

# Merced County Employees' Retirement Association

As of December 31, 2019

Fourth Quarter Review

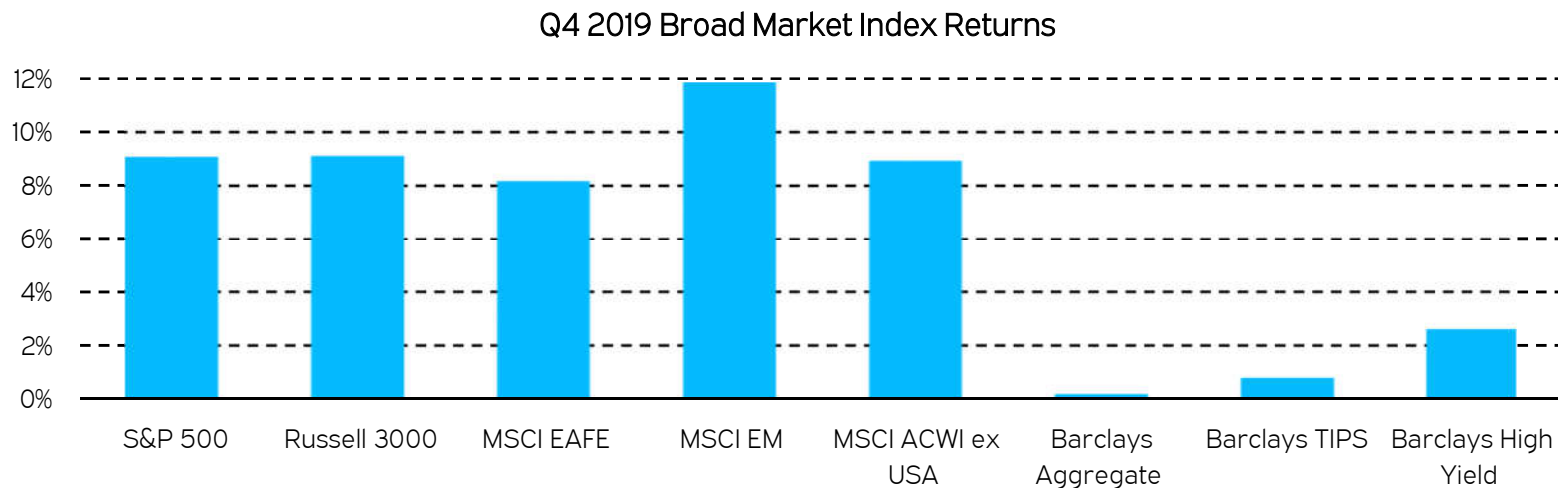
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# **Executive Summary**

## **As of December 31, 2019**

#### Market Summary for the Fourth Quarter 2019

During the fourth quarter, global equity markets surged on the prospect of a U.S- China trade agreement being signed, improving economic data in Europe, Brexit uncertainty moving closer toward resolution, and further commitment to monetary policy easing in the US and China. U.S Equity markets were up +9.1%, International Developed Equity was up +8.2%, as expressed by the Russell 3000 and MSCI EAFE indexes. Emerging Markets posted the highest returns, with the MSCI Emerging Markets Index returning +11.8%. Fixed Income markets were up for the quarter, reflecting expectations for a sustained low interest rate environment, and the yield curve steepening as short term rates fell while long term rates increased.



Growth > Value

US Treasury 10 yr: +24 basis point

Small Cap > Large Cap

### Executive Summary – Q4 2019

Total Market Value		Q4 Results		QTD Relative Results
Q4 2019	\$909,213,596	MCERA	4.9%	MCERA vs Policy Benchmark +0.2%
Q3 2019	\$866,302,483	Policy Benchmark	4.7%	

### Contribution to QTD Return

Major aggregates were mostly positive for Q4 2019.

The Total Equity sleeve was the key positive contributor during Q4 2019. Within that sleeve, US Equity led with +9.1% for the quarter. Developed International Equity and Emerging Markets Equity were also positive, returning +9.0% and +12.8% respectively.

Private Real Estate and Private Equity were the only asset classes that reported negative returns for the quarter, posting -2.8% and -0.1% respectively.

### Public Manager Highlights Q4 2019

7 out of 9 Public Active Managers<sup>1</sup> either outpaced or matched their respective benchmarks for Q4 2019.

#### Total Equity (Active)

- US Equity (+9.1%) trailed its benchmark by 10 basis points. Mellon Dynamic US Equity (+9.2%) was the only manager in this sleeve to outpace its benchmark (+9.1%).
- Developed International Equity returned +9.0% to outperform its benchmark, the MSCI EAFE, by +0.8%. Both active managers in this sleeve, Driehaus and Acadian outperformed their respective benchmarks by +0.6% and +1.6% respectively.
- Emerging Markets Equity posted +12.8%, to beat its benchmark by +0.9%. This outperformance was entirely attributable to Wells Capital, which returned +13.3% for the quarter. Large cash movements at the end of December to fund new managers created a cash drag on performance.

#### Total Fixed Income (Active)

- All three active managers in the Total Fixed Income sleeve outpaced their benchmarks. Barrow Hanley returned +0.3% beating its benchmark by +0.1%. GoldenTree returned +2.4% while PIMCO Income returned +2.5%, to beat their benchmarks by +0.3% and +2.3% respectively and produce outperformance of +1.3% for the Opportunistic Credit sleeve.

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<sup>1</sup> Excludes Public Managers that do not have a full quarter of performance, Private Markets and Hedge Fund Managers.

## Manager Updates/ Recommendations/ Watch List

### Asset Allocation and Manager Update

- Decision made by the Board to replace Mellon International with a 50/50 allocation to GQG International Equity and First Eagle International Value Equity was implemented in December.
- The Board had also approved the termination of Wells Fargo Berkeley Street Emerging Markets, and replacement with a 70/30 allocation to Artisan Developing World and RWC Emerging Markets Equity. The termination and replacement was implemented in December.

### Performance Report Update

The Board approved Meketa's proposed benchmark changes. These will go into effect in Q1 2020 reporting.

### Watch List

No funds on the watch list.

### Active Manager Expectations

Manager	Strategy Description	Beta (High/Neutral/Low)	Tracking Error Range (bps)	Environments Manager Underperforms
<b>Domestic Equity</b>				
DFA U.S. Small Cap Trust	Very diversified small cap portfolio, tilts toward value	Neutral	2.0% to 2.7%	In growth-oriented markets
PanAgora U.S. Small Cap Core Stock Selector	Diversified, quantitatively managed small cap portfolio	Neutral	2.5% to 4.0%	In low quality rallies or at market inflection points
Mellon Capital MCM Dynamic U.S. Equity	Very diversified, quantitative, large cap core portfolio	Neutral (higher in more recent periods)	2.5% to 5.0%	When investors misprice forward looking return/risk characteristics; when returns are concentrated in one sector
<b>Developed Markets Equity (Non-U.S.)</b>				
Driehaus International Small Cap Growth	Diversified growth manager that seeks to invest in companies experiencing positive growth inflections, using a combination of fundamental and macroeconomic analysis.	Low	4.0% to 7.0%	At market inflection points, with abrupt leadership change. Deep value, low quality market environments.
Acadian ACWI ex US Small Cap Equity	Very diversified international small cap portfolio, employing highly adaptive quantitative models	Neutral	2.5% to 4.5%	During narrow markets, abrupt changes in leadership. In "value" challenged periods.
First Eagle International Value Fund	Benchmark agnostic, diversified international value manager with strategic gold allocation and willingness to utilize cash when valuations are elevated across the market	Low	5.0% to 10.0%	In growth- and momentum-led rallies, where value discipline and an allocation to cash will be headwinds, and if physical gold underperforms.
GQG International Equity	Benchmark agnostic, concentrated international quality-growth equity manager with valuation discipline and macro awareness. Willing to invest in US-listed companies.	Low	5.0% to 10.0%	In cyclical recoveries where deep value, asset-heavy, smaller cap stocks, rally.



### Active Manager Expectations (continued)

Manager	Strategy Description	Beta (High/Neutral/Low)	Tracking Error Range (bps)	Environments Manager Underperforms
<b>Emerging Markets Equity</b>				
Artisan Developing World	Concentrated, benchmark agnostic emerging markets strategy focused on high quality companies, overlaid with top-down macro (currency) awareness.	Neutral	5.0% to 10.0%	During cyclical rallies concentrated in deeper value, smaller cap stocks.
RWC Emerging Markets	Concentrated, growth-at-a-reasonable-price emerging markets equity strategy focused on mid cap stocks	High	6.0% to 10.0%	Narrow rallies in large cap stocks where small and mid caps lag, periods of heightened market volatility, deep drawdowns in asset-heavy cyclicals
<b>Investment Grade Bonds</b>				
Barrow Hanley Core Fixed Income	Conservative, low tracking-error core strategy focused on bottom-up security selection	Neutral	0.2% to 0.7%	At market inflection points, but should track the index very closely
<b>Opportunistic Credit</b>				
PIMCO Income	Global multi-sector, benchmark agnostic approach, utilizing firm's resources to identify best income ideas while staying senior in the capital structure	Low	1.5% to 3.5%	During periods of lower quality bond rallies and volatility in interest rates and certain currencies
GoldenTree Multi-Sector Credit	Bottom-up security selection, managing risk and adding value through credit sector rotation	Low	2.5% to 4.5%	During initial periods of economic recovery and rapid spread tightening

### Manager Monitor

Manager	Significant Events (Yes/No)	Last Meeting with Board of Retirement	Last Meeting with MIG	Comments
<b>Domestic Equity Assets</b>				
Mellon Capital BNY Mellon MCM Dynamic US Equity Fund	No	-	Mar-17	Merger of smaller boutiques – Met Mellon in March 2017 to go over HY Beta Strategy & conference call for Carbon Efficiency strategy.
Mellon Capital EB DV Large Cap Stock Index Fund	No	-	Mar-17	Merger of smaller boutiques – Met Mellon in March 2017 to go over HY Beta Strategy & conference call for Carbon Efficiency strategy.
DFA US Small Cap Trust	No	-	Sep-19	On site with DFA to discuss non-U.S. equities in September of this year.
PanAgora US Small Cap Core Stock Selector	No	-	Aug-18	CEO Eric Sorensen, who is credited with turning the firm around, has not announced a plan to retire and no formal succession plan is in place. We do not recommend any changes at this time.
<b>Developed Markets Equity (Non-U.S.) Assets</b>				
Driehaus International Small Cap Growth	No	-	Oct-19	Review of strategy, no changes to conviction level.
Acadian ACWI ex US Small Cap Equity	No	-	Mar-19	Review of strategy, no changes to conviction level.
First Eagle International Value Fund			Nov-19	Review of strategy, no changes to conviction level.
GQG International Equity	No	-	Feb-19	Review of strategy, no changes to conviction level.
<b>Emerging Markets Equity Assets</b>				
Artisan Developing World			Apr- 19	Review of strategy, no changes to conviction level.
RWC Emerging Markets	No	-	Feb-19	Review of strategy, no changes to conviction level.
<b>US Fixed Income Assets</b>				
Barrow Hanley Core Fixed Income Fund	No	Apr-19	Apr-19	Standard update from Barrow team – review of Core Fixed and Short Duration.
Vanguard Total Bond Market				
Vanguard Short Term Treasury Index Fund	No	-	Aug-19	Review of High Yield strategy.
<b>Opportunistic Credit</b>				
PIMCO Income Fund	No	-	Jun-19	Regular high-level meeting discussing positioning and detractors for Income and Total Return strategies.
GoldenTree Multi-Sector Credit	No	-	Jul-19	Meeting in London for regular strategy update.
Private Equity Program	N/A	N/A	N/A	Oversight by Cliffwater.
Real Assets Program	N/A	N/A	N/A	Oversight by Cliffwater.
Hedge Fund Program	N/A	N/A	N/A	Oversight by Cliffwater.

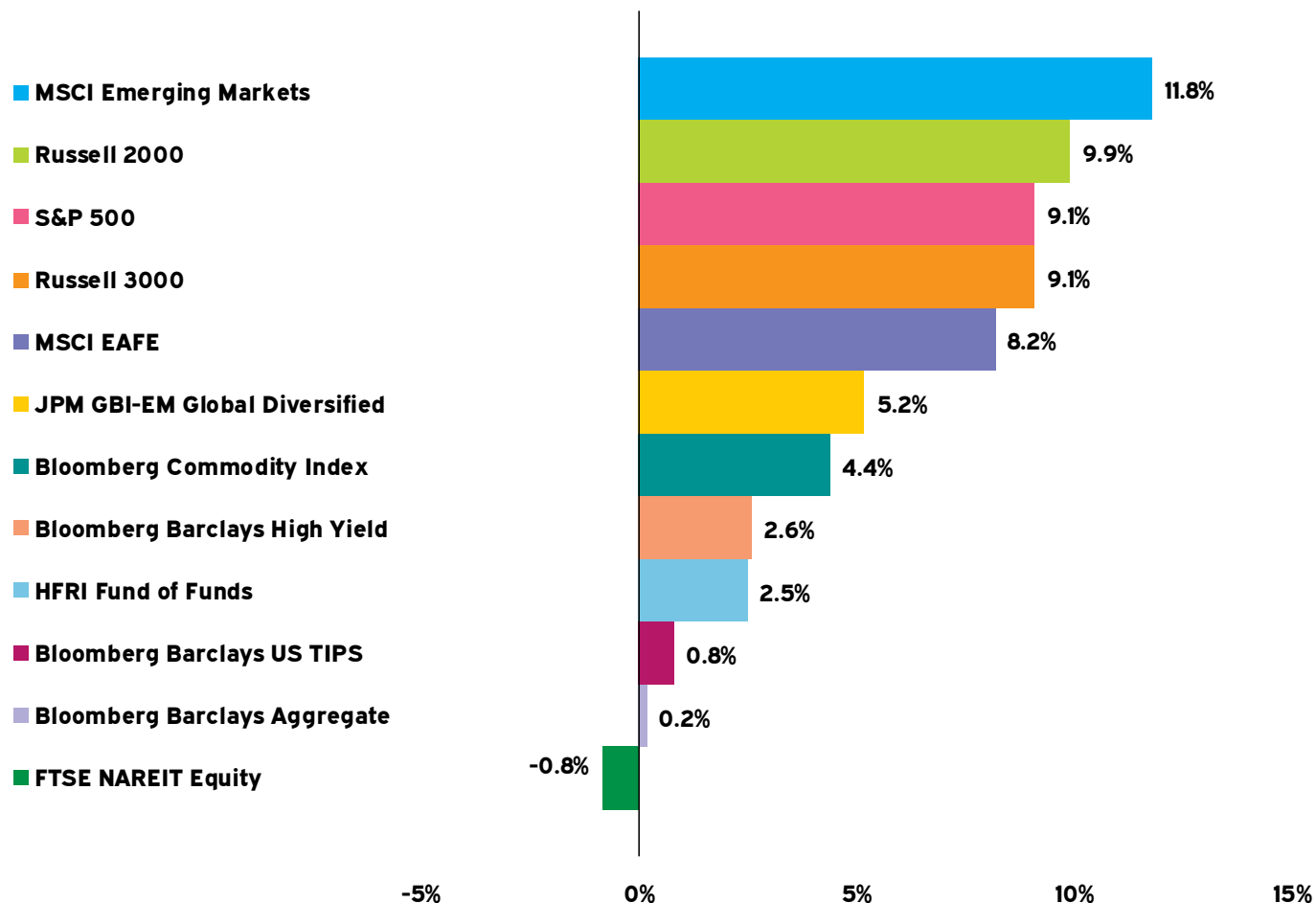
### Active Manager Peer Rankings<sup>1</sup>

Investment Managers	Product	Peer Group	Market Value (\$ mm)	Market Value				Client Inception	Years in Portfolio
				1YR	3YR	5YR	10YR		
DFA	US Small Cap Equity Strategy	US Small Cap Core	19	70	74	61	52	14-Jun	5.6
PanAgora	US Small Cap Core Stock Selector	US Small Cap Core	20	35	48	60	5	13-Sep	6.3
Mellon Capital	Dynamic US Equity Strategy	US Large Cap Core	103	2	5	1	1	12-Dec	7.1
Acadian	All-Country World ex US Small Cap	Non-US Div Small Cap	11	60	42	18	31	19-May	0.6
Driehaus	International Small Cap Growth	Non-US Div Small Cap	12	11	6	9	14	19-May	0.6
GQG	International Equity	All ACWI ex US Equity	45	7	4			19-Dec	--
First Eagle	International Value	EAFE Value Equity	45	85	90	62	50	19-Dec	--
Artisan	Developing World	Emerging Markets	56	1	2			19-Dec	--
RWC	Emerging Markets	Emerging Markets	22	15	67	32		19-Dec	--
Barrow Hanley	Core Fixed Income	US Core Fixed Income	61	50	55	53	77	10-Mar	9.8
PIMCO	Income Fund	Global Multi-Sector Fixed Income	21	95	98	91		19-May	0.6
GoldenTree	Multi-Sector Credit Strategy	Global Multi-Sector Fixed Income	21	52	25	9		19-Jun	0.6

<sup>1</sup> Source: eVestment. Ranks are greyed out for periods before MCERA was invested.

## **Q4 Market Review and Capital Markets Outlook**

### The World Markets<sup>1</sup> Fourth Quarter of 2019



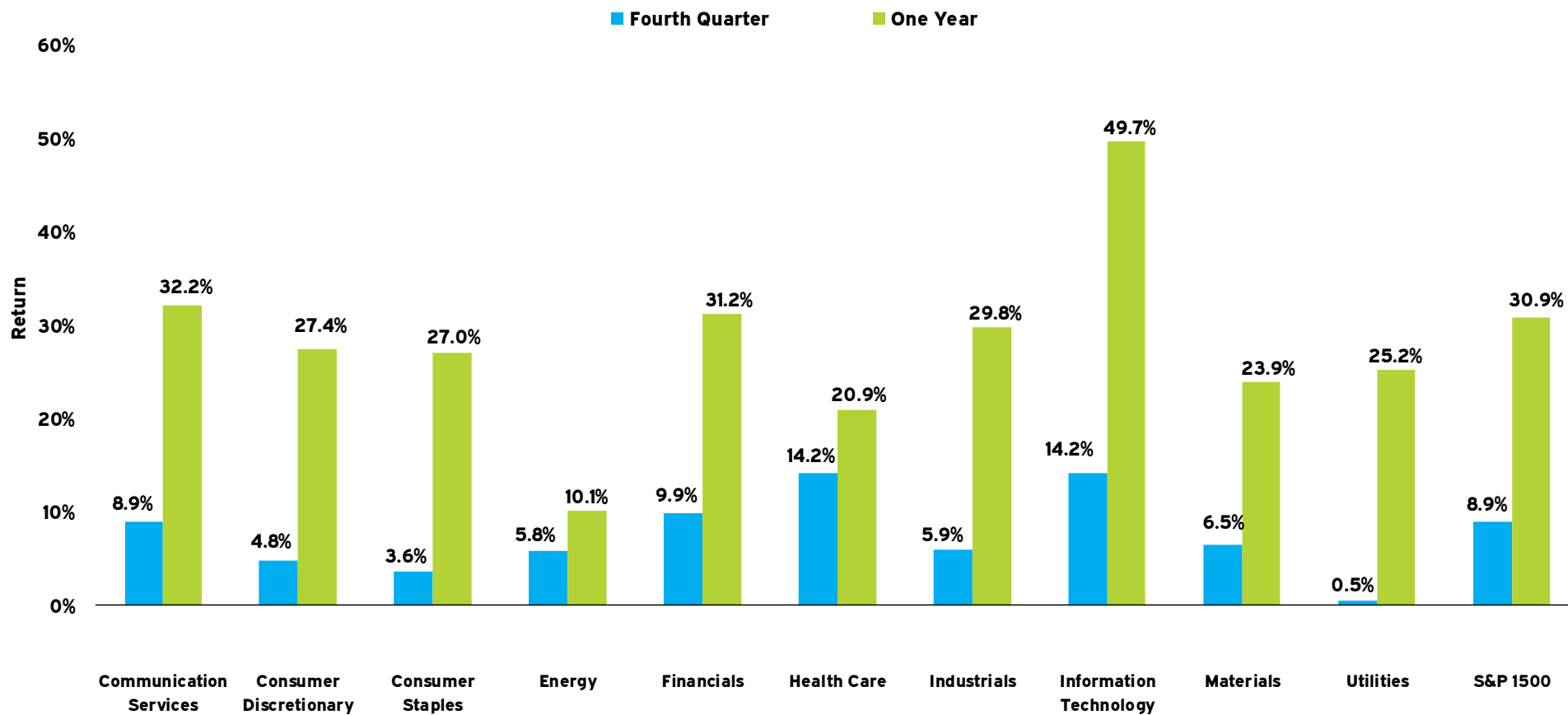
<sup>1</sup> Source: InvestorForce.

## Index Returns<sup>1</sup>

	4Q19 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
<b>Domestic Equity</b>					
S&P 500	9.1	31.5	15.3	11.7	13.6
Russell 3000	9.1	31.0	14.6	11.2	13.4
Russell 1000	9.0	31.4	15.0	11.5	13.5
Russell 1000 Growth	10.6	36.4	20.5	14.6	15.2
Russell 1000 Value	7.4	26.5	9.7	8.3	11.8
Russell MidCap	7.1	30.5	12.1	9.3	13.2
Russell MidCap Growth	8.2	35.5	17.4	11.6	14.2
Russell MidCap Value	6.4	27.1	8.1	7.6	12.4
Russell 2000	9.9	25.5	8.6	8.2	11.8
Russell 2000 Growth	11.4	28.5	12.5	9.3	13.0
Russell 2000 Value	8.5	22.4	4.8	7.0	10.6
<b>Foreign Equity</b>					
MSCI ACWI (ex. US)	8.9	21.5	9.9	5.5	5.0
MSCI EAFE	8.2	22.0	9.6	5.7	5.5
MSCI EAFE (Local Currency)	5.2	21.7	7.7	6.7	7.2
MSCI EAFE Small Cap	11.5	25.0	10.9	8.9	8.7
MSCI Emerging Markets	11.8	18.4	11.6	5.6	3.7
MSCI Emerging Markets (Local Currency)	9.5	18.1	11.5	7.5	6.1
<b>Fixed Income</b>					
Bloomberg Barclays Universal	0.5	9.3	4.3	3.4	4.1
Bloomberg Barclays Aggregate	0.2	8.7	4.0	3.0	3.7
Bloomberg Barclays US TIPS	0.8	8.4	3.3	2.6	3.4
Bloomberg Barclays High Yield	2.6	14.3	6.4	6.1	7.6
JPM GBI-EM Global Diversified	5.2	13.5	7.0	2.8	2.7
<b>Other</b>					
FTSE NAREIT Equity	-0.8	26.0	8.1	7.2	11.9
Bloomberg Commodity Index	4.4	7.7	-0.9	-3.9	-4.7
HFRI Fund of Funds	2.5	7.8	3.7	2.2	2.8

<sup>1</sup> Source: InvestorForce.

### S&P Sector Returns<sup>1</sup>



<sup>1</sup> Source: InvestorForce. Represents S&P 1500 (All Cap) data.

## Capital Markets Outlook

### Takeaways

- In a reverse from calendar year 2019, most risk-oriented markets produced slight drawdowns in January 2020. Several of the themes that have dominated recent years also returned in a material way as US equity markets fared better than Non-US equity markets, growth outperformed value, and large caps bested small caps. Long US Treasury bonds produced some of the strongest performance as they generated nearly a 7% return over the month.
- While it is still too early to determine the economic impacts, the viral outbreak of the coronavirus was designated as one of the reasons behind the recent market selloff.
- The US yield curve flattened in January as the long end of the curve declined by roughly 30 basis points whereas the short end of the curve remained relatively stable. As a reminder, the Federal Reserve lowered rates three times in 2019 but have since indicated a pause. The current target federal funds rate is 1.50-1.75%.
- Due in part to strong returns across nearly all asset classes in 2019, most practitioner's long-term, forward-looking returns are lower as of early-2020 when compared to early-2019 capital market assumptions.
- US equity markets remain expensive whereas non-US equity markets remain reasonably valued relative to their histories. US credit and emerging markets debt spreads remain reasonably valued relative to their histories, although the richness of US high yield has recently increased (i.e., is now more expensive).



### Capital Markets Outlook

#### Takeaways

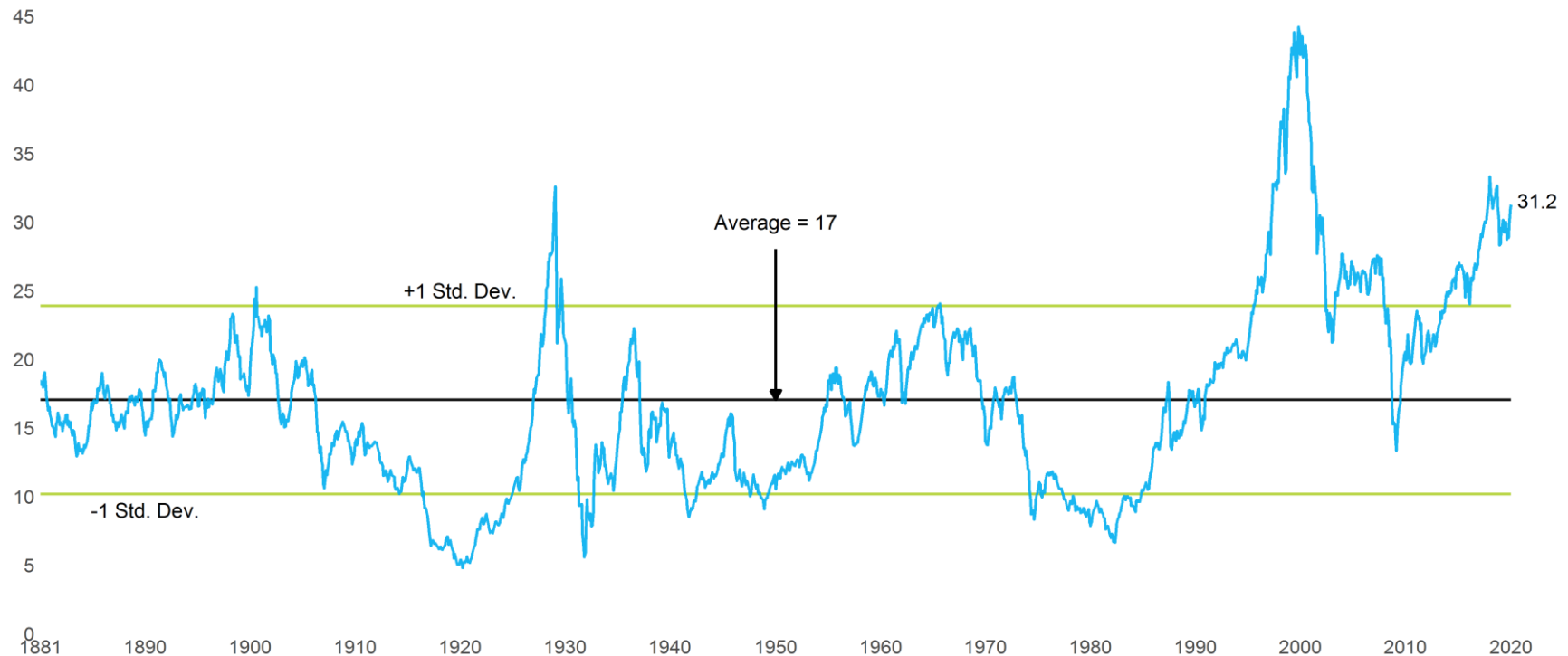
- Relative to their counterparts (growth and large cap), value and small cap equities continue to remain attractive from a valuation perspective.
- Although implied equity market volatility<sup>1</sup> remained at relatively low levels (~12-14) throughout most of January, the VIX Index did jump to near its long-term average (~19) at month-end.
- The Market Sentiment Indicator<sup>2</sup> stayed green at month end.

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<sup>1</sup> As measured by VIX Index.

<sup>2</sup> See Appendix for the rationale for selection and calculation methodology used for the risk metrics.

