	9.9%	7.7%
Korea*	2.5%	0.0%	14.9%	12.1%
Singapore	0.5%	1.3%	--	7.6%
Total-AsiaPacific	33.5%	36.4%	10.0%	7.1%
Totals				
Developed	97.5%	100.0%	8.2%	8.2%
Emerging*	2.5%	0.0%	14.9%	--



December 31, 2019

GLOBEFLEX



	Returns and Ending Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
Totals									
Americas	5.0%	–	11.7%	0.0%	0.0%	0.0%	0.3%	-0.3%	0.0%
Europe	8.2%	8.9%	54.9%	63.0%	-0.3%	0.1%	-0.4%	0.0%	-0.7%
Asia/Pacific	10.0%	7.1%	33.5%	36.4%	0.9%	-0.1%	0.1%	-0.1%	0.9%
Other	–	8.1%	0.0%	0.6%	–	0.0%	0.0%	–	0.0%
Total	8.4%	8.2%	100.0%	100.0%	0.6%	0.0%	-0.1%	-0.4%	0.2%
Totals									
Developed	8.2%	8.2%	97.5%	100.0%	0.1%	0.0%	-0.1%	0.0%	-0.1%
Emerging*	14.9%	–	2.5%	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%



December 31, 2019

KABOUTER INT'L OPPS OFFSHORE FUND II

SECTOR ATTRIBUTION W/CURRENCY

	Average Weight			Contribution to Return			Total Return		Attribution Analysis			
	Port. Average Weight	Bench. Average Weight	Variation in Average Weight	Port. Contrib. To Return	Bench. Contrib. To Return	Variation in Contribution To Return	Port. Total Return	Bench. Total Return	Total Effect	Allocation Effect (Local)	Selection Effect (Local)	Total Currency Effect
Total	100.00	100.00	--	9.81	11.55	-1.74	9.81	11.55	-1.74	1.22	-2.18	-0.78
Communication Services	--	4.85	-4.85	--	0.41	-0.41	--	8.44	0.15	0.17	--	-0.02
Consumer Discretionary	3.90	12.53	-8.63	0.12	1.60	-1.49	3.59	12.92	-0.49	-0.10	-0.39	0.00
Consumer Staples	1.85	6.30	-4.45	-0.08	0.40	-0.48	-3.90	6.19	0.03	0.19	-0.15	-0.01
Energy	--	2.51	-2.51	--	0.15	-0.15	--	5.85	0.14	0.16	--	-0.03
Etf	1.48	--	1.48	0.17	--	0.17	11.03	--	-0.01	0.03	--	-0.04
Financials	8.44	10.67	-2.23	1.55	1.20	0.35	19.44	11.26	0.60	0.02	0.48	0.10
Health Care	19.04	7.22	11.82	1.79	0.97	0.81	9.54	13.71	-0.55	0.19	-0.57	-0.16
Industrials	21.98	21.45	0.53	2.64	3.04	-0.40	12.07	14.37	-0.47	0.04	-0.23	-0.27
Information Technology	20.93	10.09	10.84	3.44	1.60	1.84	17.67	16.13	0.60	0.45	0.12	0.03
Materials	9.89	7.97	1.92	-0.76	0.85	-1.61	-6.95	10.61	-1.83	-0.02	-1.55	-0.26
Real Estate	5.02	13.87	-8.86	0.33	1.12	-0.79	5.91	7.91	0.23	0.31	-0.07	-0.00
Utilities	7.48	2.42	5.06	0.63	0.19	0.44	8.50	7.78	-0.15	-0.23	0.19	-0.11

*Returns are gross of fees



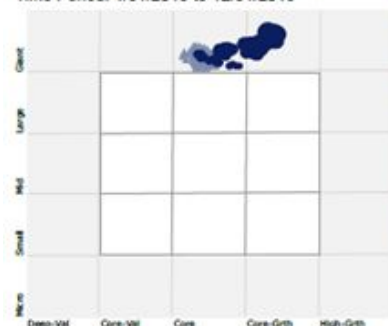
Source: Kabouter

December 31, 2019

ABERDEEN EMERGING MARKET EQUITY

Holdings Based Style Trail (5 Years)

Time Period: 1/31/2015 to 12/31/2019



• Aberdeen Emerging Markets Instl - MSCI EM NR USD

Portfolio Statistics

	Fund	Index
# of Holdings	63	1,404
% Asset in Top 10 Holdings	40.3	24.5
Turnover Ratio %	20.4	
P/E Ratio	16.9	14.4
P/B Ratio	2.6	1.7
LT Eam Growth	10.1	8.8
Hist Eam Growth	13.7	10.3
12 Mo Yield	1.8	

Market Capitalization Breakdown

	Fund	Index
Market Cap Giant %	71.4	53.4
Market Cap Large %	23.7	33.2
Market Cap Mid %	4.8	12.5
Market Cap Small %	0.0	0.9
Market Cap Micro %	0.1	0.0
Average Market Cap	48,619.9	31,981.7
Equity Region Developed %	24.2	26.2
Equity Region Emerging %	75.8	73.8

Top Ten Holdings

	Port Weight %	3 Month Return
Taiwan Semiconductor Manufacturing Co Ltd	6.82	26.89
Tencent Holdings Ltd	6.24	14.44
Samsung Electronics Co Ltd Participating Preferred	5.82	18.88
Housing Development Finance Corp Ltd	4.36	21.16
Ping An Insurance (Group) Co. of China Ltd Class H	3.94	2.90
Bank Bradesco SAADR	3.43	14.93
AIA Group Ltd	2.91	11.14
Vale SAADR	2.29	17.80
China Resources Land Ltd	2.27	18.83
Kotak Mahindra Bank Ltd	2.24	1.70

Sector Attribution (Quarter)

	Portfolio Weights	Benchmark Weights	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Active Return
Communication Services	11.00	11.20	9.94	9.77	0.02	0.04	0.06
Consumer Discretionary	12.37	13.55	9.69	16.47	-0.01	-0.90	-0.91
Consumer Staples	10.77	6.73	-1.11	2.52	-0.37	-0.42	-0.79
Energy	4.35	6.12	10.74	7.51	0.07	0.14	0.21
Financials	28.04	24.60	9.50	9.66	-0.07	-0.05	-0.12
Health Care	0.92	2.74	24.07	14.67	-0.06	0.08	0.03
Industrials	2.33	5.35	11.33	7.52	0.13	0.09	0.22
Information Technology	16.27	15.27	19.69	18.71	0.07	0.15	0.21
Materials	7.77	7.25	5.16	12.35	0.00	-0.58	-0.58
Real Estate	4.91	2.90	11.34	17.66	0.11	-0.33	-0.21
Utilities	0.00	2.76		4.38	0.21	0.00	0.21
Attribution Total	98.72	98.48	9.93	11.61	0.10	-1.78	-1.68
Cash	1.28	0.00					
Missing Performance	0.00	1.52					
Total	100.00	100.00					

Region Attribution (Quarter)

	Portfolio Weights	Benchmark Weights	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Active Return
Africa	3.01	4.70	3.71	13.14	-0.03	-0.29	-0.32
Asia - Developed	20.56	24.33	17.39	15.06	-0.13	0.47	0.34
Asia - Emerging	49.74	48.60	7.42	10.85	0.02	-1.78	-1.76
Europe - Emerging	4.20	4.47	8.03	10.68	0.00	-0.11	-0.11
Eurozone	2.24	0.37	8.02	11.89	0.03	-0.14	-0.12
Latin America	18.06	11.56	9.71	10.49	-0.02	-0.14	-0.16
Middle East	0.00	4.13		2.48	0.40	0.00	0.40
United States	0.92	0.31	24.07	32.77	0.12	-0.08	0.05
Attribution Total	98.72	98.48	9.93	11.61	0.39	-2.07	-1.68
Cash	1.28	0.00					
Missing Performance	0.00	1.52					
Total	100.00	100.00					



Source: Morningstar

December 31, 2019

ABERDEEN EMERGING MARKET EQUITY

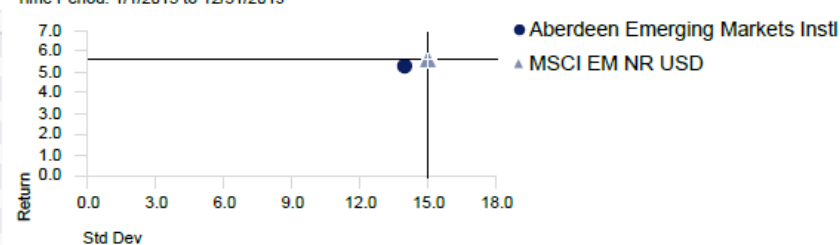
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	89.1	100.0
Alpha	0.2	0.0
Beta	0.9	1.0
Std Dev	14.0	15.0
Up Capture Ratio	93.1	100.0
Down Capture Ratio	92.9	100.0
Sharpe Ratio (geo)	0.3	0.3
Information Ratio (geo)	-0.1	
Tracking Error	5.0	0.0
Correlation	0.9	1.0

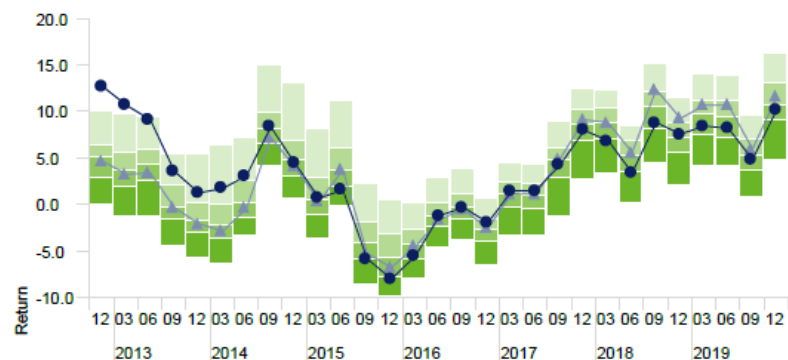
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile

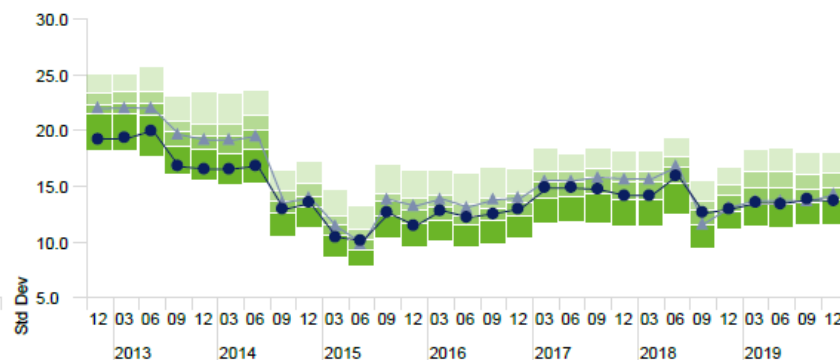


—Aberdeen Emerging Markets Instl

—MSCI EM NR USD

Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—Aberdeen Emerging Markets Instl

—MSCI EM NR USD

Calendar Year Returns

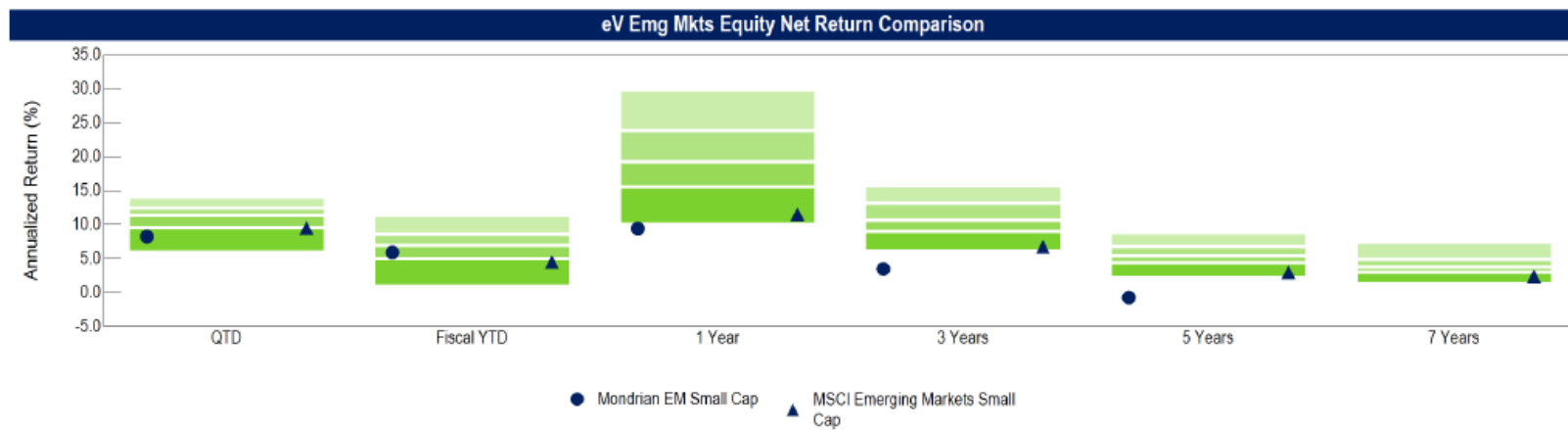
	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
Aberdeen Emerging Markets Instl	27.6	6	-11.0	4	26.2	8	-7.5	93	-2.5	43	-13.7	45	12.0	24	30.2	70	-14.6	35	20.4	41
MSCI EM NR USD	18.9		-18.4		18.2		-2.6		-2.2		-14.9		11.2		37.3		-14.6		18.4	



Source: Morningstar

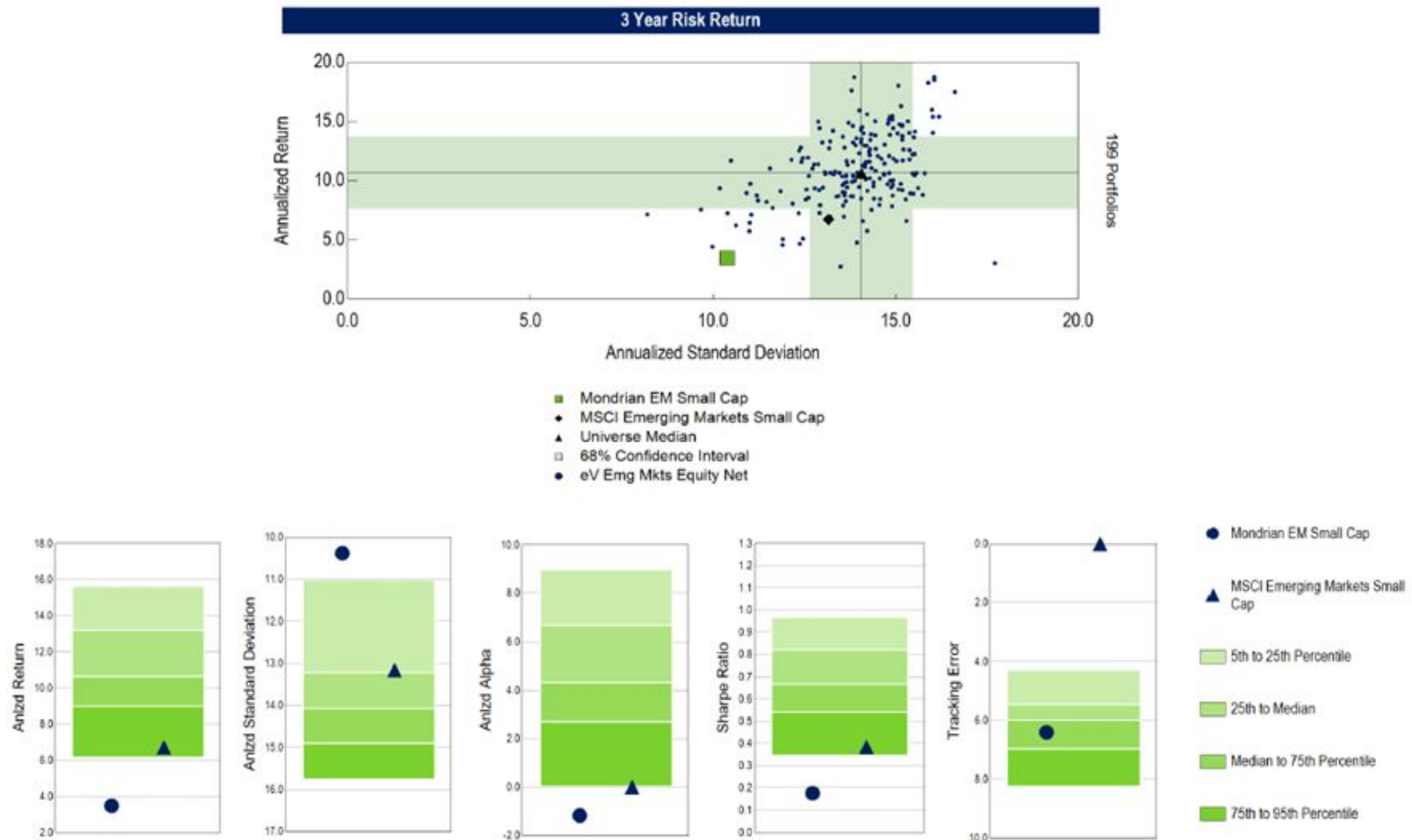
December 31, 2019

MONDRIAN EM SMALL CAP



December 31, 2019

MONDRIAN EM SMALL CAP



December 31, 2019

MONDRIAN EM SMALL CAP

Characteristics		MSCI Emerging Markets Small Cap
	Portfolio	
Number of Holdings	105	1,652
Weighted Avg. Market Cap. (\$B)	1.5	1.3
Median Market Cap. (\$B)	1.1	0.7
Price To Earnings	19.1	13.5
Price To Book	3.2	2.3
Price To Sales	2.2	0.9
Return on Equity (%)	18.9	12.3
Yield (%)	2.4	2.8
Beta		1.0
R-Squared		1.0

Top Positive Contributors		
	Relative Contribution %	Return %
CLEAR MEDIA	0.7%	66.4%
AIRTAC INTERNATIONAL GP.	0.5%	30.7%
MONETA MONEY BANK	0.4%	27.1%
DUZONBIZON	0.4%	28.1%
WILSON SONS BDR (BSP)	0.4%	36.4%
ASTER DM HEALTHCARE	0.4%	35.2%
MICROPORT SCIENTIFIC	0.3%	30.8%
PHOENIX MILLS	0.3%	18.5%
QL RESOURCES	0.3%	15.4%
TEGMA GESTAO LOGISTICA ON	0.3%	27.5%

Top Negative Contributors		
	Relative Contribution %	Return %
MANILA WATER	-0.4%	-46.3%
SARANA MEDITAMA MET.TBK	-0.3%	-46.7%
ARWANA CITRAMULIA	-0.2%	-12.6%
CCL PRODUCTS (INDIA)	-0.1%	-16.5%
SINOSOFT TECHNOLOGY GP.	-0.1%	-10.6%
SYMPHONY	-0.1%	-10.5%
PACIFIC HOSPITAL SUPPLY	-0.1%	-10.9%
FU SHOU YUAN INTL.GP.	-0.1%	-4.2%
HUMAN SOFT HOLDING	-0.1%	-3.3%
BANGKOK CHAIN HOSP. FB	0.0%	-4.6%

Equity Sector Attribution											
	Attribution Effects				Returns		Ending Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	0.0%	0.0%	0.0%	2.5%	5.3%	1.2%	2.3%			
Materials	-1.2%	-0.7%	-0.1%	-0.3%	7.0%	16.4%	10.7%	11.1%			
Industrials	1.2%	1.0%	-0.1%	0.3%	12.6%	5.7%	17.8%	14.0%			
Consumer Discretionary	-0.3%	-0.1%	0.0%	-0.2%	4.8%	7.1%	13.2%	14.1%			
Consumer Staples	-0.4%	-0.2%	-0.1%	-0.1%	4.6%	8.2%	13.5%	6.0%			
Health Care	-1.0%	-0.7%	0.4%	-0.7%	5.0%	15.4%	13.8%	9.0%			
Financials	0.5%	1.2%	0.2%	-0.9%	21.5%	6.1%	3.8%	9.6%			
Information Technology	-0.5%	0.5%	-0.3%	-0.6%	16.3%	14.0%	9.8%	16.1%			
Communication Services	0.6%	0.6%	0.0%	0.0%	18.1%	4.5%	4.1%	3.8%			
Utilities	-0.6%	-0.8%	0.0%	0.2%	-1.7%	11.7%	2.9%	5.0%			
Real Estate	0.4%	0.4%	0.1%	-0.1%	10.3%	5.1%	6.5%	8.2%			
Cash	-0.3%	0.0%	-0.3%	0.0%	0.4%	—	1.8%	0.0%			
Portfolio	-1.4%	=	1.2%	+	-0.3%	+	-2.3%	8.2%	9.7%	99.2%	99.2%

* Attribution on manager pages is holdings based, using buy-and-hold assumptions from the beginning of period portfolio. Results may differ from actual performance. Returns are gross of fees.



December 31, 2019

MONDRIAN EM SMALL CAP

Sector Allocation

	Fund	MSCI EM SC
Communication Services	4.0	3.9
Consumer Discretionary	13.0	14.3
Consumer Staples	13.3	6.0
Energy	1.2	2.3
Financials	4.5	9.6
Health Care	15.3	9.0
Industrials	17.5	14.0
Information Technology	9.6	16.2
Materials	10.6	11.1
Real Estate	6.4	8.5
Utilities	2.8	5.1
Cash	1.8	—
TOTAL	100.0	100.0

Country Allocation

	Fund	MSCI EM SC
Latin America	9.6	15.4
Brazil	4.4	10.5
Mexico	3.2	2.8
Peru	2.0	—
Europe, Middle East & Africa	13.0	14.0
Czech Republic	1.6	0.1
Estonia	1.2	—
Kuwait	1.6	—
Poland	2.3	1.1
Saudi Arabia	2.8	2.5
Slovenia	0.8	—
South Africa	0.8	4.9
UAE	1.0	0.6
United Kingdom	0.9	—
Asia	75.6	70.6
North Asia	34.7	46.5
China/Hong Kong	18.9	10.6
South Korea	6.2	15.5
Taiwan	9.6	20.4
South Asia	40.9	23.6
India	28.6	13.2
Indonesia	3.9	2.1
Malaysia	3.1	3.3
Philippines	2.7	1.0
Thailand	2.6	4.0
Cash	1.8	—
TOTAL	100.0	100.0



Source: Mondrian

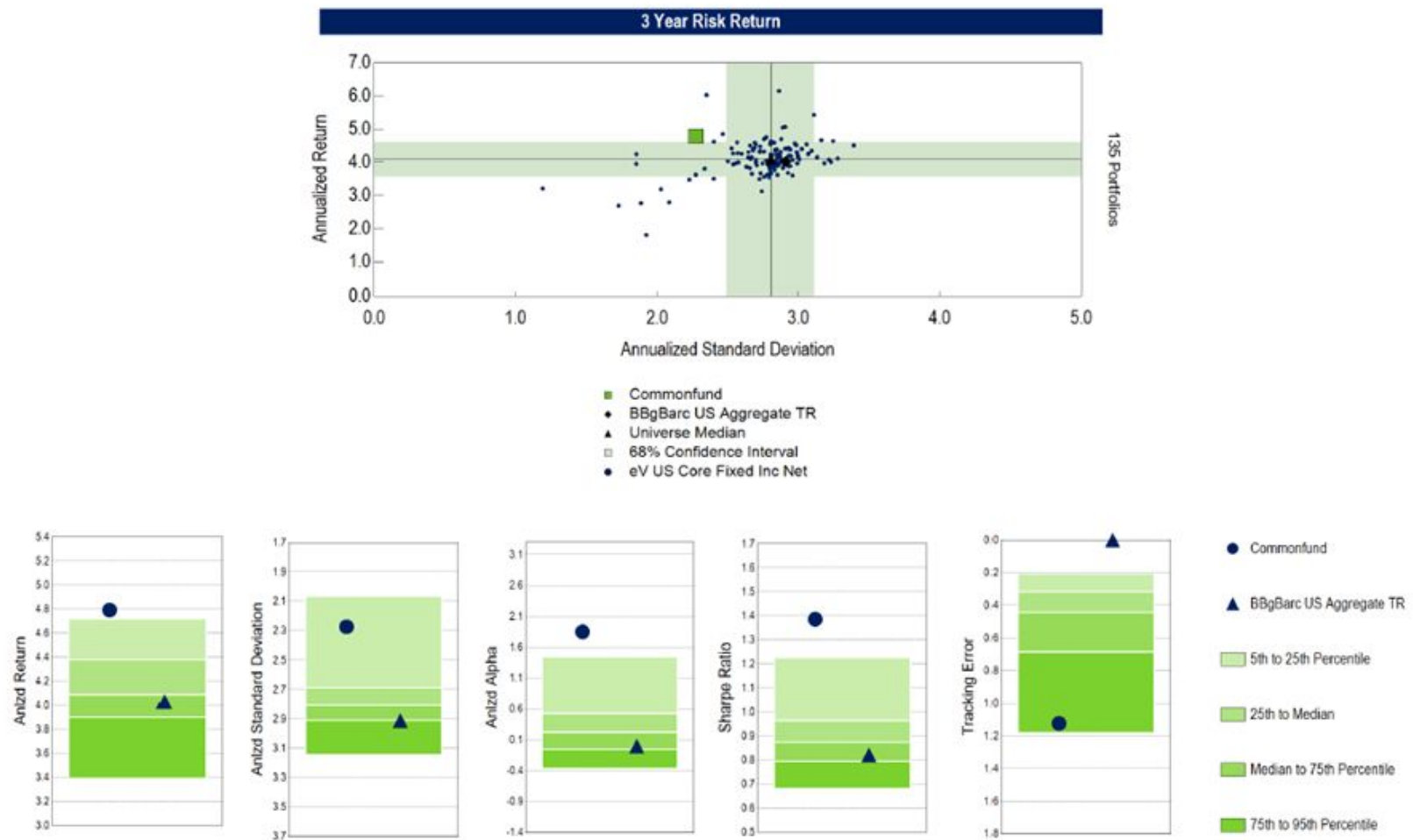
December 31, 2019

COMMONFUND



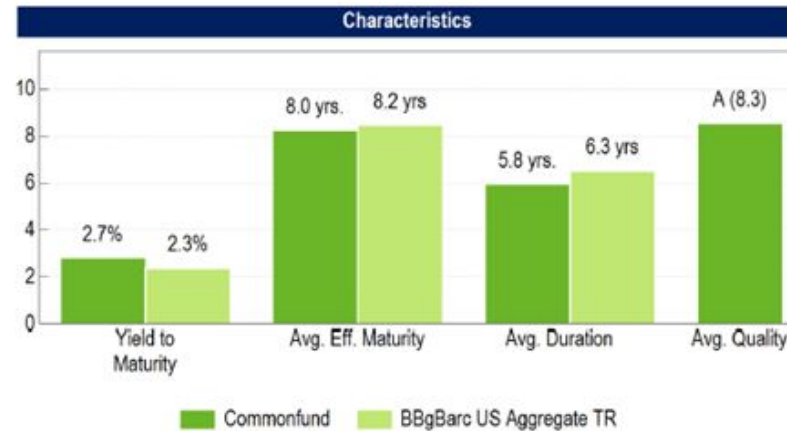
December 31, 2019

COMMONFUND



December 31, 2019

COMMONFUND



December 31, 2019

COMMONFUND

Multi-Strategy Bond Fund: Investment Managers

Investment Managers	Core	Credit	Opportunistic
Bain Capital Specialty Fin.		X	
Brandywine Asset Management			X
Cerberus Capital Management		X	
Credit Partnerships CF 2018		X	
Direct Trading (Tsy Fut)			X
Distressed Debt Partnerships		X	
Income Research & Management (IRM)	X		
PIMCO Income Fund (PIMIX)			X
Rimrock Capital Management	X		
Western Asset	X		X



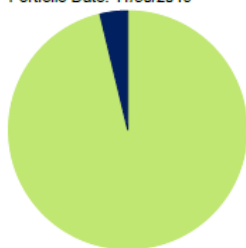
Source: Commonfund

December 31, 2019

VANGUARD INFLATION PROTECTED SECURITIES

Asset Allocation

Portfolio Date: 11/30/2019



• Stock	0.0
• Bond	96.2
• Cash	3.8
• Other	0.0
Total	100.0

Fixed Income Statistics

Portfolio Date: 11/30/2019

Morningstar Fixed Income Style Box™			
	Ltd	Mod	Ext
High			
Med			
Low			

Fixed-Income Stats

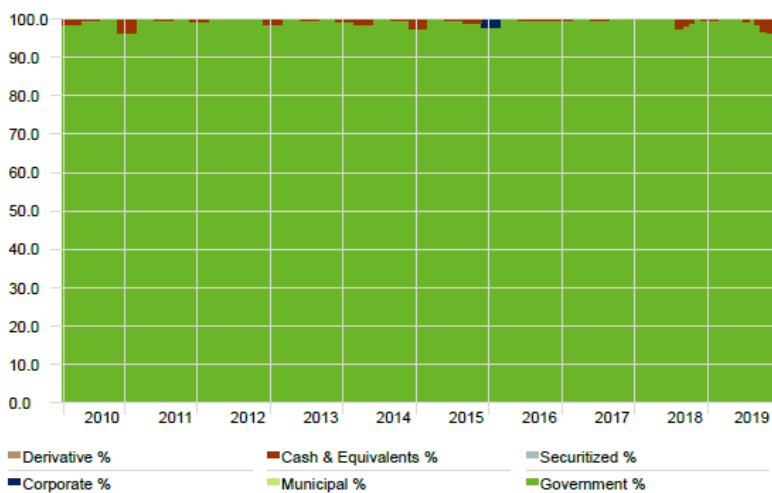
Average Eff Duration	7.4
Average Eff Maturity	8.3
Average Coupon	0.8
Average Price	112.4
Yield to Maturity	

Credit Quality Breakdown

Portfolio Date: 11/30/2019

	Fund	Index
AAA %	100.0	
AA %	0.00	
A %	0.00	
BBB %	0.00	
BB %	0.00	
B %	0.00	
Below B %	0.00	
Not Rated %	0.00	
Yield to Maturity		

Historical Sector Allocations (10 Years)



Top Holdings

	Detail Holding Type	Portfolio Weighting %
Vanguard Market Liquidity Inv	MUTUAL FUND - MONEY MARKET	3.76
United States Treasury Notes 0.62%	BOND - GOV'T INFLATION PROTECTED	3.56
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	3.51
United States Treasury Notes 0.38%	BOND - GOV'T INFLATION PROTECTED	3.48
United States Treasury Notes 0.62%	BOND - GOV'T INFLATION PROTECTED	3.47
United States Treasury Notes 0.25%	BOND - GOV'T INFLATION PROTECTED	3.46
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	3.43
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	3.38
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	3.32
United States Treasury Notes 0.38%	BOND - GOV'T INFLATION PROTECTED	3.28



Source: Morningstar

December 31, 2019

VANGUARD INFLATION PROTECTED SECURITIES

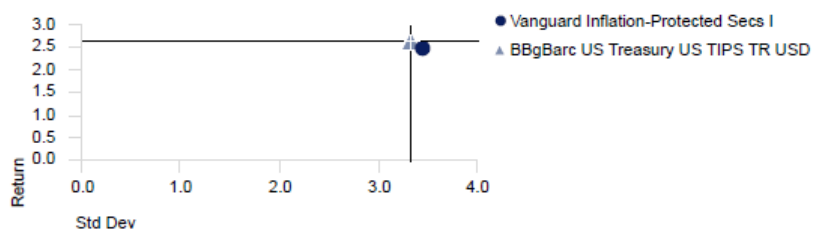
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	99.4	100.0
Alpha	-0.2	0.0
Beta	1.0	1.0
Std Dev	3.4	3.3
Up Capture Ratio	99.6	100.0
Down Capture Ratio	107.7	100.0
Sharpe Ratio (geo)	0.4	0.4
Information Ratio (geo)	-0.5	
Tracking Error	0.3	0.0
Correlation	1.0	1.0

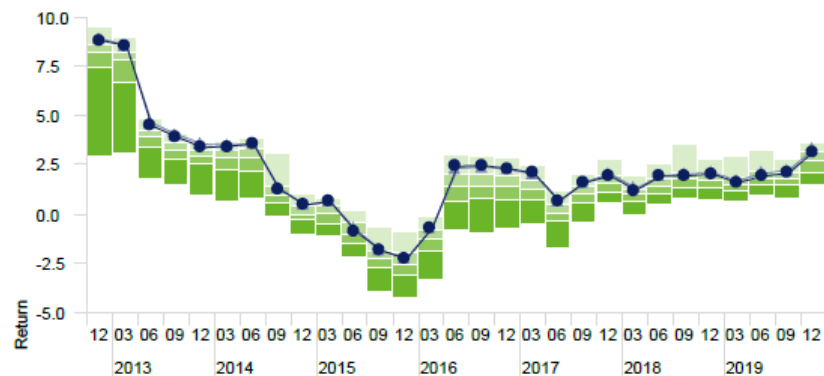
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile

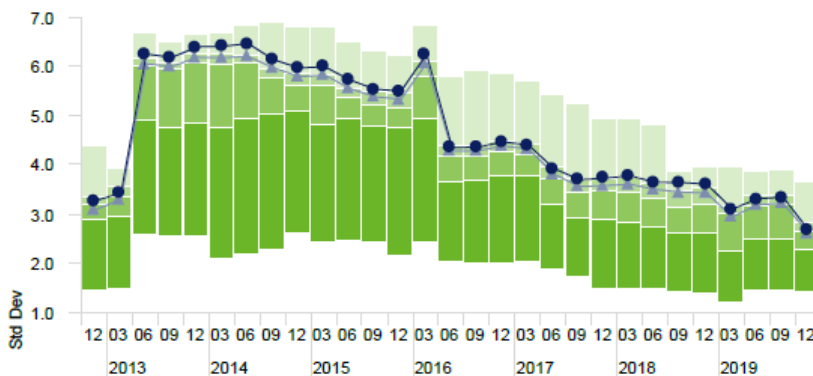


— Vanguard Inflation-Protected Secs I

— BBgBarc US Treasury US TIPS TR USD

Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



— Vanguard Inflation-Protected Secs I

— BBgBarc US Treasury US TIPS TR USD

Calendar Year Returns

	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
Vanguard Inflation-Protected Secs I	6.3	28	13.4	6	6.9	24	-8.8	52	4.1	5	-1.7	31	4.6	39	3.0	34	-1.4	48	8.2	43
BBgBarc US Treasury US TIPS TR USD	6.3		13.6		7.0		-8.6		3.6		-1.4		4.7		3.0		-1.3		8.4	



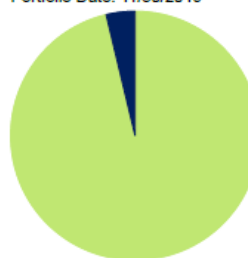
Source: Morningstar

December 31, 2019

VANGUARD SHORT-TERM TIPS

Asset Allocation

Portfolio Date: 11/30/2019



• Stock	0.0
• Bond	96.3
• Cash	3.7
• Other	0.0
Total	100.0

Fixed Income Statistics

Portfolio Date: 11/30/2019

Morningstar Fixed Income Style Box™			
	Ltd	Mod	Ext
High			
Med			
Low			

Fixed-Income Stats

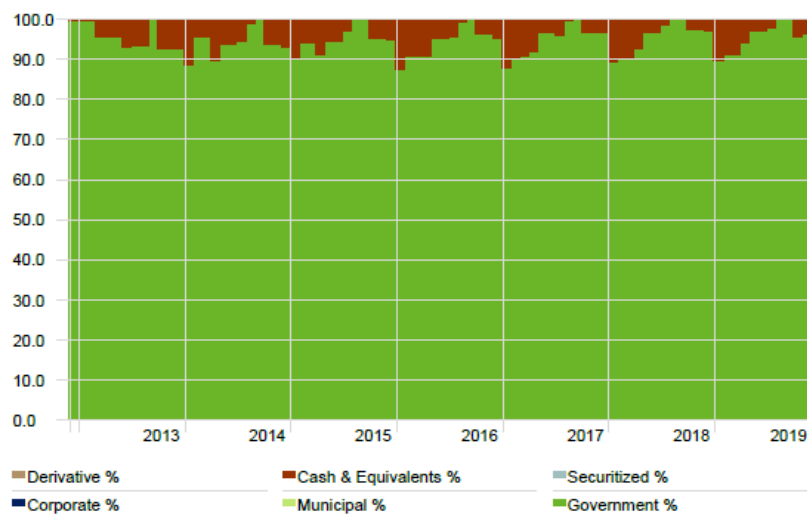
Average Eff Duration	2.5
Average Eff Maturity	2.5
Average Coupon	0.4
Average Price	110.0

Credit Quality Breakdown

Portfolio Date: 11/30/2019

	Fund	Index
AAA %	100.0	
AA %	0.00	
A %	0.00	
BBB %	0.00	
BB %	0.00	
B %	0.00	
Below B %	0.00	
Not Rated %	0.00	
Yield to Maturity		

Historical Sector Allocations (10 Years)



Top Holdings

	Detail Holding Type	Portfolio Weighting %
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	8.38
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	7.26
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	7.08
United States Treasury Notes 0.62%	BOND - GOV'T INFLATION PROTECTED	7.05
United States Treasury Notes 0.38%	BOND - GOV'T INFLATION PROTECTED	7.04
United States Treasury Notes 0.62%	BOND - GOV'T INFLATION PROTECTED	6.99
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	6.94
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	6.93
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	6.76
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	6.71



December 31, 2019

VANGUARD SHORT-TERM TIPS

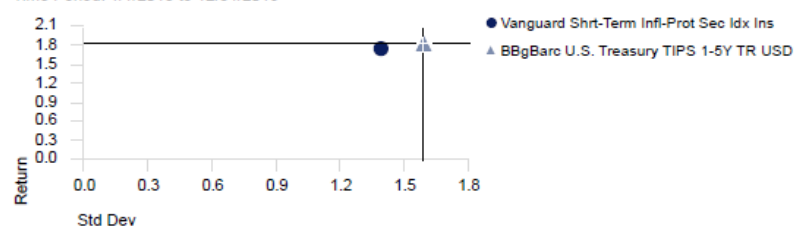
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	99.1	100.0
Alpha	0.0	0.0
Beta	0.9	1.0
Std Dev	1.4	1.6
Up Capture Ratio	93.3	100.0
Down Capture Ratio	85.2	100.0
Sharpe Ratio (geo)	0.5	0.5
Information Ratio (geo)	-0.3	
Tracking Error	0.3	0.0
Correlation	1.0	1.0

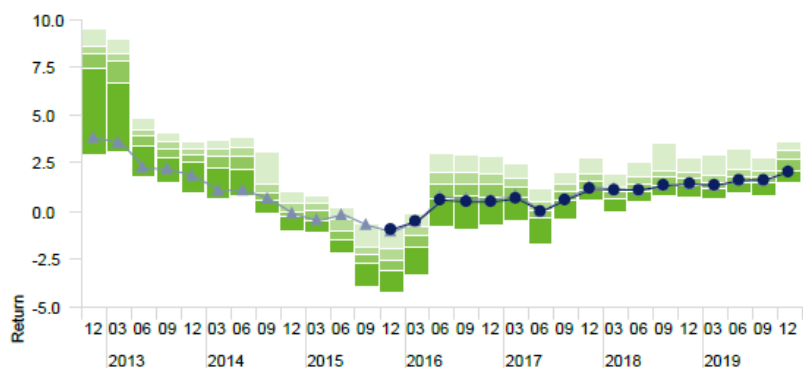
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile

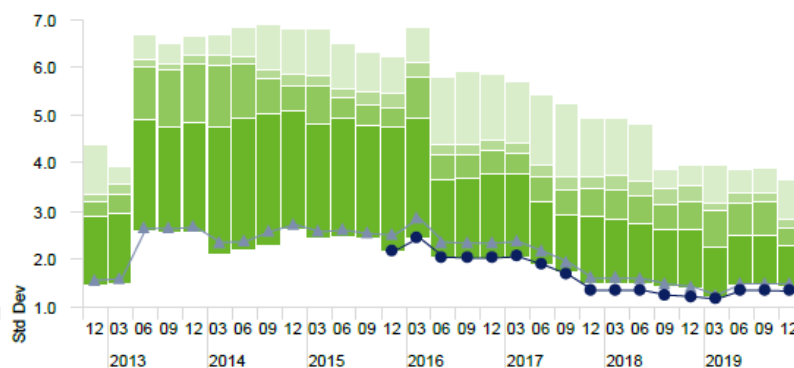


—Vanguard Shrt-Term Infl-Prot Sec Idx Ins

—BBgBarc U.S. Treasury TIPS 1-5Y TR USD

Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—Vanguard Shrt-Term Infl-Prot Sec Idx Ins

—BBgBarc U.S. Treasury TIPS 1-5Y TR USD

Calendar Year Returns

	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
Vanguard Shrt-Term Infl-Prot Sec Idx Ins							-1.5	5	-1.1	88	-0.2	2	2.8	91	0.8	85	0.6	1	4.8	93
BBgBarc U.S. Treasury TIPS 1-5Y TR USD	3.9		4.9		2.7		-2.0		-1.1		-0.1		3.1		0.8		0.4		5.1	

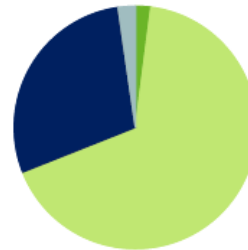


December 31, 2019

BLACKROCK STRATEGIC INCOME

Asset Allocation

Portfolio Date: 10/31/2019



Stock	2.0
Bond	66.9
Cash	28.7
Other	2.3
Total	100.0

Fixed Income Statistics

Portfolio Date: 6/30/2019

Morningstar Fixed Income Style Box™			
	Ltd	Mod	Ext
High			
Med			
Low			

Fixed-Income Stats

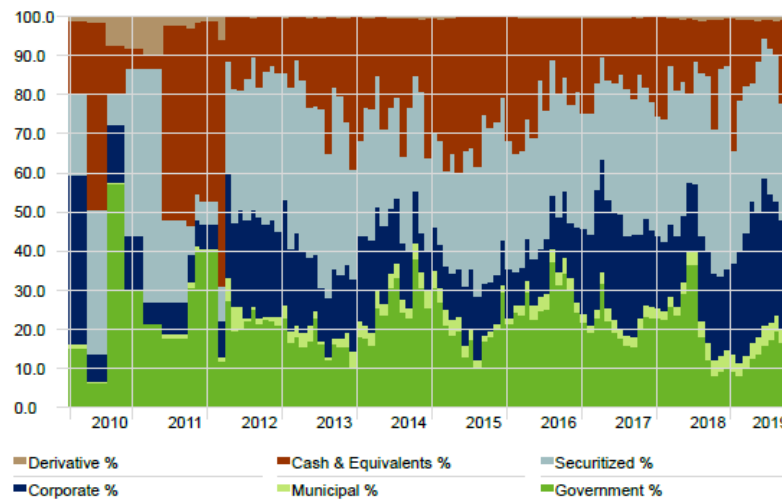
Average Eff Duration	3.8
Average Eff Maturity	9.2
Average Coupon	4.4
Average Price	102.6

Credit Quality Breakdown

Portfolio Date: 9/30/2019

	Fund	Index
AAA %	24.1	
AA %	5.71	
A %	13.95	
BBB %	22.24	
BB %	11.74	
B %	8.54	
Below B %	4.03	
Not Rated %	9.73	
Yield to Maturity		

Historical Sector Allocations (10 Years)



Top Holdings

	Detail Holding Type	Portfolio Weighting %
United States Treasury Notes 0.5%	BOND - GOV'T INFLATION PROTECTED	1.47
BlackRock Liquidity T-Fund Instl	MUTUAL FUND - MONEY MARKET	0.99
France (Republic Of) 1.5%	BOND - GOV'T/TREASURY	0.93
Japan (Government Of) 0.1%	BOND - GOV'T INFLATION PROTECTED	0.60
Federal National Mortgage Association 4%	BOND - GOV'T AGENCY PASS-THRU	0.54
China (People's Republic Of) 3.29%	BOND - GOV'T/TREASURY	0.54
Wells Fargo & Company 3.75%	B	0.52
United States Treasury Notes 0.62%	BOND - GOV'T INFLATION PROTECTED	0.51
Federal National Mortgage Association 4%	BOND - GOV'T AGENCY PASS-THRU	0.48
China (People's Republic Of) 3.19%	BOND - GOV'T/TREASURY	0.48



Source: Morningstar

December 31, 2019

BLACKROCK STRATEGIC INCOME

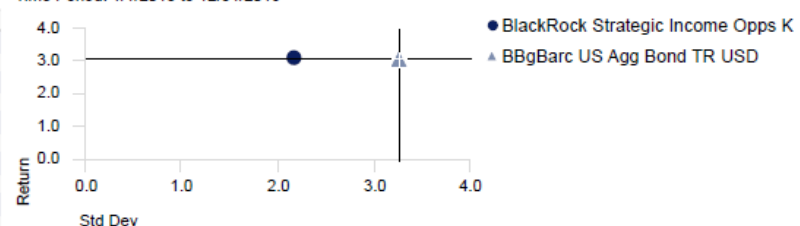
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	6.6	100.0
Alpha	1.6	0.0
Beta	0.2	1.0
Std Dev	2.2	3.3
Up Capture Ratio	69.9	100.0
Down Capture Ratio	2.6	100.0
Sharpe Ratio (geo)	0.9	0.6
Information Ratio (geo)	0.0	
Tracking Error	3.3	0.0
Correlation	0.3	1.0

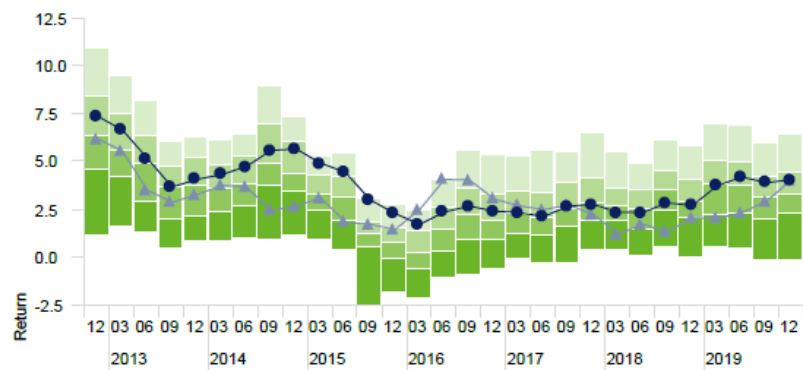
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile

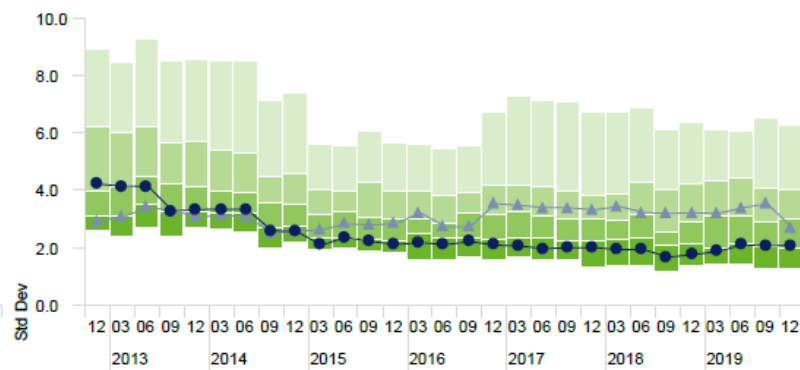


—BlackRock Strategic Income Opps K

—BBgBarc US Agg Bond TR USD

Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—BlackRock Strategic Income Opps K

—BBgBarc US Agg Bond TR USD

Calendar Year Returns

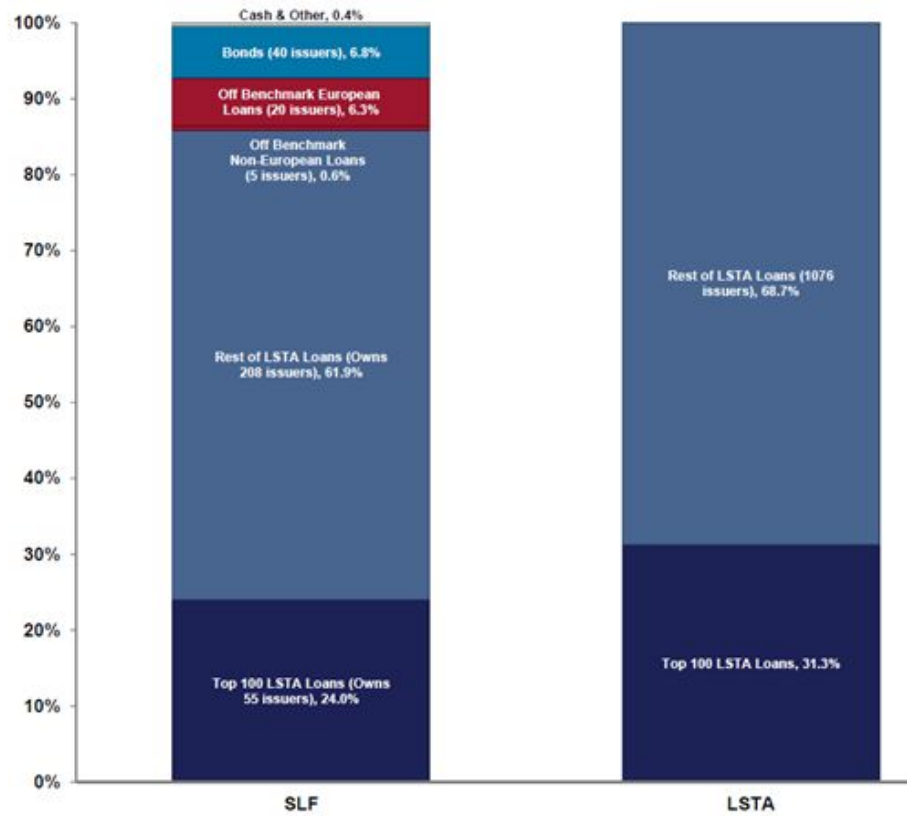
	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
BlackRock Strategic Income Opps K	13.4		-0.7		9.9		3.3		3.9		-0.3		3.7		5.0	37	-0.5	46	7.8	36
BBgBarc US Agg Bond TR USD	6.5		7.8		4.2		-2.0		6.0		0.5		2.6		3.5		0.0		8.7	



Source: Morningstar

December 31, 2019

BAIN CAPITAL SENIOR LOAN FUND



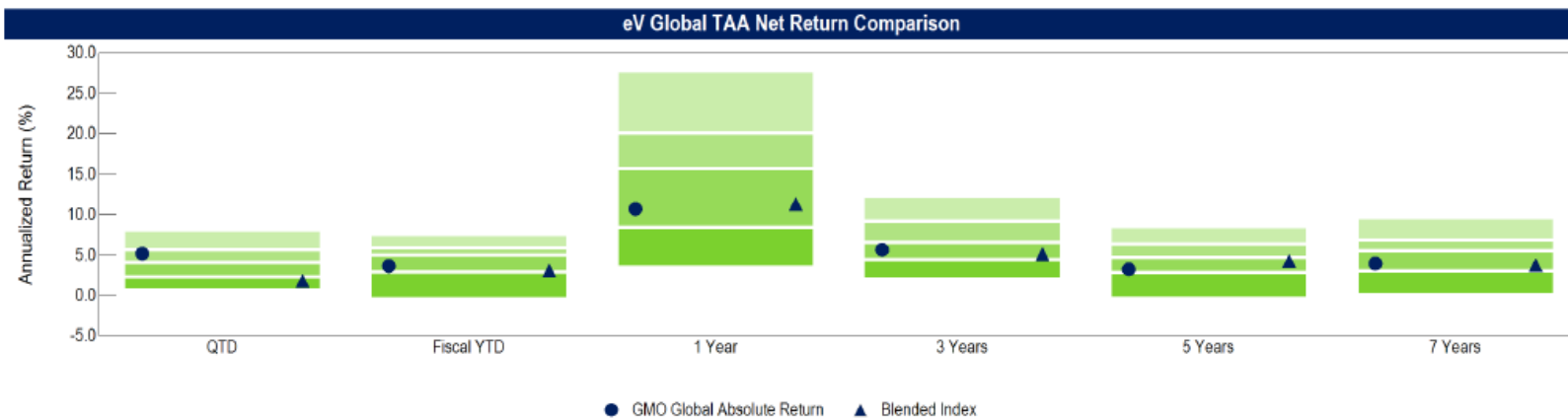
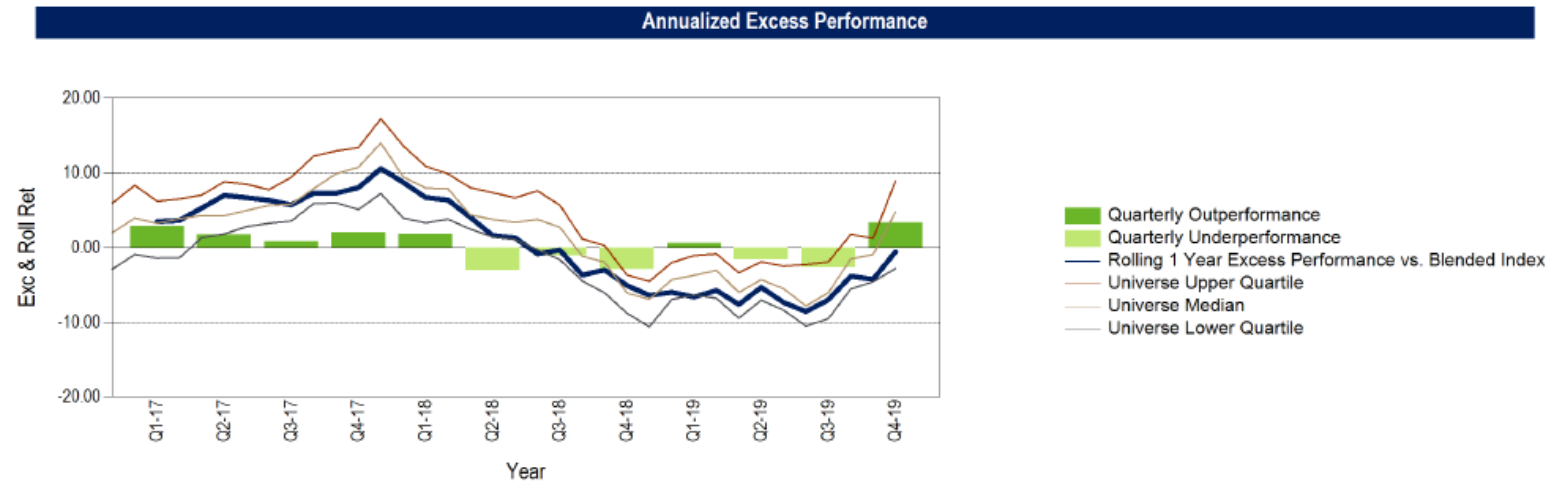
Top 5 Winners & Losers	
Winners	
Issuer	bps
Ascena Retail Group	5
Hearthside Food Solutions	3
La Financiere Atalian S.A.	3
KIK Custom Products	3
Travelport	2
Rest of Winners	45
Total Winners	61
Losers	
Issuer	bps
Algoma Steel	(29)
Murray Energy	(11)
Party City	(5)
OGF	(4)
NPC International	(3)
Rest of Losers	(53)
Total Losers	(105)



