

**Oklahoma Police Pension & Retirement System**

***Investment Performance Review***

*March 31, 2020*





*We are proud to announce that ACG has been named a Greenwich Associates Quality Leader - recognized as one of the top consultants in the industry. This award is based on a number of factors, and a culmination of extensive nationwide interviews with institutional investors. We are grateful to have been given this honor.*



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**Market Overview**

## Global Long-Only Equity

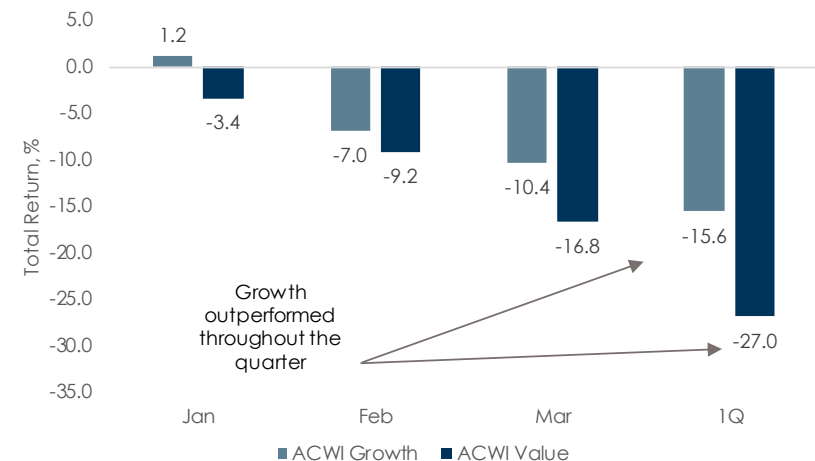
Global equity markets experienced the **swiftest market correction in history** as the spread of COVID-19 halted economies around the world. The longest bull market in history officially came to an end mid-March following an all-time S&P 500 high on February 19<sup>th</sup>. While all sector moves have been negative, value-oriented Energy and Financials have seen significant pressure, providing additional room for Growth to continue its lead over Value across the globe.

**US Large Caps**, represented by the S&P 500, were down -19.6% in 1Q-20. US Small Caps have seen the most pressure across the globe as evidenced by the -30.6% YTD decline in the Russell 2000, with the index also posting its worst day (-14.3%) in history on March 16<sup>th</sup>.

**International markets modestly underperformed** US Large Cap markets with the MSCI EAFE Index down -22.7%, and the MSCI EM Index down -23.6%. As it relates to Developed vs. Emerging Markets, the sell-off in the quarter was broad based. The US dollar also strengthened in the quarter, creating an additional headwind for non-US strategies.

Volatility is expected to remain elevated and visibility toward an end to the pandemic related pressures is cloudy at best. Corporate and economic growth expectations are likely to be challenged in the near-term and could last until greater clarity into the duration and magnitude of this unprecedented disruption is better understood.

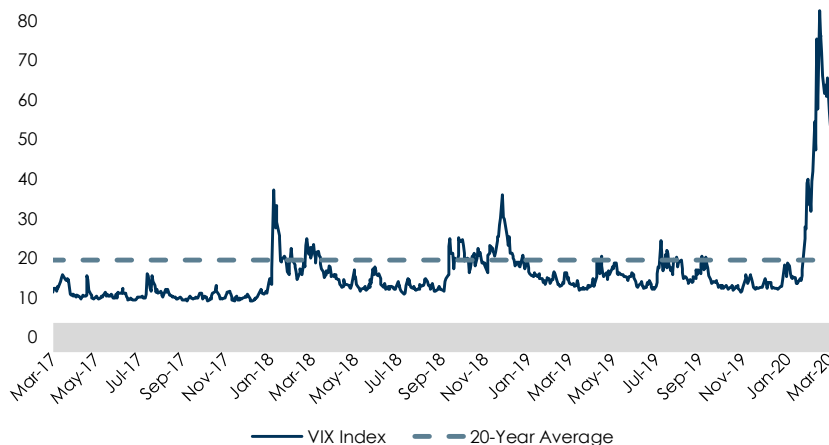
## Global Equity Style Diversion Continues



Sources: Bloomberg, ACG Research

## Global Long/Short Equity

## Market Volatility Measured in Units of VIX



Sources: Bloomberg, ACG Research

**Volatility** in the market was off the charts in 1Q-20, as the VIX Index at one point rose to 4X above the 20 year average. We anticipate this **higher volatility to continue to be the norm** for the foreseeable future as uncertainty dominates in most areas. All else being equal, an increase in market **volatility helps generate opportunities** on both the long and short side so equity long/short managers stand to benefit.

As we would hope during a strong market downturn, **Equity long/short managers** generally **had a good quarter**. Managers provided portfolio protection both through their shorts as well as through reducing market exposure. This is reflected by the most **extreme exposure reduction** since the financial crisis in 2008 as managers reacted to the **lack of clarity** about impact and duration of COVID-19.

Style exposure was a major contributor to 1Q-20 performance as **momentum/growth outperformed value**. Managers with significant exposure to **growth sectors of Technology and Health Care performed much better** than the broad universe. Market cap was also a factor as managers with greater **small cap exposure generally underperformed** managers with larger cap, more liquid portfolios. This also increased the level of **crowding in the largest, most popular hedge fund names**.

**Global positioning continued to increase towards the US** as managers reduced Europe exposure and some European countries implemented short sale bans.



## Global Private Equity

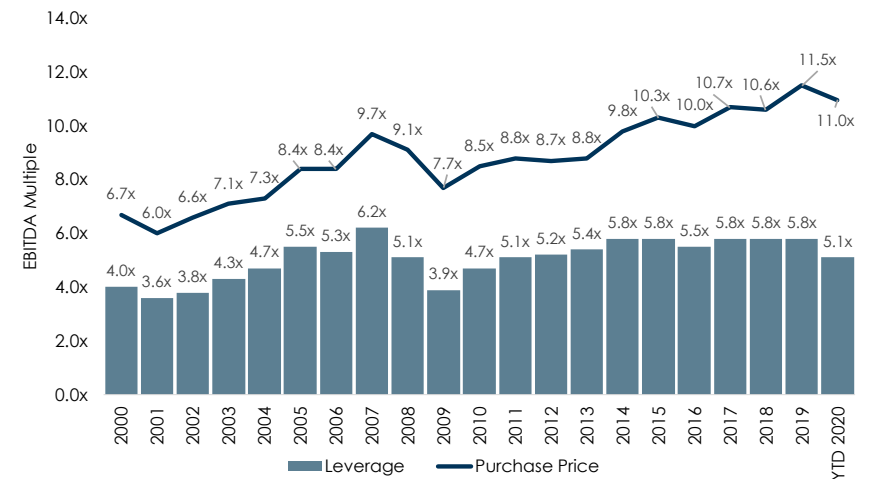
**LBO purchase price multiples hovered at all time highs throughout 2019**, although it appears that lenders remained disciplined late in the bull market cycle as leverage levels stayed almost unchanged for the past six years. As private equity sponsors switched from bull to bear market conditions in 1Q, changes to purchase prices and lending capacity will certainly follow.

**Gone are thoughts of heady IPO valuations and ample liquidity.** Private equity sponsors are in full triage mode as they identify and quantify the unanticipated affects of COVID-19 and its global economic impact on their portfolio companies. In the near-term the focus will be on finding a balance between preserving liquidity and maintaining employment levels where possible.

**New transaction activity has all but stopped** as sponsors try to adjust their vision to the new paradigms of the pandemic. How long will the current economic conditions persist? Will we emerge with an L-shaped, U-shaped, or V-shaped recovery? How will pricing adjust? How can diligence be completed in the context of social distancing?

The **affiliate rule** included in the CARES Act makes **Federal stimulus package relief unavailable to most private equity and venture capital backed companies** despite the best efforts of industry lobbyists. Hope remains that a third round of Federal stimulus efforts will include some assistance for companies and their workforce.

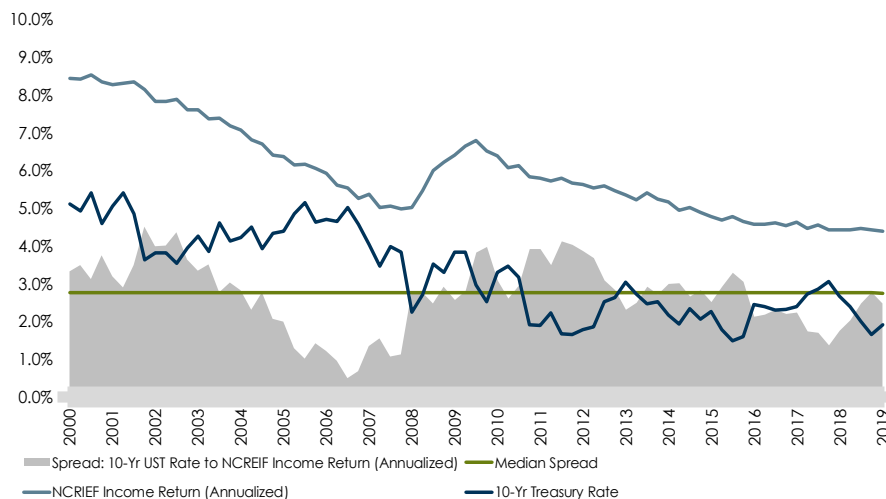
## Purchase Multiples Were Elevated Heading into the Crisis



Sources: S&P LCD, ACG Research

## Global Real Assets

## NCREIF Income Return Spread to Treasuries



Sources: NCREIF, ACG Research

The fourth quarter of **2019** marked the **tenth full calendar year of positive returns** for the NCREIF Property Index (NPI). In 4Q-19, NCREIF annualized income returns (a proxy for cap rates) fell marginally to 4.4%. Fundamental results remained strong at year end with occupancy holding above 94%.

**Public real estate markets suffered steep losses** in the first quarter of 2020 that private real estate markets will be unable to avoid completely. The question will be timing and severity. Sectors that have traditionally been considered vulnerable to rapid repricing, like hotels, will be joined by what were perhaps thought to be more recession resistant property types, like multifamily and senior housing, as the unanticipated consequence of coronavirus's impacts are felt.

The **CARES Act will provide some relief to rent-paying businesses** as many small business owners will be eligible for forgivable loans that will provide some ability to stay afloat. However, retail and hotel assets, or those with connections to energy markets, will come under significant pressure.

The Bloomberg Commodity Index (BCOM) fell -23.3% in 1Q-20, underperforming the Bloomberg US Aggregate Bond Index by 26.4%, the S&P 500 by 3.7%, and the MSCI ACWI by 2.0%. **The double-whammy of a supply shock caused by disagreement between two of the world's big producers and the demand shock of the unexpected economic shutdown led to a -66.5% drop in Nymex Oil futures for the quarter.** Gold stood out as a safe-haven after posting a modest, yet positive return of +4.0%.

## Global Traditional Bond Markets

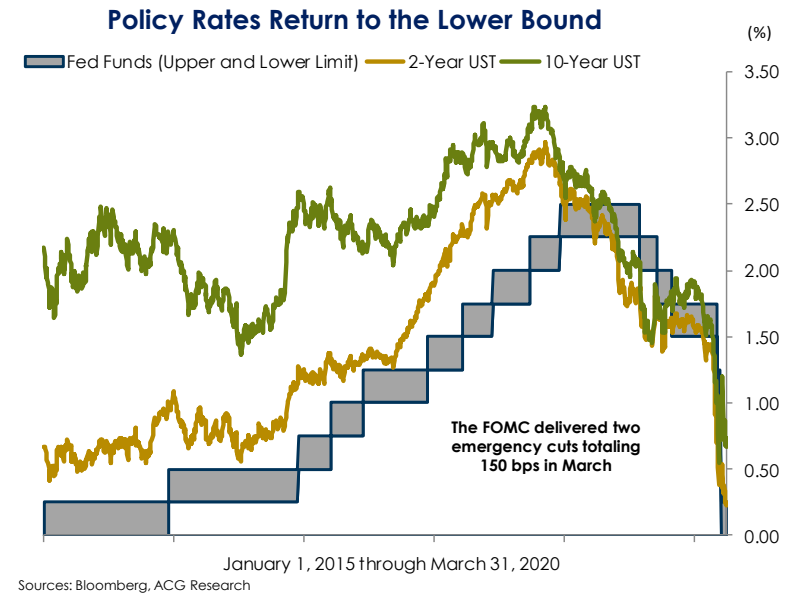
It was the best of times and the worst of times for fixed income in 1Q-20, as the rally in risk-free rates became historic while lower-quality credit endured harsh losses. The **Federal Reserve** took several emergency actions in March, cutting short-term interest rates back to a targeted range of 0.00% to 0.25% while showcasing an expanded crisis-fighting toolkit to stabilize financial markets and support the flow of credit. Even as long-term **US Treasury rates established all-time lows**, the yield curve (10's – 2's) steepened given policy easing.