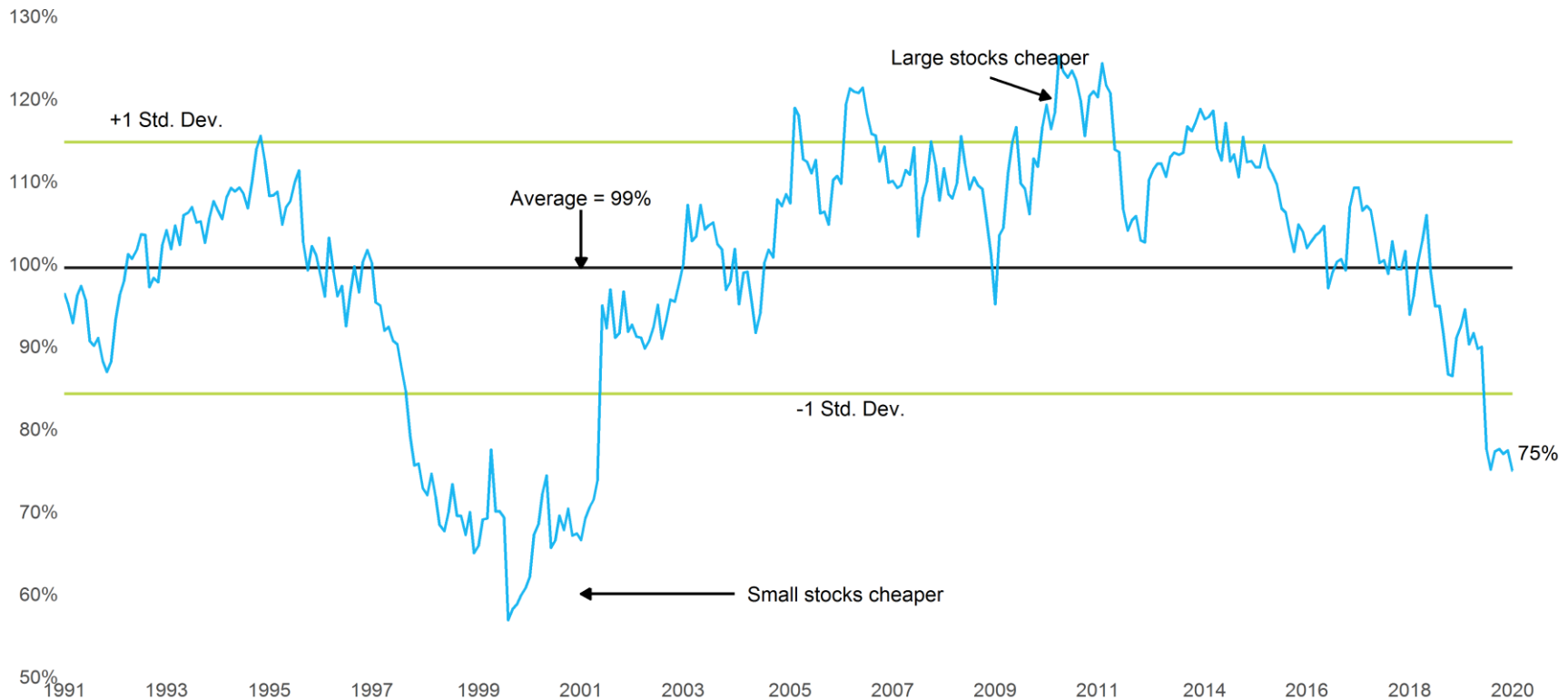
### US Equity Cyclically Adjusted P/E<sup>1</sup> (As of January 31, 2020)



- This chart details one valuation metric for US equities. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

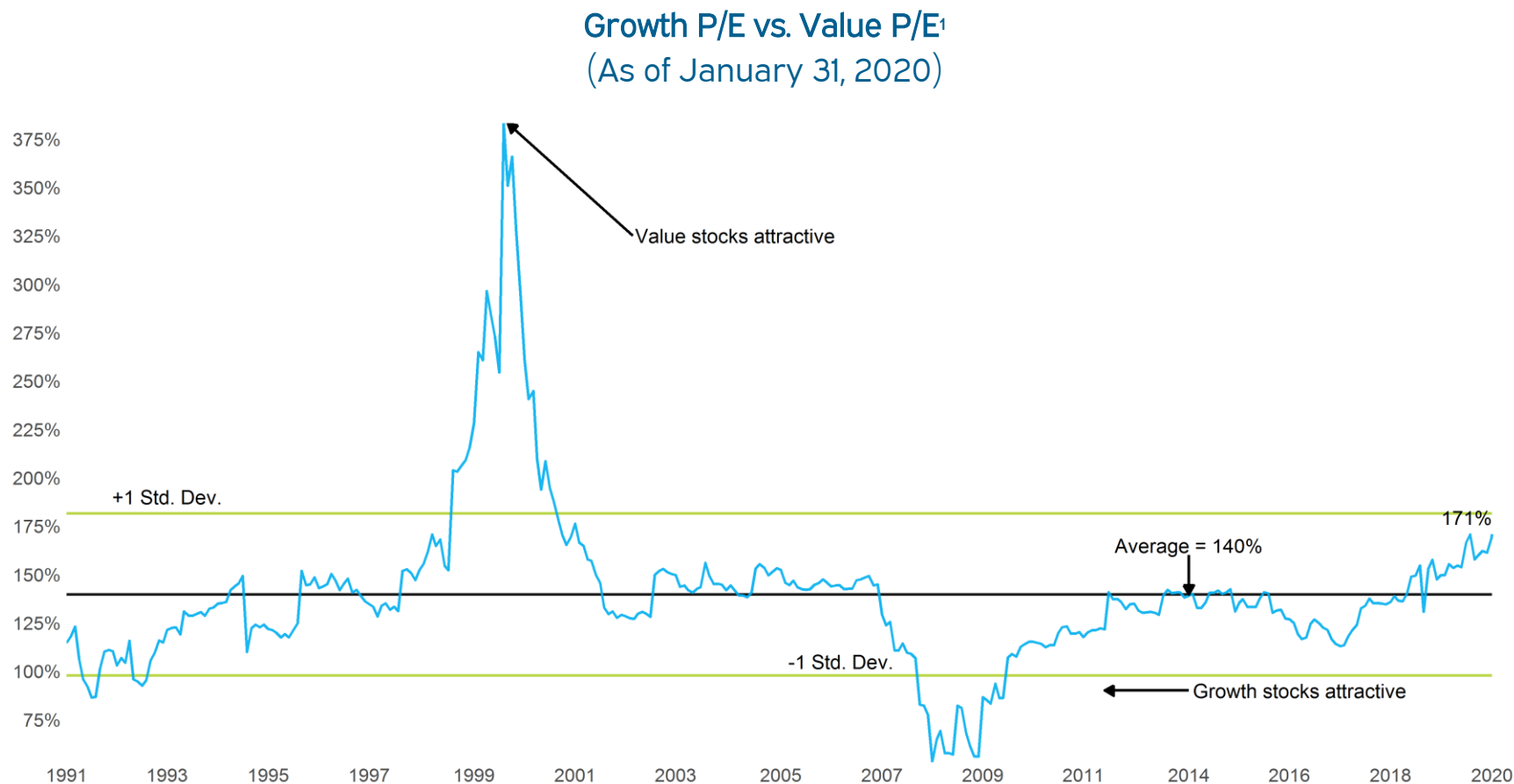
<sup>1</sup> US Equity Cyclically Adjusted P/E on S&P 500 Index – Source: Robert Shiller, Yale University and Meketa Investment Group.

### Small Cap P/E vs. Large Cap P/E<sup>1</sup> (As of January 31, 2020)



- This chart compares the relative attractiveness of small cap US equities vs. large cap US equities on a valuation basis. A higher (lower) figure indicates that large cap (small cap) is more attractive.

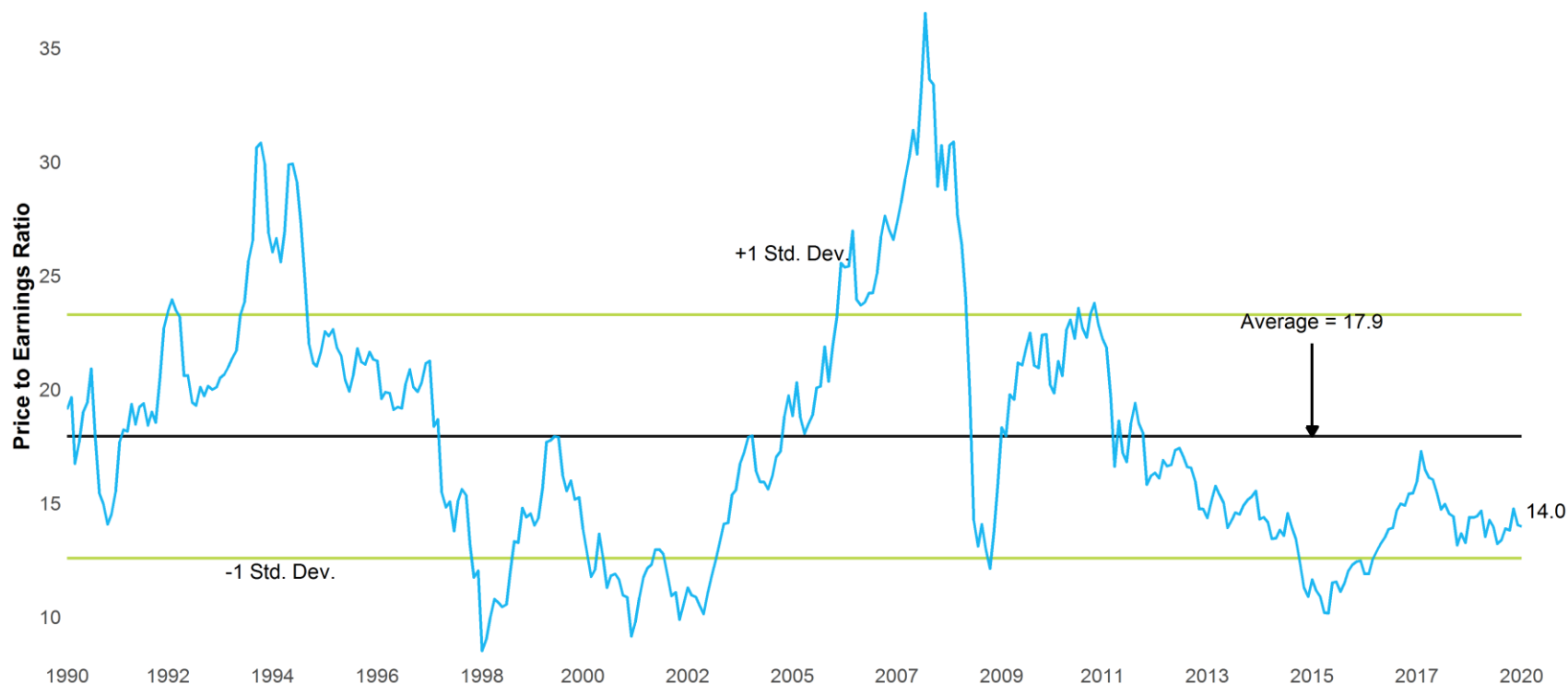
<sup>1</sup> Small Cap P/E (Russell 2000 Index) vs. Large Cap P/E (Russell 1000 Index) - Source: Russell Investments. Earnings figures represent 12-month "as reported" earnings.



- This chart compares the relative attractiveness of US growth equities vs. US value equities on a valuation basis. A higher (lower) figure indicates that value (growth) is more attractive.

<sup>1</sup> Growth P/E (Russell 3000 Growth Index) vs. Value (Russell 3000 Value Index) P/E - Source: Bloomberg, MSCI, and Meketa Investment Group. Earnings figures represent 12-month "as reported" earnings.

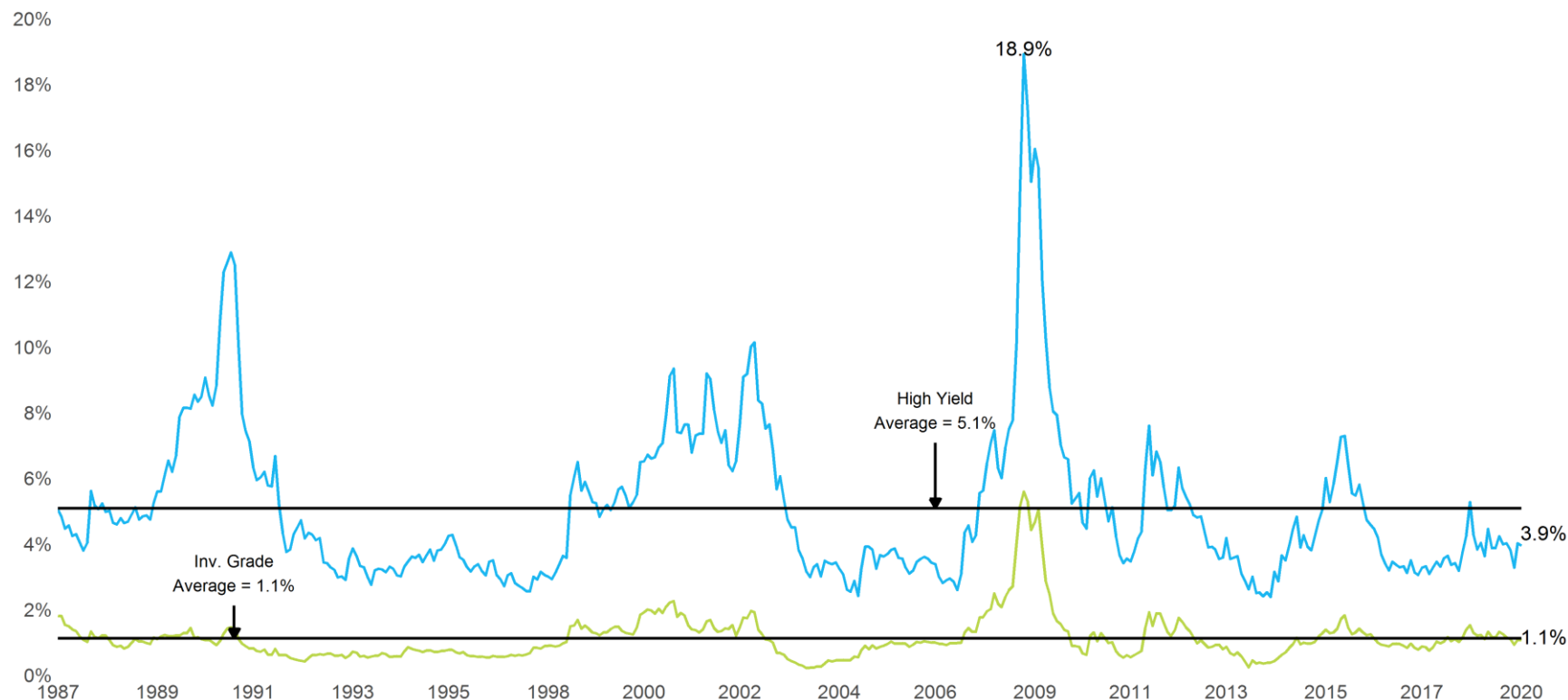
### Emerging Market Equity Cyclically Adjusted P/E<sup>1</sup> (As of December 31, 2019)



- This chart details one valuation metric for emerging markets equities. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

<sup>1</sup> Emerging Market Equity (MSCI Emerging Markets Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.

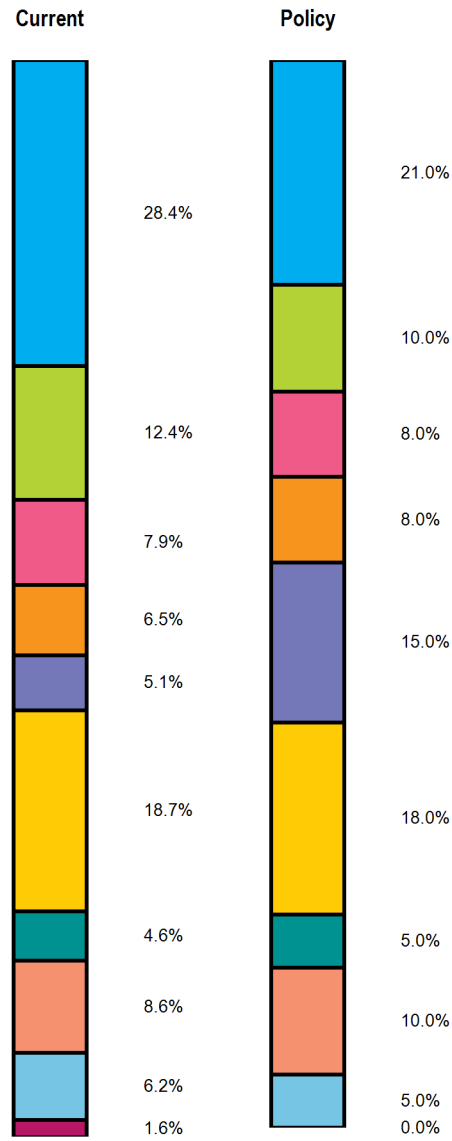
### Credit Spreads<sup>1</sup> (As of January 31, 2020)



- This chart details one valuation metric for the US credit markets. A higher (lower) figure indicates cheaper (more expensive) valuation relative to history.

<sup>1</sup> Credit Spreads – Source: Barclays Capital. High Yield is proxied by the Barclays High Yield index and Investment Grade Corporates are proxied by the Barclays US Corporate Investment Grade index.

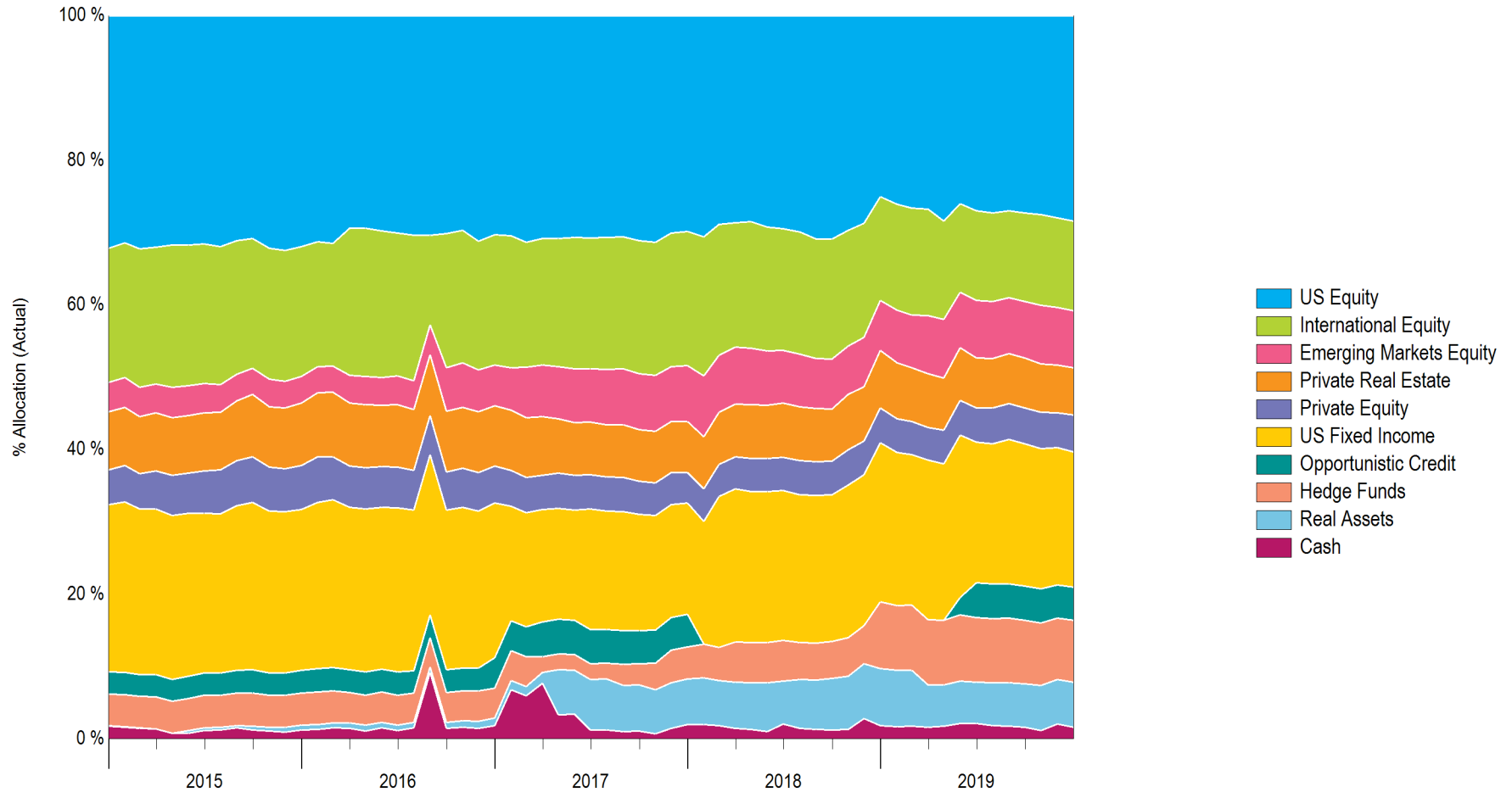
## **Quarterly Review As of December 31, 2019**



Allocation vs. Targets and Policy							
	Current Balance	Current Allocation	Policy	Difference	Policy Range	Within IPS Range?	
US Equity	\$257,917,114	28.4%	21.0%	7.4%	15.0% - 26.0%	No	
International Equity	\$112,735,966	12.4%	10.0%	2.4%	5.0% - 15.0%	Yes	
Emerging Markets Equity	\$72,026,006	7.9%	8.0%	-0.1%	4.0% - 12.0%	Yes	
Private Real Estate	\$59,306,144	6.5%	8.0%	-1.5%	6.0% - 10.0%	Yes	
Private Equity	\$46,605,241	5.1%	15.0%	-9.9%	5.0% - 20.0%	Yes	
US Fixed Income	\$169,785,805	18.7%	18.0%	0.7%	13.0% - 23.0%	Yes	
Opportunistic Credit	\$41,893,524	4.6%	5.0%	-0.4%	3.0% - 7.0%	Yes	
Hedge Funds	\$77,792,596	8.6%	10.0%	-1.4%	5.0% - 15.0%	Yes	
Real Assets	\$56,433,241	6.2%	5.0%	1.2%	3.0% - 7.0%	Yes	
Cash	\$14,717,960	1.6%	0.0%	1.6%	0.0% - 5.0%	Yes	
<b>Total</b>	<b>\$909,213,596</b>	<b>100.0%</b>	<b>100.0%</b>				



### Asset Allocation History 5 Years Ending December 31, 2019



Asset Class Performance Summary										
	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Fund (Net)*</b>	<b>909,213,596</b>	<b>100.0</b>	<b>4.9</b>	<b>5.6</b>	<b>17.1</b>	<b>9.3</b>	<b>7.0</b>	<b>8.2</b>	<b>8.0</b>	<b>Dec-94</b>
<b>Total Fund (Gross)*</b>			<b>4.9</b>	<b>5.7</b>	<b>17.3</b>	<b>9.5</b>	<b>7.3</b>	<b>8.5</b>	<b>8.2</b>	
<i>Policy Index</i>			4.7	5.5	16.8	9.4	7.4	8.7	6.1	Dec-94
<b>Total Fund w/o Alternatives (Net)</b>	<b>654,358,415</b>	<b>72.0</b>	<b>6.6</b>	<b>7.5</b>	<b>22.1</b>	<b>10.4</b>	<b>7.4</b>	<b>--</b>	<b>--</b>	<b>Dec-94</b>
<b>Total Fund w/o Alternatives (Gross)</b>			<b>6.7</b>	<b>7.6</b>	<b>22.4</b>	<b>10.7</b>	<b>7.7</b>	<b>--</b>	<b>--</b>	
<i>Policy Index w/o AI</i>			6.6	6.8	20.4	10.0	7.3	--	--	Dec-94
<b>US Equity (Net)</b>	<b>257,917,114</b>	<b>28.4</b>	<b>9.1</b>	<b>10.7</b>	<b>32.7</b>	<b>14.9</b>	<b>11.9</b>	<b>13.7</b>	<b>10.3</b>	<b>Dec-94</b>
<b>US Equity (Gross)</b>			<b>9.1</b>	<b>10.9</b>	<b>33.0</b>	<b>15.2</b>	<b>12.1</b>	<b>13.9</b>	<b>10.4</b>	
<i>Custom Blended US Equity Benchmark</i>			9.2	9.9	30.3	13.8	10.9	13.2	10.1	Dec-94
<b>International Equity (Net)</b>	<b>184,761,972</b>	<b>20.3</b>	<b>10.6</b>	<b>9.5</b>	<b>25.4</b>	<b>11.2</b>	<b>5.9</b>	<b>6.0</b>	<b>5.5</b>	<b>Dec-98</b>
<b>International Equity (Gross)</b>			<b>10.7</b>	<b>9.7</b>	<b>25.9</b>	<b>11.6</b>	<b>6.4</b>	<b>6.6</b>	<b>5.8</b>	
<i>International Equity Custom</i>			9.9	7.2	21.0	10.6	6.1	5.6	4.6	Dec-98
<b>Developed International Equity (Net)</b>	<b>112,735,966</b>	<b>12.4</b>	<b>9.0</b>	<b>7.8</b>	<b>23.3</b>	<b>9.9</b>	<b>5.3</b>	<b>6.2</b>	<b>3.7</b>	<b>Jan-08</b>
<b>Developed International Equity (Gross)</b>			<b>9.0</b>	<b>7.9</b>	<b>23.4</b>	<b>10.1</b>	<b>5.7</b>	<b>6.7</b>	<b>4.2</b>	
<i>Custom Blended Developed International Equity Benchmark</i>			8.2	7.0	22.0	9.6	5.7	5.5	2.9	Jan-08
<b>Emerging Markets Equity (Net)</b>	<b>72,026,006</b>	<b>7.9</b>	<b>12.8</b>	<b>11.8</b>	<b>29.0</b>	<b>14.1</b>	<b>7.9</b>	<b>--</b>	<b>4.8</b>	<b>Apr-12</b>
<b>Emerging Markets Equity (Gross)</b>			<b>13.0</b>	<b>12.2</b>	<b>30.1</b>	<b>15.1</b>	<b>8.9</b>	<b>--</b>	<b>5.7</b>	
<i>Custom Blended Emerging Markets Benchmark</i>			11.9	7.3	18.9	12.0	6.0	4.0	4.0	Apr-12
<b>US Fixed Income (Net)</b>	<b>169,785,805</b>	<b>18.7</b>	<b>0.2</b>	<b>2.1</b>	<b>7.5</b>	<b>3.8</b>	<b>3.4</b>	<b>4.2</b>	<b>5.3</b>	<b>Dec-94</b>
<b>US Fixed Income (Gross)</b>			<b>0.3</b>	<b>2.2</b>	<b>7.6</b>	<b>4.0</b>	<b>3.6</b>	<b>4.6</b>	<b>5.5</b>	
<i>Custom Blended US Fixed Income Benchmark</i>			0.2	2.1	7.7	4.0	3.5	3.9	5.6	Dec-94
<b>Opportunistic Credit (Net)</b>	<b>41,893,524</b>	<b>4.6</b>	<b>2.5</b>	<b>2.6</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.2</b>	<b>May-19</b>
<b>Opportunistic Credit (Gross)</b>			<b>2.5</b>	<b>2.6</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.2</b>	
<i>50% Barclays US Aggregate / 25% Barclays US High Yield / 25% Credit Suisse Leveraged Loans</i>			1.2	2.9	--	--	--	--	4.7	May-19

Data prior to March 2018 provided by prior consultant.

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Private Real Estate (Net)</b>	<b>59,306,144</b>	<b>6.5</b>	<b>-2.8</b>	<b>-3.6</b>	<b>-1.2</b>	<b>4.7</b>	<b>5.9</b>	<b>--</b>	<b>--</b>	<b>Mar-99</b>
<b>Private Real Estate (Gross)</b>			<b>-2.8</b>	<b>-3.6</b>	<b>-1.2</b>	<b>4.7</b>	<b>6.5</b>	<b>9.1</b>	<b>8.2</b>	
<i>Custom Blended Real Estate Benchmark</i>			1.3	2.4	4.4	6.1	8.0	10.4	7.3	Mar-99
<b>Private Equity (Net)</b>	<b>46,605,241</b>	<b>5.1</b>	<b>-0.1</b>	<b>2.9</b>	<b>6.8</b>	<b>12.0</b>	<b>9.7</b>	<b>10.3</b>	<b>8.0</b>	<b>Jun-05</b>
<b>Private Equity (Gross)</b>			<b>-0.1</b>	<b>2.9</b>	<b>6.8</b>	<b>12.0</b>	<b>9.7</b>	<b>10.5</b>	<b>8.2</b>	
<i>Custom Blended Private Equity Benchmark</i>			1.2	6.4	17.2	17.3	14.3	--	--	Jun-05
<i>Russell 3000 +3% 1-Quarter Lag</i>			1.9	6.9	6.0	16.2	13.7	16.4	12.1	Jun-05
<b>Hedge Fund (Net)</b>	<b>77,792,596</b>	<b>8.6</b>	<b>2.4</b>	<b>1.2</b>	<b>7.4</b>	<b>6.0</b>	<b>3.6</b>	<b>--</b>	<b>3.9</b>	<b>Jun-14</b>
<b>Hedge Fund (Gross)</b>			<b>2.7</b>	<b>1.5</b>	<b>7.9</b>	<b>6.3</b>	<b>3.8</b>	<b>--</b>	<b>4.0</b>	
<i>Hedge Fund Custom</i>			3.1	2.1	8.4	3.9	3.0	--	3.0	Jun-14
<b>Real Assets (Net)</b>	<b>56,433,241</b>	<b>6.2</b>	<b>2.9</b>	<b>4.4</b>	<b>13.6</b>	<b>8.3</b>	<b>8.0</b>	<b>--</b>	<b>--</b>	<b>Mar-99</b>
<b>Real Assets (Gross)</b>			<b>3.0</b>	<b>4.4</b>	<b>13.7</b>	<b>8.4</b>	<b>8.6</b>	<b>--</b>	<b>--</b>	
<i>Custom Blended Real Assets Benchmark</i>			7.3	4.4	22.2	11.1	9.2	--	--	Mar-99
<i>CPI + 5% (Seasonally Adjusted)</i>			2.1	3.7	7.4	7.2	6.9	--	--	Mar-99
<b>Private Infrastructure (Net)</b>	<b>23,780,002</b>	<b>2.6</b>	<b>2.4</b>	<b>5.2</b>	<b>11.7</b>	<b>13.5</b>	<b>7.8</b>	<b>--</b>	<b>7.8</b>	<b>Dec-14</b>
<b>Private Infrastructure (Gross)</b>			<b>2.4</b>	<b>5.2</b>	<b>11.7</b>	<b>13.5</b>	<b>7.8</b>	<b>--</b>	<b>7.8</b>	
<i>S&amp;P Global Infrastructure Net TR USD</i>			4.9	5.3	25.8	10.3	5.6	6.8	5.6	Dec-14
<b>Private Natural Resources (Net)</b>	<b>15,388,400</b>	<b>1.7</b>	<b>3.3</b>	<b>5.3</b>	<b>11.6</b>	<b>11.1</b>	<b>--</b>	<b>--</b>	<b>16.7</b>	<b>Sep-15</b>
<b>Private Natural Resources (Gross)</b>			<b>3.3</b>	<b>5.3</b>	<b>11.6</b>	<b>11.1</b>	<b>--</b>	<b>--</b>	<b>16.7</b>	
<i>S&amp;P Global Natural Resources Index TR USD</i>			9.5	2.9	17.2	7.9	4.8	1.6	12.9	Sep-15
<b>Cash (Net)</b>	<b>14,717,960</b>	<b>1.6</b>	<b>0.4</b>	<b>0.8</b>	<b>1.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>Cash (Gross)</b>			<b>0.4</b>	<b>0.8</b>	<b>1.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	

\*One or more accounts have been excluded from the composite for the purposes of performance calculations and market value.