Source: Bain Capital

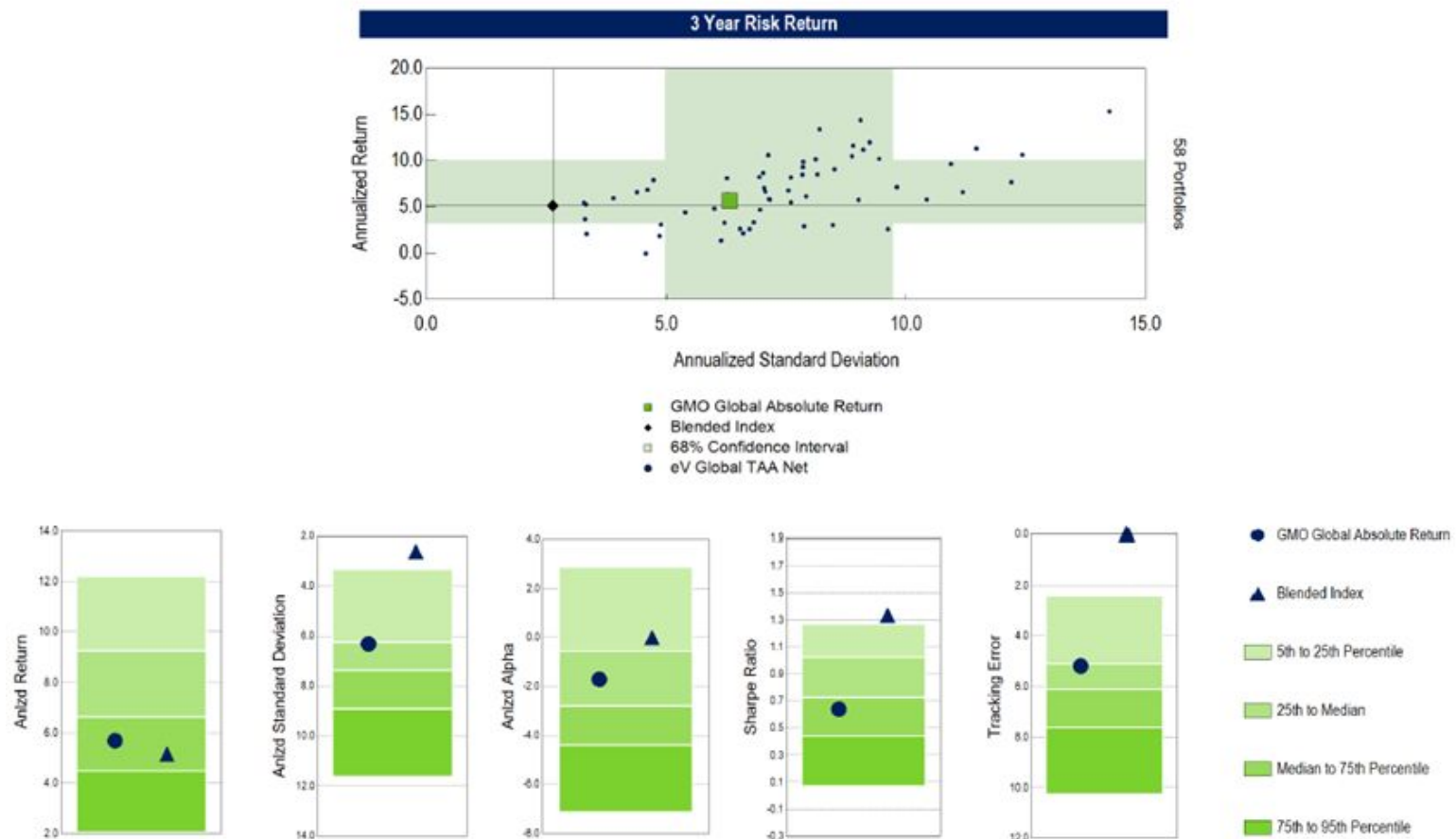
December 31, 2019

GMO GLOBAL ABSOLUTE RETURN



December 31, 2019

GMO GLOBAL ABSOLUTE RETURN

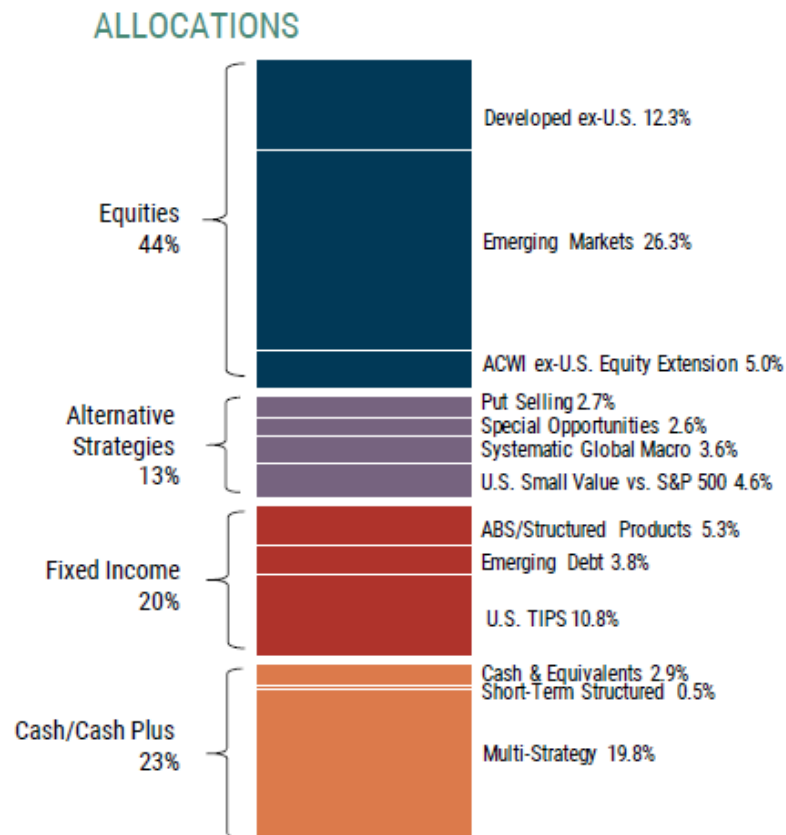


December 31, 2019

GMO GLOBAL ABSOLUTE RETURN

**PA -
UPDATE**

Strategy Composition



Source: GMO

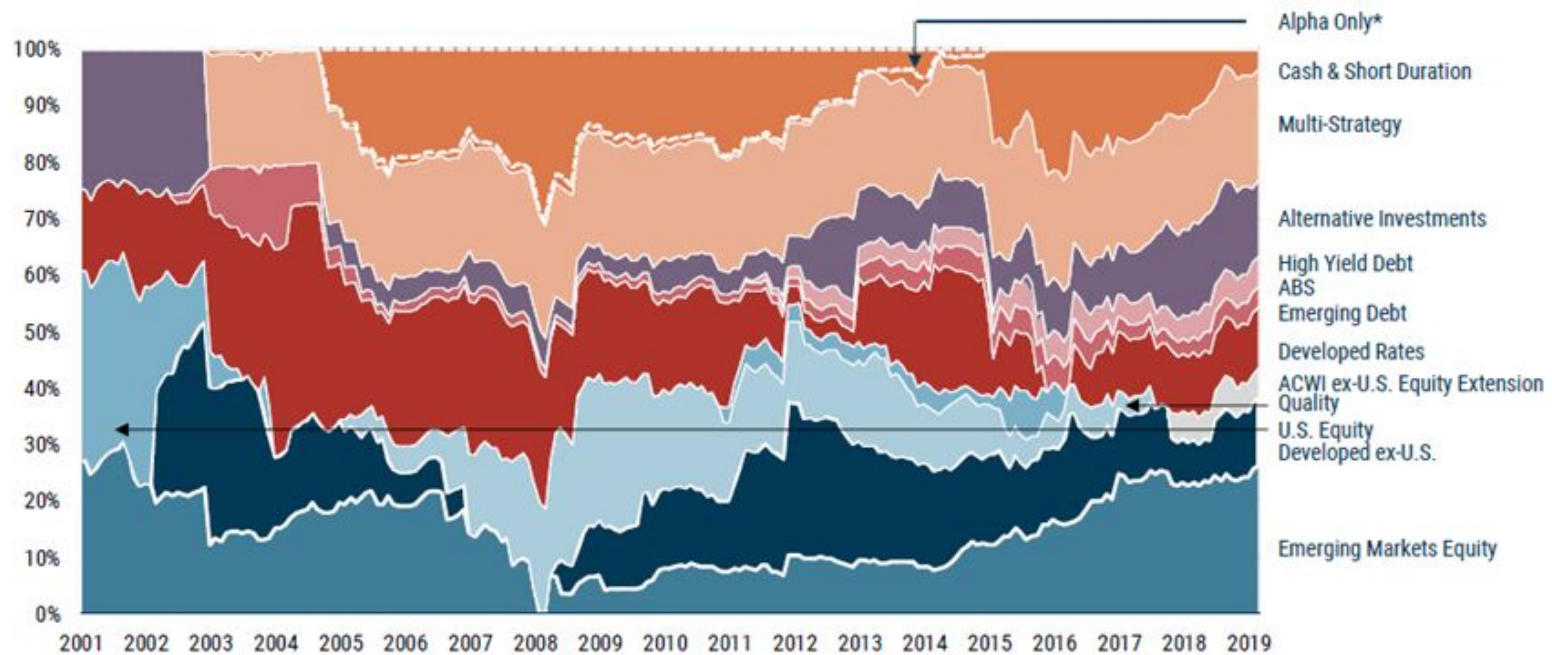


December 31, 2019

GMO GLOBAL ABSOLUTE RETURN

PA -
UPDATE

Allocation History

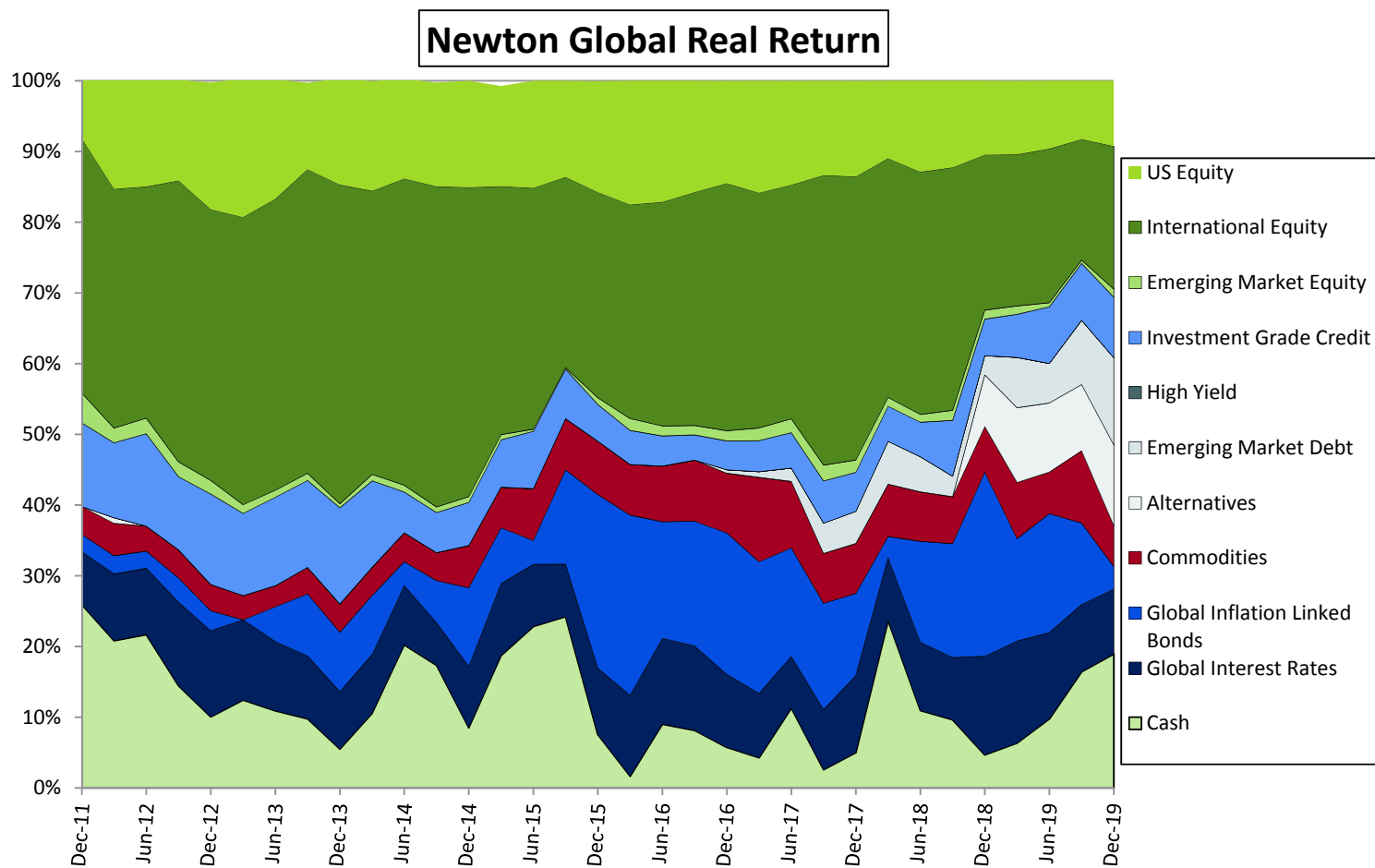


Source: GMO



December 31, 2019

NEWTON GLOBAL REAL RETURN



Source: Newton

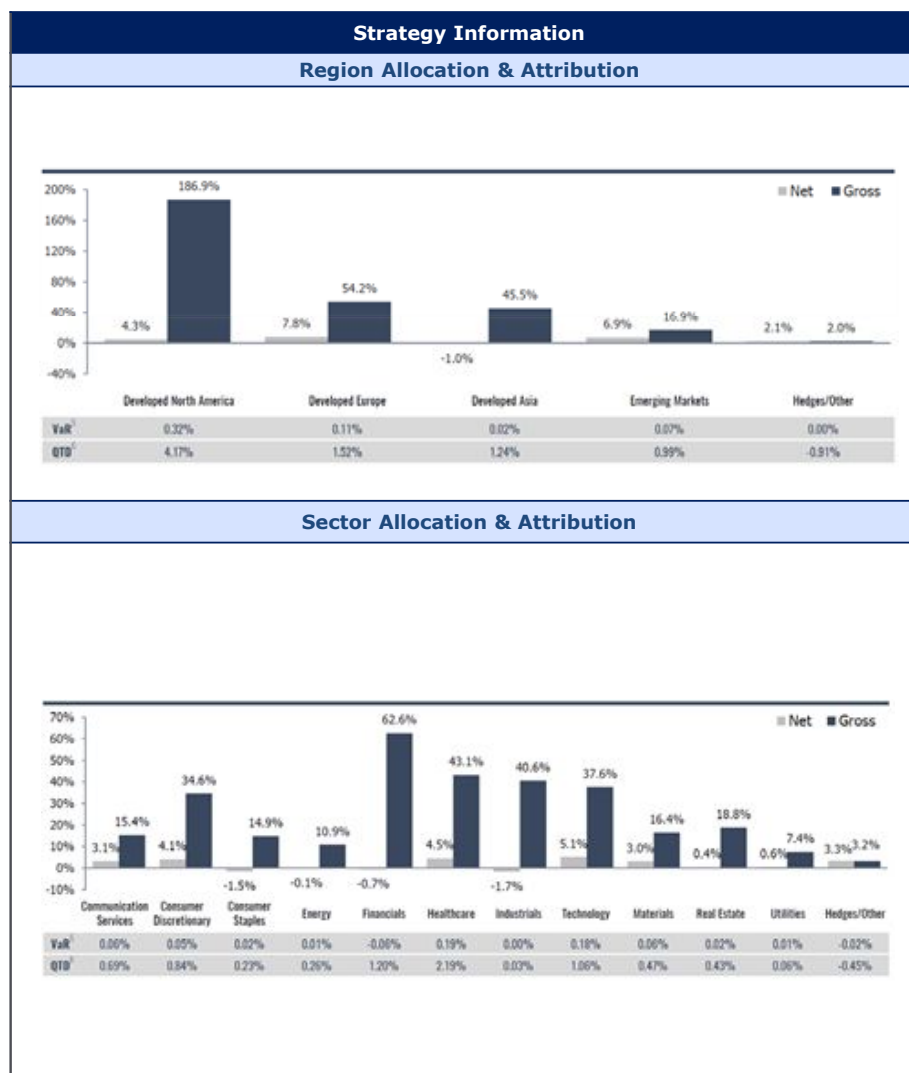
December 31, 2019

LIGHTHOUSE GLOBAL LONG/SHORT

General Fund Information			
Fund Name	Lighthouse Global Long/Short Fund		
Management Company	Lighthouse Investment Partners, LLC		
Location	Palm Beach, FL		
Firm AUM	\$13.3 billion	Strategy	Fund of Fund
Fund AUM	\$1.1 billion	Sub-Strategy	Long/Short Equity
Portfolio Managers	Ethan Baron	Direct or FOF	FOF

Terms	
Share Class	--
Minimum Investment	\$1 million
Management Fee	1.15%
Incentive Fee	--
Hurdle Rate	None
High Water Mark	Yes
Subscription	Monthly
Redemption	Quarterly (60 days notice) or Monthly (90 days notice)
Lock-Up	None

Investment Strategy
Lighthouse's Global Long/Short Fund is a global portfolio of 20-30 separately managed accounts with industry sector and country specialist managers. The geographical allocations are similar to the MSCI World Index (30%-75% Americas, 10%-35% Europe, 5%-35% Asia).
The Fund targets returns greater than 10% over market cycles with 6%-8% volatility and an equity beta of 0.2-0.4 to the MSCI World Index.



For more information please see NEPC's Investment Due Diligence Report and Operational Due Diligence Report

December 31, 2019

LIGHTHOUSE GLOBAL LONG/SHORT



December 31, 2019

LANDMARK EQUITY PARTNERS XV

General Fund Information			
Fund Name	Landmark Equity Partners XV		
General Partner	Landmark Partners		
Main Address	10 Mill Pond Lane, Simsbury, CT 06070		
Target Fund Size	\$2.5B	Expected Final Close	Up to 15 months after Initial Closing
Capital Raised	\$3.25B	Closes to Date	Yes
Investment Period	3-4 years	Minimum Investment	\$10M (negotiable)
Term of Entity	10 years from initial close, subject to 2 one-year extensions at GP's discretion	Investment Structure	Delaware L.P.
Key Persons	There are 6 members of the Key Person clause	Fund Auditor	PWC
Size of Fund Team	78 professionals (includes investment and administrative)	Number of Past Funds	28 (across all strategies)

GP Fees, Promote and Commitment	
Preferred Return	<ul style="list-style-type: none"> 8% per annum
GP Fees	Years 1 - 4: 1.00% of LP's capital commitments Years 5 - 8: 1.00% of the aggregate amount of LP's capital contributions plus amounts subject to call for Fund obligations Years 8 - remaining life of fund: 1.00% of LP's investment percentage of the reported value of Fund XV's portfolio investments
GP Commitment	<ul style="list-style-type: none"> 1% of aggregate commitments
Carried Interest	<ul style="list-style-type: none"> 10% on secondary investments only

Fund Strategy			
Investment Strategy	<ul style="list-style-type: none"> Landmark XV's primary objective is to acquire interests in private equity investments through secondary transactions. Landmark will build a diversified portfolio of private equity partnership interests diversified by strategy, geography and vintage year. Landmark strives to execute transactions on a negotiated basis and acquire portfolios of interests in private equity funds and direct investments through secondary market transactions that are unique, may require structuring, and where the opportunity for value creation exists. 		
Target Net Returns	Landmark aims to return a 1.6x-1.8x net multiple and a 15%-20% net IRR	Direct or fund of funds	Fund of funds (secondary interests)
Investment Style	Secondary	Target Fund Leverage	May use up to 10% leverage on aggregate commitment amount
Target Asset Types	Secondary investments in limited partnership interests	Target Geographies	Global (primary focus North America and Europe)
		Target Deal Size	No stated minimums or maximums

Fund Sourcing and Asset Management Capabilities	
Sourcing Capabilities	<ul style="list-style-type: none"> Reactive deal flow is attributed to inbound leads from limited partners, general partners and intermediaries - generally in the form of an auction. Firm will only consider participating in a competitive process if it believes it has an edge on its competitors with regard to familiarity of a portfolio and/or believes the assets are mispriced. Utilizes its proprietary database, quantitative research, and portfolio management tools to proactively engage with potential sellers with the ultimate goal of sourcing investments on an exclusive basis. Believes that deal exclusivity hinges on talking to LPs who do not yet realize that they are potential sellers. Two-thirds of their non-auctioned deal flow is due to their research tool projects undertaken with potential sellers.
Value Add	<ul style="list-style-type: none"> Focus on sourcing exclusive transactions should on average produce pricing that is lower than the prices available in the auction channel. Strives to arrange preferred structures to protect downside while preserving commensurate upside participation. Proactive sourcing model allows the investment team more time and better access to data to conduct due diligence.



December 31, 2019

APPENDIX

NEPC, LLC

December 31, 2019

GLOSSARY OF TERMS

Alpha - Measures the relationship between the fund performance and the performance of another fund or benchmark index and equals the excess return while the other fund or benchmark index is zero.

Alpha Jensen - The average return on a portfolio over and above that predicted by the capital asset pricing model (CAPM), given the portfolio's beta and the average market return. Also known as the abnormal return or the risk adjusted excess return.

Annualized Excess Return over Benchmark - Annualized fund return minus the annualized benchmark return for the calculated return.

Annualized Return - A statistical technique whereby returns covering periods greater than one year are converted to cover a 12 month time span.

Beta - Measures the volatility or systematic risk and is equal to the change in the fund's performance in relation to the change in the assigned index's performance.

Information Ratio - A measure of the risk adjusted return of a financial security, asset, or portfolio.

Formula:

(Annualized Return of Portfolio - Annualized Return of Benchmark)/Annualized Standard Deviation(Period Portfolio Return - Period Benchmark Return). To annualize standard deviation, multiply the deviation by the square root of the number of periods per year where monthly returns per year equals 12 and quarterly returns is four periods per year.

R-Squared - Represents the percentage of a fund's movements that can be explained by movements in an index. R-Squared values range from 0 to 100. An R-Squared of 100 denotes that all movements of a fund are completely explained by movements in the index.

Sharpe Ratio - A measure of the excess return or risk premium per unit of risk in an investment asset or trading strategy.

Sortino Ratio - A method to differentiate between good and bad volatility in the Sharpe Ratio. The differentiation of up and down volatility allows the calculation to provide a risk adjusted measure of a security or fund's performance without upward price change penalties.

Formula:

*Calculation Average (X-Y)/Downside Deviation (X-Y) * 2
Where X=Return Series X Y = Return Series Y which is the risk free return (91 day T-bills)*

Standard Deviation - The standard deviation is a statistical term that describes the distribution of results. It is a commonly used measure of volatility of returns of a portfolio, asset class, or security. The higher the standard deviation the more volatile the returns are.

Formula:

(Annualized Return of Portfolio - Annualized Return of Risk Free) / Annualized Standard Deviation (Portfolio Returns)

Tracking Error - Tracking error, also known as residual risk, is a measure of the degree to which a portfolio tracks its benchmark. It is also a measure of consistency of excess returns. Tracking error is computed as the annualized standard deviation of the difference between a portfolio's return and that of its benchmark.

Formula:

*Tracking Error = Standard Deviation (X-Y) * $\sqrt{(\# \text{ of periods per year})}$*

Where X = periods portfolio return and Y = the period's benchmark return

For monthly returns, the periods per year = 12

For quarterly returns, the periods per year = 4

Treynor Ratio - A risk-adjusted measure of return based on systematic risk. Similar to the Sharpe ratio with the difference being the Treynor ratio uses beta as the measurement of volatility.

Formula:

(Portfolio Average Return - Average Return of Risk-Free Rate)/Portfolio Beta

Up/Down Capture Ratio - A measure of what percentage of a market's returns is "captured" by a portfolio. For example, if the market declines 10% over some period, and the manager declines only 9%, then his or her capture ratio is 90%. In down markets, it is advantageous for a manager to have as low a capture ratio as possible. For up markets, the higher the capture ratio the better. Looking at capture ratios can provide insight into how a manager achieves excess returns. A value manager might typically have a lower capture ratio in both up and down markets, achieving excess returns by protecting on the downside, whereas a growth manager might fall more than the overall market in down markets, but achieve above-market returns in a rising market.

UpsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Period Benchmark Return is >= 0

DownsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Benchmark < 0

Data Source: InvestorForce



December 31, 2019

INFORMATION DISCLAIMER AND REPORTING METHODOLOGY

Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may not be available from the source or may be preliminary and subject to change.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodial bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- This report is provided as a management aid for the client's internal use only. Performance contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of Return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.



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FOURTH QUARTER 2019 SUPPLEMENTAL PERFORMANCE

UNIVERSITY OF MAINE SYSTEM PENSION PLAN

February 27, 2020

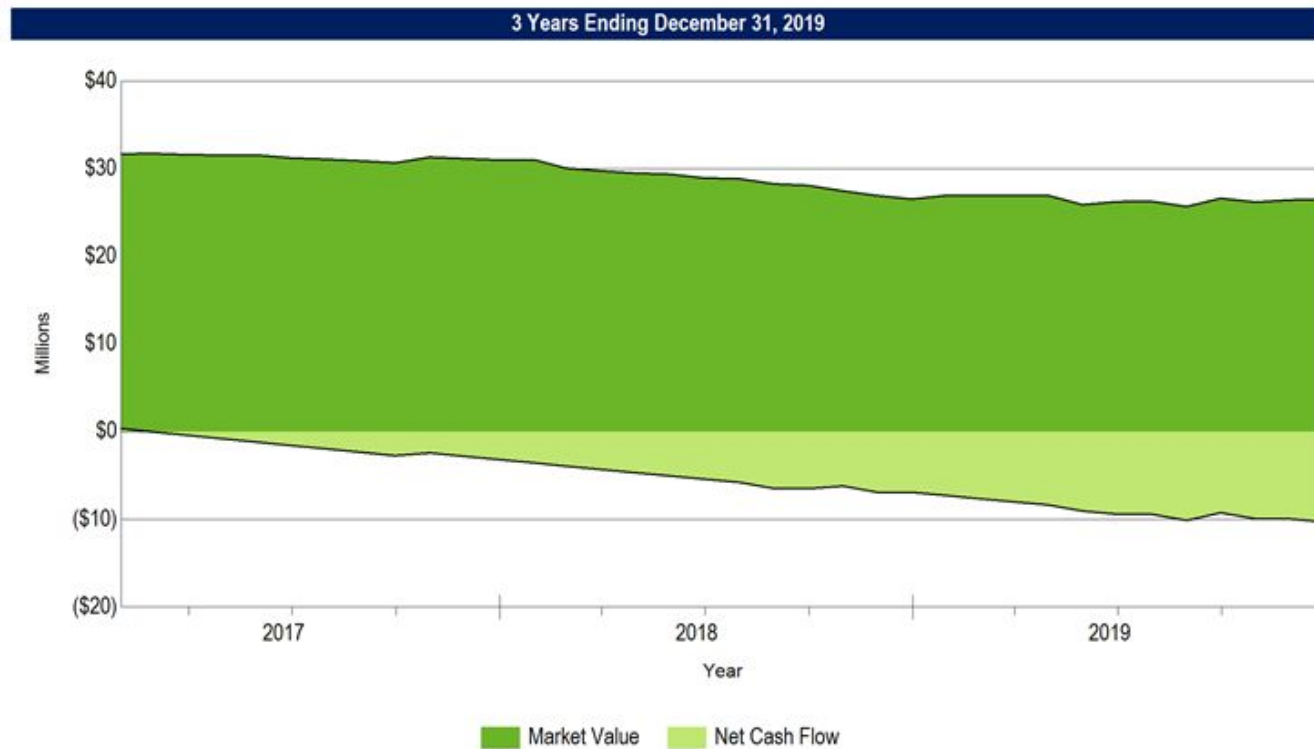
Jay E. Roney, Partner

Kelly Regan, Senior Consultant



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

ASSET GROWTH SUMMARY



	Quarter-To-Date	Fiscal Year-To-Date	One Year	Three Years
Beginning Market Value	\$26,610,506	\$26,231,215	\$26,520,627	\$31,010,184
Net Cash Flow	-\$1,057,917	-\$898,171	-\$3,381,071	-\$10,316,805
Net Investment Change	\$969,338	\$1,188,883	\$3,382,371	\$5,828,548
Ending Market Value	\$26,521,927	\$26,521,927	\$26,521,927	\$26,521,927



December 31, 2019

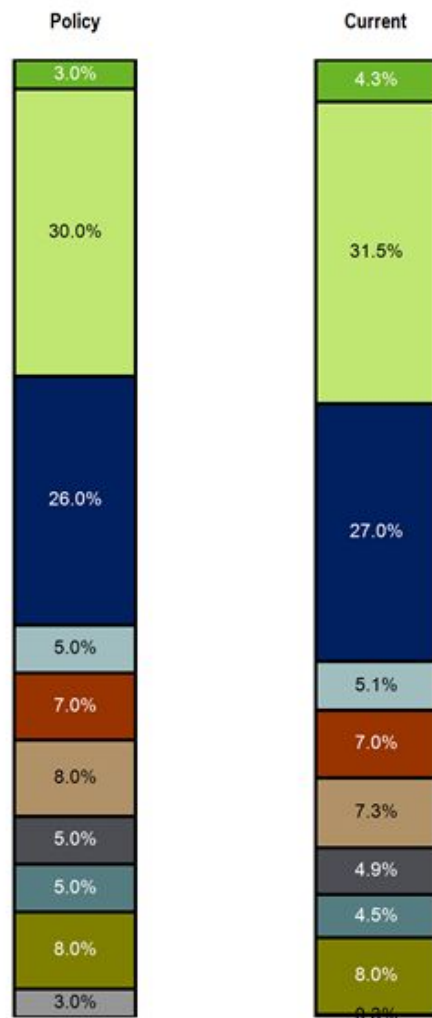
CASH FLOW SUMMARY

	Beginning Market Value	Quarter Ending December 31, 2019				Ending Market Value
		Contributions	Withdrawals	Net Cash Flow	Net Investment Change	
Bain Capital Senior Loan Fund	\$1,341,252	\$0	-\$1,686	-\$1,686	\$18,022	\$1,357,588
BlackRock Strategic Income Opportunities	\$1,180,014	\$0	-\$1,577	-\$1,577	\$20,633	\$1,199,069
Distribution Account	\$956,439	\$156,939	-\$1,035,228	-\$878,289	\$1,255	\$79,405
Lighthouse	\$1,201,323	\$0	\$0	\$0	\$87,561	\$1,288,884
Mondrian EM Small Cap	\$1,056,811	\$0	-\$5,147	-\$5,147	\$92,173	\$1,143,837
Newton Global Real Return	\$1,907,513	\$0	-\$3,851	-\$3,851	\$42,051	\$1,945,713
Principal	\$2,100,680	\$0	\$0	\$0	\$26,264	\$2,126,944
Vanguard Inflation-Protected Securities	\$937,555	\$0	-\$164	-\$164	\$5,006	\$942,397
Vanguard Short-Term Inflation-Protected Securities - VTSPX	\$912,335	\$0	-\$92	-\$92	\$9,629	\$921,872
Vanguard Total Bond Market Index	\$7,147,056	\$0	-\$1,252	-\$1,252	\$3,520	\$7,149,324
Walter Scott Global Equity Fund	\$7,869,528	\$0	-\$165,858	-\$165,858	\$663,223	\$8,366,893
Total	\$26,610,506	\$156,939	-\$1,214,856	-\$1,057,917	\$969,338	\$26,521,927



December 31, 2019

ASSET ALLOCATION



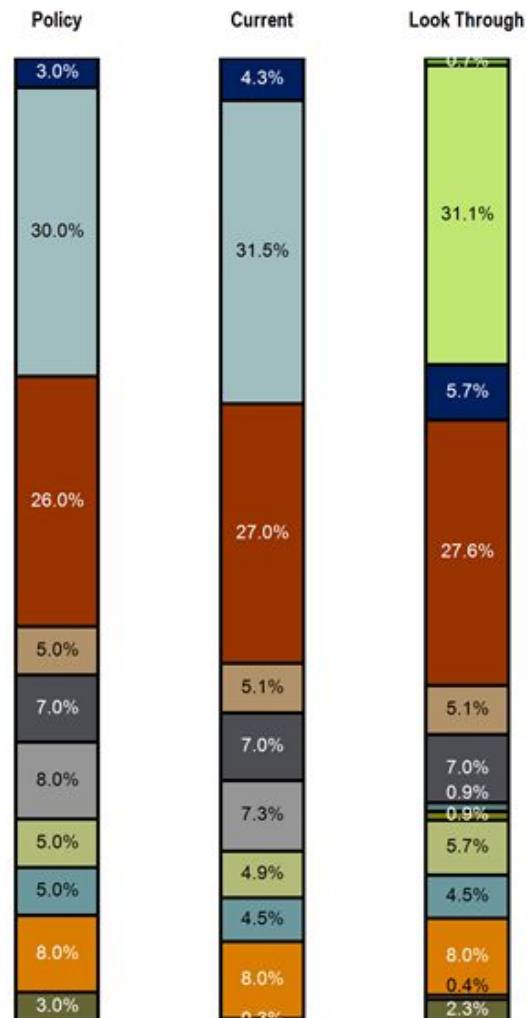
Asset Allocation vs. Target							
	Current	Policy	Current	Difference	Policy Range	Within Range	
Emerging Markets Equity	\$1,143,837	3.0%	4.3%	1.3%	0.0% - 7.0%	Yes	
Global Equity	\$8,366,893	30.0%	31.5%	1.5%	25.0% - 35.0%	Yes	
Core Bonds	\$7,149,324	26.0%	27.0%	1.0%	20.0% - 30.0%	Yes	
Bank Loans	\$1,357,588	5.0%	5.1%	0.1%	0.0% - 10.0%	Yes	
TIPS	\$1,864,269	7.0%	7.0%	0.0%	0.0% - 14.0%	Yes	
Global Asset Allocation	\$1,945,713	8.0%	7.3%	-0.7%	5.0% - 13.0%	Yes	
Hedge Funds	\$1,288,884	5.0%	4.9%	-0.1%	0.0% - 10.0%	Yes	
Absolute Return	\$1,199,069	5.0%	4.5%	-0.5%	0.0% - 10.0%	Yes	
Real Estate	\$2,126,944	8.0%	8.0%	0.0%	0.0% - 10.0%	Yes	
Cash	\$79,405	3.0%	0.3%	-2.7%	0.0% - 10.0%	Yes	
Total	\$26,521,927	100.0%	100.0%				

Note: Emerging market equity policy targets and ranges include emerging market small cap equity. TIPS policy targets and ranges include short-term TIPS.



December 31, 2019

ASSET ALLOCATION



Asset Allocation			
	Policy	Current	Look Through
Large Cap Equity	--	--	0.7%
International Equity	--	--	31.1%
Emerging Markets Equity	3.0%	4.3%	5.7%
Global Equity	30.0%	31.5%	--
Core Bonds	26.0%	27.0%	27.6%
Bank Loans	5.0%	5.1%	5.1%
TIPS	7.0%	7.0%	7.0%
Fixed Income - Emerging	--	--	0.9%
Global Bonds	--	--	0.9%
Global Asset Allocation	8.0%	7.3%	--
Hedge Funds	5.0%	4.9%	5.7%
Absolute Return	5.0%	4.5%	4.5%
Real Estate	8.0%	8.0%	8.0%
Real Assets	--	--	0.4%
Cash	3.0%	0.3%	2.3%
Total	100.0%	100.0%	100.0%

Net Asset Allocation breaks out the exposure of GAA and Global Equity managers.

Asset class weights may not add up to 100% due to rounding.

The 60% MSCI ACWI/40% CITI WGBI Index is broken down into the following categories: 33.4% Domestic Equities, 19.3% Int'l Equities, 7.3% Emerging Equities, 15.6% US Treasury Bonds, 12.3% European Government Bonds, 7.4% Japanese Debt, 2.1% United Kingdom Bonds and 2.6% Developing Markets Bonds.

Emerging Markets Equity bucket includes Emerging Markets Small Cap.

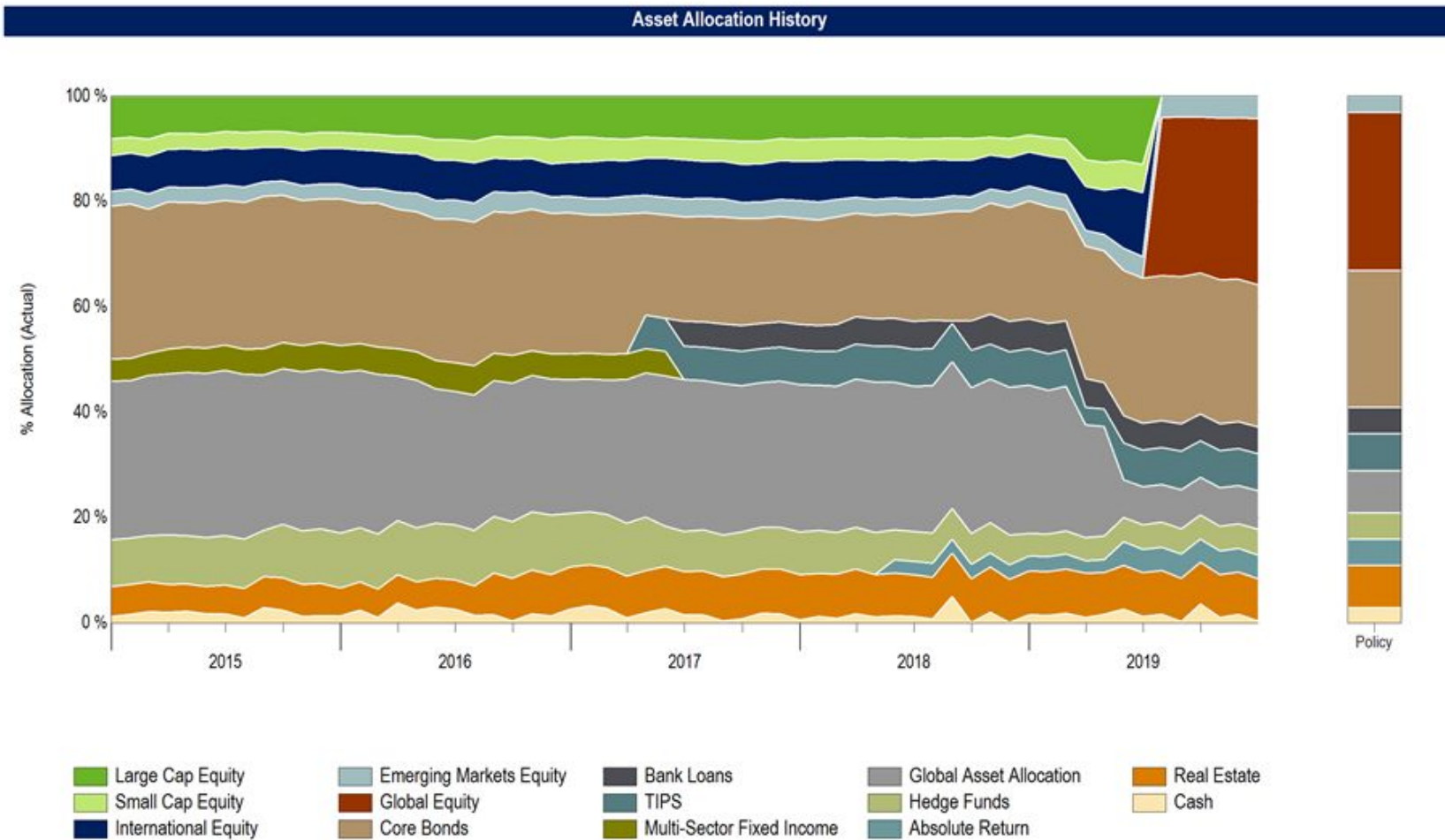
TIPS bucket includes: TIPS and Short Term TIPS.



December 31, 2019

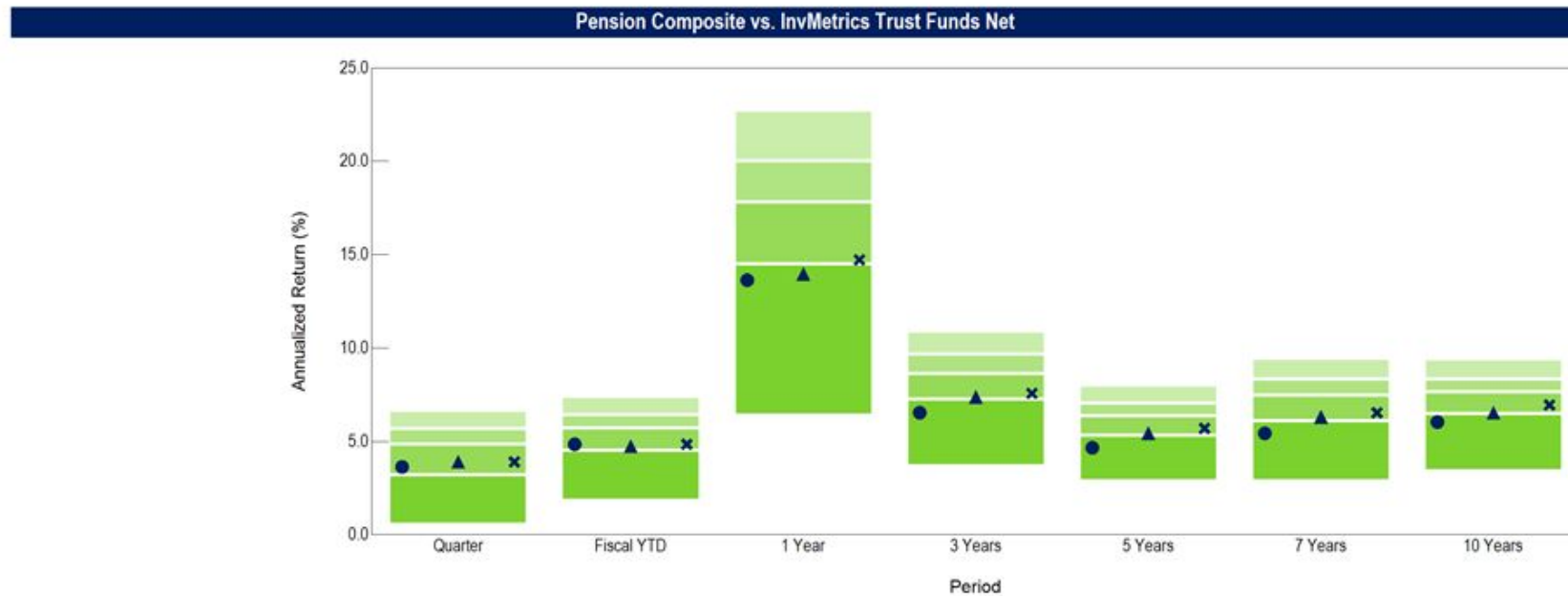
ASSET ALLOCATION HISTORY

3.3



December 31, 2019

RETURNS VS. PEER UNIVERSE

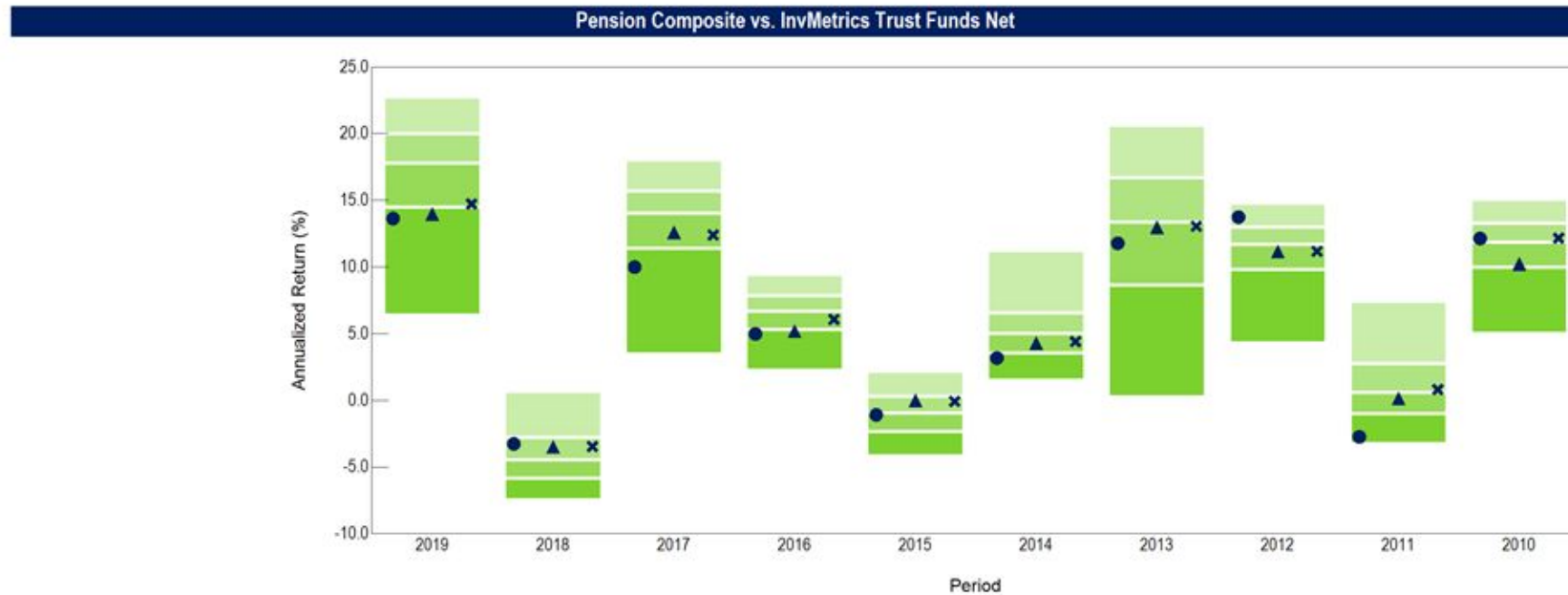


	Return (Rank)													
5th Percentile	6.7	7.4	22.7	10.9	8.0	9.4	9.4							
25th Percentile	5.7	6.4	20.0	9.7	7.1	8.4	8.4							
Median	4.9	5.7	17.8	8.7	6.4	7.5	7.7							
75th Percentile	3.2	4.6	14.5	7.3	5.4	6.1	6.5							
95th Percentile	0.6	1.9	6.4	3.7	2.9	2.9	3.4							
# of Portfolios	2,899	2,888	2,853	2,674	2,429	2,178	1,863							
● Pension Composite	3.6	(72)	4.8	(71)	13.6	(79)	6.5	(83)	4.7	(85)	5.4	(82)	6.0	(81)
▲ Allocation Index	3.9	(69)	4.7	(72)	14.0	(78)	7.4	(74)	5.4	(74)	6.3	(73)	6.5	(75)
× Policy Index	3.9	(69)	4.8	(71)	14.7	(75)	7.6	(72)	5.7	(69)	6.5	(70)	6.9	(69)



December 31, 2019

RETURNS VS. PEER UNIVERSE

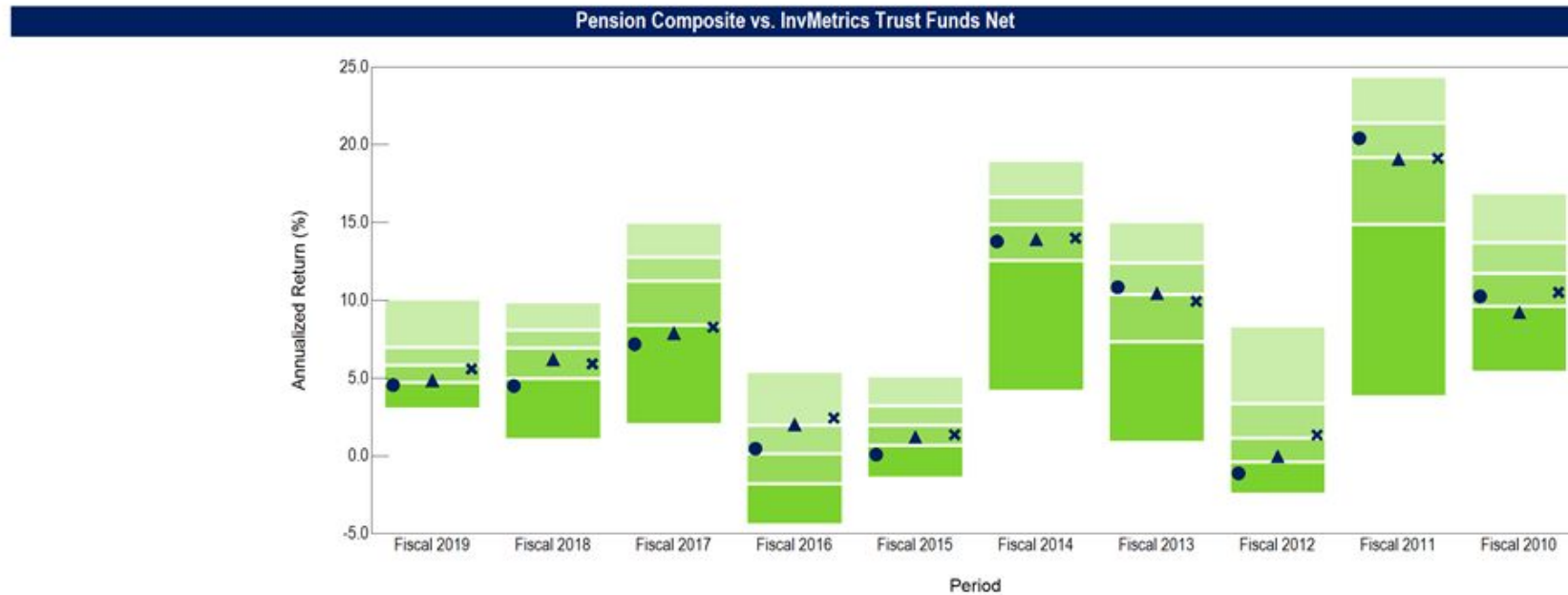


	Return (Rank)									
5th Percentile	22.7	0.7	18.0	9.4	2.1	11.2	20.6	14.8	7.4	15.1
25th Percentile	20.0	-2.8	15.7	7.9	0.3	6.6	16.7	13.0	2.8	13.3
Median	17.8	-4.4	14.1	6.7	-0.9	5.0	13.4	11.7	0.6	11.9
75th Percentile	14.5	-5.8	11.4	5.3	-2.3	3.6	8.7	9.8	-1.0	10.0
95th Percentile	6.4	-7.5	3.5	2.3	-4.2	1.5	0.3	4.3	-3.2	5.0
# of Portfolios	2,853	3,627	2,518	2,446	2,339	2,007	1,709	1,539	1,403	1,326
● Pension Composite	13.6 (79)	-3.3 (32)	10.0 (80)	5.0 (80)	-1.1 (54)	3.2 (82)	11.8 (60)	13.7 (14)	-2.7 (92)	12.1 (47)
▲ Allocation Index	14.0 (78)	-3.5 (35)	12.6 (67)	5.2 (77)	0.0 (32)	4.3 (64)	13.0 (53)	11.2 (60)	0.1 (57)	10.2 (73)
× Policy Index	14.7 (75)	-3.5 (34)	12.4 (69)	6.1 (64)	-0.1 (34)	4.4 (62)	13.1 (52)	11.2 (60)	0.8 (47)	12.2 (47)



December 31, 2019

RETURNS VS. PEER UNIVERSE

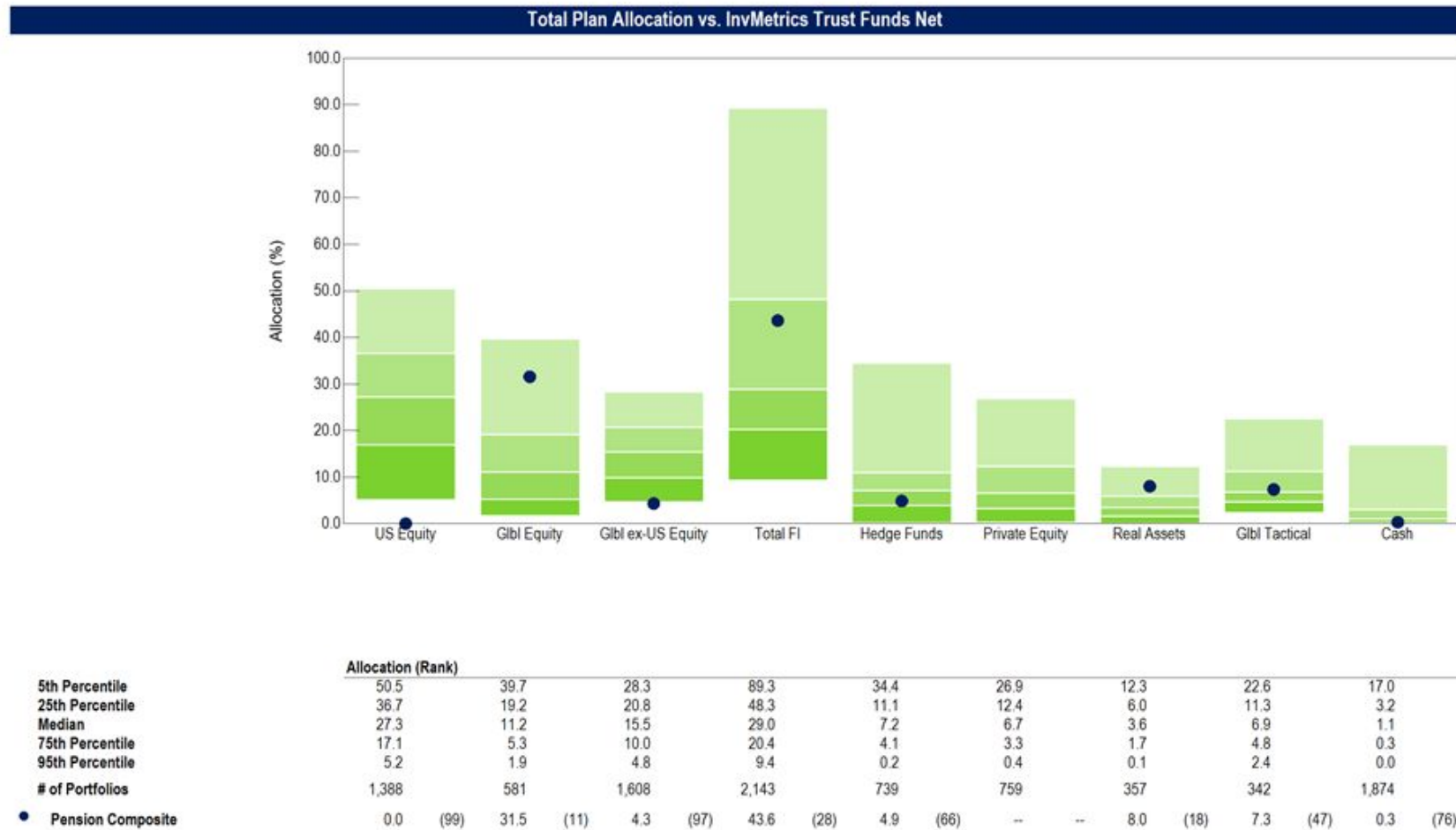


	Return (Rank)									
5th Percentile	10.1	9.9	15.0	5.4	5.1	19.0	15.0	8.4	24.4	16.9
25th Percentile	7.0	8.1	12.8	2.0	3.3	16.6	12.4	3.4	21.4	13.7
Median	5.9	7.0	11.2	0.1	2.0	14.9	10.4	1.2	19.2	11.7
75th Percentile	4.7	5.0	8.4	-1.8	0.7	12.6	7.4	-0.4	14.9	9.6
95th Percentile	3.0	1.0	2.0	-4.4	-1.4	4.2	0.9	-2.4	3.8	5.4
# of Portfolios	3,804	2,424	2,780	2,289	2,198	1,565	1,828	1,431	1,362	1,279
● Pension Composite	4.6 (79)	4.5 (78)	7.2 (81)	0.5 (46)	0.1 (84)	13.8 (66)	10.8 (44)	-1.1 (86)	20.4 (36)	10.3 (70)
▲ Allocation Index	4.9 (73)	6.2 (63)	7.9 (78)	2.0 (25)	1.2 (67)	13.9 (65)	10.5 (49)	0.0 (70)	19.1 (51)	9.2 (78)
× Policy Index	5.6 (57)	5.9 (67)	8.3 (76)	2.4 (21)	1.4 (64)	14.0 (64)	9.9 (55)	1.3 (48)	19.1 (51)	10.5 (67)



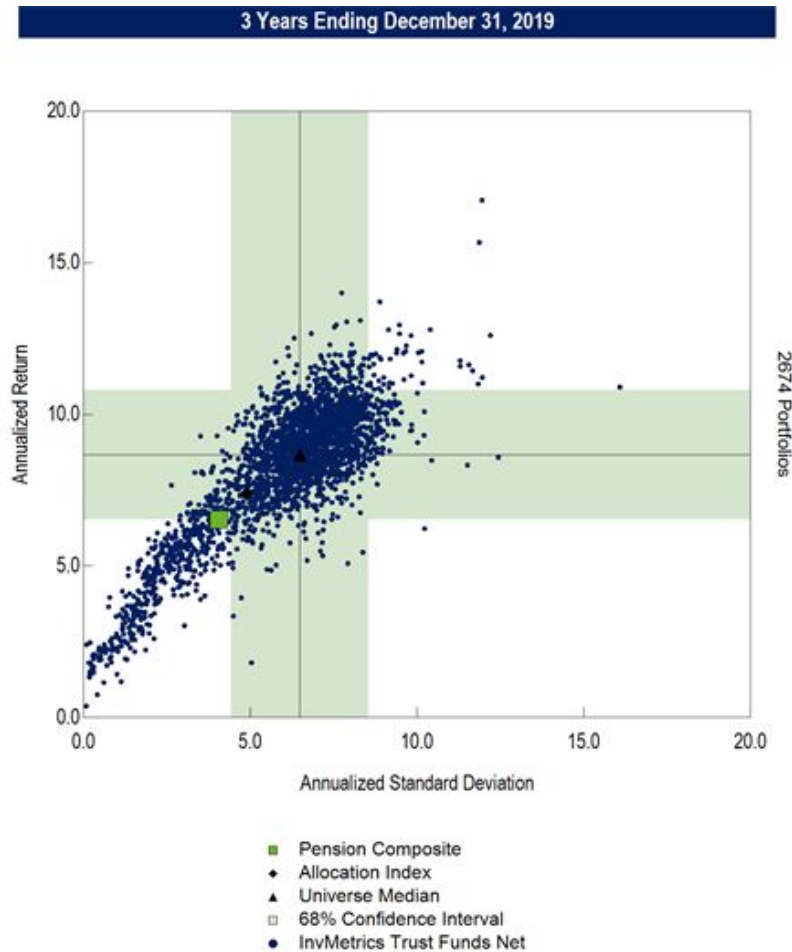
December 31, 2019

ALLOCATIONS VS. PEER UNIVERSE



December 31, 2019

TOTAL PLAN RISK/RETURN - 3 YEAR



3 Years Ending December 31, 2019				
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Pension Composite	6.5%	83	4.0%	18
Allocation Index	7.4%	74	4.9%	23
Policy Index	7.6%	72	4.9%	23
InvMetrics Trust Funds Net Median	8.7%	--	6.5%	--

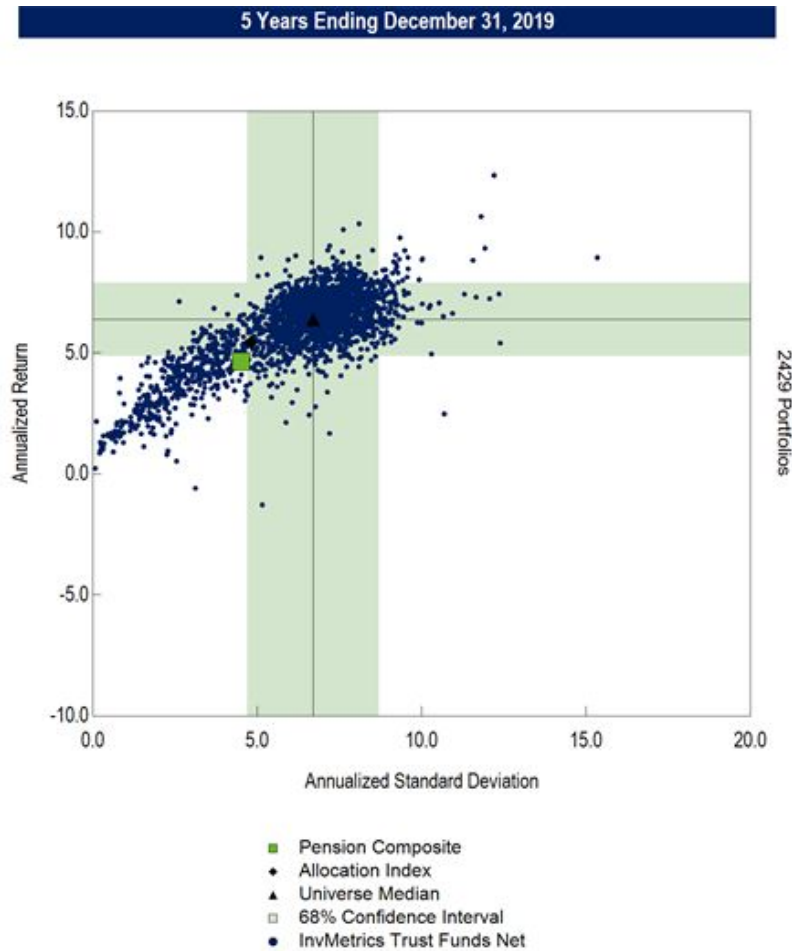
3 Years Ending December 31, 2019				
	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Pension Composite	1.2	31	1.3	31
Allocation Index	1.2	35	1.2	43
Policy Index	1.2	31	1.2	36
InvMetrics Trust Funds Net Median	1.1	--	1.1	--

*Returns are net of fees.



December 31, 2019

TOTAL PLAN RISK/RETURN - 5 YEAR



5 Years Ending December 31, 2019				
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Pension Composite	4.7%	85	4.5%	19
Allocation Index	5.4%	74	4.8%	20
Policy Index	5.7%	69	4.9%	21
InvMetrics Trust Funds Net Median	6.4%	--	6.7%	--

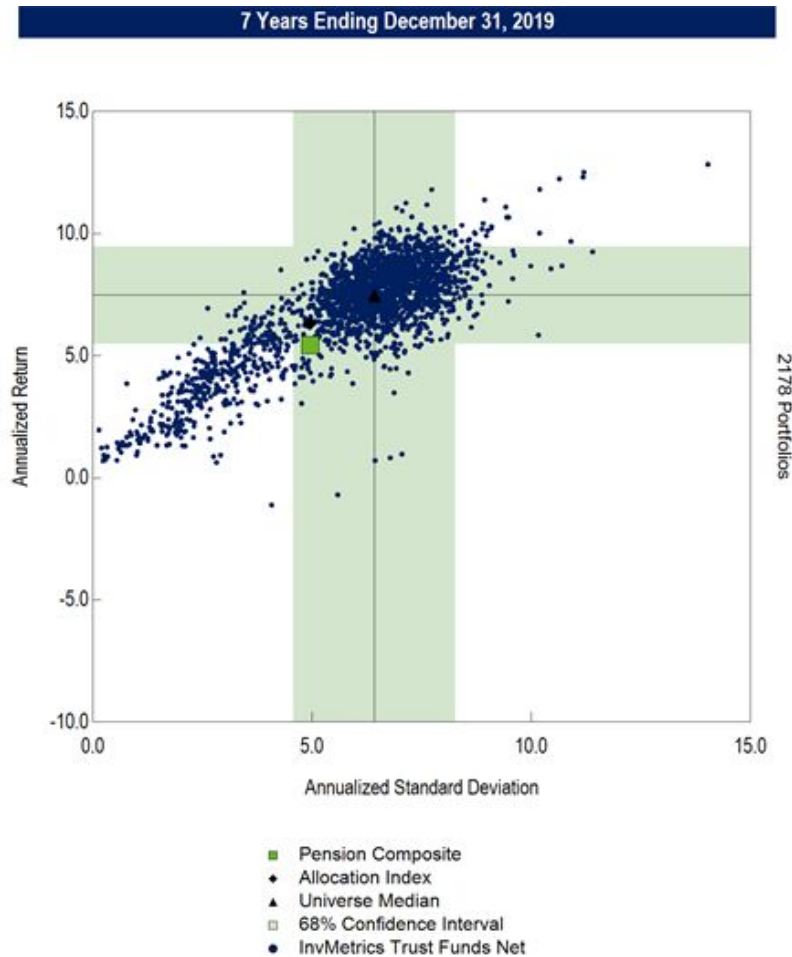
5 Years Ending December 31, 2019				
	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Pension Composite	0.8	56	1.1	34
Allocation Index	0.9	30	1.2	32
Policy Index	1.0	23	1.3	22
InvMetrics Trust Funds Net Median	0.8	--	1.0	--

*Returns are net of fees.



December 31, 2019

TOTAL PLAN RISK/RETURN - 7 YEAR



7 Years Ending December 31, 2019				
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Pension Composite	5.4%	82	5.0%	22
Allocation Index	6.3%	73	5.0%	22
Policy Index	6.5%	70	5.0%	22
InvMetrics Trust Funds Net Median	7.5%	--	6.4%	--

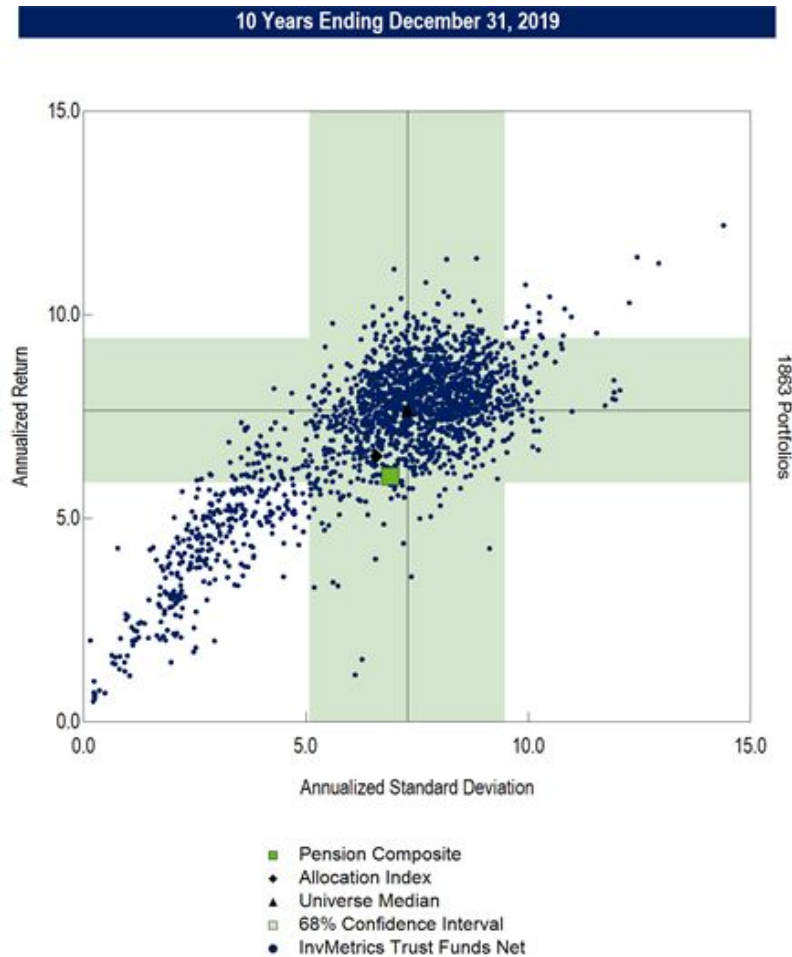
7 Years Ending December 31, 2019				
	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Pension Composite	0.9	73	1.6	32
Allocation Index	1.1	39	1.6	27
Policy Index	1.2	31	1.7	18
InvMetrics Trust Funds Net Median	1.1	--	1.4	--

*Returns are net of fees.



December 31, 2019

TOTAL PLAN RISK/RETURN - 10 YEAR



10 Years Ending December 31, 2019				
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Pension Composite	6.0%	81	6.9%	40
Allocation Index	6.5%	75	6.6%	34
Policy Index	6.9%	69	6.4%	30
InvMetrics Trust Funds Net Median	7.7%	--	7.3%	--

10 Years Ending December 31, 2019				
	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Pension Composite	0.8	88	1.1	87
Allocation Index	0.9	68	1.3	67
Policy Index	1.0	49	1.5	37
InvMetrics Trust Funds Net Median	1.0	--	1.4	--

*Returns are net of fees.