Due to its high sensitivity to domestic interest rates, the **BloomBar US Aggregate** provided some needed stability amid COVID-19 uncertainty. Total returns for the quarter were solid at +3.2%, even as IG corporate credit detracted the materially wider spreads. The benchmark's yield-to-worst contracted by 70 bps in the period, settling just below 1.6%.

With investor risk appetite and liquidity capitulating in March, the **High Yield** bond category returned a dismal -12.7% 1Q-20. With unprecedented speed, spreads more-than-doubled at the index level (336 bps to 880 bps), and CCC-rated issues continued to underperform.

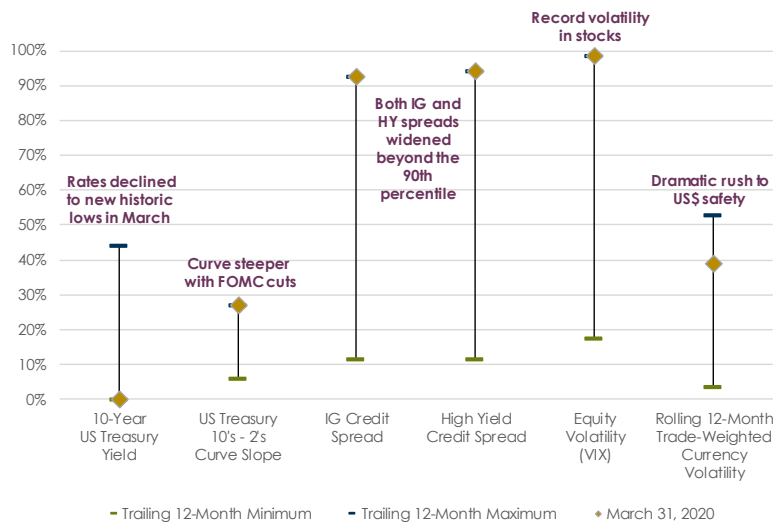
Amid a notable "dash for cash," **Municipal Bonds** failed to participate in the high-quality rally, and yields were essentially unchanged for the quarter. With tax-exempt income above US Treasury rates across the curve, ratios returned to historically cheap levels.

**Unhedged Global** government bonds underperformed with the drag of a strong US dollar offsetting the benefit of lower-trending yields. **Emerging Market** outcomes were very weak.



## Global Nontraditional Fixed Income

## Percentile Rankings of Observations for Past 15-Years



Sources: Bloomberg, ACG Research

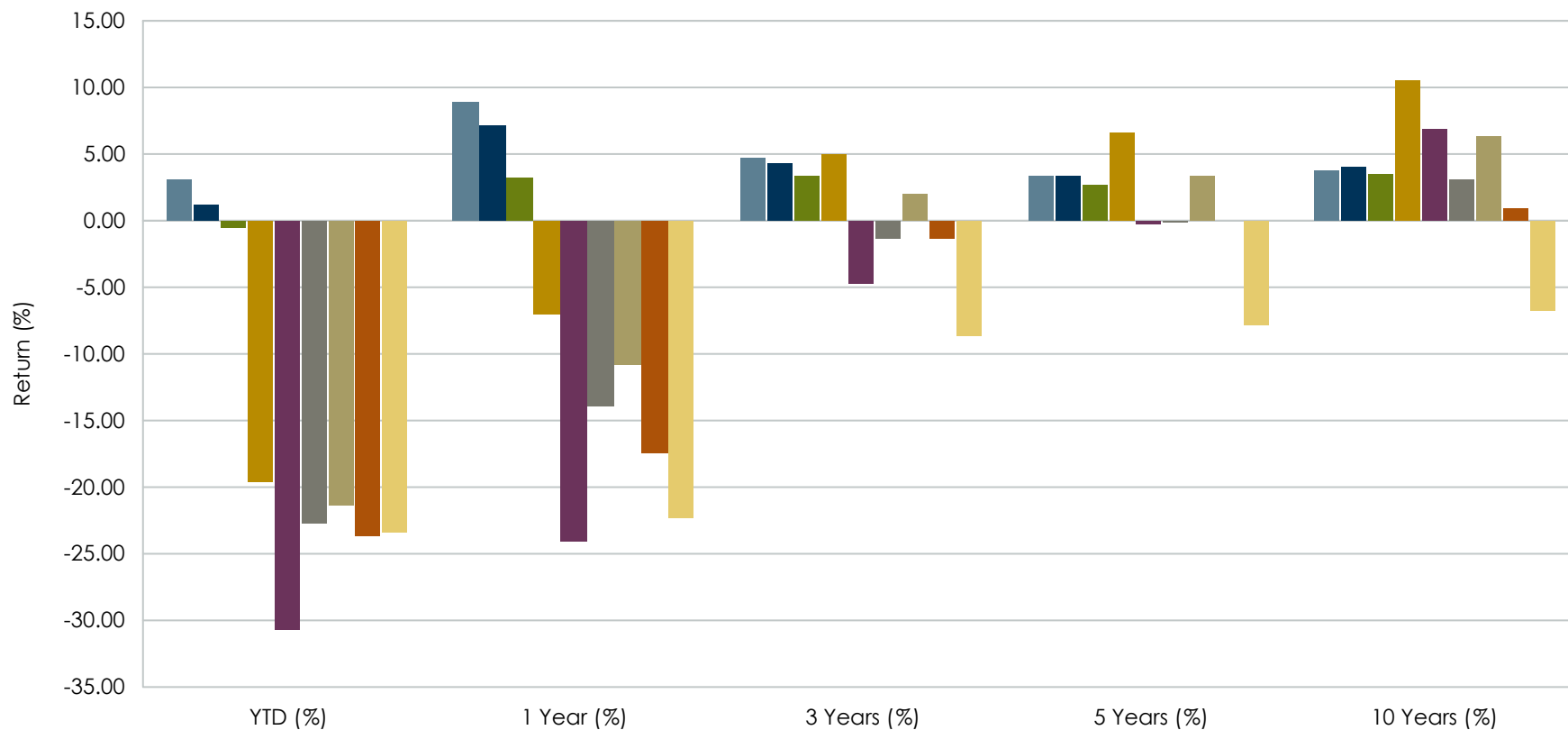
**Liquid Absolute Return** strategies produced generally disappointing results in 1Q-20, as modest portfolio duration was overwhelmed by the negative mark-to-market outcomes of diversified credit exposures. The category continued to lag traditional bond benchmarks, with observed returns varying widely and averaging -6.1%. We continue to believe the diversification of risk factors within portfolios remains valuable, as this aids in downside protection and reduces key correlations. **Outperforming risk-free cash becomes easier as policy rates hit the lower bound, and enhanced volatility in rates, spreads, and currency should provide alpha opportunities.**

The first quarter of 2020 brought an onslaught of market disruptions, testing **Long/Short Credit** strategies ability to navigate the rapid evaporation of liquidity and price support. Many managers had spoken in recent years about the need to maintain a degree of defensive positioning in their portfolios. **The use of leverage, and a manager's ability to maintain true portfolio liquidity are emerging as key factors** that will determine the winners and losers in this scenario, a situation that has played out most acutely in the structured credit space. As wider spreads and corporate solvency issues create dispersion across the investment universe, managers have a **new set of opportunities to pursue** going forward.

**Private Credit** strategies (typically 5- to 10-year fund life) offer the opportunity to earn both a credit spread and an illiquidity premium over publicly traded fixed income strategies. The first quarter featured a **complete reversal** of fortune as tight spreads, ample liquidity, and high availability of credit as the year began were replaced with **very little appetite to fund new transactions and periods of extreme low or no-bids on illiquid assets near quarter end.**

## Market Environment

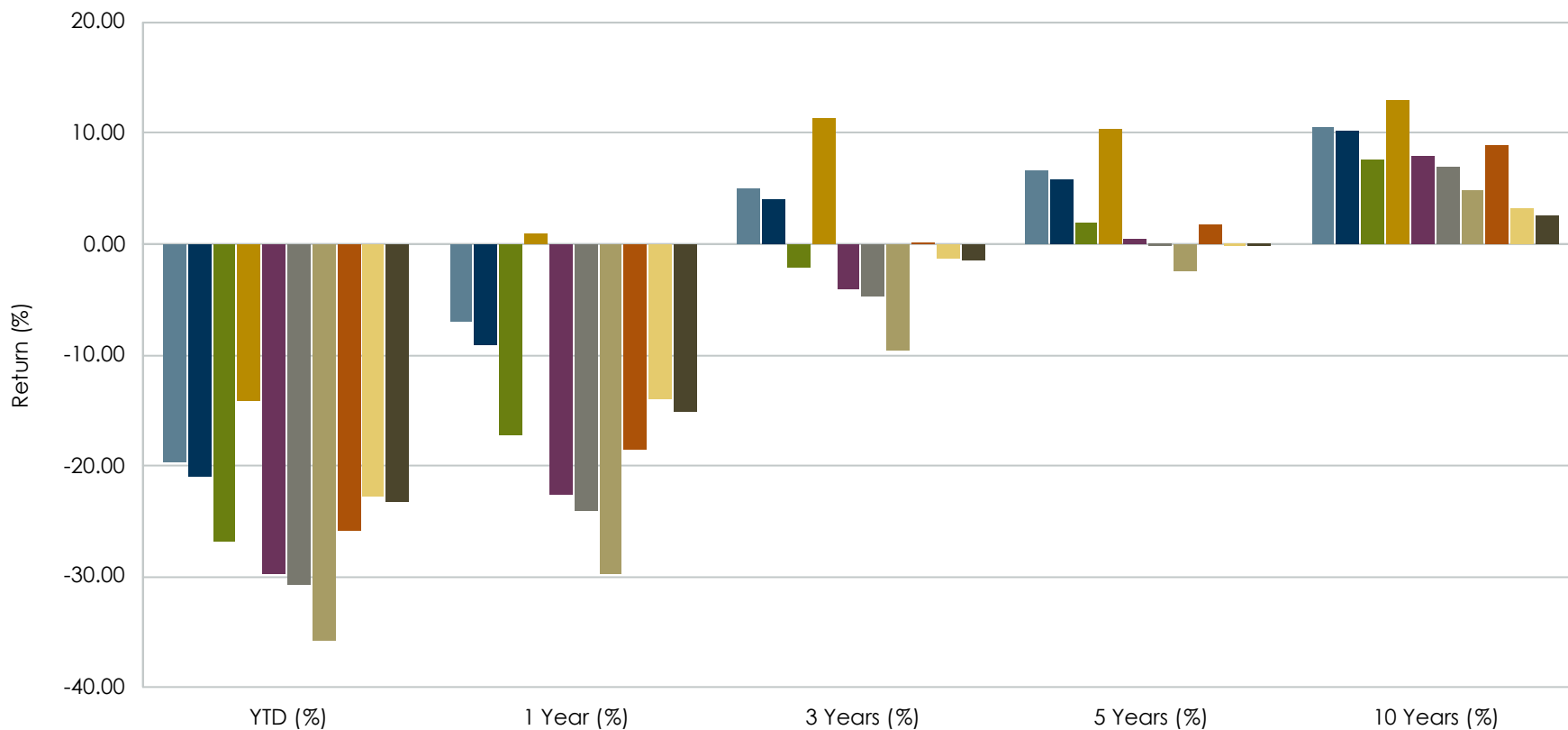
For the Periods Ending March 31, 2020



BloomBar US Aggregate	3.15
BloomBar Universal	1.30
BloomBar 1-15 Yr Municipal	-0.50
S&P 500	-19.60
Russell 2000	-30.61
MSCI EAFE	-22.72
MSCI ACWI	-21.26
MSCI Emerging Markets	-23.57
Bloomberg Commodity	-23.29