Real Assets includes State Street Real Asset NL Fund

Trailing Net Performance											
	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Fund*</b>	<b>909,213,596</b>	<b>100.0</b>	<b>--</b>	<b>4.9</b>	<b>5.6</b>	<b>17.1</b>	<b>9.3</b>	<b>7.0</b>	<b>8.2</b>	<b>8.0</b>	<b>Dec-94</b>
Policy Index				4.7	5.5	16.8	9.4	7.4	8.7	6.1	Dec-94
InvMetrics Public DB \$250mm-\$1B Net Median				5.5	6.0	18.7	9.6	6.9	8.3	8.0	Dec-94
InvMetrics Public DB \$250mm-\$1B Net Rank				78	77	79	60	49	53	48	Dec-94
<b>Total Fund w/o Alternatives</b>	<b>654,358,415</b>	<b>72.0</b>	<b>72.0</b>	<b>6.6</b>	<b>7.5</b>	<b>22.1</b>	<b>10.4</b>	<b>7.4</b>	<b>--</b>	<b>--</b>	<b>Dec-94</b>
Policy Index w/o AI				6.6	6.8	20.4	10.0	7.3	--	--	Dec-94
InvMetrics Public DB \$250mm-\$1B Net Median				5.5	6.0	18.7	9.6	6.9	8.3	8.0	Dec-94
InvMetrics Public DB \$250mm-\$1B Net Rank				7	1	4	12	24	--	--	Dec-94
<b>US Equity</b>	<b>257,917,114</b>	<b>28.4</b>	<b>39.4</b>	<b>9.1</b>	<b>10.7</b>	<b>32.7</b>	<b>14.9</b>	<b>11.9</b>	<b>13.7</b>	<b>10.3</b>	<b>Dec-94</b>
Custom Blended US Equity Benchmark				9.2	9.9	30.3	13.8	10.9	13.2	10.1	Dec-94
InvMetrics All DB US Eq Net Median				8.6	9.5	30.1	13.7	10.5	12.7	9.9	Dec-94
InvMetrics All DB US Eq Net Rank				23	6	6	13	5	7	23	Dec-94
Mellon Large Cap	116,210,494	12.8	45.1	9.0	10.6	31.4	15.0	--	--	15.0	Mar-16
Russell 1000				9.0	10.6	31.4	15.0	11.5	13.5	15.0	Mar-16
eV US Large Cap Core Equity Net Median				8.0	9.7	28.9	13.6	10.3	12.8	13.5	Mar-16
eV US Large Cap Core Equity Net Rank				28	29	29	27	--	--	22	Mar-16
Mellon Dynamic US Equity	103,016,896	11.3	39.9	9.2	12.4	37.8	18.6	13.9	--	17.9	Dec-12
S&P 500				9.1	10.9	31.5	15.3	11.7	13.6	14.7	Dec-12
eV US Large Cap Core Equity Net Median				8.0	9.7	28.9	13.6	10.3	12.8	13.6	Dec-12
eV US Large Cap Core Equity Net Rank				26	8	2	5	1	--	1	Dec-12
PanAgora	19,606,675	2.2	7.6	9.4	7.8	26.2	8.3	7.9	--	9.5	Sep-13
Russell 2000				9.9	7.3	25.5	8.6	8.2	11.8	8.8	Sep-13
eV US Small Cap Core Equity Net Median				8.3	6.6	24.3	8.2	8.5	12.1	9.1	Sep-13
eV US Small Cap Core Equity Net Rank				28	32	35	48	60	--	41	Sep-13

Historical returns for the US Equity Composite prior to January 2012 and for the International Equity Composite prior to December 2010 are gross only.

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
DFA Small Cap	19,083,048	2.1	7.4	8.1	6.4	21.7	6.2	7.7	--	7.5	Jun-14
<i>Russell 2000</i>				9.9	7.3	25.5	8.6	8.2	11.8	7.8	Jun-14
<i>eV US Small Cap Core Equity Net Median</i>				8.3	6.6	24.3	8.2	8.5	12.1	7.8	Jun-14
<i>eV US Small Cap Core Equity Net Rank</i>				55	58	70	74	61	--	62	Jun-14
<b>International Equity</b>	<b>184,761,972</b>	<b>20.3</b>	<b>28.2</b>	<b>10.6</b>	<b>9.5</b>	<b>25.4</b>	<b>11.2</b>	<b>5.9</b>	<b>6.0</b>	<b>5.5</b>	<b>Dec-98</b>
<i>International Equity Custom</i>				9.9	7.2	21.0	10.6	6.1	5.6	4.6	Dec-98
<i>InvMetrics All DB ex-US Eq Net Median</i>				9.7	7.7	22.8	9.9	5.8	5.5	5.4	Dec-98
<i>InvMetrics All DB ex-US Eq Net Rank</i>				18	6	17	24	43	28	43	Dec-98
<b>Developed International Equity</b>	<b>112,735,966</b>	<b>12.4</b>	<b>61.0</b>	<b>9.0</b>	<b>7.8</b>	<b>23.3</b>	<b>9.9</b>	<b>5.3</b>	<b>6.2</b>	<b>3.7</b>	<b>Jan-08</b>
<i>Custom Blended Developed International Equity Benchmark</i>				8.2	7.0	22.0	9.6	5.7	5.5	2.9	Jan-08
First Eagle International Value Fund	45,000,000	4.9	39.9	--	--	--	--	--	--	0.0	Dec-19
<i>MSCI EAFE</i>				8.2	7.0	22.0	9.6	5.7	5.5	3.2	Dec-19
<i>MSCI World ex USA</i>				7.9	6.9	22.5	9.3	5.4	5.3	3.2	Dec-19
GQG International Equity	45,000,000	4.9	39.9	--	--	--	--	--	--	0.0	Dec-19
<i>MSCI ACWI ex USA</i>				8.9	7.0	21.5	9.9	5.5	5.0	4.3	Dec-19
Driehaus International Small Cap Growth	11,647,208	1.3	10.3	11.8	12.1	--	--	--	--	14.8	May-19
<i>MSCI ACWI ex US Small Cap Growth NR USD</i>				11.2	9.7	24.6	10.8	7.6	7.3	8.7	May-19
<i>eV ACWI ex-US Small Cap Equity Net Median</i>				11.6	8.6	24.9	12.8	8.8	9.4	8.9	May-19
<i>eV ACWI ex-US Small Cap Equity Net Rank</i>				46	11	--	--	--	--	6	May-19
Acadian ACWI ex U.S. Small Cap Equity	11,088,758	1.2	9.8	12.6	9.2	--	--	--	--	9.0	May-19
<i>MSCI ACWI ex US Small Cap</i>				11.0	9.7	22.4	9.6	7.0	6.9	8.6	May-19
<i>eV ACWI ex-US Small Cap Equity Net Median</i>				11.6	8.6	24.9	12.8	8.8	9.4	8.9	May-19
<i>eV ACWI ex-US Small Cap Equity Net Rank</i>				31	36	--	--	--	--	50	May-19

Developed International Equity and Emerging Markets Equity composites were only reported as one composite prior to March 2018.

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Emerging Markets Equity</b>	<b>72,026,006</b>	<b>7.9</b>	<b>39.0</b>	<b>12.8</b>	<b>11.8</b>	<b>29.0</b>	<b>14.1</b>	<b>7.9</b>	<b>--</b>	<b>4.8</b>	<b>Apr-12</b>
<i>Custom Blended Emerging Markets Benchmark</i>				11.9	7.3	18.9	12.0	6.0	4.0	4.0	Apr-12
Artisan Developing World TR	50,426,006	5.5	70.0	--	--	--	--	--	--	0.1	Dec-19
<i>MSCI Emerging Markets</i>				11.8	7.1	18.4	11.6	5.6	3.7	7.5	Dec-19
RWC	21,600,000	2.4	30.0	--	--	--	--	--	--	0.0	Dec-19
<i>MSCI Emerging Markets</i>				11.8	7.1	18.4	11.6	5.6	3.7	7.5	Dec-19
Wells Capital	0	0.0	0.0	13.3	12.2	29.5	14.2	8.0	--	4.6	Mar-12
<i>MSCI Emerging Markets</i>				11.8	7.1	18.4	11.6	5.6	3.7	3.4	Mar-12
<i>eV Emg Mkts Equity Net Median</i>				11.4	7.0	19.3	10.7	5.5	4.4	4.2	Mar-12
<i>eV Emg Mkts Equity Net Rank</i>				14	3	6	16	11	--	37	Mar-12
<b>US Fixed Income</b>	<b>169,785,805</b>	<b>18.7</b>	<b>25.9</b>	<b>0.2</b>	<b>2.1</b>	<b>7.5</b>	<b>3.8</b>	<b>3.4</b>	<b>4.2</b>	<b>5.3</b>	<b>Dec-94</b>
<i>Custom Blended US Fixed Income Benchmark</i>				0.2	2.1	7.7	4.0	3.5	3.9	5.6	Dec-94
<i>InvMetrics All DB US Fix Inc Net Median</i>				0.4	2.4	8.7	4.2	3.4	4.5	5.9	Dec-94
<i>InvMetrics All DB US Fix Inc Net Rank</i>				60	66	71	68	52	61	85	Dec-94
Barrow Hanley	60,905,967	6.7	35.9	0.3	2.7	9.0	4.1	3.1	--	3.7	Mar-10
<i>BBgBarc US Aggregate TR</i>				0.2	2.5	8.7	4.0	3.0	3.7	3.7	Mar-10
<i>eV US Core Fixed Inc Net Median</i>				0.2	2.5	9.0	4.1	3.1	4.0	3.8	Mar-10
<i>eV US Core Fixed Inc Net Rank</i>				21	15	50	55	53	--	67	Mar-10
Vanguard Total Bond Market Index Fund	60,089,182	6.6	35.4	0.0	2.5	--	--	--	--	5.6	May-19
<i>BBgBarc US Aggregate TR</i>				0.2	2.5	8.7	4.0	3.0	3.7	5.6	May-19
<i>eV US Core Fixed Inc Net Median</i>				0.2	2.5	9.0	4.1	3.1	4.0	5.5	May-19
<i>eV US Core Fixed Inc Net Rank</i>				71	49	--	--	--	--	48	May-19
Vanguard Short-Term Treasury Index Fund	48,790,657	5.4	28.7	0.4	1.1	3.5	--	--	--	2.9	Feb-18
<i>BBgBarc US Govt 1-3 Yr TR</i>				0.5	1.1	3.6	1.9	1.4	1.2	3.0	Feb-18

Historical returns for the US Fixed Income Composite prior to December 2010 and for Barrow Hanley prior to June 2010 are gross only.

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<i>BBgBarc US Govt 1-5 Yr TR</i>				0.3	1.1	4.2	2.1	1.7	1.7	3.5	Feb-18
<i>eV US Short Duration Fixed Inc Net Median</i>				0.5	1.3	4.3	2.4	1.9	1.9	3.3	Feb-18
<i>eV US Short Duration Fixed Inc Net Rank</i>				80	92	90	--	--	--	85	Feb-18
<b>Opportunistic Credit</b>	<b>41,893,524</b>	<b>4.6</b>	<b>6.4</b>	<b>2.5</b>	<b>2.6</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.2</b>	<b>May-19</b>
<i>50% Barclays US Aggregate / 25% Barclays US High Yield / 25% Credit Suisse Leveraged Loans</i>				1.2	2.9	--	--	--	--	4.7	May-19
GoldenTree Multi-Sector Credit	21,299,026	2.3	50.8	2.4	2.7	--	--	--	--	4.1	Jun-19
<i>50% BBgBarc US High Yield TR/50% Credit Suisse Leveraged Loans</i>				2.1	3.3	11.2	5.4	5.3	6.4	4.6	Jun-19
PIMCO Income Fund	20,594,498	2.3	49.2	2.5	2.4	--	--	--	--	4.0	Apr-19
<i>BBgBarc US Aggregate TR</i>				0.2	2.5	8.7	4.0	3.0	3.7	5.6	Apr-19
<i>Multisector Bond MStar MF Median</i>				1.5	2.7	10.7	5.1	4.4	5.7	4.9	Apr-19
<i>Multisector Bond MStar MF Rank</i>				5	66	--	--	--	--	76	Apr-19
<b>Private Real Estate</b>	<b>59,306,144</b>	<b>6.5</b>	<b>6.5</b>	<b>-2.8</b>	<b>-3.6</b>	<b>-1.2</b>	<b>4.7</b>	<b>5.9</b>	<b>--</b>	<b>--</b>	<b>Mar-99</b>
<i>Custom Blended Real Estate Benchmark</i>				1.3	2.4	4.4	6.1	8.0	10.4	7.3	Mar-99
<i>InvMetrics All DB Real Estate Pub+Priv Net Median</i>				1.2	2.4	5.3	6.5	8.0	10.5	8.1	Mar-99
<i>InvMetrics All DB Real Estate Pub+Priv Net Rank</i>				99	99	95	89	91	--	--	Mar-99
UBS Trumbull Property	40,670,827	4.5	68.6	0.9	-3.0	-0.9	2.8	5.2	8.2	6.9	Mar-99
Greenfield Gap VII	8,825,230	1.0	14.9	1.0	10.8	15.5	14.4	13.4	--	13.4	Dec-14
Patron Capital V	5,016,146	0.6	8.5	-30.9	-27.0	-25.5	8.8	--	--	3.3	Jan-16
Taconic CRE Dislocation Fund II	2,838,129	0.3	4.8	5.3	8.8	8.7	--	--	--	7.4	Nov-18

Private Real Estate results prior to 1/1/2019 were included in the Real Assets composite. All results for the Private Real Estate composite that include the period prior to 1/1/2019 will reflect only the latest lineup of managers that Meketa received information for, therefore it may not reflect the entire Private Real Estate composite at that given time.

All private markets performance and market values reflect a 9/30/2019 capital account balance unless otherwise noted.

Historical returns for Invesco IV prior to April 2012 are gross only.

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
AG Realty Value Fund X, L.P.	967,383	0.1	1.6	-1.2	-17.9	--	--	--	--	-17.9	Jun-19
Carlyle Realty VIII	865,839	0.1	1.5	2.5	5.4	-2.7	--	--	--	-26.5	Dec-17
Carmel Partners Investment Fund VII	122,589	0.0	0.2	-16.7	-32.9	--	--	--	--	-46.6	Apr-19
<b>Private Equity</b>	<b>46,605,241</b>	<b>5.1</b>	<b>5.1</b>	<b>-0.1</b>	<b>2.9</b>	<b>6.8</b>	<b>12.0</b>	<b>9.7</b>	<b>10.3</b>	<b>8.0</b>	<b>Jun-05</b>
Custom Blended Private Equity Benchmark				1.2	6.4	17.2	17.3	14.3	--	--	Jun-05
Russell 3000 +3% 1-Quarter Lag				1.9	6.9	6.0	16.2	13.7	16.4	12.1	Jun-05
InvMetrics All DB Private Eq Net Median				1.2	3.5	7.7	11.7	10.3	10.5	10.1	Jun-05
InvMetrics All DB Private Eq Net Rank				83	58	59	47	61	54	80	Jun-05
Ocean Avenue II	9,893,781	1.1	21.2	-0.9	4.4	15.4	24.9	16.3	--	12.0	Jun-14
Adams Street	7,104,660	0.8	15.2	-1.3	-1.5	3.1	11.0	11.0	12.3	6.9	Sep-05
Invesco VI	6,586,534	0.7	14.1	0.4	7.1	9.9	14.0	14.3	--	12.1	Jun-13
Pantheon II	3,835,159	0.4	8.2	-3.8	0.8	6.1	13.9	11.7	--	11.3	Dec-11
Davidson Kempner Long-Term Distressed Opportunities Fund IV	3,682,239	0.4	7.9	1.3	1.6	5.4	--	--	--	10.4	Apr-18
Raven Asset Fund II	3,471,659	0.4	7.4	2.3	3.9	8.2	1.0	-0.1	--	-0.1	Aug-14
Cortec Group Fund VII	2,890,529	0.3	6.2	--	--	--	--	--	--	0.0	Dec-19
Genstar Capital Partners IX	1,572,115	0.2	3.4	-0.4	--	--	--	--	--	-0.4	Jul-19
TCV X	1,549,032	0.2	3.3	-3.0	-9.5	--	--	--	--	-9.5	Apr-19
GTCR Fund XII	1,481,133	0.2	3.2	18.4	29.1	-6.9	--	--	--	-4.4	Jun-18

Adams Street includes Adams Street 2005, Adams Street 2007, and Adams Street 2011.

Pantheon I includes Pantheon US Fund VI and Pantheon Europe Fund IV.

Pantheon II Includes Pantheon US Fund IX, Pantheon Asia Fund VI, and Pantheon Europe Fund VII.

Pantheon Secondary includes Pantheon GLO SEC III B.



	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Carrick Capital Partners III	1,318,509	0.1	2.8	0.1	20.2	8.2	--	--	--	2.1	Aug-18
Cressey & Company Fund VI	1,061,715	0.1	2.3	1.0	3.9	-12.3	--	--	--	-12.3	Jan-19
Pantheon Secondary	822,421	0.1	1.8	1.2	-0.7	0.3	7.0	4.0	3.8	3.9	Jun-07
Pantheon I	785,079	0.1	1.7	-9.8	-10.7	-11.6	2.1	2.1	6.2	2.7	Dec-05
Accel-KKR Growth Capital Partners III	550,677	0.1	1.2	-16.1	-16.1	--	--	--	--	-16.1	Jul-19
Invesco IV	0	0.0	0.0								
<b>Hedge Fund</b>	<b>77,792,596</b>	<b>8.6</b>	<b>8.6</b>	<b>2.4</b>	<b>1.2</b>	<b>7.4</b>	<b>6.0</b>	<b>3.6</b>	<b>--</b>	<b>3.9</b>	<b>Jun-14</b>
<i>Hedge Fund Custom</i>				<i>3.1</i>	<i>2.1</i>	<i>8.4</i>	<i>3.9</i>	<i>3.0</i>	<i>--</i>	<i>3.0</i>	<i>Jun-14</i>
<i>InvMetrics All DB Hedge Funds Net Median</i>				<i>2.5</i>	<i>2.3</i>	<i>6.8</i>	<i>4.4</i>	<i>3.0</i>	<i>4.1</i>	<i>2.7</i>	<i>Jun-14</i>
<i>InvMetrics All DB Hedge Funds Net Rank</i>				<i>52</i>	<i>69</i>	<i>46</i>	<i>22</i>	<i>36</i>	<i>--</i>	<i>28</i>	<i>Jun-14</i>
Wellington-Archipelago	12,470,062	1.4	16.0	5.5	4.0	15.0	--	--	--	5.7	Aug-17
Silver Point Capital	12,333,154	1.4	15.9	2.5	-0.4	3.7	--	--	--	1.5	Nov-17
Sculptor (OZ) Domestic II	10,895,361	1.2	14.0	5.8	2.8	16.8	8.9	6.1	--	6.3	Jun-14
Taconic Opportunity Fund	10,428,275	1.1	13.4	0.8	0.9	4.7	--	--	--	4.7	Dec-18
KLS Diversified	9,088,522	1.0	11.7	-0.4	-1.4	0.1	--	--	--	0.8	Oct-17
Graham Absolute Return	7,611,040	0.8	9.8	2.0	0.3	8.2	--	--	--	3.3	Aug-17
Winton	6,233,755	0.7	8.0	-0.7	2.3	2.3	--	--	--	2.0	Oct-17
Laurion Capital	5,337,280	0.6	6.9	0.5	-1.4	4.4	--	--	--	5.4	Aug-18
Marshall Wace Eureka	3,395,147	0.4	4.4	3.7	4.4	10.5	--	--	--	5.0	Nov-17

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Real Assets</b>	<b>56,433,241</b>	<b>6.2</b>	<b>6.2</b>	<b>2.9</b>	<b>4.4</b>	<b>13.6</b>	<b>8.3</b>	<b>8.0</b>	<b>--</b>	<b>--</b>	<b>Mar-99</b>
Custom Blended Real Assets Benchmark				7.3	4.4	22.2	11.1	9.2	--	--	Mar-99
CPI + 5% (Seasonally Adjusted)				2.1	3.7	7.4	7.2	6.9	--	--	Mar-99
InvMetrics All DB Real Assets/Commodities Net Median				1.6	2.9	8.2	5.9	4.1	7.0	--	Mar-99
InvMetrics All DB Real Assets/Commodities Net Rank				34	20	19	24	23	--	--	Mar-99
SSgA	17,264,839	1.9	30.6	3.5	2.7	13.3	--	--	--	4.6	Apr-17
Real Asset NL Custom Blended Index				3.7	3.0	13.9	--	--	--	5.0	Apr-17
<b>Private Infrastructure</b>	<b>23,780,002</b>	<b>2.6</b>	<b>42.1</b>	<b>2.4</b>	<b>5.2</b>	<b>11.7</b>	<b>13.5</b>	<b>7.8</b>	<b>--</b>	<b>7.8</b>	<b>Dec-14</b>
S&P Global Infrastructure Net TR USD				4.9	5.3	25.8	10.3	5.6	6.8	5.6	Dec-14
KKR Global II	11,307,757	1.2	47.6	1.5	4.3	9.5	13.5	10.3	--	10.3	Dec-14
North Haven Infrastructure II	8,662,119	1.0	36.4	2.0	5.5	13.6	14.2	--	--	8.0	May-15
ISQ Global Infrastructure Fund II	2,216,124	0.2	9.3	4.4	6.4	17.9	--	--	--	-13.6	Jul-18
KKR Global Infrastructure Investors III	1,404,527	0.2	5.9	3.4	0.4	-15.1	--	--	--	-15.1	Jan-19
Ardian Infrastructure Fund V	189,475	0.0	0.8	--	--	--	--	--	--	0.0	Oct-19
<b>Private Natural Resources</b>	<b>15,388,400</b>	<b>1.7</b>	<b>27.3</b>	<b>3.3</b>	<b>5.3</b>	<b>11.6</b>	<b>11.1</b>	<b>--</b>	<b>--</b>	<b>16.7</b>	<b>Sep-15</b>
S&P Global Natural Resources Index TR USD				9.5	2.9	17.2	7.9	4.8	1.6	12.9	Sep-15
Taurus Mining	4,023,695	0.4	26.1	4.0	7.0	16.9	11.0	--	--	17.6	Sep-15
Taurus Mining Annex	3,770,973	0.4	24.5	7.1	12.2	25.0	28.1	--	--	29.0	Jan-17
GSO Energy Opportunities	3,623,832	0.4	23.5	-0.9	0.1	2.6	9.0	--	--	14.7	Nov-15
EnCap XI	1,289,184	0.1	8.4	-4.2	-6.9	-11.7	--	--	--	-28.0	Jul-17
EnCap IV	1,122,326	0.1	7.3	8.1	8.2	24.4	--	--	--	1.8	Feb-18
Tailwater Energy Fund IV, LP	846,614	0.1	5.5	0.0	--	--	--	--	--	0.0	Oct-19

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
BlackRock Global Energy and Power Infrastructure Fund III LP	711,776	0.1	4.6	17.7	--	--	--	--	--	--	Jul-19
<b>Cash</b>	<b>14,717,960</b>	<b>1.6</b>	<b>1.6</b>	<b>0.4</b>	<b>0.8</b>	<b>1.4</b>	--	--	--	--	
Cash	10,825,261	1.2	73.6	0.5	1.1	2.0	1.4	1.1	--	--	Sep-03
Treasury Cash	3,892,698	0.4	26.4								

\*One or more accounts have been excluded from the composite for the purposes of performance calculations and market value.