December 31, 2019

TOTAL PLAN PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Pension Composite	26,521,927	100.0	100.0	3.6	4.8	13.6	6.5	4.7	5.4	6.0
Allocation Index				3.9	4.7	14.0	7.4	5.4	6.3	6.5
Policy Index				3.9	4.8	14.7	7.6	5.7	6.5	6.9
Total Global Equity	8,366,893	31.5	30.0	8.3	--	--	--	--	--	--
MSCI World				8.6	9.1	27.7	12.6	8.7	10.6	9.5
Walter Scott Global Equity Fund	8,366,893	31.5	30.0	8.3	--	--	--	--	--	--
MSCI World				8.6	9.1	27.7	12.6	8.7	10.6	9.5
Emerging Markets Equity	1,143,837	4.3	3.0	8.2	5.9	9.4	3.5	-0.7	-1.3	--
MSCI Emerging Markets				11.8	7.1	18.4	11.6	5.6	3.3	3.7
Mondrian EM Small Cap	1,143,837	4.3	3.0	8.2	5.9	9.4	3.5	-0.7	--	--
MSCI Emerging Markets Small Cap				9.5	4.5	11.5	6.7	3.0	2.4	2.9
Total Fixed Income	11,570,251	43.6	43.0	0.5	2.3	8.3	4.0	3.1	2.8	4.1
BBGBarc US Aggregate TR				0.2	2.5	8.7	4.0	3.0	2.7	3.7
Vanguard Total Bond Market Index	7,149,324	27.0	26.0	0.0	2.5	8.7	4.0	3.0	--	--
BBGBarc US Aggregate TR				0.2	2.5	8.7	4.0	3.0	2.7	3.7
Vanguard Inflation-Protected Securities	942,397	3.6	3.5	0.5	2.0	8.2	--	--	--	--
BBGBarc US TIPS TR				0.8	2.1	8.4	3.3	2.6	1.1	3.4
Vanguard Short-Term Inflation-Protected Securities - VTSPX	921,872	3.5	3.5	1.0	1.5	--	--	--	--	--
BBGBarc US TIPS 1-5 Yr TR				1.2	1.4	5.1	2.1	1.8	0.9	1.7
BlackRock Strategic Income Opportunities	1,199,069	4.5	5.0	1.6	2.5	7.8	--	--	--	--
3-Month Libor Total Return USD				0.5	1.0	2.4	2.0	1.4	1.1	0.9
Bain Capital Senior Loan Fund	1,357,588	5.1	5.0	1.2	1.9	7.7	--	--	--	--
Credit Suisse Leveraged Loans				1.7	2.6	8.2	4.5	4.5	4.4	5.2
Total GAA	1,945,713	7.3	8.0	2.0	2.7	13.9	6.1	3.7	3.5	4.5
65% MSCI ACWI (Net) / 35% BBGBarc Global Agg				5.9	6.2	19.6	9.7	6.4	6.9	6.7
Newton Global Real Return	1,945,713	7.3	8.0	2.0	2.7	11.8	5.7	--	--	--
60% MSCI ACWI (Net) / 40% FTSE WGBI				5.2	5.6	18.2	9.2	6.0	6.2	6.2
Total Alternative Investments	1,288,884	4.9	5.0	7.3	5.4	13.4	4.2	2.7	3.3	2.7
HFRI Fund of Funds Composite Index				3.0	2.1	8.3	3.9	2.4	3.4	2.8
Lighthouse	1,288,884	4.9	5.0	7.3	5.4	13.4	5.5	--	--	--
Credit Suisse Long Shrt Eqt USD				5.1	5.2	12.2	6.7	3.9	6.0	5.2
Total Real Assets	2,126,944	8.0	8.0							
Principal	2,126,944	8.0	8.0	1.3	2.9	5.8	7.2	8.8	10.0	11.3
NCREIF ODCE				1.5	2.8	5.3	7.1	9.0	10.2	11.4
Total Cash	79,405	0.3	3.0							
Distribution Account	79,405	0.3	3.0	0.3	0.8	1.9	1.3	0.8	0.6	0.4
91 Day T-Bills				0.4	0.9	2.1	1.6	1.1	0.8	0.6

Fiscal YTD begins 7/1

Returns are net of manager fees.



December 31, 2019

WALTER SCOTT GLOBAL EQUITY FUND

PORTFOLIO CHARACTERISTICS

	Portfolio
Number of Securities	51
Operating Margin	18.4%
ROE	20.2%
Net Debt to Equity	24%
P/E Ratio	26.7x
Dividend Yield	1.6%
Active Share	86%
Portfolio Turnover (12 months)	3%

Source: Walter Scott, Factset & MSCI. Portfolio Characteristics are subject to change and are based on a Walter Scott Global Equity representative portfolio as at 31/12/19.

Net Debt to Equity figure(s) exclude securities from the financial sector.

TOP TEN STOCKS

Stock	% of portfolio
Keyence	2.9
AIA Group	2.8
Microsoft Corporation	2.8
Taiwan Semiconductor	2.8
Mastercard	2.8
Inditex	2.7
Novo Nordisk	2.5
Roche	2.5
EOG Resources	2.5
Adobe	2.4

SECTOR

Information technology	25.8%	
Healthcare	22.5%	
Consumer discretionary	14.8%	
Consumer staples	8.9%	
Industrials	8.0%	
Energy	5.2%	
Communication services	4.2%	
Materials	3.7%	
Financials	2.8%	
Utilities	2.2%	
Liquidity	1.9%	

REGION

USA	53.7%	
Europe ex UK	17.8%	
Japan	7.9%	
Asia Pacific ex Japan	7.3%	
UK	5.4%	
Emerging Markets	4.2%	
Canada	1.9%	
Liquidity	1.9%	



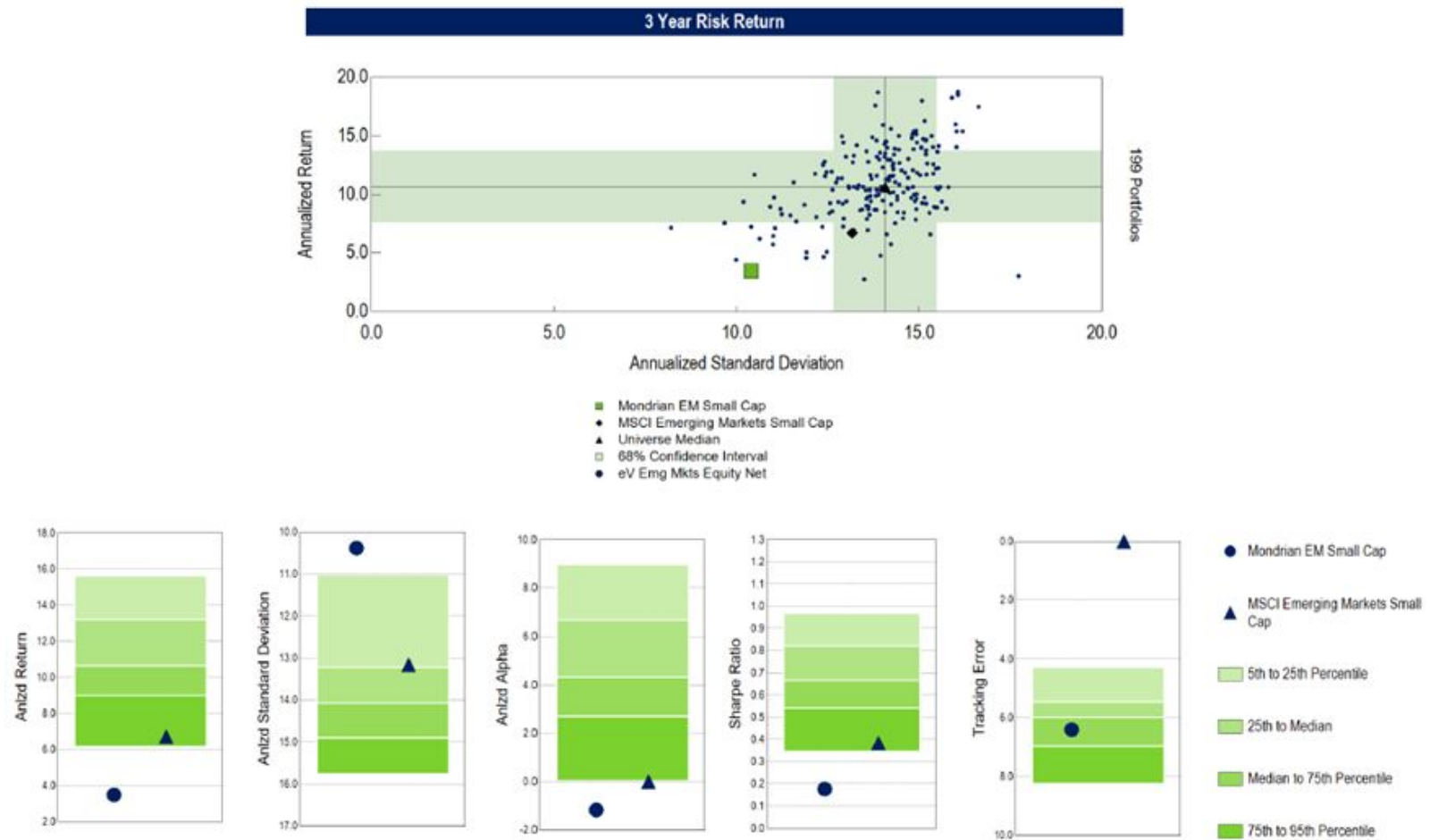
December 31, 2019

MONDRIAN EM SMALL CAP



December 31, 2019

MONDRIAN EM SMALL CAP



December 31, 2019

MONDRIAN EM SMALL CAP

Characteristics	MSCI Emerging Markets Small Cap	
	Portfolio	
Number of Holdings	105	1,652
Weighted Avg. Market Cap. (\$B)	1.5	1.3
Median Market Cap. (\$B)	1.1	0.7
Price To Earnings	19.1	13.5
Price To Book	3.2	2.3
Price To Sales	2.2	0.9
Return on Equity (%)	18.9	12.3
Yield (%)	2.4	2.8
Beta		1.0
R-Squared		1.0

Top Positive Contributors		
	Relative Contribution %	Return %
CLEAR MEDIA	0.7%	66.4%
AIRTAC INTERNATIONAL GP.	0.5%	30.7%
MONETA MONEY BANK	0.4%	27.1%
DUZONBIZON	0.4%	28.1%
WILSON SONS BDR (BSP)	0.4%	36.4%
ASTER DM HEALTHCARE	0.4%	35.2%
MICROPORT SCIENTIFIC	0.3%	30.8%
PHOENIX MILLS	0.3%	18.5%
QL RESOURCES	0.3%	15.4%
TEGMA GESTAO LOGISTICA ON	0.3%	27.5%

Top Negative Contributors		
	Relative Contribution %	Return %
MANILA WATER	-0.4%	-46.3%
SARANA MEDITAMA MET.TBK	-0.3%	-46.7%
ARWANA CITRAMULIA	-0.2%	-12.6%
CCL PRODUCTS (INDIA)	-0.1%	-16.5%
SINOSOFT TECHNOLOGY GP.	-0.1%	-10.6%
SYMPHONY	-0.1%	-10.5%
PACIFIC HOSPITAL SUPPLY	-0.1%	-10.9%
FU SHOU YUAN INTL.GP.	-0.1%	-4.2%
HUMAN SOFT HOLDING	-0.1%	-3.3%
BANGKOK CHAIN HOSP. FB	0.0%	-4.6%

	Equity Sector Attribution				Returns		Ending Sector Weights	
	Total Effects	Selection Effect	Attribution Effects		Portfolio	Benchmark	Portfolio	Benchmark
			Allocation Effect	Interaction Effects				
Energy	0.0%	0.0%	0.0%	0.0%	2.5%	5.3%	1.2%	2.3%
Materials	-1.2%	-0.7%	-0.1%	-0.3%	7.0%	16.4%	10.7%	11.1%
Industrials	1.2%	1.0%	-0.1%	0.3%	12.6%	5.7%	17.8%	14.0%
Consumer Discretionary	-0.3%	-0.1%	0.0%	-0.2%	4.8%	7.1%	13.2%	14.1%
Consumer Staples	-0.4%	-0.2%	-0.1%	-0.1%	4.6%	8.2%	13.5%	6.0%
Health Care	-1.0%	-0.7%	0.4%	-0.7%	5.0%	15.4%	13.8%	9.0%
Financials	0.5%	1.2%	0.2%	-0.9%	21.5%	6.1%	3.8%	9.6%
Information Technology	-0.5%	0.5%	-0.3%	-0.6%	16.3%	14.0%	9.8%	16.1%
Communication Services	0.6%	0.6%	0.0%	0.0%	18.1%	4.5%	4.1%	3.8%
Utilities	-0.6%	-0.8%	0.0%	0.2%	-1.7%	11.7%	2.9%	5.0%
Real Estate	0.4%	0.4%	0.1%	-0.1%	10.3%	5.1%	6.5%	8.2%
Cash	-0.3%	0.0%	-0.3%	0.0%	0.4%	-	1.8%	0.0%
Unclassified	0.2%	0.0%	0.0%	0.2%	27.0%	9.7%	0.8%	0.8%
Portfolio	-1.4%	=	1.2%	+	-0.3%	+	-2.3%	
					8.2%	9.7%	100.0%	100.0%



December 31, 2019

MONDRIAN EM SMALL CAP

Sector Allocation

	Fund	MSCI EM SC
Communication Services	4.0	3.9
Consumer Discretionary	13.0	14.3
Consumer Staples	13.3	6.0
Energy	1.2	2.3
Financials	4.5	9.6
Health Care	15.3	9.0
Industrials	17.5	14.0
Information Technology	9.6	16.2
Materials	10.6	11.1
Real Estate	6.4	8.5
Utilities	2.8	5.1
Cash	1.8	—
TOTAL	100.0	100.0

Country Allocation

	Fund	MSCI EM SC
Latin America	9.6	15.4
Brazil	4.4	10.5
Mexico	3.2	2.8
Peru	2.0	—
Europe, Middle East & Africa	13.0	14.0
Czech Republic	1.6	0.1
Estonia	1.2	—
Kuwait	1.6	—
Poland	2.3	1.1
Saudi Arabia	2.8	2.5
Slovenia	0.8	—
South Africa	0.8	4.9
UAE	1.0	0.6
United Kingdom	0.9	—
Asia	75.6	70.6
North Asia	34.7	46.5
China/Hong Kong	18.9	10.6
South Korea	6.2	15.5
Taiwan	9.6	20.4
South Asia	40.9	23.6
India	28.6	13.2
Indonesia	3.9	2.1
Malaysia	3.1	3.3
Philippines	2.7	1.0
Thailand	2.6	4.0
Cash	1.8	—
TOTAL	100.0	100.0



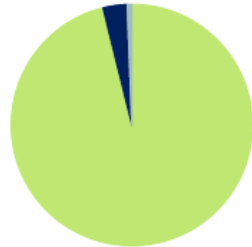
Source: Mondrian

December 31, 2019

VANGUARD TOTAL BOND MARKET I

Asset Allocation

Portfolio Date: 11/30/2019



	%
• Stock	0.0
• Bond	96.1
• Cash	3.3
• Other	0.6
Total	100.0

Fixed Income Statistics

Portfolio Date: 11/30/2019

Morningstar Fixed Income Style Box™			
	Ltd	Mod	Ext
High			
Med			
Low			

Fixed-Income Stats

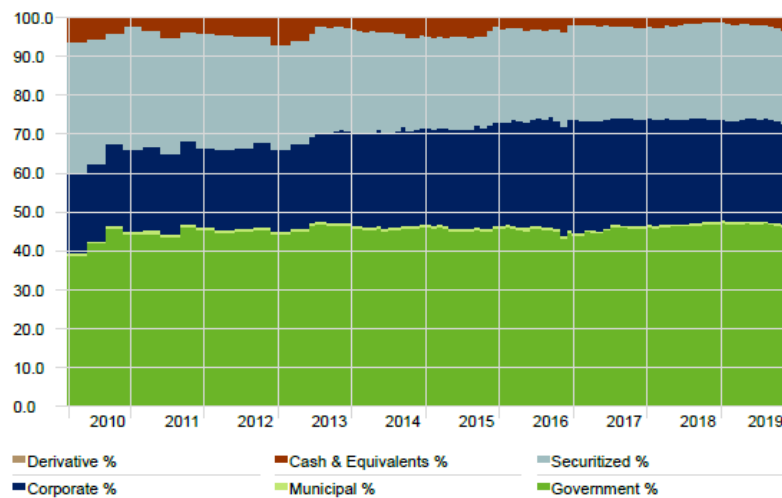
Average Eff Duration	6.3
Average Eff Maturity	8.2
Average Coupon	3.2
Average Price	106.6

Credit Quality Breakdown

Portfolio Date: 11/30/2019

	Fund	Index
AAA %	66.2	
AA %	3.43	
A %	11.16	
BBB %	19.17	
BB %	0.00	
B %	0.00	
Below B %	0.00	
Not Rated %	0.00	
Yield to Maturity	2.45	

Historical Sector Allocations (10 Years)



Top Holdings

	Detail Holding Type	Portfolio Weighting %
Vanguard Market Liquidity Inv	MUTUAL FUND - MONEY MARKET	3.25
Federal National Mortgage Association 3%	BOND - GOV'T AGENCY PASS-THRU	0.62
United States Treasury Notes 2%	BOND - GOV'T/TREASURY	0.44
United States Treasury Notes 2.88%	BOND - GOV'T/TREASURY	0.40
United States Treasury Notes 1.62%	BOND - GOV'T/TREASURY	0.40
United States Treasury Notes 2.12%	BOND - GOV'T/TREASURY	0.39
United States Treasury Notes 1.5%	BOND - GOV'T/TREASURY	0.39
United States Treasury Notes 1.75%	BOND - GOV'T/TREASURY	0.39
United States Treasury Notes 2.12%	BOND - GOV'T/TREASURY	0.39
United States Treasury Notes 1.75%	BOND - GOV'T/TREASURY	0.38



Source: Morningstar

December 31, 2019

VANGUARD TOTAL BOND MARKET I

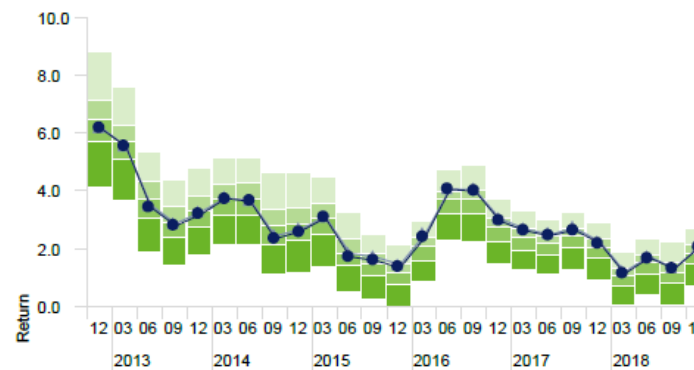
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	99.8	100.0
Alpha	-0.1	0.0
Beta	1.0	1.0
Std Dev	3.4	3.3
Up Capture Ratio	100.8	100.0
Down Capture Ratio	105.0	100.0
Sharpe Ratio (geo)	0.6	0.6
Information Ratio (geo)	-0.2	
Tracking Error	0.2	0.0
Correlation	1.0	1.0

Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



— Vanguard Total Bond Market Index I

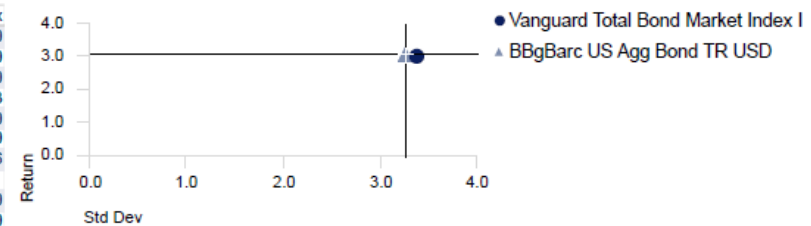
— BBgBarc US Agg Bond TR USD

Calendar Year Returns

	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
Vanguard Total Bond Market Index I	6.6	70	7.7	11	4.2	83	-2.1	67	5.9	30	0.4	28	2.6	62	3.6	55	0.0	30	8.7	33
BBgBarc US Agg Bond TR USD	6.5		7.8		4.2		-2.0		6.0		0.5		2.6		3.5		0.0		8.7	

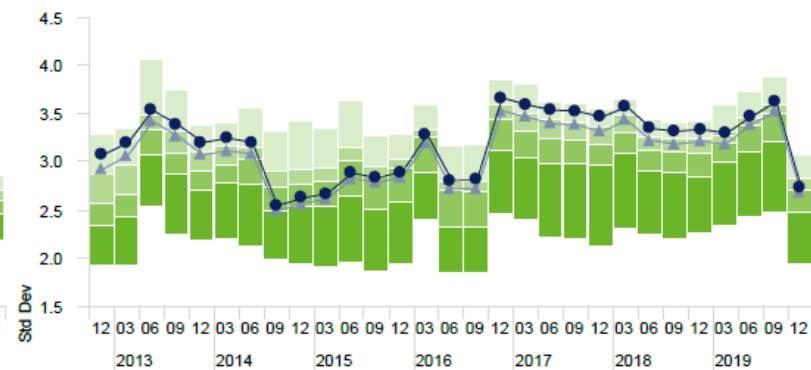
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



— Vanguard Total Bond Market Index I

— BBgBarc US Agg Bond TR USD



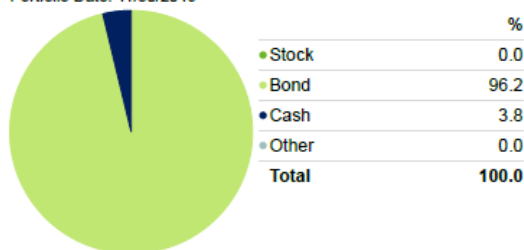
Source: Morningstar

December 31, 2019

VANGUARD INFLATION PROTECTED SECURITIES

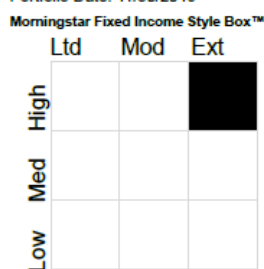
Asset Allocation

Portfolio Date: 11/30/2019



Fixed Income Statistics

Portfolio Date: 11/30/2019



Fixed-Income Stats

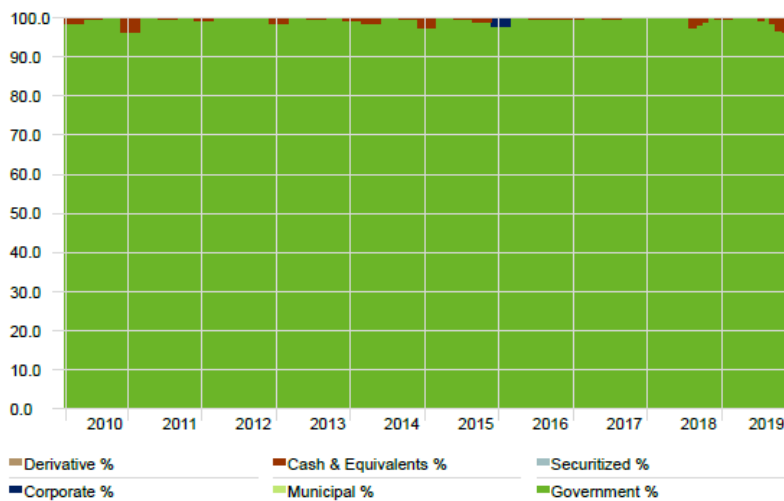
Average Eff Duration	7.4
Average Eff Maturity	8.3
Average Coupon	0.8
Average Price	112.4

Credit Quality Breakdown

Portfolio Date: 11/30/2019

	Fund	Index
AAA %	100.0	
AA %	0.00	
A %	0.00	
BBB %	0.00	
BB %	0.00	
B %	0.00	
Below B %	0.00	
Not Rated %	0.00	
Yield to Maturity		

Historical Sector Allocations (10 Years)



Top Holdings

	Detail Holding Type	Portfolio Weighting %
Vanguard Market Liquidity Inv	MUTUAL FUND - MONEY MARKET	3.76
United States Treasury Notes 0.62%	BOND - GOV'T INFLATION PROTECTED	3.56
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	3.51
United States Treasury Notes 0.38%	BOND - GOV'T INFLATION PROTECTED	3.48
United States Treasury Notes 0.62%	BOND - GOV'T INFLATION PROTECTED	3.47
United States Treasury Notes 0.25%	BOND - GOV'T INFLATION PROTECTED	3.46
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	3.43
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	3.38
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	3.32
United States Treasury Notes 0.38%	BOND - GOV'T INFLATION PROTECTED	3.28



Source: Morningstar

December 31, 2019

VANGUARD INFLATION PROTECTED SECURITIES

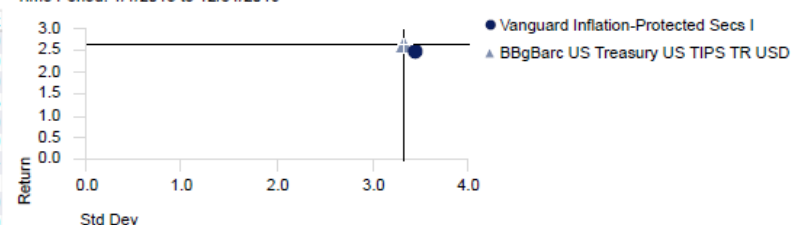
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	99.4	100.0
Alpha	-0.2	0.0
Beta	1.0	1.0
Std Dev	3.4	3.3
Up Capture Ratio	99.6	100.0
Down Capture Ratio	107.7	100.0
Sharpe Ratio (geo)	0.4	0.4
Information Ratio (geo)	-0.5	
Tracking Error	0.3	0.0
Correlation	1.0	1.0

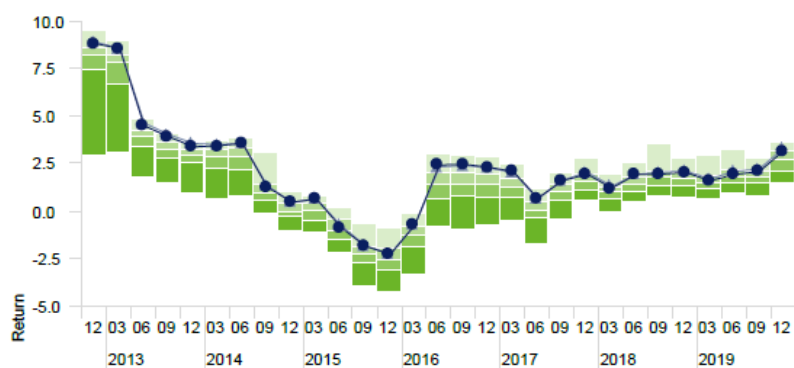
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile

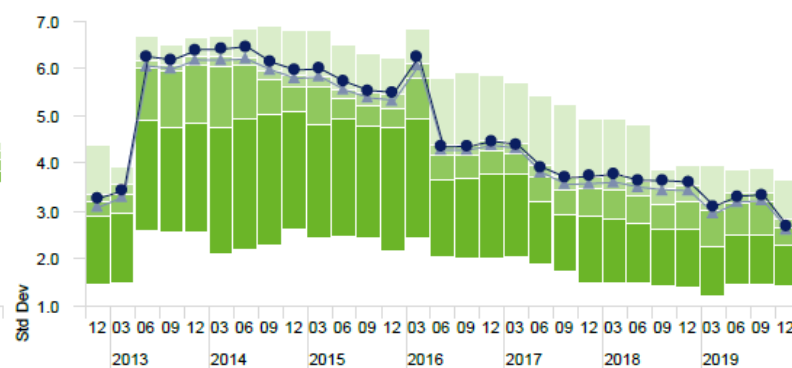


—Vanguard Inflation-Protected Secs I

—BBgBarc US Treasury US TIPS TR USD

Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—Vanguard Inflation-Protected Secs I

—BBgBarc US Treasury US TIPS TR USD

Calendar Year Returns

	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
Vanguard Inflation-Protected Secs I	6.3	28	13.4	6	6.9	24	-8.8	52	4.1	5	-1.7	31	4.6	39	3.0	34	-1.4	48	8.2	43
BBgBarc US Treasury US TIPS TR USD	6.3		13.6		7.0		-8.6		3.6		-1.4		4.7		3.0		-1.3		8.4	



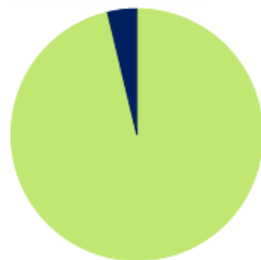
Source: Morningstar

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VANGUARD SHORT-TERM TIPS

Asset Allocation

Portfolio Date: 11/30/2019



• Stock	0.0
• Bond	96.3
• Cash	3.7
• Other	0.0
Total	100.0

Fixed Income Statistics

Portfolio Date: 11/30/2019

Morningstar Fixed Income Style Box™			
	Ltd	Mod	Ext
High			
Med			
Low			

Fixed-Income Stats

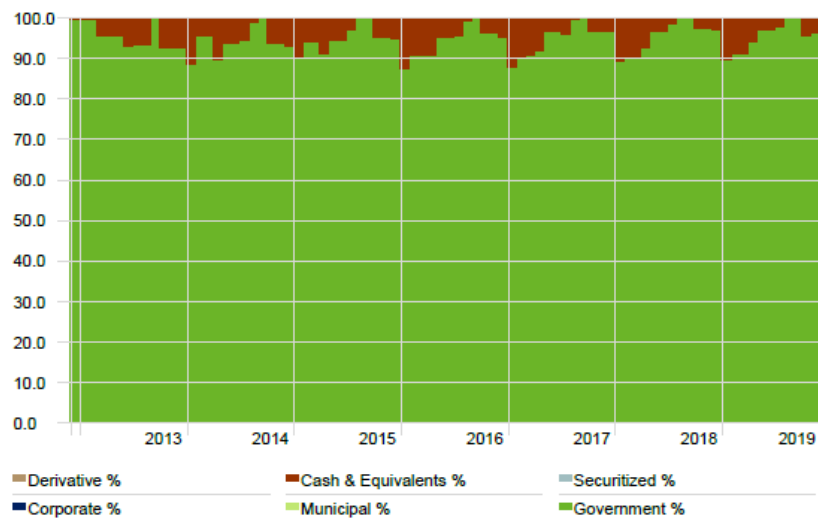
Average Eff Duration	2.5
Average Eff Maturity	2.5
Average Coupon	0.4
Average Price	110.0

Credit Quality Breakdown

Portfolio Date: 11/30/2019

	Fund	Index
AAA %	100.0	
AA %	0.00	
A %	0.00	
BBB %	0.00	
BB %	0.00	
B %	0.00	
Below B %	0.00	
Not Rated %	0.00	
Yield to Maturity		

Historical Sector Allocations (10 Years)



Top Holdings

	Detail Holding Type	Portfolio Weighting %
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	8.38
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	7.26
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	7.08
United States Treasury Notes 0.62%	BOND - GOV'T INFLATION PROTECTED	7.05
United States Treasury Notes 0.38%	BOND - GOV'T INFLATION PROTECTED	7.04
United States Treasury Notes 0.62%	BOND - GOV'T INFLATION PROTECTED	6.99
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	6.94
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	6.93
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	6.76
United States Treasury Notes 0.12%	BOND - GOV'T INFLATION PROTECTED	6.71



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VANGUARD SHORT-TERM TIPS

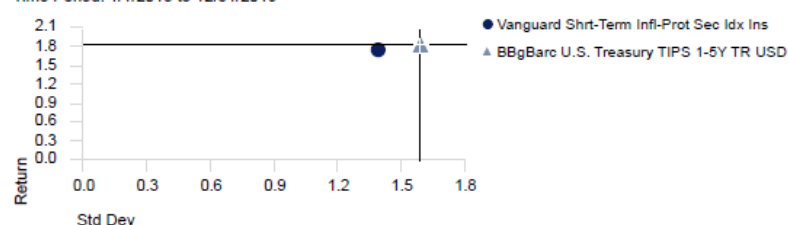
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	99.1	100.0
Alpha	0.0	0.0
Beta	0.9	1.0
Std Dev	1.4	1.6
Up Capture Ratio	93.3	100.0
Down Capture Ratio	85.2	100.0
Sharpe Ratio (geo)	0.5	0.5
Information Ratio (geo)	-0.3	
Tracking Error	0.3	0.0
Correlation	1.0	1.0

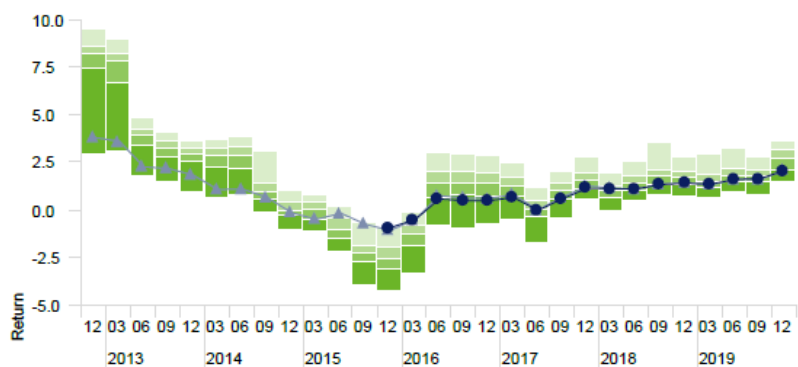
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile

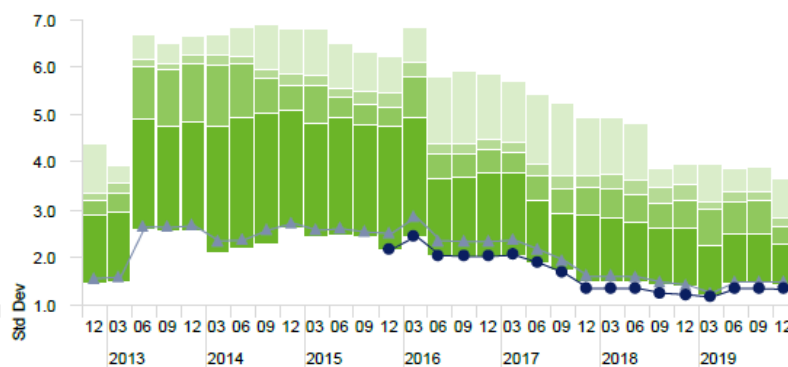


—Vanguard Shrt-Term Infl-Prot Sec Idx Ins

—BBgBarc U.S. Treasury TIPS 1-5Y TR USD

Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—Vanguard Shrt-Term Infl-Prot Sec Idx Ins

—BBgBarc U.S. Treasury TIPS 1-5Y TR USD

Calendar Year Returns

	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
Vanguard Shrt-Term Infl-Prot Sec Idx Ins							-1.5	5	-1.1	88	-0.2	2	2.8	91	0.8	85	0.6	1	4.8	93
BBgBarc U.S. Treasury TIPS 1-5Y TR USD	3.9		4.9		2.7		-2.0		-1.1		-0.1		3.1		0.8		0.4		5.1	

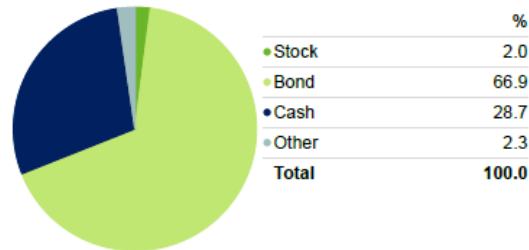


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BLACKROCK STRATEGIC INCOME

Asset Allocation

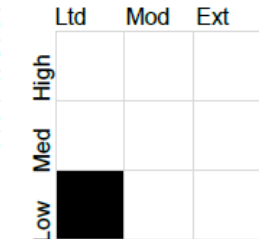
Portfolio Date: 10/31/2019



Fixed Income Statistics

Portfolio Date: 6/30/2019

Morningstar Fixed Income Style Box™ Fixed-Income Stats



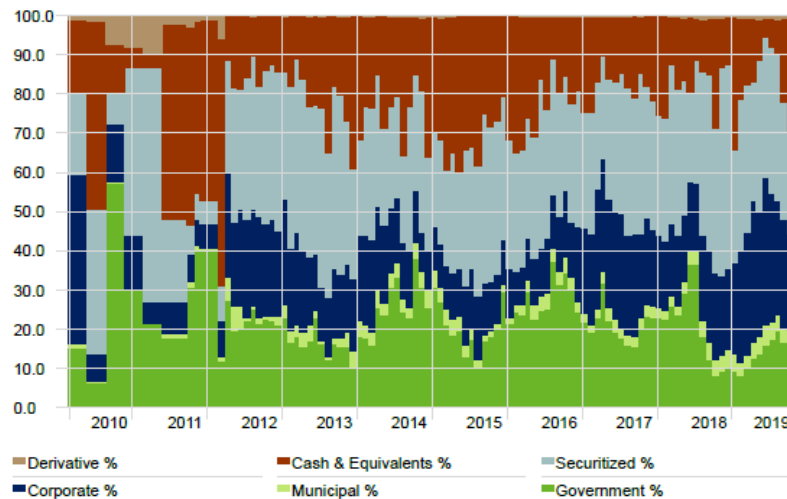
Average Eff Duration	3.8
Average Eff Maturity	9.2
Average Coupon	4.4
Average Price	102.6
AAA %	24.1
AA %	5.71
A %	13.95
BBB %	22.24
BB %	11.74
B %	8.54
Below B %	4.03
Not Rated %	9.73
Yield to Maturity	

Credit Quality Breakdown

Portfolio Date: 9/30/2019

	Fund	Index
AAA %	24.1	
AA %	5.71	
A %	13.95	
BBB %	22.24	
BB %	11.74	
B %	8.54	
Below B %	4.03	
Not Rated %	9.73	
Yield to Maturity		

Historical Sector Allocations (10 Years)



Top Holdings

	Detail Holding Type	Portfolio Weighting %
United States Treasury Notes 0.5%	BOND - GOV'T INFLATION PROTECTED	1.47
BlackRock Liquidity T-Fund Instl	MUTUAL FUND - MONEY MARKET	0.99
France (Republic Of) 1.5%	BOND - GOV'T/TREASURY	0.93
Japan (Government Of) 0.1%	BOND - GOV'T INFLATION PROTECTED	0.60
Federal National Mortgage Association 4%	BOND - GOV'T AGENCY PASS-THRU	0.54
China (People's Republic Of) 3.29%	BOND - GOV'T/TREASURY	0.54
Wells Fargo & Company 3.75%	B	0.52
United States Treasury Notes 0.62%	BOND - GOV'T INFLATION PROTECTED	0.51
Federal National Mortgage Association 4%	BOND - GOV'T AGENCY PASS-THRU	0.48
China (People's Republic Of) 3.19%	BOND - GOV'T/TREASURY	0.48



Source: Morningstar

December 31, 2019

BLACKROCK STRATEGIC INCOME

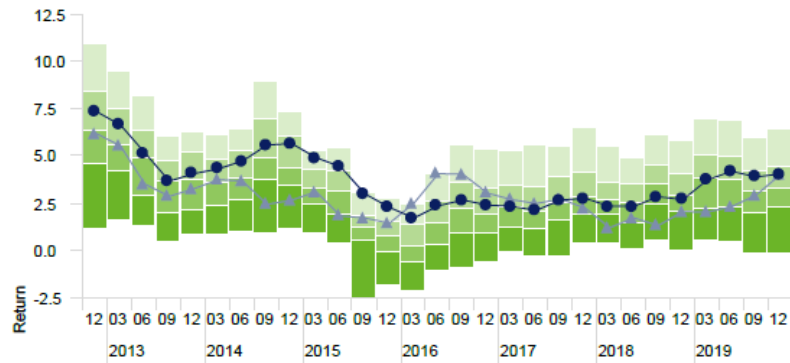
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	6.6	100.0
Alpha	1.6	0.0
Beta	0.2	1.0
Std Dev	2.2	3.3
Up Capture Ratio	69.9	100.0
Down Capture Ratio	2.6	100.0
Sharpe Ratio (geo)	0.9	0.6
Information Ratio (geo)	0.0	
Tracking Error	3.3	0.0
Correlation	0.3	1.0

Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—BlackRock Strategic Income Opps K

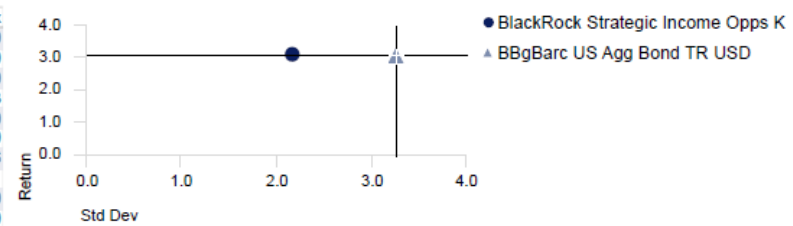
—BBgBarc US Agg Bond TR USD

Calendar Year Returns

	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
BlackRock Strategic Income Opps K	13.4		-0.7		9.9		3.3		3.9		-0.3		3.7		5.0	37	-0.5	46	7.8	36
BBgBarc US Agg Bond TR USD	6.5		7.8		4.2		-2.0		6.0		0.5		2.6		3.5		0.0		8.7	

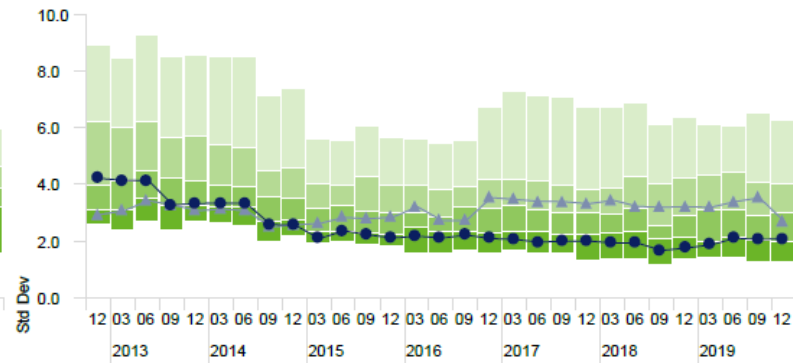
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—BlackRock Strategic Income Opps K

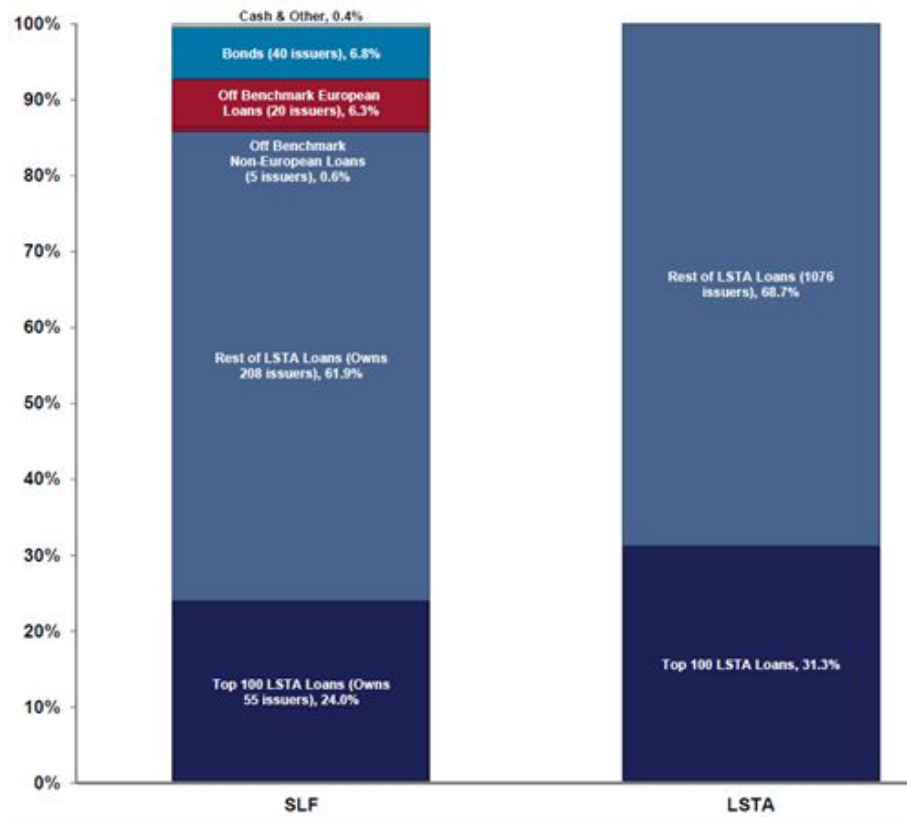
—BBgBarc US Agg Bond TR USD



Source: Morningstar

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BAIN CAPITAL SENIOR LOAN FUND



Top 5 Winners & Losers

Winners

Issuer	bps
Ascena Retail Group	5
Hearthside Food Solutions	3
La Financiere Atalian S.A.	3
KIK Custom Products	3
Travelport	2
Rest of Winners	45
Total Winners	61

Losers

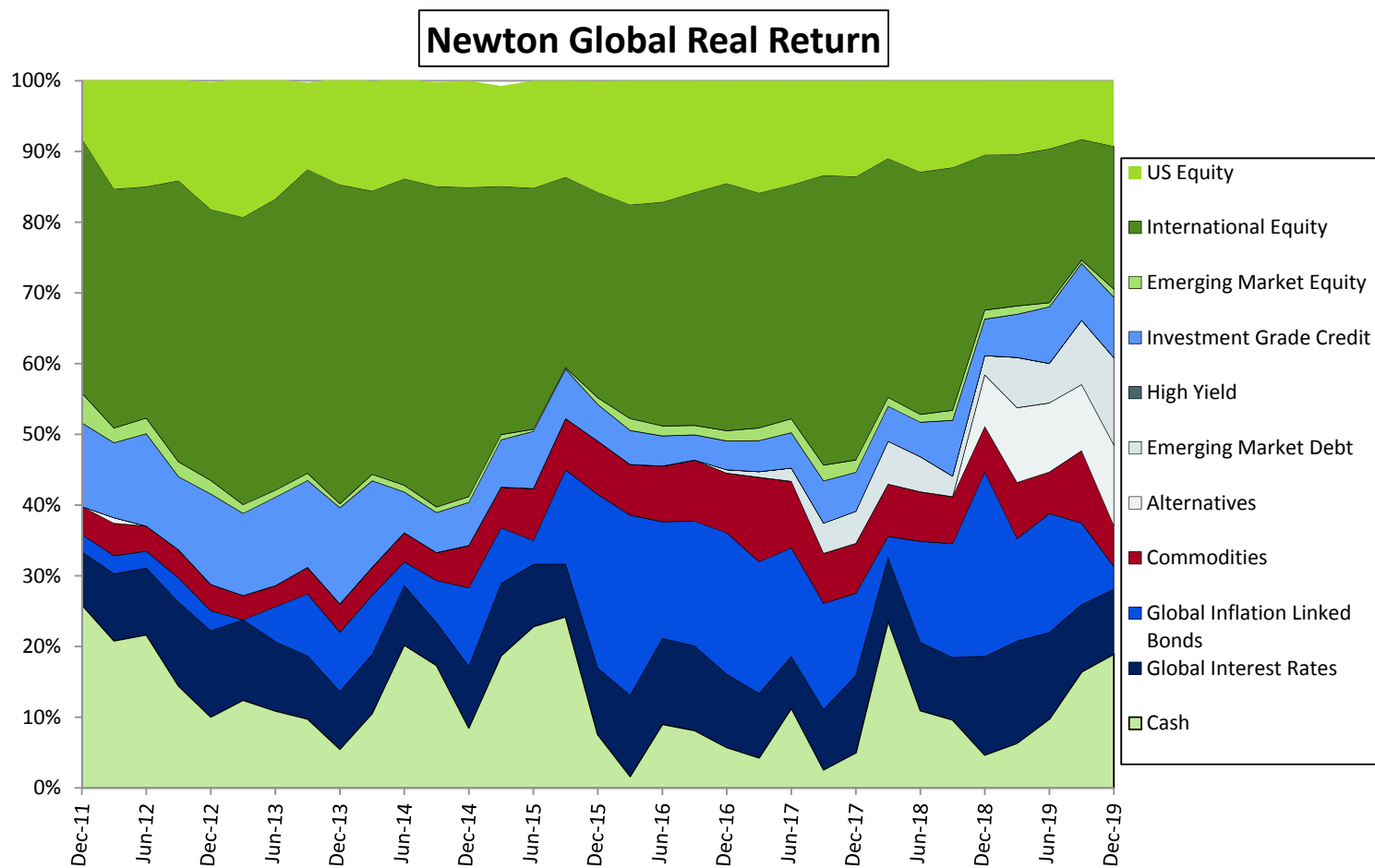
Issuer	bps
Algoma Steel	(29)
Murray Energy	(11)
Party City	(5)
OGF	(4)
NPC International	(3)
Rest of Losers	(53)
Total Losers	(105)



Source: Bain Capital

December 31, 2019

NEWTON GLOBAL REAL RETURN



Source: Newton

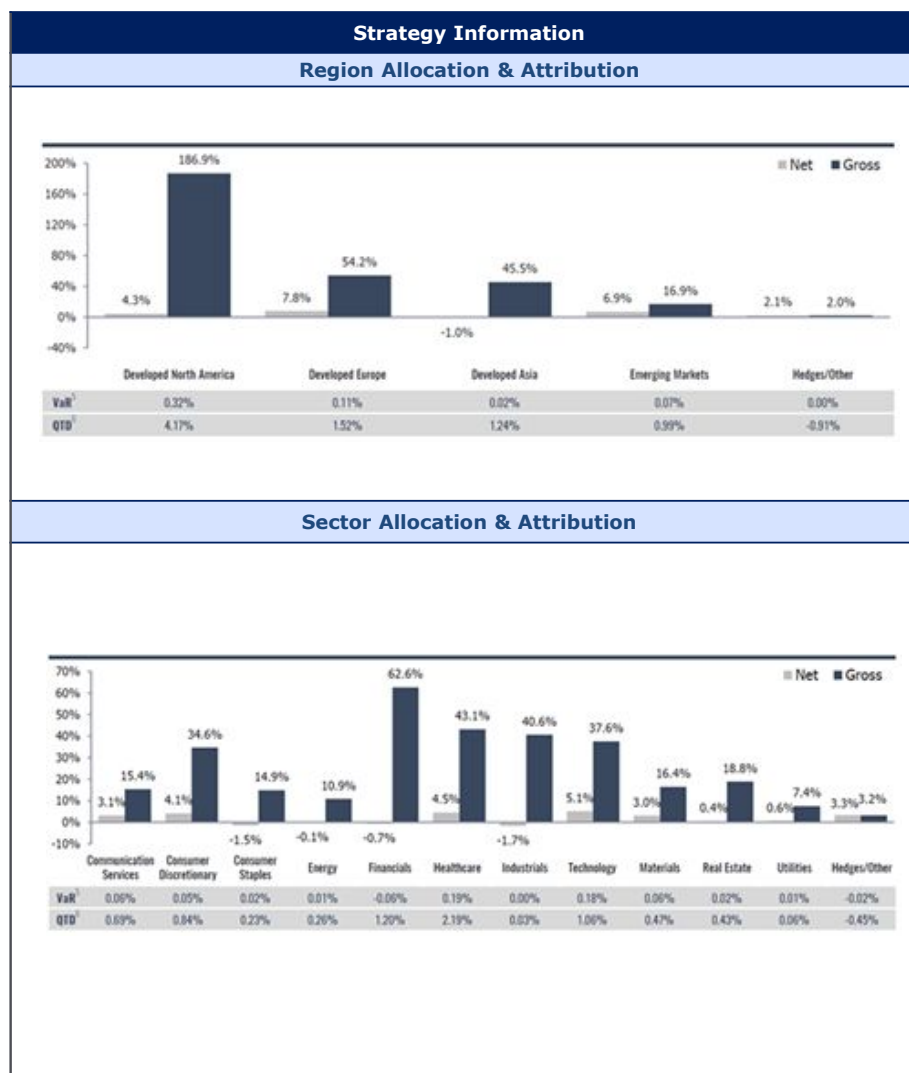
December 31, 2019

LIGHTHOUSE GLOBAL LONG/SHORT

General Fund Information			
Fund Name	Lighthouse Global Long/Short Fund		
Management Company	Lighthouse Investment Partners, LLC		
Location	Palm Beach, FL		
Firm AUM	\$13.5 billion	Strategy	Fund of Fund
Fund AUM	\$1.0 billion	Sub-Strategy	Long/Short Equity
Portfolio Managers	Ethan Baron	Direct or FOF	FOF

Terms	
Share Class	--
Minimum Investment	\$1 million
Management Fee	1.15%
Incentive Fee	--
Hurdle Rate	None
High Water Mark	Yes
Subscription	Monthly
Redemption	Quarterly (60 days notice) or Monthly (90 days notice)
Lock-Up	None

Investment Strategy
Lighthouse's Global Long/Short Fund is a global portfolio of 20-30 separately managed accounts with industry sector and country specialist managers. The geographical allocations are similar to the MSCI World Index (30%-75% Americas, 10%-35% Europe, 5%-35% Asia).
The Fund targets returns greater than 10% over market cycles with 6%-8% volatility and an equity beta of 0.2-0.4 to the MSCI World Index.



For more information please see NEPC's Investment Due Diligence Report and Operational Due Diligence Report

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LIGHTHOUSE GLOBAL LONG/SHORT



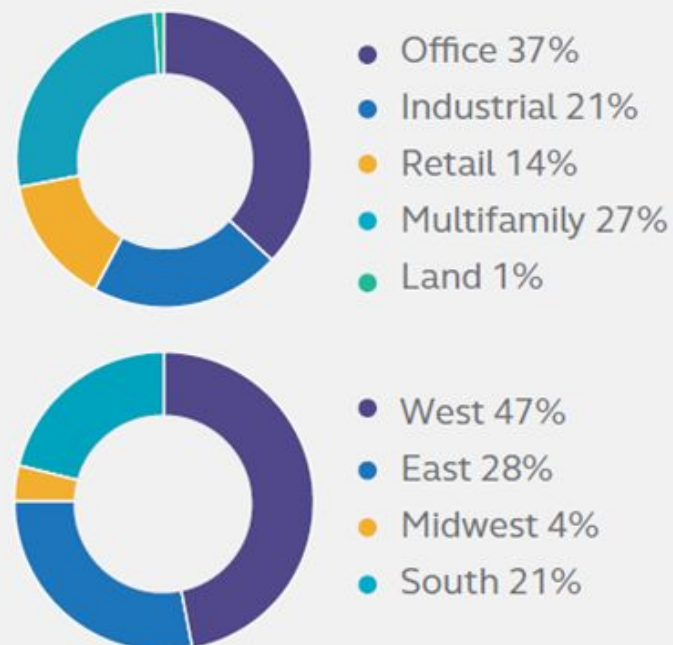
December 31, 2019

PRINCIPAL U.S. PROPERTY

4Q2019 key statistics

Inception date	January, 1982
Gross asset value	\$10.73 billion
Net asset value	\$8.42 billion
Number of investments	133
Number of markets	43
Core portfolio occupancy*	93.4%
Cash to gross assets	3.8%
Leverage ratio**	18.8%

Diversification



Source: Principal

December 31, 2019

APPENDIX

NEPC, LLC

December 31, 2019

GLOSSARY OF TERMS

Alpha - Measures the relationship between the fund performance and the performance of another fund or benchmark index and equals the excess return while the other fund or benchmark index is zero.

Alpha Jensen - The average return on a portfolio over and above that predicted by the capital asset pricing model (CAPM), given the portfolio's beta and the average market return. Also known as the abnormal return or the risk adjusted excess return.

Annualized Excess Return over Benchmark - Annualized fund return minus the annualized benchmark return for the calculated return.

Annualized Return - A statistical technique whereby returns covering periods greater than one year are converted to cover a 12 month time span.

Beta - Measures the volatility or systematic risk and is equal to the change in the fund's performance in relation to the change in the assigned index's performance.

Information Ratio - A measure of the risk adjusted return of a financial security, asset, or portfolio.

Formula:

$$\frac{(\text{Annualized Return of Portfolio} - \text{Annualized Return of Benchmark})}{\text{Annualized Standard Deviation}(\text{Period Portfolio Return} - \text{Period Benchmark Return})}$$
 To annualize standard deviation, multiply the deviation by the square root of the number of periods per year where monthly returns per year equals 12 and quarterly returns is four periods per year.

R-Squared - Represents the percentage of a fund's movements that can be explained by movements in an index. R-Squared values range from 0 to 100. An R-Squared of 100 denotes that all movements of a fund are completely explained by movements in the index.

Sharpe Ratio - A measure of the excess return or risk premium per unit of risk in an investment asset or trading strategy.

Sortino Ratio - A method to differentiate between good and bad volatility in the Sharpe Ratio. The differentiation of up and down volatility allows the calculation to provide a risk adjusted measure of a security or fund's performance without upward price change penalties.

Formula:

$$\text{Calculation Average } (X-Y) / \text{Downside Deviation } (X-Y) * 2$$
 Where X = Return Series X Y = Return Series Y which is the risk free return (91 day T-bills)

Standard Deviation - The standard deviation is a statistical term that describes the distribution of results. It is a commonly used measure of volatility of returns of a portfolio, asset class, or security. The higher the standard deviation the more volatile the returns are.

Formula:

$$\frac{(\text{Annualized Return of Portfolio} - \text{Annualized Return of Risk Free})}{\text{Annualized Standard Deviation (Portfolio Returns)}}$$

Tracking Error - Tracking error, also known as residual risk, is a measure of the degree to which a portfolio tracks its benchmark. It is also a measure of consistency of excess returns. Tracking error is computed as the annualized standard deviation of the difference between a portfolio's return and that of its benchmark.

Formula:

$$\text{Tracking Error} = \text{Standard Deviation } (X-Y) * \sqrt{\# \text{ of periods per year}}$$
 Where X = periods portfolio return and Y = the period's benchmark return
 For monthly returns, the periods per year = 12
 For quarterly returns, the periods per year = 4

Treynor Ratio - A risk-adjusted measure of return based on systematic risk. Similar to the Sharpe ratio with the difference being the Treynor ratio uses beta as the measurement of volatility.

Formula:

$$\frac{(\text{Portfolio Average Return} - \text{Average Return of Risk-Free Rate})}{\text{Portfolio Beta}}$$

Up/Down Capture Ratio - A measure of what percentage of a market's returns is "captured" by a portfolio. For example, if the market declines 10% over some period, and the manager declines only 9%, then his or her capture ratio is 90%. In down markets, it is advantageous for a manager to have as low a capture ratio as possible. For up markets, the higher the capture ratio the better. Looking at capture ratios can provide insight into how a manager achieves excess returns. A value manager might typically have a lower capture ratio in both up and down markets, achieving excess returns by protecting on the downside, whereas a growth manager might fall more than the overall market in down markets, but achieve above-market returns in a rising market.

$$\text{UpsideCapture} = \frac{\text{TotalReturn}(\text{FundReturns})}{\text{TotalReturns}(\text{BMReturn})} \text{ when Period Benchmark Return is } > = 0$$

$$\text{DownsideCapture} = \frac{\text{TotalReturn}(\text{FundReturns})}{\text{TotalReturns}(\text{BMReturn})} \text{ when Benchmark } < 0$$

Data Source: InvestorForce



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INFORMATION DISCLAIMER AND REPORTING METHODOLOGY

Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may not be available from the source or may be preliminary and subject to change.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodial bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- This report is provided as a management aid for the client's internal use only. Performance contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of Return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.



December 31, 2019

**FOURTH QUARTER 2019
SUPPLEMENTAL PERFORMANCE
UNIVERSITY OF MAINE SYSTEM
OPERATING FUND**



February 27, 2020

Jay E. Roney, Partner

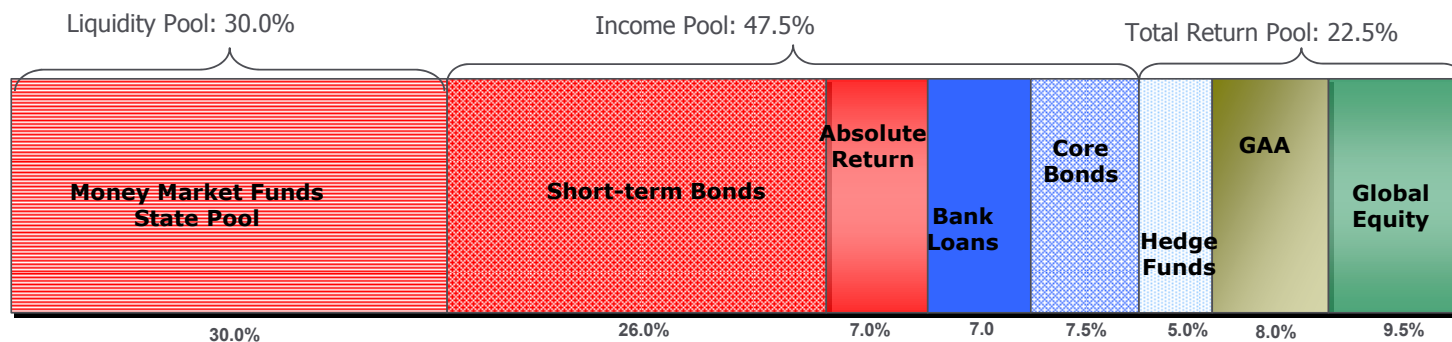
Kelly Regan, Senior Consultant



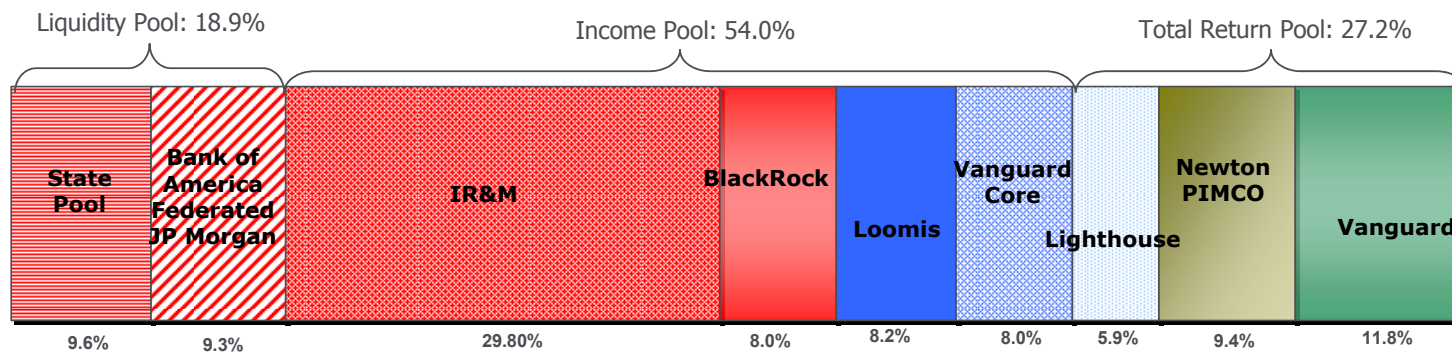
BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

TOTAL FUND ASSET ALLOCATION

Target Asset Allocation



Actual Asset Allocation



*May not add up to 100% due to rounding



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TOTAL PLAN PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Operating Funds Composite	259,342,614	100.0	100.0	2.0	2.6	7.3	3.8	2.8	2.5	2.8
<i>Allocation Index</i>				1.9	2.6	7.4	4.0	2.9	2.7	2.7
Liquidity Pool Composite	48,962,664	18.9	30.0	0.5	1.0	2.1	1.5	1.0	0.8	0.6
State Pool	25,011,423	9.6		0.5	1.1	2.2	1.6	1.1	0.9	0.7
BOA General Fund	1,768,743	0.7		0.1	0.2	0.8	0.5	0.3	0.2	--
Federated Gov't Obligations	18,902,714	7.3		0.4	1.0	2.2	1.5	--	--	--
JP Morgan US Gov't Money Market Fund	3,279,783	1.3		0.4	1.0	2.1	1.5	--	--	--
<i>FTSE T-Bill 3 Months TR</i>				0.5	1.0	2.3	1.7	1.0	0.8	0.6
Income Pool Composite	139,950,447	54.0	47.5	0.7	1.8	5.9	2.9	2.5	2.2	2.9
Income Research + Management	77,313,856	29.8	26.0	0.6	1.3	4.2	2.2	1.8	1.5	--
<i>BBgBarc US Govt/Credit 1-3 Yr. TR</i>				0.6	1.3	4.0	2.1	1.7	1.4	1.5
BlackRock Strategic Income Opportunities	20,804,435	8.0	7.0	1.6	2.5	7.8	4.0	--	--	--
<i>3-Month Libor Total Return USD</i>				0.5	1.0	2.4	2.0	1.4	1.1	0.9
Loomis Sayles Bank Loans	21,206,470	8.2	7.0	1.0	2.3	7.8	3.5	3.8	3.4	4.3
<i>Loomis Bank Loans Custom Index</i>				1.4	2.9	9.3	4.0	4.3	4.2	5.0
Vanguard Total Bond Market Instl [®] Fund	20,625,686	8.0	7.5	0.0	2.5	8.7	4.0	3.0	2.7	3.7
<i>BBgBarc US Aggregate TR</i>				0.2	2.5	8.7	4.0	3.0	2.7	3.7
Total Return Pool Composite	70,429,503	27.2	22.5	6.4	6.0	16.7	8.0	5.4	5.2	5.7
Lighthouse	15,414,608	5.9	5.0	7.3	5.4	13.4	5.5	--	--	--
<i>Credit Suisse Long Shrt Eqt USD</i>				5.1	5.2	12.2	6.7	3.9	6.0	5.2
Newton Global Real Return	12,186,729	4.7	4.0	2.0	2.6	11.8	5.7	--	--	--
<i>60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg</i>				5.5	5.8	18.6	9.3	6.1	6.5	6.4
PIMCO All Asset	12,314,560	4.7	4.0	4.3	3.7	12.2	6.7	4.7	3.5	5.5
<i>Blended Index</i>				1.9	3.1	11.3	5.1	4.3	3.8	5.1
Vanguard Total World Stock Index	30,513,606	11.8	9.5	9.0	9.0	26.8	12.5	8.7	--	--
<i>FTSE Global All Cap Index</i>				9.2	9.2	26.8	12.3	7.6	8.6	7.4

Notes:

Returns are net of manager fees.