## Equity Index Returns

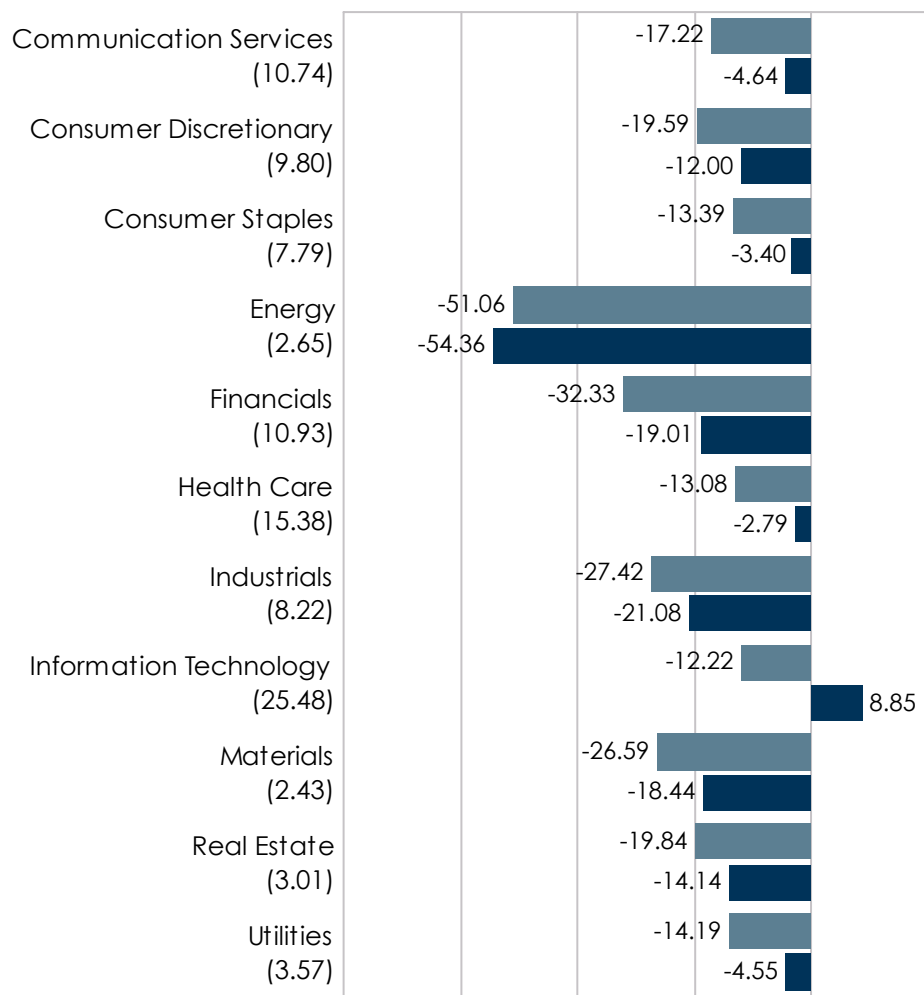
For the Periods Ending March 31, 2020



## US Markets - Performance Breakdown

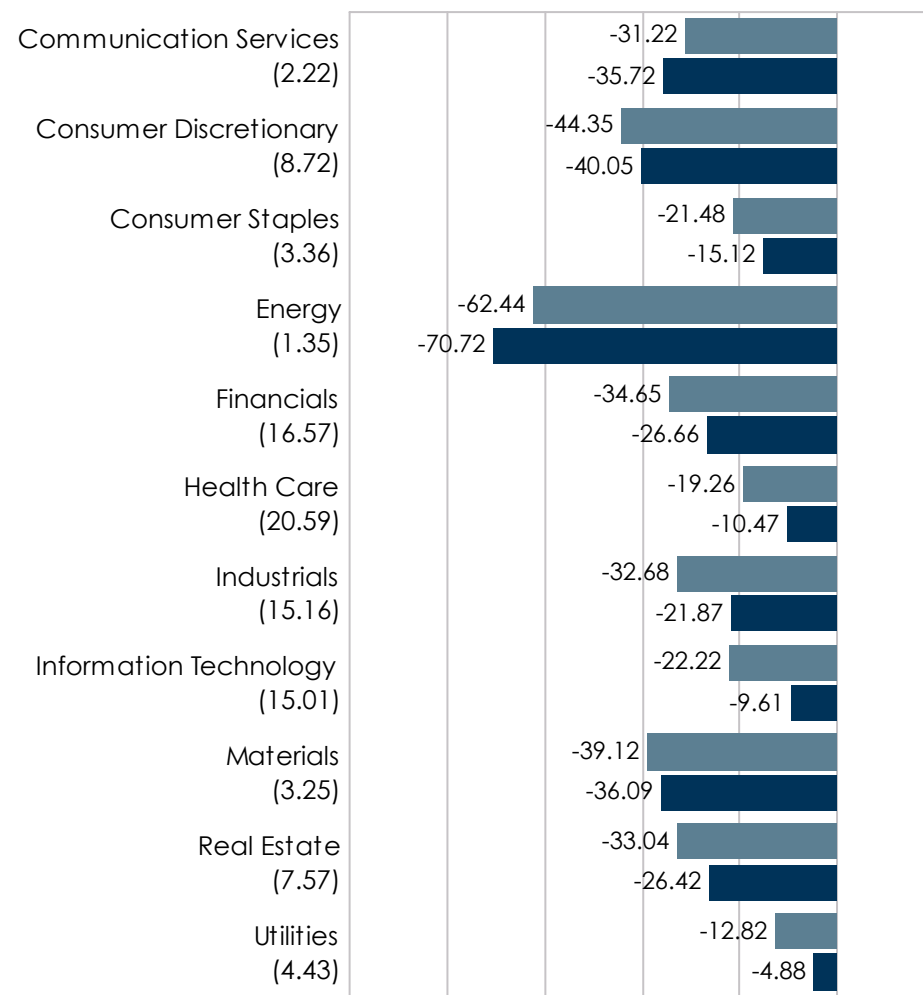
For the Periods Ending March 31, 2020

### S&P 500 - Sector Returns (%)



■ 3 Months ■ 1 Year

### Russell 2000 - Sector Returns (%)

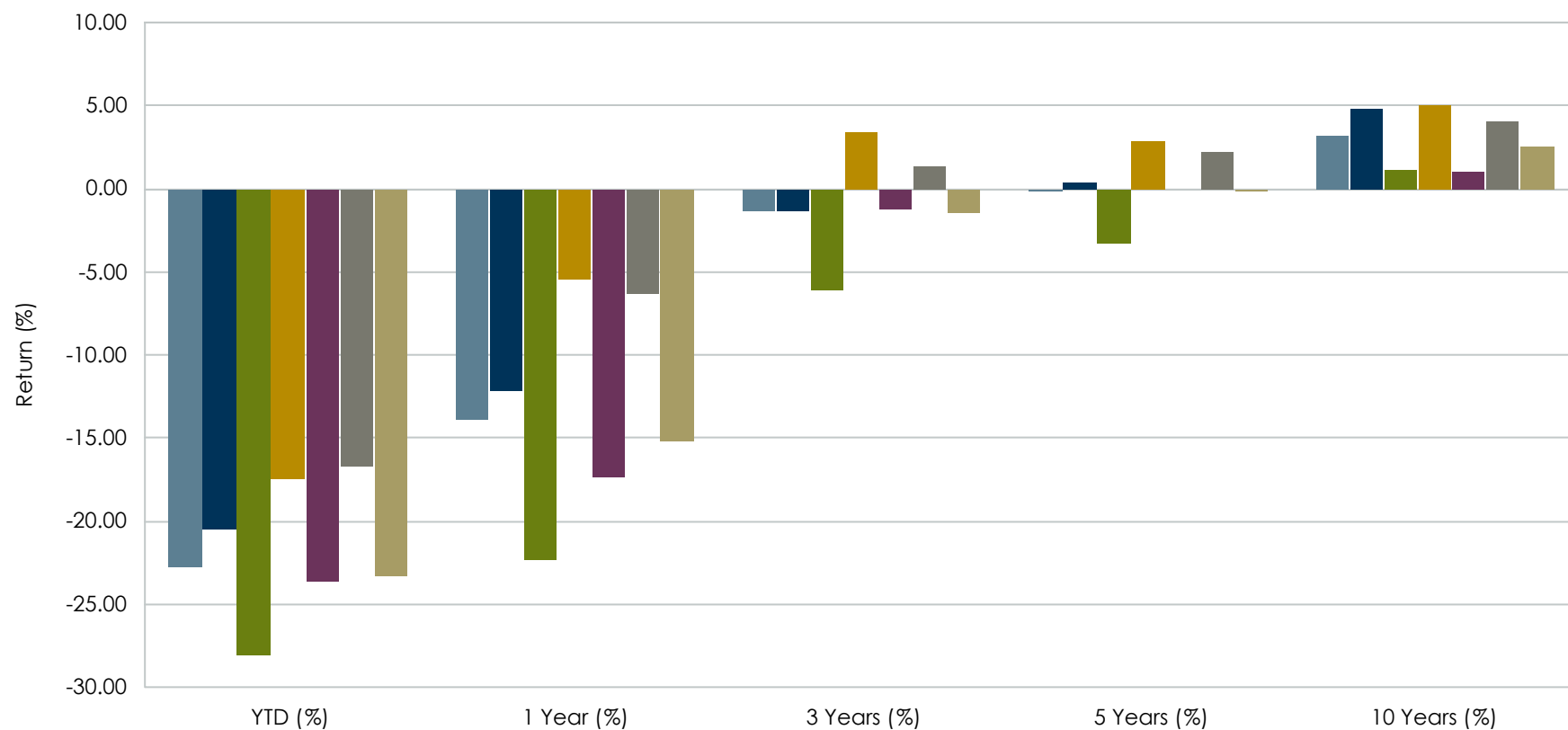


Numbers in parenthesis represent sector weightings of the index. Sector weights may not add to 100% due to rounding or securities that are not assigned to a Global Industry Classification Standard (GICS) sector.

Source: ACG Research, Bloomberg

## Non-US Equity Index Returns

For the Periods Ending March 31, 2020

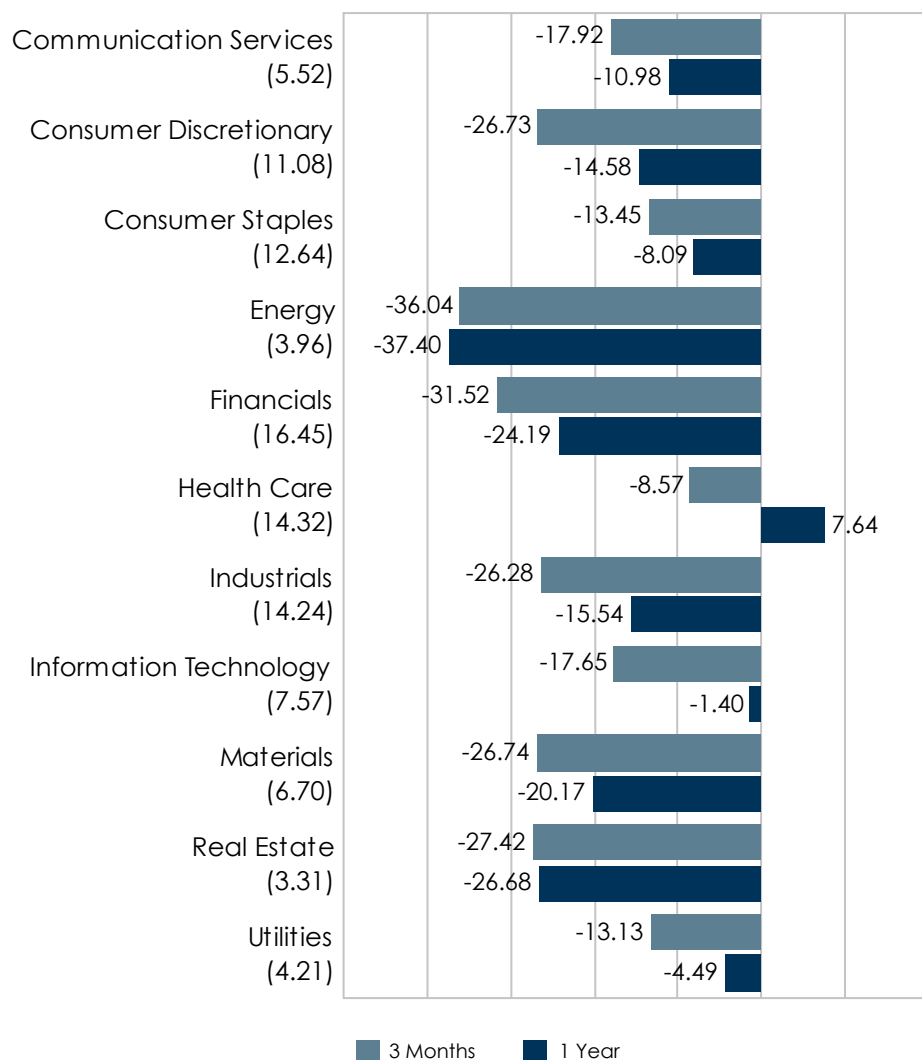


MSCI EAFE	-22.72	-13.92	-1.33	-0.13	3.20
MSCI EAFE Local Currency	-20.43	-12.12	-1.31	0.34	4.85
MSCI EAFE Value	-28.08	-22.26	-6.09	-3.26	1.20
MSCI EAFE Growth	-17.41	-5.44	3.39	2.87	5.09
MSCI Emerging Markets	-23.57	-17.36	-1.25	0.01	1.04
MSCI Japan	-16.63	-6.31	1.33	2.18	4.11
MSCI ACWI ex US	-23.26	-15.14	-1.48	-0.17	2.52