Benchmark History		
As of December 31, 2019		
Total Fund		
7/1/2019	Present	21% US Equity Custom / 18% International Equity Custom / 18% US Fixed Custom / 10% Hedge Fund Custom / 15% Thomson Reuters Cambridge Private Equity Index / 5% Real Asset Custom / 8% NCREIF ODCE (net) / 5% 50% Barclays US Aggregate / 25% Barclays US High Yield / 25% Credit Suisse Leveraged Loans
1/1/2019	6/30/2019	21% US Equity Custom / 18% International Equity Custom / 23% US Fixed Custom / 10% Hedge Fund Custom / 15% Thomson Reuters Cambridge Private Equity Index / 5% Real Asset Custom / 8% NCREIF ODCE (net)
1/1/2017	12/31/2018	27% US Equity Custom / 23% International Equity Custom / 22% US Fixed Custom / 5% Hedge Fund Custom / 9% Thomson Reuters Cambridge Private Equity Index / 14% Real Asset Custom
US Equity		
1/1/2020	Present	Russell 3000
International Equity		
1/1/2019	Present	56% MSCI EAFE Gross / 44% MSCI Emerging Markets Gross
1/1/2017	12/31/2018	69.56% MSCI EAFE Gross / 30.44% MSCI Emerging Markets Gross
7/1/2013	12/31/2016	MSCI ACWI ex USA Gross
US Fixed Income		
1/1/2020	Present	BBgBarc US Aggregate TR
12/31/1994	12/31/2019	US Fixed Custom
Hedge Fund		
7/1/2017	Present	100% HFRI Fund of Funds Composite Index
1/1/2015	6/30/2017	50% HFRI Fund of Funds Composite Index / 50% HFRI RV: Multi-Strategy Index
Real Assets		
1/1/2020	Present	50% Cambridge Infrastructure (1 Quarter Lagged) / 50% Cambridge Energy Upstream & Royalties & Private Energy
3/31/1999	12/31/2019	Real Asset Custom

**Benchmark History**  
**As of December 31, 2019**

SSgA		
4/30/2017	Present	25% Bloomberg Roll Select Commodities Index TR USD / 25% S&P Global LargeMidCap Commodity and Resources NR USD / 10% S&P Global Infrastructure TR USD / 15% DJ US Select REIT TR USD / 25% BBgBarc US TIPS TR

Statistics Summary						
5 Years Ending December 31, 2019						
	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Fund	6.99%	6.68%	-0.35	1.03	0.89	1.24%
Policy Index	7.42%	6.40%	--	1.00	0.99	0.00%
InvMetrics Public DB \$250mm-\$1B Net Median	6.95%	7.00%	-0.09	0.99	0.83	0.99%

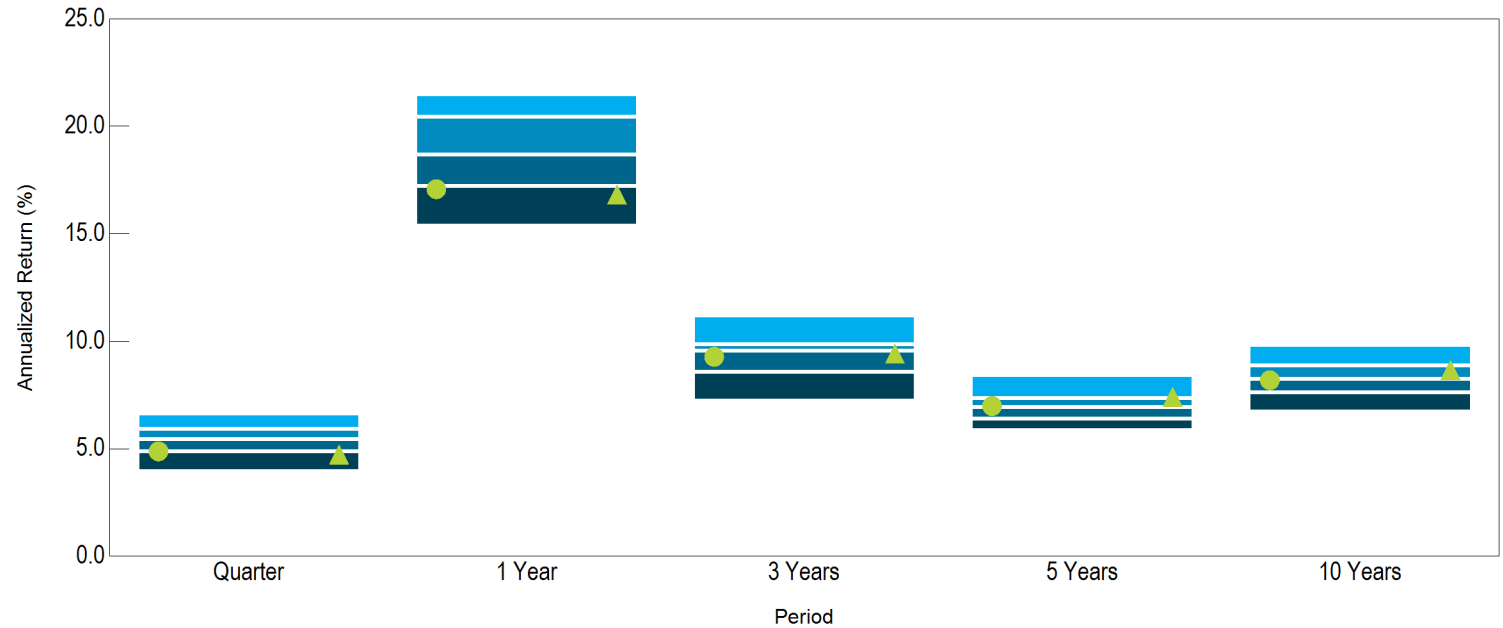
Annual Investment Expense Analysis As Of December 31, 2019				
Name	Fee Schedule	Market Value	Estimated Fee	Estimated Fee Value
<b>Total Fund w/o Alternatives</b>		<b>\$654,358,415</b>		
<b>US Equity</b>		<b>\$257,917,114</b>		
Mellon Dynamic US Equity	0.30% of Assets	\$103,016,896	0.30%	\$309,051
Mellon Large Cap	0.04% of First 100.0 Mil, 0.02% Thereafter	\$116,210,494	0.04%	\$43,242
DFA Small Cap	0.35% of Assets	\$19,083,048	0.35%	\$66,791
PanAgora	0.80% of Assets	\$19,606,675	0.80%	\$156,853
<b>International Equity</b>		<b>\$184,761,972</b>		
<b>Developed International Equity</b>		<b>\$112,735,966</b>		
Acadian ACWI ex U.S. Small Cap Equity	0.99% of Assets	\$11,088,758	0.99%	\$109,779
Driehaus International Small Cap Growth	0.90% of Assets	\$11,647,208	0.90%	\$104,825
GQG International Equity		\$45,000,000		
First Eagle International Value Fund		\$45,000,000		
<b>Emerging Markets Equity</b>		<b>\$72,026,006</b>		
Wells Capital	0.90% of First 100.0 Mil, 0.85% Thereafter	\$0	0.84%	\$0
Artisan Developing World TR	1.05% of Assets	\$50,426,006	1.05%	\$529,473
RWC	0.87% of Assets	\$21,600,000	0.87%	\$187,920
<b>US Fixed Income</b>		<b>\$169,785,805</b>		
Barrow Hanley	0.30% of First 50.0 Mil, 0.20% of Next 100.0 Mil, 0.15% Thereafter	\$60,905,967	0.28%	\$171,812
Vanguard Short-Term Treasury Index Fund	0.05% of Assets	\$48,790,657	0.05%	\$24,395
Vanguard Total Bond Market Index Fund	0.04% of Assets	\$60,089,182	0.04%	\$21,031
<b>Opportunistic Credit</b>		<b>\$41,893,524</b>		
PIMCO Income Fund	0.50% of Assets	\$20,594,498	0.50%	\$102,972
GoldenTree Multi-Sector Credit	0.75% of Assets	\$21,299,026	0.75%	\$159,743
<b>Private Real Estate</b>		<b>\$59,306,144</b>		
Greenfield Gap VII		\$8,825,230		
Patron Capital V		\$5,016,146		
UBS Trumbull Property		\$40,670,827		

Name	Fee Schedule	Market Value	Estimated Fee	Estimated Fee Value
Carlyle Realty VIII		\$865,839		
Taconic CRE Dislocation Fund II		\$2,838,129		
Carmel Partners Investment Fund VII		\$122,589		
AG Realty Value Fund X, L.P.		\$967,383		
Invesco IV		\$0		
Invesco VI		\$6,586,534		
Ocean Avenue II		\$9,893,781		
Pantheon I		\$785,079		
Pantheon II		\$3,835,159		
Pantheon Secondary		\$822,421		
Raven Asset Fund II		\$3,471,659		
Davidson Kempner Long-Term Distressed Opportunities Fund IV		\$3,682,239		
GTCR Fund XII		\$1,481,133		
Carrick Capital Partners III		\$1,318,509		
Cressey & Company Fund VI		\$1,061,715		
TCV X		\$1,549,032		
Accel-KKR Growth Capital Partners III		\$550,677		
Genstar Capital Partners IX		\$1,572,115		
Cortec Group Fund VII		\$2,890,529		
<b>Hedge Fund</b>		<b>\$77,792,596</b>		
Sculptor (OZ) Domestic II	Performance-based 1.50 and 20.00	\$10,895,361	1.90%	\$207,090
Graham Absolute Return	Performance-based 1.75 and 20.00	\$7,611,040	2.04%	\$154,998
Wellington-Archipelago	Performance-based 1.00 and 20.00	\$12,470,062	1.46%	\$182,419
KLS Diversified	Performance-based 2.00 and 20.00	\$9,088,522	2.32%	\$210,490
Winton	Performance-based 0.90 and 20.00	\$6,233,755	1.18%	\$73,371
Marshall Wace Eureka	Performance-based 2.00 and 20.00	\$3,395,147	2.41%	\$81,852
Silver Point Capital	Performance-based 2.00 and 20.00	\$12,333,154	2.42%	\$298,399
Laurion Capital		\$5,337,280		
Taconic Opportunity Fund		\$10,428,275		



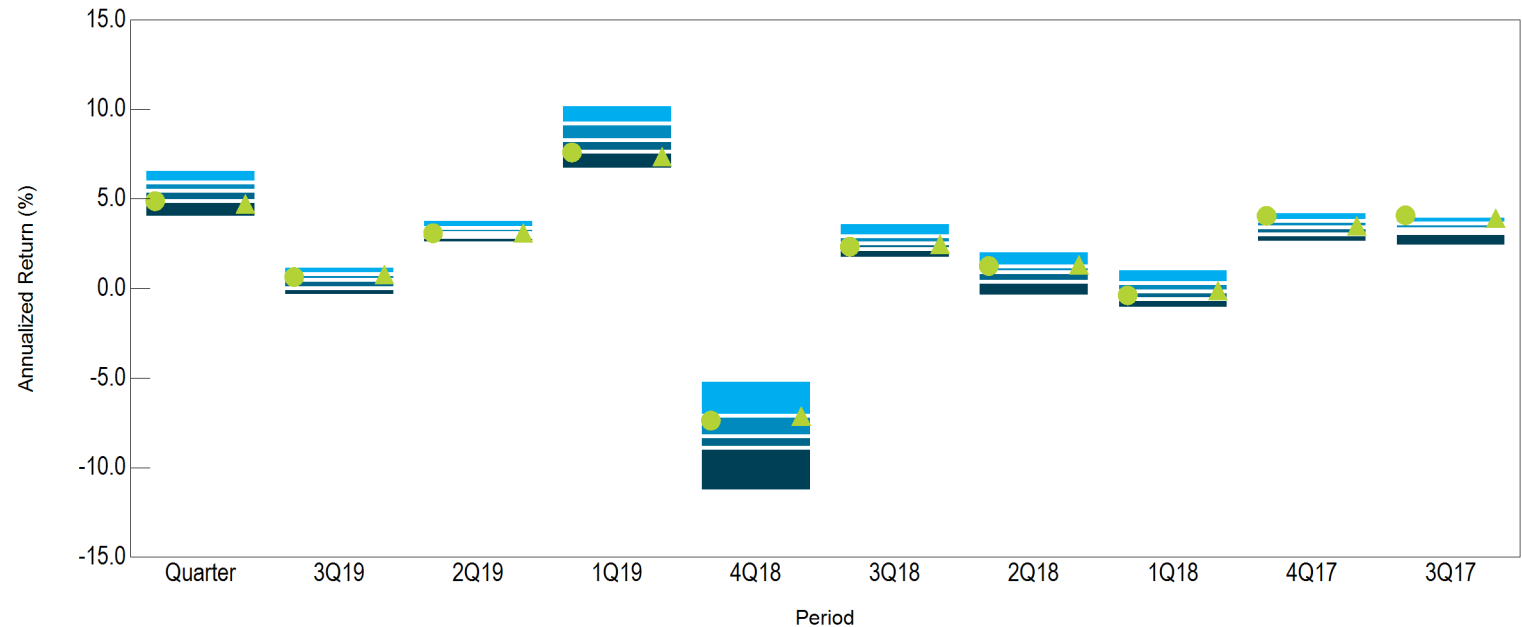
Name	Fee Schedule	Market Value	Estimated Fee	Estimated Fee Value
<b>Real Assets</b>		<b>\$56,433,241</b>		
SSgA	0.30% of First 50.0 Mil, 0.27% of Next 50.0 Mil, 0.25% Thereafter	\$17,264,839	0.30%	\$51,795
<b>Private Infrastructure</b>		<b>\$23,780,002</b>		
KKR Global II		\$11,307,757		
North Haven Infrastructure II		\$8,662,119		
ISQ Global Infrastructure Fund II		\$2,216,124		
KKR Global Infrastructure Investors III		\$1,404,527		
Ardian Infrastructure Fund V		\$189,475		
<b>Private Natural Resources</b>		<b>\$15,388,400</b>		
EnCap XI		\$1,289,184		
EnCap IV		\$1,122,326		
GSO Energy Opportunities		\$3,623,832		
Taurus Mining		\$4,023,695		
Taurus Mining Annex		\$3,770,973		
BlackRock Global Energy and Power Infrastructure Fund III LP		\$711,776		
Tailwater Energy Fund IV, LP		\$846,614		
<b>Cash</b>		<b>\$14,717,960</b>		
Cash		\$10,825,261		
Treasury Cash		\$3,892,698		

### InvMetrics Public DB \$250mm-\$1B Net Return Comparison Ending December 31, 2019

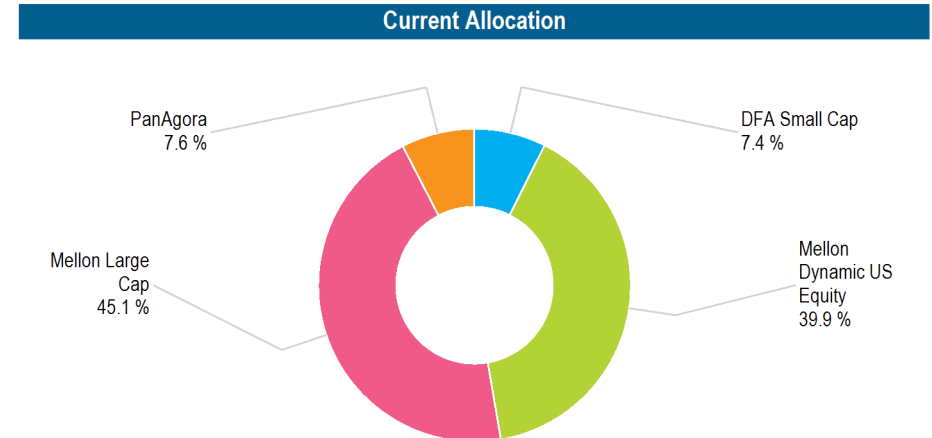
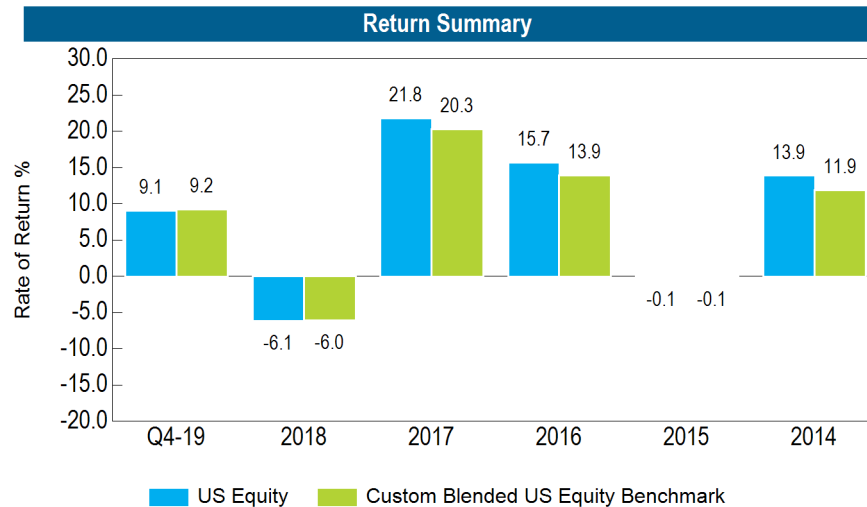


	Quarter		1 Year		3 Years		5 Years		10 Years	
Return (Rank)	6.6		21.5		11.2		8.4		9.8	
5th Percentile	6.6		21.5		11.2		8.4		9.8	
25th Percentile	5.9		20.5		9.9		7.4		8.9	
Median	5.5		18.7		9.6		6.9		8.3	
75th Percentile	4.9		17.2		8.6		6.4		7.7	
95th Percentile	4.0		15.4		7.3		5.9		6.8	
# of Portfolios	77		77		75		68		53	
Total Fund	4.9	(78)	17.1	(79)	9.3	(60)	7.0	(49)	8.2	(53)
Policy Index	4.7	(82)	16.8	(79)	9.4	(55)	7.4	(24)	8.7	(35)

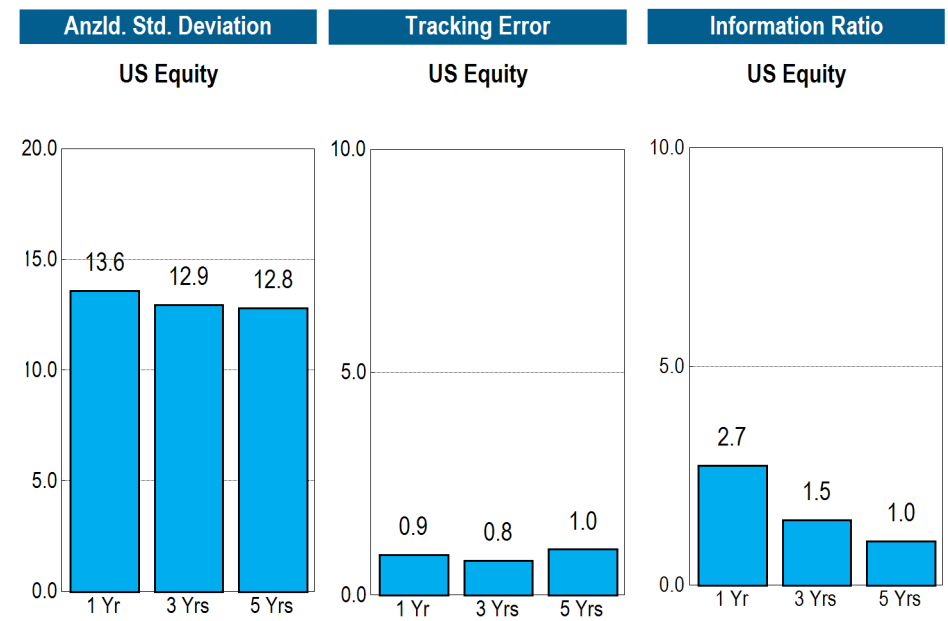
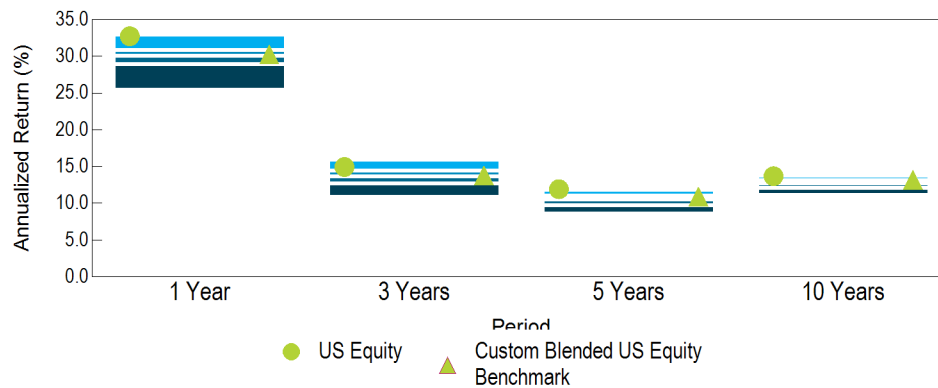
#### InvMetrics Public DB \$250mm-\$1B Net Return Comparison Ending December 31, 2019



	Return (Rank)									
5th Percentile	6.6	1.3	3.9	10.3	-5.1	3.7	2.1	1.1	4.3	4.1
25th Percentile	5.9	0.8	3.4	9.2	-7.1	2.9	1.3	0.3	3.8	3.6
Median	5.5	0.5	3.1	8.3	-8.2	2.5	0.9	-0.1	3.4	3.3
75th Percentile	4.9	0.0	2.9	7.6	-8.9	2.2	0.4	-0.6	3.1	3.1
95th Percentile	4.0	-0.4	2.5	6.7	-11.3	1.7	-0.4	-1.1	2.6	2.4
# of Portfolios	77	69	74	77	73	57	61	56	59	61
● Total Fund	4.9 (78)	0.6 (38)	3.1 (55)	7.6 (77)	-7.4 (33)	2.3 (68)	1.3 (25)	-0.4 (66)	4.1 (16)	4.1 (4)
▲ Policy Index	4.7 (82)	0.8 (31)	3.1 (53)	7.4 (84)	-7.1 (29)	2.5 (56)	1.3 (23)	-0.1 (50)	3.5 (43)	3.9 (10)



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>US Equity</b>	<b>32.7</b>	<b>14.9</b>	<b>11.9</b>	<b>13.7</b>
Custom Blended US Equity Benchmark	30.3	13.8	10.9	13.2
InvMetrics All DB US Eq Net Median	30.1	13.7	10.5	12.7
InvMetrics All DB US Eq Net Rank	6	13	5	7



US Equity | As of December 31, 2019

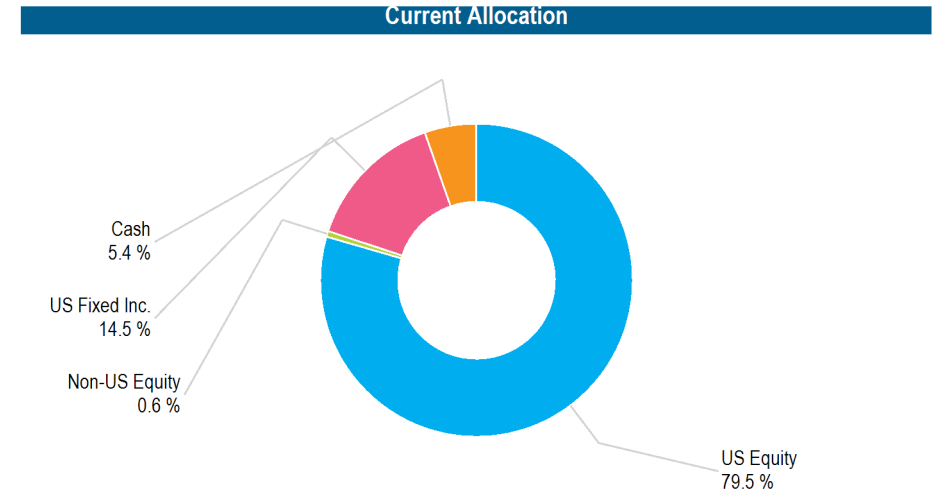
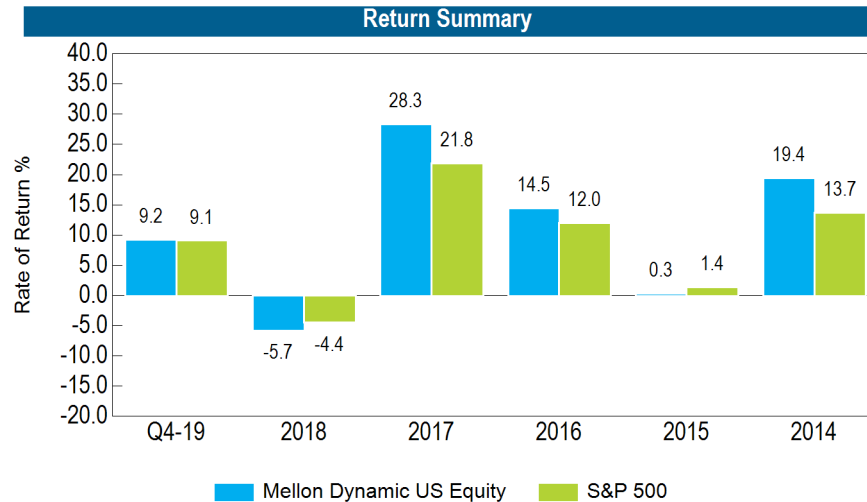
US Equity Characteristics vs Russell 3000		
	Portfolio Q4-19	Index Q4-19
Characteristics		
Weighted Avg. Market Cap. (\$B)	214.6	230.5
Median Market Cap (\$B)	2.5	1.8
P/E Ratio	22.2	22.8
Yield	1.7	1.8
EPS Growth - 5 Yrs.	12.6	13.1
Price to Book	3.5	3.6
Beta (holdings; domestic)	1.0	1.0

US Equity Sector Distribution vs Russell 3000		
	Portfolio Q4-19	Index Q4-19
Sector Distribution		
Energy	3.8	4.1
Materials	2.8	2.9
Industrials	9.9	9.9
Consumer Discretionary	9.6	10.0
Consumer Staples	6.0	6.4
Health Care	13.0	14.2
Financials	13.0	13.5
Information Technology	19.6	22.4
Communication Services	8.2	9.4
Utilities	3.1	3.2
Real Estate	3.0	4.0

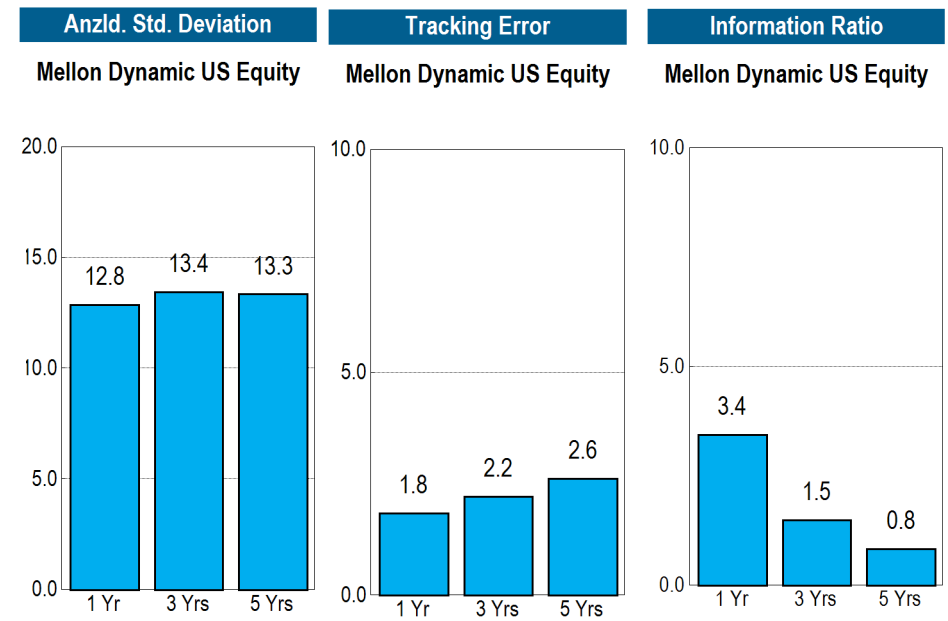
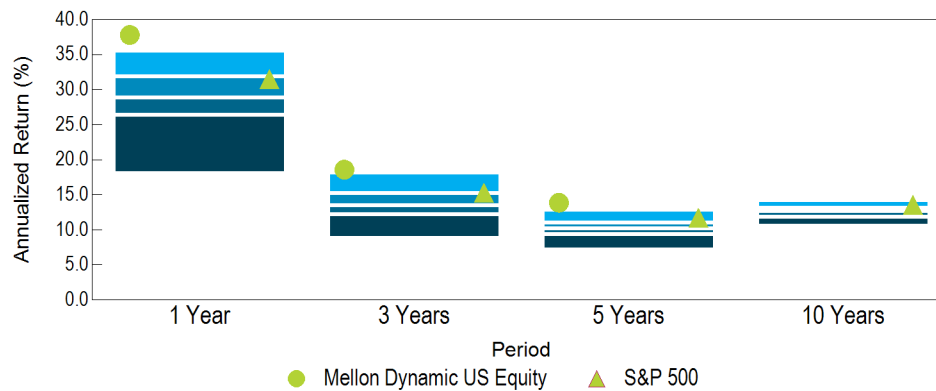
Top Holdings	
UST Bill 03/19/20 When Iss	5.8%
APPLE	3.4%
MICROSOFT	3.2%
CASH - USD	2.2%
AMAZON.COM	2.1%
FACEBOOK CLASS A	1.3%
BERKSHIRE HATHAWAY 'B'	1.2%
JP MORGAN CHASE & CO.	1.2%
ALPHABET A	1.1%
ALPHABET 'C'	1.1%

Best Performers	
	Return %
IVERIC BIO	666.1%
CHEMOCENTRYX	483.3%
INTRA CELLULAR THERAPIES	359.3%
NEOLEUKIN THERAPEUTICS	332.3%
STAGE STORES	331.9%
SUPERIOR ENERGY SVCS	285.4%
MERSANA THERAPEUTICS	262.7%
NANTKWEST	210.7%
ARQULE	178.4%
CLOVIS ONCOLOGY	165.3%

Worst Performers	
	Return %
CELADON GROUP	-98.8%
DEAN FOODS	-94.8%
NUVECTRA	-93.0%
HORNBECK OFFS.SVS.	-86.2%
LSC COMMUNICATIONS	-85.1%
MCCLATCHY 'A'	-83.0%
BASIC ENERGY SERVICES	-81.6%
UNIT	-79.4%
CYCLERION THERAPEUTICS	-77.6%
INTELSAT	-69.2%



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Mellon Dynamic US Equity	37.8	18.6	13.9	--
S&P 500	31.5	15.3	11.7	13.6
eV US Large Cap Core Equity Net Median	28.9	13.6	10.3	12.8
eV US Large Cap Core Equity Net Rank	2	5	1	--

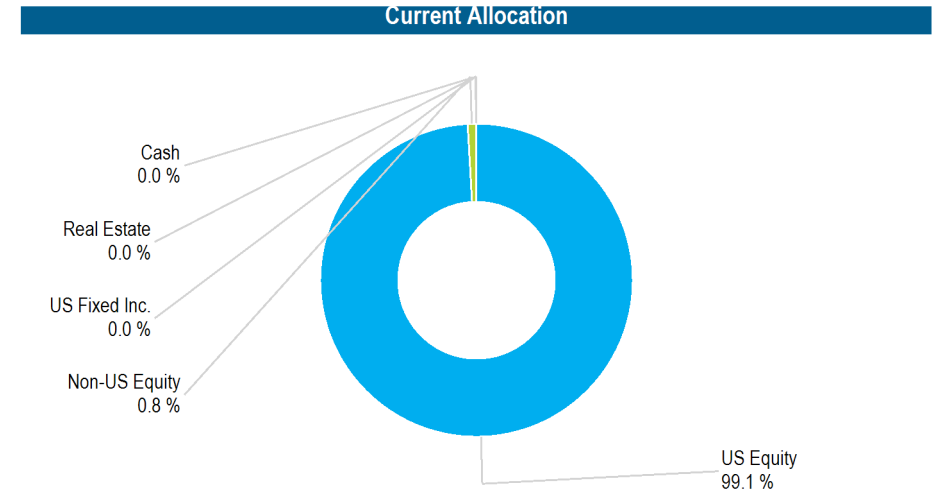
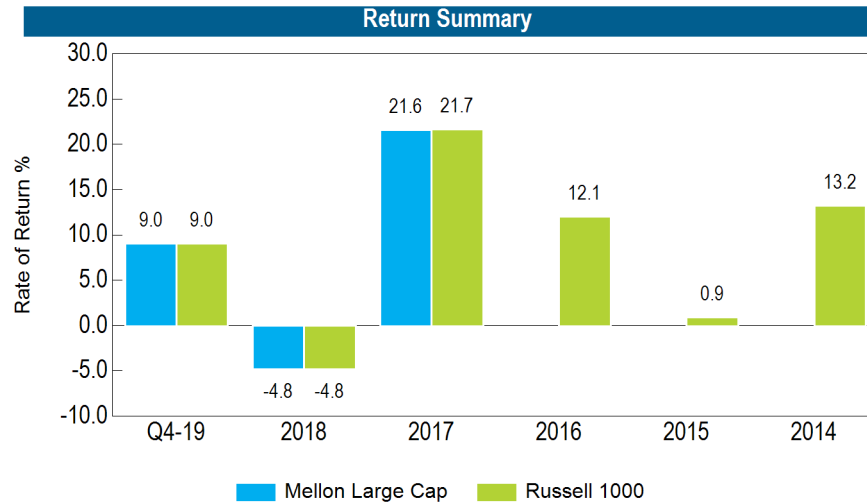