The inception date for the allocation index is 07/01/2009

Fiscal YTD begins 7/1

Blended Index: 40% BC Aggregate / 30% BC U.S. TIPS 1-10YR / 10% S&P 500 / 10% BC High Yield / 10% JPM EMBI+

Loomis Bank Loans Custom Index blends performance of "S&P/LSTA Leveraged Loan Index" before 9/1/2014 and "S&P/LSTA Leveraged BB Loan Index" after 9/1/2014.

Composite excludes external loans.

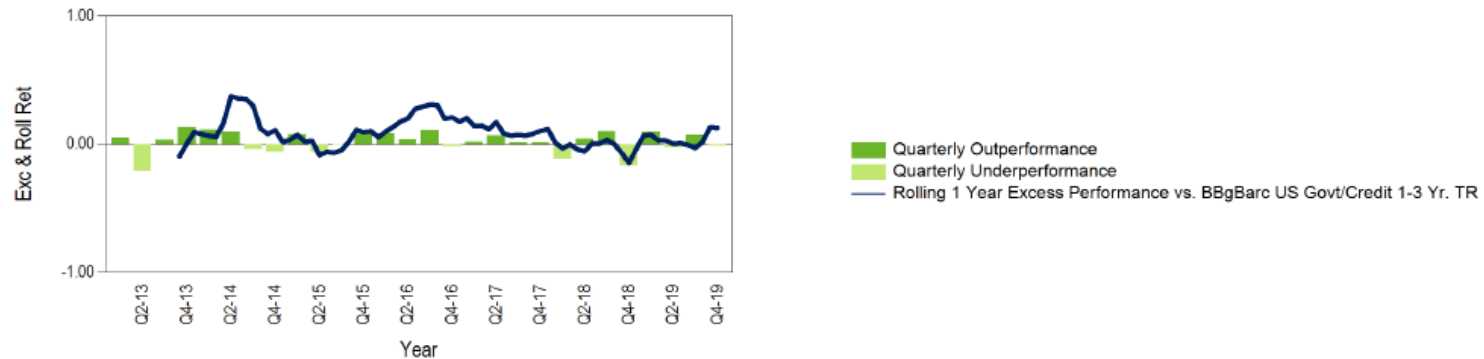
Blackrock SIO changed its share class in May 2018 to BSIKX.



December 31, 2019

INCOME RESEARCH + MANAGEMENT

Rolling Annualized Excess Performance

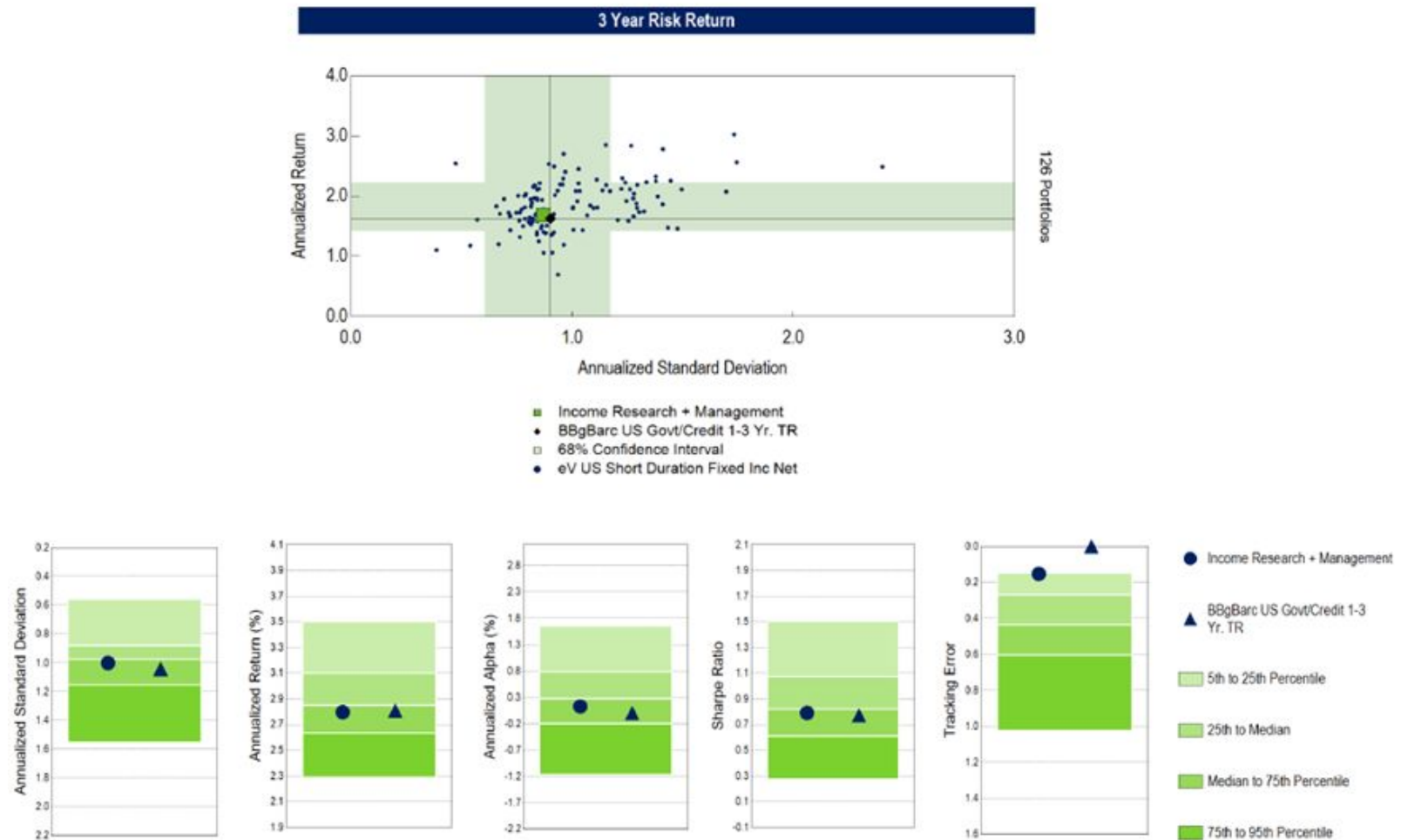


eV US Short Duration Fixed Inc Net Return Comparison



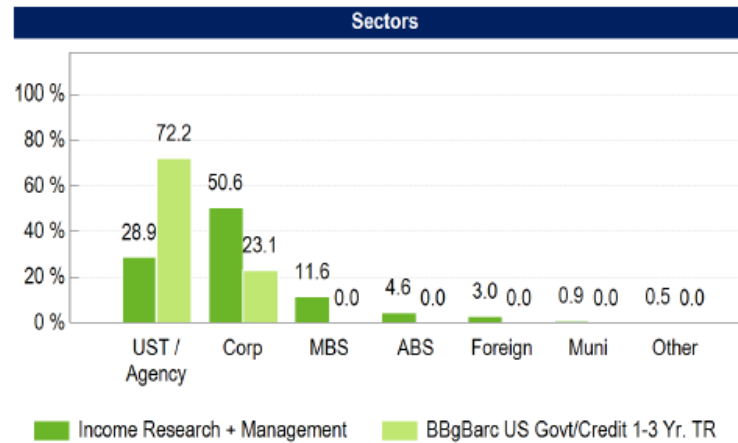
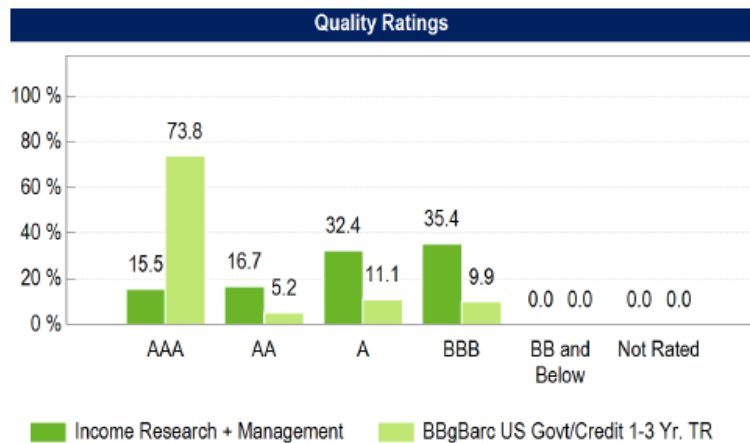
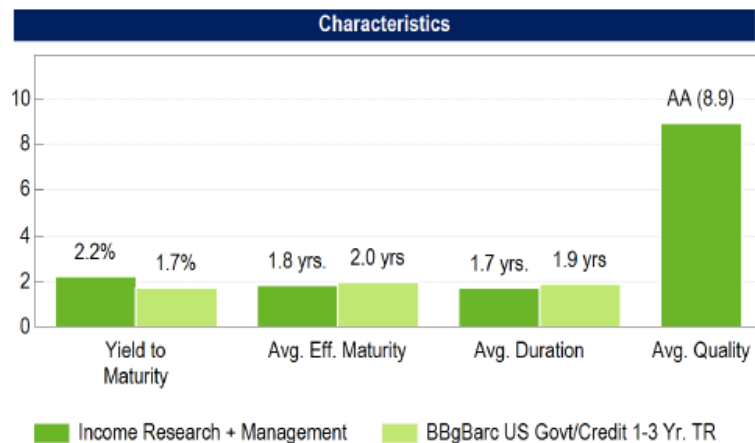
December 31, 2019

INCOME RESEARCH + MANAGEMENT



December 31, 2019

INCOME RESEARCH + MANAGEMENT

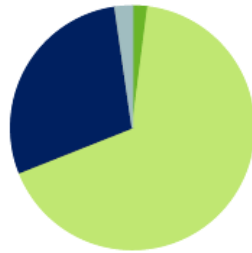


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BLACKROCK STRATEGIC INCOME

Asset Allocation

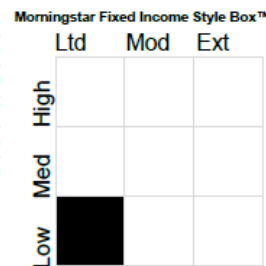
Portfolio Date: 10/31/2019



• Stock	2.0
• Bond	66.9
• Cash	28.7
• Other	2.3
Total	100.0

Fixed Income Statistics

Portfolio Date: 6/30/2019



Fixed-Income Stats

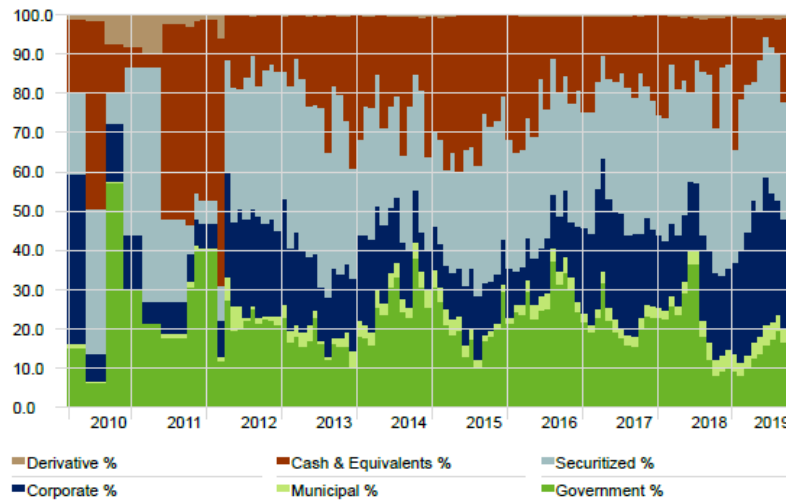
Average Eff Duration	3.8	AAA %	24.1
Average Eff Maturity	9.2	AA %	5.71
Average Coupon	4.4	A %	13.95
Average Price	102.6	BBB %	22.24
		BB %	11.74
		B %	8.54
		Below B %	4.03
		Not Rated %	9.73
Yield to Maturity			

Credit Quality Breakdown

Portfolio Date: 9/30/2019

	Fund	Index
Average Eff Duration	3.8	AAA %
Average Eff Maturity	9.2	AA %
Average Coupon	4.4	A %
Average Price	102.6	BBB %
		BB %
		B %
		Below B %
		Not Rated %
Yield to Maturity		

Historical Sector Allocations (10 Years)



Top Holdings

	Detail Holding Type	Portfolio Weighting %
United States Treasury Notes 0.5%	BOND - GOV'T INFLATION PROTECTED	1.47
BlackRock Liquidity T-Fund Instl	MUTUAL FUND - MONEY MARKET	0.99
France (Republic Of) 1.5%	BOND - GOV'T/TREASURY	0.93
Japan (Government Of) 0.1%	BOND - GOV'T INFLATION PROTECTED	0.60
Federal National Mortgage Association 4%	BOND - GOV'T AGENCY PASS-THRU	0.54
China (People's Republic Of) 3.29%	BOND - GOV'T/TREASURY	0.54
Wells Fargo & Company 3.75%	B	0.52
United States Treasury Notes 0.62%	BOND - GOV'T INFLATION PROTECTED	0.51
Federal National Mortgage Association 4%	BOND - GOV'T AGENCY PASS-THRU	0.48
China (People's Republic Of) 3.19%	BOND - GOV'T/TREASURY	0.48



Source: Morningstar

December 31, 2019

BLACKROCK STRATEGIC INCOME

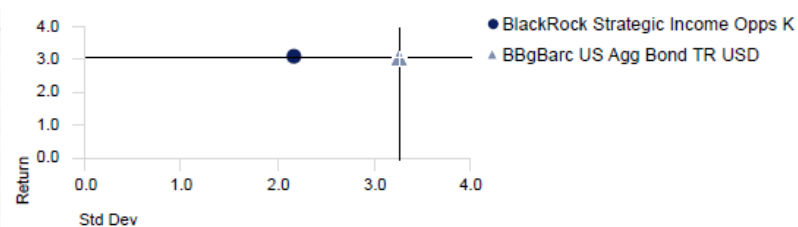
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	6.6	100.0
Alpha	1.6	0.0
Beta	0.2	1.0
Std Dev	2.2	3.3
Up Capture Ratio	69.9	100.0
Down Capture Ratio	2.6	100.0
Sharpe Ratio (geo)	0.9	0.6
Information Ratio (geo)	0.0	
Tracking Error	3.3	0.0
Correlation	0.3	1.0

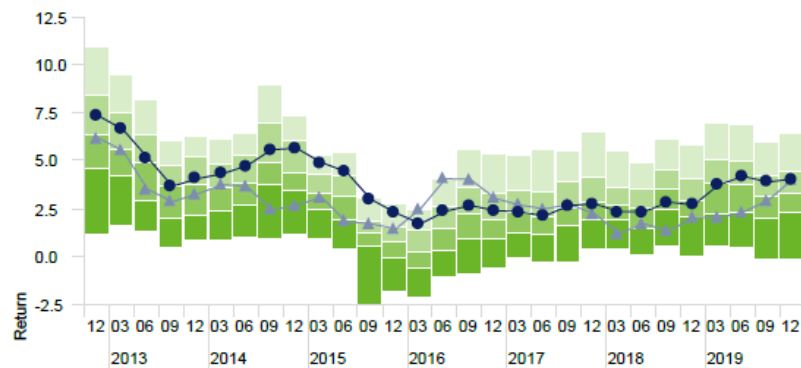
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile

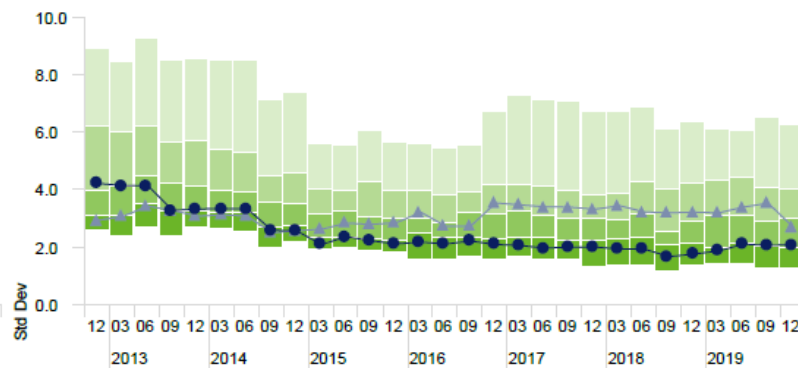


—BlackRock Strategic Income Opps K

—BBgBarc US Agg Bond TR USD

Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—BlackRock Strategic Income Opps K

—BBgBarc US Agg Bond TR USD

Calendar Year Returns

	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
BlackRock Strategic Income Opps K	13.4		-0.7		9.9		3.3		3.9		-0.3		3.7		5.0	37	-0.5	46	7.8	36
BBgBarc US Agg Bond TR USD	6.5		7.8		4.2		-2.0		6.0		0.5		2.6		3.5		0.0		8.7	



Source: Morningstar

December 31, 2019

LOOMIS SAYLES BANK LOANS

HOLDINGS BY INDUSTRY (%)

Technology	10.0	P&C	2.3	Wireless	0.6
Building Materials	7.0	Retailers	2.3	Diversified Manufacturing	0.6
Media Entertainment	6.7	Leisure	1.9	Lodging	0.6
Consumer Cyclical Services	5.4	Packaging	1.7	Insurance	0.5
Healthcare	5.1	Transportation Services	1.7	Brokerage	0.5
Chemicals	4.9	REITS	1.5	Midstream	0.5
Consumer Products	4.2	Environmental	1.4	Media - NonCable	0.4
Industrials - Other	4.1	Electric	1.3	Refining	0.4
Cable Satellite	4.1	Aerospace/Defense	1.1	Construction Machinery	0.4
Restaurants	3.2	Entertainment	1.1	Oil Field Services	0.4
Automotive	3.2	Home Construction	0.9	Office Reits	0.3
Financial Other	3.0	Health Insurance	0.8	Conglomerates	0.3
Pharmaceuticals	2.8	Internet & Data	0.7	Energy - Integrated	0.2
Gaming	2.8	Metals and mining	0.7	Railroads	0.2
Food & Beverage	2.6	Banking	0.6	Supermarkets	0.1
				Cash & Equivalents	5.2

CREDIT QUALITY (%)

	Portfolio	S&P/LSTA Leveraged Loan Index
AA	-	-
A	-	-
BBB	6.4	9.4
BB	51.0	24.9
B	37.1	57.6
CCC & Lower	0.3	6.5
Not Rated	-	1.7
Cash & Equivalents	5.2	-
Second Lien	-	3.4
Avg. Credit Quality	BB-	B+

Reflects the credit ratings assigned by Standard & Poors. If shown, the S&P/LSTA US BB Ratings Loan Index would be rated 100% BB.

SECTOR DISTRIBUTION (%)

	Portfolio
Industrial	84.1
Financial	9.4
Utility	1.3
Cash & Equivalents	5.2

COUNTRY DISTRIBUTION (%)

	Portfolio
United States	91.9
Canada	3.2
Other	4.9

TOP FIVE HOLDINGS (%)

	Portfolio
Burger King Corporation	1.3
Neilsen Finance LLC	1.0
CommScope, Inc.	0.9
Nomad Foods Europe Midco Limited	0.9
Brookfield Property REIT Inc	0.9

Source: Loomis Sayles

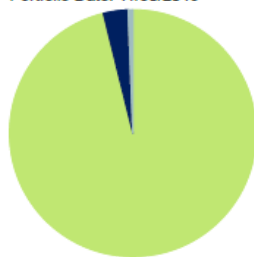


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VANGUARD TOTAL BOND MARKET I

Asset Allocation

Portfolio Date: 11/30/2019



● Stock	0.0
● Bond	96.1
● Cash	3.3
● Other	0.6
Total	100.0

Fixed Income Statistics

Portfolio Date: 11/30/2019

Morningstar Fixed Income Style Box™			
	Ltd	Mod	Ext
High			
Med			
Low			

Fixed-Income Stats

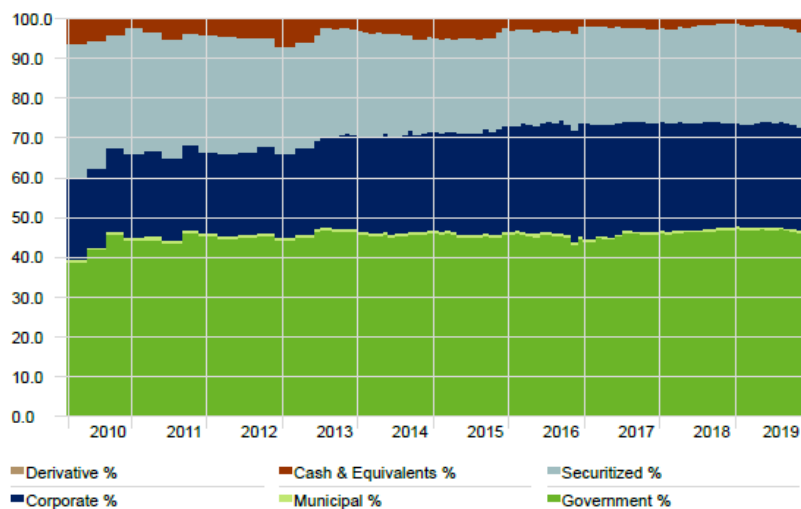
Average Eff Duration	6.3
Average Eff Maturity	8.2
Average Coupon	3.2
Average Price	106.6

Credit Quality Breakdown

Portfolio Date: 11/30/2019

	Fund	Index
AAA %	66.2	
AA %	3.43	
A %	11.16	
BBB %	19.17	
BB %	0.00	
B %	0.00	
Below B %	0.00	
Not Rated %	0.00	
Yield to Maturity	2.45	

Historical Sector Allocations (10 Years)



Top Holdings

	Detail Holding Type	Portfolio Weighting %
Vanguard Market Liquidity Inv	MUTUAL FUND - MONEY MARKET	3.25
Federal National Mortgage Association 3%	BOND - GOV'T AGENCY PASS-THRU	0.62
United States Treasury Notes 2%	BOND - GOV'T/TREASURY	0.44
United States Treasury Notes 2.88%	BOND - GOV'T/TREASURY	0.40
United States Treasury Notes 1.62%	BOND - GOV'T/TREASURY	0.40
United States Treasury Notes 2.12%	BOND - GOV'T/TREASURY	0.39
United States Treasury Notes 1.5%	BOND - GOV'T/TREASURY	0.39
United States Treasury Notes 1.75%	BOND - GOV'T/TREASURY	0.39
United States Treasury Notes 2.12%	BOND - GOV'T/TREASURY	0.39
United States Treasury Notes 1.75%	BOND - GOV'T/TREASURY	0.38



Source: Morningstar

December 31, 2019

VANGUARD TOTAL BOND MARKET I

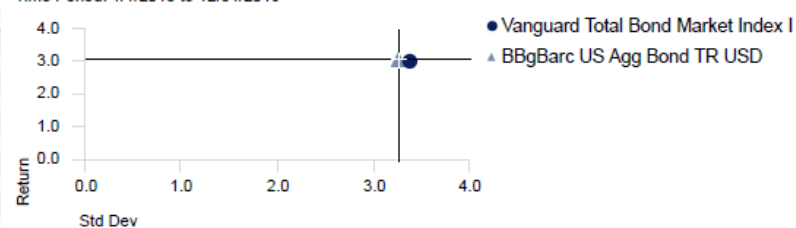
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	99.8	100.0
Alpha	-0.1	0.0
Beta	1.0	1.0
Std Dev	3.4	3.3
Up Capture Ratio	100.8	100.0
Down Capture Ratio	105.0	100.0
Sharpe Ratio (geo)	0.6	0.6
Information Ratio (geo)	-0.2	
Tracking Error	0.2	0.0
Correlation	1.0	1.0

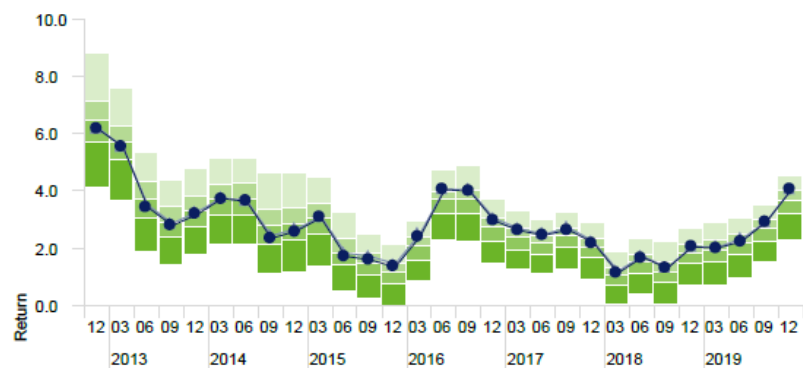
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile

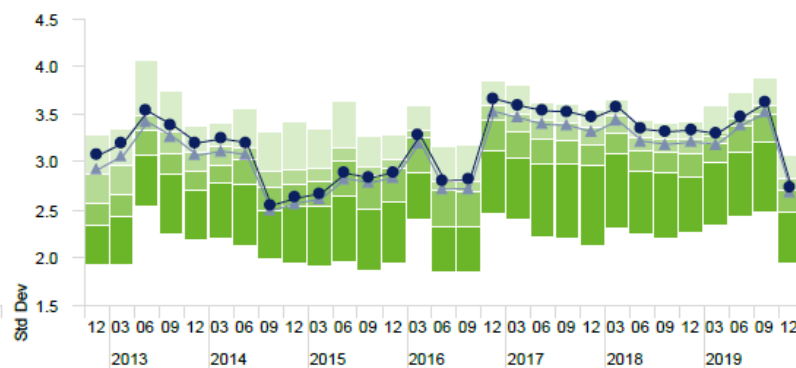


—Vanguard Total Bond Market Index I

—BBgBarc US Agg Bond TR USD

Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—Vanguard Total Bond Market Index I

—BBgBarc US Agg Bond TR USD

Calendar Year Returns

	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
Vanguard Total Bond Market Index I	6.6	70	7.7	11	4.2	83	-2.1	67	5.9	30	0.4	28	2.6	62	3.6	55	0.0	30	8.7	33
BBgBarc US Agg Bond TR USD	6.5		7.8		4.2		-2.0		6.0		0.5		2.6		3.5		0.0		8.7	



Source: Morningstar

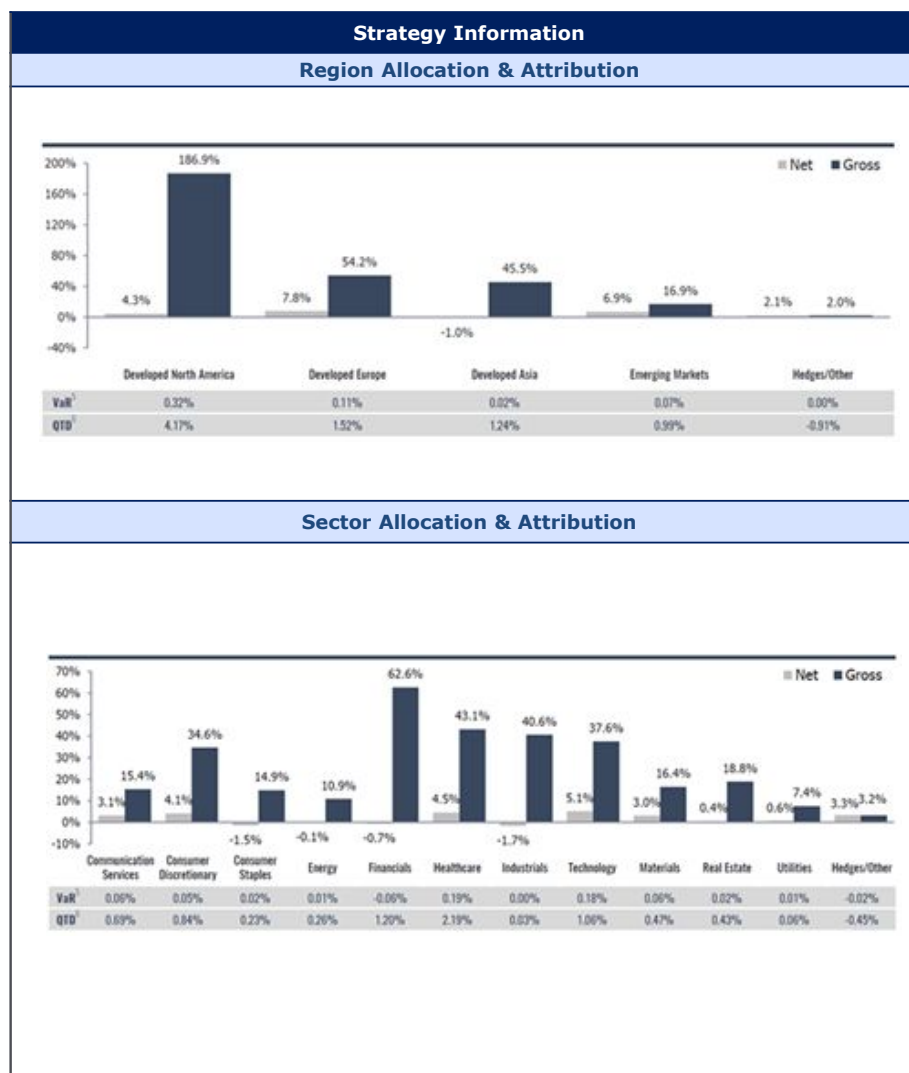
December 31, 2019

LIGHTHOUSE GLOBAL LONG/SHORT

General Fund Information			
Fund Name	Lighthouse Global Long/Short Fund		
Management Company	Lighthouse Investment Partners, LLC		
Location	Palm Beach, FL		
Firm AUM	\$13.5 billion	Strategy	Fund of Fund
Fund AUM	\$1.0 billion	Sub-Strategy	Long/Short Equity
Portfolio Managers	Ethan Baron	Direct or FOF	FOF

Terms	
Share Class	--
Minimum Investment	\$1 million
Management Fee	1.15%
Incentive Fee	--
Hurdle Rate	None
High Water Mark	Yes
Subscription	Monthly
Redemption	Quarterly (60 days notice) or Monthly (90 days notice)
Lock-Up	None

Investment Strategy
Lighthouse's Global Long/Short Fund is a global portfolio of 20-30 separately managed accounts with industry sector and country specialist managers. The geographical allocations are similar to the MSCI World Index (30%-75% Americas, 10%-35% Europe, 5%-35% Asia).
The Fund targets returns greater than 10% over market cycles with 6%-8% volatility and an equity beta of 0.2-0.4 to the MSCI World Index.



For more information please see NEPC's Investment Due Diligence Report and Operational Due Diligence Report

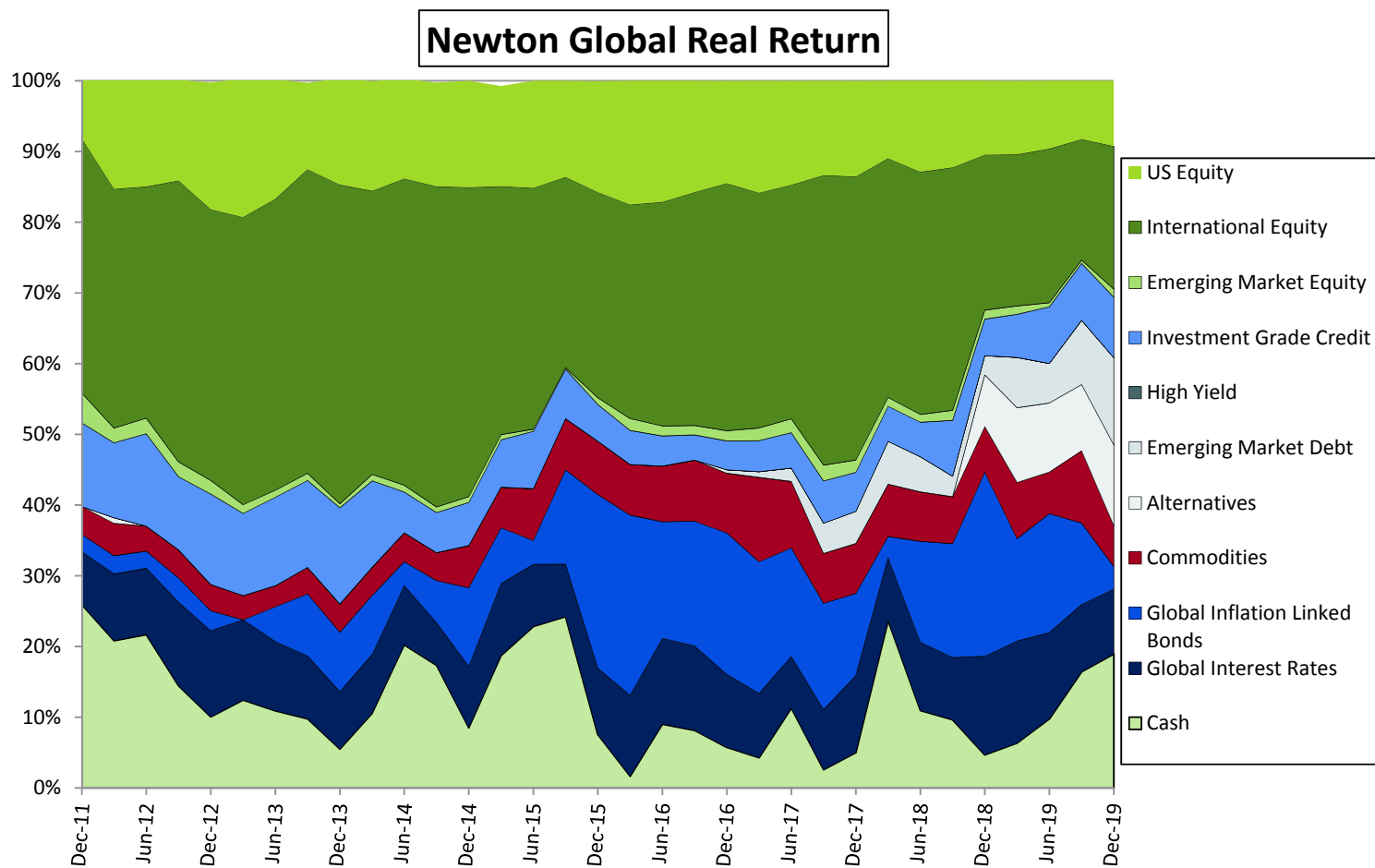
December 31, 2019

LIGHTHOUSE GLOBAL LONG/SHORT



December 31, 2019

NEWTON GLOBAL REAL RETURN



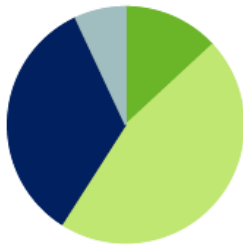
Source: Newton

December 31, 2019

PIMCO ALL ASSET

Asset Allocation

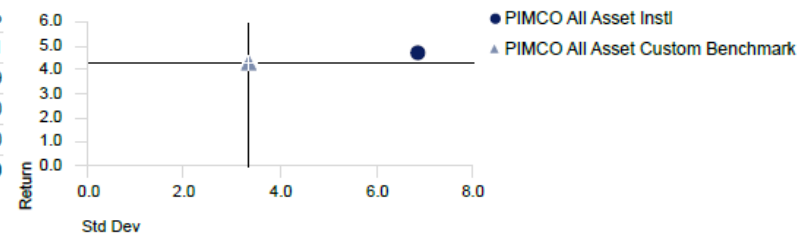
Portfolio Date: 9/30/2019



	%
Stock	13.1
Bond	45.9
Cash	34.0
Other	7.0
Total	100.0

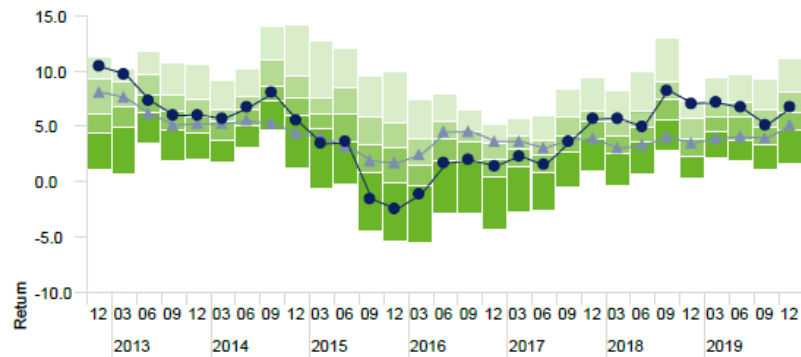
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Returns (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile

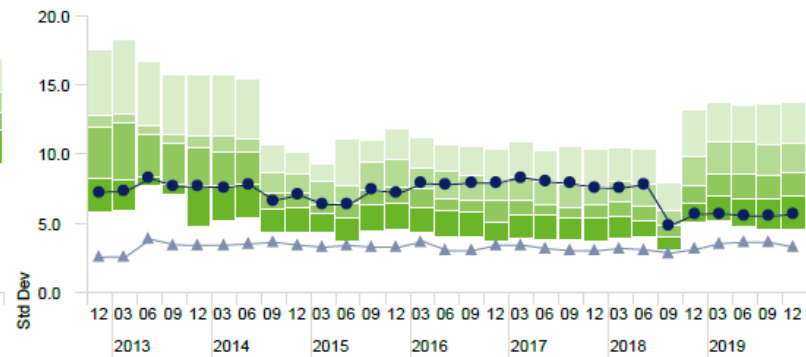


—PIMCO All Asset Instl

—PIMCO All Asset Custom Benchmark

Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



—PIMCO All Asset Instl

—PIMCO All Asset Custom Benchmark

Calendar Year Returns

	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
PIMCO All Asset Instl	13.7	18	2.4	13	15.4	11	0.8	82	0.8	71	-8.7	78	13.3	7	14.0	42	-5.0	22	12.2	67
PIMCO All Asset Custom Benchmark	8.5		7.6		8.1		0.2		4.9		0.0		6.1		5.6		-1.1		11.3	



Source: Morningstar

December 31, 2019

PIMCO ALL ASSET

Fund Name	All Asset Fund														
Total Fund Net Assets (\$US MM)	17,939.8														
	6/30/2014	12/31/2014	6/30/2015	12/31/2015	6/30/2016	12/31/2016	6/30/2017	12/31/2017	6/30/2018	12/31/2018	6/30/2019	9/30/2019	10/31/2019	11/30/2019	12/31/2019
Third Pillar	78.71%	74.17%	85.75%	81.91%	81.04%	74.27%	70.05%	70.82%	74.15%	74.69%	79.70%	79.83%	79.89%	79.61%	80.38%
Emerging Markets Equities	12.81%	11.83%	13.67%	14.11%	22.17%	18.77%	17.50%	17.76%	18.35%	22.87%	24.91%	25.77%	26.10%	25.51%	26.19%
RAE Emerging Markets Fund	-	-	-	-	4.22%	4.63%	4.47%	5.33%	5.31%	6.68%	8.70%	10.75%			
RAE PLUS EMG Fund	5.99%	4.12%	4.73%	4.65%	6.11%	3.39%	3.70%	6.41%	9.14%	11.95%	12.08%	10.54%			
RAE Low Volatility PLUS EMG Fund	6.80%	7.70%	8.94%	9.46%	11.83%	10.74%	9.33%	5.76%	2.97%	3.30%	2.84%	2.77%			
EqS Emerging Markets Fund	0.02%	0.02%	-	-	-	-	-	-	-	-	-	-			
RAFI Dynamic Multi-Factor EM Equity ETF	-	-	-	-	-	-	-	0.26%	0.92%	0.94%	1.30%	1.69%			
Commodities and REITs	8.76%	9.89%	6.36%	5.52%	5.53%	5.25%	6.29%	10.66%	10.41%	8.48%	6.06%	6.03%	8.27%	7.91%	8.02%
CommoditiesPLUS™ Strategy Fund	3.03%	3.06%	2.19%	1.68%	3.12%	3.47%	4.05%	5.38%	4.72%	3.25%	3.70%	4.02%			
CommodityRealReturn Strategy Fund®	1.66%	3.97%	2.18%	1.62%	0.89%	0.53%	1.05%	1.08%	1.10%	1.21%	1.00%	0.98%			
RealEstateRealReturn Strategy Fund	4.06%	2.86%	1.99%	2.23%	1.53%	1.26%	3.19%	4.20%	4.59%	4.02%	3.36%	3.03%			
Emerging Markets Bonds	19.86%	18.83%	22.45%	20.83%	17.67%	19.97%	20.55%	20.11%	18.62%	17.72%	15.47%	14.44%	14.44%	13.85%	13.94%
Emerging Local Bond Fund	7.42%	9.10%	9.79%	8.48%	6.94%	6.98%	6.76%	6.44%	5.70%	5.73%	3.93%	2.95%			
Emerging Markets Currency and Short-Term Investments Fund	7.10%	9.05%	12.29%	11.94%	10.73%	12.99%	13.80%	13.66%	12.92%	11.99%	11.54%	11.49%			
Emerging Markets Bond Fund	3.90%	0.47%	0.29%	0.32%	-	-	-	-	-	-	-	-			
Emerging Markets Corporate Bond Fund	1.43%	0.20%	0.07%	0.09%	-	-	-	-	-	-	-	-			
Credit	21.64%	14.21%	15.23%	15.32%	17.72%	17.46%	14.08%	12.40%	12.17%	8.16%	7.36%	6.54%	6.47%	6.20%	5.89%
High Yield Fund	1.11%	2.64%	2.88%	2.53%	2.90%	2.35%	1.01%	0.59%	0.58%	1.03%	0.71%	0.00%			
High Yield Spectrum Fund	3.69%	2.90%	3.20%	3.84%	4.67%	4.64%	2.50%	1.55%	1.59%	1.59%	1.40%	1.18%			
Income Fund	10.28%	6.21%	6.01%	6.34%	7.51%	7.63%	6.62%	6.27%	7.00%	5.54%	5.25%	5.36%			
Diversified Income Fund	3.21%	0.10%	0.21%	0.24%	0.57%	0.49%	0.15%	0.00%	0.00%	0.00%	0.00%	0.00%			
Low Duration Income Fund	1.75%	0.06%	0.33%	0.29%	-	-	-	-	-	-	-	-			
Senior Floating Rate Fund	1.79%	2.30%	2.61%	2.07%	2.06%	2.34%	3.81%	3.99%	2.99%	0.00%	0.00%	0.00%			
Convertible Fund	-	-	-	-	-	-	-	-	-	-	-	-			
European Convertible Fund	-	-	-	-	-	-	-	-	-	-	-	-			
Global Bonds	1.21%	0.35%	1.07%	1.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
International Bond Fund (Unhedged)	0.26%	0.30%	0.30%	0.29%	-	-	-	-	-	-	-	-			
Global Advantage Strategy Fund	0.95%	0.05%	0.76%	0.88%	-	-	-	-	-	-	-	-			
Global Bond Opportunities Fund (Unhedged)	-	-	-	-	-	-	-	-	-	-	-	-			
Inflation Linked Bonds	0.90%	2.73%	7.88%	7.90%	3.21%	3.85%	3.97%	3.75%	2.61%	1.93%	6.73%	7.15%	7.01%	7.98%	7.99%
Real Return Fund	0.29%	1.38%	1.29%	0.81%	0.18%	3.19%	3.53%	3.32%	2.16%	1.49%	1.06%	1.27%			
Long-Term Real Return Fund	0.53%	1.27%	6.50%	6.99%	2.91%	0.54%	0.44%	0.43%	0.44%	0.44%	5.67%	5.88%			
Global Advantage® Inflation-Linked Bond ETF	0.08%	0.08%	0.08%	0.10%	0.12%	0.12%	-	-	-	-	-	-			
Alternative Strategies	13.34%	16.33%	19.09%	17.05%	14.74%	8.98%	5.65%	6.15%	12.00%	15.54%	17.16%	17.91%	17.60%	18.15%	18.36%
Dynamic Bond Fund	2.53%	1.79%	2.44%	2.08%	1.96%	-	-	-	-	1.58%	1.49%	0.99%			
Credit Opportunities Bond Fund	2.78%	0.76%	0.44%	0.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Mortgage Opportunities and Bond Fund	0.55%	0.61%	0.66%	0.74%	0.78%	0.74%	0.72%	0.69%	0.71%	0.74%	0.79%	0.82%			
TRENDS Managed Futures Strategy Fund	0.16%	0.19%	0.20%	0.26%	0.29%	0.30%	0.28%	0.29%	0.29%	1.08%	1.00%	1.01%			
EqS Long/Short Fund	0.47%	0.49%	0.25%	-	-	-	-	-	-	-	-	-			
RAE Worldwide Long/Short PLUS Fund	-	3.08%	7.49%	7.96%	7.28%	5.73%	3.06%	3.03%	5.15%	6.25%	6.40%	6.61%			
RAE Fundamental Advantage PLUS Fund	2.62%	4.84%	3.75%	2.62%	2.20%	1.06%	1.59%	2.14%	5.85%	5.88%	7.48%	8.48%			
RAE Worldwide Fundamental Adv PLUS Fund	4.24%	4.57%	3.86%	3.16%	2.23%	1.15%	-	-	-	-	-	-			

Source: PIMCO



December 31, 2019

PIMCO ALL ASSET

	6/30/2014	12/31/2014	6/30/2015	12/31/2015	6/30/2016	12/31/2016	6/30/2017	12/31/2017	6/30/2018	12/31/2018	6/30/2019	9/30/2019	10/31/2019	11/30/2019	12/31/2019
Second Pillar	9.05%	13.80%	6.15%	10.78%	10.63%	14.67%	20.07%	19.88%	19.91%	19.63%	13.84%	14.06%	13.97%	14.14%	13.81%
US Core Bonds	3.10%	4.58%	3.17%	3.66%	6.28%	4.68%	7.71%	7.21%	6.46%	4.17%	4.18%	3.54%	3.58%	3.56%	3.48%
Total Return Fund	3.07%	2.25%	1.39%	1.65%	3.41%	1.92%	4.44%	4.90%	4.25%	2.07%	2.16%	1.83%			
Investment Grade Credit Bond Fund	0.02%	2.34%	1.78%	2.01%	2.87%	2.76%	3.26%	2.30%	2.21%	2.09%	2.00%	1.71%			
Mortgage-Backed Securities Fund	-	-	-	-	-	-	-	-	-	-	-	-			
GNMA and Government Securities Fund	-	-	-	-	-	-	-	-	-	-	-	-			
US Long Maturity Bonds	4.82%	7.70%	1.52%	2.31%	2.55%	5.30%	8.63%	8.70%	8.22%	9.56%	8.33%	6.74%	7.03%	7.23%	6.74%
Extended Duration Fund	-	-	-	-	0.42%	1.51%	2.91%	3.13%	3.52%	4.61%	3.47%	4.35%			
Long-Term US Government Fund	0.27%	3.91%	0.00%	0.00%	1.18%	2.41%	4.42%	4.29%	3.45%	3.64%	1.50%	1.62%			
Long-Term Credit Bond Fund	4.20%	1.93%	0.57%	0.88%	0.27%	0.17%	-	-	-	-	-	-			
Long Duration Total Return Fund	0.35%	1.86%	0.95%	1.42%	0.68%	1.20%	1.30%	1.28%	1.26%	1.31%	1.36%	0.76%			
Short-Term Bonds	1.13%	1.52%	1.46%	4.81%	1.80%	4.69%	3.73%	3.97%	5.23%	5.91%	3.35%	3.78%		3.35%	3.59%
Low Duration Fund	0.94%	0.53%	0.87%	1.54%	1.26%	2.44%	3.37%	3.34%	4.89%	5.33%	3.01%	3.46%			
Low Duration Exchange Traded Fund	0.20%	0.22%	0.24%	0.19%	-	-	-	-	-	-	-	-			
Short Term Fund	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-			
Government Money Market Fund	-	0.80%	0.35%	-	0.54%	2.26%	0.37%	0.63%	0.34%	0.56%	0.34%	0.32%			
Money Market Fund	-	-	-	3.13%	-	-	-	-	-	-	-	-			
Net Short Duration Instruments	-0.01%	-0.02%	-0.01%	-0.04%	0.00%	-0.01%	-0.01%	0.00%	0.00%	0.01%	0.00%	0.00%			
First Pillar	12.24%	12.03%	8.10%	7.32%	8.33%	11.06%	9.88%	9.30%	5.95%	5.68%	6.46%	6.11%	6.14%	6.25%	5.81%
US Equities	1.12%	4.03%	2.38%	1.53%	0.55%	0.25%	0.25%	0.27%	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RAE PLUS Fund	0.03%	0.55%	0.21%	-	-	-	-	-	-	-	-	-			
RAE Low Volatility PLUS Fund	0.41%	2.70%	1.74%	1.21%	0.55%	0.25%	0.25%	0.27%	0.28%	-	-	-			
RAE PLUS Small Fund	0.65%	0.74%	0.43%	0.32%	-	-	-	-	-	-	-	-			
StocksPLUS® Small Fund	0.02%	0.02%	-	-	-	-	-	-	-	-	-	-			
Fundamental IndexPLUS™	-	0.00%	-	-	-	-	-	-	-	-	-	-			
StocksPLUS® Fund	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-			
StocksPLUS® Absolute Return Fund	0.01%	0.01%	-	-	-	-	-	-	-	-	-	-			
Developed ex-US Equities	11.12%	8.00%	5.73%	5.79%	7.78%	10.81%	9.62%	9.03%	5.67%	5.68%	6.46%	6.11%	6.14%	6.25%	5.81%
RAE PLUS International Fund	3.16%	3.01%	1.60%	1.51%	1.56%	2.51%	3.45%	3.43%	0.50%	0.91%	1.33%	1.15%			
RAE Low Volatility PLUS Int'l Fund	5.73%	3.79%	4.13%	4.24%	3.35%	5.31%	2.50%	1.80%	1.83%	1.73%	1.91%	1.86%			
StocksPLUS® International Fund (USD-Hedged)	0.01%	0.01%	-	0.05%	2.58%	2.83%	2.94%	3.02%	3.08%	3.04%	3.22%	3.11%			
StocksPLUS® International Fund (Unhedged)	0.02%	0.02%	-	-	0.29%	0.16%	0.73%	0.77%	0.26%	-	-	-			
EqS Global Dividend Fund	0.01%	0.01%	-	-	-	-	-	-	-	-	-	-			
EqS Pathfinder Fund	2.19%	1.16%	-	-	-	-	-	-	-	-	-	-			

Source: PIMCO

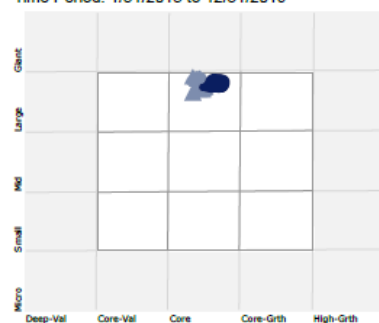


December 31, 2019

VANGUARD TOTAL WORLD STOCK INDEX I

Holdings Based Style Trail (5 Years)

Time Period: 1/31/2015 to 12/31/2019



• Vanguard Total World Stock Index I • FTSE Global All Cap ex US TR USD

Portfolio Statistics

	Fund	Index
# of Holdings	8,193	7,067
% Asset in Top 10 Holdings	10.4	9.1
Turnover Ratio %	7.0	
P/E Ratio	18.6	15.9
P/B Ratio	2.2	1.6
LT Earn Growth	8.9	8.2
Hist Earn Growth	8.4	5.1
12 Mo Yield	2.3	

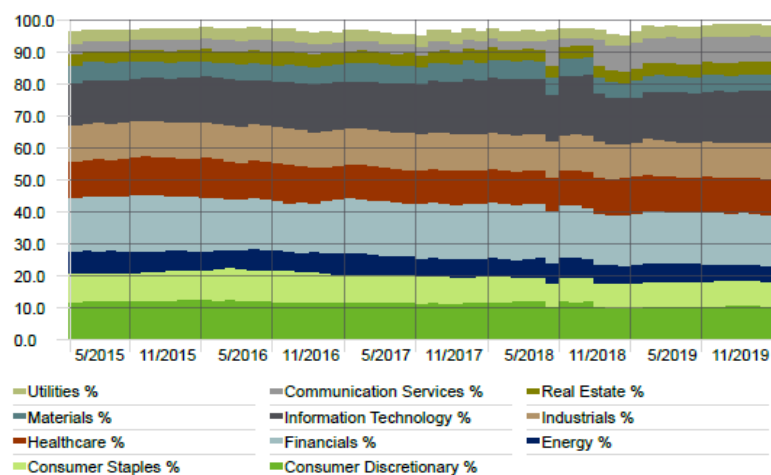
Market Capitalization Breakdown

	Fund	Index
Market Cap Giant %	45.5	43.6
Market Cap Large %	31.0	31.3
Market Cap Mid %	18.1	19.2
Market Cap Small %	5.0	5.2
Market Cap Micro %	0.5	0.7
Average Market Cap (mil)	45,268.0	23,757.8

Top 10 Holdings

	Portf Weight %	3 Month Ret %
Apple Inc	2.17	31.48
Microsoft Corp	2.05	13.80
Amazon.com Inc	1.33	6.45
Facebook Inc A	0.88	15.28
Cmt Market Liquidity Rate	0.81	
JPMorgan Chase & Co	0.75	19.21
Alphabet Inc Class C	0.73	9.68
Alphabet Inc A	0.68	9.68
Johnson & Johnson	0.65	13.48
Berkshire Hathaway Inc B	0.57	8.88

Historical Sector Allocations (5 Years)



Attribution (Quarter)

	Portfolio Weights	Benchmark Weights	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Active Effect
Communication Services	8.04		8.42				
Consumer Discretionary	10.81		8.27				
Consumer Staples	7.82		3.10				
Energy	4.97		6.37				
Financials	16.05		9.06				
Health Care	11.18		13.96				
Industrials	11.19		8.05				
Information Technology	16.22		14.25				
Materials	4.98		9.68				
Real Estate	4.05		3.97				
Utilities	3.34		2.68				
Unclassified	0.00		3.36				
Attribution Total	98.65		9.16				
Cash	0.71						
Bond	0.02						
Other	0.03						
Missing Performance	0.60						
Total	100.00						
Expense Ratio				0.02			
Residual(Reported - Attribution + Expense)				-0.09			



Source: Morningstar

December 31, 2019

VANGUARD TOTAL WORLD STOCK INDEX I

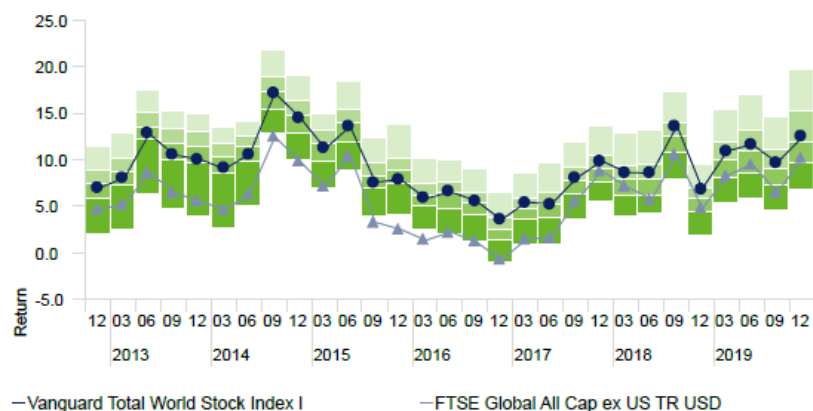
Risk & Return Characteristics (5 Years)

Time Period: 1/1/2015 to 12/31/2019

	Fund	Index
R2	93.1	100.0
Alpha	2.8	0.0
Beta	0.9	1.0
Std Dev	11.3	11.9
Up Capture Ratio	101.1	100.0
Down Capture Ratio	65.3	100.0
Sharpe Ratio (geo)	0.7	0.4
Information Ratio (geo)	0.8	
Tracking Error	3.1	0.0
Correlation	1.0	1.0

Rolling Return (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile

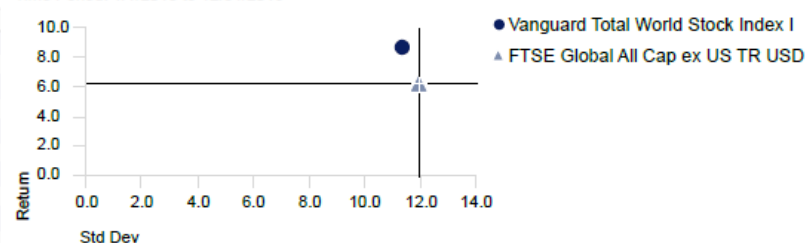


Calendar Year Returns

	2010	Rank	2011	Rank	2012	Rank	2013	Rank	2014	Rank	2015	Rank	2016	Rank	2017	Rank	2018	Rank	2019	Rank
Vanguard Total World Stock Index I	13.1	46	-7.7	48	17.4	40	23.0	63	4.0	34	-1.9	54	8.8	18	24.2	40	-9.7	52	26.8	43
FTSE Global All Cap ex US TR USD	13.2		-14.0		17.9		15.9		-3.1		-4.0		5.0		27.8		-14.4		22.2	

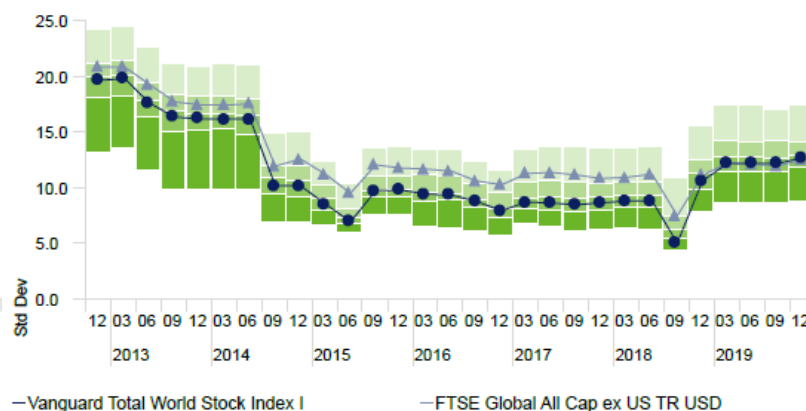
Risk & Return Illustration (5 Years)

Time Period: 1/1/2015 to 12/31/2019



Rolling Risk (3 Years)

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



Source: Morningstar

December 31, 2019

APPENDIX

NEPC, LLC

December 31, 2019

GLOSSARY OF TERMS

Alpha - Measures the relationship between the fund performance and the performance of another fund or benchmark index and equals the excess return while the other fund or benchmark index is zero.

Alpha Jensen - The average return on a portfolio over and above that predicted by the capital asset pricing model (CAPM), given the portfolio's beta and the average market return. Also known as the abnormal return or the risk adjusted excess return.

Annualized Excess Return over Benchmark - Annualized fund return minus the annualized benchmark return for the calculated return.

Annualized Return - A statistical technique whereby returns covering periods greater than one year are converted to cover a 12 month time span.

Beta - Measures the volatility or systematic risk and is equal to the change in the fund's performance in relation to the change in the assigned index's performance.

Information Ratio - A measure of the risk adjusted return of a financial security, asset, or portfolio.

Formula:

$$\frac{(\text{Annualized Return of Portfolio} - \text{Annualized Return of Benchmark}) / \text{Annualized Standard Deviation}(\text{Period Portfolio Return} - \text{Period Benchmark Return})}{\text{To annualize standard deviation, multiply the deviation by the square root of the number of periods per year where monthly returns per year equals 12 and quarterly returns is four periods per year.}}$$

R-Squared - Represents the percentage of a fund's movements that can be explained by movements in an index. R-Squared values range from 0 to 100. An R-Squared of 100 denotes that all movements of a fund are completely explained by movements in the index.

Sharpe Ratio - A measure of the excess return or risk premium per unit of risk in an investment asset or trading strategy.

Sortino Ratio - A method to differentiate between good and bad volatility in the Sharpe Ratio. The differentiation of up and down volatility allows the calculation to provide a risk adjusted measure of a security or fund's performance without upward price change penalties.

Formula:

$$\text{Calculation Average } (X-Y) / \text{Downside Deviation } (X-Y) * 2$$
 Where X=Return Series X Y = Return Series Y which is the risk free return (91 day T-bills)

Standard Deviation - The standard deviation is a statistical term that describes the distribution of results. It is a commonly used measure of volatility of returns of a portfolio, asset class, or security. The higher the standard deviation the more volatile the returns are.

Formula:

$$(\text{Annualized Return of Portfolio} - \text{Annualized Return of Risk Free}) / \text{Annualized Standard Deviation (Portfolio Returns)}$$

Tracking Error - Tracking error, also known as residual risk, is a measure of the degree to which a portfolio tracks its benchmark. It is also a measure of consistency of excess returns. Tracking error is computed as the annualized standard deviation of the difference between a portfolio's return and that of its benchmark.

Formula:

$$\text{Tracking Error} = \text{Standard Deviation } (X-Y) * \sqrt{\# \text{ of periods per year}}$$
 Where X = periods portfolio return and Y = the period's benchmark return
 For monthly returns, the periods per year = 12
 For quarterly returns, the periods per year = 4

Treynor Ratio - A risk-adjusted measure of return based on systematic risk. Similar to the Sharpe ratio with the difference being the Treynor ratio uses beta as the measurement of volatility.

Formula:

$$(\text{Portfolio Average Return} - \text{Average Return of Risk-Free Rate}) / \text{Portfolio Beta}$$

Up/Down Capture Ratio - A measure of what percentage of a market's returns is "captured" by a portfolio. For example, if the market declines 10% over some period, and the manager declines only 9%, then his or her capture ratio is 90%. In down markets, it is advantageous for a manager to have as low a capture ratio as possible. For up markets, the higher the capture ratio the better. Looking at capture ratios can provide insight into how a manager achieves excess returns. A value manager might typically have a lower capture ratio in both up and down markets, achieving excess returns by protecting on the downside, whereas a growth manager might fall more than the overall market in down markets, but achieve above-market returns in a rising market.

$$\text{UpsideCapture} = \text{TotalReturn}(\text{FundReturns}) / \text{TotalReturns}(\text{BMReturn}) \text{ when Period Benchmark Return is } > = 0$$

$$\text{DownsideCapture} = \text{TotalReturn}(\text{FundReturns}) / \text{TotalReturns}(\text{BMReturn}) \text{ when Benchmark } < 0$$

Data Source: InvestorForce



December 31, 2019

INFORMATION DISCLAIMER AND REPORTING METHODOLOGY

Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may not be available from the source or may be preliminary and subject to change.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodial bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- This report is provided as a management aid for the client's internal use only. Performance contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of Return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.