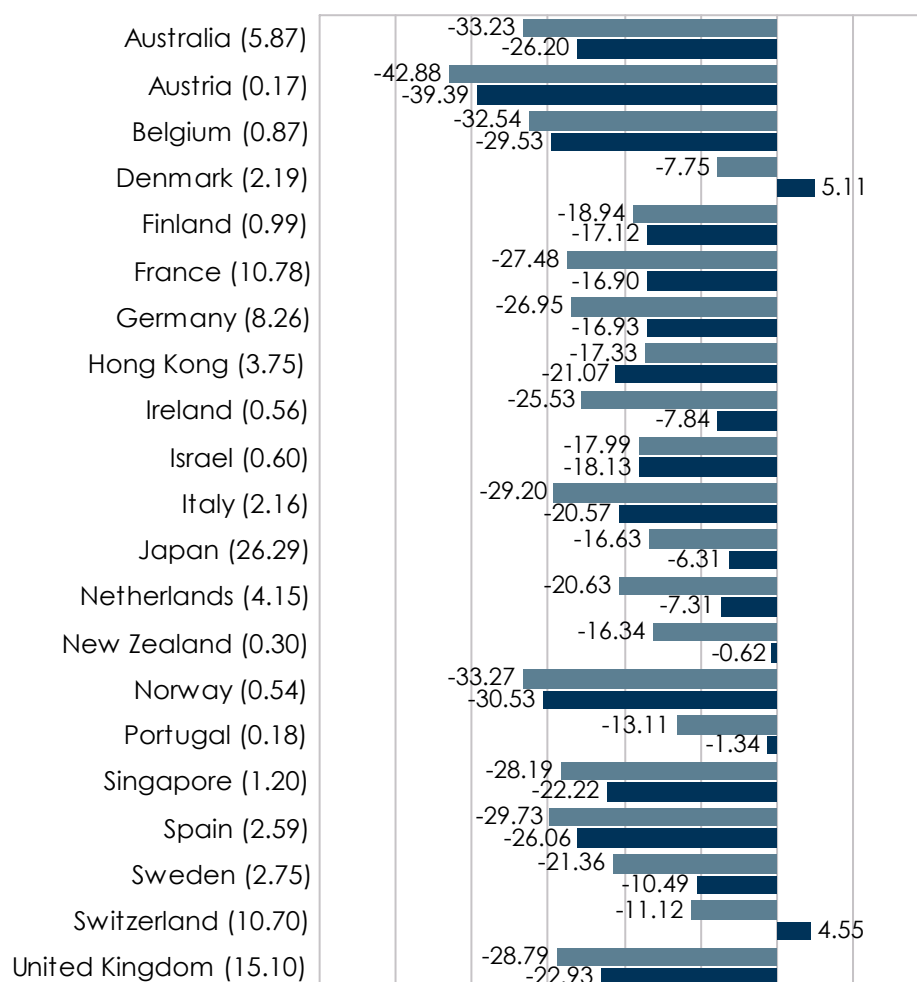
## Non-US Equity - Performance Breakdown

For the Periods Ending March 31, 2020

### MSCI EAFE - Sector Returns (%)



### MSCI EAFE - Country Returns (%)



Numbers in parenthesis represent sector or country weights of the index. Sector or country weights may not add to 100% due to rounding.

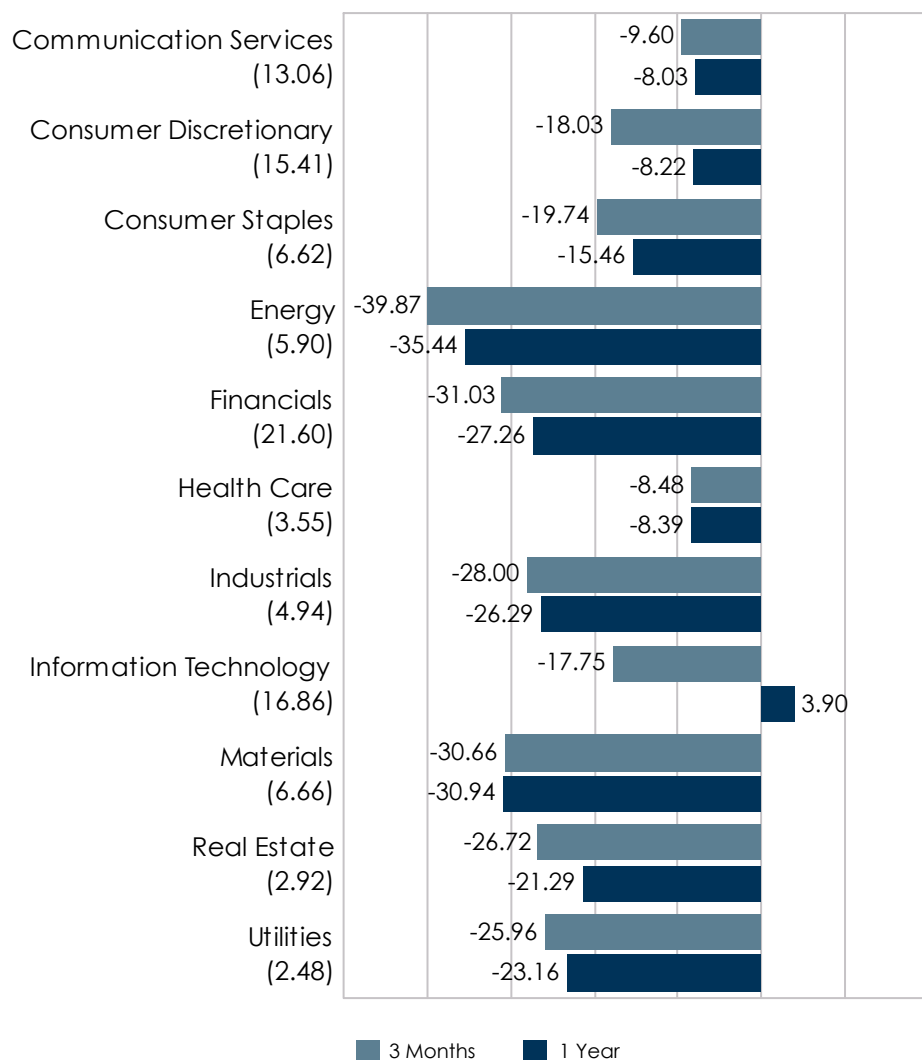
Source: ACG Research, Bloomberg

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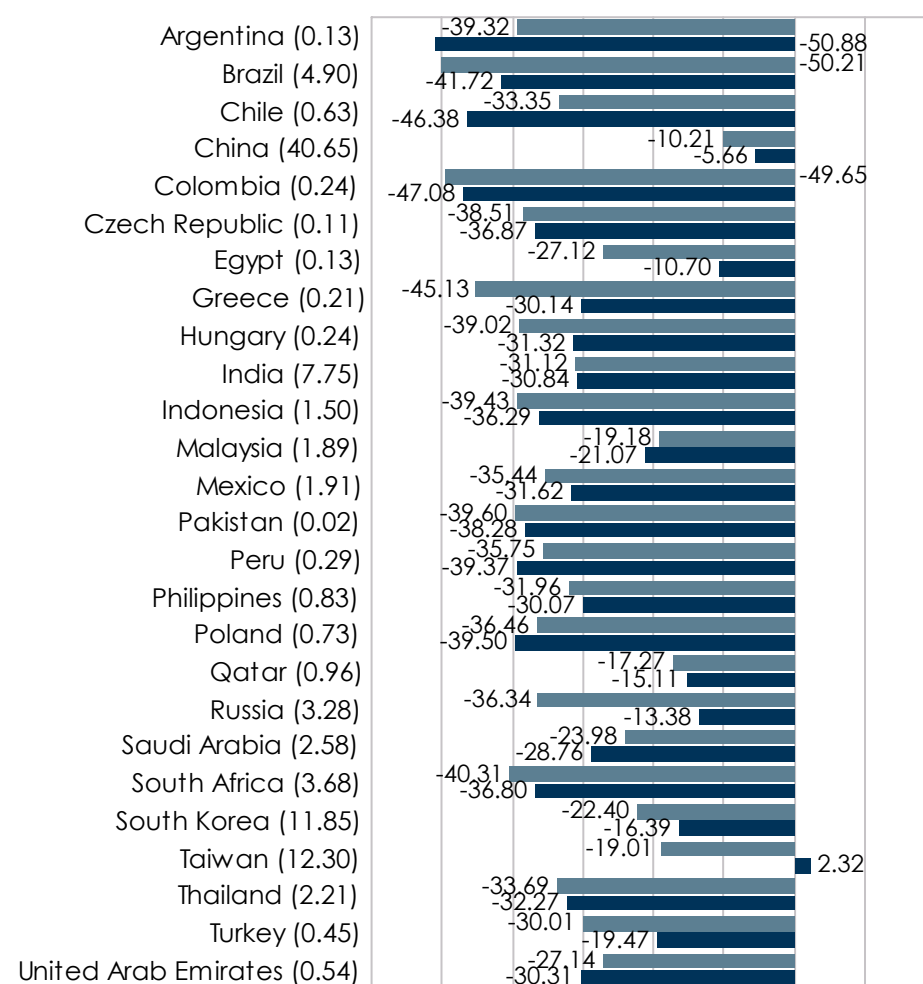
## Emerging Markets - Performance Breakdown

For the Periods Ending March 31, 2020

### MSCI Emerging Markets - Sector Returns (%)



### MSCI Emerging Markets - Country Returns (%)



Numbers in parenthesis represent sector or country weights of the index. Sector or country weights may not add to 100% due to rounding.

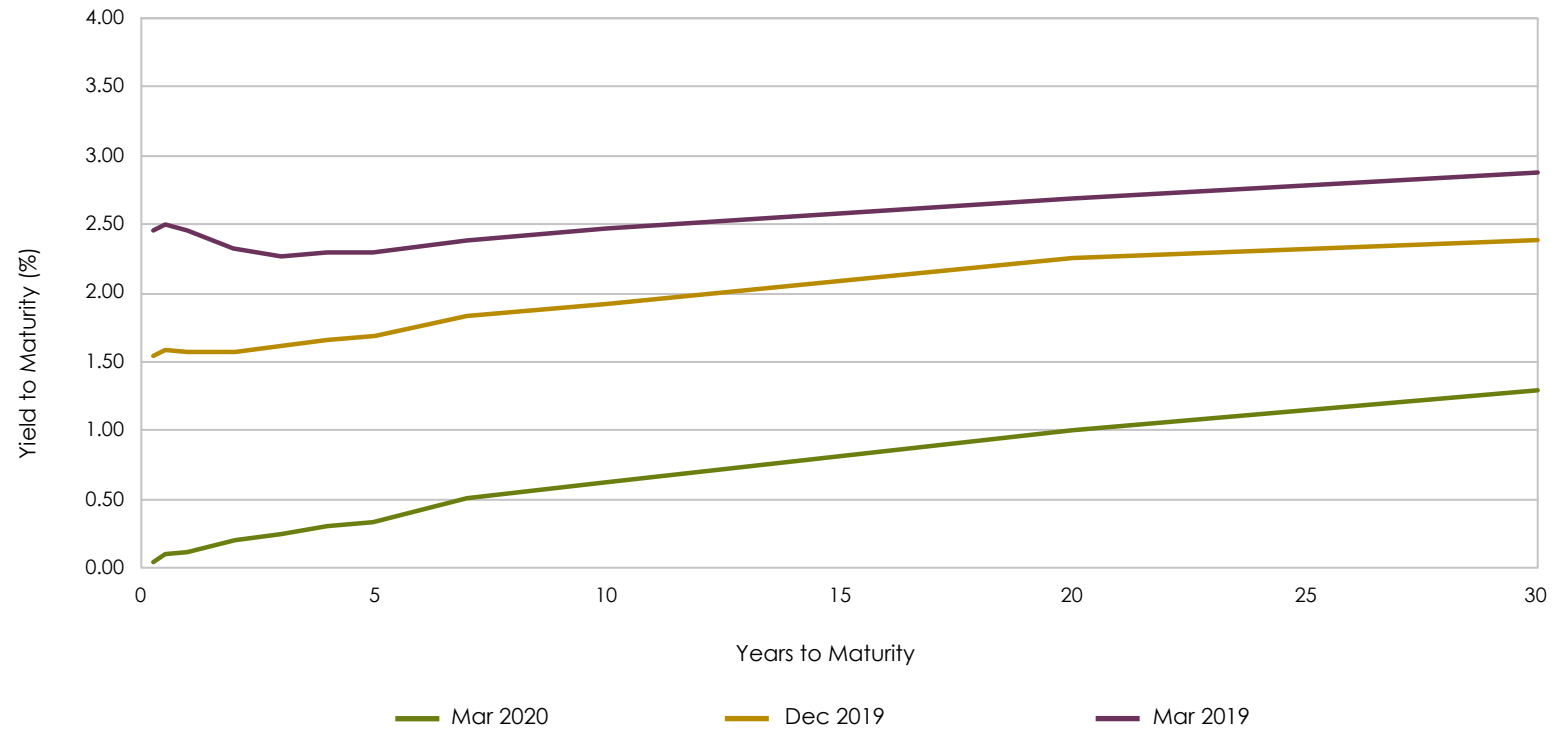
Source: ACG Research, Bloomberg

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## Interest Rate Term Structure