Account Information			Account Characteristics			Sector Distribution		
			Portfolio		Index	Portfolio		Index
			Q4-19		Q4-19	Q4-19		Q4-19
Account Name	Mellon Dynamic US Equity		Characteristics			Sector Distribution		
Account Structure	Commingled Fund		Weighted Avg. Market Cap. (\$B)	269.6	272.0	Energy	3.5	4.2
Investment Style	Active		Median Market Cap (\$B)	23.6	23.6	Materials	2.1	2.6
Inception Date	12/31/12		P/E Ratio	23.0	23.0	Industrials	7.3	9.0
Account Type	US Equity		Yield	1.9	1.8	Consumer Discretionary	7.8	10.1
Benchmark	S&P 500		EPS Growth - 5 Yrs.	12.9	12.8	Consumer Staples	5.8	7.8
Universe	eV US Large Cap Core Equity Net		Price to Book	3.9	3.9	Health Care	11.4	13.8
			Beta (holdings; domestic)	1.0	1.0	Financials	10.4	13.3
						Information Technology	18.6	22.8
						Communication Services	8.3	10.4
						Utilities	2.7	3.2
						Real Estate	2.3	2.8

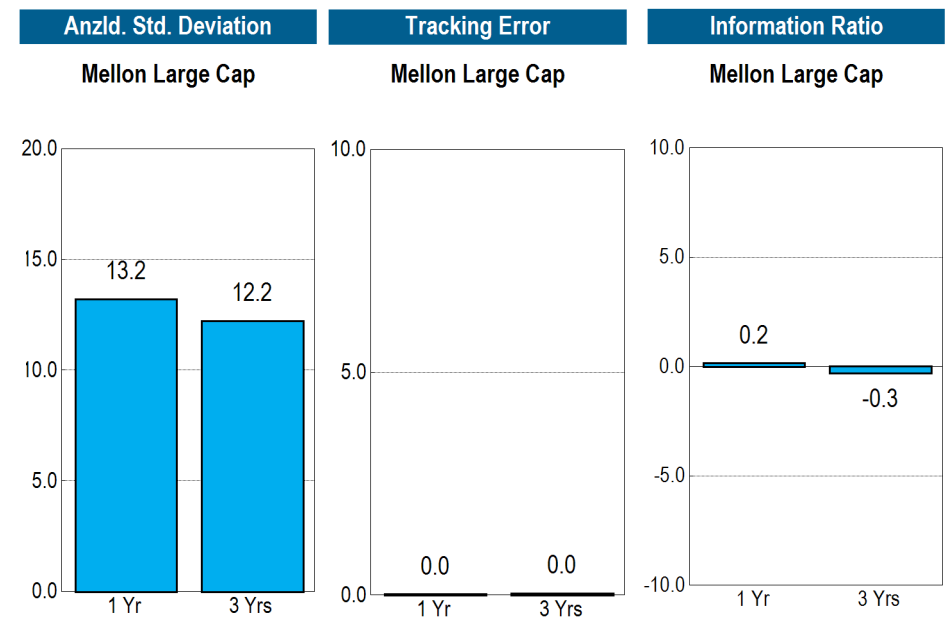
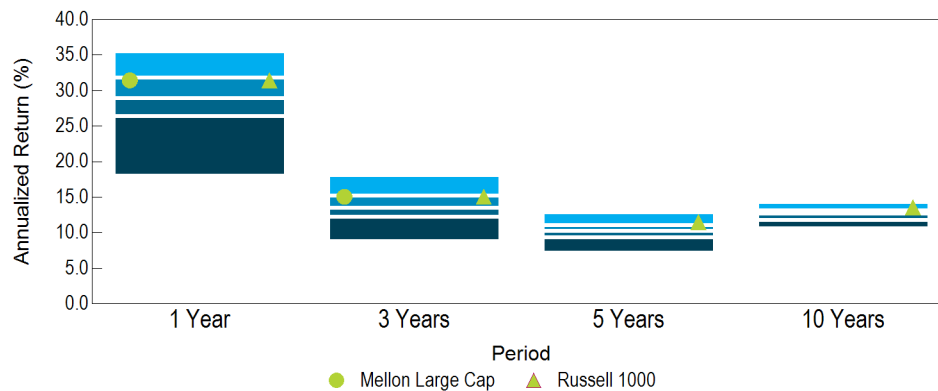
  

Top Holdings			Best Performers		Worst Performers	
			Return %		Return %	
UST Bill 03/19/20 When Iss	14.5%		ADVANCED MICRO DEVICES	58.2%	TWITTER	-22.2%
CASH - USD	5.4%		QORVO	56.8%	VENTAS	-19.9%
APPLE	3.7%		ALIGN TECHNOLOGY	54.2%	EXPEDIA GROUP	-19.3%
MICROSOFT	3.6%		SKYWORKS SOLUTIONS	53.2%	DOLLAR TREE	-17.6%
AMAZON.COM	2.3%		CENTENE	45.3%	ARISTA NETWORKS	-14.9%
FACEBOOK CLASS A	1.5%		TIFFANY & CO	44.9%	BOEING	-13.9%
BERKSHIRE HATHAWAY 'B'	1.3%		HUMANA	43.6%	MACERICH	-12.5%
JP MORGAN CHASE & CO.	1.3%		FORTINET	39.1%	PUBLIC STORAGE	-12.3%
ALPHABET A	1.2%		FREEPORT-MCMORAN	37.8%	ALLIANCE DATA SYSTEMS	-11.9%
ALPHABET 'C'	1.2%		UNITEDHEALTH GROUP	35.8%	TRIPADVISOR 'A'	-11.7%

Current Allocations do not depict asset class weights based on long/short positions.



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Mellon Large Cap	31.4	15.0	--	--
Russell 1000	31.4	15.0	11.5	13.5
eV US Large Cap Core Equity Net Median	28.9	13.6	10.3	12.8
eV US Large Cap Core Equity Net Rank	29	27	--	--

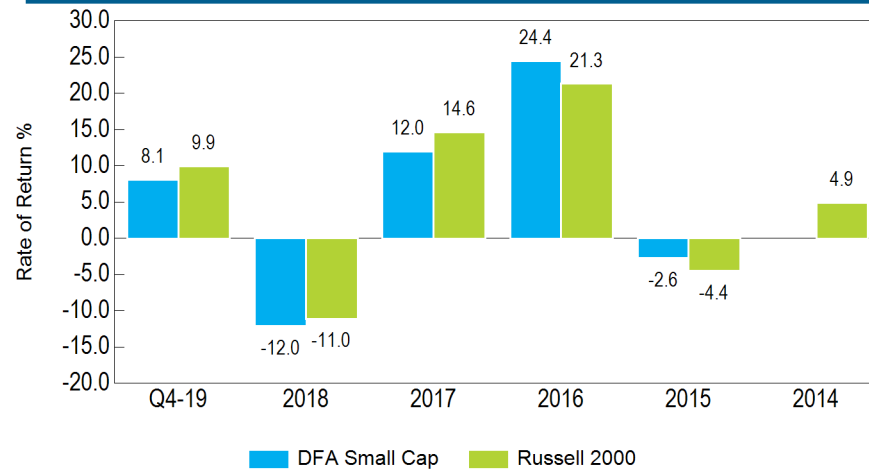




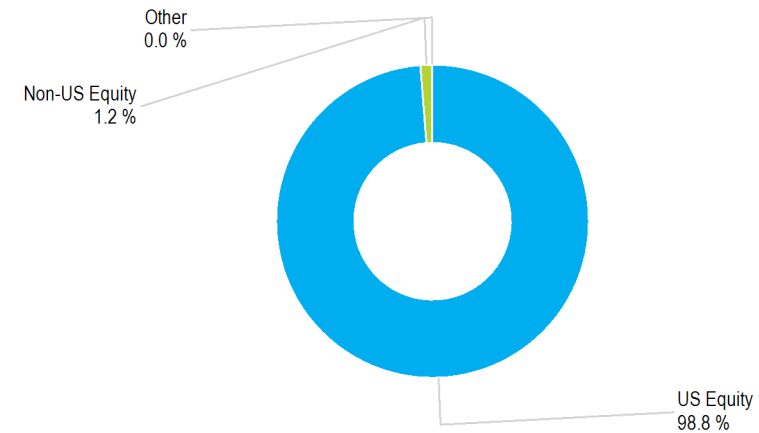
Account Information		Account Characteristics		Sector Distribution			
Account Name	Mellon Large Cap	Portfolio	Index	Portfolio	Index		
Account Structure	Commingled Fund	Q4-19	Q4-19	Q4-19	Q4-19		
Investment Style	Passive	Characteristics		Sector Distribution			
Inception Date	3/31/16	Weighted Avg. Market Cap. (\$B)	246.7	246.6	Energy	4.1	4.1
Account Type	US Stock Large	Median Market Cap (\$B)	10.4	10.4	Materials	2.8	2.8
Benchmark	Russell 1000	P/E Ratio	23.1	23.1	Industrials	9.5	9.5
Universe	eV US Large Cap Core Equity Net	Yield	1.8	1.8	Consumer Discretionary	10.0	10.0
		EPS Growth - 5 Yrs.	13.4	13.4	Consumer Staples	6.7	6.7
		Price to Book	3.8	3.8	Health Care	13.9	13.9
		Beta (holdings; domestic)	1.0	1.0	Financials	13.2	13.2
					Information Technology	23.0	23.1
					Communication Services	9.9	9.9
					Utilities	3.2	3.2
					Real Estate	3.7	3.7

Top Holdings		Best Performers		Worst Performers	
			Return %		Return %
APPLE	4.4%	TESLA	73.7%	BEYOND MEAT	-49.1%
MICROSOFT	4.0%	SAREPTA THERAPEUTICS	71.3%	SAGE THERAPEUTICS	-48.5%
AMAZON.COM	2.6%	UBIQUITI	60.1%	CHESAPEAKE ENERGY	-41.4%
FACEBOOK CLASS A	1.6%	ADVANCED MICRO DEVICES	58.2%	SERVICEMASTER GLB.HDG.	-30.8%
BERKSHIRE HATHAWAY 'B'	1.5%	QORVO	56.8%	TWITTER	-22.2%
JP MORGAN CHASE & CO.	1.5%	ZILLOW GROUP CLASS A	54.8%	TAUBMAN CENTERS	-22.1%
ALPHABET A	1.3%	ALIGN TECHNOLOGY	54.2%	ELASTIC	-21.9%
ALPHABET 'C'	1.3%	ZILLOW GROUP CLASS C	54.1%	ETSY	-21.6%
JOHNSON & JOHNSON	1.3%	TRANSOCEAN	53.9%	SINCLAIR BROADCAST 'A'	-21.5%
VISA 'A'	1.1%	SKYWORKS SOLUTIONS	53.2%	VENTAS	-19.9%

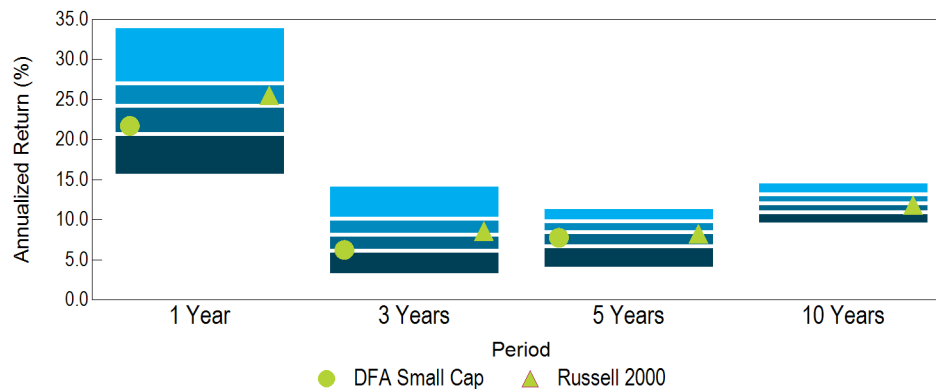
Return Summary



Current Allocation

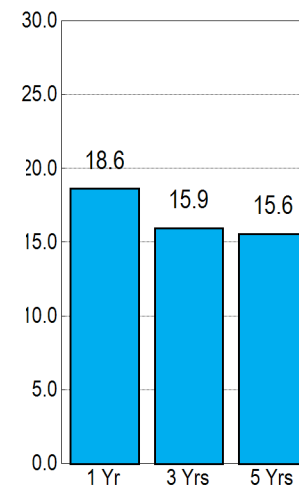


	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
DFA Small Cap	21.7	6.2	7.7	--
Russell 2000	25.5	8.6	8.2	11.8
eV US Small Cap Core Equity Net Median	24.3	8.2	8.5	12.1
eV US Small Cap Core Equity Net Rank	70	74	61	--



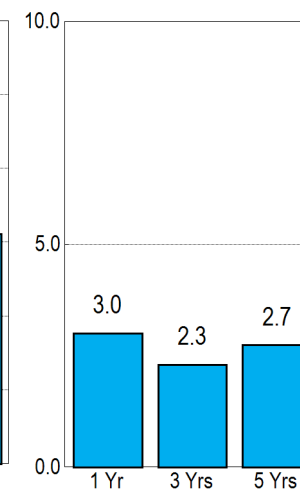
Anzld. Std. Deviation

DFA Small Cap



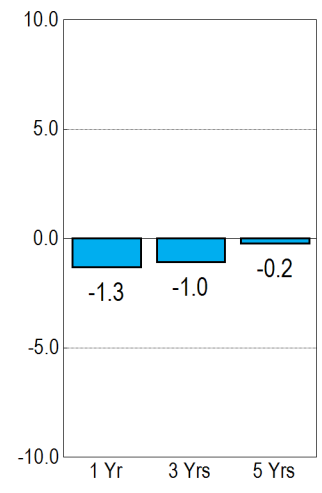
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DFA Small Cap



Information Ratio

DFA Small Cap

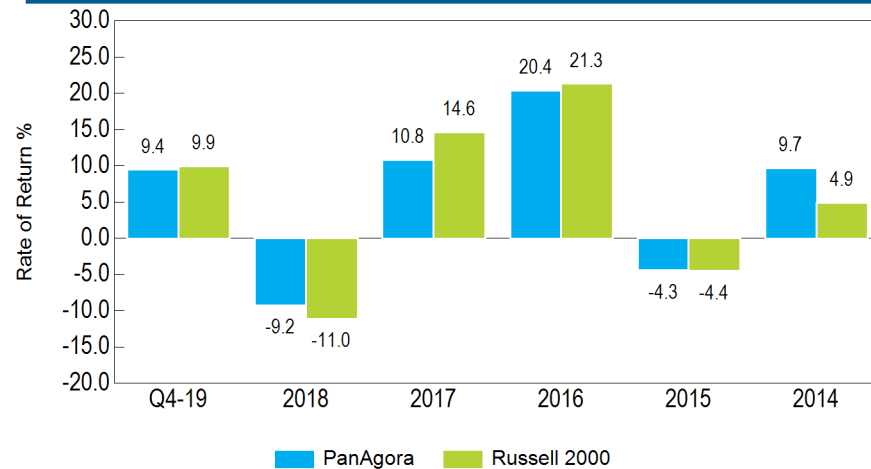


Account Information		Account Characteristics		Sector Distribution			
Account Name	DFA Small Cap	Portfolio	Index	Portfolio	Index		
Account Structure	Commingled Fund	Q4-19	Q4-19	Q4-19	Q4-19		
Investment Style	Active	Characteristics		Sector Distribution			
Inception Date	6/30/14	Weighted Avg. Market Cap. (\$B)	2.4	2.5	Energy	4.1	3.1
Account Type	US Stock Small	Median Market Cap (\$B)	0.8	0.8	Materials	5.9	3.9
Benchmark	Russell 2000	P/E Ratio	18.7	19.8	Industrials	20.6	15.8
Universe	eV US Small Cap Core Equity Net	Yield	1.3	1.4	Consumer Discretionary	14.5	10.9
		EPS Growth - 5 Yrs.	9.1	9.3	Consumer Staples	4.4	3.0
		Price to Book	2.4	2.5	Health Care	9.1	18.2
		Beta (holdings; domestic)	1.2	1.2	Financials	19.9	17.7
					Information Technology	13.9	13.6
					Communication Services	3.4	2.3
					Utilities	3.7	3.7
					Real Estate	0.6	7.8

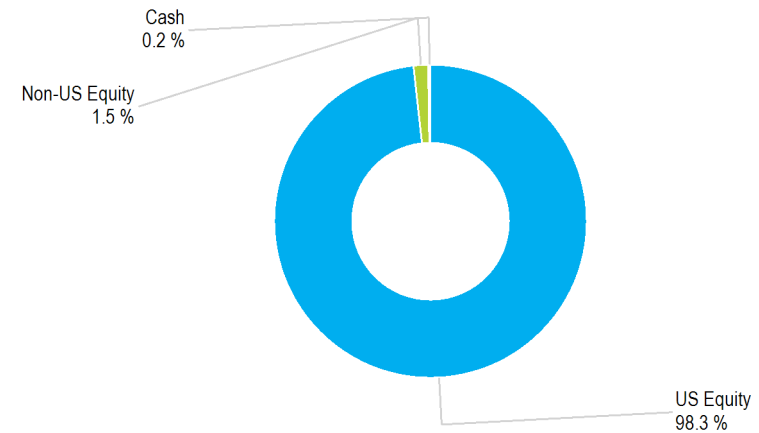
Top Holdings		Best Performers		Worst Performers	
TCF FINANCIAL	0.3%		Return %		Return %
ACI WORLDWIDE	0.3%	IVERIC BIO	666.1%	CELADON GROUP	-98.8%
HELEN OF TROY	0.3%	CHEMOCENTRYX	483.3%	DEAN FOODS	-94.8%
TETRA TECH	0.3%	INTRA CELLULAR THERAPIES	359.3%	NUVECTRA	-93.0%
AMEDISYS	0.3%	NEOLEUKIN THERAPEUTICS	332.3%	HORNBECK OFFS.SVS.	-86.2%
DECKERS OUTDOOR	0.3%	STAGE STORES	331.9%	LSC COMMUNICATIONS	-85.1%
SEABOARD	0.3%	SUPERIOR ENERGY SVCS	285.4%	MCCLATCHY 'A'	-83.0%
ARMSTRONG WORLD INDS.	0.3%	NANTKWEST	210.7%	BASIC ENERGY SERVICES	-81.6%
NEXSTAR MEDIA GROUP CL.A	0.3%	JOUNCE THERAPEUTICS	162.2%	UNIT	-79.4%
FTI CONSULTING	0.3%	COMSCORE	158.6%	INTELSAT	-69.2%
		EPIZYME	138.5%	MCDERMOTT INTL.	-66.5%

PanAgora | As of December 31, 2019

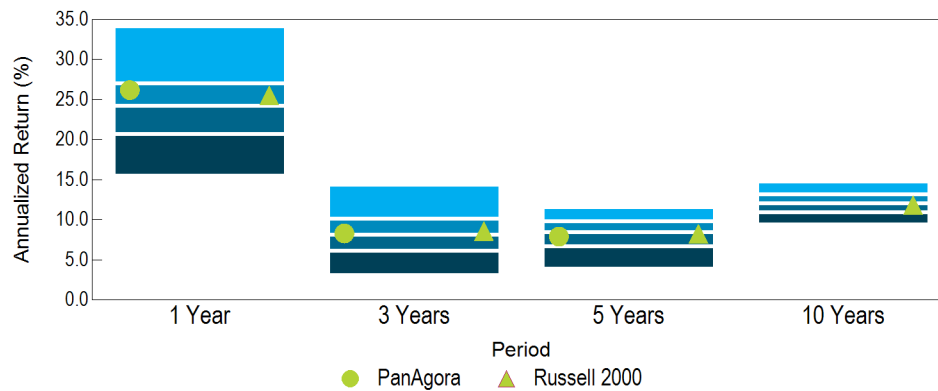
Return Summary



Current Allocation

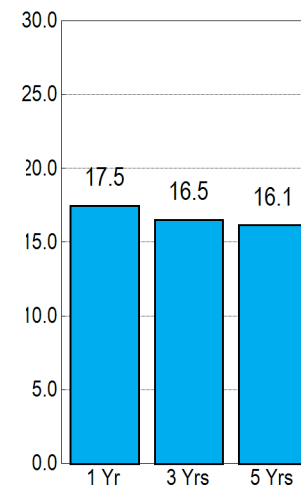


	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
PanAgora	26.2	8.3	7.9	--
Russell 2000	25.5	8.6	8.2	11.8
eV US Small Cap Core Equity Net Median	24.3	8.2	8.5	12.1
eV US Small Cap Core Equity Net Rank	35	48	60	--



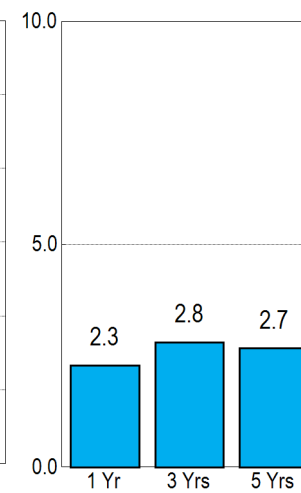
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PanAgora



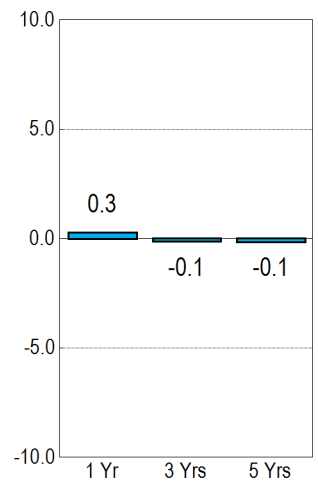
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PanAgora



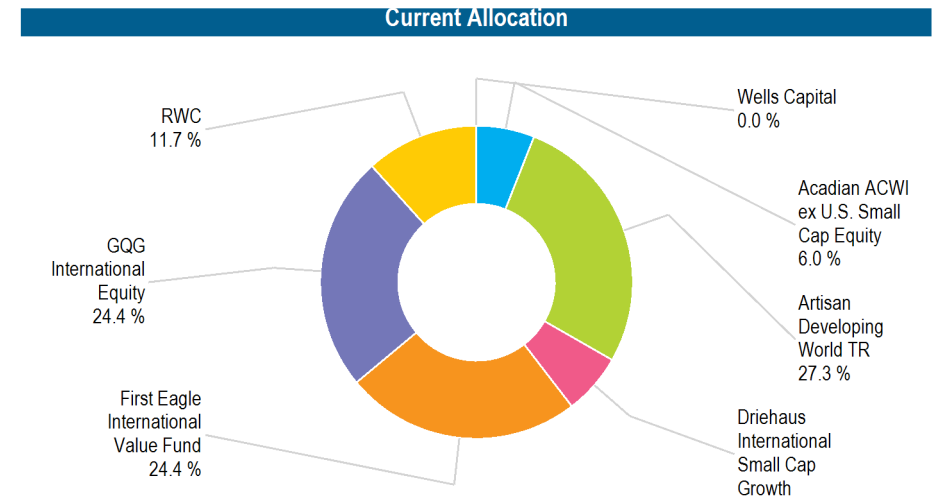
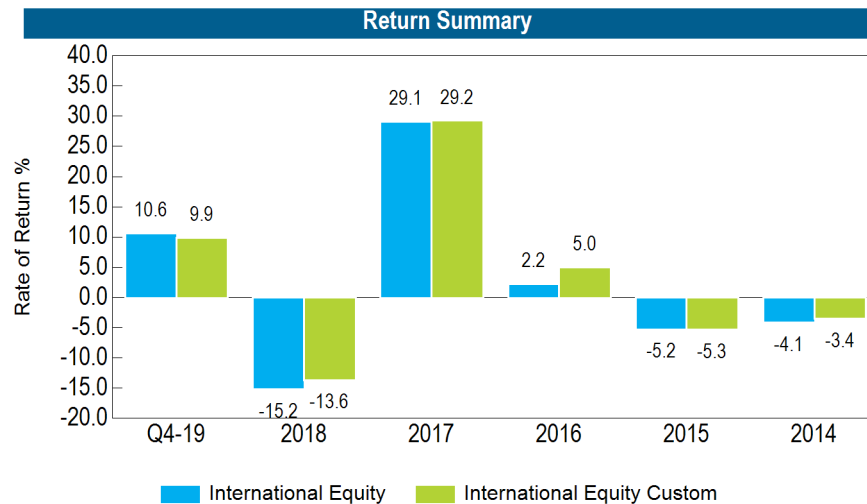
Information Ratio

PanAgora

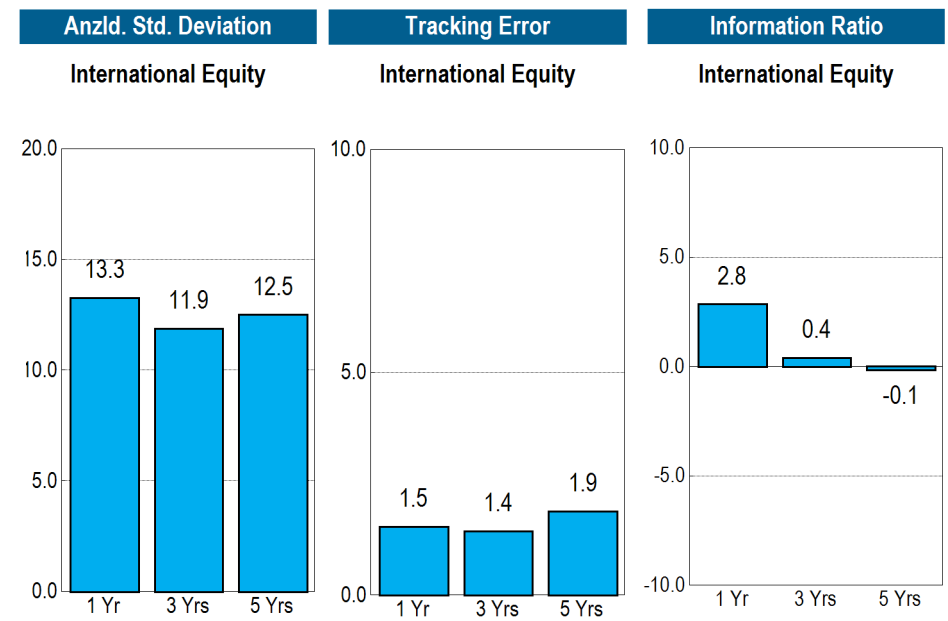
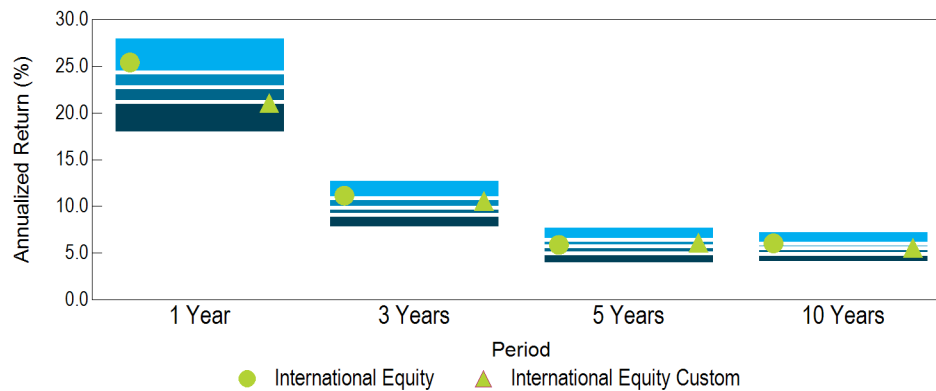


Account Information		Account Characteristics		Sector Distribution			
Account Name	PanAgora	Portfolio	Index	Portfolio	Index		
Account Structure	Commingled Fund	Q4-19	Q4-19	Q4-19	Q4-19		
Investment Style	Active	Characteristics		Sector Distribution			
Inception Date	9/30/13	Weighted Avg. Market Cap. (\$B)	2.5	2.5	Energy	4.0	3.1
Account Type	US Stock Small Cap Core	Median Market Cap (\$B)	0.8	0.8	Materials	3.1	3.9
Benchmark	Russell 2000	P/E Ratio	18.0	19.8	Industrials	16.1	15.8
Universe	eV US Small Cap Core Equity Net	Yield	1.4	1.4	Consumer Discretionary	12.2	10.9
		EPS Growth - 5 Yrs.	9.3	9.3	Consumer Staples	5.1	3.0
		Price to Book	2.5	2.5	Health Care	19.8	18.2
		Beta (holdings; domestic)	1.2	1.2	Financials	18.7	17.7
					Information Technology	10.1	13.6
					Communication Services	2.5	2.3
					Utilities	3.6	3.7
					Real Estate	4.4	7.8