December 31, 2019



AGENDA ITEM SUMMARY

1. **NAME OF ITEM:** Defined Contribution Plan Quarterly Review
2. **INITIATED BY:** Sven P. Bartholomew, Chair Pro tem
3. **BOARD INFORMATION:** X **BOARD ACTION:**
4. **OUTCOME:** **BOARD POLICY:**
 Primary Outcome: Section 709 - Investments
 Enhance fiscal positioning
5. **BACKGROUND:**
 Michael Pratico, Senior Vice President, and Barry Schmitt, Principal, with CAPTRUST Financial Advisors, will provide a quarterly update regarding the Defined Contribution Plan at the February 27, 2020 Investment Committee meeting.

February 19, 2020

UNIVERSITY OF MAINE SYSTEM
4TH QUARTER, 2019

**DEFINED CONTRIBUTION
QUARTERLY REVIEW**

CAPTRUST
4208 Six Forks Road, Suite 1700
Raleigh, NC 27609

Our mission is to enrich the lives of our clients, colleagues and communities through sound financial advice, integrity, and a commitment to service beyond expectation.

IN THIS REVIEW

Period Ending 12.31.19 | **Q4 19**

University of Maine System

4.1

University of Maine System Defined Contribution Plans

4th Quarter, 2019 Quarterly Review

prepared by:

Michael S. Pratico

Senior Vice President | Financial Advisor

Barron V. Schmitt

Principal | Financial Advisor

Section 1

RETIREMENT INDUSTRY UPDATES

Section 2

MARKET COMMENTARY AND REVIEW

Section 3

PLAN INVESTMENT REVIEW

Section 4

FUND FACT SHEETS

Appendix

SECTION 1: RETIREMENT INDUSTRY UPDATES

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

SECTION 1: RETIREMENT INDUSTRY UPDATES

Industry Updates.....

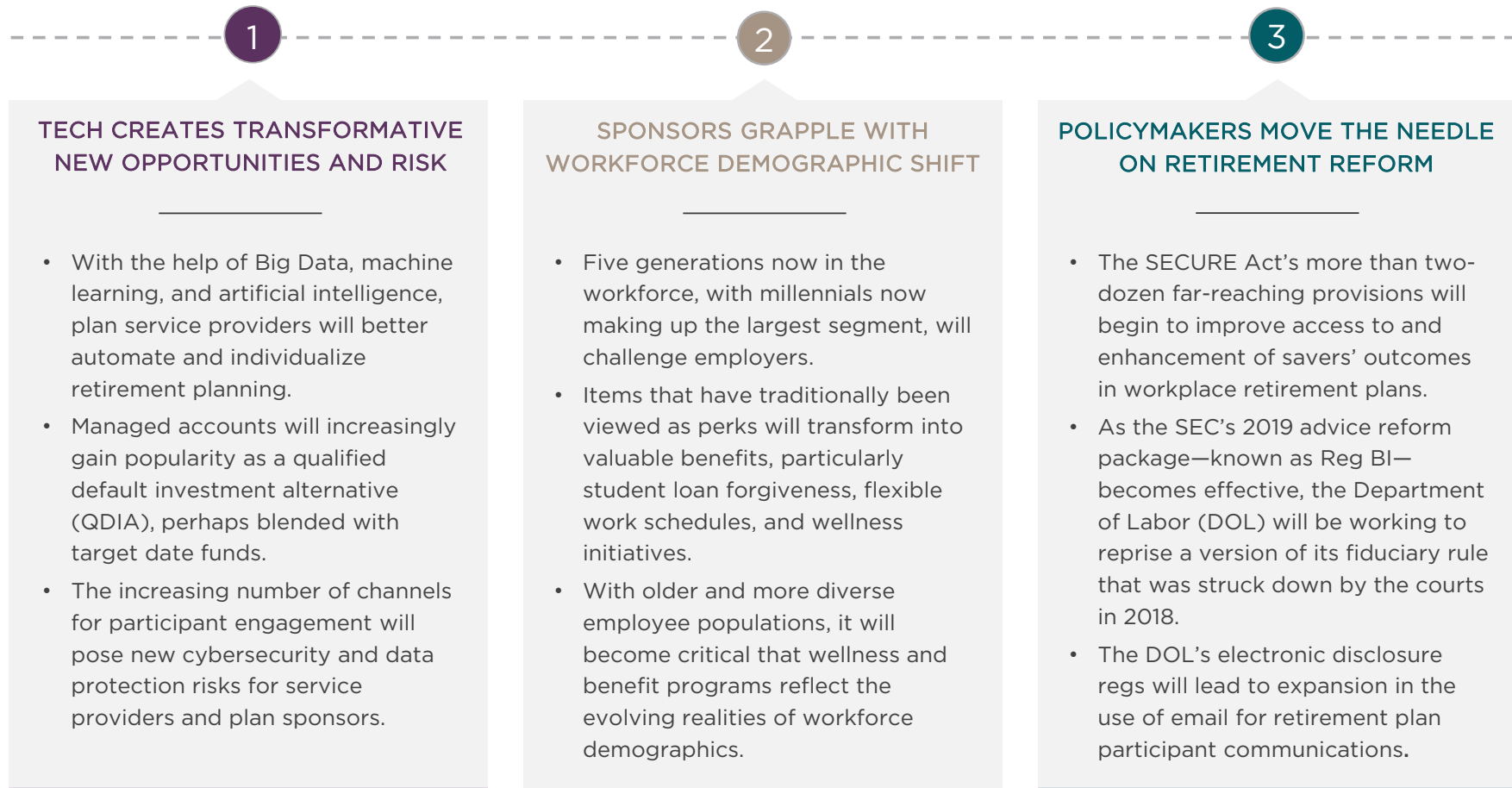
DEFINED CONTRIBUTION MARKETPLACE — INDUSTRY UPDATE

Period Ending 12.31.19 | Q4 19

4.1

2020 PREDICTIONS: PERFECT VISION OR STILL A LITTLE HAZY?

It's that time of year again: the time we pull out our crystal ball and make predictions about developments affecting plan sponsors and their participants in the new year.



DEFINED CONTRIBUTION MARKETPLACE — INDUSTRY UPDATE

Period Ending 12.31.19 | Q4 19

4.1

SECURE ACT PASSES

In December, as a part of the government's spending bill, Congress passed—and the president signed into law—legislation that includes the most comprehensive changes to private retirement plans in more than a decade. The Setting Every Community Up for Retirement Enhancement (SECURE) Act of 2019 is a combination of several bills that were introduced in the last Congress with bipartisan support and is expected to make it easier for employers to sponsor retirement plans for their employees.

IMPACTS MOST RETIREMENT PLANS

- Requires annual disclosure of lifetime income (pending DOL guidance)
- Requires long-term part-time workers to be eligible for 401(k) plans (effective 1.1.2021)
- Extends the current required minimum distribution requirements to age 72 (effective for anyone turning 70.5 after 1.1.2020)
- Modifies the treatment of custodial accounts on termination of 403(b) plans
- Allows penalty-free withdrawals for birth or adoption

SPECIFIC PLAN PROVISIONS

- Simplifies 401(k) safe harbor rules
- Raises auto-enrollment safe harbor cap to 15%
- Provides a safe harbor for lifetime-income provider selection
- Expands portability of lifetime income options
- Allows plans more time to adopt a safe harbor provision
- Eases rules for the creation of “open” multiple employer plans (MEPs)
- Modifies the nondiscrimination rules to protect longer-service participants

OUTCOMES

- Plan documents will likely need to be amended to comply with certain new regulations.
- Plan sponsors may wish to rethink optional plan provisions.
- Plan sponsors may need to adjust payroll feeds and files to account for long-term part-time employees.
- Service providers will need to update and invest in new technologies, such as:
 - Ability to support the new age-based rules
 - Required statement upgrades
 - Process and procedures for terminating individual contracts in 403(b) plan
 - New retirement income products, along with income and annuity portability
 - New scalable platforms and service models to serve the small-employer market segment
- Access to MEPs will expand, creating cost-effective savings plans for small employers, bringing the benefits of defined contribution plans to organizations of all sizes.

DEFINED CONTRIBUTION MARKETPLACE — INDUSTRY UPDATE

Period Ending 12.31.19 | Q4 19

4.1

YEAR IN REVIEW

CAPTRUST KEY MEASURES

- More than \$350 billion of client assets under advisement, including over \$30 billion of institutional discretionary assets under management
- 48 advisor locations – 11 new locations added in 2019
- 650 employees, a 29% increase from 2018
- CAPTRUST Community Foundation provided financial support to 85 charities enriching the lives of underprivileged children

INDUSTRY RECOGNITION

- *Financial Advisor Magazine* named CAPTRUST the No. 1 advisory firm for the fourth consecutive year in its annual RIA ranking.
- CAPTRUST advisors were featured on the National Association of Plan Advisors' top-advisor lists, including Top Women Advisors (9) and Aces (4), and the Financial Times Top 401 list (23).
- CAPTRUST was named to the *Triangle Business Journal's* Best Places to Work list for the sixth time.

INVESTMENT RESEARCH

- More than 30 on-site visits and over 3,500 due diligence calls
- Interviews with over 350 portfolio managers
- Annual oversight of more than 230 asset management firms
- Daily performance monitoring of more than 2,300 mutual funds and CITs

VENDOR MANAGEMENT

- More than 80 in-person visits with retirement plan service providers
- More than 180 vendor searches completed
- Created new database and application to automate capture, analysis, and tracking of client fee benchmarking data for faster and easier access

PARTICIPANT ENGAGEMENT

- Performed more than 30,000 individual advice sessions
- Expanded tools and services for executives and other key employees
- Launched several upgrades to captrustadvice.com, including videos, articles, and financial wellness tools
- Increased after-hours availability

NOTABLE INNOVATIONS

- Released 2019 Endowment and Foundation survey results
- Developed Blueprint Managed Advice discretionary managed account solution
- Upgraded data protection and cybersecurity standards
- Launched upgraded corporate website

Data as of 12.31.2019

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SECTION 2: MARKET COMMENTARY AND REVIEW

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

SECTION 2: MARKET COMMENTARY AND REVIEW	
Market Commentary.....	
Market Review.....	
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MARKET COMMENTARY

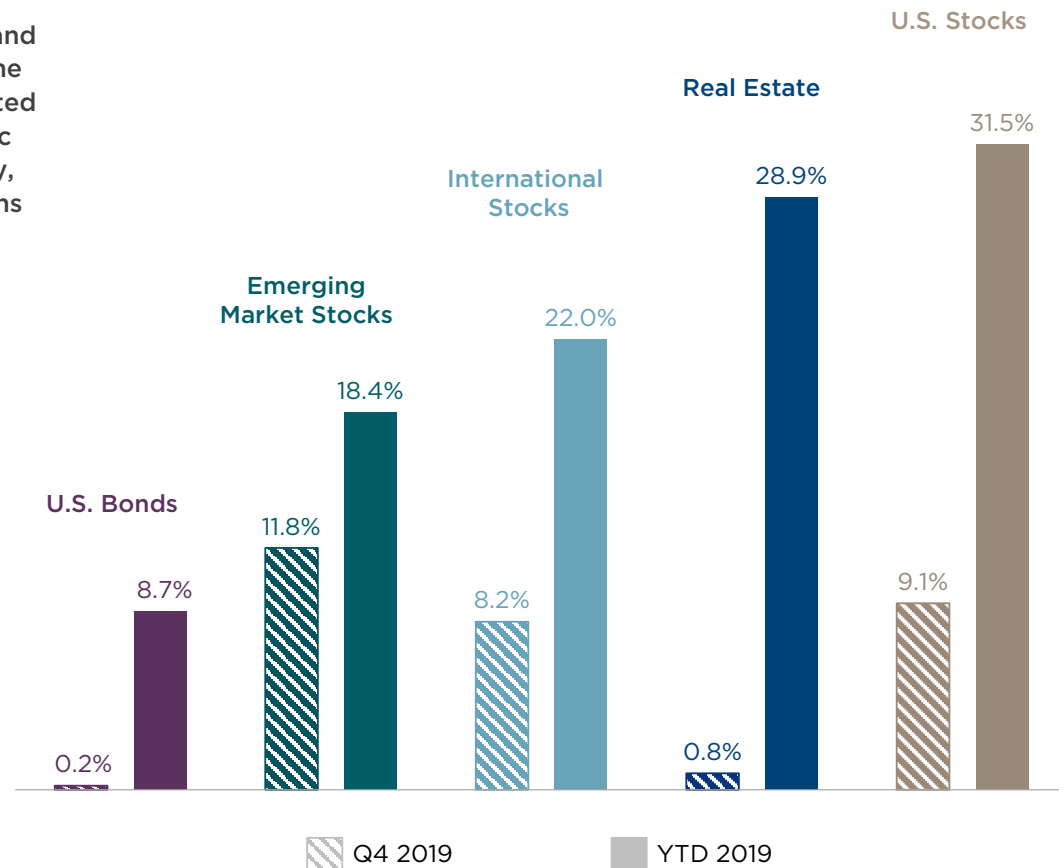
Period Ending 12.31.19 | Q4 19

4.1

STRONG FINISH TO 2019

All asset classes posted solid results for 2019. U.S. and international stocks and bonds performed well as the Federal Reserve and other central banks implemented policies to counter fears of slowing global economic growth. Despite distracting headlines along the way, patient investors were rewarded with generous gains during this news-driven year.

- While the economy grew only modestly in 2019, U.S. stocks posted their best year since 2013, aided by easing U.S.-China trade tensions and a boost from the Fed. The technology sector was especially strong last year.
- International developed and emerging market stocks also posted strong gains last year despite headwinds created by sluggish economic growth in Europe and China and a strong U.S. dollar.
- Bonds recorded their best year in more than a decade as interest rates fell significantly during the calendar year.
- Public real estate benefited from the helpful combination of low interest rates and favorable market demand.



Asset class returns are represented by the following indexes: S&P 500 Index (U.S. large-cap stocks), MSCI EAFE Index (international developed stocks), MSCI Emerging Markets Index (emerging market stocks), Bloomberg Barclays U.S. Aggregate Bond Index (U.S. bonds), and Dow Jones U.S. Real Estate Index (real estate).

MARKET COMMENTARY

Period Ending 12.31.19 | Q4 19

4.1

DIGGING DEEPER: STOCKS AND BONDS

Equities

	Q4 2019	YTD 2019	Last 12 Months
U.S. Stocks	9.1%	31.5%	31.5%
- Q4 Best Sector: Technology	14.4%	50.3%	50.3%
- Q4 Worst Sector: Real Estate	-0.5%	29.0%	29.0%
International Stocks	8.2%	22.0%	22.0%
Emerging Market Stocks	11.8%	18.4%	18.4%

Fixed Income

	12.31.19	9.30.19	12.31.18
1-Year U.S. Treasury Yield	1.59%	1.75%	2.63%
10-Year U.S. Treasury Yield	1.92%	1.68%	2.69%
	QTD 2019	YTD 2019	Last 12 Months
10-Year U.S. Treasury Total Return	-1.77%	8.90%	8.90%

Equities - Relative Performance by Market Capitalization and Style

Q4 2019				YTD 2019				Last 12 Months			
	Value	Blend	Growth		Value	Blend	Growth		Value	Blend	Growth
Large	7.4%	9.1%	10.6%	Large	26.5%	31.5%	36.4%	Large	26.5%	31.5%	36.4%
Mid	6.4%	7.1%	8.2%	Mid	27.1%	30.5%	35.5%	Mid	27.1%	30.5%	35.5%
Small	8.5%	9.9%	11.4%	Small	22.4%	25.5%	28.5%	Small	22.4%	25.5%	28.5%

Asset class returns are represented by the following indexes: S&P 500 Index (U.S. stocks), MSCI EAFE Index (international stocks), and MSCI Emerging Markets Index (emerging market stocks). Relative performance by market capitalization and style is based upon the Russell US Style Indexes except for large-cap blend, which is based upon the S&P 500 Index. Sources: Bloomberg, U.S. Treasury

MARKET COMMENTARY

Period Ending 12.31.19 | Q4 19

4.1

DIGGING DEEPER: FIXED INCOME MARKET

Interest Rates	3-Month	2-Year	5-Year	10-Year	30-Year	Mortgage Rate
September 2019	1.88%	1.63%	1.55%	1.68%	2.12%	3.72%
December 2019	1.55%	1.58%	1.69%	1.92%	2.39%	3.86%
Change	-0.33%	-0.05%	0.14%	0.24%	0.27%	0.14%

The Treasury yield curve steepened in the fourth quarter and is no longer inverted. Shorter maturity bond yields fell after the Federal Reserve cut overnight rates by 25 bps.

Bloomberg Barclays U.S. Aggregate Bond Index	Yield to Worst	Duration	Total Return Q4 2019	Spread	Treasury Rate	AA Spread	BBB Spread
September 2019	2.26%	5.78	0.18%	0.46%	1.80%	0.55%	1.52%
December 2019	2.31%	5.87		0.39%	1.92%	0.50%	1.25%
Change	0.05%	0.09		-0.07%	0.12%	-0.05%	-0.27%

After several strong quarters, the Bloomberg Barclays U.S. Aggregate Bond Index returned a modest 0.18% for the fourth quarter. A decline in BBB spreads supported performance, while an increase in overall interest rates held it back.

Bloomberg Barclays U.S. Long Credit Index	Yield to Worst	Duration	Total Return Q4 2019	Spread	Treasury Rate	AA Spread	BBB Spread
September 2019	3.64%	14.26	1.18%	1.67%	1.97%	1.05%	2.10%
December 2019	3.63%	14.27		1.39%	2.24%	0.91%	1.76%
Change	-0.01%	0.01		-0.28%	0.27%	-0.14%	-0.34%

The Bloomberg Barclays U.S. Long Credit Index returned 1.18% for the fourth quarter. Spread tightening, particularly in BBB-rated bonds drove returns, while an increase in long Treasury rates detracted from performance.

Sources: Bloomberg, U.S. Treasury, CAPTRUST Research

MARKET COMMENTARY

Period Ending 12.31.19 | Q4 19

4.1

ECONOMIC OUTLOOK

The global economic picture typically consists of favorable attributes (tailwinds) and challenges (headwinds). Here, we provide our perspective on both and offer our view on which side has the upper hand.

TAILWINDS

Consumer Optimism

- The U.S. consumer, a key driver of the economy, remains healthy.
- With unemployment at a 50-year low and plentiful job openings, consumer confidence is near 10-year highs. Other consumer health measures remain stable.
- From here, continued employment growth will be influenced by business confidence, which has suffered from trade uncertainty.

**More Stimulus**

- The Fed lowered short-term interest rates and is once again expanding its balance sheet by buying Treasuries.
- Other central banks are also in stimulus mode. Their actions have put a floor under global growth, as shown by a bottoming of manufacturing indexes in the U.S., China, and Germany.
- Accommodative monetary policy has given investors a green light to buy risky assets like stocks.

A China Trade Truce...

- The U.S. and China have reached a phase one trade deal, although the details remain elusive.
- Despite the lack of specifics, the announcement indicates a positive direction and de-escalation of tensions, which has been enough to boost the spirits of investors and business executives.

HEADWINDS

...But Linger Trade Uncertainty

- Despite the phase one announcement, investors are concerned that China trade tensions could re-escalate as phase two negotiations begin.
- With the 2020 election approaching, we could see trade rhetoric and tensions shift to other parts of the world.
- The potential for auto tariffs, for example, could threaten the fragile recoveries in Europe and China.

**Geopolitical Uncertainty**

- Investors remain wary of risks, including an early-2020 Brexit, U.S. elections, unrest in Hong Kong, and Middle East tensions.
- With no definitive Democrat frontrunner, the U.S. presidential outlook remains cloudy. Institutional investors expect the president's reelection, but his low approval rating and impeachment trial raise uncertainty.

Corporate Earnings Worries

- In 2019, more than 90% of the S&P 500's return came from higher valuations, as opposed to earnings growth.
- While 2020 earnings estimates reflect an improvement, estimates tend to start high and decline as the future becomes clearer.
- Corporate profit margins may face pressure from rising input costs and higher wages in 2020.

2019 finished far better than it started, as recession fears ebbed, trade tensions cooled, and global monetary stimulus boosted investors' appetites for risky assets.

MARKET COMMENTARY

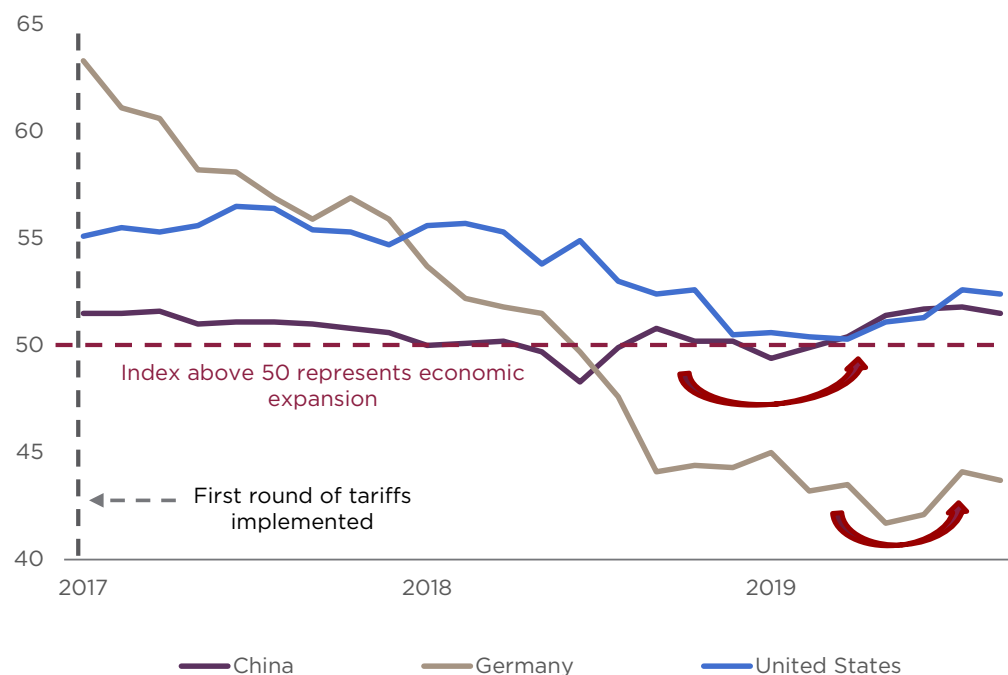
Period Ending 12.31.19 | Q4 19

4.1

GLOBAL ECONOMIC STABILIZATION

Global economic activity is recovering, thanks to supportive monetary policy moves that have kept interest rates low and a better outlook for U.S.-China trade. Over the past two years, trade uncertainty has been a major headwind to global growth. But with waning U.S.-China tensions and the anticipatory export pull-forward behind us, global manufacturing activity, as reflected in Manufacturing Purchasing Managers' Index (PMI) data, has improved. Looking ahead, we believe there is further upside if the policy backdrop remains supportive.

Manufacturing Purchasing Managers' Index (PMI)



Sources: Bloomberg, Markit, National Federation of Independent Business, CAPTRUST Research

OBSERVATIONS

- China's stimulus over the past 18 months continues to support economic recovery, as shown by improving PMI readings since July. This is significant because China's manufacturing activity represents a leading indicator of global economic activity.
- Manufacturing activity in Germany's export-oriented economy has declined sharply since the start of the U.S.-China trade dispute. Germany's PMI, while still weak, has bottomed and started to recover.
- U.S. manufacturing PMI has remained in expansion over the course of trade dispute.
- In November, the NFIB's Small Business Optimism Index posted its largest month-over-month gain since May 2018.
- Two years after passage of the Tax Cuts and Jobs Act, which included sweeteners for small businesses, owners continue to hire, raise wages, and invest in their businesses.

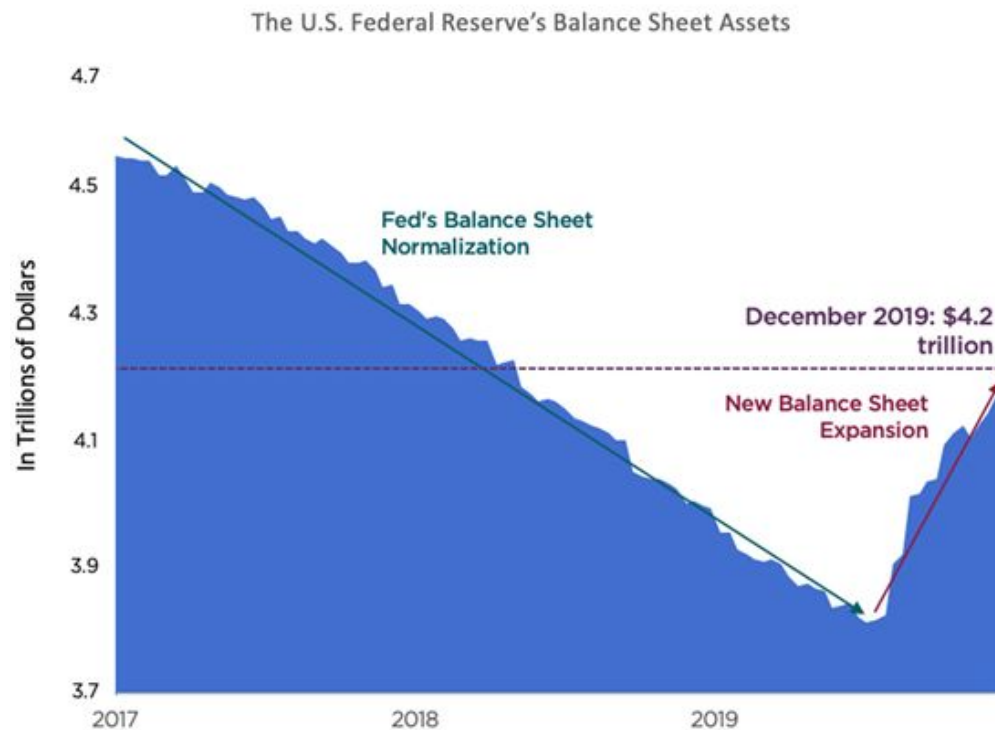
MARKET COMMENTARY

Period Ending 12.31.19 | Q4 19

4.1

MORE STIMULUS FROM THE FED

The Federal Reserve reversed course with its monetary policy in 2019. It paused its balance sheet normalization program and expanded its purchases of U.S. Treasuries to provide market liquidity. In contrast to its four 2018 rate hikes, the Fed cut its policy rate three times in 2019, for a total reduction of 0.75%. Although we do not expect more cuts in 2020, these measures have boosted investor confidence and market returns.



OBSERVATIONS

- Between 2009 and late 2014, the Fed's balance sheet ballooned as it conducted asset-purchase programs to support economic recovery.
- Starting in late 2017, the Fed's balance sheet shrank as a result of its balance sheet normalization program. But starting in October, the Fed began purchasing Treasuries, swelling its balance sheet to \$4.2 trillion by December.
- Interest rates remain supportive of growth, with a 1.75% fed funds rate—far lower than its 30-year average of 3%.
- Recession is more likely when real interest rates exceed growth rates. Today's inflation-adjusted fed funds rate holds near zero, well below the level that would restrict growth.
- The Treasury yield curve, the yield difference between short- and longer-term Treasuries, has steepened. This suggests improving confidence in future economic conditions.

Sources: Bloomberg, Federal Reserve, CAPTRUST Research

MARKET COMMENTARY

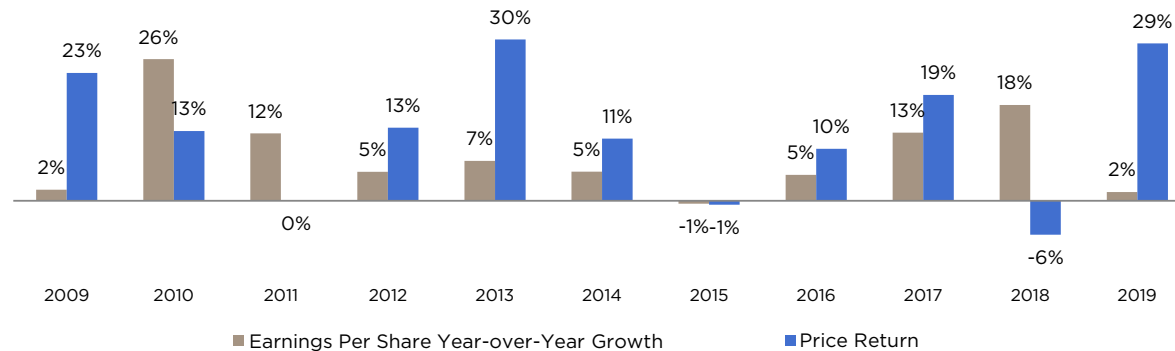
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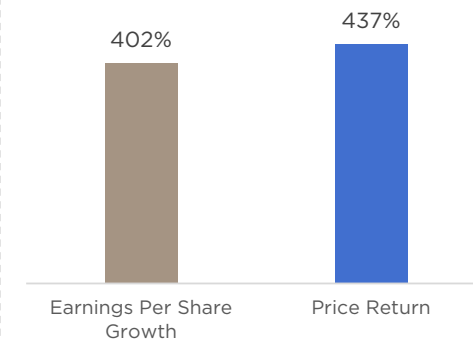
CORPORATE EARNINGS WORRIES

From 2009 to 2018, most of the S&P 500 Index's price return was generated by earnings growth. In 2019, with very little earnings growth, more than 90% of the index's return was generated by price-to-earnings multiple expansion. This means that stock prices rose because investors were willing to pay more for a dollar of earnings. Although 2020 earnings expectations reflect an improvement from 2019's paltry levels, earnings estimates tend to start high and decline as the future becomes clearer.

S&P 500 Calendar Year Price Return vs Year-over-Year Earnings Per Share Growth



2009-2018 Cumulative Growth



OBSERVATIONS

- Last year's increase in price-to-earnings multiples contributed to the S&P 500 Index's best price return since 2013, despite flat earnings growth. This was due in part to higher investor appetite for stocks after the Fed's move toward a stimulative policy stance. With the Fed likely on pause in 2020, market attention will shift toward corporate fundamentals.
- Wall Street analysts project S&P 500 stock profits to expand at a mid-to high-single-digit rate in 2020, compared with just 2% in 2019. They almost always overestimate future earnings and lower their projections as the forecast period nears.
- Rising labor and raw materials costs may compress margins in 2020. According to the NABE Business Condition Survey published in October, material costs rose for a 14th consecutive quarter, with more respondents reporting falling sales and anemic profit margins.

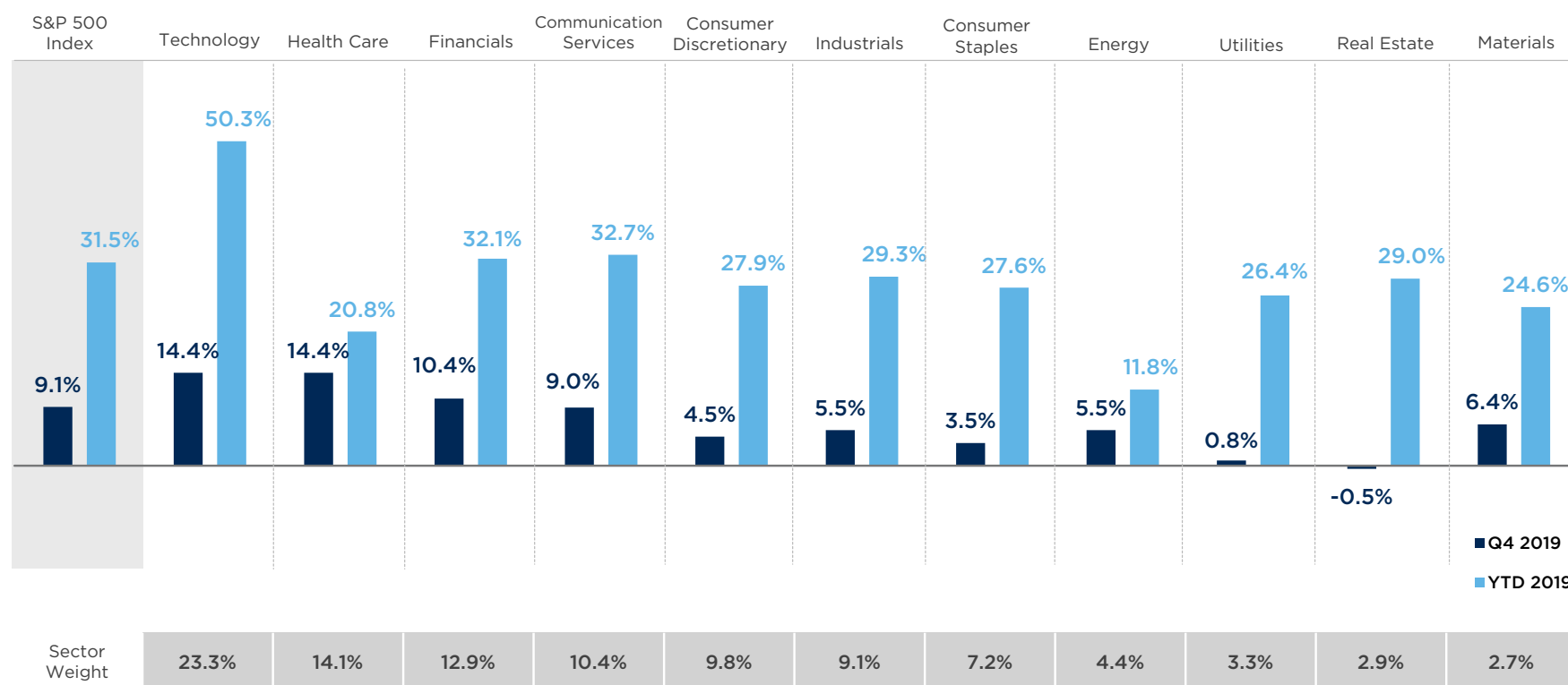
Sources: Bloomberg, National Association for Business Economics, CAPTRUST Research

Period Ending 12.31.19 | Q4 19

4.1

The S&P 500 Index is a market-capitalization-weighted index of U.S. large-cap stocks across a diverse set of industry sectors. The stocks represented in these 11 sectors generated a range of returns in the most recent quarter and for the year-to-date period.

Returns by S&P 500 Sector



All calculations are cumulative total return, not annualized, including dividends for the stated period. Past performance is not indicative of future returns.
Source: Bloomberg

ASSET CLASS RETURNS

Period Ending 12.31.19 | Q4 19

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2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
International Equities 26.86%	Large-Cap Growth 11.81%	Fixed Income 5.08%	Mid-Cap Growth 46.29%	Small-Cap Growth 29.09%	Fixed Income 7.84%	Mid-Cap Value 18.51%	Small-Cap Growth 43.30%	Mid-Cap Value 14.75%	Large-Cap Growth 5.67%	Small-Cap Value 31.74%	Large-Cap Growth 30.21%	Cash 1.87%	Large-Cap Growth 36.39%
Small-Cap Value 23.48%	International Equities 11.63%	Cash 1.51%	Large-Cap Growth 37.21%	Mid-Cap Growth 26.38%	Large-Cap Growth 2.64%	Small-Cap Value 18.05%	Mid-Cap Growth 35.74%	Large-Cap Value 13.45%	Fixed Income 0.55%	Mid-Cap Value 20.00%	International Equities 25.62%	Fixed Income 0.01%	Mid-Cap Growth 35.47%
Large-Cap Value 22.25%	Mid-Cap Growth 11.43%	Small-Cap Value -28.92%	Small-Cap Growth 34.47%	Mid-Cap Value 24.75%	Large-Cap Value 0.39%	International Equities 17.90%	Small-Cap Value 34.52%	Large-Cap Growth 13.05%	Cash 0.05%	Large-Cap Value 17.34%	Mid-Cap Growth 25.27%	Large-Cap Growth -1.51%	Small-Cap Growth 25.52%
Mid-Cap Value 20.22%	Fixed Income 7.39%	Large-Cap Value -36.85%	Mid-Cap Value 34.21%	Small-Cap Value 24.50%	Cash 0.10%	Large-Cap Value 17.51%	Large-Cap Growth 33.48%	Mid-Cap Growth 11.90%	Mid-Cap Growth -0.20%	Small-Cap Growth 11.32%	Small-Cap Growth 22.17%	Mid-Cap Growth -4.75%	Mid-Cap Value 27.06%
Small-Cap Growth 13.35%	Small-Cap Growth 7.05%	Mid-Cap Value -38.44%	International Equities 32.46%	Large-Cap Growth 16.71%	Mid-Cap Value -1.38%	Mid-Cap Growth 15.81%	Mid-Cap Value 33.46%	Fixed Income 5.97%	International Equities -0.39%	Mid-Cap Growth 7.33%	Large-Cap Value 13.66%	Large-Cap Value -8.27%	Large-Cap Value 26.54%
Mid-Cap Growth 10.66%	Cash 4.71%	Large-Cap Growth -38.44%	Small-Cap Value 20.58%	Large-Cap Value 15.51%	Mid-Cap Growth -1.65%	Large-Cap Growth 15.26%	Large-Cap Value 32.53%	Small-Cap Growth 5.60%	Small-Cap Growth -1.38%	Large-Cap Growth 7.08%	Mid-Cap Value 13.34%	Small-Cap Growth -9.31%	International Equities 22.66%
Large-Cap Growth 9.07%	Large-Cap Value -0.17%	Small-Cap Growth -38.54%	Large-Cap Value 19.69%	International Equities 8.21%	Small-Cap Growth -2.91%	Small-Cap Growth 14.59%	International Equities 23.29%	Small-Cap Value 4.22%	Large-Cap Value -3.83%	Fixed Income 2.65%	Small-Cap Value 7.84%	Mid-Cap Value -12.29%	Small-Cap Value 22.39%
Cash 5.08%	Mid-Cap Value -1.42%	International Equities -43.06%	Fixed Income 5.24%	Fixed Income 5.89%	Small-Cap Value -5.50%	Fixed Income 4.22%	Cash 0.07%	Cash 0.03%	Mid-Cap Value -4.78%	International Equities 1.51%	Fixed Income 3.54%	Small-Cap Value -12.86%	Fixed Income 8.72%
Fixed Income 4.08%	Small-Cap Value -9.78%	Mid-Cap Growth -44.32%	Cash 0.21%	Cash 0.13%	International Equities -11.73%	Cash 0.11%	Fixed Income -2.02%	International Equities -4.48%	Small-Cap Value -7.47%	Cash 0.33%	Cash 0.86%	International Equities -13.36%	Cash 2.28%

Small-Cap Value Stocks (Russell 2000 Value)	Large-Cap Value Stocks (Russell 1000 Value)	International Equities (MSCI EAFE)
Small-Cap Growth Stocks (Russell 2000 Growth)	Mid-Cap Growth Stocks (Russell Mid-Cap Growth)	Fixed Income (Bloomberg Barclays U.S. Aggregate Bond)
Large-Cap Growth Stocks (Russell 1000 Growth)	Mid-Cap Value Stocks (Russell Mid-Cap Value)	Cash (Merrill Lynch 3-Month Treasury Bill)

Source: Markov Processes, Inc., Bloomberg, Mobius

The information contained in this report is from sources believed to be reliable but not warranted by CAPTRUST Financial Advisors to be accurate or complete.

INDEX PERFORMANCE

Period Ending 12.31.19 | Q4 19

INDEXES	Q4 2019	YTD	2018	2017	2016	2015	2014	1 YEAR	3 YEAR	5 YEAR	10 YEAR
90-Day U.S. Treasury	0.46%	2.28%	1.87%	0.86%	0.33%	0.05%	0.03%	2.28%	1.67%	1.07%	0.58%
Bloomberg Barclays Government 1-3 Year	0.51%	3.59%	1.58%	0.45%	0.87%	0.57%	0.64%	3.59%	1.86%	1.40%	1.25%
Bloomberg Barclays Intermediate Govt	0.01%	5.20%	1.43%	1.14%	1.05%	1.18%	2.52%	5.20%	2.57%	1.99%	2.38%
Bloomberg Barclays Muni Bond	0.74%	7.54%	1.28%	5.45%	0.25%	3.30%	9.05%	7.54%	4.72%	3.53%	4.34%
Bloomberg Barclays Intermediate Govt/Credit	0.37%	6.80%	0.88%	2.14%	2.08%	1.07%	3.13%	6.80%	3.24%	2.57%	3.05%
Bloomberg Barclays Intermediate Credit	0.98%	9.52%	0.01%	3.67%	3.68%	0.90%	4.16%	9.52%	4.33%	3.50%	4.25%
Bloomberg Barclays Aggregate Bond	0.18%	8.72%	0.01%	3.54%	2.65%	0.55%	5.97%	8.72%	4.03%	3.05%	3.75%
Bloomberg Barclays Corporate IG Bond	1.18%	14.54%	-2.51%	6.42%	6.11%	-0.68%	7.46%	14.54%	5.92%	4.60%	5.54%
Bloomberg Barclays High Yield	2.61%	14.32%	-2.08%	7.50%	17.13%	-4.47%	2.45%	14.32%	6.37%	6.13%	7.57%
Bloomberg Barclays Global Aggregate	0.49%	6.84%	-1.20%	7.39%	2.09%	-3.15%	0.59%	6.84%	4.27%	2.31%	2.48%
Bloomberg Barclays U.S. Long Corporate	1.33%	23.89%	-7.24%	12.09%	10.97%	-4.61%	15.73%	23.89%	8.81%	6.40%	7.99%
S&P 500	9.07%	31.49%	-4.38%	21.83%	11.96%	1.38%	13.69%	31.49%	15.27%	11.70%	13.56%
Dow Jones Industrial Average	6.67%	25.34%	-3.48%	28.11%	16.50%	0.21%	10.04%	25.34%	15.73%	12.59%	13.40%
NASDAQ Composite	12.17%	35.23%	-3.88%	28.24%	7.50%	5.73%	13.40%	35.23%	18.57%	13.63%	14.74%
Russell 1000 Value	7.41%	26.54%	-8.27%	13.66%	17.34%	-3.83%	13.45%	26.54%	9.68%	8.29%	11.80%
Russell 1000	9.04%	31.43%	-4.78%	21.69%	12.05%	0.92%	13.24%	31.43%	15.05%	11.48%	13.54%
Russell 1000 Growth	10.62%	36.39%	-1.51%	30.21%	7.08%	5.67%	13.05%	36.39%	20.49%	14.63%	15.22%
Russell Mid-Cap Value Index	6.36%	27.06%	-12.29%	13.34%	20.00%	-4.78%	14.75%	27.06%	8.10%	7.62%	12.41%
Russell Mid-Cap Index	7.06%	30.54%	-9.06%	18.52%	13.80%	-2.44%	13.22%	30.54%	12.06%	9.33%	13.19%
Russell Mid-Cap Growth Index	8.17%	35.47%	-4.75%	25.27%	7.33%	-0.20%	11.90%	35.47%	17.36%	11.60%	14.24%
MSCI EAFE	8.21%	22.66%	-13.36%	25.62%	1.51%	-0.39%	-4.48%	22.66%	10.11%	6.18%	6.00%
MSCI ACWI ex U.S.	8.99%	22.13%	-13.78%	27.77%	5.01%	-5.25%	-3.44%	22.13%	10.40%	6.01%	5.45%
Russell 2000 Value	8.49%	22.39%	-12.86%	7.84%	31.74%	-7.47%	4.22%	22.39%	4.77%	6.99%	10.56%
Russell 2000	9.94%	25.52%	-11.01%	14.65%	21.31%	-4.41%	4.89%	25.52%	8.59%	8.23%	11.83%
Russell 2000 Growth	11.39%	28.48%	-9.31%	22.17%	11.32%	-1.38%	5.60%	28.48%	12.49%	9.34%	13.01%
MSCI Emerging Markets	11.93%	18.90%	-14.25%	37.75%	11.60%	-14.60%	-1.82%	18.90%	11.99%	6.01%	4.04%
Dow Jones U.S. Real Estate Index	0.79%	28.92%	-4.03%	9.84%	7.56%	2.14%	27.24%	28.92%	10.77%	8.35%	11.96%
HFRX Absolute Return Index	1.57%	4.37%	-0.49%	3.39%	0.31%	2.86%	0.79%	4.37%	2.40%	2.07%	1.16%
Consumer Price Index (Inflation)	0.17%	2.38%	1.91%	2.11%	2.07%	0.73%	0.76%	2.38%	2.13%	1.84%	1.76%
BLENDED BENCHMARKS	Q4 2019	YTD	2018	2017	2016	2015	2014	1 YEAR	3 YEAR	5 YEAR	10 YEAR
25% S&P 500/5% MSCI EAFE/70% BB Agg	2.76%	14.96%	-1.55%	8.93%	5.00%	0.92%	7.37%	14.96%	7.23%	5.49%	6.45%
30% S&P 500/10% MSCI EAFE/60% BB Agg	3.60%	16.79%	-2.44%	10.90%	5.43%	0.95%	7.21%	16.79%	8.11%	6.11%	7.09%
35% S&P 500/15% MSCI EAFE/50% BB Agg	4.44%	18.63%	-3.34%	12.90%	5.85%	0.97%	7.04%	18.63%	8.99%	6.71%	7.71%
40% S&P 500/20% MSCI EAFE/40% BB Agg	5.29%	20.48%	-4.25%	14.93%	6.26%	0.96%	6.87%	20.48%	9.86%	7.30%	8.31%
45% S&P 500/25% MSCI EAFE/30% BB Agg	6.15%	22.33%	-5.17%	16.99%	6.65%	0.93%	6.69%	22.33%	10.72%	7.88%	8.90%
60% S&P 500/40% Bloomberg Barclays Agg	5.46%	22.16%	-2.28%	14.25%	8.41%	1.40%	10.75%	22.16%	10.90%	8.44%	9.87%

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SECTION 3: PLAN INVESTMENT REVIEW

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

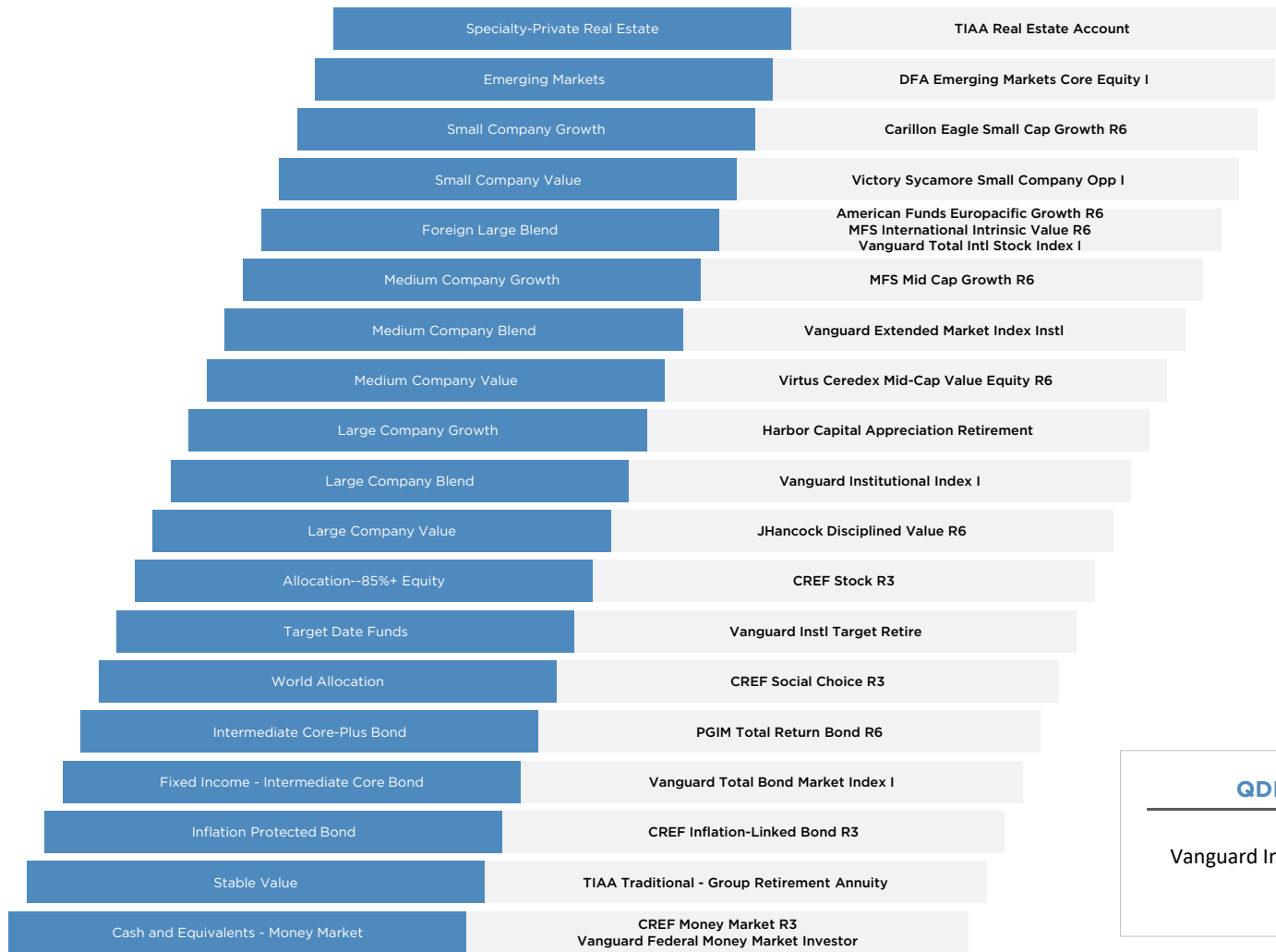
SECTION 3: PLAN INVESTMENT REVIEW

Plan Investment Menu Review.....
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PLAN INVESTMENT REVIEW | PLAN MENU

Period Ending 12.31.19 | Q4 19

University of Maine System

↑
EXPECTED RETURN**QDIA OPTION:**

Vanguard Instl Target Retirement

→ EXPECTED RISK

19


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PLAN INVESTMENT REVIEW | EXECUTIVE ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System

Plan Name	Plan/Contract Number	Plan Assets
University of Maine System Retirement Plan for Faculty and Professionals 403(b) DC	102965	\$1,310,875,970
University of Maine System Retirement Tax Deferred Annuity Plan 403(b) TDA	102966	\$187,107,543
University of Maine System Optional Retirement Savings 403(b)	102967	\$1,508,374
University of Maine System Optional Retirement Savings 401(a)	102968	\$1,159,708
University of Maine System Basic Retirement Plan for Classified Employees 403(b)	102969	\$41,625,140
University of Maine System Basic Retirement Plan for Classified Employees 401(a)	102970	\$79,152,359
University of Maine System Deferred Compensation Plan 457(b)	102971	\$36,105,245
TOTALS		\$1,657,534,339

 <p>University of Maine System *</p> <p>Alternate Carrier Transfers In</p> <p>Date Range October 1, 2019 - December 31, 2019</p>	
Alternate Carrier	Amount
FIDELITY	\$ 1,894.89
MID ATLANTIC TRUST COMPANY	\$ 2,230.76
TIAA***	\$ 3,446.20
VALIC	\$ 2,517.51
VOYA	\$ 90,000.92
Total	\$ 100,090.28
* 7 plans : 102965, 102966, 102967, 102968, 102969, 102970 & 102971	
*** Assets transferred from TPA contract	

 <p><u>Disclosures</u></p> <p>The data provided is for informational purposes only. It is not intended as an offer or solicitation or any similar communication being made for the purchase or sale of any financial instrument / product or as an official confirmation or as an official statement on any transaction.</p> <p>Pursuant to your request for information, enclosed you will find data related to the Plan(s) and/or Investments specified. You have solicited this information for fiduciary due diligence and review purposes related to the referenced Plan. This report should not be used for regulatory filings or for benefit statements.</p> <p>Please be advised that neither TIAA, CREF, nor their affiliates, in their satisfaction of your information request, make any representations or warranties, express or implied, as to the accuracy, completeness, or fitness for any purpose or use of this or other data for the Plan(s) that you may request. Teachers Advisors Inc. or its affiliates will not be liable for any direct, indirect, or consequential loss arising from any use of or reliance on the information supplied.</p>
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These numbers include non-approved assets held at TIAA-CREF that are no longer available for additional investments.

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PLAN BALANCES BY FUND

Period Ending 12.31.19 | Q4 19

University of Maine System

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Allocation Name	Ticker	University of Maine System Retirement Plan for Faculty and Professionals 403(b) DC - 102965	University of Maine System Retirement Tax Deferred Annuity Plan 403(b) TDA- 102966	University of Maine System Optional Retirement Savings 403(b) - 102967	University of Maine System Optional Retirement Savings 401(a) - 102968	Maine System Basic Retirement Plan for Classified Employees 403(b) - 102969	Maine System Basic Retirement Plan for Classified Employees 401(a) - 102970	University of Maine System Deferred Compensation Plan 457(b) - 102971	Grand Total	Percent to total
American Funds Europacific Growth R6	RERGX	\$ 9,672,370.92	\$ 1,429,054.72	\$ 5,343.09	\$ 4,677.65	\$ 171,968.79	\$ 225,733.19	\$ 250,336.98	\$ 11,759,485.34	0.71%
Carillon Eagle Small Cap Growth R6	HSRUX	\$ 6,508,214.34	\$ 611,385.85	\$ 4,534.23	\$ 4,388.97	\$ 207,115.79	\$ 301,098.67	\$ 198,220.77	\$ 7,834,958.62	0.47%
CREF Inflation-Linked Bond R3	QCILIX	\$ 14,207,232.28	\$ 2,577,254.71	\$ 15,684.94	\$ 16,120.50	\$ 579,185.15	\$ 1,108,346.60	\$ 556,737.21	\$ 19,060,561.39	1.15%
CREF Money Market R3	QCMMIX	\$ 8,129,320.37	\$ 600,644.13	\$ 5,915.06	\$ 5,574.10	\$ 373,650.96	\$ 1,018,253.82	\$ 414,214.61	\$ 10,547,573.05	0.64%
CREF Social Choice R3	QCSCIX	\$ 35,544,565.83	\$ 6,474,633.92	\$ 39,274.03	\$ 27,460.60	\$ 1,094,085.34	\$ 2,973,565.16	\$ 1,726,380.29	\$ 47,879,965.17	2.89%
CREF Stock R3	QCSTIX	\$ 195,835,513.10	\$ 18,496,850.86	\$ 183,312.59	\$ 120,649.80	\$ 3,472,055.62	\$ 9,005,731.98	\$ 2,047,030.99	\$ 229,161,144.94	13.83%
Default Loan	N/A	\$ 17,072.31	\$ 84,370.37	\$ -	\$ -	\$ 4,740.18	\$ -	\$ -	\$ 106,182.86	0.01%
DFA Emerging Markets Core Equity I	DFCEX	\$ 15,935,295.89	\$ 2,024,623.34	\$ 1,774.80	\$ 15,943.18	\$ 700,697.41	\$ 1,209,662.58	\$ 614,150.85	\$ 20,502,148.05	1.24%
Harbor Capital Appreciation Retirement	HNACX	\$ 20,681,306.34	\$ 2,848,879.52	\$ 1,855.55	\$ 1,622.94	\$ 2,313,270.90	\$ 2,063,982.82	\$ 922,815.29	\$ 28,833,733.36	1.74%
JHancock Disciplined Value R6	JDVWX	\$ 25,443,532.34	\$ 2,818,351.93	\$ 5,565.82	\$ 12,326.37	\$ 902,897.34	\$ 1,408,992.43	\$ 728,732.62	\$ 31,320,398.85	1.89%
MFS International Intrinsic Value R6	MINJX	\$ 24,978,213.96	\$ 3,776,935.60	\$ 4,421.81	\$ 18,497.04	\$ 1,064,739.00	\$ 2,019,170.36	\$ 823,093.01	\$ 32,685,070.78	1.97%
MFS Mid Cap Growth R6	OTCKX	\$ 11,673,848.04	\$ 1,310,577.06	\$ 680.67	\$ 22,325.02	\$ 452,989.51	\$ 810,040.03	\$ 349,438.25	\$ 14,619,898.58	0.88%
Frozen TIAA Annuities	NOAPRV	\$ 87,318,260.48	\$ 13,704,955.07	\$ 236,519.16	\$ 181,674.33	\$ 3,086,298.29	\$ 8,510,025.20	\$ 1,998,548.82	\$ 115,036,281.35	6.94%
PGIM Total Return Bond R6	PTRQX	\$ 27,366,505.73	\$ 7,327,538.33	\$ 5,082.43	\$ 21,432.28	\$ 1,161,683.84	\$ 1,960,443.63	\$ 1,370,229.73	\$ 39,212,915.97	2.37%
Self Directed Accounts	SDA	\$ 40,832,442.80	\$ 2,040,149.44	\$ -	\$ 133,724.80	\$ 2,252,293.84	\$ 1,904,743.19	\$ 719,228.67	\$ 47,882,582.74	2.89%
TIAA Real Estate Account	QREARX	\$ 54,664,345.35	\$ 11,443,286.31	\$ 40,287.52	\$ 59,303.46	\$ 2,255,859.27	\$ 3,929,434.10	\$ 2,167,161.80	\$ 74,559,677.81	4.50%
TIAA Traditional - Group Retirement Annuity	TIAA#	\$ 427,531,727.60	\$ 61,679,970.34	\$ 764,450.91	\$ 331,666.99	\$ 6,866,181.54	\$ 15,121,286.09	\$ 8,807,620.87	\$ 521,102,904.34	31.44%
Vanguard Extended Market Index Instl	VIEIX	\$ 15,576,512.52	\$ 2,844,363.54	\$ 2,334.57	\$ 517.22	\$ 438,567.16	\$ 809,625.36	\$ 831,053.46	\$ 20,502,973.83	1.24%
Vanguard Federal Money Market Investor	VMFXX	\$ 3,361,076.96	\$ 125,104.62	\$ -	\$ -	\$ 53,185.39	\$ 109,997.08	\$ 125,327.50	\$ 3,774,691.55	0.23%
Vanguard Institutional Index I	VINIX	\$ 82,898,695.65	\$ 13,602,142.68	\$ 11,594.08	\$ 5,824.43	\$ 1,289,814.91	\$ 4,180,264.83	\$ 3,062,222.80	\$ 105,050,559.38	6.34%
Vanguard Retirement Series	N/A	\$ 144,634,866.86	\$ 20,762,735.22	\$ 167,847.90	\$ 122,800.92	\$ 10,820,897.33	\$ 17,298,777.45	\$ 6,336,706.06	\$ 200,144,631.74	12.07%
Vanguard Total Bond Market Index I	VBPIX	\$ 6,320,932.82	\$ 1,984,202.48	\$ 629.65	\$ 13,765.01	\$ 129,103.04	\$ 308,509.47	\$ 265,365.70	\$ 9,022,508.17	0.54%
Vanguard Total Intl Stock Index I	VTSNX	\$ 17,819,654.10	\$ 3,174,244.58	\$ 3,743.26	\$ 916.51	\$ 701,376.40	\$ 1,193,286.23	\$ 753,201.76	\$ 23,646,422.84	1.43%
Victory Sycamore Small Company Opp I	VSOIX	\$ 14,318,882.19	\$ 2,291,654.77	\$ 2,426.23	\$ 34,643.97	\$ 623,905.71	\$ 856,009.52	\$ 432,748.62	\$ 18,560,271.01	1.12%
Virtus Ceredex Mid-Cap Value Equity R6	SMVZX	\$ 19,605,581.31	\$ 3,073,633.09	\$ 5,095.74	\$ 3,851.69	\$ 608,577.26	\$ 825,379.66	\$ 604,678.81	\$ 24,726,797.56	1.49%
Total		\$ 1,310,875,970.09	\$ 187,107,542.48	\$ 1,508,374.04	\$ 1,159,707.78	\$ 41,625,139.97	\$ 79,152,359.45	\$ 36,105,245.47	\$ 1,657,534,339.28	100%

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PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Retirement Plan for Faculty and Professionals 403(b) DC - 102965

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Cash and Equivalents - Money Market	CREF Money Market R3	\$33,741,188	2.87%	\$8,129,320	0.62%
Cash and Equivalents - Money Market	Vanguard Federal Money Market Investor	\$3,245,798	0.28%	\$3,361,077	0.26%
Stable Value	TIAA Traditional - Group Retirement Annuity	\$433,231,435	36.79%	\$427,531,728	32.61%
Inflation Protected Bond	CREF Inflation-Linked Bond R3	\$13,977,742	1.19%	\$14,207,232	1.08%
Fixed Income - Intermediate Core Bond	Vanguard Total Bond Market Index I	\$5,319,901	0.45%	\$6,320,933	0.48%
Intermediate Core-Plus Bond	PGIM Total Return Bond R6	\$21,528,393	1.83%	\$27,366,506	2.09%
World Allocation	CREF Social Choice R3	\$31,116,545	2.64%	\$35,544,566	2.71%
Target Date Ret Income Moderate	Vanguard Instl Trgt Retire Inc Instl	-	-	\$6,068,596	0.46%
Target Date Ret Income Moderate	Vanguard Target Retirement Income Inv	\$6,252,363	0.53%	-	-
Target Date 2015 Moderate	Vanguard Instl Trgt Retire 2015 Instl	-	-	\$6,956,395	0.53%
Target Date 2015 Moderate	Vanguard Target Retirement 2015 Inv	\$4,581,987	0.39%	-	-
Target Date 2020 Moderate	Vanguard Instl Trgt Retire 2020 Instl	-	-	\$16,795,458	1.28%
Target Date 2020 Moderate	Vanguard Target Retirement 2020 Inv	\$10,668,569	0.91%	-	-
Target Date 2025 Moderate	Vanguard Instl Trgt Retire 2025 Instl	-	-	\$20,619,050	1.57%
Target Date 2025 Moderate	Vanguard Target Retirement 2025 Inv	\$11,636,300	0.99%	-	-
Target Date 2030 Moderate	Vanguard Instl Trgt Retire 2030 Instl	-	-	\$19,422,867	1.48%
Target Date 2030 Moderate	Vanguard Target Retirement 2030 Inv	\$9,811,752	0.83%	-	-
Target Date 2035 Moderate	Vanguard Instl Trgt Retire 2035 Instl	-	-	\$20,819,922	1.59%

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PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Retirement Plan for Faculty and Professionals 403(b) DC - 102965