Government Issues - 3 Months to 30 Years Maturity

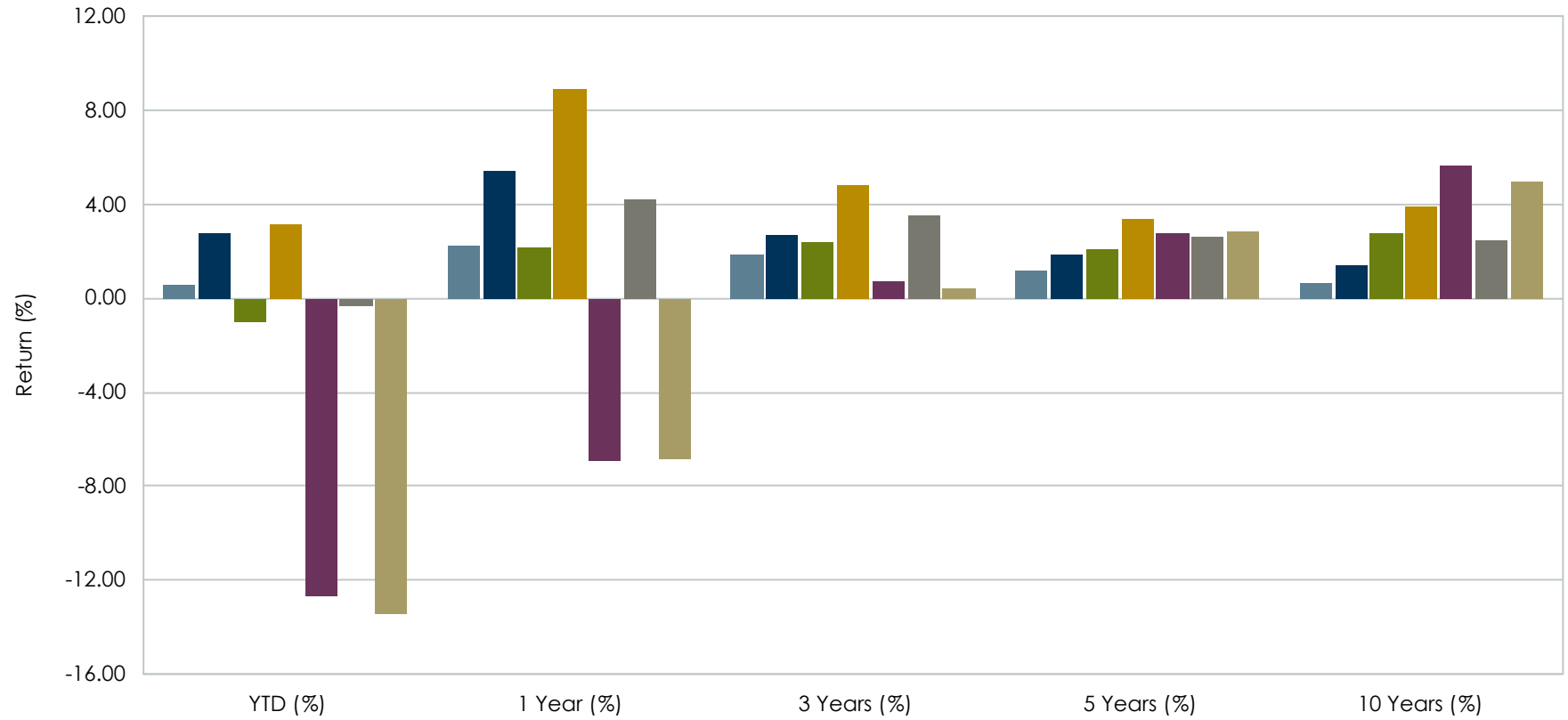


90 Days	0.09	1.55	2.39
180 Days	0.15	1.59	2.43
1 Year	0.16	1.58	2.39
2 Years	0.25	1.57	2.26
3 Years	0.30	1.61	2.21
4 Years	0.34	1.66	2.22
5 Years	0.38	1.69	2.23
7 Years	0.54	1.83	2.31
10 Years	0.67	1.92	2.41
20 Years	1.05	2.25	2.63
30 Years	1.32	2.39	2.82

Source: Bloomberg

## Fixed Income Index Returns

For the Periods Ending March 31, 2020



US T-Bills 90 Day	0.57	2.26	1.83	1.19	0.64
ICE BofA ML 1-3 Yr Treasury	2.81	5.43	2.70	1.85	1.43
BloomBar 5 Yr Municipal	-1.04	2.19	2.41	2.08	2.76
BloomBar US Aggregate	3.15	8.93	4.82	3.36	3.88
BloomBar US Corp High Yield	-12.68	-6.94	0.77	2.78	5.64
BloomBar Global Aggregate	-0.33	4.20	3.55	2.64	2.47
JPM EMBI Global Diversified	-13.38	-6.84	0.42	2.82	4.94

## US Fixed Income Market Environment

For the Periods Ending March 31, 2020

### Nominal Returns By Sector (%)

	<u>1 Month</u>	<u>3 Months</u>	<u>1 Year</u>	<u>3 Years</u>
US Aggregate	-0.59	3.14	8.94	4.83
US Treasury	2.89	8.19	13.21	5.82
US Agg: Gov't-Related	-3.09	0.48	6.24	4.13
US Corporate IG	-7.09	-3.64	4.96	4.19
MBS	1.06	2.83	7.03	4.05
CMBS	-3.13	1.19	6.13	4.20
ABS	-2.07	-0.22	2.76	2.35
US Corp High Yield	-11.46	-12.68	-6.94	0.76

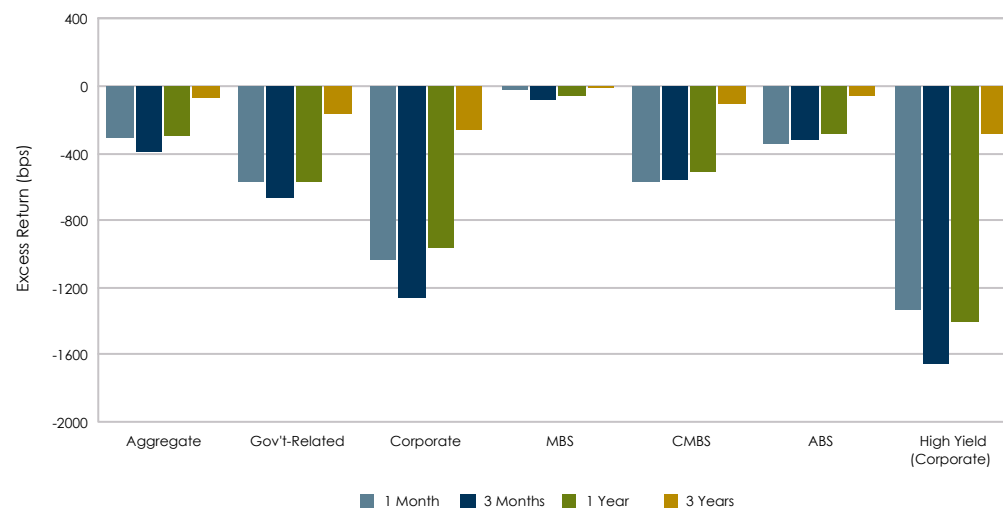
### Nominal Returns by Quality (%)

	<u>1 Month</u>	<u>3 Months</u>	<u>1 Year</u>	<u>3 Years</u>
AAA	1.97	5.81	10.49	5.05
AA	-2.70	1.48	7.50	4.72
A	-4.51	-0.55	7.37	4.80
BAA	-10.34	-7.39	1.90	3.41
BA	-9.27	-10.15	-3.20	2.12
B	-11.58	-12.97	-6.82	0.79
CAA	-18.37	-20.55	-18.78	-4.08

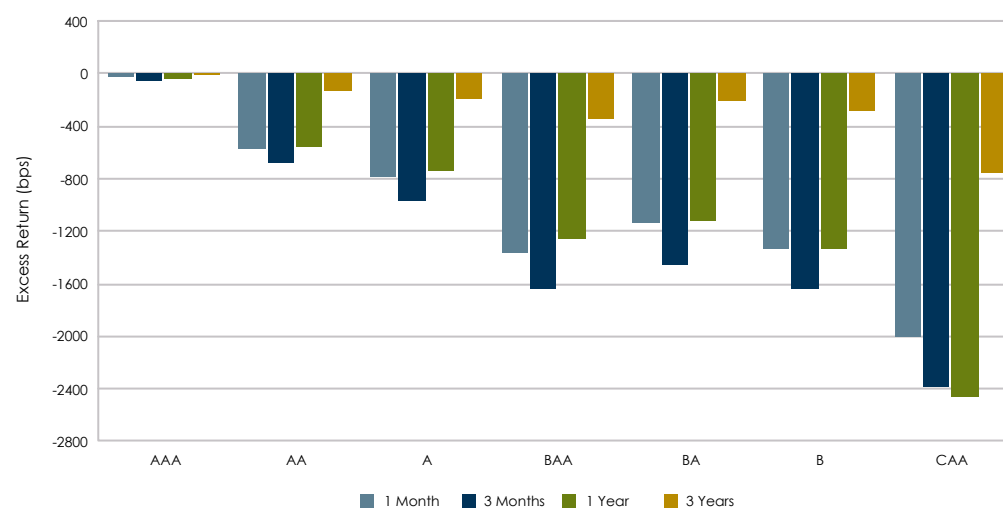
### Nominal Returns by Maturity (%)

	<u>1 Month</u>	<u>3 Months</u>	<u>1 Year</u>	<u>3 Years</u>
1-3 Yr.	0.40	1.78	4.60	2.62
3-5 Yr.	0.50	2.80	7.02	3.76
5-7 Yr.	-0.24	2.69	7.43	4.23
7-10 Yr.	-2.81	2.14	8.77	4.87
10+ Yr.	-2.93	6.23	19.33	9.71

### Excess Returns by Sector



### Excess Returns by Quality



Source: Bloomberg

Excess returns are relative to the duration-neutral Treasury.

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## Monthly Index Returns

For the Periods Ending March 31, 2020

Index Name	3 Months (%)	YTD (%)	1 Year (%)	3 Years (%)	5 Years (%)	7 Years (%)	10 Years (%)
<b>Equity</b>							
S&P 500	-19.60	-19.60	-6.98	5.10	6.73	9.62	10.53
Russell 1000	-20.22	-20.22	-8.03	4.64	6.22	9.32	10.39
Russell 1000 Growth	-14.10	-14.10	0.91	11.32	10.36	12.93	12.97
Russell 1000 Value	-26.73	-26.73	-17.17	-2.18	1.90	5.56	7.67
Russell 2500	-29.72	-29.72	-22.47	-3.10	0.49	4.91	7.73
Russell 2000	-30.61	-30.61	-23.99	-4.64	-0.25	4.21	6.90
Russell 2000 Growth	-25.76	-25.76	-18.58	0.10	1.70	6.47	8.89
Russell 2000 Value	-35.66	-35.66	-29.64	-9.51	-2.42	1.80	4.79
Wilshire 5000 Cap Wtd	-20.70	-20.70	-8.94	4.09	5.99	9.08	10.19
MSCI ACWI	-21.26	-21.26	-10.76	2.05	3.41	5.64	6.45
MSCI ACWI ex US	-23.26	-23.26	-15.14	-1.48	-0.17	1.53	2.52
MSCI EAFE	-22.72	-22.72	-13.92	-1.33	-0.13	2.24	3.20
MSCI EAFE Local Currency	-20.43	-20.43	-12.12	-1.31	0.34	4.86	4.85
MSCI EAFE Growth	-17.41	-17.41	-5.44	3.39	2.87	4.36	5.09
MSCI EAFE Value	-28.08	-28.08	-22.26	-6.09	-3.26	-0.01	1.20
MSCI Emerging Markets	-23.57	-23.57	-17.36	-1.25	0.01	-0.04	1.04
<b>Fixed Income</b>							
ICE BofA ML 1-3 Yr Treasury	2.81	2.81	5.43	2.70	1.85	1.52	1.43
BloomBar 5 Yr Municipal	-1.04	-1.04	2.19	2.41	2.08	2.04	2.76
BloomBar US Aggregate	3.15	3.15	8.93	4.82	3.36	3.19	3.88
BloomBar Gov't Bond	8.08	8.08	13.08	5.78	3.63	3.16	3.72
BloomBar US Credit	-3.14	-3.14	5.10	4.19	3.28	3.44	4.75
BloomBar 10 Yr Municipal	-0.40	-0.40	4.00	4.19	3.34	3.41	4.45
BloomBar US Corp High Yield	-12.68	-12.68	-6.94	0.77	2.78	3.33	5.64
FTSE World Govt Bond	2.00	2.00	6.17	4.27	2.96	1.48	2.19
BloomBar Global Aggregate	-0.33	-0.33	4.20	3.55	2.64	1.61	2.47
BloomBar Multiverse	-1.11	-1.11	3.47	3.37	2.67	1.66	2.58
JPM EMBI Global Diversified	-13.38	-13.38	-6.84	0.42	2.82	2.89	4.94
<b>Real Assets</b>							
NCREIF Property	0.71	0.71	5.28	6.41	7.65	8.86	10.17
NFI ODCE Net	0.75	0.75	3.93	5.85	7.48	8.91	10.42
FTSE NAREIT US Real Estate	-27.30	-27.30	-21.26	-3.14	-0.35	3.46	7.40
Bloomberg Commodity	-23.29	-23.29	-22.31	-8.61	-7.76	-10.04	-6.74
<b>Cash and Equivalents</b>							
US T-Bills 90 Day	0.57	0.57	2.26	1.83	1.19	0.86	0.64