Top Holdings		Best Performers		Worst Performers	
FIVE9	1.4%		Return %		Return %
PORTLAND GEN.ELEC.	1.4%	CHEMOCENTRYX	483.3%	LSC COMMUNICATIONS	-85.1%
PNM RESOURCES	1.3%	MERSANA THERAPEUTICS	262.7%	UNIT	-79.4%
SKYWEST	1.2%	ARQULE	178.4%	CYCLERION THERAPEUTICS	-77.6%
DECKERS OUTDOOR	1.2%	CLOVIS ONCOLOGY	165.3%	AKORN	-60.5%
INSIGHT ENTS.	1.1%	DERMIRA	137.2%	SPECTRUM PHARMS.	-56.1%
SUNSTONE HTL.INVRS.	1.1%	MOLECULAR TEMPLATES	112.2%	SMILEDIRECTCLUB A	-37.0%
INTERNATIONAL BCSH.	1.0%	IMMUNOGEN	111.0%	FOSSIL GROUP	-37.0%
PERFORMANCE FOOD GROUP	1.0%	RECRO PHARMA	84.5%	MODINE MANUFACTURING	-32.3%
UNITED COMMUNITY BANKS	1.0%	OSMOTICA PHARMACEUTICALS	82.0%	IDT 'B'	-31.5%
		COLLEGIUM PHARMACEUTICAL	79.3%	LEE ENTERPRISES	-30.4%



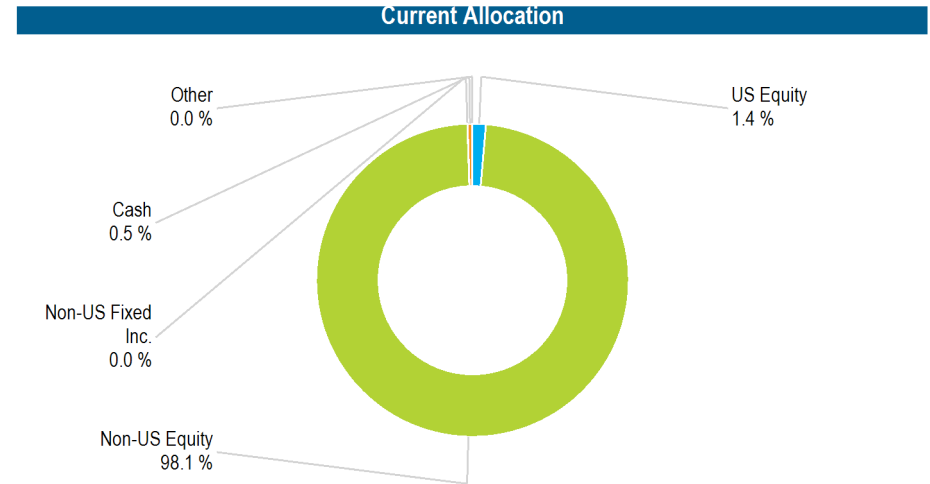
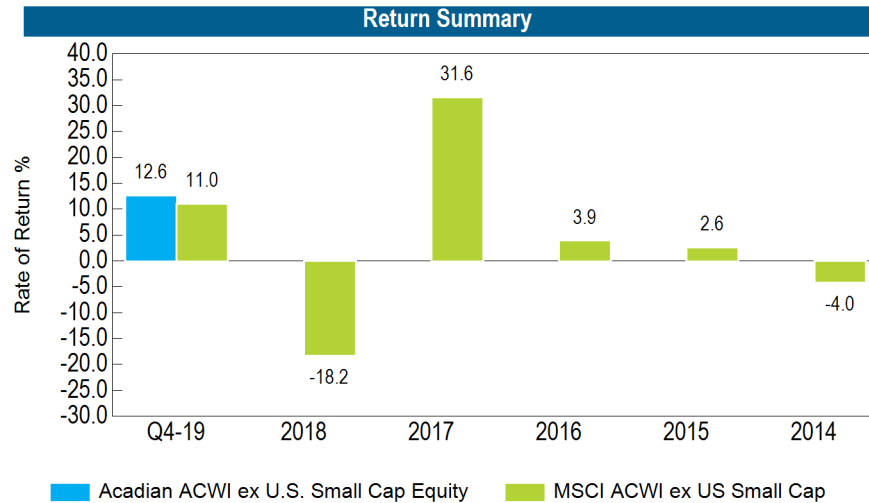
	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>International Equity</b>	<b>25.4</b>	<b>11.2</b>	<b>5.9</b>	<b>6.0</b>
International Equity Custom	21.0	10.6	6.1	5.6
InvMetrics All DB ex-US Eq Net Median	22.8	9.9	5.8	5.5
InvMetrics All DB ex-US Eq Net Rank	17	24	43	28



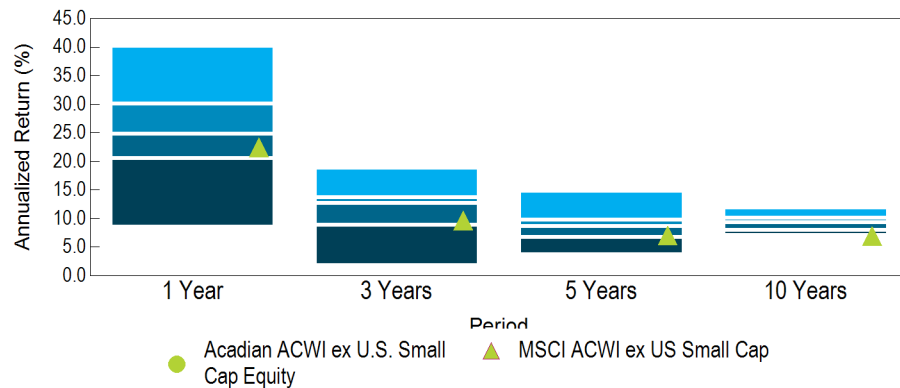
International Equity Characteristics vs MSCI ACWI ex USA		
	Portfolio Q4-19	Index Q4-19
Characteristics		
Weighted Avg. Market Cap. (\$B)	80.3	74.1
Median Market Cap (\$B)	0.6	8.2
P/E Ratio	19.2	16.3
Yield	2.0	3.0
EPS Growth - 5 Yrs.	14.5	9.1
Price to Book	3.1	2.4
Beta (holdings; domestic)	1.0	1.0

International Equity Sector Distribution vs MSCI ACWI ex USA		
	Portfolio Q4-19	Index Q4-19
Sector Distribution		
Energy	1.5	6.5
Materials	9.5	7.4
Industrials	6.0	12.0
Consumer Discretionary	9.6	11.8
Consumer Staples	7.3	9.4
Health Care	6.6	8.8
Financials	13.8	21.5
Information Technology	12.3	9.3
Communication Services	6.9	6.6
Utilities	1.1	3.4
Real Estate	6.2	3.2

Top Holdings		Best Performers		Worst Performers	
			Return %		Return %
CASH - USD	8.5%	AUGEAN	114.0%	TULLOW OIL	-67.8%
HOA PHAT GROUP	4.5%	WAH SEONG CORPORATION	101.4%	TORSTAR 'B'	-48.9%
VINCOM RETAIL	4.3%	CSU CARDSYSTEM ON	100.3%	REITMANS (CANADA) 'A'	-48.5%
MISCELLANEOUS SECURITIES	3.7%	SING TAO NEWS	100.0%	SMARTGROUP CORPORATION	-40.8%
ALIBABA GROUP HOLDING ADR 1:8	2.4%	DART GROUP	99.4%	JIANPU TECHNOLOGY ADR 2:5	-40.4%
GOLD-PHYSICAL	2.2%	UCHIDA YOKO	90.5%	ARCELORMITTAL SA.	-39.7%
HDFC BANK ADR 1:3	2.2%	CROPENERGIES	84.3%	MEDICAL FACILITIES	-37.6%
VISA 'A'	1.6%	ZYMEWORKS (NYS)	83.3%	JUMBO INTERACTIVE	-35.8%
NVIDIA	1.4%	MCBRIDE	82.9%	QUDIAN ADR 1:1	-31.6%
NESTLE 'N'	1.3%	OSMOTICA PHARMACEUTICALS	82.0%	ADCORP	-31.4%



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Acadian ACWI ex U.S. Small Cap Equity	--	--	--	--
MSCI ACWI ex US Small Cap	22.4	9.6	7.0	6.9
eV ACWI ex-US Small Cap Equity Net Median	24.9	12.8	8.8	9.4
eV ACWI ex-US Small Cap Equity Net Rank	--	--	--	--



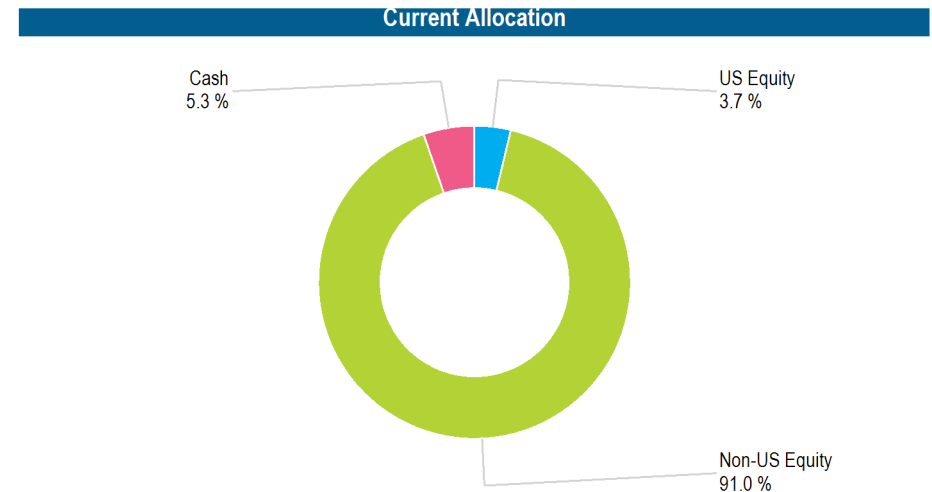
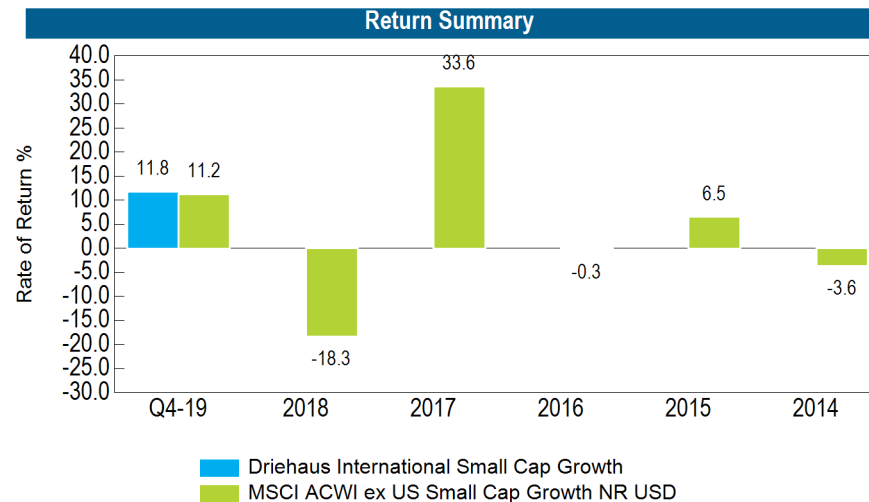


## Acadian ACWI ex U.S. Small Cap Equity | As of December 31, 2019

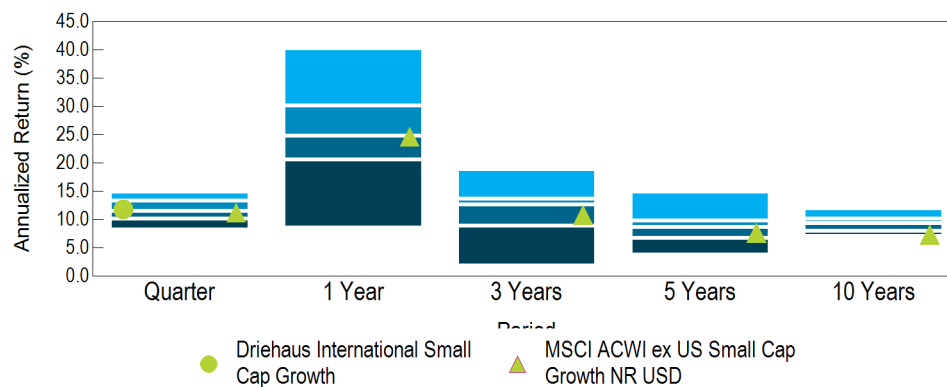
Account Information		Account Characteristics		Sector Distribution			
Account Name	Acadian ACWI ex U.S. Small Cap Equity	Portfolio Q4-19	Index Q4-19	Portfolio Q4-19	Index Q4-19		
Account Structure	Commingled Fund	Characteristics		Sector Distribution			
Investment Style	Active	Weighted Avg. Market Cap. (\$B)	2.1	2.8	Energy	2.4	3.5
Inception Date	5/01/19	Median Market Cap (\$B)	0.3	1.1	Materials	8.5	9.7
Account Type	International	P/E Ratio	12.1	17.2	Industrials	15.3	21.1
Benchmark	MSCI ACWI ex US Small Cap	Yield	2.9	2.5	Consumer Discretionary	12.7	12.1
Universe	eV ACWI ex-US Small Cap Equity Net	EPS Growth - 5 Yrs.	14.2	10.7	Consumer Staples	1.4	5.9
		Price to Book	2.1	2.2	Health Care	7.5	6.9
		Beta (holdings; domestic)	1.0	0.9	Financials	16.2	10.6
					Information Technology	18.1	9.7
					Communication Services	5.3	4.4
					Utilities	0.9	2.7
					Real Estate	6.9	13.2

Top Holdings		Best Performers		Worst Performers	
CANADIAN WESTERN BANK	1.6%		Return %		Return %
BOYD GROUP INCOME	1.5%	AUGEAN	114.0%	TORSTAR 'B'	-48.9%
IA FINANCIAL	1.4%	WAH SEONG CORPORATION	101.4%	REITMANS (CANADA) 'A'	-48.5%
BRP	1.2%	CSU CARDSYSTEM ON	100.3%	SMARTGROUP CORPORATION	-40.8%
QUEBECOR 'B'	1.2%	SING TAO NEWS	100.0%	ARCELORMITTAL SA.	-39.7%
ASR NEDERLAND	1.1%	DART GROUP	99.4%	MEDICAL FACILITIES	-37.6%
QILIANSHAN ORD A	1.1%	UCHIDA YOKO	90.5%	JUMBO INTERACTIVE	-35.8%
UNIPOL GRUPPO FINANZIARI	1.0%	CROPENERGIES	84.3%	QUDIAN ADR 1:1	-31.6%
PHOENIX GROUP HDG.	0.9%	ZYMEWORKS (NYS)	83.3%	ADCORP	-31.4%
CYBER ARK SOFTWARE	0.9%	MCBRIDE	82.9%	XIWANG SPECIAL STEEL CO.	-30.6%
		OSMOTICA PHARMACEUTICALS	82.0%	JUST ENERGY GROUP	-29.1%

### Driehaus International Small Cap Growth | As of December 31, 2019



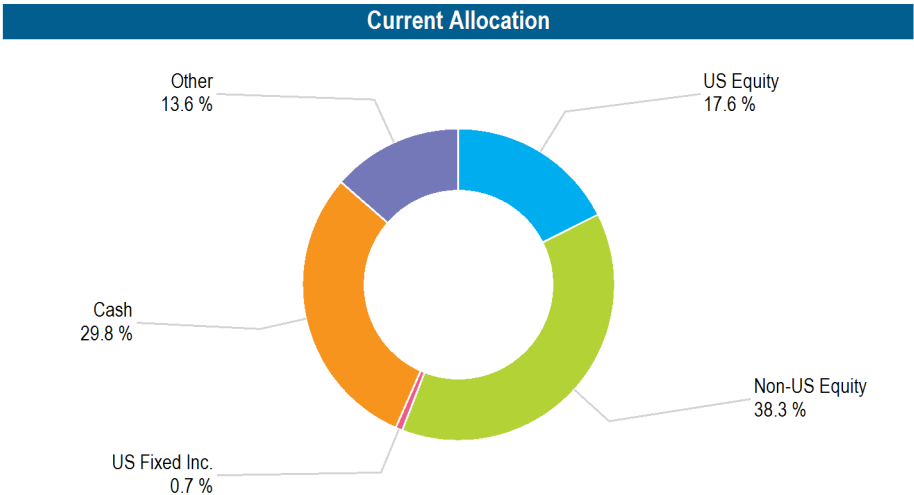
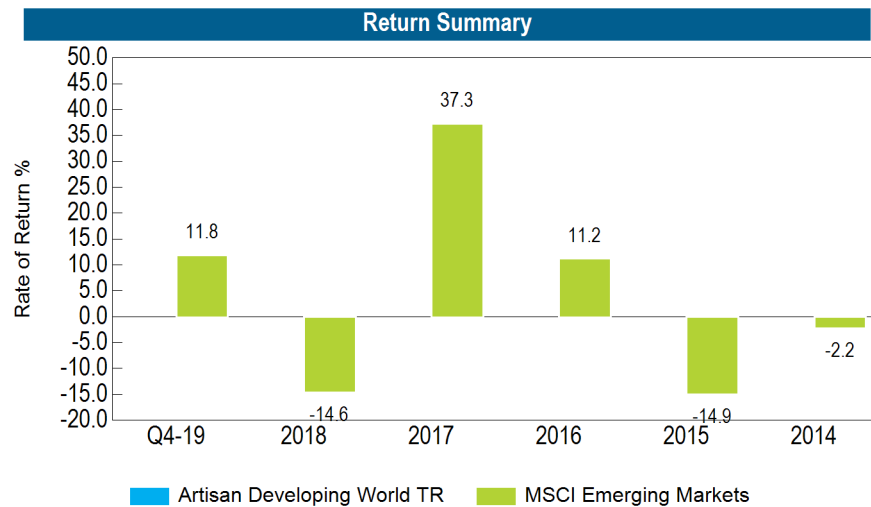
	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Driehaus International Small Cap Growth	11.8	--	--	--	--
MSCI ACWI ex US Small Cap Growth NR USD	11.2	24.6	10.8	7.6	7.3
eV ACWI ex-US Small Cap Equity Net Median	11.6	24.9	12.8	8.8	9.4
eV ACWI ex-US Small Cap Equity Net Rank	46	--	--	--	--



## Driehaus International Small Cap Growth | As of December 31, 2019

Account Information		Account Characteristics		Sector Distribution		
Account Name	Driehaus International Small Cap Growth	Portfolio	Index	Portfolio	Index	
Account Structure	Commingled Fund	Q4-19	Q4-19	Q4-19	Q4-19	
Investment Style	Active	Characteristics		Sector Distribution		
Inception Date	5/01/19	Weighted Avg. Market Cap. (\$B)	4.5	2.8	Energy	3.5
Account Type	International	Median Market Cap (\$B)	3.8	1.1	Materials	9.7
Benchmark	MSCI ACWI ex US Small Cap Growth NR USD	P/E Ratio	25.0	17.2	Industrials	21.2
Universe	eV ACWI ex-US Small Cap Equity Net	Yield	3.4	2.5	Consumer Discretionary	12.7
		EPS Growth - 5 Yrs.	12.4	10.7	Consumer Staples	6.9
		Price to Book	3.3	2.2	Health Care	6.9
		Beta (holdings; domestic)	0.8	0.9	Financials	5.8
					Information Technology	18.7
					Communication Services	5.4
					Utilities	0.0
					Real Estate	3.9
						13.2

Top Holdings		Best Performers		Worst Performers	
NORTHERN INSTITUTIONAL U.S. GOVERNMENT SELECT PORTFOLIO	5.3%	Return %		Return %	
PARKLAND FUEL	1.9%	LASERTEC	64.0%	EMPIRE 'A'	-13.0%
TEAMVIEWER (WBO)	1.7%	NICHIAS	44.9%	OCI	-10.9%
LEONARDO	1.6%	ASCENDIS PHARMA ADR 1:1	44.4%	BK BRA.OPEAS.A RTR. ON	-10.7%
SQUARE ENIX HOLDINGS	1.5%	KOBE BUSSAN	43.3%	RHEINMETALL	-9.9%
CAE	1.5%	KELT EXPLORATION	42.9%	SG HOLDINGS	-7.5%
SUL AMERICA UNITS	1.5%	CKD	42.4%	STOCK SPIRITS GROUP	-4.7%
TOKYO TATEMONO	1.5%	ARGENX	42.0%	NET ONE SYSTEMS	-4.5%
GREGGS	1.5%	WH SMITH	40.7%	UBISOFT ENTM.	-4.4%
SERCO GROUP	1.4%	TEAMVIEWER (WBO)	37.5%	YOKOGAWA ELECTRIC	-3.0%
		M&A CAPITAL PARTNERS	36.0%	DINO POLSKA SA	-2.9%



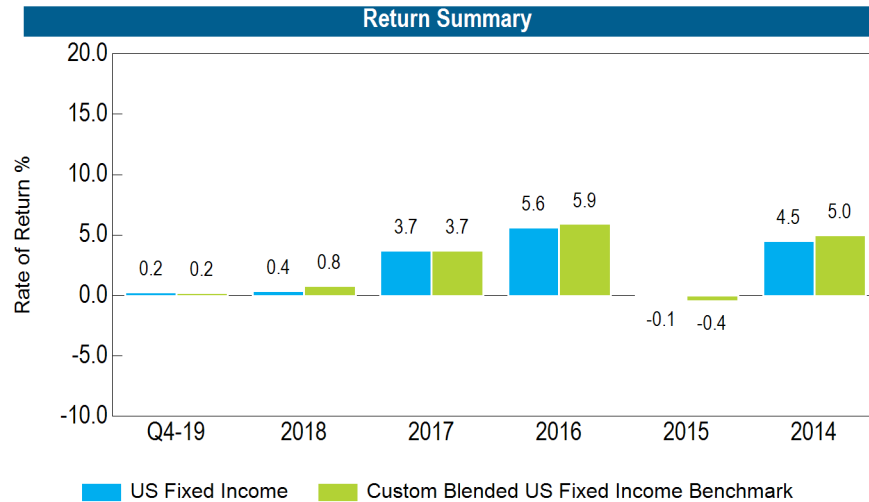
	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
RWC	--	--	--	--	--
MSCI Emerging Markets	--	--	--	--	--

Account Information	
Account Name	Artisan Developing World TR
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	12/01/19
Account Type	International Emerging Stocks
Benchmark	MSCI Emerging Markets
Universe	

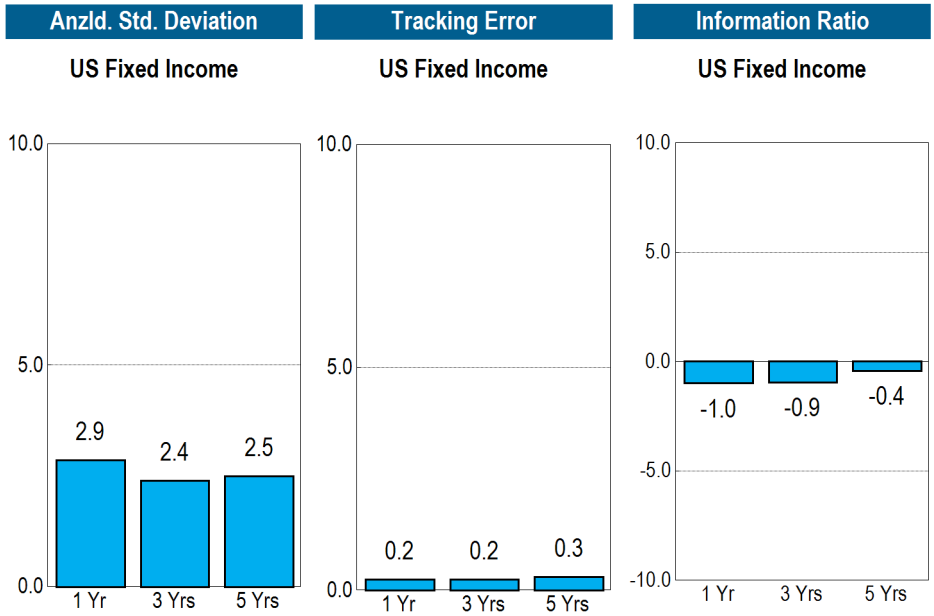
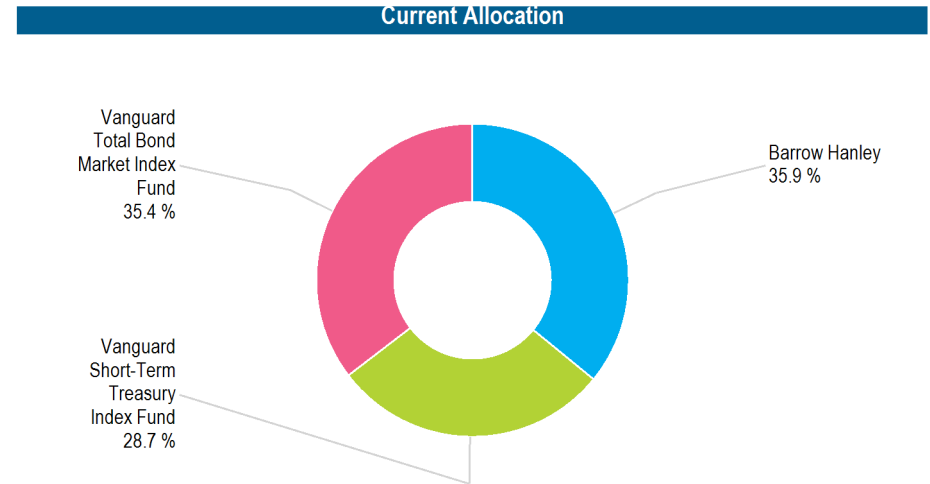
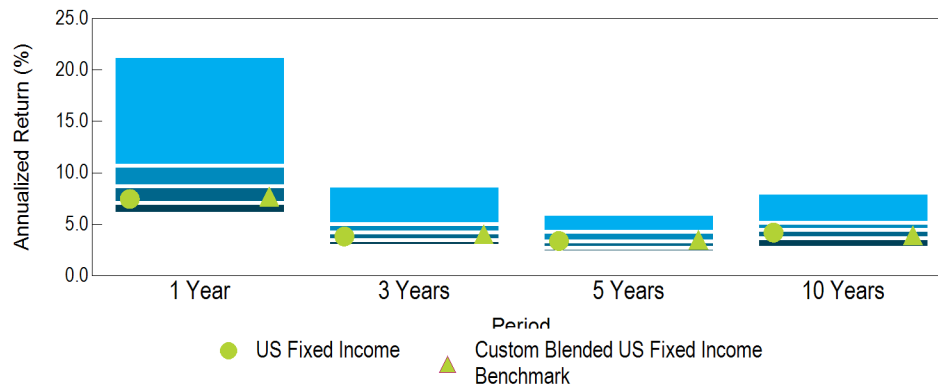
Account Characteristics			Sector Distribution		
	Portfolio Q4-19	Index Q4-19		Portfolio Q4-19	Index Q4-19
Characteristics			Sector Distribution		
Weighted Avg. Market Cap. (\$B)	139.5	106.2	Energy	0.0	7.4
Median Market Cap (\$B)	25.5	5.9	Materials	0.0	7.3
P/E Ratio	36.9	15.0	Industrials	0.0	5.3
Yield	0.5	2.7	Consumer Discretionary	15.3	14.3
EPS Growth - 5 Yrs.	27.3	13.1	Consumer Staples	6.3	6.2
Price to Book	10.7	2.6	Health Care	1.9	2.7
Beta (holdings; domestic)	1.2	1.1	Financials	8.1	24.5
			Information Technology	12.7	15.6
			Communication Services	10.8	11.0
			Utilities	0.0	2.6
			Real Estate	0.0	3.0

Top Holdings	
ALIBABA GROUP HOLDING ADR 1:8	7.8%
HDFC BANK ADR 1:3	7.6%
SEA 'A' SPN.ADR 1:1	7.5%
MERCADOLIBRE	6.9%
TAL EDUCATION GROUP CL.A ADR 3:1	6.6%
AIA GROUP (OTC)	6.6%
ADYEN UNSPONSORED NETHERL 50 ADR 50:1	6.6%
NVIDIA	6.6%
TENCENT HOLDINGS (OTC)	6.1%
VISA 'A'	6.1%