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Target Date 2035 Moderate	Vanguard Target Retirement 2035 Inv	\$10,491,797	0.89%	-	-
Target Date 2040 Moderate	Vanguard Instl Trgt Retire 2040 Instl	-	-	\$23,931,974	1.83%
Target Date 2040 Moderate	Vanguard Target Retirement 2040 Inv	\$10,398,259	0.88%	-	-
Target Date 2045 Moderate	Vanguard Instl Trgt Retire 2045 Instl	-	-	\$15,225,321	1.16%
Target Date 2045 Moderate	Vanguard Target Retirement 2045 Inv	\$8,840,912	0.75%	-	-
Target Date 2050 Moderate	Vanguard Instl Trgt Retire 2050 Instl	-	-	\$10,558,817	0.81%
Target Date 2050 Moderate	Vanguard Target Retirement 2050 Inv	\$5,836,262	0.50%	-	-
Target Date 2055 Moderate	Vanguard Instl Trgt Retire 2055 Instl	-	-	\$3,622,960	0.28%
Target Date 2055 Moderate	Vanguard Target Retirement 2055 Inv	\$2,071,139	0.18%	-	-
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2060 Instl	-	-	\$569,656	0.04%
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2065 Instl	-	-	\$43,851	0.00%
Target Date 2060+ Moderate	Vanguard Target Retirement 2060 Inv	\$244,692	0.02%	-	-
Target Date 2060+ Moderate	Vanguard Target Retirement 2065 Inv	\$0	0.00%	-	-
Allocation--85%+ Equity	CREF Stock R3	\$175,595,931	14.91%	\$195,835,513	14.94%
Large Company Value	JHancock Disciplined Value R6	\$16,925,133	1.44%	\$25,443,532	1.94%
Large Company Blend	Vanguard Institutional Index I	\$35,014,254	2.97%	\$82,898,696	6.32%
Large Company Growth	Harbor Capital Appreciation Retirement	\$10,165,637	0.86%	\$20,681,306	1.58%
Medium Company Value	Virtus Ceredex Mid-Cap Value Equity R6	\$9,207,455	0.78%	\$19,605,581	1.50%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Retirement Plan for Faculty and Professionals 403(b) DC - 102965

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Medium Company Blend	Vanguard Extended Market Index Instl	\$14,041,707	1.19%	\$15,576,513	1.19%
Medium Company Growth	Goldman Sachs Growth Opportunities R6	\$5,113,494	0.43%	-	-
Medium Company Growth	MFS Mid Cap Growth R6	-	-	\$11,673,848	0.89%
Foreign Large Blend	American Funds Europacific Growth R6	-	-	\$9,672,371	0.74%
Foreign Large Blend	MFS International Intrinsic Value R6	\$19,243,386	1.63%	\$24,978,214	1.91%
Foreign Large Blend	Vanguard Total Intl Stock Index I	\$12,831,913	1.09%	\$17,819,654	1.36%
Foreign Large Growth	Oppenheimer International Growth I	\$3,309,664	0.28%	-	-
Small Company Value	Victory Sycamore Small Company Opp I	\$7,696,760	0.65%	\$14,318,882	1.09%
Small Company Growth	Carillon Eagle Small Cap Growth R6	\$3,516,252	0.30%	\$6,508,214	0.50%
Emerging Markets	DFA Emerging Markets Core Equity I	\$12,978,914	1.10%	\$15,935,296	1.22%
Specialty-Private Real Estate	TIAA Real Estate Account	\$52,094,873	4.42%	\$54,664,345	4.17%
Other Assets	Frozen TIAA Annuities	\$126,995,957	10.78%	\$87,318,260	6.66%
Self-Directed Brokerage	Self Directed Accounts	\$49,871,532	4.23%	\$40,832,443	3.11%
Loan	Default Loan	\$16,365	0.00%	\$17,072	0.00%
TOTALS		\$1,177,614,259	100%	\$1,310,875,970	100%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Retirement Tax Deferred Annuity Plan 403(b) TDA- 102966

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Cash and Equivalents - Money Market	CREF Money Market R3	\$2,776,789	1.77%	\$600,644	0.32%
Cash and Equivalents - Money Market	Vanguard Federal Money Market Investor	\$213,653	0.14%	\$125,105	0.07%
Stable Value	TIAA Traditional - Group Retirement Annuity	\$56,098,968	35.75%	\$61,679,970	32.96%
Inflation Protected Bond	CREF Inflation-Linked Bond R3	\$2,381,360	1.52%	\$2,577,255	1.38%
Fixed Income - Intermediate Core Bond	Vanguard Total Bond Market Index I	\$1,339,285	0.85%	\$1,984,202	1.06%
Intermediate Core-Plus Bond	PGIM Total Return Bond R6	\$5,142,723	3.28%	\$7,327,538	3.92%
World Allocation	CREF Social Choice R3	\$5,187,134	3.31%	\$6,474,634	3.46%
Target Date Ret Income Moderate	Vanguard Instl Trgt Retire Inc Instl	-	-	\$2,653,495	1.42%
Target Date Ret Income Moderate	Vanguard Target Retirement Income Inv	\$1,672,675	1.07%	-	-
Target Date 2015 Moderate	Vanguard Instl Trgt Retire 2015 Instl	-	-	\$1,002,481	0.54%
Target Date 2015 Moderate	Vanguard Target Retirement 2015 Inv	\$841,090	0.54%	-	-
Target Date 2020 Moderate	Vanguard Instl Trgt Retire 2020 Instl	-	-	\$4,032,173	2.16%
Target Date 2020 Moderate	Vanguard Target Retirement 2020 Inv	\$2,788,232	1.78%	-	-
Target Date 2025 Moderate	Vanguard Instl Trgt Retire 2025 Instl	-	-	\$5,065,172	2.71%
Target Date 2025 Moderate	Vanguard Target Retirement 2025 Inv	\$3,610,502	2.30%	-	-
Target Date 2030 Moderate	Vanguard Instl Trgt Retire 2030 Instl	-	-	\$2,983,277	1.59%
Target Date 2030 Moderate	Vanguard Target Retirement 2030 Inv	\$1,721,577	1.10%	-	-
Target Date 2035 Moderate	Vanguard Instl Trgt Retire 2035 Instl	-	-	\$1,849,209	0.99%

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PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Retirement Tax Deferred Annuity Plan 403(b) TDA- 102966

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Target Date 2035 Moderate	Vanguard Target Retirement 2035 Inv	\$1,117,230	0.71%	-	-
Target Date 2040 Moderate	Vanguard Instl Trgt Retire 2040 Instl	-	-	\$2,165,688	1.16%
Target Date 2040 Moderate	Vanguard Target Retirement 2040 Inv	\$980,701	0.62%	-	-
Target Date 2045 Moderate	Vanguard Instl Trgt Retire 2045 Instl	-	-	\$505,221	0.27%
Target Date 2045 Moderate	Vanguard Target Retirement 2045 Inv	\$304,310	0.19%	-	-
Target Date 2050 Moderate	Vanguard Instl Trgt Retire 2050 Instl	-	-	\$425,029	0.23%
Target Date 2050 Moderate	Vanguard Target Retirement 2050 Inv	\$193,325	0.12%	-	-
Target Date 2055 Moderate	Vanguard Instl Trgt Retire 2055 Instl	-	-	\$68,573	0.04%
Target Date 2055 Moderate	Vanguard Target Retirement 2055 Inv	\$72,237	0.05%	-	-
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2060 Instl	-	-	\$12,418	0.01%
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2065 Instl	-	-	\$0	0.00%
Target Date 2060+ Moderate	Vanguard Target Retirement 2060 Inv	\$4,452	0.00%	-	-
Target Date 2060+ Moderate	Vanguard Target Retirement 2065 Inv	\$0	0.00%	-	-
Allocation--85%+ Equity	CREF Stock R3	\$16,035,834	10.22%	\$18,496,851	9.89%
Large Company Value	JHancock Disciplined Value R6	\$1,802,893	1.15%	\$2,818,352	1.51%
Large Company Blend	Vanguard Institutional Index I	\$9,011,773	5.74%	\$13,602,143	7.27%
Large Company Growth	Harbor Capital Appreciation Retirement	\$1,622,489	1.03%	\$2,848,880	1.52%
Medium Company Value	Virtus Ceredex Mid-Cap Value Equity R6	\$1,000,005	0.64%	\$3,073,633	1.64%

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PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Retirement Tax Deferred Annuity Plan 403(b) TDA- 102966

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Medium Company Blend	Vanguard Extended Market Index Instl	\$2,393,286	1.53%	\$2,844,364	1.52%
Medium Company Growth	Goldman Sachs Growth Opportunities R6	\$339,964	0.22%	-	-
Medium Company Growth	MFS Mid Cap Growth R6	-	-	\$1,310,577	0.70%
Foreign Large Blend	American Funds Europacific Growth R6	-	-	\$1,429,055	0.76%
Foreign Large Blend	MFS International Intrinsic Value R6	\$2,816,190	1.79%	\$3,776,936	2.02%
Foreign Large Blend	Vanguard Total Intl Stock Index I	\$1,968,499	1.25%	\$3,174,245	1.70%
Foreign Large Growth	Oppenheimer International Growth I	\$373,437	0.24%	-	-
Small Company Value	Victory Sycamore Small Company Opp I	\$1,550,403	0.99%	\$2,291,655	1.22%
Small Company Growth	Carillon Eagle Small Cap Growth R6	\$244,205	0.16%	\$611,386	0.33%
Emerging Markets	DFA Emerging Markets Core Equity I	\$1,566,956	1.00%	\$2,024,623	1.08%
Specialty-Private Real Estate	TIAA Real Estate Account	\$10,567,548	6.73%	\$11,443,286	6.12%
Other Assets	Frozen TIAA Annuities	\$16,811,525	10.71%	\$13,704,955	7.32%
Self-Directed Brokerage	Self Directed Accounts	\$2,311,384	1.47%	\$2,040,149	1.09%
Loan	Default Loan	\$64,204	0.04%	\$84,370	0.05%
TOTALS		\$156,926,838	100%	\$187,107,542	100%

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PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Optional Retirement Savings 403(b) - 102967

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Cash and Equivalents - Money Market	CREF Money Market R3	\$10,011	0.69%	\$5,915	0.39%
Cash and Equivalents - Money Market	Vanguard Federal Money Market Investor	\$0	0.00%	\$0	0.00%
Stable Value	TIAA Traditional - Group Retirement Annuity	\$708,840	48.69%	\$764,451	50.68%
Inflation Protected Bond	CREF Inflation-Linked Bond R3	\$16,036	1.10%	\$15,685	1.04%
Fixed Income - Intermediate Core Bond	Vanguard Total Bond Market Index I	\$129	0.01%	\$630	0.04%
Intermediate Core-Plus Bond	PGIM Total Return Bond R6	\$10,372	0.71%	\$5,082	0.34%
World Allocation	CREF Social Choice R3	\$33,411	2.29%	\$39,274	2.60%
Target Date Ret Income Moderate	Vanguard Instl Trgt Retire Inc Instl	-	-	\$47,960	3.18%
Target Date Ret Income Moderate	Vanguard Target Retirement Income Inv	\$270	0.02%	-	-
Target Date 2015 Moderate	Vanguard Instl Trgt Retire 2015 Instl	-	-	\$16,037	1.06%
Target Date 2015 Moderate	Vanguard Target Retirement 2015 Inv	\$155	0.01%	-	-
Target Date 2020 Moderate	Vanguard Instl Trgt Retire 2020 Instl	-	-	\$58,590	3.88%
Target Date 2020 Moderate	Vanguard Target Retirement 2020 Inv	\$50,294	3.45%	-	-
Target Date 2025 Moderate	Vanguard Instl Trgt Retire 2025 Instl	-	-	\$6,886	0.46%
Target Date 2025 Moderate	Vanguard Target Retirement 2025 Inv	\$2,218	0.15%	-	-
Target Date 2030 Moderate	Vanguard Instl Trgt Retire 2030 Instl	-	-	\$35,117	2.33%
Target Date 2030 Moderate	Vanguard Target Retirement 2030 Inv	\$0	0.00%	-	-
Target Date 2035 Moderate	Vanguard Instl Trgt Retire 2035 Instl	-	-	\$3,257	0.22%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Optional Retirement Savings 403(b) - 102967

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Target Date 2035 Moderate	Vanguard Target Retirement 2035 Inv	\$0	0.00%	-	-
Target Date 2040 Moderate	Vanguard Instl Trgt Retire 2040 Instl	-	-	\$0	0.00%
Target Date 2040 Moderate	Vanguard Target Retirement 2040 Inv	\$0	0.00%	-	-
Target Date 2045 Moderate	Vanguard Instl Trgt Retire 2045 Instl	-	-	\$0	0.00%
Target Date 2045 Moderate	Vanguard Target Retirement 2045 Inv	\$0	0.00%	-	-
Target Date 2050 Moderate	Vanguard Instl Trgt Retire 2050 Instl	-	-	\$0	0.00%
Target Date 2050 Moderate	Vanguard Target Retirement 2050 Inv	\$0	0.00%	-	-
Target Date 2055 Moderate	Vanguard Instl Trgt Retire 2055 Instl	-	-	\$0	0.00%
Target Date 2055 Moderate	Vanguard Target Retirement 2055 Inv	\$0	0.00%	-	-
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2060 Instl	-	-	\$0	0.00%
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2065 Instl	-	-	\$0	0.00%
Target Date 2060+ Moderate	Vanguard Target Retirement 2060 Inv	\$0	0.00%	-	-
Target Date 2060+ Moderate	Vanguard Target Retirement 2065 Inv	\$0	0.00%	-	-
Allocation--85%+ Equity	CREF Stock R3	\$202,585	13.92%	\$183,313	12.15%
Large Company Value	JHancock Disciplined Value R6	\$1,643	0.11%	\$5,566	0.37%
Large Company Blend	Vanguard Institutional Index I	\$12,154	0.83%	\$11,594	0.77%
Large Company Growth	Harbor Capital Appreciation Retirement	\$1,306	0.09%	\$1,856	0.12%
Medium Company Value	Virtus Ceredex Mid-Cap Value Equity R6	\$653	0.04%	\$5,096	0.34%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Optional Retirement Savings 403(b) - 102967

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Medium Company Blend	Vanguard Extended Market Index Instl	\$2,301	0.16%	\$2,335	0.15%
Medium Company Growth	Goldman Sachs Growth Opportunities R6	\$45	0.00%	-	-
Medium Company Growth	MFS Mid Cap Growth R6	-	-	\$681	0.05%
Foreign Large Blend	American Funds Europacific Growth R6	-	-	\$5,343	0.35%
Foreign Large Blend	MFS International Intrinsic Value R6	\$3,092	0.21%	\$4,422	0.29%
Foreign Large Blend	Vanguard Total Intl Stock Index I	\$2,712	0.19%	\$3,743	0.25%
Foreign Large Growth	Oppenheimer International Growth I	\$481	0.03%	-	-
Small Company Value	Victory Sycamore Small Company Opp I	\$1,625	0.11%	\$2,426	0.16%
Small Company Growth	Carillon Eagle Small Cap Growth R6	\$225	0.02%	\$4,534	0.30%
Emerging Markets	DFA Emerging Markets Core Equity I	\$1,342	0.09%	\$1,775	0.12%
Specialty-Private Real Estate	TIAA Real Estate Account	\$44,719	3.07%	\$40,288	2.67%
Other Assets	Frozen TIAA Annuities	\$349,219	23.99%	\$236,519	15.68%
Self-Directed Brokerage	Self Directed Accounts	\$0	0.00%	\$0	0.00%
TOTALS		\$1,455,840	100%	\$1,508,374	100%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Optional Retirement Savings 401(a) - 102968

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Cash and Equivalents - Money Market	CREF Money Market R3	\$8,004	0.72%	\$5,574	0.48%
Cash and Equivalents - Money Market	Vanguard Federal Money Market Investor	\$0	0.00%	\$0	0.00%
Stable Value	TIAA Traditional - Group Retirement Annuity	\$343,012	31.06%	\$331,667	28.60%
Inflation Protected Bond	CREF Inflation-Linked Bond R3	\$17,093	1.55%	\$16,120	1.39%
Fixed Income - Intermediate Core Bond	Vanguard Total Bond Market Index I	\$12,738	1.15%	\$13,765	1.19%
Intermediate Core-Plus Bond	PGIM Total Return Bond R6	\$24,413	2.21%	\$21,432	1.85%
World Allocation	CREF Social Choice R3	\$23,450	2.12%	\$27,461	2.37%
Target Date Ret Income Moderate	Vanguard Instl Trgt Retire Inc Instl	-	-	\$57,204	4.93%
Target Date Ret Income Moderate	Vanguard Target Retirement Income Inv	\$623	0.06%	-	-
Target Date 2015 Moderate	Vanguard Instl Trgt Retire 2015 Instl	-	-	\$13,657	1.18%
Target Date 2015 Moderate	Vanguard Target Retirement 2015 Inv	\$0	0.00%	-	-
Target Date 2020 Moderate	Vanguard Instl Trgt Retire 2020 Instl	-	-	\$48,739	4.20%
Target Date 2020 Moderate	Vanguard Target Retirement 2020 Inv	\$40,812	3.70%	-	-
Target Date 2025 Moderate	Vanguard Instl Trgt Retire 2025 Instl	-	-	\$2,019	0.17%
Target Date 2025 Moderate	Vanguard Target Retirement 2025 Inv	\$1,361	0.12%	-	-
Target Date 2030 Moderate	Vanguard Instl Trgt Retire 2030 Instl	-	-	\$368	0.03%
Target Date 2030 Moderate	Vanguard Target Retirement 2030 Inv	\$0	0.00%	-	-
Target Date 2035 Moderate	Vanguard Instl Trgt Retire 2035 Instl	-	-	\$814	0.07%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Optional Retirement Savings 401(a) - 102968

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Target Date 2035 Moderate	Vanguard Target Retirement 2035 Inv	\$0	0.00%	-	-
Target Date 2040 Moderate	Vanguard Instl Trgt Retire 2040 Instl	-	-	\$0	0.00%
Target Date 2040 Moderate	Vanguard Target Retirement 2040 Inv	\$0	0.00%	-	-
Target Date 2045 Moderate	Vanguard Instl Trgt Retire 2045 Instl	-	-	\$0	0.00%
Target Date 2045 Moderate	Vanguard Target Retirement 2045 Inv	\$0	0.00%	-	-
Target Date 2050 Moderate	Vanguard Instl Trgt Retire 2050 Instl	-	-	\$0	0.00%
Target Date 2050 Moderate	Vanguard Target Retirement 2050 Inv	\$0	0.00%	-	-
Target Date 2055 Moderate	Vanguard Instl Trgt Retire 2055 Instl	-	-	\$0	0.00%
Target Date 2055 Moderate	Vanguard Target Retirement 2055 Inv	\$0	0.00%	-	-
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2060 Instl	-	-	\$0	0.00%
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2065 Instl	-	-	\$0	0.00%
Target Date 2060+ Moderate	Vanguard Target Retirement 2060 Inv	\$0	0.00%	-	-
Target Date 2060+ Moderate	Vanguard Target Retirement 2065 Inv	\$0	0.00%	-	-
Allocation--85%+ Equity	CREF Stock R3	\$119,792	10.85%	\$120,650	10.40%
Large Company Value	JHancock Disciplined Value R6	\$7,768	0.70%	\$12,326	1.06%
Large Company Blend	Vanguard Institutional Index I	\$6,720	0.61%	\$5,824	0.50%
Large Company Growth	Harbor Capital Appreciation Retirement	\$1,077	0.10%	\$1,623	0.14%
Medium Company Value	Virtus Ceredex Mid-Cap Value Equity R6	\$551	0.05%	\$3,852	0.33%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Optional Retirement Savings 401(a) - 102968

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Medium Company Blend	Vanguard Extended Market Index Instl	\$550	0.05%	\$517	0.04%
Medium Company Growth	Goldman Sachs Growth Opportunities R6	\$18,314	1.66%	-	-
Medium Company Growth	MFS Mid Cap Growth R6	-	-	\$22,325	1.93%
Foreign Large Blend	American Funds Europacific Growth R6	-	-	\$4,678	0.40%
Foreign Large Blend	MFS International Intrinsic Value R6	\$16,797	1.52%	\$18,497	1.59%
Foreign Large Blend	Vanguard Total Intl Stock Index I	\$640	0.06%	\$917	0.08%
Foreign Large Growth	Oppenheimer International Growth I	\$200	0.02%	-	-
Small Company Value	Victory Sycamore Small Company Opp I	\$366	0.03%	\$34,644	2.99%
Small Company Growth	Carillon Eagle Small Cap Growth R6	\$408	0.04%	\$4,389	0.38%
Emerging Markets	DFA Emerging Markets Core Equity I	\$15,693	1.42%	\$15,943	1.37%
Specialty-Private Real Estate	TIAA Real Estate Account	\$56,699	5.13%	\$59,303	5.11%
Other Assets	Frozen TIAA Annuities	\$249,934	22.63%	\$181,674	15.67%
Self-Directed Brokerage	Self Directed Accounts	\$137,233	12.43%	\$133,725	11.53%
TOTALS		\$1,104,249	100%	\$1,159,708	100%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Basic Retirement Plan for Classified Employees 403(b) - 102969

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Cash and Equivalents - Money Market	CREF Money Market R3	\$1,371,931	3.91%	\$373,651	0.90%
Cash and Equivalents - Money Market	Vanguard Federal Money Market Investor	\$19,321	0.06%	\$53,185	0.13%
Stable Value	TIAA Traditional - Group Retirement Annuity	\$6,550,622	18.65%	\$6,866,182	16.50%
Inflation Protected Bond	CREF Inflation-Linked Bond R3	\$518,912	1.48%	\$579,185	1.39%
Fixed Income - Intermediate Core Bond	Vanguard Total Bond Market Index I	\$115,399	0.33%	\$129,103	0.31%
Intermediate Core-Plus Bond	PGIM Total Return Bond R6	\$851,848	2.43%	\$1,161,684	2.79%
World Allocation	CREF Social Choice R3	\$910,818	2.59%	\$1,094,085	2.63%
Target Date Ret Income Moderate	Vanguard Instl Trgt Retire Inc Instl	-	-	\$467,189	1.12%
Target Date Ret Income Moderate	Vanguard Target Retirement Income Inv	\$400,402	1.14%	-	-
Target Date 2015 Moderate	Vanguard Instl Trgt Retire 2015 Instl	-	-	\$660,575	1.59%
Target Date 2015 Moderate	Vanguard Target Retirement 2015 Inv	\$370,253	1.05%	-	-
Target Date 2020 Moderate	Vanguard Instl Trgt Retire 2020 Instl	-	-	\$2,167,248	5.21%
Target Date 2020 Moderate	Vanguard Target Retirement 2020 Inv	\$1,428,448	4.07%	-	-
Target Date 2025 Moderate	Vanguard Instl Trgt Retire 2025 Instl	-	-	\$2,318,848	5.57%
Target Date 2025 Moderate	Vanguard Target Retirement 2025 Inv	\$1,435,893	4.09%	-	-
Target Date 2030 Moderate	Vanguard Instl Trgt Retire 2030 Instl	-	-	\$1,476,628	3.55%
Target Date 2030 Moderate	Vanguard Target Retirement 2030 Inv	\$695,804	1.98%	-	-
Target Date 2035 Moderate	Vanguard Instl Trgt Retire 2035 Instl	-	-	\$1,040,941	2.50%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Basic Retirement Plan for Classified Employees 403(b) - 102969

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Target Date 2035 Moderate	Vanguard Target Retirement 2035 Inv	\$461,102	1.31%	-	-
Target Date 2040 Moderate	Vanguard Instl Trgt Retire 2040 Instl	-	-	\$1,287,603	3.09%
Target Date 2040 Moderate	Vanguard Target Retirement 2040 Inv	\$527,090	1.50%	-	-
Target Date 2045 Moderate	Vanguard Instl Trgt Retire 2045 Instl	-	-	\$629,380	1.51%
Target Date 2045 Moderate	Vanguard Target Retirement 2045 Inv	\$378,277	1.08%	-	-
Target Date 2050 Moderate	Vanguard Instl Trgt Retire 2050 Instl	-	-	\$316,252	0.76%
Target Date 2050 Moderate	Vanguard Target Retirement 2050 Inv	\$159,959	0.46%	-	-
Target Date 2055 Moderate	Vanguard Instl Trgt Retire 2055 Instl	-	-	\$339,771	0.82%
Target Date 2055 Moderate	Vanguard Target Retirement 2055 Inv	\$187,988	0.54%	-	-
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2060 Instl	-	-	\$109,252	0.26%
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2065 Instl	-	-	\$7,210	0.02%
Target Date 2060+ Moderate	Vanguard Target Retirement 2060 Inv	\$49,443	0.14%	-	-
Target Date 2060+ Moderate	Vanguard Target Retirement 2065 Inv	\$1,769	0.01%	-	-
Allocation--85%+ Equity	CREF Stock R3	\$3,053,369	8.69%	\$3,472,056	8.34%
Large Company Value	JHancock Disciplined Value R6	\$703,713	2.00%	\$902,897	2.17%
Large Company Blend	Vanguard Institutional Index I	\$989,242	2.82%	\$1,289,815	3.10%
Large Company Growth	Harbor Capital Appreciation Retirement	\$447,951	1.28%	\$2,313,271	5.56%
Medium Company Value	Virtus Ceredex Mid-Cap Value Equity R6	\$314,378	0.90%	\$608,577	1.46%

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PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Basic Retirement Plan for Classified Employees 403(b) - 102969

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Medium Company Blend	Vanguard Extended Market Index Instl	\$436,113	1.24%	\$438,567	1.05%
Medium Company Growth	Goldman Sachs Growth Opportunities R6	\$246,048	0.70%	-	-
Medium Company Growth	MFS Mid Cap Growth R6	-	-	\$452,990	1.09%
Foreign Large Blend	American Funds Europacific Growth R6	-	-	\$171,969	0.41%
Foreign Large Blend	MFS International Intrinsic Value R6	\$846,757	2.41%	\$1,064,739	2.56%
Foreign Large Blend	Vanguard Total Intl Stock Index I	\$470,116	1.34%	\$701,376	1.68%
Foreign Large Growth	Oppenheimer International Growth I	\$72,983	0.21%	-	-
Small Company Value	Victory Sycamore Small Company Opp I	\$213,626	0.61%	\$623,906	1.50%
Small Company Growth	Carillon Eagle Small Cap Growth R6	\$162,294	0.46%	\$207,116	0.50%
Emerging Markets	DFA Emerging Markets Core Equity I	\$597,850	1.70%	\$700,697	1.68%
Specialty-Private Real Estate	TIAA Real Estate Account	\$2,054,078	5.85%	\$2,255,859	5.42%
Other Assets	Frozen TIAA Annuities	\$5,424,116	15.44%	\$3,086,298	7.41%
Self-Directed Brokerage	Self Directed Accounts	\$2,656,996	7.56%	\$2,252,294	5.41%
Loan	Default Loan	-	-	\$4,740	0.01%
TOTALS		\$35,124,910	100%	\$41,625,140	100%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Basic Retirement Plan for Classified Employees 401(a) - 102970

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Cash and Equivalents - Money Market	CREF Money Market R3	\$2,164,846	3.23%	\$1,018,254	1.29%
Cash and Equivalents - Money Market	Vanguard Federal Money Market Investor	\$103,838	0.15%	\$109,997	0.14%
Stable Value	TIAA Traditional - Group Retirement Annuity	\$14,737,647	22.00%	\$15,121,286	19.10%
Inflation Protected Bond	CREF Inflation-Linked Bond R3	\$1,059,929	1.58%	\$1,108,347	1.40%
Fixed Income - Intermediate Core Bond	Vanguard Total Bond Market Index I	\$246,046	0.37%	\$308,509	0.39%
Intermediate Core-Plus Bond	PGIM Total Return Bond R6	\$1,497,133	2.23%	\$1,960,444	2.48%
World Allocation	CREF Social Choice R3	\$2,555,632	3.81%	\$2,973,565	3.76%
Target Date Ret Income Moderate	Vanguard Instl Trgt Retire Inc Instl	-	-	\$936,209	1.18%
Target Date Ret Income Moderate	Vanguard Target Retirement Income Inv	\$782,154	1.17%	-	-
Target Date 2015 Moderate	Vanguard Instl Trgt Retire 2015 Instl	-	-	\$1,419,320	1.79%
Target Date 2015 Moderate	Vanguard Target Retirement 2015 Inv	\$795,796	1.19%	-	-
Target Date 2020 Moderate	Vanguard Instl Trgt Retire 2020 Instl	-	-	\$3,047,795	3.85%
Target Date 2020 Moderate	Vanguard Target Retirement 2020 Inv	\$1,971,028	2.94%	-	-
Target Date 2025 Moderate	Vanguard Instl Trgt Retire 2025 Instl	-	-	\$3,798,857	4.80%
Target Date 2025 Moderate	Vanguard Target Retirement 2025 Inv	\$2,201,354	3.29%	-	-
Target Date 2030 Moderate	Vanguard Instl Trgt Retire 2030 Instl	-	-	\$2,494,237	3.15%
Target Date 2030 Moderate	Vanguard Target Retirement 2030 Inv	\$1,137,658	1.70%	-	-
Target Date 2035 Moderate	Vanguard Instl Trgt Retire 2035 Instl	-	-	\$1,768,927	2.23%

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PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Basic Retirement Plan for Classified Employees 401(a) - 102970

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Target Date 2035 Moderate	Vanguard Target Retirement 2035 Inv	\$929,292	1.39%	-	-
Target Date 2040 Moderate	Vanguard Instl Trgt Retire 2040 Instl	-	-	\$1,812,619	2.29%
Target Date 2040 Moderate	Vanguard Target Retirement 2040 Inv	\$809,531	1.21%	-	-
Target Date 2045 Moderate	Vanguard Instl Trgt Retire 2045 Instl	-	-	\$1,065,907	1.35%
Target Date 2045 Moderate	Vanguard Target Retirement 2045 Inv	\$613,813	0.92%	-	-
Target Date 2050 Moderate	Vanguard Instl Trgt Retire 2050 Instl	-	-	\$530,597	0.67%
Target Date 2050 Moderate	Vanguard Target Retirement 2050 Inv	\$290,146	0.43%	-	-
Target Date 2055 Moderate	Vanguard Instl Trgt Retire 2055 Instl	-	-	\$321,621	0.41%
Target Date 2055 Moderate	Vanguard Target Retirement 2055 Inv	\$173,984	0.26%	-	-
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2060 Instl	-	-	\$96,173	0.12%
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2065 Instl	-	-	\$6,515	0.01%
Target Date 2060+ Moderate	Vanguard Target Retirement 2060 Inv	\$45,984	0.07%	-	-
Target Date 2060+ Moderate	Vanguard Target Retirement 2065 Inv	\$1,769	0.00%	-	-
Allocation--85%+ Equity	CREF Stock R3	\$7,778,316	11.61%	\$9,005,732	11.38%
Large Company Value	JHancock Disciplined Value R6	\$1,025,700	1.53%	\$1,408,992	1.78%
Large Company Blend	Vanguard Institutional Index I	\$1,719,143	2.57%	\$4,180,265	5.28%
Large Company Growth	Harbor Capital Appreciation Retirement	\$1,027,266	1.53%	\$2,063,983	2.61%
Medium Company Value	Virtus Ceredex Mid-Cap Value Equity R6	\$439,521	0.66%	\$825,380	1.04%

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PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Basic Retirement Plan for Classified Employees 401(a) - 102970

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Medium Company Blend	Vanguard Extended Market Index Instl	\$736,299	1.10%	\$809,625	1.02%
Medium Company Growth	Goldman Sachs Growth Opportunities R6	\$412,042	0.61%	-	-
Medium Company Growth	MFS Mid Cap Growth R6	-	-	\$810,040	1.02%
Foreign Large Blend	American Funds Europacific Growth R6	-	-	\$225,733	0.29%
Foreign Large Blend	MFS International Intrinsic Value R6	\$1,517,269	2.26%	\$2,019,170	2.55%
Foreign Large Blend	Vanguard Total Intl Stock Index I	\$728,621	1.09%	\$1,193,286	1.51%
Foreign Large Growth	Oppenheimer International Growth I	\$104,291	0.16%	-	-
Small Company Value	Victory Sycamore Small Company Opp I	\$340,374	0.51%	\$856,010	1.08%
Small Company Growth	Carillon Eagle Small Cap Growth R6	\$198,893	0.30%	\$301,099	0.38%
Emerging Markets	DFA Emerging Markets Core Equity I	\$924,399	1.38%	\$1,209,663	1.53%
Specialty-Private Real Estate	TIAA Real Estate Account	\$3,628,969	5.42%	\$3,929,434	4.96%
Other Assets	Frozen TIAA Annuities	\$12,177,225	18.18%	\$8,510,025	10.75%
Self-Directed Brokerage	Self Directed Accounts	\$2,123,109	3.17%	\$1,904,743	2.41%
TOTALS		\$66,999,016	100%	\$79,152,359	100%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Deferred Compensation Plan 457(b) - 102971

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Cash and Equivalents - Money Market	CREF Money Market R3	\$1,205,273	4.00%	\$414,215	1.15%
Cash and Equivalents - Money Market	Vanguard Federal Money Market Investor	\$76,407	0.25%	\$125,328	0.35%
Stable Value	TIAA Traditional - Group Retirement Annuity	\$7,899,472	26.22%	\$8,807,621	24.39%
Inflation Protected Bond	CREF Inflation-Linked Bond R3	\$557,696	1.85%	\$556,737	1.54%
Fixed Income - Intermediate Core Bond	Vanguard Total Bond Market Index I	\$155,447	0.52%	\$265,366	0.73%
Intermediate Core-Plus Bond	PGIM Total Return Bond R6	\$1,102,632	3.66%	\$1,370,230	3.80%
World Allocation	CREF Social Choice R3	\$1,359,775	4.51%	\$1,726,380	4.78%
Target Date Ret Income Moderate	Vanguard Instl Trgt Retire Inc Instl	-	-	\$599,378	1.66%
Target Date Ret Income Moderate	Vanguard Target Retirement Income Inv	\$449,876	1.49%	-	-
Target Date 2015 Moderate	Vanguard Instl Trgt Retire 2015 Instl	-	-	\$1,077,723	2.98%
Target Date 2015 Moderate	Vanguard Target Retirement 2015 Inv	\$506,383	1.68%	-	-
Target Date 2020 Moderate	Vanguard Instl Trgt Retire 2020 Instl	-	-	\$1,501,061	4.16%
Target Date 2020 Moderate	Vanguard Target Retirement 2020 Inv	\$878,160	2.91%	-	-
Target Date 2025 Moderate	Vanguard Instl Trgt Retire 2025 Instl	-	-	\$1,049,234	2.91%
Target Date 2025 Moderate	Vanguard Target Retirement 2025 Inv	\$971,820	3.23%	-	-
Target Date 2030 Moderate	Vanguard Instl Trgt Retire 2030 Instl	-	-	\$806,872	2.23%
Target Date 2030 Moderate	Vanguard Target Retirement 2030 Inv	\$548,525	1.82%	-	-
Target Date 2035 Moderate	Vanguard Instl Trgt Retire 2035 Instl	-	-	\$566,931	1.57%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Deferred Compensation Plan 457(b) - 102971

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Target Date 2035 Moderate	Vanguard Target Retirement 2035 Inv	\$367,559	1.22%	-	-
Target Date 2040 Moderate	Vanguard Instl Trgt Retire 2040 Instl	-	-	\$466,254	1.29%
Target Date 2040 Moderate	Vanguard Target Retirement 2040 Inv	\$314,980	1.05%	-	-
Target Date 2045 Moderate	Vanguard Instl Trgt Retire 2045 Instl	-	-	\$213,711	0.59%
Target Date 2045 Moderate	Vanguard Target Retirement 2045 Inv	\$157,570	0.52%	-	-
Target Date 2050 Moderate	Vanguard Instl Trgt Retire 2050 Instl	-	-	\$51,341	0.14%
Target Date 2050 Moderate	Vanguard Target Retirement 2050 Inv	\$37,154	0.12%	-	-
Target Date 2055 Moderate	Vanguard Instl Trgt Retire 2055 Instl	-	-	\$3,325	0.01%
Target Date 2055 Moderate	Vanguard Target Retirement 2055 Inv	\$288	0.00%	-	-
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2060 Instl	-	-	\$877	0.00%
Target Date 2060+ Moderate	Vanguard Instl Trgt Retire 2065 Instl	-	-	\$0	0.00%
Target Date 2060+ Moderate	Vanguard Target Retirement 2060 Inv	\$0	0.00%	-	-
Target Date 2060+ Moderate	Vanguard Target Retirement 2065 Inv	\$0	0.00%	-	-
Allocation--85%+ Equity	CREF Stock R3	\$1,778,279	5.90%	\$2,047,031	5.67%
Large Company Value	JHancock Disciplined Value R6	\$606,838	2.01%	\$728,733	2.02%
Large Company Blend	Vanguard Institutional Index I	\$1,500,515	4.98%	\$3,062,223	8.48%
Large Company Growth	Harbor Capital Appreciation Retirement	\$403,685	1.34%	\$922,815	2.56%
Medium Company Value	Virtus Ceredex Mid-Cap Value Equity R6	\$282,698	0.94%	\$604,679	1.67%

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4.1

PLAN INVESTMENT REVIEW | ASSET SUMMARY

Period Ending 12.31.19 | Q4 19

University of Maine System Deferred Compensation Plan 457(b) - 102971

		— MARKET VALUE —			
FUND OPTION	CURRENT INVESTMENT NAME	12.31.2018	(%)	CURRENT	(%)
Medium Company Blend	Vanguard Extended Market Index Instl	\$671,538	2.23%	\$831,053	2.30%
Medium Company Growth	Goldman Sachs Growth Opportunities R6	\$149,980	0.50%	-	-
Medium Company Growth	MFS Mid Cap Growth R6	-	-	\$349,438	0.97%
Foreign Large Blend	American Funds Europacific Growth R6	-	-	\$250,337	0.69%
Foreign Large Blend	MFS International Intrinsic Value R6	\$604,312	2.01%	\$823,093	2.28%
Foreign Large Blend	Vanguard Total Intl Stock Index I	\$446,512	1.48%	\$753,202	2.09%
Foreign Large Growth	Oppenheimer International Growth I	\$98,030	0.33%	-	-
Small Company Value	Victory Sycamore Small Company Opp I	\$246,682	0.82%	\$432,749	1.20%
Small Company Growth	Carillon Eagle Small Cap Growth R6	\$124,423	0.41%	\$198,221	0.55%
Emerging Markets	DFA Emerging Markets Core Equity I	\$500,334	1.66%	\$614,151	1.70%
Specialty-Private Real Estate	TIAA Real Estate Account	\$2,076,757	6.89%	\$2,167,162	6.00%
Other Assets	Frozen TIAA Annuities	\$3,116,681	10.34%	\$1,998,549	5.54%
Self-Directed Brokerage	Self Directed Accounts	\$932,610	3.10%	\$719,229	1.99%
TOTALS		\$30,128,891	100%	\$36,105,245	100%

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4.1

INVESTMENT REVIEW | INVESTMENT POLICY MONITOR

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

INVESTMENT	QUANTITATIVE								QUALITATIVE		TOTALS	
	Risk-Adjusted Performance		vs. Peers Performance		Style		Confidence		Fund Management	Fund Firm	Overall	Total Score
	3 Yr	5 Yr	3 Yr	5 Yr	3 Yr	5 Yr	3 Yr	5 Yr				
Inflation Protected Bond CREF Inflation-Linked Bond R3	●	●	▼	▼	●	●	▼	▼	●	▼	●	85
Intermediate Core-Plus Bond PGIM Total Return Bond R6	●	●	●	●	●	●	●	●	●	●	●	100
World Allocation CREF Social Choice R3	●	●	●	●	●	●	●	●	●	▼	●	99
Large Company Value JHancock Disciplined Value R6	▼	▼	●	▼	●	●	●	▼	●	●	●	81
Large Company Growth Harbor Capital Appreciation Retirement	●	●	●	●	●	●	●	●	●	●	●	97
Medium Company Value Virtus Ceredex Mid-Cap Value Equity R6	●	●	●	●	●	●	●	●	●	●	●	100
Medium Company Growth MFS Mid Cap Growth R6	●	●	●	●	●	●	●	●	●	●	●	100
Foreign Large Blend American Funds Europacific Growth R6	●	●	●	●	●	●	●	●	●	●	●	100

LEGEND

●	IN GOOD STANDING	▼	MARKED FOR REVIEW	●	CONSIDER FOR TERMINATION
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The CAPTRUST Investment Policy Monitor ("Scorecard") is an illustration of our monitoring system and is designed to assist our clients in their efforts to provide fiduciary oversight to investment assets. It is not intended as a solicitation to buy any security. The scoring system measures quantitative areas as well as qualitative (or subjective) fields for actively managed investment options. Quantitative scoring areas include Risk Adjusted Performance (3 & 5 yr.); Performance vs. Relevant Peer Group; Style Attribution; and Confidence. Qualitative Scoring Areas measure the quality of the Management Team while also considering the stewardship of the investment option's parent company under Investment Family Items. Qualitative areas of analysis are subjective in nature. CAPTRUST typically requires at least 3 months of monitoring before including an investment in this report. Investments that have been added to our system less than 3 months prior to a report being generated may have a Fund Management assessment of '25' as a default, but will be updated, if necessary, after the first quarter of monitoring to more accurately reflect our system. Investments that are not mutual funds or have less than 3 years of performance history may not be scored. This material is for institutional investor use only and is not intended to be shared with individual investors.

INVESTMENT REVIEW | INVESTMENT POLICY MONITOR

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

INVESTMENT	QUANTITATIVE								QUALITATIVE		TOTALS	
	Risk-Adjusted Performance		vs. Peers Performance		Style		Confidence		Fund Management	Fund Firm	Overall	Total Score
	3 Yr	5 Yr	3 Yr	5 Yr	3 Yr	5 Yr	3 Yr	5 Yr				
Foreign Large Blend MFS International Intrinsic Value R6	●	●	●	●	▼	▼	●	●	●	●	●	97
Small Company Value Victory Sycamore Small Company Opp I	●	●	●	●	●	●	●	●	●	●	●	100
Small Company Growth Carillon Eagle Small Cap Growth R6	▼	▼	▼	▼	●	●	▼	▼	●	▼	▼	77
Emerging Markets DFA Emerging Markets Core Equity I	▼	▼	▼	▼	●	●	▼	▼	●	●	▼	78

LEGEND

●	IN GOOD STANDING	▼	MARKED FOR REVIEW	●	CONSIDER FOR TERMINATION
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INVESTMENT REVIEW | INVESTMENT POLICY MONITOR

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

TARGET DATE INVESTMENTS

INVESTMENT	QUANTITATIVE						QUALITATIVE				TOTALS	
	Risk-Adjusted Performance		vs. Peers Performance		Glidepath		Portfolio Construct.	Underlying Inv. Vehicles	Fund Mgmt	Fund Firm	Overall	Total Score
	3 Yr	5 Yr	3 Yr	5 Yr	% of Equities	Beta to Equities						
Vanguard Instl Target Retire	●	●	●	●	●	●	●	●	●	●	●	96

CAPITAL PRESERVATION INVESTMENTS

INVESTMENT	Overall	Commentary
CREF Money Market R3	●	This Capital Preservation option is in good standing per the guidelines as established by the Investment Policy Statement.
Vanguard Federal Money Market Investor	●	This Capital Preservation option is in good standing per the guidelines as established by the Investment Policy Statement.
TIAA Traditional - Group Retirement Annuity	●	This Capital Preservation option is in good standing per the guidelines as established by the Investment Policy Statement.

CONTINUED...

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INVESTMENT REVIEW | INVESTMENT POLICY MONITOR

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

PASSIVE INVESTMENTS

INVESTMENT	Overall	Commentary
Vanguard Total Bond Market Index I		This fund currently meets the guidelines set forth by CAPTRUST for passively managed investments. This assessment is based on both quantitative and qualitative data. Examples of quantitative and qualitative items considered include, but are not limited to, quality of management, tracking error, and cost.
Vanguard Institutional Index I		This fund currently meets the guidelines set forth by CAPTRUST for passively managed investments. This assessment is based on both quantitative and qualitative data. Examples of quantitative and qualitative items considered include, but are not limited to, quality of management, tracking error, and cost.
Vanguard Extended Market Index Instl		This fund currently meets the guidelines set forth by CAPTRUST for passively managed investments. This assessment is based on both quantitative and qualitative data. Examples of quantitative and qualitative items considered include, but are not limited to, quality of management, tracking error, and cost.
Vanguard Total Intl Stock Index I		This fund currently meets the guidelines set forth by CAPTRUST for passively managed investments. This assessment is based on both quantitative and qualitative data. Examples of quantitative and qualitative items considered include, but are not limited to, quality of management, tracking error, and cost.

CONTINUED...

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INVESTMENT REVIEW | INVESTMENT POLICY MONITOR

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

INVESTMENTS IN DISTINCT ASSET CLASSES

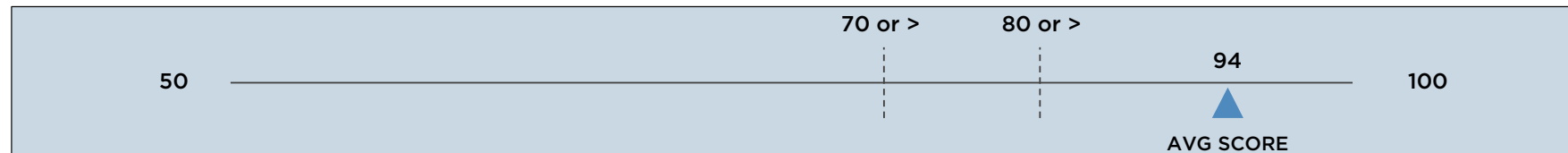
INVESTMENT	Overall	Commentary
CREF Stock R3		This fund currently meets the guidelines set forth by CAPTRUST for distinct investments in the Investment Policy Statement. This assessment is based on both quantitative and qualitative data. Examples of quantitative and qualitative items considered include, but are not limited to, quality of management, excess return, and risk-adjusted performance.
TIAA Real Estate Account		This fund currently meets the guidelines set forth by CAPTRUST for distinct investments in the Investment Policy Statement. This assessment is based on both quantitative and qualitative data. Examples of quantitative and qualitative items considered include, but are not limited to, quality of management, excess return, and risk-adjusted performance.

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PLAN INVESTMENT REVIEW | PLAN PERFORMANCE MEASUREMENT

Period Ending 12.31.19 | Q4 19

University of Maine System

Plan Performance Success Rate: Average score of plan investments illustrated below

INVESTMENT NAME	Q1 17	Q2 17	Q3 17	Q4 17	Q1 18	Q2 18	Q3 18	Q4 18	Q1 19	Q2 19	Q3 19	Q4 19	AVERAGE
CREF Inflation-Linked Bond R3	87	88	91	88	86	93	91	93	93	93	82	85	89
PGIM Total Return Bond R6	100	100	100	100	100	100	100	100	100	100	100	100	100
CREF Social Choice R3	99	100	100	100	100	100	100	100	99	100	100	99	99
Vanguard Instl Target Retire	-	-	-	-	-	-	-	-	-	-	96	96	96
JHancock Disciplined Value R6	83	93	89	93	95	86	88	88	81	88	83	81	87
Harbor Capital Appreciation Retirement	90	93	96	98	98	99	95	96	100	97	93	97	96
Virtus Ceredex Mid-Cap Value Equity R6	99	94	87	79	91	98	98	100	100	100	100	100	95
MFS Mid Cap Growth R6	-	-	-	-	-	-	-	-	99	100	100	100	99
American Funds Europacific Growth R6	-	-	-	-	-	-	-	-	100	100	100	100	100
MFS International Intrinsic Value R6	99	97	97	96	97	96	95	96	96	97	97	97	96
Victory Sycamore Small Company Opp I	100	100	99	100	100	99	99	100	100	100	100	100	99
Carillon Eagle Small Cap Growth R6	94	92	89	86	88	86	88	78	86	78	67	77	84
DFA Emerging Markets Core Equity I	95	90	88	90	90	89	91	97	83	86	78	78	87

SUMMARY: Over the previous quarters the plan investment options have averaged a score of 94.

Scores are calculated quarterly using the CAPTRUST Investment Policy Monitoring System ("Scorecard"). In the 4Q2013, our methodology changed utilizing different quantitative statistics than the prior system resulting in a re-categorization of some specific funds as either "passive" (funds designed to track a given benchmark) or "distinct" funds with a limited number of comparable funds, or funds with distinct strategies that do not have an appropriate benchmark. These funds (passive and/or distinct) will no longer be included in the Plan Performance Measurement Report but will continue to be included on the Investment Policy Monitor and be scored by CAPTRUST for their ability to achieve stated goals.

INVESTMENT REVIEW | SELECT COMMENTARY

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

FUND MANAGEMENT ITEMS	COMMENTARY
American Funds EuroPacific Growth	<p>Capital Group has announced that Portfolio Manager Mark Denning is no longer with the firm. Mark served as a portfolio manager of EuroPacific Growth Fund, Capital World Growth and Income, New World Fund, and New Economy Fund. He had been at the firm for 36 years and on EuroPacific Growth for 28 years. Mark was the longest tenured PM on EuroPac, although almost all of the PMs have been with the firm for 20+ years. This was an unexpected departure that the firm characterized as a personnel issue. Mark was responsible for a 7% sleeve of EuroPac. EuroPac has eleven portfolio managers who each manage a sleeve of the portfolio, which reduces the dependence on a single PM. Another sleeve is managed by the research analysts. EuroPac's PM line-up has been stable in recent years, with the latest departure in June 2014. Thus, this change does not impact our view of the strategy.</p> <p>Lara Pellini has been named a portfolio manager of the American Funds EuroPacific Growth Fund. Ms. Pellini has 17 years of investment experience, all with Capital Group. As part of the firm's succession planning, she has served as a portfolio manager on the EuroPacific Growth strategy on a trial basis for the past four years.</p> <p>Noriko Honda Chen and Gerald Du Manoir have been named portfolio managers of the American Funds EuroPacific Growth Fund. Ms. Honda Chen has 28 years of investment experience, 20 of which have been with Capital Group. Mr. Du Manoir brings 29 years of investment experience, 28 with Capital Group. With these additions, the EuroPacific Growth Fund will now have 11 portfolio managers.</p>
DFA Emerging Markets Core Equity	<p>DFA has incorporated a new factor, the investment effect, to their investment process for this strategy. Their research on the behavior of small cap stocks with high investment, as measured by asset growth, suggests underperformance. Therefore, DFA strategies that invest in small cap stocks may now begin to exclude small cap stocks that have exhibited high growth in assets.</p> <p>DFA Emerging Markets strategies no longer limit exposure to individual countries at 17.5% at the time of purchase.</p>

INVESTMENT REVIEW | SELECT COMMENTARY

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

FUND MANAGEMENT ITEMS	COMMENTARY
Carillon Eagle Small Cap Growth	Almost all of the strategy's 2019 underperformance occurred in Q3. Performance stabilized in Q4, as the strategy was in-line with the benchmark and near the top quartile in the peer group. Full year underperformance was driven by negative stock selection in healthcare, mainly in biotech. The strategy's biotech holdings gained 20% vs. a strong 45% rally for biotech in the index. This difference is mainly driven by biotech stocks that the strategy did not own which were acquired. Negative stock selection in financials also weighed on results due to Green Dot Financial. The stock was a top contributor in 2018 but was hurt in 2019 from increased industry competition. While the strategy has underperformed the peer group in recent years, it is only lagging the benchmark by about 50 basis points over five years. Since 2009, the strategy has been in the top half of the peer group in seven out of eleven years and in the bottom quartile of the peer group in only two years (2013 and 2018). We recommend that clients currently holding the strategy continue to do so.
John Hancock Disciplined Value	Co-CEO and CIO Jay Feeney became the sole CEO of Boston Partners, taking the lead role he had jointly shared with co-CEO Mark Donovan since 2008. Mr. Donovan, one of four portfolio managers to the John Hancock Disciplined Value Fund, will focus exclusively on his portfolio management responsibilities.
MFS International Intrinsic Value	Effective 2/1/2020, Philip Evans will join the portfolio management team of Benjamin Stone and Pablo de la Mata on the MFS International Intrinsic Value strategy. The addition of Mr. Evans is in preparation for the pending departure of Mr. de la Mata on 4/15/2022.
Vanguard Instl Target Retire	Vanguard is launching the Total International Bond II Index fund in February 2020. The fund will mirror the existing Total International Bond Index fund. It will serve as an underlying investment for Vanguard's suite of target date funds and other funds of funds, replacing Total International Bond. It will not be available for direct purchase by investors, allowing Vanguard to segregate institutional and retail assets.

INVESTMENT REVIEW | SELECT COMMENTARY

Period Ending 12.31.19 | Q4 19

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FUND FIRM ITEMS	COMMENTARY
TIAA-CREF	TIAA has consolidated the global equity investment teams of TIAA-CREF and Nuveen into one. As a result, several equity portfolio managers and other investment professionals have left the firm while others are taking on new portfolio and research assignments.
MFS Family of Funds	Effective 3/1/2020, the Equity department at MFS will move to a regional, co-CIO leadership structure across Asia, Europe, and the Americas. The co-CIO leadership team will be: Simon Gresham and Jeanine Thompson for Asia-Pacific, Christopher Jennings and David Shindler for Europe, and Kevin Beatty and Alison O'Neill for the Americas. All six individuals are currently leaders within the Equity Division and will report to Chief Investment Officer Ted Maloney. They will retain their current portfolio management responsibilities.
Eagle Asset Management, Inc.	Carillon Executive Vice President Court James recently retired. Ed Rick, who joined the firm in 2014, has taken over the role of executive vice president of Carillon and head of investments for Eagle.
Victory Capital Management	<p>Victory recently reorganized its leadership structure, creating the Executive Committee and Distribution Committee. The Management Committee remains in place; however some of the members have changed to reflect a broader representation of leadership.</p> <p>Following Victory's completed acquisition of USAA Asset Management, Lisa Alexander, head of Direct Distribution and Brooks Englehardt, president of USAA Investments were added to Victory's Management Committee.</p>
Virtus	Wendy Hills recently joined Virtus as chief legal officer, general counsel, and corporate secretary. She succeeds Mark Flynn, who retired. Ms. Hills also serves as general counsel and secretary for VFA, Duff & Phelps, KAR, Ceredex, and Seix.

PLAN INVESTMENT REVIEW | TARGET DATE REVIEW

Period Ending 12.31.19 | Q4 19

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VANGUARD INSTITUTIONAL TARGET RETIREMENT

MEETING DATE: JANUARY 21, 2020

FOCUS AREA

Organizational

COMMENTARY

There were no material changes to the target date team during the quarter.

Investments

COMMENTARY

There were no changes made to the underlying investments of the Institutional Target Retirement series during the quarter.

Performance and Positioning

COMMENTARY

Vanguard Institutional Target Retirement Performance Update:

Vanguard Institutional Target Retirement finished off a solid year in 2019 as it performed in line with its benchmark and mostly outperformed peers.

- The series's performance was driven by its equity portfolio in the fourth quarter as global equity markets moved higher during the period.
- In a slight shift from the first three quarters of the year, Institutional Target Retirement benefited from its larger allocation to emerging markets equities relative to peers as emerging markets outperformed the U.S. in Q4.
- For the year, Institutional Target Retirement was also aided by its use of passive equity strategies as equity market indices outperformed most active managers in 2019.
- Despite being a slight detractor in the fourth quarter, Vanguard's passive fixed income exposure was a positive contributor for the year as bond indices outpaced active managers.

There were no changes made to the series's strategic asset allocation during the quarter.