## Monthly Index Returns

For the Periods Ending April 30, 2020

Index Name	1 Month (%)	YTD (%)	1 Year (%)	3 Years (%)	5 Years (%)	7 Years (%)	10 Years (%)
<b>Equity</b>							
S&P 500	12.82	-9.29	0.86	9.04	9.12	11.22	11.69
Russell 1000	13.21	-9.68	0.09	8.68	8.74	10.99	11.57
Russell 1000 Growth	14.80	-1.39	10.84	15.69	13.34	14.83	14.41
Russell 1000 Value	11.24	-18.49	-11.01	1.42	3.90	6.95	8.54
Russell 2500	14.55	-19.50	-14.20	1.13	3.62	6.92	8.70
Russell 2000	13.74	-21.08	-16.39	-0.82	2.88	6.20	7.69
Russell 2000 Growth	14.89	-14.71	-9.22	4.21	5.19	8.70	9.96
Russell 2000 Value	12.34	-27.72	-23.84	-6.06	0.30	3.52	5.30
Wilshire 5000 Cap Wtd	13.26	-10.18	-0.85	8.12	8.55	10.77	11.34
MSCI ACWI	10.76	-12.78	-4.43	5.03	4.94	6.76	7.52
MSCI ACWI ex US	7.64	-17.40	-11.07	0.24	0.31	2.06	3.37
MSCI EAFE	6.54	-17.66	-10.89	-0.09	0.32	2.40	4.04
MSCI EAFE Local Currency	5.51	-16.05	-10.39	-0.02	1.18	5.00	5.54
MSCI EAFE Growth	7.49	-11.23	-1.69	4.84	3.59	4.81	6.02
MSCI EAFE Value	5.44	-24.17	-19.96	-5.09	-3.09	-0.14	1.93
MSCI Emerging Markets	9.18	-16.55	-11.65	0.94	0.28	1.11	1.80
<b>Fixed Income</b>							
ICE BofA ML 1-3 Yr Treasury	0.04	2.85	5.25	2.67	1.85	1.51	1.41
BloomBar Municipal	-1.26	-1.88	2.16	3.27	3.04	2.92	3.89
BloomBar US Aggregate	1.78	4.98	10.84	5.17	3.80	3.30	3.96
BloomBar Gov't Bond	0.63	8.76	14.10	5.76	3.87	3.12	3.68
BloomBar US Credit	4.58	1.29	9.37	5.40	4.33	3.84	5.04
BloomBar 10 Yr Municipal	-1.02	-1.41	2.67	3.51	3.25	3.07	4.21
BloomBar US Corp High Yield	4.51	-8.75	-4.11	1.87	3.44	3.72	5.86
FTSE World Govt Bond	1.19	3.22	7.97	4.24	2.98	1.50	2.35
BloomBar Global Aggregate	1.96	1.63	6.56	3.84	2.82	1.69	2.67
BloomBar Multiverse	2.04	0.91	5.84	3.67	2.84	1.74	2.78
<b>Real Assets</b>							
Bloomberg Commodity	-1.54	-24.47	-23.18	-8.62	-9.07	-9.87	-7.07
<b>Cash and Equivalents</b>							
US T-Bills 90 Day	0.01	0.58	2.07	1.81	1.19	0.86	0.64

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**Total Portfolio Summary**

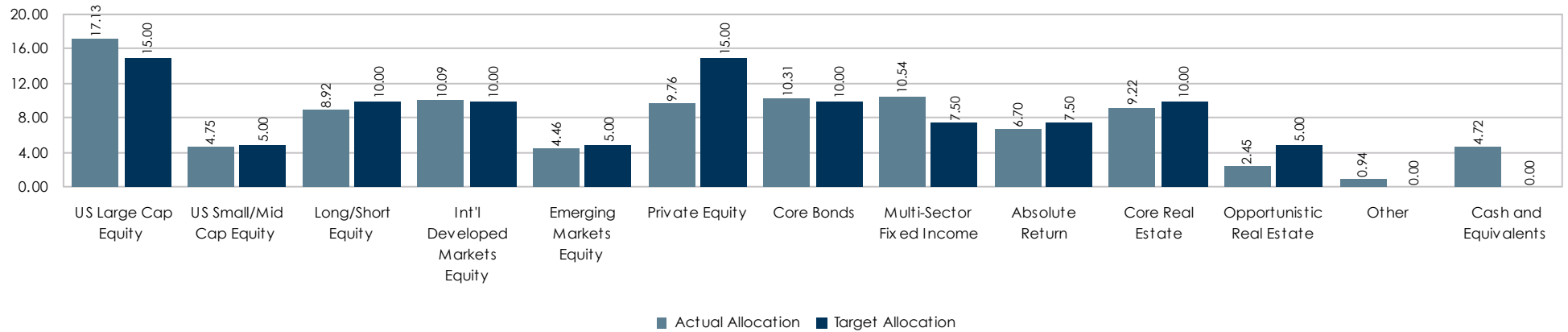
**Total Portfolio**  
**Dollar Reconciliation (\$000s)**  
*For the Periods Ending March 31, 2020*

	<b>FYTD</b>	<b>1 Year</b>	<b>5 Years</b>	<b>10 Years</b>
<b>Beginning Market Value</b>	<b>2,606,162</b>	<b>2,555,424</b>	<b>2,238,198</b>	<b>1,628,684</b>
Net Additions	-51,694	-64,355	-280,284	-486,620
Return on Investment	-157,501	-94,101	439,053	1,254,903
<b>Ending Market Value</b>	<b>2,396,967</b>	<b>2,396,967</b>	<b>2,396,967</b>	<b>2,396,967</b>



### Total Portfolio

For the Period Ending March 31, 2020

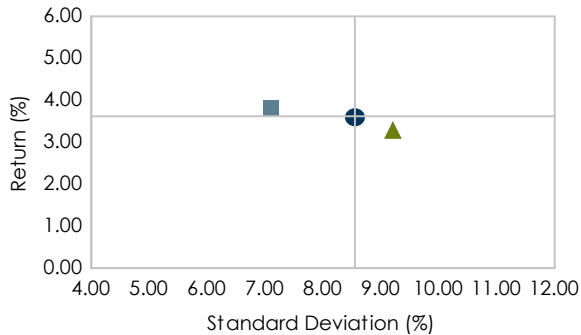


	Market Value (\$000s)	Actual Allocation (%)	Target Allocation (%)	Over/Under Target (%)	Range Min-Max (%)
<b>Total Portfolio</b>	<b>2,396,967</b>	<b>100.00</b>	<b>100.00</b>		
<b>Equity</b>	<b>1,320,906</b>	<b>55.11</b>	<b>60.00</b>	<b>-4.89</b>	<b>50.00 - 70.00</b>
US Large Cap Equity	410,631	17.13	15.00	2.13	10.00 - 20.00
US Small/Mid Cap Equity	113,747	4.75	5.00	-0.25	0.00 - 15.00
Long/Short Equity	213,871	8.92	10.00	-1.08	5.00 - 15.00
Int'l Developed Markets Equity	241,803	10.09	10.00	0.09	5.00 - 15.00
Emerging Markets Equity	106,942	4.46	5.00	-0.54	0.00 - 10.00
Private Equity	233,912	9.76	15.00	-5.24	5.00 - 20.00
<b>Fixed Income</b>	<b>660,665</b>	<b>27.56</b>	<b>25.00</b>	<b>2.56</b>	<b>15.00 - 35.00</b>
Core Bonds	247,237	10.31	10.00	0.31	5.00 - 15.00
Multi-Sector Fixed Income	252,719	10.54	7.50	3.04	2.50 - 12.50
Absolute Return	160,710	6.70	7.50	-0.80	2.50 - 12.50
<b>Real Assets</b>	<b>302,333</b>	<b>12.61</b>	<b>15.00</b>	<b>-2.39</b>	<b>10.00 - 20.00</b>
Core Real Estate	221,050	9.22	10.00	-0.78	5.00 - 15.00
Opportunistic Real Estate	58,689	2.45	5.00	-2.55	0.00 - 10.00
Other	22,594	0.94	0.00	0.94	
<b>Cash and Equivalents</b>	<b>113,063</b>	<b>4.72</b>	<b>0.00</b>	<b>4.72</b>	

## Total Portfolio

For the Periods Ending March 31, 2020

### 5 Year Risk / Return



■ Total Portfolio  
● Total Fund Policy  
▲ IM TF Between 55 - 70% Equity

### 5 Year Relative Statistics

Total Fund Policy	
Beta	0.81
Up Capture (%)	83.07
Down Capture (%)	78.66

	Return (%)	Rank	Std Dev (%)	Sharpe Ratio
FYTD				
Total Portfolio	-6.18	4	--	--
Total Fund Policy	-7.14		--	--
IM TF Between 55 - 70% Equity	-9.72		--	--

### 1 Year

Total Portfolio	-3.83	9	10.52	-0.55
Total Fund Policy	-4.20		12.32	-0.50
IM TF Between 55 - 70% Equity	-6.61		13.61	-0.62

### 3 Years

Total Portfolio	3.14	27	7.85	0.18
Total Fund Policy	3.13		9.24	0.16
IM TF Between 55 - 70% Equity	2.37		10.30	0.06

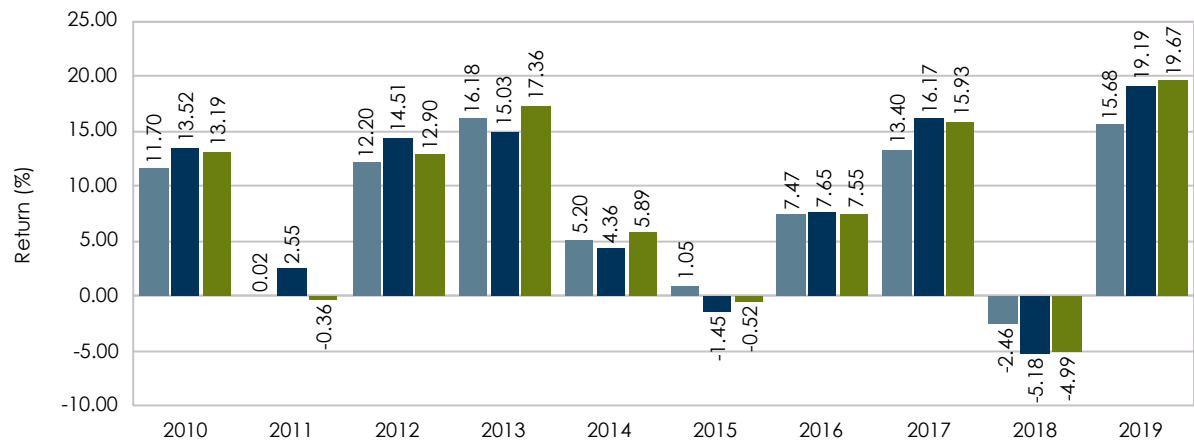
### 5 Years

Total Portfolio	3.81	29	7.10	0.38
Total Fund Policy	3.60		8.54	0.30
IM TF Between 55 - 70% Equity	3.27		9.20	0.23

### 10 Years

Total Portfolio	6.30	49	6.99	0.82
Total Fund Policy	6.46		8.71	0.68
IM TF Between 55 - 70% Equity	6.26		9.11	0.62