Best Performers		Worst Performers	
	Return %		Return %
TAL EDUCATION GROUP CL.A ADR 3:1	40.8%	ARCO PLATFORM A	-12.8%
NVIDIA	35.3%	VEEVA SYSTEMS CL.A	-7.9%
SEA 'A' SPN.ADR 1:1	30.0%	REMY COINT.UNSP. FRN.ADR 10:1	-7.9%
ALIBABA GROUP HOLDING ADR 1:8	26.8%	CP ALL FB	-5.5%
YANDEX	24.2%	DNP SELECT INCOME FUND	0.8%
HUAZHU GROUP ADR 1:1	21.4%	DIAGEO (OTC)	1.7%
NETFLIX	20.9%	MERCADOLIBRE	3.8%
ASML HLDG.ADR 1:1	19.6%	ESTEE LAUDER COS.'A'	4.1%
RAIA DROGASIL ADR 1:1	16.8%	HERMES INTL. (OTC)	8.2%
TENCENT HOLDINGS (OTC)	15.7%	VISA 'A'	9.4%



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>US Fixed Income</b>	<b>7.5</b>	<b>3.8</b>	<b>3.4</b>	<b>4.2</b>
Custom Blended US Fixed Income Benchmark	7.7	4.0	3.5	3.9
InvMetrics All DB US Fix Inc Net Median	8.7	4.2	3.4	4.5
InvMetrics All DB US Fix Inc Net Rank	71	68	52	61

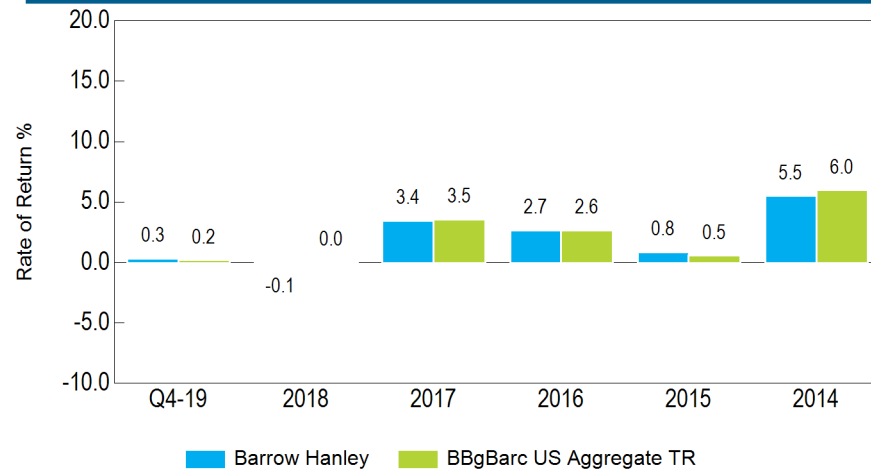


US Fixed Income Fixed Income Characteristics vs. BBgBarc US Aggregate TR				
	Portfolio	Index	Portfolio	Index
	Q4-19	Q4-19	Q3-19	Q3-19
Fixed Income Characteristics				
Yield to Maturity	2.13	2.31	2.13	2.27
Average Duration	4.88	6.32	4.81	6.32
Average Quality	AA	AA	AA	AA
Weighted Average Maturity	8.11	13.12	8.14	13.11

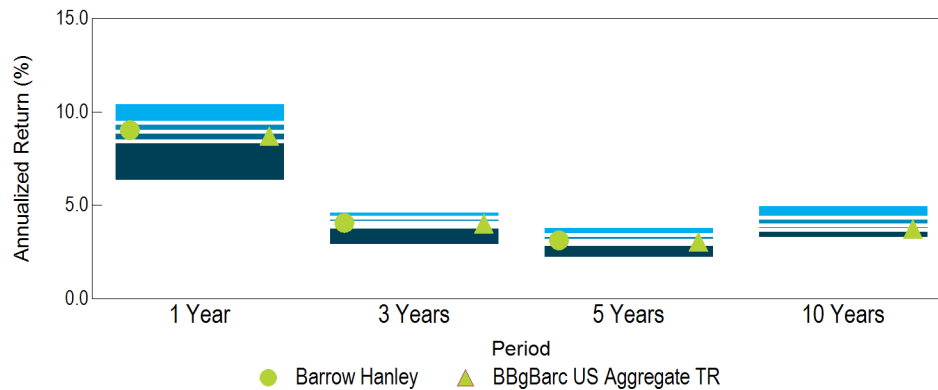
US Fixed Income Fixed Income Duration vs. BBgBarc US Aggregate TR				
	Portfolio	Index	Portfolio	Index
	Q4-19	Q4-19	Q3-19	Q3-19
Credit Quality Allocation				
AAA	73.85	72.03	74.51	71.98
AA	2.54	3.38	2.52	3.46
A	10.70	10.78	10.27	10.68
BBB	12.91	13.80	12.71	13.86

US Fixed Income Fixed Income Sector Allocation vs. BBgBarc US Aggregate TR				
	Portfolio	Index	Portfolio	Index
	Q4-19	Q4-19	Q3-19	Q3-19
US Sector Allocation				
UST/Agency	47.60	42.06	52.10	42.29
Corporate	23.80	25.05	23.06	25.15
MBS	20.41	29.14	19.50	28.87
ABS	2.66	0.45	2.41	0.45
Foreign	1.71	2.34	2.36	2.31
Muni	0.65	0.95	--	0.93
Other	--	--	0.02	--
Cash	3.18	--	0.54	--

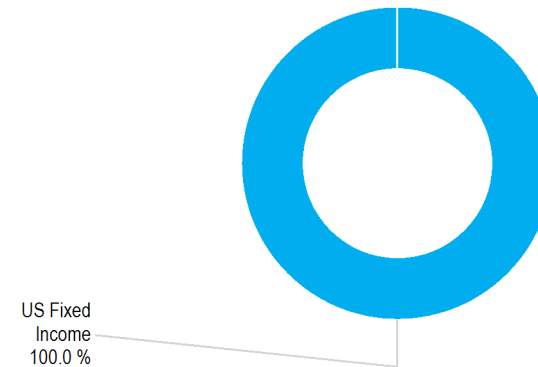
#### Return Summary



	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Barrow Hanley	9.0	4.1	3.1	--
BBgBarc US Aggregate TR	8.7	4.0	3.0	3.7
eV US Core Fixed Inc Net Median	9.0	4.1	3.1	4.0
eV US Core Fixed Inc Net Rank	50	55	53	--

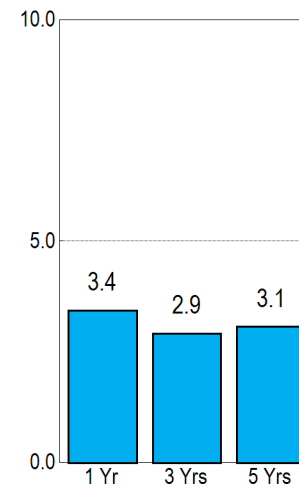


#### Current Allocation



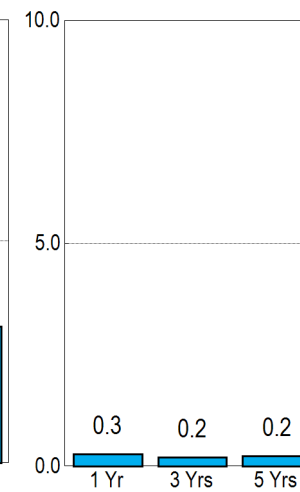
#### Anzld. Std. Deviation

Barrow Hanley



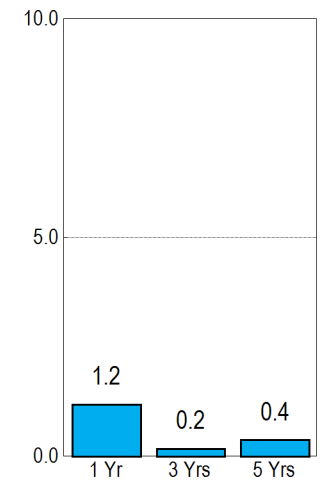
#### Tracking Error

Barrow Hanley



#### Information Ratio

Barrow Hanley





Account Information		Fixed Income Characteristics			Fixed Income Characteristics		
Account Name	Barrow Hanley		Portfolio	Index		Portfolio	Index
			Q4-19	Q4-19		Q4-19	Q4-19
Account Structure	Separate Account	Fixed Income Characteristics			Credit Quality Allocation		
Investment Style	Active	Yield to Maturity	2.37	2.31	AAA	59.12	72.03
Inception Date	3/31/10	Average Duration	5.77	6.32	AA	3.70	3.38
Account Type	US Fixed Income Core	Average Quality	AA	AA	A	18.60	10.78
Benchmark	BBgBarc US Aggregate TR	Weighted Average Maturity	7.92	13.12	BBB	18.58	13.80
Universe	eV US Core Fixed Inc Net						

### Vanguard Short-Term Treasury Index Fund | As of December 31, 2019

#### Description:

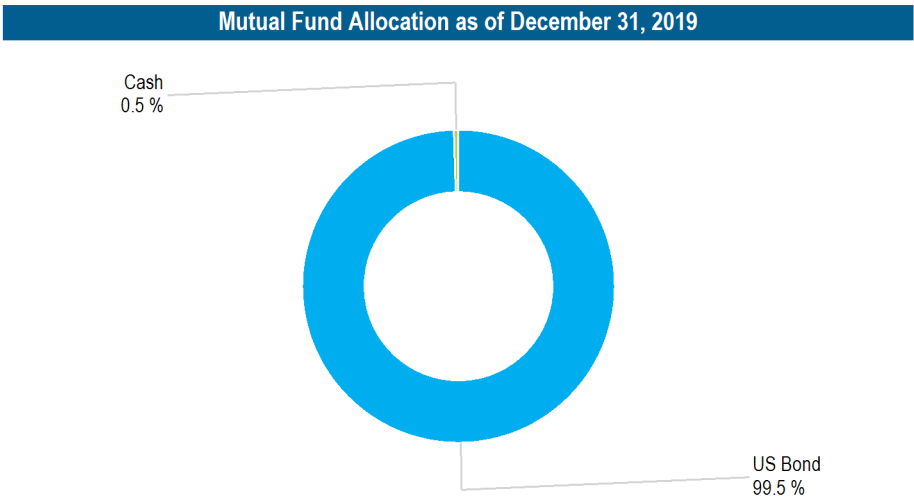
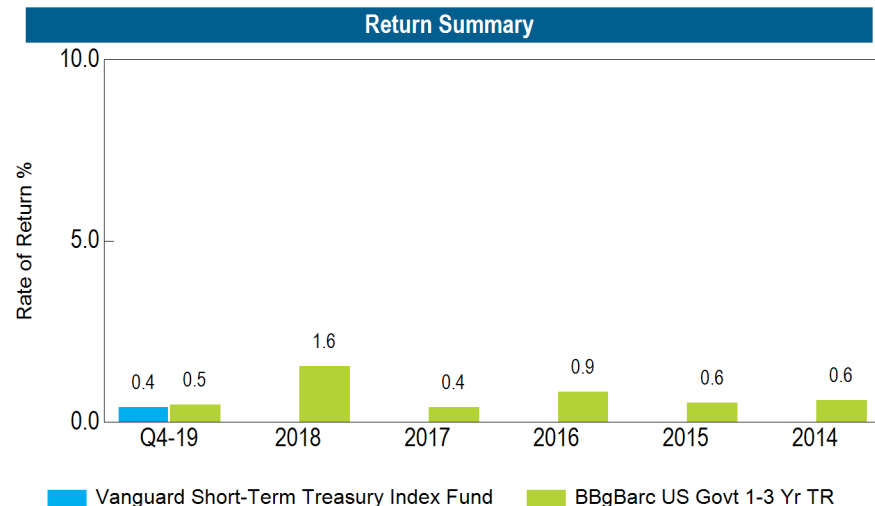
The investment seeks to track the performance of a market-weighted Treasury index with a short-term dollar-weighted average maturity.

The fund employs an indexing investment approach designed to track the performance of the Bloomberg Barclays US Treasury 1-3 Year Bond Index. This index includes fixed income securities issued by the U.S. Treasury (not including inflation-protected securities), all with maturities between 1 and 3 years. At least 80% of the fund's assets will be invested in bonds included in the index.

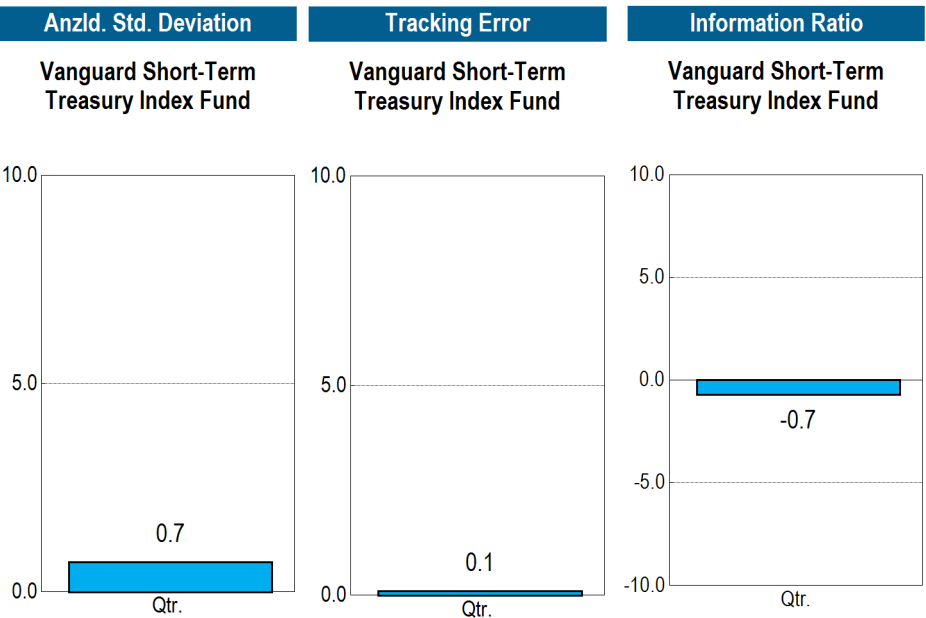
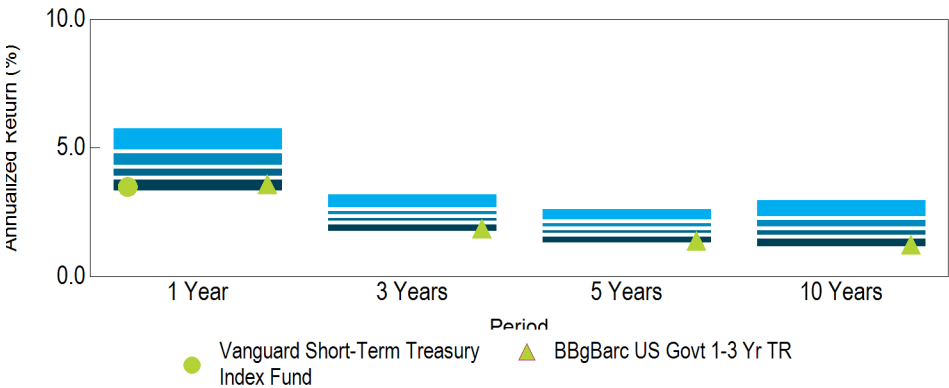
Portfolio Fund Information as of December 31, 2019		Top Holdings as of December 31, 2019		Fund Characteristics as of December 31, 2019	
<b>Ticker</b>	VSBI	<b>UNITED STATES TREASURY NOTES 1.5%</b>	2.65%	<b>Sharpe Ratio (3 Year)</b>	
<b>Morningstar Category</b>	Short Government	<b>UNITED STATES TREASURY NOTES 2.25%</b>	2.52%	<b>Average Duration</b>	1.92
<b>Average Market Cap (\$mm)</b>		<b>UNITED STATES TREASURY NOTES 1.75%</b>	2.48%	<b>Effective Duration</b>	1.92
<b>Net Assets (\$mm)</b>	1,090.69	<b>UNITED STATES TREASURY NOTES 2.62%</b>	2.43%	<b>Modified Duration</b>	
<b>% Assets in Top 10 Holdings</b>	23.62	<b>UNITED STATES TREASURY NOTES 1.62%</b>	2.38%	<b>Average Coupon</b>	1.97%
<b>Total Number of Holdings</b>	98	<b>UNITED STATES TREASURY NOTES 1.62%</b>	2.29%	<b>Average Effective Maturity</b>	2.00
<b>Manager Name</b>	Joshua C. Barrickman	<b>UNITED STATES TREASURY NOTES 1.38%</b>	2.28%	<b>R-Squared (3 Year)</b>	
<b>Manager Tenure</b>	7	<b>UNITED STATES TREASURY NOTES 1.25%</b>	2.22%	<b>Alpha (3 Year)</b>	
<b>Expense Ratio</b>	0.05%	<b>UNITED STATES TREASURY NOTES 2.88%</b>	2.19%	<b>Beta (3 Year)</b>	
<b>Closed to New Investors</b>	No	<b>UNITED STATES TREASURY NOTES 1.88%</b>	2.18%		

Maturities as of December 31, 2019		Fixed Income Sectors as of December 31, 2019		Credit Quality as of November 30, 2019	
<b>1 to 3 Years</b>	98.31%	<b>GOVERNMENT</b>	99.52%	<b>AAA</b>	96.63%
<b>3 to 5 Years</b>	1.33%	<b>MUNICIPAL</b>	0.00%	<b>AA</b>	0.00%
<b>5 to 7 Years</b>	0.00%	<b>CORPORATE</b>	0.00%	<b>A</b>	0.00%
<b>7 to 10 Years</b>	0.00%	<b>SECURITIZED</b>	0.00%	<b>BBB</b>	3.37%
<b>10 to 15 Years</b>	0.00%	<b>CASH &amp; EQUIVALENTS</b>	0.48%	<b>BB</b>	0.00%
<b>15 to 20 Years</b>	0.00%	<b>DERIVATIVE</b>	0.00%	<b>B</b>	0.00%
<b>20 to 30 Years</b>	0.00%			<b>Below B</b>	0.00%
<b>Greater than 30 Years</b>	0.00%			<b>Not Rated</b>	0.00%

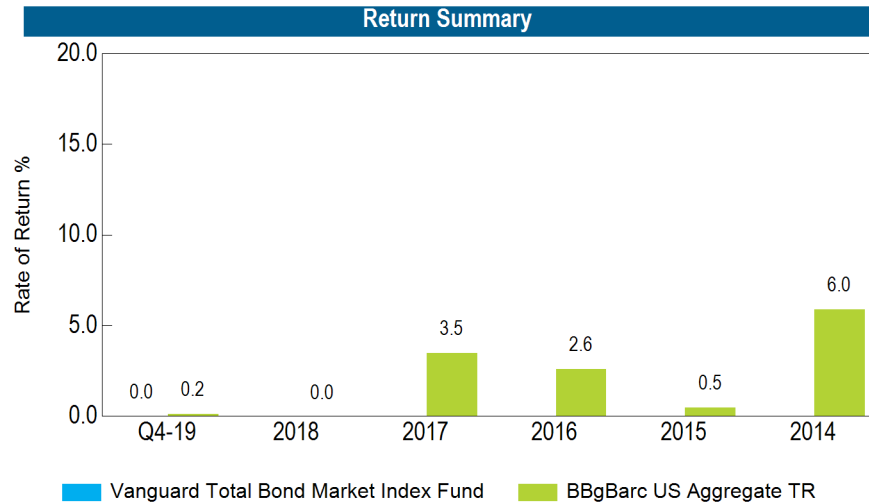
Vanguard Short-Term Treasury Index Fund | As of December 31, 2019



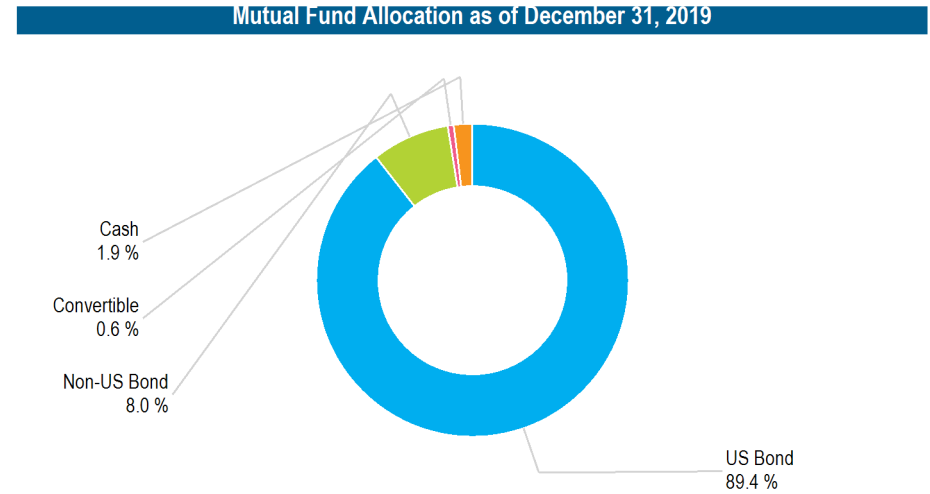
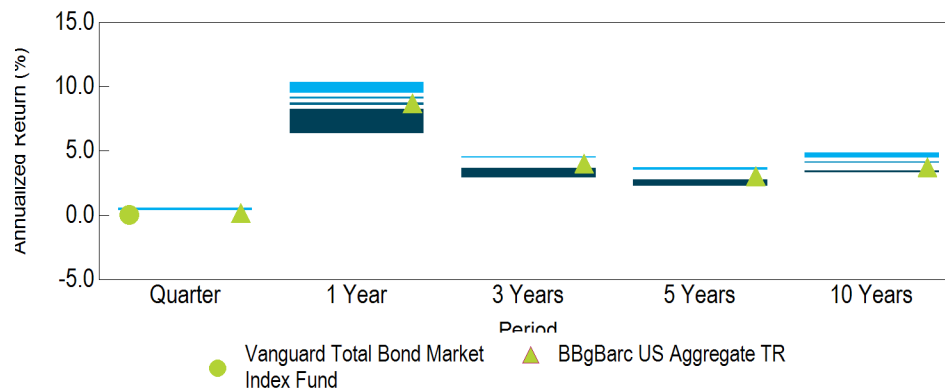
	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Vanguard Short-Term Treasury Index Fund	3.5	--	--	--
BBgBarc US Govt 1-3 Yr TR	3.6	1.9	1.4	1.2
eV US Short Duration Fixed Inc Net Median	4.3	2.4	1.9	1.9
eV US Short Duration Fixed Inc Net Rank	90	--	--	--



### Vanguard Total Bond Market Index Fund | As of December 31, 2019

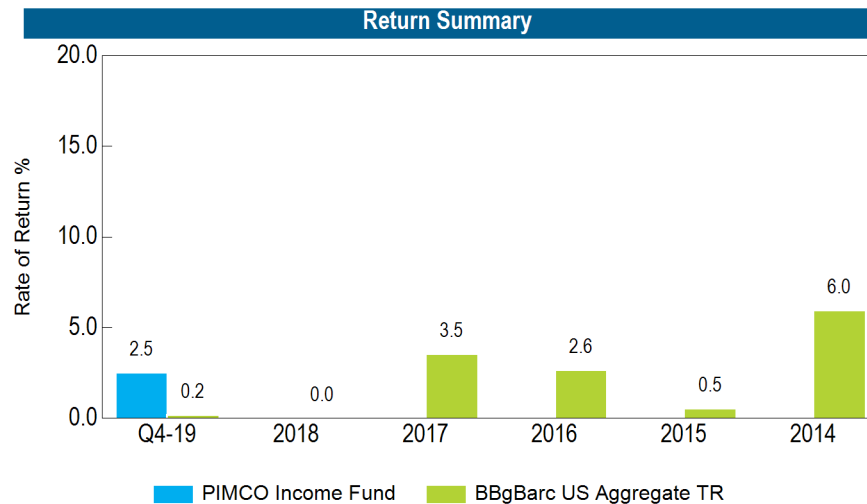


	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Vanguard Total Bond Market Index Fund	0.0	--	--	--	--
BBgBarc US Aggregate TR	0.2	8.7	4.0	3.0	3.7
eV US Core Fixed Inc Net Median	0.2	9.0	4.1	3.1	4.0
eV US Core Fixed Inc Net Rank	71	--	--	--	--

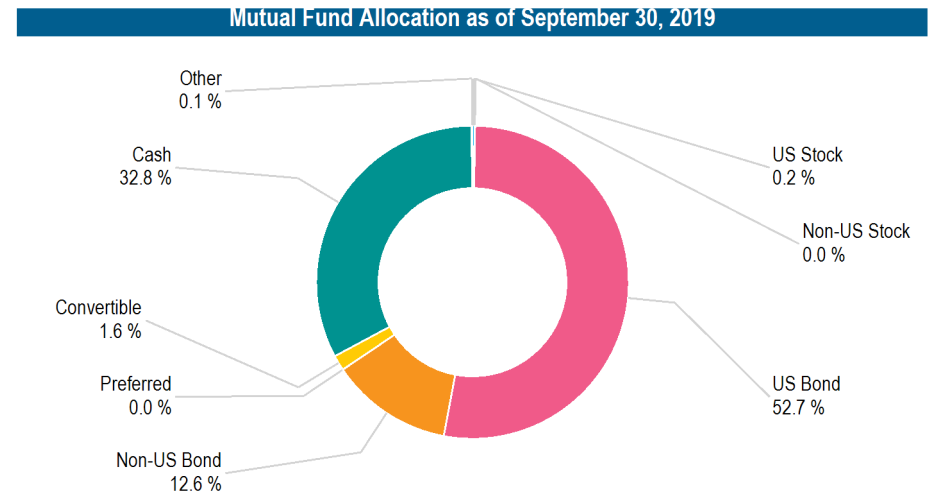
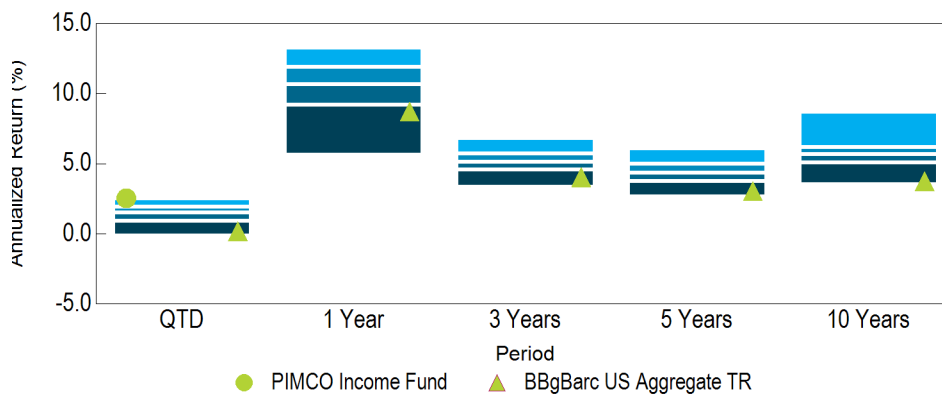


## Vanguard Total Bond Market Index Fund | As of December 31, 2019

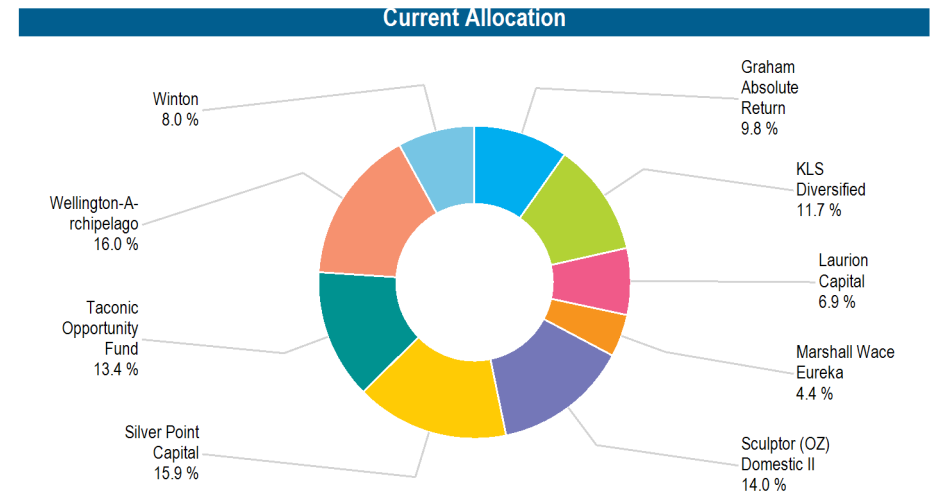
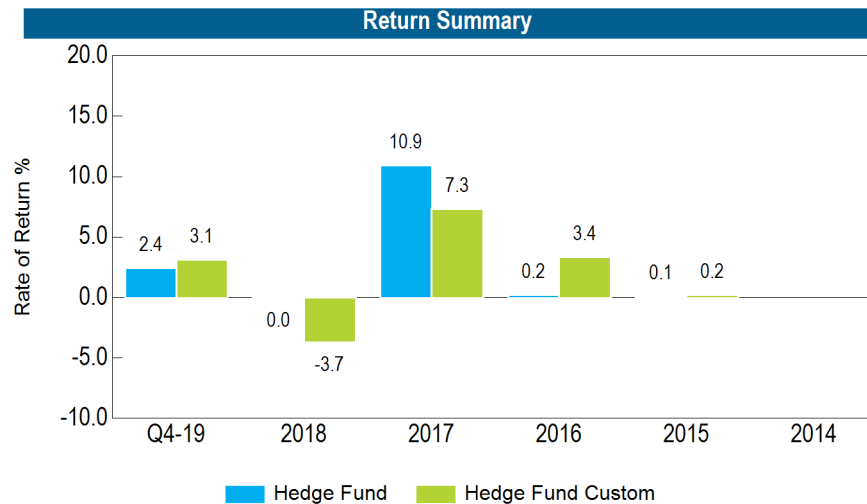
Account Information		Fixed Income Characteristics			Fixed Income Characteristics		
Account Name	Vanguard Total Bond Market Index Fund		Portfolio	Index		Portfolio	Index
			Q4-19	Q4-19		Q4-19	Q4-19
Account Structure	Mutual Fund	Fixed Income Characteristics			Credit Quality Allocation		
Investment Style	Passive	Yield to Maturity	2.30	2.31	AAA	67.55	72.03
Inception Date	5/01/19	Average Duration	6.22	6.32	AA	3.43	3.38
Account Type	US Fixed Income	Average Quality	AA	AA	A	11.37	10.78
Benchmark	BBgBarc US Aggregate TR	Weighted Average Maturity	8.30	13.12	BBB	17.65	13.80
Universe	eV US Core Fixed Inc Net						