PLAN INVESTMENT REVIEW | PERFORMANCE SUMMARY

Period Ending 12.31.19 | Q4 19

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INVESTMENT NAME	Q4 '19	YTD '19	2018	2017	2016	2015	2014	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*
CASH AND EQUIVALENTS - MONEY MARKET											
CREF Money Market R3	0.40%	2.02%	1.46%	0.50%	0.13%	0.00%	0.00%	2.02%	1.32%	0.82%	0.41%
Vanguard Federal Money Market Investor	0.43%	2.14%	1.78%	0.81%	0.30%	0.04%	0.01%	2.14%	1.58%	1.01%	0.51%
ICE BofA ML US Treasury Bill 3 Mon USD	0.46%	2.28%	1.87%	0.86%	0.33%	0.05%	0.03%	2.28%	1.67%	1.07%	0.58%
STABLE VALUE											
TIAA Traditional - Group Retirement Annuity	Current Rate is 3.50%										
ICE BofA ML US Treasury Bill 3 Mon USD	0.46%	2.28%	1.87%	0.86%	0.33%	0.05%	0.03%	2.28%	1.67%	1.07%	0.58%
Hueler Stable Value Index (gross)	0.62%	2.52%	2.26%	1.95%	1.79%	1.77%	1.69%	2.52%	2.24%	2.06%	2.19%
INFLATION PROTECTED BOND											
CREF Inflation-Linked Bond R3	0.77%	6.53%	-0.49%	1.85%	4.23%	-1.68%	3.34%	6.53%	2.59%	2.04%	2.87%
BBgBarc US Treasury US TIPS TR USD	0.79%	8.43%	-1.26%	3.01%	4.68%	-1.44%	3.64%	8.43%	3.32%	2.62%	3.36%
Inflation Protected Bond Universe	1.00%	7.33%	-1.65%	2.51%	4.51%	-2.22%	1.96%	7.33%	2.66%	2.03%	2.60%
FIXED INCOME - INTERMEDIATE CORE BOND											
Vanguard Total Bond Market Index I	0.03%	8.73%	-0.01%	3.57%	2.61%	0.41%	5.90%	8.73%	4.03%	3.01%	3.70%
BBgBarc Aggregate Bond Index	0.18%	8.72%	0.01%	3.54%	2.65%	0.55%	5.97%	8.72%	4.03%	3.05%	3.75%
Intermediate Core Bond Universe	0.09%	8.07%	-0.39%	3.22%	2.59%	0.00%	5.06%	8.07%	3.57%	2.68%	3.55%
INTERMEDIATE CORE-PLUS BOND											
PGIM Total Return Bond R6	0.35%	11.13%	-0.63%	6.71%	4.83%	0.09%	7.25%	11.13%	5.62%	4.33%	5.52%
BBgBarc Aggregate Bond Index	0.18%	8.72%	0.01%	3.54%	2.65%	0.55%	5.97%	8.72%	4.03%	3.05%	3.75%
Intermediate Core Plus Bond Universe	0.34%	8.99%	-0.71%	4.28%	3.92%	-0.51%	5.49%	8.99%	4.11%	3.14%	4.29%

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PLAN INVESTMENT REVIEW | PERFORMANCE SUMMARY

Period Ending 12.31.19 | Q4 19

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INVESTMENT NAME	Q4 '19	YTD '19	2018	2017	2016	2015	2014	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*
WORLD ALLOCATION											
CREF Social Choice R3	5.14%	20.80%	-4.29%	14.27%	7.40%	-0.87%	6.83%	20.80%	9.73%	7.06%	8.29%
60% MSCI World 40% BBgBarc Agg Index	5.22%	20.42%	-4.76%	14.90%	6.09%	0.26%	5.77%	20.42%	9.64%	6.99%	7.75%
World Allocation Universe	5.00%	16.80%	-7.94%	14.02%	6.17%	-4.25%	2.21%	16.80%	7.22%	4.63%	6.28%
TARGET DATE RET INCOME MODERATE											
Vanguard Instl Trgt Retire Inc Instl	2.66%	13.20%	-1.98%	8.54%	5.29%	-	-	13.20%	6.39%	-	-
Morningstar Lifetime Moderate Income Index	3.23%	13.27%	-2.20%	8.55%	5.98%	-1.30%	4.09%	13.27%	6.34%	4.70%	5.68%
Retirement Income Moderate	2.71%	13.33%	-3.55%	9.24%	4.86%	-1.30%	4.47%	13.33%	6.06%	4.30%	5.21%
TARGET DATE 2015 MODERATE											
Vanguard Instl Trgt Retire 2015 Instl	3.27%	14.88%	-2.91%	11.50%	6.27%	-	-	14.88%	7.54%	-	-
Morningstar Lifetime Moderate 2015 Index	3.57%	16.29%	-3.54%	11.39%	7.10%	-1.73%	5.55%	16.29%	7.71%	5.63%	7.11%
2015 Moderate	3.64%	15.19%	-4.18%	11.21%	6.15%	-1.38%	4.75%	15.19%	7.04%	5.13%	6.57%
TARGET DATE 2020 MODERATE											
Vanguard Instl Trgt Retire 2020 Instl	4.47%	17.69%	-4.21%	14.13%	7.04%	-	-	17.69%	8.76%	-	-
Morningstar Lifetime Moderate 2020 Index	3.93%	17.73%	-4.16%	12.79%	7.66%	-1.88%	5.87%	17.73%	8.37%	6.10%	7.70%
2020 Moderate	4.18%	16.57%	-4.93%	13.25%	6.10%	-1.33%	5.13%	16.57%	7.87%	5.60%	7.27%
TARGET DATE 2025 MODERATE											
Vanguard Instl Trgt Retire 2025 Instl	5.25%	19.67%	-5.02%	15.94%	7.56%	-	-	19.67%	9.63%	-	-
Morningstar Lifetime Moderate 2025 Index	4.50%	19.36%	-4.90%	14.54%	8.39%	-2.06%	6.04%	19.36%	9.14%	6.66%	8.36%
2025 Moderate	4.90%	18.34%	-5.54%	15.15%	6.78%	-1.38%	5.27%	18.34%	8.77%	6.26%	7.98%

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PLAN INVESTMENT REVIEW | PERFORMANCE SUMMARY

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INVESTMENT NAME	Q4 '19	YTD '19	2018	2017	2016	2015	2014	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*
TARGET DATE 2030 MODERATE											
Vanguard Instl Trgt Retire 2030 Instl	6.02%	21.14%	-5.82%	17.57%	7.97%	-	-	21.14%	10.28%	-	-
Morningstar Lifetime Moderate 2030 Index	5.32%	21.24%	-5.82%	16.59%	9.26%	-2.30%	6.01%	21.24%	10.01%	7.28%	9.01%
2030 Moderate	5.79%	20.55%	-6.43%	17.27%	7.27%	-1.36%	5.47%	20.55%	9.77%	6.97%	8.60%
TARGET DATE 2035 MODERATE											
Vanguard Instl Trgt Retire 2035 Instl	6.68%	22.56%	-6.56%	19.14%	8.39%	-	-	22.56%	10.91%	-	-
Morningstar Lifetime Moderate 2035 Index	6.29%	23.04%	-6.82%	18.52%	10.07%	-2.58%	5.80%	23.04%	10.76%	7.82%	9.47%
2035 Moderate	6.74%	22.37%	-7.33%	19.10%	7.72%	-1.45%	5.58%	22.37%	10.53%	7.48%	9.05%
TARGET DATE 2040 MODERATE											
Vanguard Instl Trgt Retire 2040 Instl	7.40%	23.93%	-7.31%	20.73%	8.81%	-	-	23.93%	11.52%	-	-
Morningstar Lifetime Moderate 2040 Index	7.10%	24.35%	-7.65%	19.87%	10.61%	-2.83%	5.51%	24.35%	11.24%	8.15%	9.68%
2040 Moderate	7.19%	23.69%	-7.90%	20.10%	7.53%	-1.39%	5.73%	23.69%	11.05%	7.77%	9.33%
TARGET DATE 2045 MODERATE											
Vanguard Instl Trgt Retire 2045 Instl	8.02%	25.07%	-7.87%	21.47%	8.94%	-	-	25.07%	11.86%	-	-
Morningstar Lifetime Moderate 2045 Index	7.57%	24.97%	-8.17%	20.53%	10.84%	-3.03%	5.25%	24.97%	11.42%	8.26%	9.69%
2045 Moderate	7.64%	24.40%	-8.42%	20.57%	7.89%	-1.89%	5.27%	24.40%	11.18%	7.84%	9.26%
TARGET DATE 2050 MODERATE											
Vanguard Instl Trgt Retire 2050 Instl	8.02%	25.05%	-7.87%	21.47%	8.95%	-	-	25.05%	11.85%	-	-
Morningstar Lifetime Moderate 2050 Index	7.73%	25.09%	-8.41%	20.78%	10.89%	-3.19%	5.00%	25.09%	11.43%	8.24%	9.61%
2050 Moderate	7.62%	24.67%	-8.33%	20.76%	7.77%	-1.60%	5.55%	24.67%	11.37%	7.95%	9.43%

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INVESTMENT NAME	Q4 '19	YTD '19	2018	2017	2016	2015	2014	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*
TARGET DATE 2055 MODERATE											
Vanguard Instl Trgt Retire 2055 Instl	8.03%	25.06%	-7.84%	21.47%	8.94%	-	-	25.06%	11.87%	-	-
Morningstar Lifetime Moderate 2055 Index	7.78%	25.05%	-8.57%	20.95%	10.90%	-3.34%	4.74%	25.05%	11.41%	8.19%	9.50%
2055 Moderate	7.76%	24.48%	-8.95%	20.73%	8.35%	-1.65%	5.97%	24.48%	11.02%	7.85%	9.57%
TARGET DATE 2060+ MODERATE											
Vanguard Instl Trgt Retire 2060 Instl	8.04%	25.13%	-7.88%	21.42%	8.94%	-	-	25.13%	11.86%	-	-
Vanguard Instl Trgt Retire 2065 Instl	8.01%	25.15%	-7.84%	-	-	-	-	25.15%	-	-	-
Morningstar Lifetime Moderate 2060 Index	7.81%	24.96%	-8.69%	21.06%	10.88%	-3.48%	4.53%	24.96%	11.37%	8.13%	-
2060+ Moderate	7.87%	25.06%	-8.56%	20.72%	8.79%	-1.07%	6.35%	25.06%	11.33%	8.34%	-
ALLOCATION--85%+ EQUITY											
CREF Stock R3	8.90%	27.45%	-9.65%	23.45%	9.17%	-0.84%	6.41%	27.45%	12.44%	9.00%	10.44%
85% S&P 500, 15% BBgBarc Agg	8.61%	30.19%	-4.15%	20.67%	11.32%	1.33%	13.12%	30.19%	14.62%	11.18%	12.80%
Allocation--85%+ Equity Universe	7.73%	24.89%	-9.73%	19.34%	8.67%	-2.35%	5.41%	24.89%	10.59%	7.45%	9.56%
LARGE COMPANY VALUE											
JHancock Disciplined Value R6	7.40%	22.79%	-9.47%	19.33%	14.07%	-4.81%	11.04%	22.79%	9.88%	7.57%	11.48%
Russell 1000 Value	7.41%	26.54%	-8.27%	13.66%	17.34%	-3.83%	13.45%	26.54%	9.68%	8.29%	11.80%
Large Value Universe	7.26%	25.00%	-8.82%	15.88%	14.46%	-3.94%	10.58%	25.00%	9.76%	7.82%	10.82%
LARGE COMPANY BLEND											
Vanguard Institutional Index I	9.06%	31.46%	-4.42%	21.79%	11.93%	1.37%	13.65%	31.46%	15.24%	11.67%	13.53%
S&P 500 Index	9.07%	31.49%	-4.38%	21.83%	11.96%	1.38%	13.69%	31.49%	15.27%	11.70%	13.56%
Large Blend Universe	8.28%	28.82%	-6.54%	20.38%	10.43%	-0.60%	11.27%	28.82%	13.13%	9.79%	11.98%

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INVESTMENT NAME	Q4 '19	YTD '19	2018	2017	2016	2015	2014	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*
LARGE COMPANY GROWTH											
Harbor Capital Appreciation Retirement	12.45%	33.39%	-0.96%	36.68%	-1.04%	10.99%	9.93%	33.39%	21.77%	14.68%	14.58%
Russell 1000 Growth	10.62%	36.39%	-1.51%	30.21%	7.08%	5.67%	13.05%	36.39%	20.49%	14.63%	15.22%
Large Growth Universe	9.52%	32.23%	-2.12%	28.14%	3.26%	3.62%	9.95%	32.23%	18.35%	12.22%	13.41%
MEDIUM COMPANY VALUE											
Virtus Ceredex Mid-Cap Value Equity R6	8.23%	33.31%	-7.58%	11.98%	20.53%	-5.63%	11.05%	33.31%	11.33%	9.43%	12.66%
Russell Mid Cap Value	6.36%	27.06%	-12.29%	13.34%	20.00%	-4.78%	14.75%	27.06%	8.10%	7.62%	12.41%
Mid Value Universe	6.96%	26.04%	-13.81%	13.34%	17.96%	-5.01%	9.47%	26.04%	7.28%	6.88%	10.87%
MEDIUM COMPANY BLEND											
Vanguard Extended Market Index Instl	8.89%	28.05%	-9.35%	18.12%	16.15%	-3.24%	7.56%	28.05%	11.09%	9.03%	12.83%
Russell Mid Cap	7.06%	30.54%	-9.06%	18.52%	13.80%	-2.44%	13.22%	30.54%	12.06%	9.33%	13.19%
Mid Blend Universe	7.26%	26.99%	-12.02%	15.70%	14.02%	-4.78%	8.39%	26.99%	8.97%	6.83%	10.87%
MEDIUM COMPANY GROWTH											
MFS Mid Cap Growth R6	6.38%	37.93%	1.21%	26.39%	4.75%	4.60%	8.95%	37.93%	20.84%	14.09%	15.04%
Russell Mid Cap Growth	8.17%	35.47%	-4.75%	25.27%	7.33%	-0.20%	11.90%	35.47%	17.36%	11.60%	14.24%
Mid Growth Universe	7.95%	33.77%	-5.56%	24.95%	5.91%	-0.58%	7.09%	33.77%	16.51%	10.88%	13.04%
FOREIGN LARGE BLEND											
American Funds Europacific Growth R6	10.09%	27.40%	-14.91%	31.17%	1.01%	-0.48%	-2.29%	27.40%	12.45%	7.41%	6.73%
MFS International Intrinsic Value R6	7.48%	25.99%	-8.89%	27.25%	4.31%	6.85%	1.61%	25.99%	13.46%	10.24%	10.18%
Vanguard Total Intl Stock Index I	9.05%	21.56%	-14.39%	27.55%	4.70%	-4.24%	-4.15%	21.56%	9.90%	5.88%	5.13%
MSCI EAFE	8.21%	22.66%	-13.36%	25.62%	1.51%	-0.39%	-4.48%	22.66%	10.11%	6.18%	6.00%
Foreign Large Blend Universe	8.75%	22.28%	-15.50%	25.32%	0.88%	-1.40%	-4.96%	22.28%	8.99%	5.21%	5.20%

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INVESTMENT NAME	Q4 '19	YTD '19	2018	2017	2016	2015	2014	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*
SMALL COMPANY VALUE											
Victory Sycamore Small Company Opp I	6.67%	26.94%	-8.26%	11.88%	30.04%	-0.39%	6.80%	26.94%	9.22%	11.03%	12.85%
Russell 2000 Value	8.49%	22.39%	-12.86%	7.84%	31.74%	-7.47%	4.22%	22.39%	4.77%	6.99%	10.56%
Small Value Universe	7.88%	22.17%	-15.70%	9.12%	25.47%	-6.65%	3.46%	22.17%	4.02%	5.76%	9.95%
SMALL COMPANY GROWTH											
Carillon Eagle Small Cap Growth R6	11.39%	25.90%	-10.06%	23.40%	10.45%	-0.39%	5.59%	25.90%	11.80%	8.98%	12.81%
Russell 2000 Growth	11.39%	28.48%	-9.31%	22.17%	11.32%	-1.38%	5.60%	28.48%	12.49%	9.34%	13.01%
Small Growth Universe	9.49%	28.65%	-5.58%	22.27%	11.11%	-2.65%	2.47%	28.65%	14.26%	10.04%	12.89%
EMERGING MARKETS											
DFA Emerging Markets Core Equity I	10.55%	16.04%	-15.25%	36.55%	12.35%	-14.86%	-0.91%	16.04%	10.33%	5.14%	3.89%
MSCI Emerging Markets	11.93%	18.90%	-14.25%	37.75%	11.60%	-14.60%	-1.82%	18.90%	11.99%	6.01%	4.04%
Emerging Markets Universe	10.55%	20.67%	-16.58%	35.29%	8.21%	-13.51%	-2.73%	20.67%	10.89%	5.03%	3.98%
SPECIALTY-PRIVATE REAL ESTATE											
TIAA Real Estate Account	1.19%	5.51%	4.79%	4.37%	5.20%	8.16%	12.22%	5.51%	4.89%	5.60%	8.58%
NCREIF Property Index	1.55%	6.42%	6.71%	6.98%	7.97%	13.33%	11.81%	6.42%	6.70%	8.25%	10.17%
Specialty-Real Estate Universe	0.46%	27.76%	-6.40%	6.06%	6.69%	2.33%	28.25%	27.76%	8.37%	6.75%	11.29%

*ANNUALIZED

This summary is intended for "Institutional (Plan Sponsor) Use Only" and only includes historical performance of the funds currently in the plan's fund lineup as compared to the peer group (universe) maintained/developed by CAPTRUST (using Morningstar open-end mutual fund data), which may include other investment types such as collective investment trusts. Fund and peer group returns are shown net of investment management fees, unless otherwise indicated, but gross of CAPTRUST advisory fees. The plan's overall performance will be reduced by CAPTRUST's advisory fees and other plan level fees not contemplated in this summary. Therefore, each participant's account performance will differ substantially. Past performance is not indicative of future results. Information from sources believed to be reliable, but not warranted by CAPTRUST to be accurate or complete.

SECTION 4: FUND FACT SHEETS

Period Ending 12.31.19 | **Q4 19**

University of Maine System

4.1

SECTION 4: FUND FACT SHEETS

Fund Fact Sheets.....

CREF MONEY MARKET R3

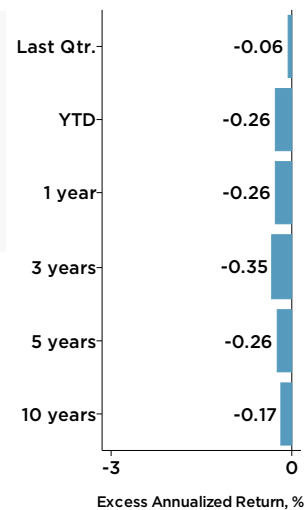
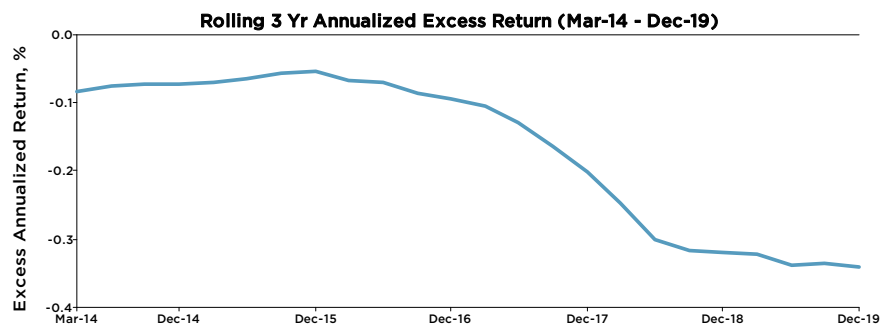
Period Ending 12.31.19 | Q4 19

4.1

INDUSTRY ANALYSIS

Money market yields have fluctuated in recent years due primarily to actions by the United States Federal Reserve. After several years of yields near 0.00%, the Federal Reserve increased the Fed Funds Rate nine times from 2015 through 2018, landing in a target range of 2.25%-2.50%. The increase in the Fed Funds rate benefited money market funds which were able to invest in high yielding bonds. 2019 saw a reversal in this policy from the Federal Reserve as they cut rates by 0.25% in August and again in September. This warrants further attention as the Fed is mulling further reductions to the Fed Funds Rate this year.

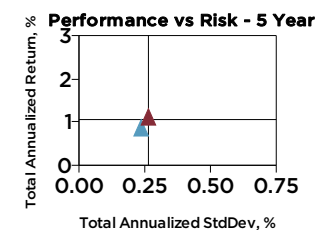
	CREF Money Market R3	90 Day US Treasury Bill Index
TRAILING RETURNS		
Last Qtr.	0.40	0.46
YTD	2.02	2.28
1 Year	2.02	2.28
3 Years	1.32	1.67
5 Years	0.82	1.07
10 Years	0.41	0.58
CALENDAR RETURNS		
2018	1.46	1.87
2017	0.50	0.86
2016	0.13	0.33
2015	0.00	0.05
2014	0.00	0.03
KEY MEASURES / 5 YEAR		
5 Year	0.24	0.26



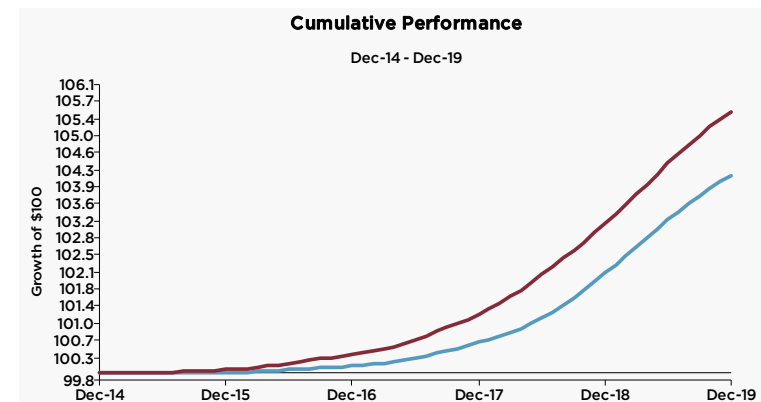
CREF Money Market R3
■ Excess

INVESTMENT PROFILE

Ticker	-
Strategy Incept Date	-
Prospectus Exp Ratio	-
12 Mo Yield	-



▲ CREF Money Market R3
▲ 90 Day US Treasury Bill Index



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VANGUARD FEDERAL MONEY MARKET INVESTOR

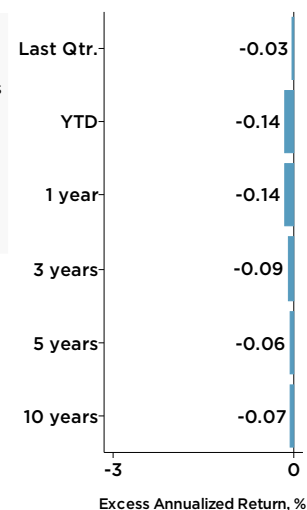
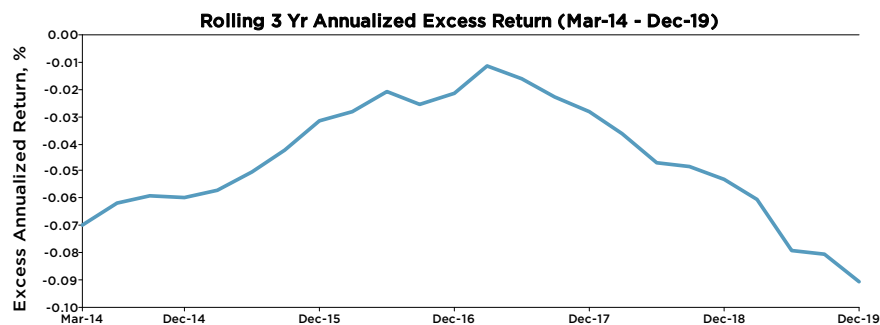
Period Ending 12.31.19 | Q4 19

4.1

INDUSTRY ANALYSIS

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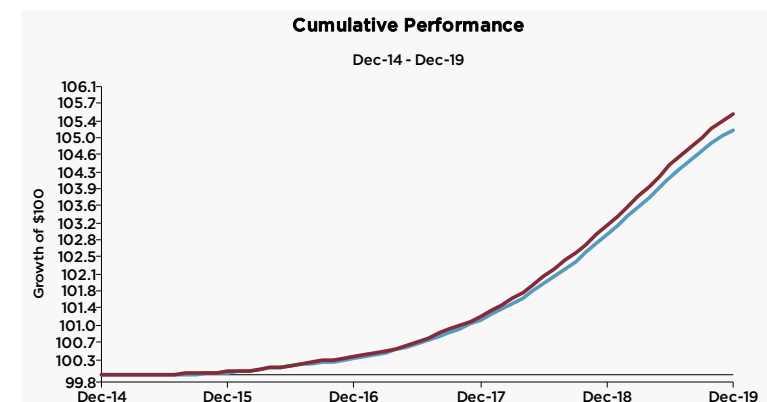
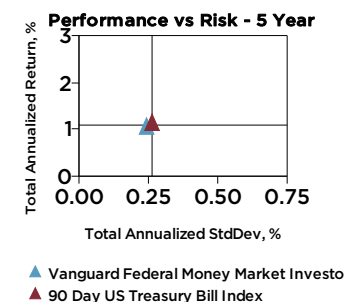
	Vanguard Federal Money Market Investor	90 Day US Treasury Bill Index
TRAILING RETURNS		
Last Qtr.	0.43	0.46
YTD	2.14	2.28
1 Year	2.14	2.28
3 Years	1.58	1.67
5 Years	1.01	1.07
10 Years	0.51	0.58
CALENDAR RETURNS		
2018	1.78	1.87
2017	0.81	0.86
2016	0.30	0.33
2015	0.04	0.05
2014	0.01	0.03
KEY MEASURES / 5 YEAR		
5 Year	0.24	0.26



Vanguard Federal Money Market
■ Excess

INVESTMENT PROFILE

Ticker	VMFXX
Strategy Incept Date	07/13/1981
Prospectus Exp Ratio	0.11%
12 Mo Yield	2.12%



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TIAA TRADITIONAL – GROUP RETIREMENT ANNUITY (GRA)

Period Ending 12.31.19 | Q4 19

4.1

INDUSTRY ANALYSIS

As the DC marketplace continues to grow, capital preservation investment vehicles are becoming increasingly more prevalent in plan fund menus. Consistent increases in the Federal Funds Rate, from 2015 through 2018, drove interest rates higher in the U.S. fixed income marketplace. This interest rate environment, generally, would present a challenge for insurance general account managers as increases in interest rates result in a decline in value for the investments already in general accounts, which in-turn lower the guaranteed. Inversely, increased rates also allow for reinvestment of new cash flows at higher levels which could increase the new business guaranteed rate. In 2018 and early 2019 we have experienced a significant rise in the new business, guaranteed crediting rates. In August 2019, the Federal Reserve reduced the Fed Funds target by 25bps and again in September. Interest rates have subsequently decreased driving new business rates down. Stable value managers continue to evaluate portfolio positioning as the Fed is mulling further reductions in the Fed Funds Rate this year.

CAPTRUST ANALYSIS

Jennifer Dunbar – Senior Manager| Investment Research

The TIAA Traditional Annuity is a guaranteed annuity account (group annuity contract) that is backed by the financial strength and claims-paying ability of TIAA. The product offers participants guaranteed principal and a contractually specified interest rate. The contractually agreed upon minimum annual interest rate is 3%. The TIAA Board of Trustees also reserves the right each year to declare a higher crediting rate to participants which remains effective for a twelve month period that begins each March 1.

The product has a payout structure at the participant level that varies the length of time it takes for a participant to fully redeem. This payout structure is individual contract-specific.

GROSS CREDITING RATES - For Contributions Applied:

10/1/18 – 12/31/18	1/1/19 – 3/31/19	4/1/19 – 6/30/19	7/1/19 – 9/30/19	10/01/2019-12/31/2019
4.00%	4.00%	3.50%	3.00%	3.25%

INVESTMENT DETAILS

Crediting Rate Details:	Current contributions are invested at the new money rate, which can change monthly but is guaranteed until the last day of February. Old Money is grouped by time period into vintages, rate on all vintages are reviewed for reset every March 1 st .
Competing Options:	Allowed.
Minimum Rate:	3.00% during accumulation stage and 2.50% during annuity payout stage, reset annually.

LIQUIDITY PROVISIONS

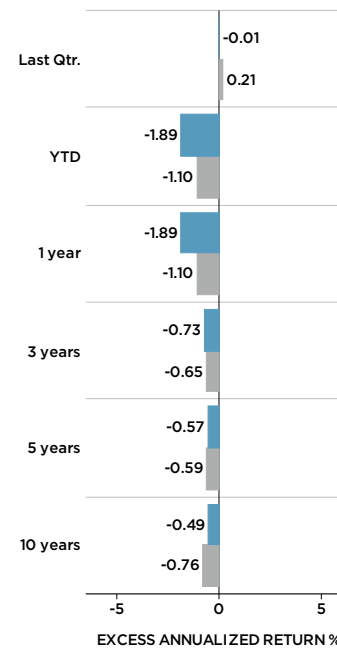
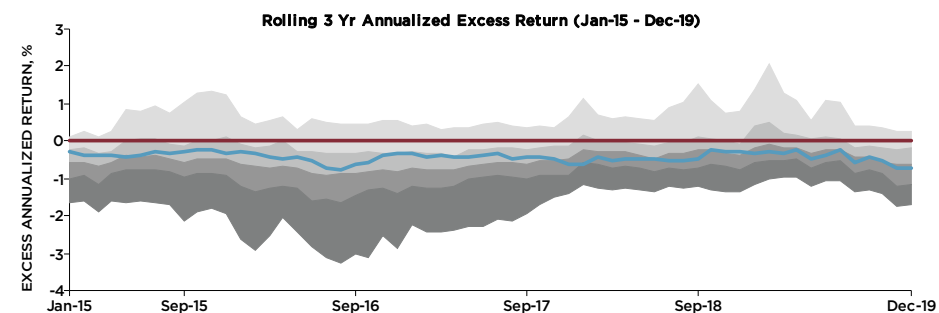
Plan Sponsor	Participant
Not applicable. Contracts are individually owned by the participant.	Lump Sum withdrawals are available within 120 days of termination of employment with a 2.5% surrender charge. Transfers and withdrawals can be made in 10 annual installments (paid over 9 years and 1 day) .

Important Disclosures: This slide is intended solely for institutional use. The opinions expressed in this report are subject to change without notice. The statistics and data have been compiled from sources believed to be reliable but are not guaranteed to be accurate or complete. Any performance quoted represents past performance and does not guarantee future results. Bloomberg Index averages are derived from Morningstar. This material is not a solicitation or an offer to buy any security or to participate in any investment strategy. Any such solicitation must be made by prospectus only. For more information or to obtain a prospectus, please contact your financial advisor at 800.216.0645. CAPTRUST Financial Advisors.

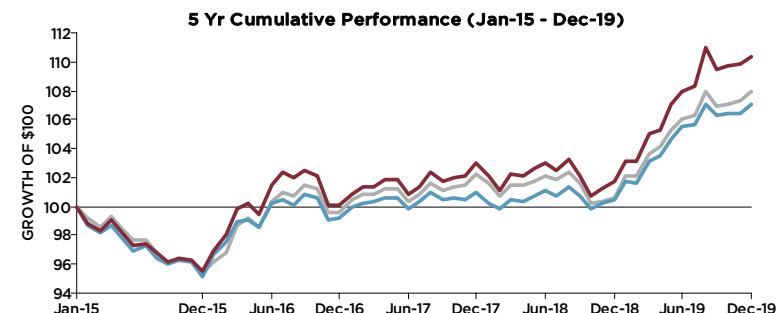
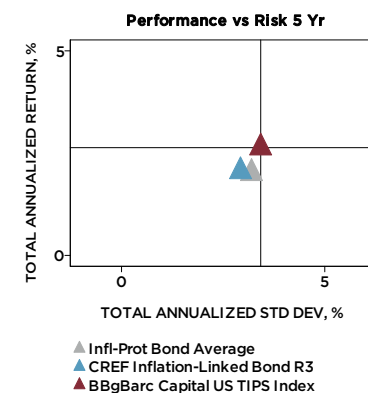
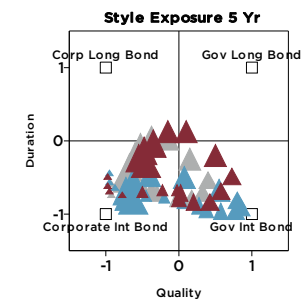
CREF INFLATION-LINKED BOND R3

Period Ending 12.31.19 | Q4 19

	CREF Inflation-Linked Bond R3	Peer Group Rank	BBgBarc Capital US TIPS Index	Infl-Prot Bond	# of Funds
KEY MEASURES / 5 YEAR					
Standard Deviation	2.93	32%	3.44	3.18	196
Sharpe Ratio	0.33	48%	0.45	0.31	196
Alpha	-0.29	54%	0.00	-0.27	196
Beta	0.82	60%	1.00	0.80	196
R-Squared	92.33	42%	100.00	80.50	196
Up Mkt Capture	80.11	65%	100.00	80.80	196
Down Mkt Capture	82.51	39%	100.00	83.38	196
Information Ratio	-0.55	60%	NA	-0.67	196
TRAILING RETURNS					
Last Qtr.	0.77	67%	0.79	1.00	208
YTD	6.53	71%	8.43	7.33	208
1 Year	6.53	71%	8.43	7.33	208
3 Years	2.59	56%	3.31	2.66	201
5 Years	2.04	52%	2.62	2.03	196
10 Years	2.87	37%	3.36	2.60	139
CALENDAR RETURNS					
2018	-0.49	14%	-1.26	-1.65	216
2017	1.85	72%	3.01	2.51	236
2016	4.23	52%	4.68	4.51	243
2015	-1.68	37%	-1.44	-2.22	252
2014	3.34	22%	3.64	1.96	257



■ CREF Inflation-Linked Bond R3
■ Infl-Prot Bond Average

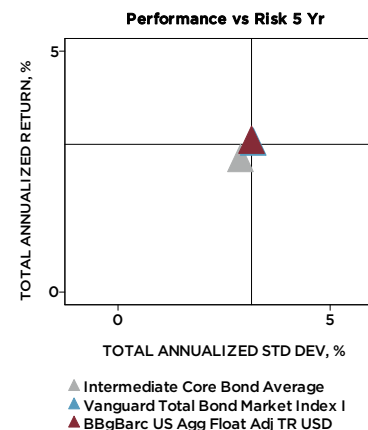
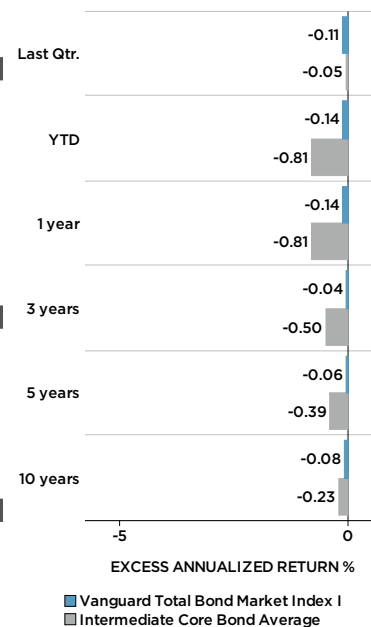
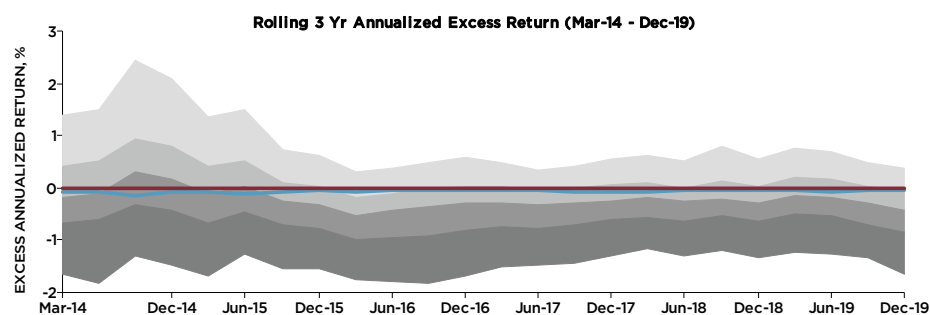


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VANGUARD TOTAL BOND MARKET INDEX I

Period Ending 12.31.19 | Q4 19

	Vanguard Total Bond Market Index I	Peer Group Rank	BBgBarc US Agg Float Adj TR USD	Intermediate Core Bond	# of Funds
KEY MEASURES / 5 YEAR					
Standard Deviation	3.20	97%	3.15	2.87	383
Sharpe Ratio	0.61	43%	0.64	0.56	383
Alpha	-0.09	47%	0.00	-0.15	383
Beta	1.02	4%	1.00	0.88	383
R-Squared	99.32	9%	100.00	93.18	383
Up Mkt Capture	99.67	10%	100.00	88.20	383
Down Mkt Capture	101.55	78%	100.00	89.76	383
Information Ratio	-0.22	35%	NA	-0.69	383
TRAILING RETURNS					
Last Qtr.	0.03	58%	0.14	0.09	423
YTD	8.73	31%	8.87	8.07	420
1 Year	8.73	31%	8.87	8.07	420
3 Years	4.03	25%	4.08	3.57	404
5 Years	3.01	28%	3.07	2.68	383
10 Years	3.70	44%	3.78	3.55	353
CALENDAR RETURNS					
2018	-0.01	29%	-0.08	-0.39	435
2017	3.57	35%	3.63	3.22	494
2016	2.61	45%	2.75	2.59	527
2015	0.41	36%	0.44	0.00	555
2014	5.90	27%	5.85	5.06	607



INVESTMENT PROFILE

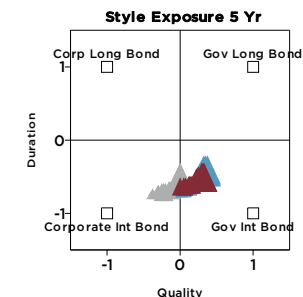
Ticker	VBPIX
CUSIP	921937504
Net Assets \$MM	\$248,595.00
Manager Names	Team Managed
Manager Tenure	6.9 Years
Prospectus Exp Ratio	0.04%
Cat Median Exp Ratio	0.81%
Current 12b-1	N/A
Annld Ret Since Incept	5.12%
Inception Date	09/18/1995
Phone Number	888-809-8102
Sub Advisor	N/A

HOLDINGS OVERVIEW

Total Number of Holdings	17559
% Assets in Top 10 Holdings	4.18%
Avg Mkt Cap \$MM	N/A
Turnover Ratio	54.00%

TOP HOLDINGS

Federal National Mortgage	0.62%
United States Treasury Not	0.44%
United States Treasury Not	0.40%
United States Treasury Not	0.40%
United States Treasury Not	0.39%



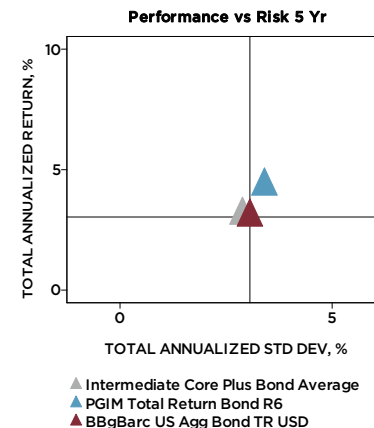
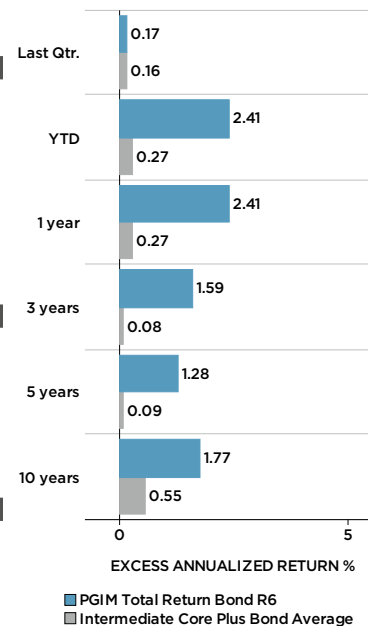
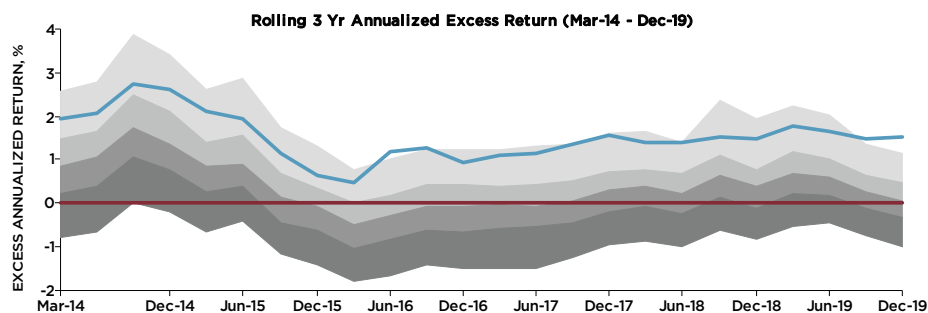
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4.1

PGIM TOTAL RETURN BOND R6

Period Ending 12.31.19 | Q4 19

	PGIM Total Return Bond R6	Peer Group Rank	BBgBarc US Agg Bond TR USD	Intermediate Core Plus Bond	# of Funds
KEY MEASURES / 5 YEAR					
Standard Deviation	3.42	93%	3.06	2.88	523
Sharpe Ratio	0.95	13%	0.64	0.73	523
Alpha	1.14	13%	0.00	0.44	523
Beta	1.07	2%	1.00	0.83	523
R-Squared	91.69	25%	100.00	79.34	523
Up Mkt Capture	121.34	1%	100.00	92.13	523
Down Mkt Capture	96.10	82%	100.00	79.74	523
Information Ratio	1.26	1%	NA	0.05	523
TRAILING RETURNS					
Last Qtr.	0.35	47%	0.18	0.34	607
YTD	11.13	8%	8.72	8.99	607
1 Year	11.13	8%	8.72	8.99	607
3 Years	5.62	2%	4.03	4.11	568
5 Years	4.33	3%	3.05	3.14	523
10 Years	5.52	5%	3.75	4.29	461
CALENDAR RETURNS					
2018	-0.63	43%	0.01	-0.71	601
2017	6.71	2%	3.54	4.28	590
2016	4.83	21%	2.65	3.92	563
2015	0.09	36%	0.55	-0.51	545
2014	7.25	9%	5.97	5.49	536



INVESTMENT PROFILE

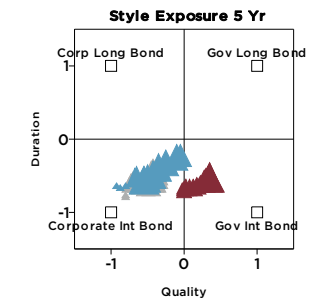
Ticker	PTRQX
CUSIP	74440B884
Net Assets \$MM	\$52,257.00
Manager Names	Team Managed
Manager Tenure	17.2 Years
Prospectus Exp Ratio	0.39%
Cat Median Exp Ratio	0.70%
Current 12b-1	N/A
Annld Ret Since Incept	5.12%
Inception Date	12/27/2010
Phone Number	800-225-1852
Sub Advisor	PGIM Fixed Income

HOLDINGS OVERVIEW

Total Number of Holdings	4569
% Assets in Top 10 Holdings	7.73%
Avg Mkt Cap \$MM	\$694.72
Turnover Ratio	45.00%

TOP HOLDINGS

PGIM Core Short-Term Boi	1.48%
Portugal (Republic Of) 5.1	1.36%
MRA ISSUANCE TRUST 3.0	0.77%
Bvrt_19-1f	0.72%
Hungary (Republic Of) 6.3	0.66%

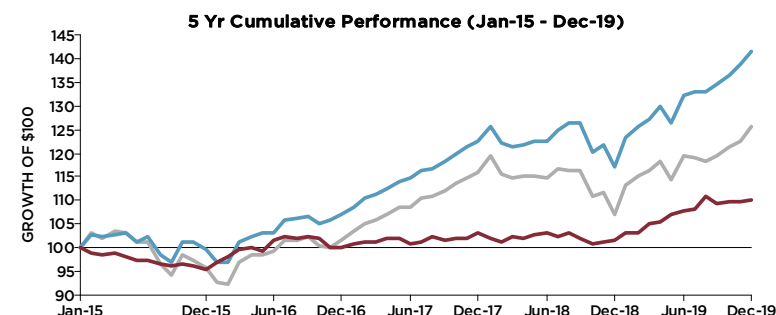
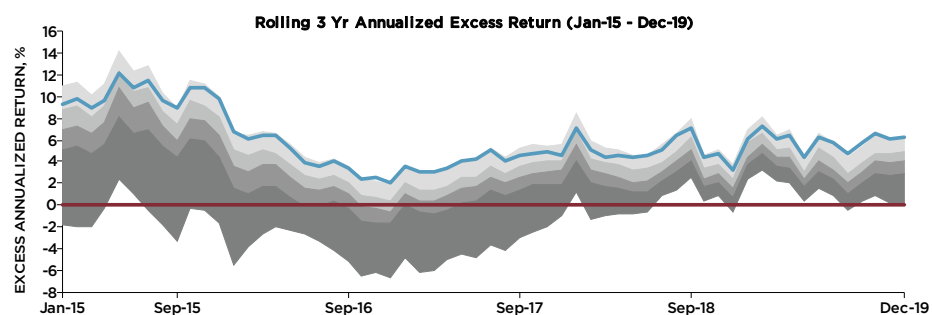
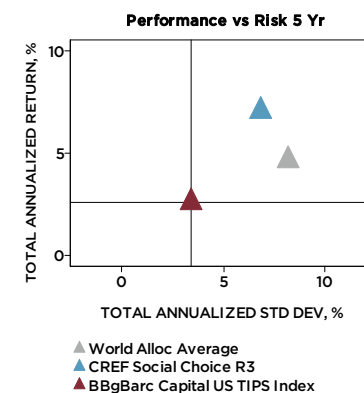
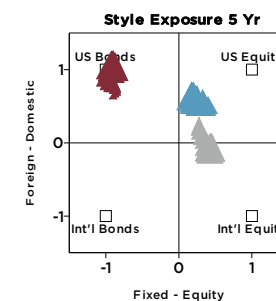
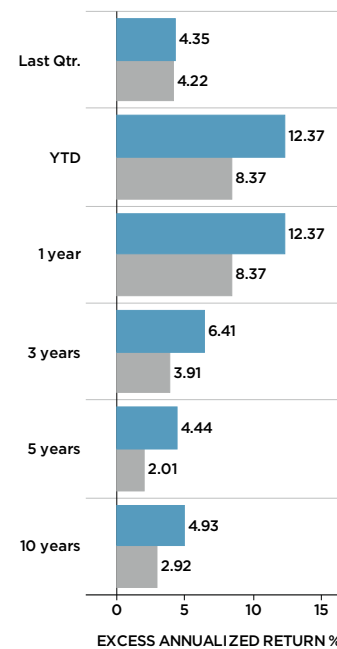


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CREF SOCIAL CHOICE R3

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR	CREF Social Choice R3	Peer Group Rank	BBgBarc Capital US TIPS Index	World Alloc	# of Funds
Standard Deviation	6.84	12%	3.44	8.17	391
Sharpe Ratio	0.87	1%	0.45	0.45	391
Alpha	5.50	5%	0.00	2.85	391
Beta	0.32	73%	1.00	0.45	391
R-Squared	2.50	59%	100.00	5.44	391
Up Mkt Capture	116.51	21%	100.00	102.04	391
Down Mkt Capture	5.31	12%	100.00	47.36	391
Information Ratio	0.61	2%	NA	0.25	391
TRAILING RETURNS					
Last Qtr.	5.14	52%	0.79	5.00	475
YTD	20.80	13%	8.43	16.80	468
1 Year	20.80	13%	8.43	16.80	468
3 Years	9.73	5%	3.31	7.22	422
5 Years	7.06	4%	2.62	4.63	391
10 Years	8.29	7%	3.36	6.28	266
CALENDAR RETURNS					
2018	-4.29	3%	-1.26	-7.94	480
2017	14.27	50%	3.01	14.02	519
2016	7.40	27%	4.68	6.17	545
2015	-0.87	19%	-1.44	-4.25	551
2014	6.83	6%	3.64	2.21	545



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4.1

VANGUARD INST TARGET RETIREMENT

Period Ending 12.31.19 | Q4 19

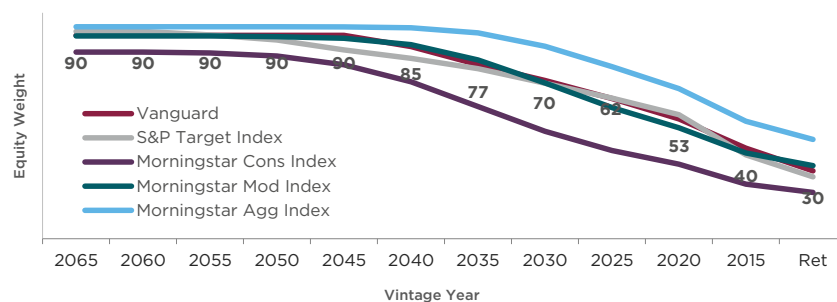
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Investor Assumptions/Glidepath Methodology

Glidepath Management	• Through retirement (assumed at age 65) ending 7 years after retirement
Assumed Investor Savings Rate:	• Contributions start at 5% at age 25 and increase to 10% at age 65. Also includes a 50% employer match up to 3% of salary.
Assumed Investor Income Growth Rate	• 1.1% annual salary growth
Income Replacement	• The portfolios are designed to provide withdrawals in retirement based on multiples of an investor's age 65 salary.
Assumed Accumulated Savings at Retirement	• N/A
Life Expectancy	• Through age 95
Asset Allocation Flexibility	• Strict targets with narrow ranges.
Other Assumptions	• Glidepath was tested against 10,000 potential lifetime return outcomes

Vanguard uses a proprietary capital markets modeling tool to statistically analyze historical data, including interest rates, inflation, and other risk factors for global equities, fixed income, and commodity markets. This tool is used to generate forward-looking distributions of expected returns. Then, by combining these figures with their investor assumptions, Vanguard constructs target portfolios with asset allocations that seek to provide the highest probability of a successful outcome (not outliving retirement savings).

Target Asset Allocation Glidepath per Vintage Year



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* Due to lack of track record, performance data for the Vanguard Target Retirement series is being used for the Vanguard Inst Target Retirement series.

Investment Profile

% Open Architecture:	0%	Active/Passive:	Passive
Inception Date:	6-26-2015	% Active:	0%
Net Assets \$MM:	\$220,103	Manager Tenure:	4.58 years (longest)
Manager Name:	Team	Expense Range:	0.09%
Avg # of Holdings:	5	Investment Structure:	Mutual Fund

Dedicated Asset Class Granularity/Diversification

Emerging Market Equities	Through Intl Index Fund
International/Global Debt	Yes
Inflation-Protected Securities	Yes
High Yield Fixed Income	No
Real Estate	No
Commodities	No

The Vanguard Target Retirement funds allocate to five broad index funds that provide comprehensive exposure to U.S. and non-U.S. equity and bond markets. Using index funds allows Vanguard to provide investment diversification at a low cost while also producing returns in line with equity and fixed income markets. Through its five index funds, the strategies gain exposure to over 25 sub-asset classes, capturing over 90% of the world's investable market.

VANGUARD INST TARGET RETIREMENT

Period Ending 12.31.19 | Q4 19

4.1

Material Changes to the Series

2006:

- Increased minimum equity allocation from 20% to 30%
- Added Emerging Markets Equity

Rationale:

- Participant behavior showed lower savings rate
- Decreased costs within the EM space led to increased liquidity

2010:

- Collapsed three international equity index funds (Europe, Pacific, and Emerging Markets) with Vanguard Total International Stock Index

Rationale:

- More cost-effective way to gain international exposure

2013:

- Replaced the broad TIPs fund with a short-term TIPs allocation
- Eliminated the Prime Money Market fund
- Added a 20% International Bond Index Allocation

Rationale:

- Short-Term TIPs provide better inflation exposure with lower interest rate risk
- Deemed to be an unnecessary asset class
- Dedicated exposure to move more in line with the Global fixed income Market Cap; better FI diversification

2015:

- Increased international stock allocation from 30% to 40%
- Increased International bond allocation from 20% to 30%

Rationale:

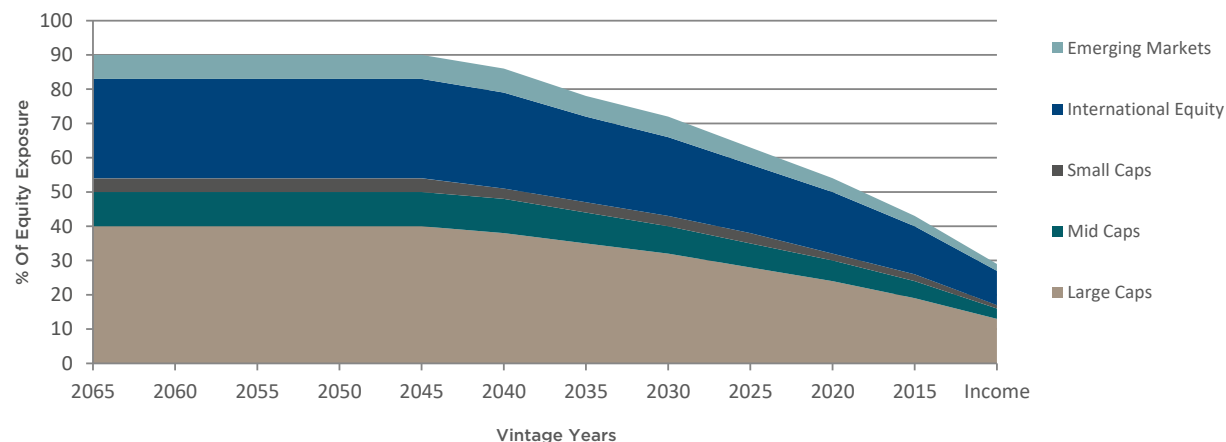
- Move to be more in line with the Global Market Cap

*All information provided by the asset manager, as of 12/31/18. Asset allocations shown are static in nature and do not incorporate any tactical views implemented by the manager.

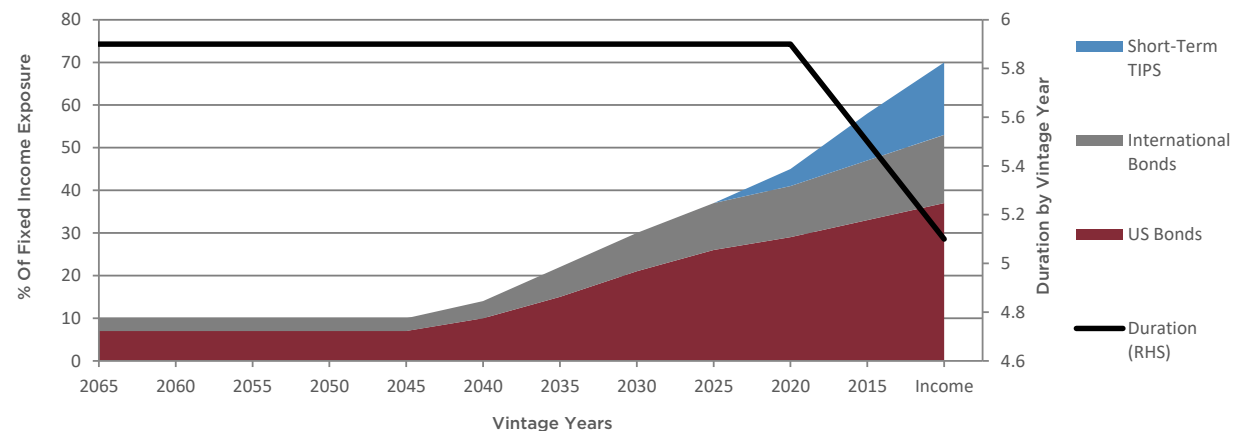
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Equity Exposure



Fixed Income Exposure



TARGET DATE ANALYSIS

Period Ending 12.31.19 | Q4 19

4.1

	3 Year				5 Year			
	Beta	Sharpe	Up Capture	Down Capture	Beta	Sharpe	Up Capture	Down Capture
Vanguard Target Retirement 2015 Inv	0.87	1.27	94.06	81.92	0.92	0.89	94.48	90.32
Morningstar Target Date 2015	0.95	1.12	95.77	92.40	0.96	0.79	94.17	96.75
S&P Target Date 2015 TR	1.00	1.10	100.00	100.00	1.00	0.84	100.00	100.00

	3 Year				5 Year			
	Beta	Sharpe	Up Capture	Down Capture	Beta	Sharpe	Up Capture	Down Capture
Vanguard Target Retirement 2025 Inv	1.02	1.12	104.99	99.03	1.02	0.80	103.16	102.12
Morningstar Target Date 2025	0.96	1.06	95.44	92.14	0.97	0.72	94.60	98.43
S&P Target Date 2025 TR	1.00	1.04	100.00	100.00	1.00	0.79	100.00	100.00

	3 Year				5 Year			
	Beta	Sharpe	Up Capture	Down Capture	Beta	Sharpe	Up Capture	Down Capture
Vanguard Target Retirement 2045 Inv	1.02	0.98	104.49	100.86	1.04	0.70	103.08	104.16
Morningstar Target Date 2045	1.00	0.94	100.01	98.09	1.02	0.66	98.90	102.78
S&P Target Date 2045 TR	1.00	0.93	100.00	100.00	1.00	0.72	100.00	100.00

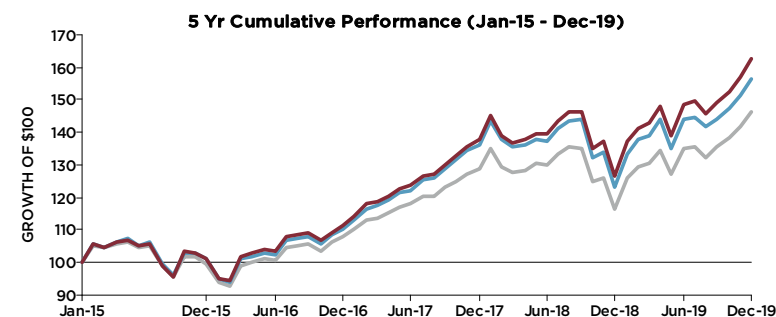
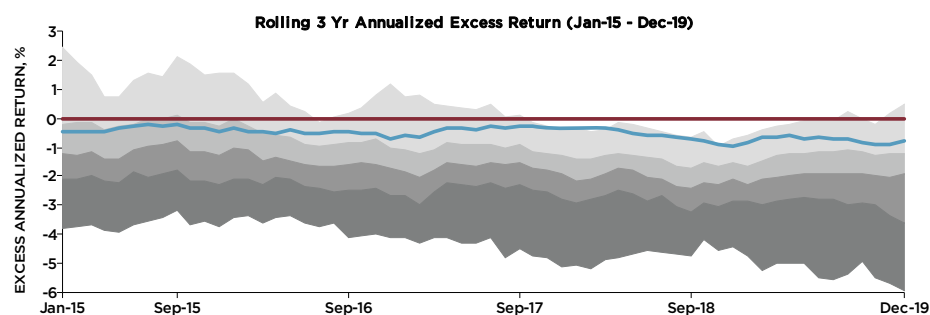
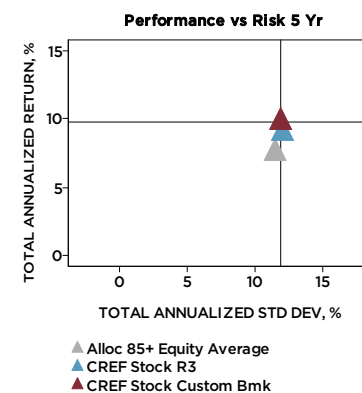
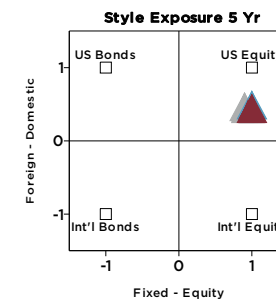
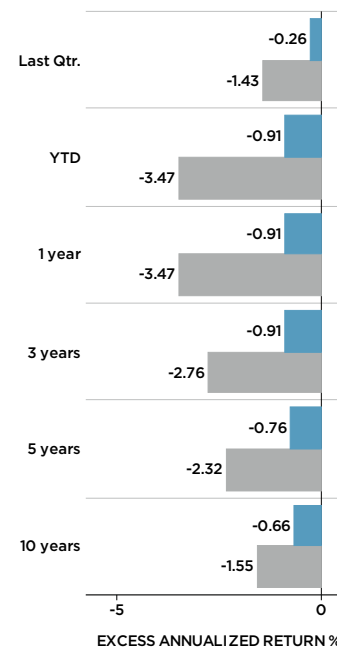
*Lowest cost share class shown

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CREF STOCK R3

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR	CREF Stock R3	Peer Group Rank	CREF Stock Custom Bmk	Alloc 85+ Equity	# of Funds
Standard Deviation	11.96	82%	11.84	11.52	170
Sharpe Ratio	0.66	15%	0.73	0.56	170
Alpha	-0.84	19%	0.00	-1.86	170
Beta	1.01	13%	1.00	0.95	170
R-Squared	99.67	1%	100.00	95.19	170
Up Mkt Capture	97.96	6%	100.00	87.76	170
Down Mkt Capture	102.61	73%	100.00	98.43	170
Information Ratio	-1.01	51%	NA	-1.04	170
TRAILING RETURNS					
Last Qtr.	8.90	10%	9.16	7.73	180
YTD	27.45	15%	28.36	24.89	179
1 Year	27.45	15%	28.36	24.89	179
3 Years	12.44	16%	13.35	10.59	173
5 Years	9.00	8%	9.77	7.45	170
10 Years	10.44	11%	11.11	9.56	129
CALENDAR RETURNS					
2018	-9.65	52%	-7.98	-9.73	203
2017	23.45	9%	23.30	19.34	224
2016	9.17	23%	10.41	8.67	234
2015	-0.84	28%	-0.89	-2.35	236
2014	6.41	30%	7.55	5.41	229



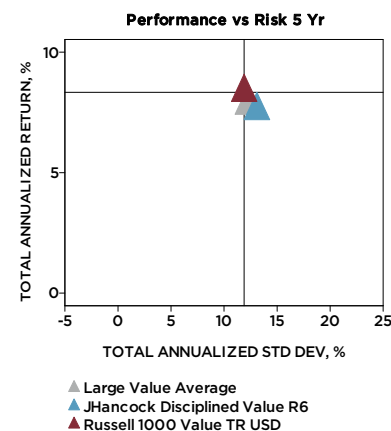
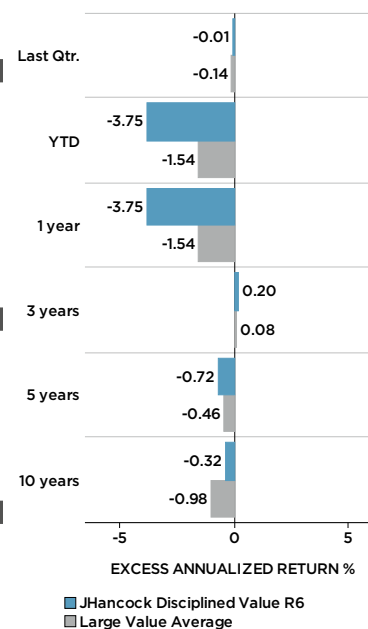
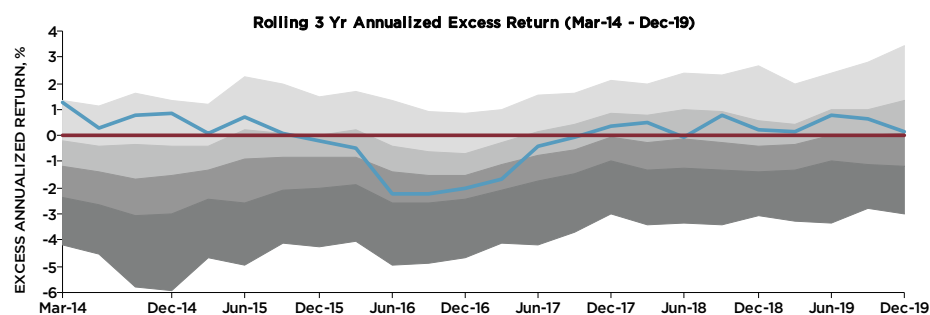
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JHANCOCK DISCIPLINED VALUE R6

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR	JHancock Disciplined Value R6	Peer Group Rank	Russell 1000 Value TR USD	Large Value	# of Funds
Standard Deviation	13.06	75%	11.98	12.24	1032
Sharpe Ratio	0.50	67%	0.60	0.56	1032
Alpha	-1.20	68%	0.00	-0.33	1032
Beta	1.07	25%	1.00	0.98	1032
R-Squared	95.61	40%	100.00	92.29	1032
Up Mkt Capture	101.33	32%	100.00	96.46	1032
Down Mkt Capture	107.04	73%	100.00	98.04	1032
Information Ratio	-0.23	62%	NA	-0.13	1032
TRAILING RETURNS					
Last Qtr.	7.40	44%	7.41	7.26	1153
YTD	22.79	78%	26.54	25.00	1134
1 Year	22.79	78%	26.54	25.00	1134
3 Years	9.88	48%	9.68	9.76	1105
5 Years	7.57	61%	8.29	7.82	1032
10 Years	11.48	29%	11.80	10.82	921
CALENDAR RETURNS					
2018	-9.47	60%	-8.27	-8.82	1224
2017	19.33	15%	13.66	15.88	1290
2016	14.07	53%	17.34	14.46	1345
2015	-4.81	68%	-3.83	-3.94	1355
2014	11.04	48%	13.45	10.58	1359



INVESTMENT PROFILE

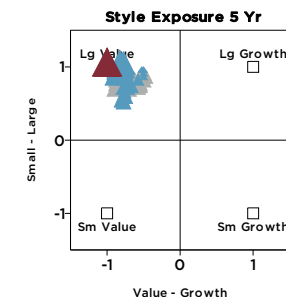
Ticker	JDVWX
CUSIP	47803U418
Net Assets \$MM	\$15,387.00
Manager Names	Team Managed
Manager Tenure	23.0 Years
Prospectus Exp Ratio	0.70%
Cat Median Exp Ratio	1.06%
Current 12b-1	0.00%
Annld Ret Since Incept	12.97%
Inception Date	09/01/2011
Phone Number	888-972-8696
Sub Advisor	Boston Partners Global Investors, Inc

HOLDINGS OVERVIEW

Total Number of Holdings	82
% Assets in Top 10 Holdings	29.49%
Avg Mkt Cap \$MM	\$80,802.10
Turnover Ratio	69.00%

TOP HOLDINGS

Berkshire Hathaway Inc E	4.62%
Bank of America Corp	4.01%
JPMorgan Chase & Co	3.31%
Comcast Corp Class A	3.05%
Procter & Gamble Co	2.68%

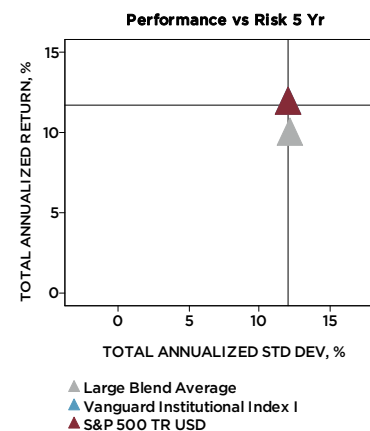
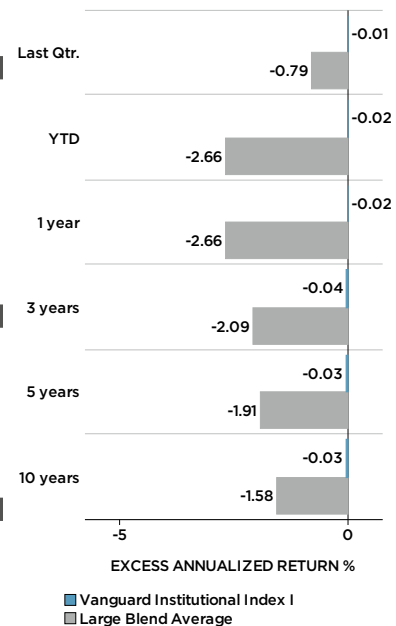
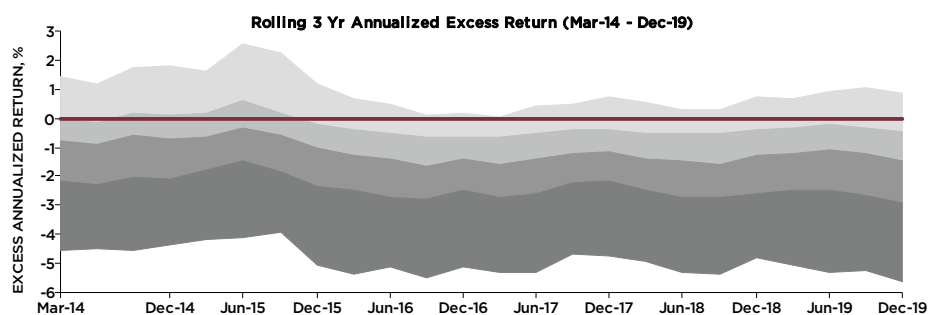


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VANGUARD INSTITUTIONAL INDEX I

Period Ending 12.31.19 | Q4 19

	Vanguard Institutional Index I	Peer Group Rank	S&P 500 TR USD	Large Blend	# of Funds
KEY MEASURES / 5 YEAR					
Standard Deviation	11.98	41%	11.98	12.21	1148
Sharpe Ratio	0.88	12%	0.89	0.72	1148
Alpha	-0.03	16%	0.00	-1.78	1148
Beta	1.00	50%	1.00	0.99	1148
R-Squared	100.00	1%	100.00	94.01	1148
Up Mkt Capture	99.90	17%	100.00	92.90	1148
Down Mkt Capture	100.05	33%	100.00	102.51	1148
Information Ratio	-2.30	93%	NA	-1.21	1148
TRAILING RETURNS					
Last Qtr.	9.06	30%	9.07	8.28	1299
YTD	31.46	22%	31.49	28.82	1283
1 Year	31.46	22%	31.49	28.82	1283
3 Years	15.24	14%	15.27	13.18	1209
5 Years	11.67	8%	11.70	9.79	1148
10 Years	13.53	7%	13.56	11.98	1011
CALENDAR RETURNS					
2018	-4.42	21%	-4.38	-6.54	1325
2017	21.79	30%	21.83	20.38	1379
2016	11.93	27%	11.96	10.43	1447
2015	1.37	22%	1.38	-0.60	1503
2014	13.65	18%	13.69	11.27	1540



INVESTMENT PROFILE

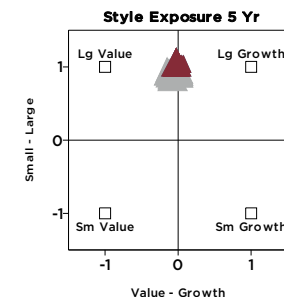
Ticker	VINIX
CUSIP	922040100
Net Assets \$MM	\$242,173.00
Manager Names	Team Managed
Manager Tenure	19.0 Years
Prospectus Exp Ratio	0.04%
Cat Median Exp Ratio	1.06%
Current 12b-1	N/A
Annlzd Ret Since Incept	10.07%
Inception Date	07/31/1990
Phone Number	888-809-8102
Sub Advisor	N/A