### Calendar Year Returns

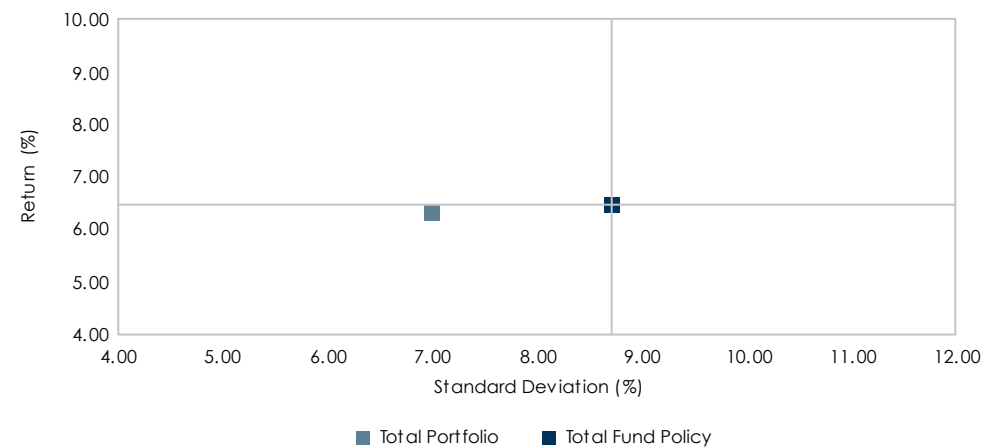


The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

Total Portfolio

For the Periods Ending March 31, 2020

10 Year Risk / Return



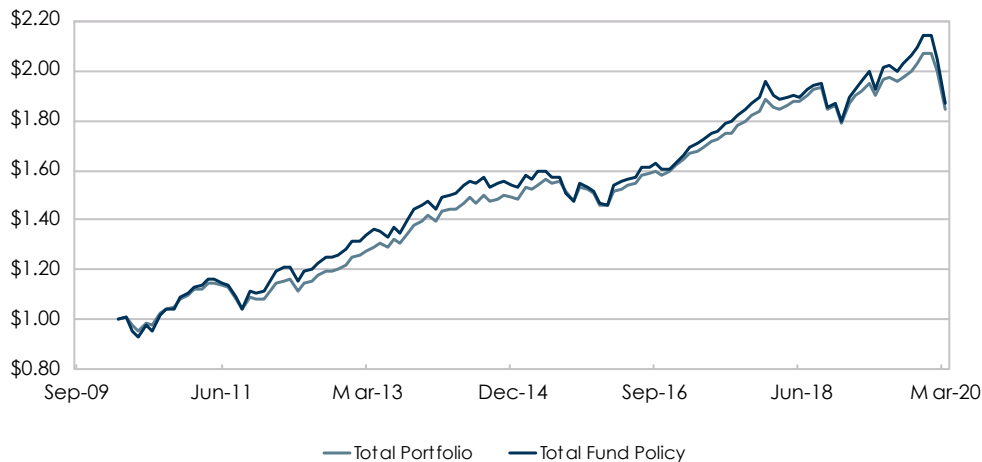
10 Year Portfolio Statistics

	Total Portfolio	Total Fund Policy
Return (%)	6.30	6.46
Standard Deviation (%)	6.99	8.71
Sharpe Ratio	0.82	0.68

Benchmark Relative Statistics

Beta	0.78
Up Capture (%)	81.45
Down Capture (%)	75.17

10 Year Growth of a Dollar

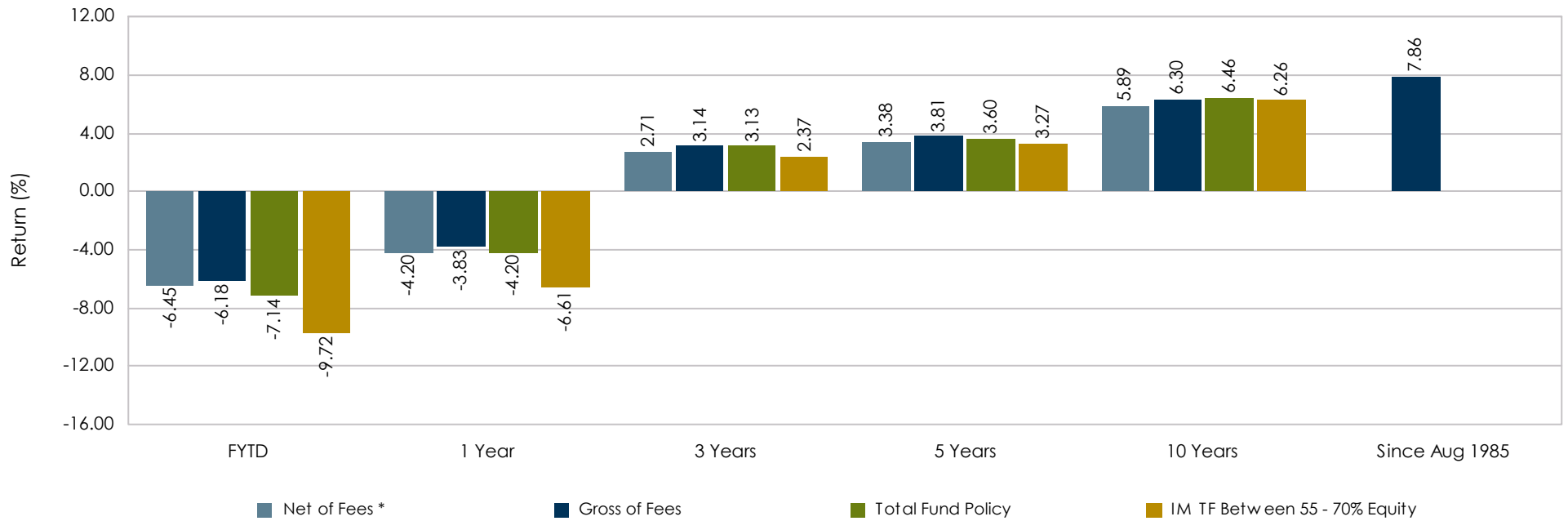


10 Year Return Analysis

	Total Portfolio	Total Fund Policy
Number of Months	120	120
Highest Monthly Return (%)	5.31	7.47
Lowest Monthly Return (%)	-7.75	-8.44
Number of Positive Months	83	78
Number of Negative Months	37	42
% of Positive Months	69.17	65.00

### Total Portfolio

For the Periods Ending March 31, 2020



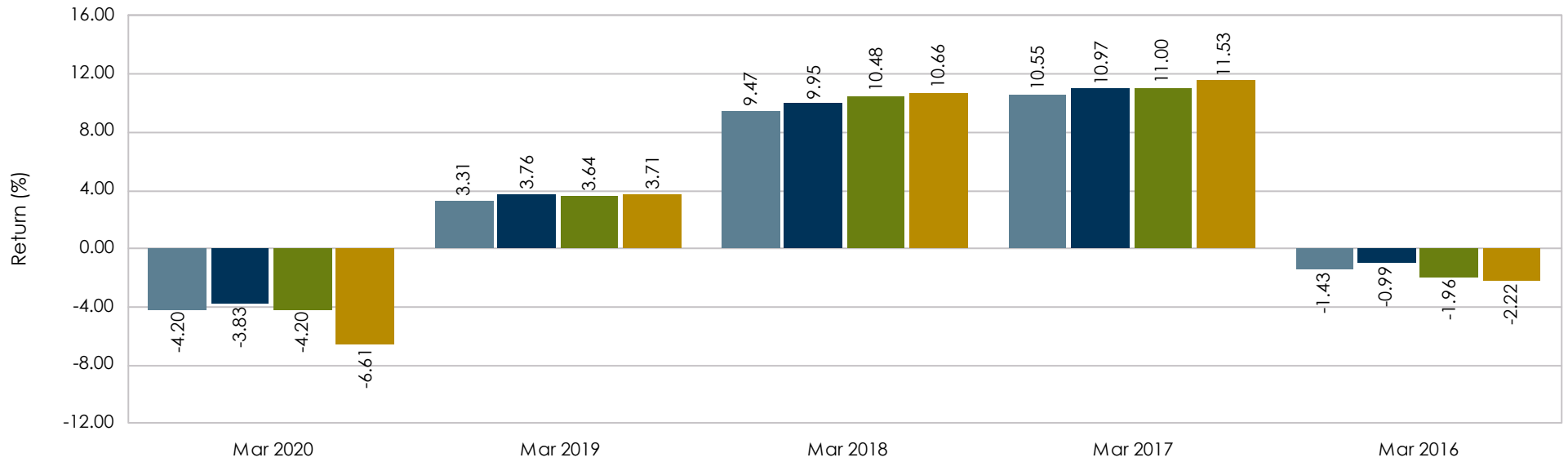
Ranking	4	9	27	29	49
5th Percentile	-6.61	-3.18	4.66	4.76	7.82
25th Percentile	-8.38	-5.16	3.19	3.88	6.84
50th Percentile	-9.72	-6.61	2.37	3.27	6.26
75th Percentile	-10.88	-7.96	1.50	2.49	5.57
95th Percentile	-12.66	-9.86	0.02	1.28	4.54
Observations	409	405	376	340	268

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

\* Performance is calculated using net of fee returns.

## Total Portfolio

For the One Year Periods Ending March



	Net of Fees *	Gross Of Fees	Total Fund Policy	IM TF Between 55 - 70% Equity	
Ranking	9	49	65	66	30
5th Percentile	-3.18	6.58	13.27	14.16	0.83
25th Percentile	-5.16	4.66	11.66	12.59	-0.72
50th Percentile	-6.61	3.71	10.66	11.53	-2.22
75th Percentile	-7.96	2.64	9.64	10.58	-3.55
95th Percentile	-9.86	1.41	7.91	9.41	-5.35
Observations	405	582	578	638	504

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

\* Performance is calculated using net of fee returns.

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## Rates of Return Summary &amp; Universe Rankings

For the Periods Ending March 31, 2020

	Market Value (\$000s)	Actual Allocation (%)	3 Months (%)	Rank	FYTD (%)	Rank	1 Year (%)	Rank	3 Years (%)	Rank	5 Years (%)	Rank	10 Years (%)
<b>Total Portfolio * (06/05) <sup>1</sup></b>	<b>2,396,967</b>	<b>100.00</b>	<b>-11.16</b>		<b>-6.45</b>		<b>-4.20</b>		<b>2.71</b>		<b>3.38</b>		<b>5.89</b>
<b>Total Portfolio (08/85)</b>			<b>-11.07</b>	<b>2</b>	<b>-6.18</b>	<b>4</b>	<b>-3.83</b>	<b>9</b>	<b>3.14</b>	<b>27</b>	<b>3.81</b>	<b>29</b>	<b>6.30</b>
<i>Total Fund Policy <sup>2</sup></i>			-12.69		-7.14		-4.20		3.13		3.60		6.46
<i>IM TF Between 55 - 70% Equity</i>			-15.29		-9.72		-6.61		2.37		3.27		6.26
<b>Equity (01/98)</b>	<b>1,320,906</b>	<b>55.11</b>	<b>-16.79</b>		<b>-10.09</b>		<b>-7.36</b>		<b>2.96</b>		<b>4.22</b>		<b>7.40</b>
<i>MSCI ACWI</i>			-21.26		-14.03		-10.76		2.05		3.41		6.45
<b>US Large Cap Equity</b>	<b>410,631</b>	<b>17.13</b>											
<b>Northern Trust Russell 1000 Index (08/98) <sup>3</sup></b>	<b>410,631</b>	<b>17.13</b>	<b>-20.22</b>	<b>56</b>	<b>-11.77</b>	<b>45</b>	<b>-8.03</b>	<b>49</b>	<b>4.64</b>	<b>43</b>	<b>6.23</b>	<b>41</b>	<b>10.40</b>
<i>Russell 1000</i>			-20.22		-11.77		-8.03		4.64		6.22		10.39
<i>eA US Large Cap Core Equity</i>			-19.89		-12.11		-8.12		4.23		5.78		10.26
<b>US Small/Mid Cap Equity</b>	<b>113,747</b>	<b>4.75</b>											
<b>Boston Partners (01/98)</b>	<b>51,029</b>	<b>2.13</b>	<b>-38.85</b>	<b>91 / 84</b>	<b>-32.45</b>	<b>87 / 70</b>	<b>-29.09</b>	<b>83 / 55</b>	<b>-9.85</b>	<b>88 / 64</b>	<b>-2.86</b>	<b>82 / 67</b>	<b>5.39</b>
<i>Russell 2500 Value</i>			-34.64		-29.93		-28.60		-8.40		-2.14		5.65
<i>eA US Mid Cap Value Equity</i>			-31.59		-25.37		-22.97		-5.76		-0.42		7.18
<i>eA US Small Cap Value Equity</i>			-35.06		-29.96		-28.58		-8.64		-2.02		6.39
<b>Silvercrest (02/14)</b>	<b>62,718</b>	<b>2.62</b>	<b>-27.23</b>	<b>79</b>	<b>-22.81</b>	<b>75</b>	<b>-21.99</b>	<b>80</b>	<b>1.31</b>	<b>70</b>	<b>4.85</b>	<b>43</b>	<b>--</b>
<i>Russell 2000 Growth</i>			-25.76		-20.76		-18.58		0.10		1.70		8.89
<i>eA US Small Cap Growth Equity</i>			-23.83		-19.71		-15.62		3.81		4.15		10.71
<b>Long/Short Equity</b>	<b>213,871</b>	<b>8.92</b>											
<b>Grosvenor Long/Short Equity (11/03)</b>	<b>213,871</b>	<b>8.92</b>	<b>-8.50</b>		<b>-3.53</b>		<b>-2.02</b>		<b>3.26</b>		<b>2.63</b>		<b>5.13</b>
<i>MSCI ACWI</i>			-21.26		-14.03		-10.76		2.05		3.41		6.45
<i>HFRI FOF: Strategic</i>			-11.67		-9.27		-8.09		-0.79		-0.37		1.68

FYTD: Fiscal year ending June.