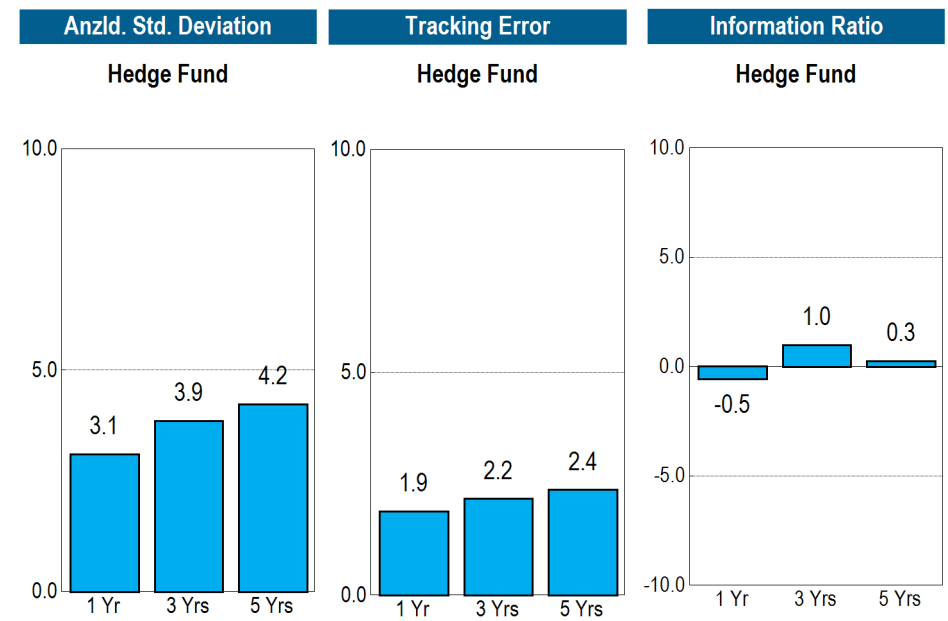
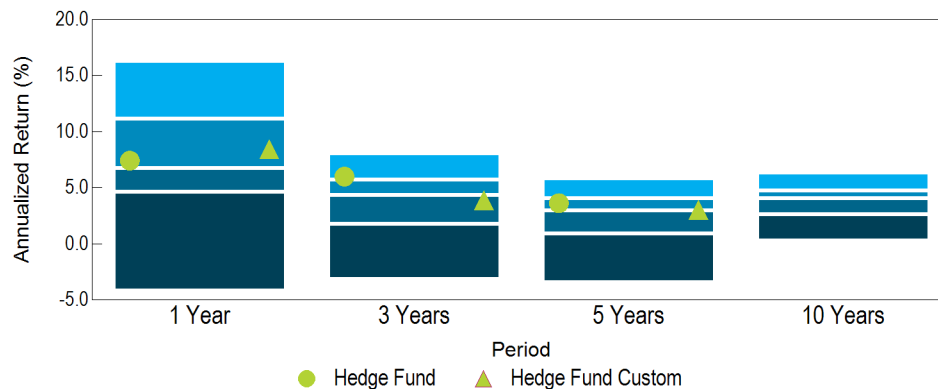
	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
PIMCO Income Fund	2.5	--	--	--	--
BBgBarc US Aggregate TR	0.2	8.7	4.0	3.0	3.7
Multisector Bond MStar MF Median	1.5	10.7	5.1	4.4	5.7
Multisector Bond MStar MF Rank	5	--	--	--	--



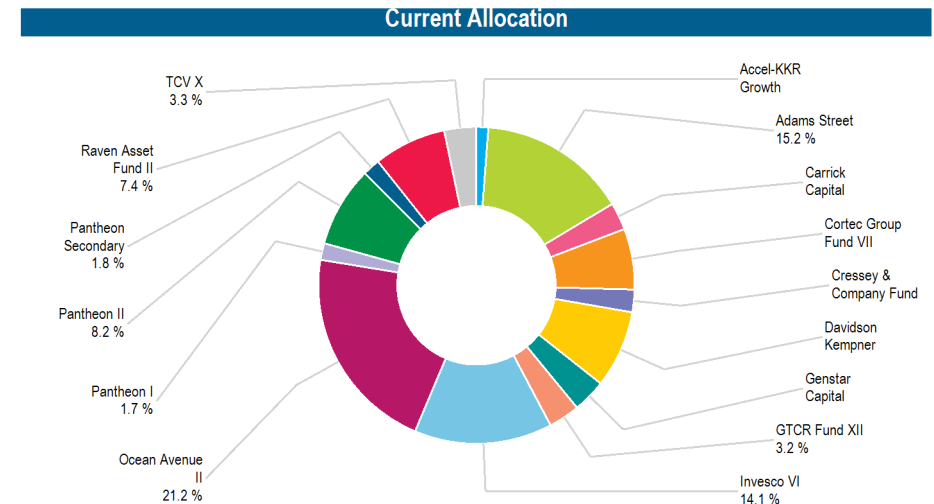
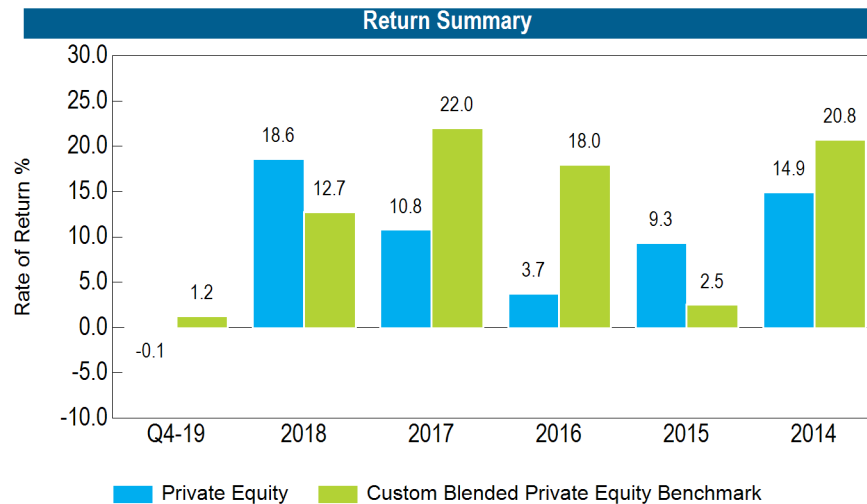
Account Information		Fixed Income Characteristics			Fixed Income Characteristics		
Account Name	PIMCO Income Fund		Portfolio	Index		Portfolio	Index
			Q4-19	Q4-19		Q4-19	Q4-19
Account Structure	Mutual Fund	Fixed Income Characteristics			Credit Quality Allocation		
Investment Style	Active	Yield to Maturity	--	2.31	AAA	37.80	72.03
Inception Date	4/30/19	Average Duration	0.91	6.32	AA	5.50	3.38
Account Type	Client Directed Opportunistic	Average Quality	BBB	AA	A	7.60	10.78
Benchmark	BBgBarc US Aggregate TR	Weighted Average Maturity	--	13.12	BBB	9.30	13.80
Universe	Multisector Bond MStar MF				BB	9.70	--
					B	16.40	--
					CCC	13.70	--



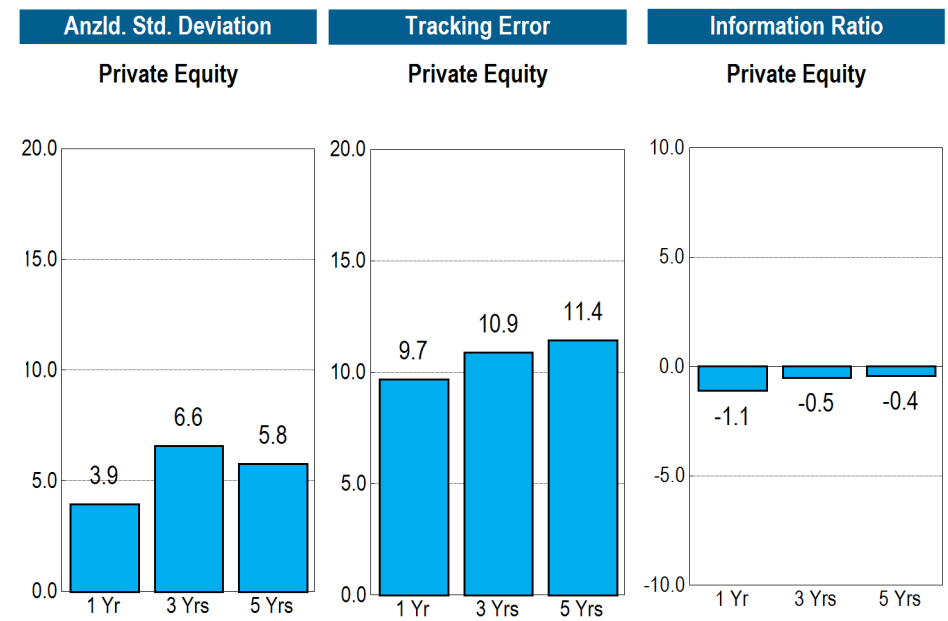
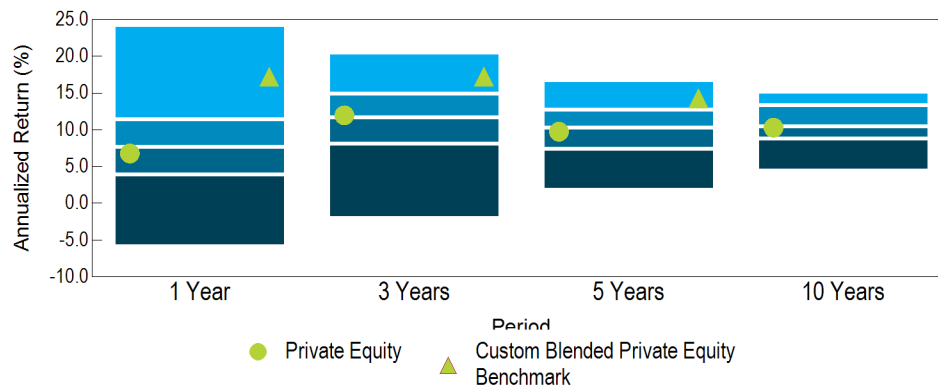
	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Hedge Fund</b>	<b>7.4</b>	<b>6.0</b>	<b>3.6</b>	--
Hedge Fund Custom	8.4	3.9	3.0	--
InvMetrics All DB Hedge Funds Net Median	6.8	4.4	3.0	4.1
InvMetrics All DB Hedge Funds Net Rank	46	22	36	--

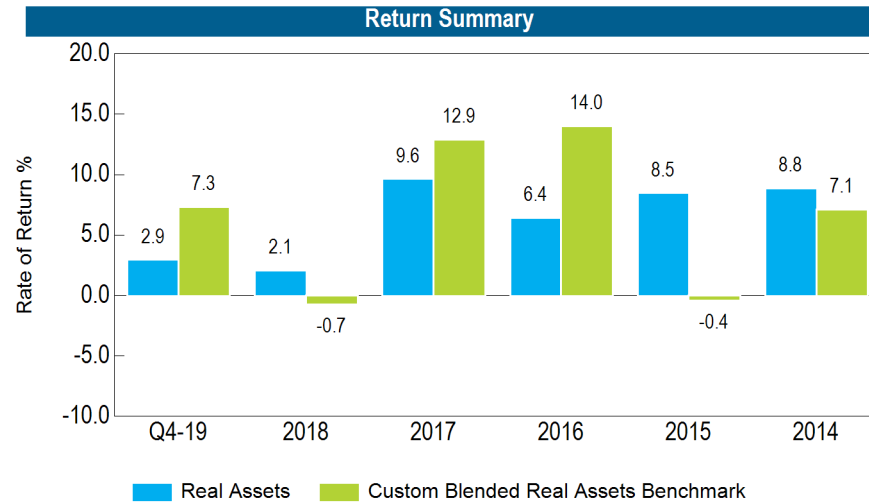




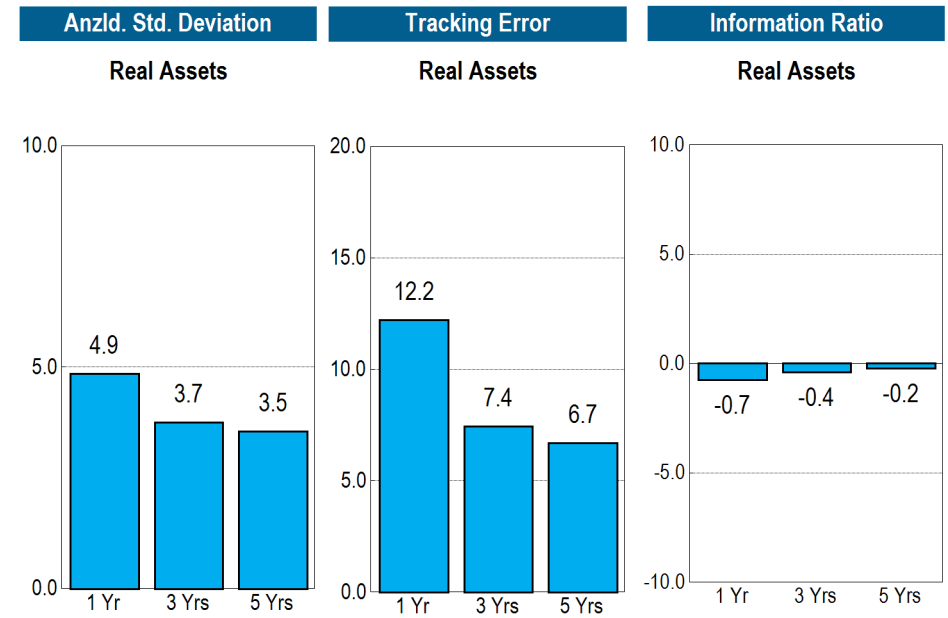
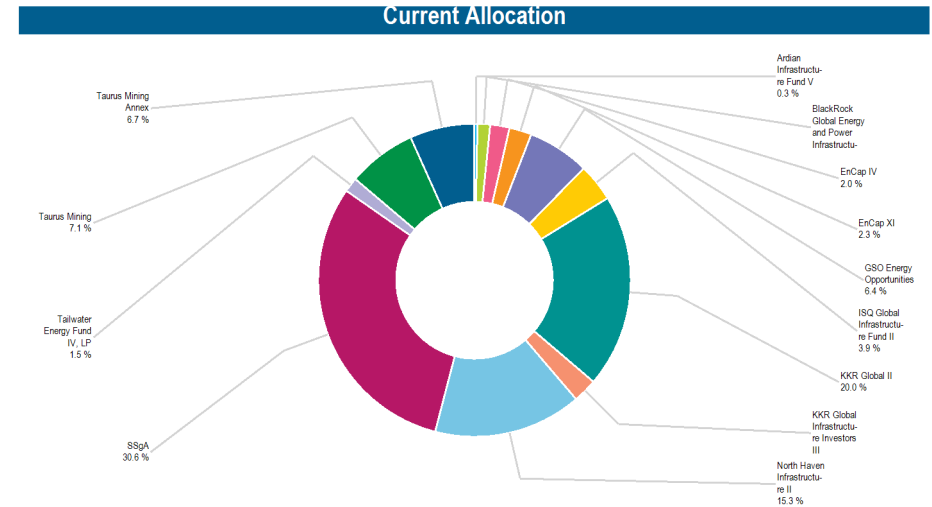


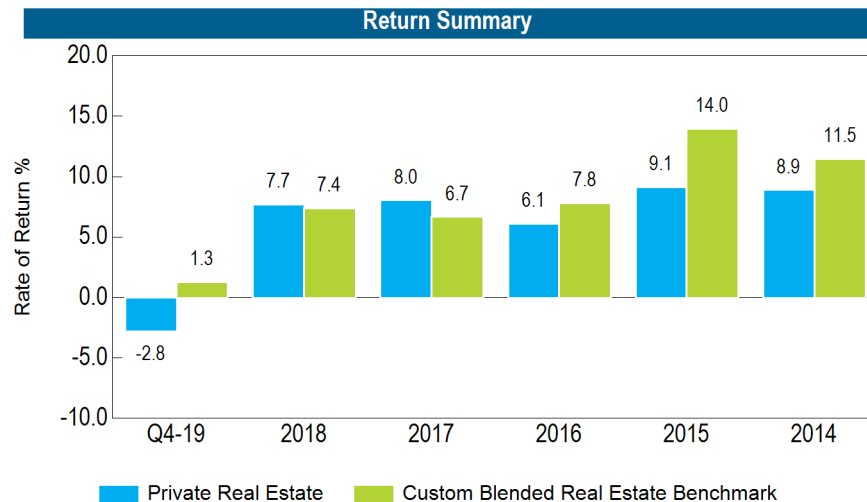
	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Private Equity</b>	<b>6.8</b>	<b>12.0</b>	<b>9.7</b>	<b>10.3</b>
Custom Blended Private Equity Benchmark	17.2	17.3	14.3	—
InvMetrics All DB Private Eq Net Median	7.7	11.7	10.3	10.5
InvMetrics All DB Private Eq Net Rank	59	47	61	54



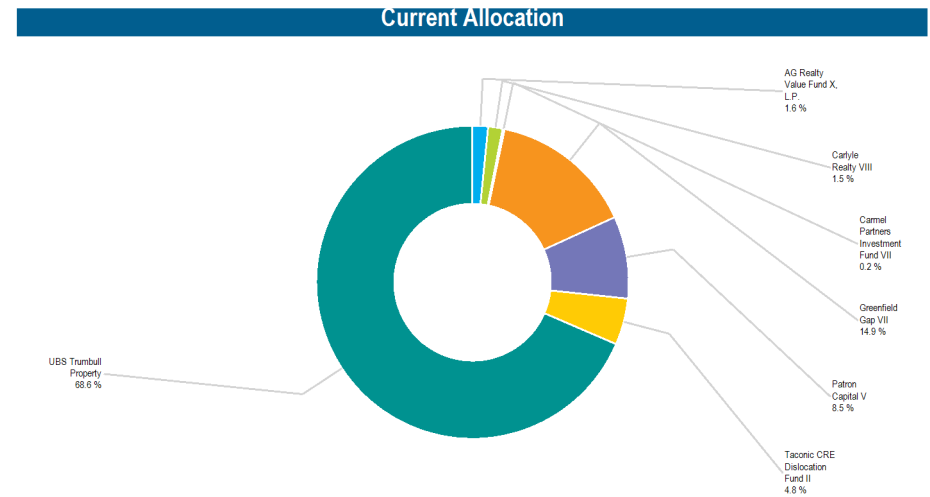
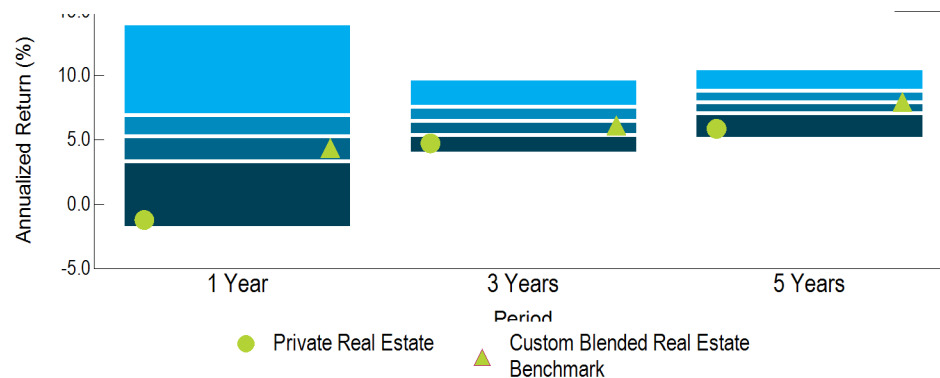


	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Real Assets</b>	<b>13.6</b>	<b>8.3</b>	<b>8.0</b>	--
Custom Blended Real Assets Benchmark	22.2	11.1	9.2	--
InvMetrics All DB Real Assets/Commodities Net Median	8.2	5.9	4.1	7.0
InvMetrics All DB Real Assets/Commodities Net Rank	19	24	23	--



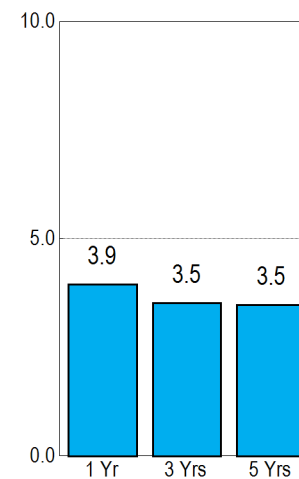


	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Private Real Estate</b>	<b>-1.2</b>	<b>4.7</b>	<b>5.9</b>	<b>--</b>
<i>Custom Blended Real Estate Benchmark</i>	<i>4.4</i>	<i>6.1</i>	<i>8.0</i>	<i>10.4</i>
<i>InvMetrics All DB Real Estate Pub+Priv Net Rank</i>	<i>95</i>	<i>89</i>	<i>91</i>	<i>--</i>
<i>InvMetrics All DB Real Estate Pub+Priv Net Median</i>	<i>5.3</i>	<i>6.5</i>	<i>8.0</i>	<i>10.5</i>



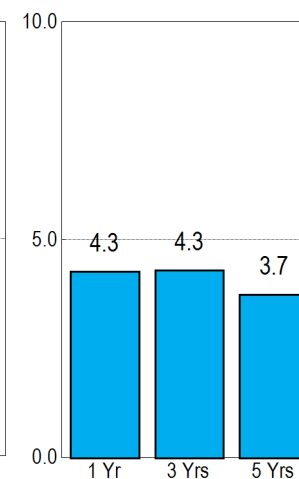
#### Anzld. Std. Deviation

##### Private Real Estate



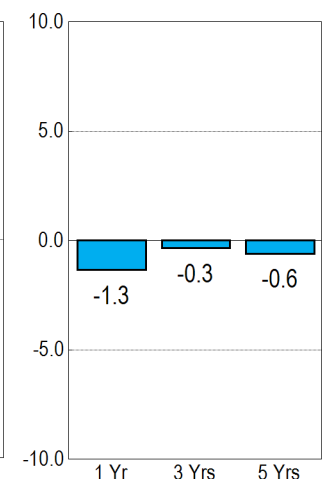
#### Tracking Error

##### Private Real Estate

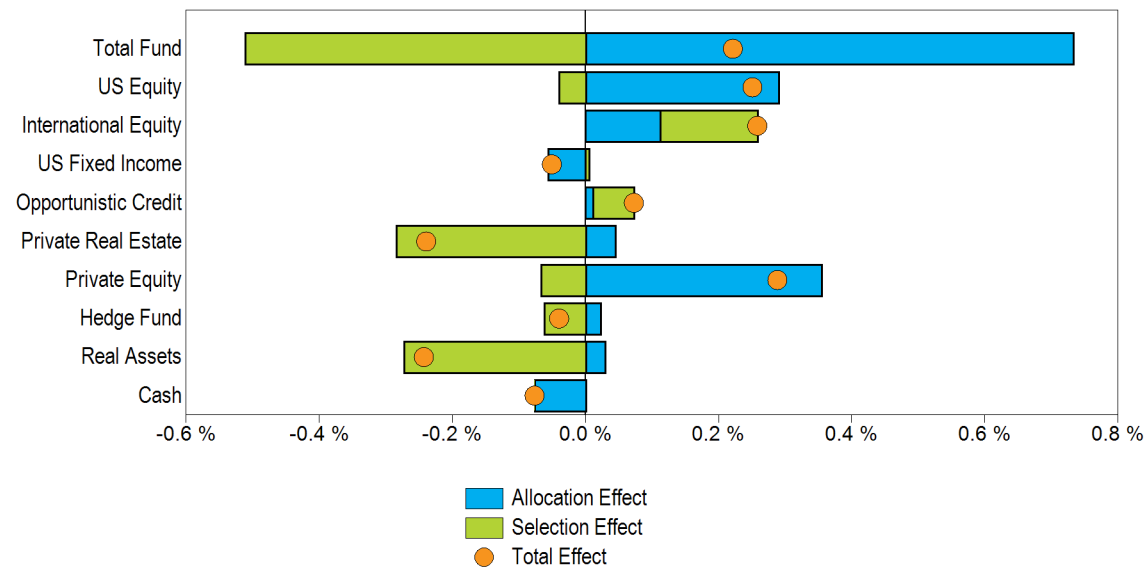


#### Information Ratio

##### Private Real Estate



#### Attribution Effects 3 Months Ending December 31, 2019



3 Months Ending December 31, 2019							
	Policy Weight	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
US Equity	21.0%	9.1%	9.2%	-0.1%	0.0%	0.3%	0.3%
International Equity	18.0%	10.6%	9.9%	0.7%	0.1%	0.1%	0.3%
US Fixed Income	18.0%	0.2%	0.2%	0.0%	0.0%	-0.1%	-0.1%
Opportunistic Credit	5.0%	2.5%	1.2%	1.3%	0.1%	0.0%	0.1%
Private Real Estate	8.0%	-2.8%	1.3%	-4.1%	-0.3%	0.0%	-0.2%
Private Equity	15.0%	-0.1%	1.2%	-1.3%	-0.1%	0.4%	0.3%
Hedge Fund	10.0%	2.4%	3.1%	-0.7%	-0.1%	0.0%	0.0%
Real Assets	5.0%	2.9%	7.3%	-4.4%	-0.3%	0.0%	-0.2%
Cash	0.0%	0.4%	0.4%	0.0%	0.0%	-0.1%	-0.1%
<b>Total</b>	<b>100.0%</b>	<b>5.0%</b>	<b>4.7%</b>	<b>0.2%</b>	<b>-0.5%</b>	<b>0.7%</b>	<b>0.2%</b>

## IFR Checklist

### IFR Checklist

Fund Governance	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20 and after
<b>Investment Policy Statement</b>							
Review and update policy							
<b>Investment Manager Guidelines</b>							
No action necessary at this time							
<b>Governance Structure</b>							
Consider reducing IC meetings to quarterly or every other month							
<b>Crisis Response Plan</b>							
Establish a crisis response plan							
<b>Asset Allocation &amp; Portfolio Construction</b>							
<b>Asset Allocation</b>							
<b>Portfolio Construction</b>							
Manager Structure & Manager Evaluation							
Review of all Underlying Benchmarks							
Domestic Equity							
International Equity							
Fixed Income							
Private Markets & Hedge Funds							
Active and Passive Investment Management							
<b>Operations</b>							
<b>Custody Services</b>							
Review Periodically							
<b>Transition Management</b>							
Retain a panel of transition managers							
<b>Securities Lending</b>							
No action necessary at this time							
<b>Expenses</b>							
Review management fees of investment managers							
<b>Cash Sweep</b>							
Utilize Govt MMF							
<b>Commission Recapture</b>							
No action necessary at this time							
<b>Legal &amp; Actuarial</b>							
No action necessary at this time							
<b>Proxy Voting</b>							
No action necessary at this time							

Asset Allocation & Portfolio Construction
  Fund Governance
  Operations
  Completed
  NA

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**Credit Risk:** Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

**Duration:** Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

**Information Ratio:** This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

**Jensen's Alpha:** A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk.  $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} \times (\text{market return} - \text{Risk Free Rate})]$ .

**Market Capitalization:** For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

**Market Weighted:** Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

**Maturity:** The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

**Prepayment Risk:** The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

**Price-Book Value (P/B) Ratio:** The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

**Price-Earnings (P/E) Ratio:** A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

**Quality Rating:** The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

**Sharpe Ratio:** A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

**STIF Account:** Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

**Standard Deviation:** A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

**Style:** The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

**Tracking Error:** A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

**Yield to Maturity:** The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

**Yield to Worst:** The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

**NCREIF Property Index (NPI):** Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

**NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE):** Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.