HOLDINGS OVERVIEW

Total Number of Holdings	512
% Assets in Top 10 Holdings	22.28%
Avg Mkt Cap \$MM	\$119,868.44
Turnover Ratio	6.00%

TOP HOLDINGS

Microsoft Corp	4.41%
Apple Inc	4.33%
Amazon.com Inc	2.86%
Facebook Inc A	1.85%
Berkshire Hathaway Inc E	1.65%



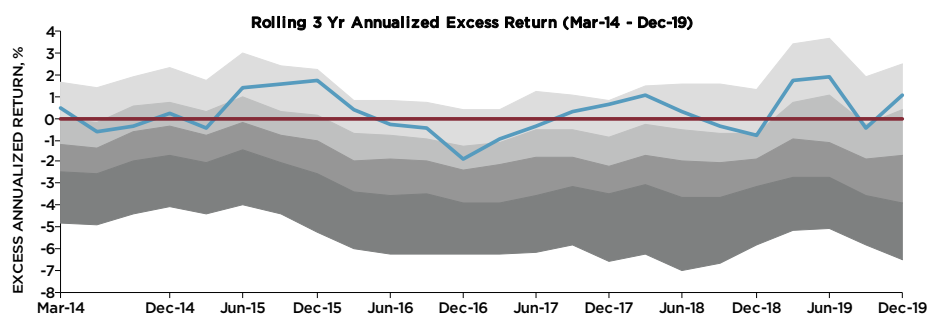
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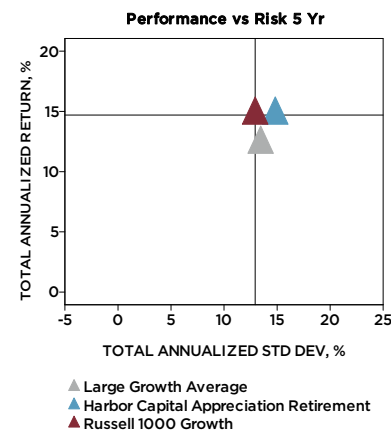
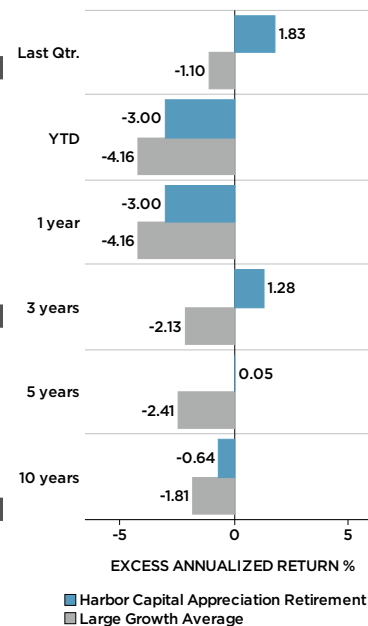
HARBOR CAPITAL APPRECIATION RETIREMENT

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR	Harbor Capital Appreciation Retirement	Peer Group Rank	Russell 1000 Growth	Large Growth	# of Funds
Standard Deviation	14.75	85%	12.92	13.50	1240
Sharpe Ratio	0.92	30%	1.05	0.83	1240
Alpha	-1.27	33%	0.00	-2.31	1240
Beta	1.10	10%	1.00	0.99	1240
R-Squared	92.35	54%	100.00	90.82	1240
Up Mkt Capture	107.91	5%	100.00	93.10	1240
Down Mkt Capture	114.07	83%	100.00	104.83	1240
Information Ratio	0.01	14%	NA	-0.58	1240
TRAILING RETURNS					
Last Qtr.	12.45	6%	10.62	9.52	1347
YTD	33.39	41%	36.39	32.23	1328
1 Year	33.39	41%	36.39	32.23	1328
3 Years	21.77	17%	20.49	18.35	1284
5 Years	14.68	14%	14.63	12.22	1240
10 Years	14.58	21%	15.22	13.41	1091
CALENDAR RETURNS					
2018	-0.96	38%	-1.51	-2.12	1425
2017	36.68	5%	30.21	28.14	1458
2016	-1.04	85%	7.08	3.26	1576
2015	10.99	4%	5.67	3.62	1670
2014	9.93	53%	13.05	9.95	1720



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INVESTMENT PROFILE

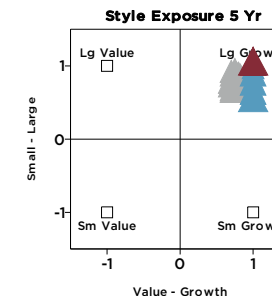
Ticker	HNACX
CUSIP	411512528
Net Assets \$MM	\$31,424.00
Manager	Blaine S. Boyer, Natasha Kuhlkin
Manager Tenure	29.7 Years
Prospectus Exp Ratio	0.58%
Cat Median Exp Ratio	1.14%
Current 12b-1	N/A
Annlzd Ret Since Incept	19.00%
Inception Date	03/01/2016
Phone Number	800-422-1050
Sub Advisor	Jennison Associates LLC

HOLDINGS OVERVIEW

Total Number of Holdings	60
% Assets in Top 10 Holdings	38.75%
Avg Mkt Cap \$MM	\$151,517.66
Turnover Ratio	40.00%

TOP HOLDINGS

Amazon.com Inc	5.79%
Microsoft Corp	5.05%
Mastercard Inc A	4.26%
Salesforce.com Inc	3.94%
Apple Inc	3.91%

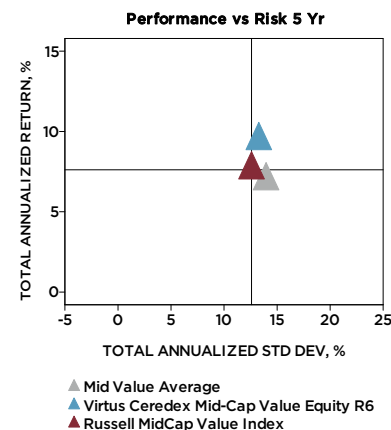
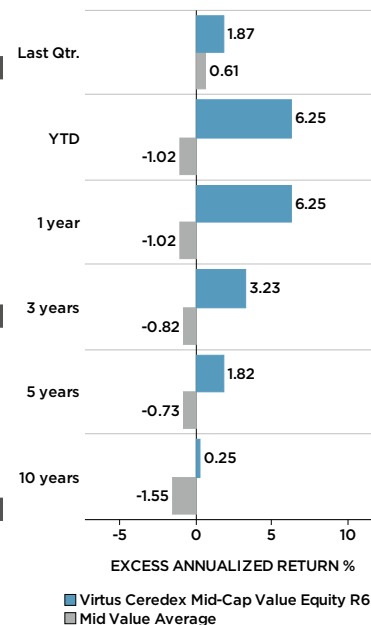
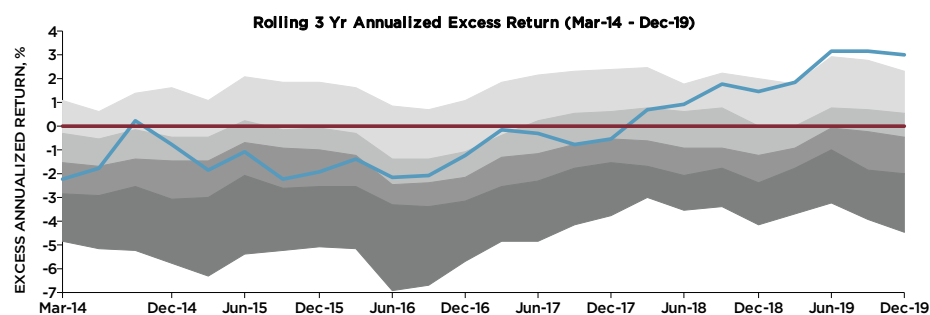


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VIRTUS CEREDEX MID-CAP VALUE EQUITY R6

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR	Virtus Ceredex Mid-Cap Value Equity R6	Peer Group Rank	Russell MidCap Value Index	Mid Value	# of Funds
Standard Deviation	13.26	36%	12.62	13.94	378
Sharpe Ratio	0.63	9%	0.52	0.43	378
Alpha	1.68	10%	0.00	-1.13	378
Beta	1.02	64%	1.00	1.06	378
R-Squared	94.60	38%	100.00	92.52	378
Up Mkt Capture	107.90	18%	100.00	100.76	378
Down Mkt Capture	98.07	32%	100.00	105.93	378
Information Ratio	0.55	5%	NA	-0.15	378
TRAILING RETURNS					
Last Qtr.	8.23	18%	6.36	6.96	403
YTD	33.31	5%	27.06	26.04	402
1 Year	33.31	5%	27.06	26.04	402
3 Years	11.33	2%	8.10	7.28	386
5 Years	9.43	7%	7.62	6.88	378
10 Years	12.66	7%	12.41	10.87	317
CALENDAR RETURNS					
2018	-7.58	6%	-12.29	-13.81	443
2017	11.98	69%	13.34	13.34	447
2016	20.53	31%	20.00	17.96	454
2015	-5.63	61%	-4.78	-5.01	468
2014	11.05	38%	14.75	9.47	452



INVESTMENT PROFILE

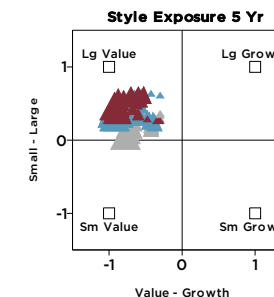
Ticker	SMVZX
CUSIP	92837F441
Net Assets \$MM	\$3,716.00
Manager Names	Don Wordell
Manager Tenure	18.1 Years
Prospectus Exp Ratio	0.79%
Cat Median Exp Ratio	1.13%
Current 12b-1	N/A
Annld Ret Since Incept	9.85%
Inception Date	08/01/2014
Phone Number	888-784-3863
Sub Advisor	Ceredex Value Advisors LLC

HOLDINGS OVERVIEW

Total Number of Holdings	55
% Assets in Top 10 Holdings	33.18%
Avg Mkt Cap \$MM	\$15,461.69
Turnover Ratio	N/A

TOP HOLDINGS

Zimmer Biomet Holdings I	4.95%
Western Digital Corp	3.67%
Humana Inc	3.63%
Progressive Corp	3.28%
Motorola Solutions Inc	3.12%

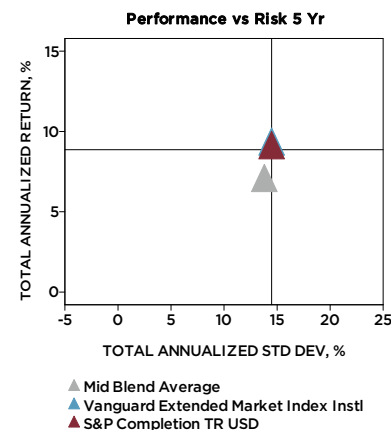
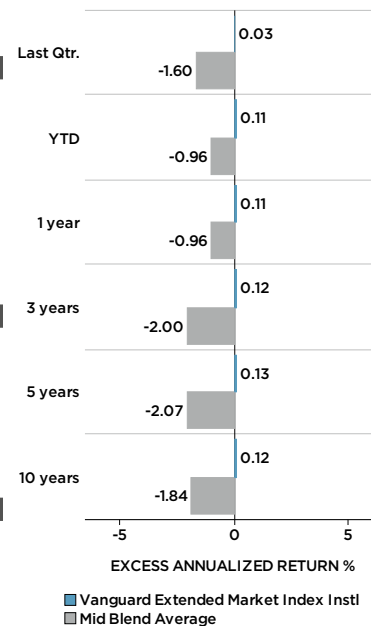
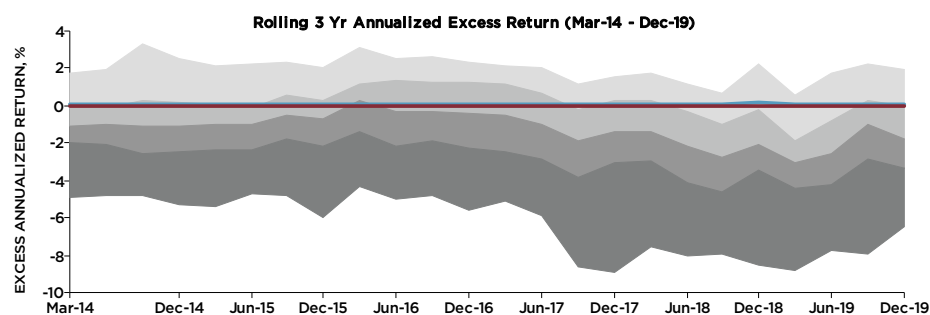


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VANGUARD EXTENDED MARKET INDEX INSTL

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR	Vanguard Extended Market Index Instl	Peer Group Rank	S&P Completion TR USD	Mid Blend	# of Funds
Standard Deviation	14.55	79%	14.55	13.84	322
Sharpe Ratio	0.55	26%	0.54	0.43	322
Alpha	0.14	32%	0.00	-1.26	322
Beta	1.00	12%	1.00	0.90	322
R-Squared	100.00	1%	100.00	88.95	322
Up Mkt Capture	100.42	4%	100.00	85.18	322
Down Mkt Capture	99.78	78%	100.00	91.90	322
Information Ratio	1.80	1%	NA	-0.33	322
TRAILING RETURNS					
Last Qtr.	8.89	14%	8.86	7.26	375
YTD	28.05	41%	27.95	26.99	371
1 Year	28.05	41%	27.95	26.99	371
3 Years	11.09	24%	10.97	8.97	360
5 Years	9.03	16%	8.90	6.83	322
10 Years	12.83	7%	12.71	10.87	280
CALENDAR RETURNS					
2018	-9.35	25%	-9.57	-12.02	398
2017	18.12	29%	18.11	15.70	415
2016	16.15	41%	15.95	14.02	405
2015	-3.24	46%	-3.35	-4.78	420
2014	7.56	64%	7.50	8.39	417



INVESTMENT PROFILE

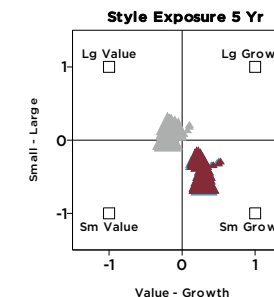
Ticker	VIEIX
CUSIP	922908884
Net Assets \$MM	\$74,562.00
Manager Names	Team Managed
Manager Tenure	22.0 Years
Prospectus Exp Ratio	0.06%
Cat Median Exp Ratio	1.15%
Current 12b-1	N/A
Annld Ret Since Incept	8.81%
Inception Date	07/07/1997
Phone Number	888-809-8102
Sub Advisor	N/A

HOLDINGS OVERVIEW

Total Number of Holdings	3283
% Assets in Top 10 Holdings	5.01%
Avg Mkt Cap \$MM	\$4,744.32
Turnover Ratio	10.00%

TOP HOLDINGS

Tesla Inc	0.89%
Blackstone Group Inc	0.68%
Workday Inc Class A	0.52%
Lululemon Athletica Inc	0.48%
Square Inc A	0.45%



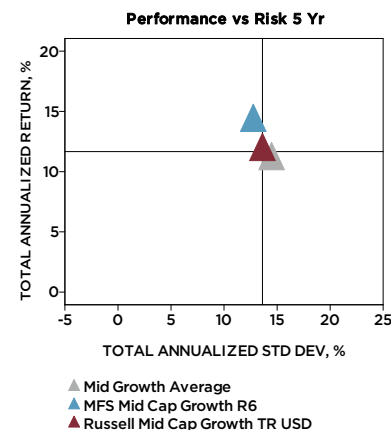
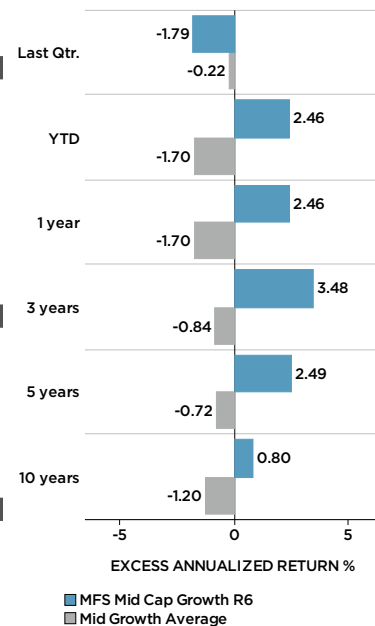
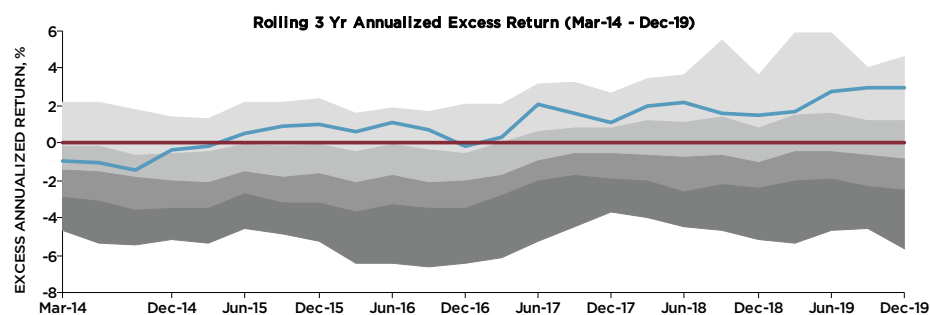
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4.1

MFS MID CAP GROWTH R6

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR					
Standard Deviation	12.83	18%	13.65	14.40	552
Sharpe Ratio	1.01	4%	0.77	0.69	552
Alpha	3.48	6%	0.00	-0.68	552
Beta	0.91	82%	1.00	1.00	552
R-Squared	92.88	43%	100.00	89.80	552
Up Mkt Capture	99.84	37%	100.00	97.59	552
Down Mkt Capture	82.92	9%	100.00	100.97	552
Information Ratio	0.62	5%	NA	-0.22	552
TRAILING RETURNS					
Last Qtr.	6.38	76%	8.17	7.95	602
YTD	37.93	21%	35.47	33.77	595
1 Year	37.93	21%	35.47	33.77	595
3 Years	20.84	10%	17.36	16.51	578
5 Years	14.09	7%	11.60	10.88	552
10 Years	15.04	11%	14.24	13.04	505
CALENDAR RETURNS					
2018	1.21	9%	-4.75	-5.56	612
2017	26.39	36%	25.27	24.95	635
2016	4.75	56%	7.33	5.91	671
2015	4.60	10%	-0.20	-0.58	683
2014	8.95	32%	11.90	7.09	702



INVESTMENT PROFILE

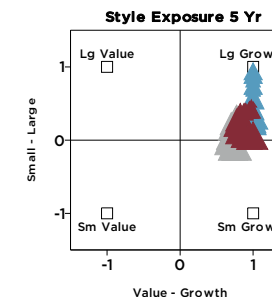
Ticker	OTCKX
CUSIP	552987554
Net Assets \$MM	\$7,986.00
Manager Names	Team Managed
Manager Tenure	11.1 Years
Prospectus Exp Ratio	0.74%
Cat Median Exp Ratio	1.25%
Current 12b-1	N/A
Annld Ret Since Incept	15.97%
Inception Date	01/02/2013
Phone Number	800-225-2606
Sub Advisor	N/A

HOLDINGS OVERVIEW

Total Number of Holdings	95
% Assets in Top 10 Holdings	25.84%
Avg Mkt Cap \$MM	\$18,285.33
Turnover Ratio	21.00%

TOP HOLDINGS

Global Payments Inc	4.22%
Bright Horizons Family Sol	3.53%
Fidelity National Informat	2.52%
PerkinElmer Inc	2.39%
Fiserv Inc	2.34%



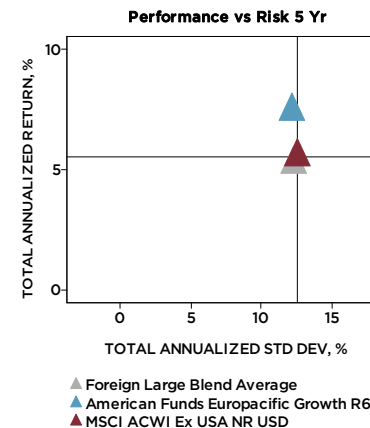
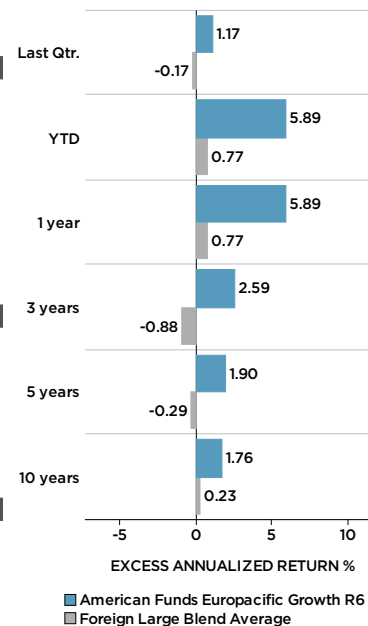
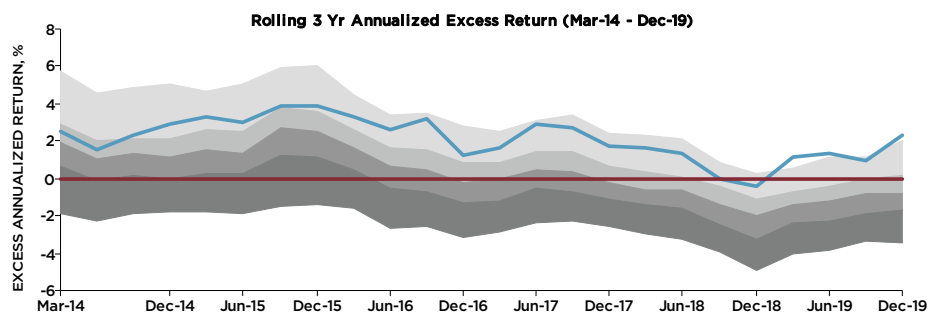
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4.1

AMERICAN FUNDS EUROPACIFIC GROWTH R6

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR	American Funds Europacific Growth R6	Peer Group Rank	MSCI ACWI Ex USA NR USD	Foreign Large Blend	# of Funds
Standard Deviation	12.16	58%	12.53	12.26	582
Sharpe Ratio	0.52	7%	0.35	0.34	582
Alpha	2.20	5%	0.00	0.01	582
Beta	0.93	46%	1.00	0.93	582
R-Squared	92.21	46%	100.00	90.92	582
Up Mkt Capture	97.72	22%	100.00	92.06	582
Down Mkt Capture	86.09	22%	100.00	92.38	582
Information Ratio	0.52	2%	NA	-0.07	582
TRAILING RETURNS					
Last Qtr.	10.09	18%	8.92	8.75	715
YTD	27.40	7%	21.51	22.28	691
1 Year	27.40	7%	21.51	22.28	691
3 Years	12.45	2%	9.87	8.99	656
5 Years	7.41	3%	5.51	5.21	582
10 Years	6.73	6%	4.97	5.20	505
CALENDAR RETURNS					
2018	-14.91	46%	-14.20	-15.50	703
2017	31.17	4%	27.19	25.32	751
2016	1.01	46%	4.50	0.88	771
2015	-0.48	38%	-5.66	-1.40	748
2014	-2.29	17%	-3.87	-4.96	758



INVESTMENT PROFILE

Ticker	RERGX
CUSIP	298706821
Net Assets \$MM	\$171,878.00
Manager Names	Team Managed
Manager Tenure	18.6 Years
Prospectus Exp Ratio	0.49%
Cat Median Exp Ratio	1.13%
Current 12b-1	N/A
Annlzd Ret Since Incept	9.43%
Inception Date	05/01/2009
Phone Number	800-421-4225
Sub Advisor	N/A

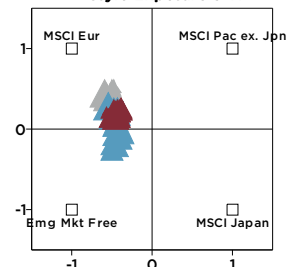
HOLDINGS OVERVIEW

Total Number of Holdings	322
% Assets in Top 10 Holdings	20.92%
Avg Mkt Cap \$MM	\$44,148.14
Turnover Ratio	35.00%

TOP HOLDINGS

Airbus SE	2.61%
AlA Group Ltd	2.56%
Nintendo Co Ltd	2.41%
Reliance Industries Ltd	2.38%
HDFC Bank Ltd	2.32%

Style Exposure 5 Yr

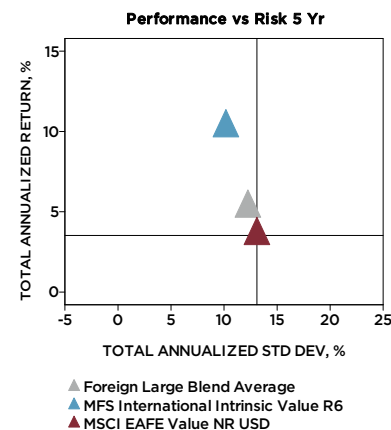
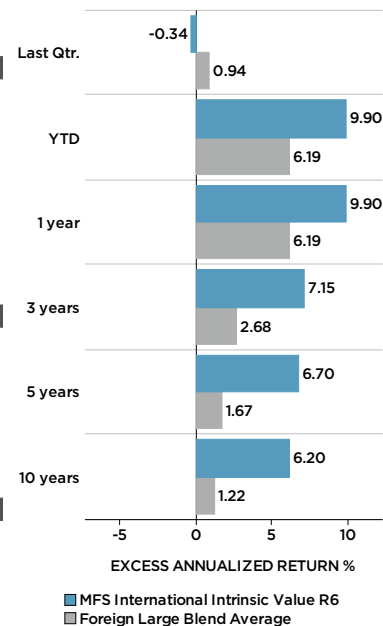
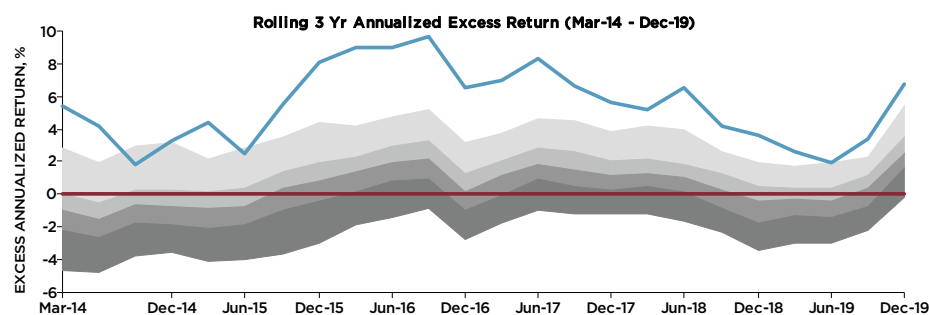


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MFS INTERNATIONAL INTRINSIC VALUE R6

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR					
	MFS International Intrinsic Value R6	Peer Group Rank	MSCI EAFE Value NR USD	Foreign Large Blend	# of Funds
Standard Deviation	10.21	4%	13.18	12.26	582
Sharpe Ratio	0.90	1%	0.19	0.34	582
Alpha	7.68	1%	0.00	2.02	582
Beta	0.60	98%	1.00	0.86	582
R-Squared	60.62	100%	100.00	84.91	582
Up Mkt Capture	74.74	94%	100.00	87.87	582
Down Mkt Capture	37.20	1%	100.00	78.60	582
Information Ratio	0.77	1%	NA	0.32	582
TRAILING RETURNS					
Last Qtr.	7.48	86%	7.82	8.75	715
YTD	25.99	18%	16.09	22.28	691
1 Year	25.99	18%	16.09	22.28	691
3 Years	13.46	1%	6.31	8.99	656
5 Years	10.24	1%	3.54	5.21	582
10 Years	10.18	1%	3.98	5.20	505
CALENDAR RETURNS					
2018	-8.89	2%	-14.78	-15.50	703
2017	27.25	28%	21.44	25.32	751
2016	4.31	14%	5.02	0.88	771
2015	6.85	1%	-5.68	-1.40	748
2014	1.61	3%	-5.39	-4.96	758



INVESTMENT PROFILE

Ticker	MINJX
CUSIP	552746349
Net Assets \$MM	\$29,869.00
Manager Names	Team Managed
Manager Tenure	11.1 Years
Prospectus Exp Ratio	0.63%
Cat Median Exp Ratio	1.13%
Current 12b-1	N/A
Annld Ret Since Incept	7.35%
Inception Date	05/01/2006
Phone Number	800-225-2606
Sub Advisor	N/A

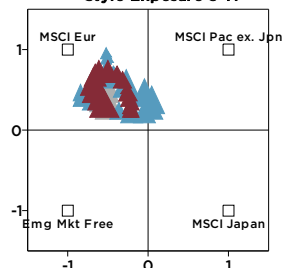
HOLDINGS OVERVIEW

Total Number of Holdings	106
% Assets in Top 10 Holdings	28.58%
Avg Mkt Cap \$MM	\$26,423.50
Turnover Ratio	6.00%

TOP HOLDINGS

Nestle SA	5.12%
Givaudan SA	3.52%
Cadence Design Systems	3.31%
Pernod Ricard SA	2.71%
Diageo PLC	2.45%

Style Exposure 5 Yr



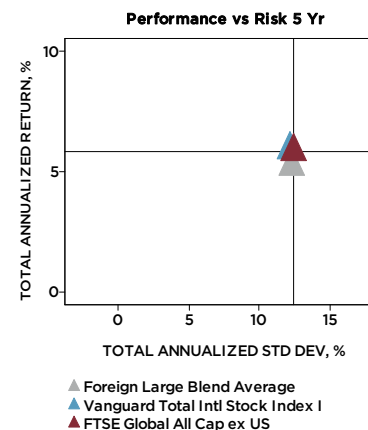
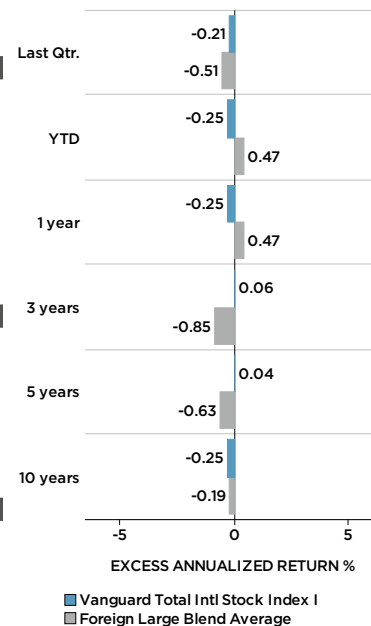
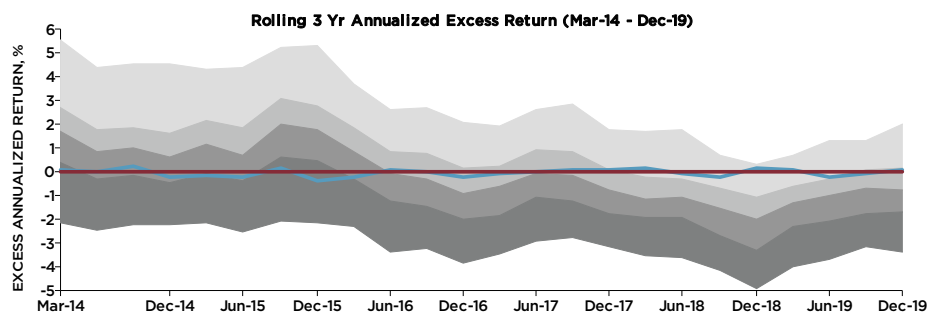
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4.1

VANGUARD TOTAL INTL STOCK INDEX I

Period Ending 12.31.19 | Q4 19

	Vanguard Total Intl Stock Index I	Peer Group Rank	FTSE Global All Cap ex US	Foreign Large Blend	# of Funds
KEY MEASURES / 5 YEAR					
Standard Deviation	12.15	56%	12.42	12.26	582
Sharpe Ratio	0.40	26%	0.38	0.34	582
Alpha	0.18	30%	0.00	-0.35	582
Beta	0.97	33%	1.00	0.94	582
R-Squared	98.54	2%	100.00	90.99	582
Up Mkt Capture	98.02	22%	100.00	92.36	582
Down Mkt Capture	97.42	66%	100.00	94.60	582
Information Ratio	0.03	24%	NA	-0.16	582
TRAILING RETURNS					
Last Qtr.	9.05	40%	9.26	8.75	715
YTD	21.56	57%	21.81	22.28	691
1 Year	21.56	57%	21.81	22.28	691
3 Years	9.90	28%	9.84	8.99	656
5 Years	5.88	26%	5.84	5.21	582
10 Years	5.13	56%	5.39	5.20	505
CALENDAR RETURNS					
2018	-14.39	38%	-14.62	-15.50	703
2017	27.55	25%	27.41	25.32	751
2016	4.70	11%	4.72	0.88	771
2015	-4.24	82%	-4.29	-1.40	748
2014	-4.15	31%	-3.39	-4.96	758

**INVESTMENT PROFILE**

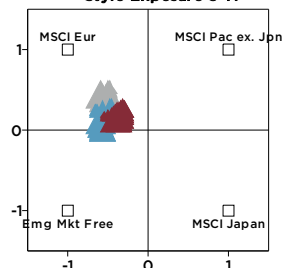
Ticker	VTSNX
CUSIP	921909784
Net Assets \$MM	\$420,632.00
Manager Names	Team Managed
Manager Tenure	11.4 Years
Prospectus Exp Ratio	0.08%
Cat Median Exp Ratio	1.13%
Current 12b-1	N/A
Annld Ret Since Incept	5.24%
Inception Date	11/29/2010
Phone Number	800-662-7447
Sub Advisor	N/A

HOLDINGS OVERVIEW

Total Number of Holdings	7390
% Assets in Top 10 Holdings	8.51%
Avg Mkt Cap \$MM	\$23,572.93
Turnover Ratio	4.00%

TOP HOLDINGS

Nestle SA	1.19%
Alibaba Group Holding Ltd	1.15%
Taiwan Semiconductor Mar	0.96%
Tencent Holdings Ltd	0.96%
Roche Holding AG Dividen	0.85%

Style Exposure 5 Yr

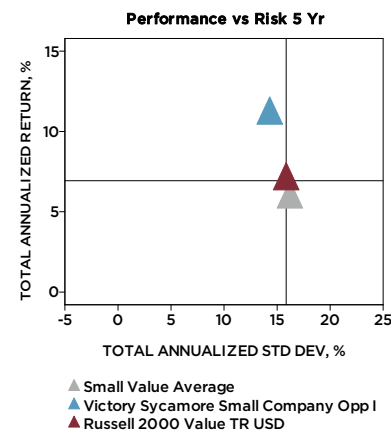
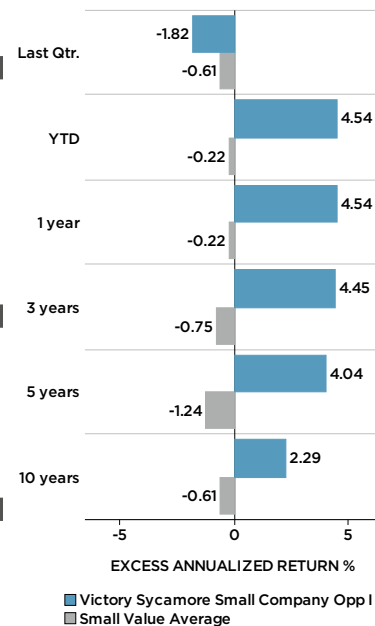
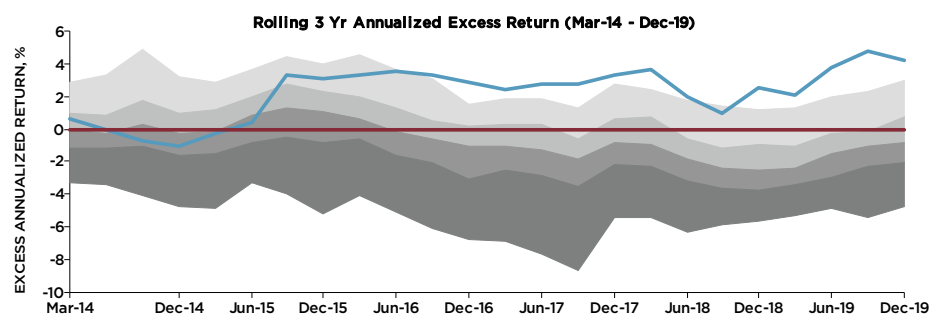
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4.1

VICTORY SYCAMORE SMALL COMPANY OPP I

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR	Victory Sycamore Small Company Opp I	Peer Group Rank	Russell 2000 Value TR USD	Small Value	# of Funds
Standard Deviation	14.32	10%	15.88	16.22	384
Sharpe Ratio	0.70	1%	0.37	0.30	384
Alpha	4.76	1%	0.00	-1.14	384
Beta	0.88	91%	1.00	0.98	384
R-Squared	94.95	47%	100.00	92.81	384
Up Mkt Capture	101.20	21%	100.00	93.66	384
Down Mkt Capture	81.95	10%	100.00	98.58	384
Information Ratio	1.00	1%	NA	-0.27	384
TRAILING RETURNS					
Last Qtr.	6.67	80%	8.49	7.88	410
YTD	26.94	14%	22.39	22.17	408
1 Year	26.94	14%	22.39	22.17	408
3 Years	9.22	4%	4.77	4.02	400
5 Years	11.03	1%	6.99	5.76	384
10 Years	12.85	2%	10.56	9.95	333
CALENDAR RETURNS					
2018	-8.26	3%	-12.86	-15.70	420
2017	11.88	24%	7.84	9.12	431
2016	30.04	19%	31.74	25.47	442
2015	-0.39	6%	-7.47	-6.65	449
2014	6.80	14%	4.22	3.46	446



INVESTMENT PROFILE

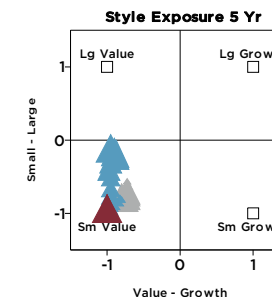
Ticker	VSOIX
CUSIP	92646A815
Net Assets \$MM	\$5,882.00
Manager Names	Team Managed
Manager Tenure	21.6 Years
Prospectus Exp Ratio	0.88%
Cat Median Exp Ratio	1.27%
Current 12b-1	0.00%
Annld Ret Since Incept	9.53%
Inception Date	08/31/2007
Phone Number	800-539-3863
Sub Advisor	N/A

HOLDINGS OVERVIEW

Total Number of Holdings	107
% Assets in Top 10 Holdings	13.82%
Avg Mkt Cap \$MM	\$2,485.36
Turnover Ratio	43.00%

TOP HOLDINGS

Bank of Hawaii Corp	1.49%
Sanderson Farms Inc	1.45%
Anixter International Inc	1.43%
Washington REIT	1.40%
South State Corp	1.39%



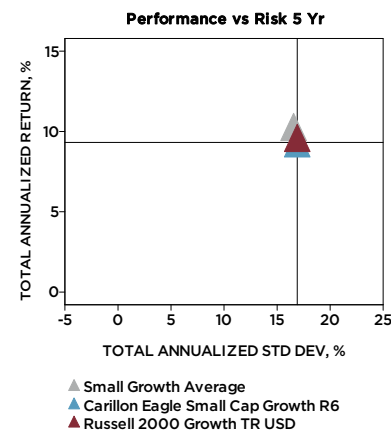
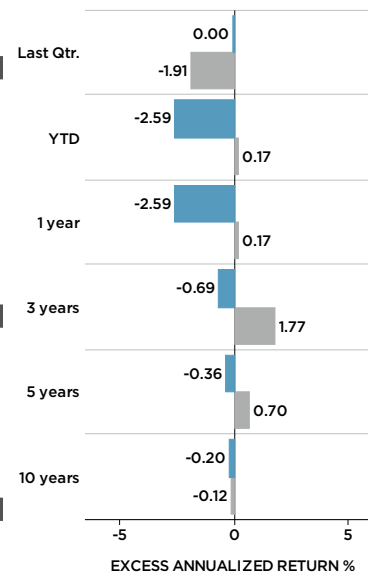
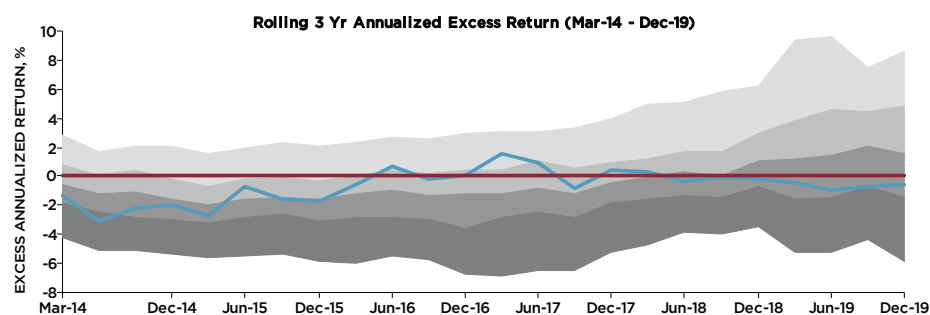
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4.1

CARILLON EAGLE SMALL CAP GROWTH R6

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR	Carillon Eagle Small Cap Growth R6	Peer Group Rank	Russell 2000 Growth TR USD	Small Growth	# of Funds
Standard Deviation	16.95	64%	16.90	16.54	596
Sharpe Ratio	0.47	71%	0.49	0.55	596
Alpha	-0.21	74%	0.00	1.27	596
Beta	0.98	26%	1.00	0.93	596
R-Squared	95.79	18%	100.00	90.65	596
Up Mkt Capture	98.72	36%	100.00	94.86	596
Down Mkt Capture	100.13	82%	100.00	90.40	596
Information Ratio	-0.09	72%	NA	0.11	596
TRAILING RETURNS					
Last Qtr.	11.39	24%	11.39	9.49	635
YTD	25.90	61%	28.48	28.65	631
1 Year	25.90	61%	28.48	28.65	631
3 Years	11.80	66%	12.49	14.26	616
5 Years	8.98	70%	9.34	10.04	596
10 Years	12.81	53%	13.01	12.89	533
CALENDAR RETURNS					
2018	-10.06	77%	-9.31	-5.58	666
2017	23.40	44%	22.17	22.27	707
2016	10.45	52%	11.32	11.11	728
2015	-0.39	26%	-1.38	-2.65	750
2014	5.59	24%	5.60	2.47	764



INVESTMENT PROFILE

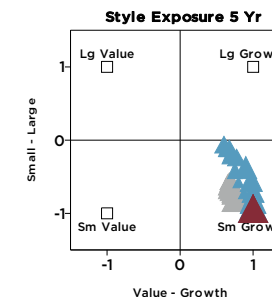
Ticker	HSRUX
CUSIP	14214L452
Net Assets \$MM	\$4,184.00
Manager Names	Team Managed
Manager Tenure	24.0 Years
Prospectus Exp Ratio	0.65%
Cat Median Exp Ratio	1.31%
Current 12b-1	0.00%
Annld Ret Since Incept	11.77%
Inception Date	08/15/2011
Phone Number	800-421-4184
Sub Advisor	Eagle Asset Management, Inc.

HOLDINGS OVERVIEW

Total Number of Holdings	111
% Assets in Top 10 Holdings	20.55%
Avg Mkt Cap \$MM	\$3,277.09
Turnover Ratio	N/A

TOP HOLDINGS

Quaker Chemical Corp	2.61%
Entegris Inc	2.36%
RealPage Inc	2.29%
Hexcel Corp	2.04%
Woodward Inc	2.03%

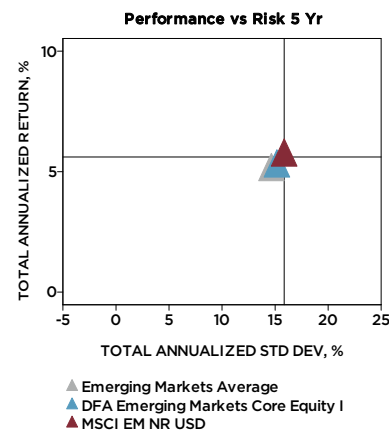
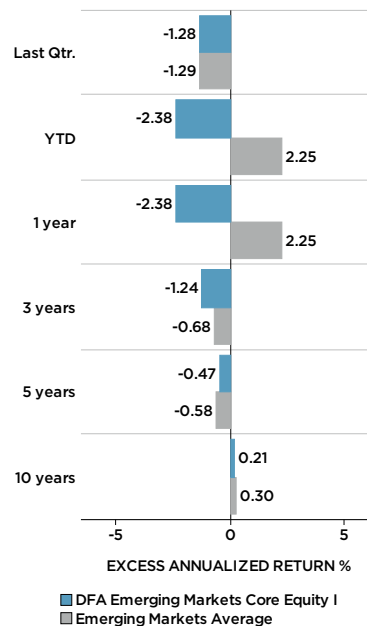
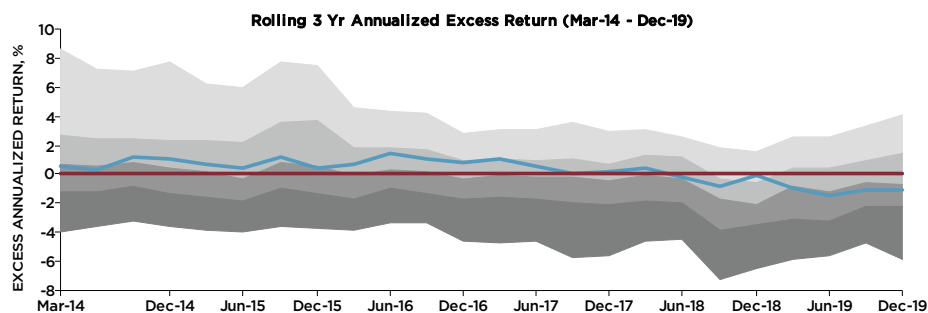


Performance Disclosure: For use with CAPTRUST clients only. Mutual fund investing involves risk. Please visit captrustadvisors.com/risk-disclosures/ for a detailed description of the risks associated with investing by asset class. Statistics and data have been derived from Morningstar and are not guaranteed to be accurate or complete. Performance data included here represents past performance and does not guarantee future results. This is not a solicitation to invest. Each mutual fund has a prospectus with a complete description of the risks associated with investing in the specific fund. To request a prospectus on this fund, please call CAPTRUST at (800)216-0645.

DFA EMERGING MARKETS CORE EQUITY I

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR	DFA Emerging Markets Core Equity I	Peer Group Rank	MSCI EM NR USD	Emerging Markets	# of Funds
Standard Deviation	15.19	59%	15.79	14.59	640
Sharpe Ratio	0.27	55%	0.29	0.27	640
Alpha	-0.24	59%	0.00	0.02	640
Beta	0.95	31%	1.00	0.87	640
R-Squared	97.21	7%	100.00	88.24	640
Up Mkt Capture	96.98	33%	100.00	88.13	640
Down Mkt Capture	99.02	78%	100.00	89.73	640
Information Ratio	-0.17	61%	NA	-0.10	640
TRAILING RETURNS					
Last Qtr.	10.55	62%	11.84	10.55	781
YTD	16.04	81%	18.42	20.67	773
1 Year	16.04	81%	18.42	20.67	773
3 Years	10.33	58%	11.57	10.89	722
5 Years	5.14	52%	5.61	5.03	640
10 Years	3.89	50%	3.68	3.98	345
CALENDAR RETURNS					
2018	-15.25	37%	-14.57	-16.58	801
2017	36.55	48%	37.28	35.29	825
2016	12.35	19%	11.19	8.21	866
2015	-14.86	60%	-14.92	-13.51	857
2014	-0.91	30%	-2.19	-2.73	802



INVESTMENT PROFILE

Ticker	DFCEX
CUSIP	233203421
Net Assets \$MM	\$30,265.00
Manager Names	Team Managed
Manager Tenure	9.8 Years
Prospectus Exp Ratio	0.52%
Cat Median Exp Ratio	1.37%
Current 12b-1	N/A
Annlzd Ret Since Incept	7.58%
Inception Date	04/05/2005
Phone Number	888-576-1167
Sub Advisor	DFA Australia Limited/ Dimensional Fund Advisors Ltd

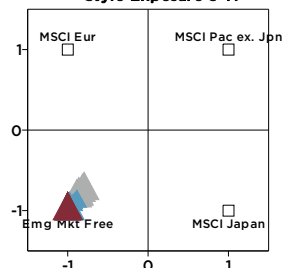
HOLDINGS OVERVIEW

Total Number of Holdings	4912
% Assets in Top 10 Holdings	14.81%
Avg Mkt Cap \$MM	\$9,756.19
Turnover Ratio	4.00%

TOP HOLDINGS

Samsung Electronics Co Ltd	4.38%
Taiwan Semiconductor Mar	2.03%
Tencent Holdings Ltd	1.77%
Taiwan Semiconductor Mar	1.46%
Alibaba Group Holding Ltd	1.03%

Style Exposure 5 Yr



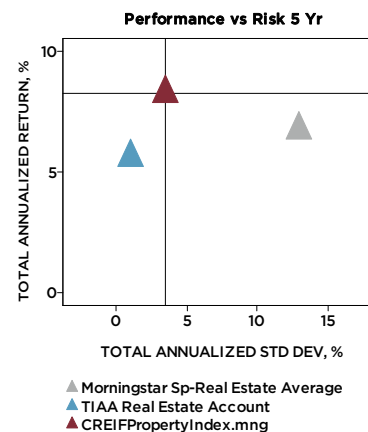
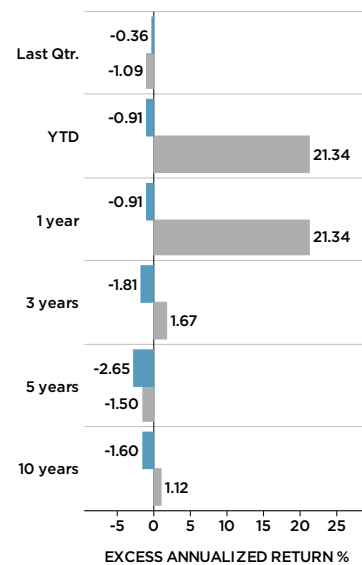
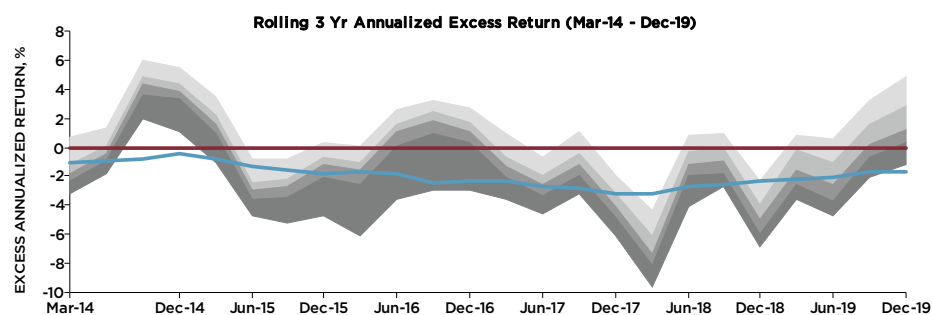
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4.1

TIAA REAL ESTATE ACCOUNT

Period Ending 12.31.19 | Q4 19

KEY MEASURES / 5 YEAR	TIAA Real Estate Account	Peer Group Rank	CREIFPropertyIndex.mng	Morningstar Sp-Real Estate	# of Funds
Standard Deviation	0.98	1%	3.53	12.99	224
Sharpe Ratio	4.64	1%	2.03	0.45	224
Alpha	4.23	29%	0.00	3.15	224
Beta	0.04	93%	1.00	0.35	224
R-Squared	1.98	4%	100.00	1.13	224
Up Mkt Capture	67.88	81%	100.00	81.85	224
Down Mkt Capture	NA	0%	NA	NA	0
Information Ratio	-0.70	100%	NA	-0.11	224
TRAILING RETURNS					
Last Qtr.	1.19	16%	1.55	0.46	242
YTD	5.51	100%	6.42	27.76	242
1 Year	5.51	100%	6.42	27.76	242
3 Years	4.89	97%	6.70	8.37	229
5 Years	5.60	81%	8.25	6.75	224
10 Years	8.58	98%	10.17	11.29	195
CALENDAR RETURNS					
2018	4.79	1%	6.71	-6.40	240
2017	4.37	66%	6.98	6.06	258
2016	5.20	73%	7.97	6.69	278
2015	8.16	1%	13.33	2.33	282
2014	12.22	99%	11.81	28.25	281



INVESTMENT PROFILE

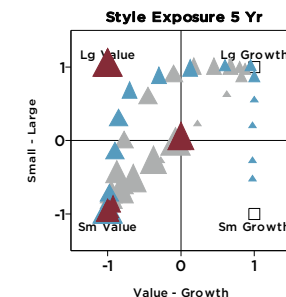
ID VAUSA059TL
 Cusip 878094200
 Net Assets \$ \$27,306,011,838.31
 Manager Name Team Managed
 Manager Start Date 2016-05-01
 Expense Ratio 0.76%
 Cat Median Exp Ratio 1.23%
 Annlzd Ret Since Incept 6.25%
 Inception Date 10-02-1995
 Share Class Incep Date 10/02/1995
 Phone Number 877-518-9161
 Sub Advisor

HOLDINGS OVERVIEW

% Assets in Top 10 Holdings 21.00%
 Avg Mkt Cap \$MM \$18,134.53
 Turnover Ratio 11.80%

TOP HOLDINGS

1001 Pennsylvania Avenue 2.73%
 Ddrtc Core Retail Fund Llc 2.67%
 Florida Mall 2.64%
 Fashion Show Mall 2.45%
 United States Treasury Not 2.24%



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APPENDIX

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

APPENDIX

Advisory Services Review.....
Plan Administration Review.....
Action Items/Notes.....
Your CAPTRUST Service Team.....
Glossary of Terms.....
Evaluation Methodology.....

YOUR CAPTRUST SERVICE TEAM MEMBERS

Period Ending 12.31.19 | Q4 19

University of Maine System

4.1

TEAM MEMBERS	RESPONSIBILITIES
Barron V. Schmitt Principal Financial Advisor Barry.Schmitt@captrust.com	Account Role: Lead Consultant Our Lead Consultants serve as the primary relationship manager for the fiduciaries of corporate retirement plans. They oversee and ensure quality delivery of comprehensive investment advisory services. They are available to assist with any aspect of clients' accounts, or put them in contact with the appropriate resources here at CAPTRUST.
Michael S. Pratico Senior Vice President Financial Advisor Barry.Schmitt@captrust.com	Account Role: Consultant Our Consultants have responsibility for client project management, client meetings, report preparation, and presentation. Projects involve the establishment of investment policies and objectives, asset allocation modeling, investment manager analyses and searches, fee analysis, performance evaluation, and other specialized projects. In addition, they will provide comprehensive written investment option and plan reviews, as well as monitor overall results and service delivery to ensure complete satisfaction.
Cheryl Walters Client Management Consultant Cheryl.Walters@captrust.com	Account Role: Client Management Consultant The Client Management Consultants are focused on overall client management from initial conversion of new plans to CAPTRUST throughout their 'life' at CAPTRUST. As the primary contact for day-to-day client service needs, the main goal of the Client Management Consultant is to deliver exceptional proactive client service. On a daily basis, the Client Management Consultants are available to assist employees with questions related to plan enrollment and education, available investment options, and other areas.
Andrew Battle Client Relationship Manager Drew.Battle@captrust.com	Account Role: Client Management Consultant The Client Management Consultants are focused on overall client management from initial conversion of new plans to CAPTRUST throughout their 'life' at CAPTRUST. As the primary contact for day-to-day client service needs, the main goal of the Client Management Consultant is to deliver exceptional proactive client service. On a daily basis, the Client Management Consultants are available to assist employees with questions related to plan enrollment and education, available investment options, and other areas.
Scott T. Matheson, CFA, CPA Senior Director Defined Contribution Practice Leader Scott.Matheson@captrust.com	Account Role: Research Analyst Our Investment Analysts conduct investment manager research, asset allocation studies, portfolio monitoring and performance measurement. Some of their specific duties include: evaluating fund lineups and investment options, reporting due diligence findings to clients, and researching the various universes for viable investment options. Our team monitors and evaluates mutual funds, separate account managers and alternative investments for use with current and prospective clients.

GLOSSARY

ALPHA

Alpha measures a manager's rate of return in excess of that which can be explained by its systematic risk, or Beta. It is a result of regressing a manager's returns against those of a benchmark index. A positive alpha implies that a manager has added value relative to its benchmark on a risk-adjusted basis.

BATTING AVERAGE

Batting Average, an indicator of consistency, measures the percentage of time an active manager outperformed the benchmark.

BETA

Beta measures a manager's sensitivity to systematic, or market risk. Beta is a result of the analysis regressing a manager's returns against those of a benchmark Index. A manager with a Beta of 1 should move perfectly with a benchmark. A Beta of less than 1 implies that a manager's returns are less volatile than the market's (i.e., selected benchmarks). A Beta of greater than 1 implies that a manager exhibits greater volatility than the market (i.e., selected benchmark).

CAPTURE RATIO

Up Market Capture is the average return of a manager relative to a benchmark index using only periods where the benchmark return was positive. Down Market Capture is the average return of a manager relative to a benchmark index using only periods where the benchmark return was negative. An Up Market Capture of greater than 100% and a Down Market Capture of less than 100% is considered desirable.

INFORMATION RATIO

The Information Ratio measures a manager's excess return over the passive index divided by the volatility of that excess return, or Tracking Error. To obtain a higher Information Ratio, which is preferable, a manager must demonstrate the ability to generate returns above its benchmark while avoiding large performance swings relative to that same benchmark.

PERCENTILE RANK

Percentile Rankings are based on a manager's performance relative to all other available funds in its universe. Percentiles range from 1, being the best, to 100 being the worst. A ranking in the 50th percentile or above demonstrates that the manager has performed better on a relative basis than at least 50% of its peers.

RISK-ADJUSTED PERFORMANCE

Risk-adjusted Performance, or RAP, measures the level of return that an investment option would generate given a level of risk equivalent to the benchmark index.

R-SQUARED

R-squared measures the portion of a manager's movements that are explained by movements in a benchmark index. R-squared values range from 0 to 100. An R-squared of 100 means that all movements of a manager are completely explained by movements in the index. This measurement is identified as the coefficient of determination from a regression equation. A high R-squared value supports the validity of the Alpha and Beta measures, and it can be used as a measure of style consistency.

SHARPE RATIO

Sharpe ratio measures a manager's return per unit of risk, or standard deviation. It is the ratio of a manager's excess return above the risk-free rate divided by a manager's standard deviation. A higher Sharpe ratio implies greater manager efficiency.

STANDARD DEVIATION

Standard Deviation is a measure of the extent to which observations in a series vary from the arithmetic mean of the series. This measure of volatility or risk allows the estimation of a range of values for a manager's returns. The wider the range, the more uncertainty, and, therefore, the riskier a manager is assumed to be.

TRACKING ERROR

Tracking Error is the standard deviation of the portfolio's residual (i.e. excess) returns. The lower the tracking error, the closer the portfolio returns have been to its risk index. Aggressively managed portfolios would be expected to have higher tracking errors than portfolios with a more conservative investment style.

TREYNOR RATIO


The Treynor Ratio is a measure of reward per unit of risk. With Treynor, the numerator (i.e. reward) is defined as the annualized excess return of the portfolio versus the risk-free rate. The denominator (i.e. risk) is defined as the portfolio beta. The result is a measure of excess return per unit of portfolio systematic risk. As with Sharpe and Sortino, the Treynor Ratio only has value when it is used as the basis of comparison between portfolios. The higher the Treynor Ratio, the better.

INVESTMENT REVIEW | EVALUATION METHODOLOGY

Period Ending 12.31.19 | Q4 19

University of Maine System

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	QUANTITATIVE EVALUATION ITEMS	QUALITATIVE EVALUATION ITEMS
 MARKED FOR REVIEW The following categories of the Investment Policy Monitor appear “Marked For Review” when:	<p>3/5 Year Risk- adjusted Performance</p> <p>The investment option's 3 or 5 Year Annualized Risk Adjusted Performance falls below the 50th percentile of the peer group.</p> <p>3/5 Year Performance vs. Peers</p> <p>The investment option's 3 or 5 Year Annualized Peer Relative Performance falls below the 50th percentile of the peer group.</p> <p>3/5 Year Style</p> <p>The investment option's 3 or 5 Year R-Squared measure falls below the absolute threshold set per asset class.</p> <p>3/5 Year Confidence</p> <p>The investment option's 3 or 5 Year Confidence Rating falls below the 50th percentile of the peer group.</p> <p>Glidepath Assessment</p> <p>% of Equity Exposure: The combined percentage of an investment option's equity exposure ranks in the top 20th percentile or bottom 20th percentile of the peer group.</p> <p>Regression to the Benchmark: The investment option's sensitivity to market risk - as measured by beta relative to a Global Equity Index - is above 0.89.</p>	<p>Fund Management</p> <p>A significant disruption to the investment option's management team has been discovered.</p> <p>Fund Family</p> <p>A significant disruption to the investment option's parent company has been discovered.</p> <p>Portfolio Construction</p> <p>The investment option's combined Portfolio Construction score is 6 or below out of a possible 15 points.</p> <p>Underlying Investment Vehicles</p> <p>The investment option's combined Underlying Investment Vehicles score is 6 or below out of a possible 15 points.</p>

CAPTRUST's Investment Policy Monitoring Methodology

The Investment Policy Monitoring Methodology document describes the systems and procedures CAPTRUST uses to monitor and evaluate the investment vehicles in your plan/account on a quarterly basis.

Our current Investment Policy Monitoring Methodology document can be accessed through the following link:

captrust.com/investmentmonitoring



AGENDA ITEM SUMMARY

1. **NAME OF ITEM:** Contributory Retirement Plans – Investment Advisory Services Contract Extension

2. **INITIATED BY:** Sven P. Bartholomew, Chair Pro tem

3. **BOARD INFORMATION:** **BOARD ACTION:** X

4. **OUTCOME:** **BOARD POLICY:**
Primary Outcome: Bylaws – Section 3
Enhance fiscal positioning

5. **BACKGROUND:**
Through a competitive procurement process, UMS engaged CAPTRUST Financial Advisors (CAPTRUST) to perform investment advisory services commencing January 2, 2013. The contract allowed for a set 7-year period with three 1-year extensions. The contract is currently in its eighth year and management recommends that the Investment Committee approve the extension of CAPTRUST for calendar year 2021.

This extension would be based on the terms of the Request of Proposal (RFP) issued in 2012 and CAPTRUST's pricing provided in 2012. CAPTRUST fees are \$99,995 for calendar year 2020 and the contract allows for a Consumer Price Index for all Urban Consumers (CPI-U) based annual increase capped at 5% annually, for a maximum annual fee of \$104,995 for calendar year 2021.

6. **TEXT OF PROPOSED RESOLUTION:**
That the Board of Trustees, acting through the Investment Committee, approves the extension of CAPTRUST's appointment as the University of Maine System's investment advisers for the Contributory Retirement Plans for calendar year 2021.