\* Net of fee return data.

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## Rates of Return Summary &amp; Universe Rankings

For the Periods Ending March 31, 2020

	Market Value (\$000s)	Actual Allocation (%)	3 Months (%)	Rank	FYTD (%)	Rank	1 Year (%)	Rank	3 Years (%)	Rank	5 Years (%)	Rank	10 Years (%)
<b>International Developed Market</b>	<b>241,803</b>	<b>10.09</b>											
<b>Mondrian International (05/04)</b>	<b>112,201</b>	<b>4.68</b>	<b>-26.36</b>	<b>49</b>	<b>-20.31</b>	<b>46</b>	<b>-19.25</b>	<b>54</b>	<b>-3.84</b>	<b>42</b>	<b>-1.68</b>	<b>48</b>	<b>2.68</b>
<i>MSCI EAFE Value</i>			-28.08		-23.70		-22.26		-6.09		-3.26		1.20
<i>eA EAFE All Cap Value Equity</i>			-26.40		-20.77		-18.80		-5.20		-1.78		3.64
<b>Barings Focused EAFE Plus Equity (03/12)</b>	<b>129,602</b>	<b>5.41</b>	<b>-19.36</b>	<b>23</b>	<b>-13.12</b>	<b>21</b>	<b>-9.69</b>	<b>26</b>	<b>0.86</b>	<b>25</b>	<b>2.69</b>	<b>16</b>	<b>--</b>
<i>MSCI EAFE NetDiv</i>			-22.83		-17.42		-14.38		-1.82		-0.62		2.72
<i>eA EAFE All Cap Equity</i>			-22.96		-17.28		-13.97		-1.21		0.10		4.44
<b>Emerging Markets Equity</b>	<b>106,942</b>	<b>4.46</b>											
<b>Wasatch Emerging Markets (09/12)</b>	<b>31,775</b>	<b>1.33</b>	<b>-22.11</b>	<b>16</b>	<b>-11.22</b>	<b>4</b>	<b>-7.84</b>	<b>4</b>	<b>2.23</b>	<b>11</b>	<b>0.70</b>	<b>36</b>	<b>--</b>
<i>MSCI EM SC</i>			-31.34		-28.06		-28.71		-9.33		-4.87		-1.04
<i>eA Global Emerging Mkts Equity</i>			-24.91		-19.45		-18.52		-2.19		-0.15		1.88
<b>AB EM Strategic Core Equity Fund (11/16)</b>	<b>75,167</b>	<b>3.14</b>	<b>-20.90</b>	<b>10</b>	<b>-16.16</b>	<b>20</b>	<b>-14.53</b>	<b>22</b>	<b>-3.38</b>	<b>64</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>MSCI Emerging Markets</i>			-23.57		-17.97		-17.36		-1.25		0.01		1.04
<i>eA Global Emerging Mkts Equity</i>			-24.91		-19.45		-18.52		-2.19		-0.15		1.88
<b>Private Equity (07/03)</b>	<b>233,912</b>	<b>9.76</b>	<b>2.25</b>		<b>7.77</b>		<b>12.08</b>		<b>12.03</b>		<b>11.25</b>		<b>11.84</b>
<b>Fixed Income (01/98)</b>	<b>660,665</b>	<b>27.56</b>	<b>-3.23</b>		<b>-1.24</b>		<b>1.05</b>		<b>2.85</b>		<b>2.22</b>		<b>3.89</b>
<i>BloomBar Universal</i>			1.30		3.92		7.15		4.37		3.35		4.05
<b>Core Bonds</b>	<b>247,237</b>	<b>10.31</b>											
<b>Agincourt Core Fixed Income (10/99)</b>	<b>247,237</b>	<b>10.31</b>	<b>2.45</b>	<b>33</b>	<b>5.11</b>	<b>32</b>	<b>8.46</b>	<b>31</b>	<b>5.06</b>	<b>22</b>	<b>3.67</b>	<b>29</b>	<b>4.36</b>
<i>BloomBar US Aggregate</i>			3.15		5.68		8.93		4.82		3.36		3.88
<i>eA US Core Fixed Income</i>			1.75		4.37		7.65		4.69		3.48		4.25

## Rates of Return Summary &amp; Universe Rankings

For the Periods Ending March 31, 2020

	Market Value (\$000s)	Actual Allocation (%)	3 Months (%)	Rank	FYTD (%)	Rank	1 Year (%)	Rank	3 Years (%)	Rank	5 Years (%)	Rank	10 Years (%)
<b>Multi Sector Fixed Income</b>	<b>252,719</b>	<b>10.54</b>											
<b>Multi Sector Fixed Income</b>													
<b>Oaktree Global Credit Fund (02/98)</b>	<b>111,015</b>	<b>4.63</b>	<b>-15.20</b>		<b>-13.64</b>		<b>-11.51</b>		<b>-1.73</b>		<b>0.90</b>		<b>4.40</b>
<i>Custom Blended Index <sup>4</sup></i>			-13.65		-10.86		-8.88		-2.20		-0.85		1.75
<b>Loomis Sayles (06/08)</b>	<b>80,011</b>	<b>3.34</b>	<b>-2.72</b>	<b>26</b>	<b>-1.64</b>	<b>35</b>	<b>2.04</b>	<b>30</b>	<b>3.38</b>	<b>27</b>	<b>2.81</b>	<b>37</b>	<b>2.97</b>
<i>FTSE World Govt Bond</i>			2.00		2.51		6.17		4.27		2.96		2.19
<i>eA All Global Fixed Income</i>			-6.94		-4.31		-1.54		2.02		2.39		3.28
<b>Private Credit (10/16)</b>	<b>61,693</b>	<b>2.57</b>	<b>2.16</b>		<b>6.13</b>		<b>8.63</b>		<b>8.87</b>		--		--
<b>Absolute Return</b>	<b>160,710</b>	<b>6.70</b>											
<b>PAAMCO (10/02)</b>	<b>83,369</b>	<b>3.48</b>	<b>-8.12</b>		<b>-6.46</b>		<b>-6.52</b>		<b>-0.62</b>		<b>-0.52</b>		<b>2.54</b>
<i>BloomBar US Aggregate</i>			3.15		5.68		8.93		4.82		3.36		3.88
<i>HFRI FOF: Conservative</i>			-7.07		-5.61		-4.22		0.25		0.45		1.86
<b>Wellington Global Total Return (12/16)</b>	<b>77,340</b>	<b>3.23</b>	<b>0.51</b>	<b>5</b>	<b>1.44</b>	<b>6</b>	<b>3.19</b>	<b>10</b>	<b>4.52</b>	<b>4</b>	--		--
<i>US T-Bills 90 Day + 4%</i>			1.56		4.64		6.34		5.89		5.23		4.66
<i>eA Global Unconstrained Fixed Income</i>			-6.95		-4.39		-2.15		0.94		1.50		2.48
<b>Real Assets (01/98)</b>	<b>302,333</b>	<b>12.61</b>	<b>0.77</b>		<b>2.80</b>		<b>2.98</b>		<b>5.04</b>		<b>5.23</b>		<b>6.00</b>
<i>Real Assets Blended Index <sup>5</sup></i>			-7.62		-5.37		-5.24		1.04		1.30		5.35
<b>Core Real Estate</b>	<b>221,050</b>	<b>9.22</b>											
<b>JP Morgan Strategic Property (12/07)</b>	<b>134,171</b>	<b>5.60</b>	<b>1.57</b>		<b>4.34</b>		<b>5.54</b>		<b>6.41</b>		<b>8.08</b>		<b>11.29</b>
<i>NFI ODCE Net</i>			0.75		3.13		3.93		5.85		7.48		10.42
<i>NCREIF Property</i>			0.71		3.71		5.28		6.41		7.65		10.17
<b>Blackstone Property Partners (01/15)</b>	<b>86,879</b>	<b>3.62</b>	<b>3.06</b>		<b>5.89</b>		<b>8.01</b>		<b>9.54</b>		<b>12.71</b>		--
<i>NFI ODCE Net</i>			0.75		3.13		3.93		5.85		7.48		10.42
<i>NCREIF Property</i>			0.71		3.71		5.28		6.41		7.65		10.17



## Rates of Return Summary &amp; Universe Rankings

For the Periods Ending March 31, 2020

	Market Value (\$000s)	Actual Allocation (%)	3 Months (%)	Rank	FYTD (%)	Rank	1 Year (%)	Rank	3 Years (%)	Rank	5 Years (%)	Rank	10 Years (%)
<b>Opportunistic Real Estate</b>	<b>58,689</b>	<b>2.45</b>											
<b>Private Real Estate (08/11)</b>	<b>53,815</b>	<b>2.25</b>	<b>3.01</b>		<b>8.45</b>		<b>10.33</b>		<b>10.78</b>		<b>11.08</b>		<b>--</b>
<b>Private Real Estate Direct</b>													
<b>Columbus Square (01/98)</b>	<b>4,874</b>	<b>0.20</b>	<b>0.52</b>		<b>2.09</b>		<b>3.28</b>		<b>6.53</b>		<b>7.48</b>		<b>10.84</b>
NCREIF Property			0.71		3.71		5.28		6.41		7.65		10.17
NFI ODCE Net			0.75		3.13		3.93		5.85		7.48		10.42
<b>Other</b>	<b>22,594</b>	<b>0.94</b>											
<b>Mount Lucas Peak Partners (01/98)</b>	<b>22,594</b>	<b>0.94</b>	<b>-14.90</b>		<b>-14.93</b>		<b>-19.83</b>		<b>-8.03</b>		<b>-6.51</b>		<b>-1.78</b>
CS Hedge - Global Macro			-8.09		-5.44		-1.13		1.07		0.56		3.58
<b>Cash and Equivalents</b>	<b>113,063</b>	<b>4.72</b>											

## Notes:

<sup>1</sup> Total Fund Policy Index history available in appendix.<sup>2</sup> Total Fund Policy: Effective September 2019, the index consists of 60.0% MSCI ACWI, 25.0% BloomBar Universal, 15.0% NFI ODCE Net.<sup>3</sup> Performance data prior to October 31, 2014 is reflective of the Mellon Capital Passive Index fund. Due to contributions and withdrawals in this account, the returns may differ from the performance of the fund.<sup>4</sup> Custom Blended Index: Effective November 2018, the index consists of 50.0% ICE BofA ML Global HY Const, 50.0% CSFB Leveraged Loan.<sup>5</sup> Real Assets Blended Index: Effective January 2016, the index consists of 67.0% NFI ODCE Net, 33.0% Bloomberg Commodity.

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**Equity Manager Performance**

## Northern Trust Russell 1000 Index

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** US Large Cap Core
- **Vehicle** Non-Mutual Commingled
- **Benchmark** Russell 1000
- **Performance Inception Date** August 1998
- **Fees** 1 bps

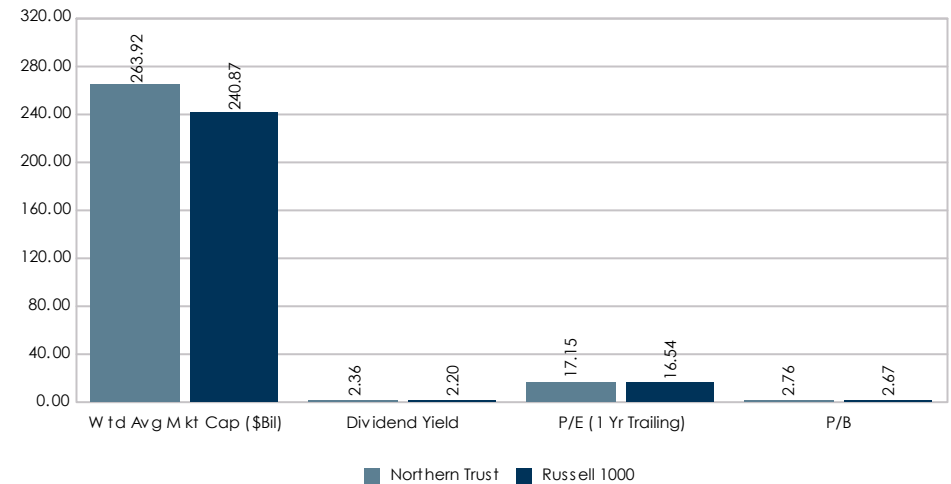
### Performance Goals

- Mirror the risk/return profile of the Russell 1000.
- Over rolling three year periods, rank above the median in the eA US Large Cap Core Equity universe.

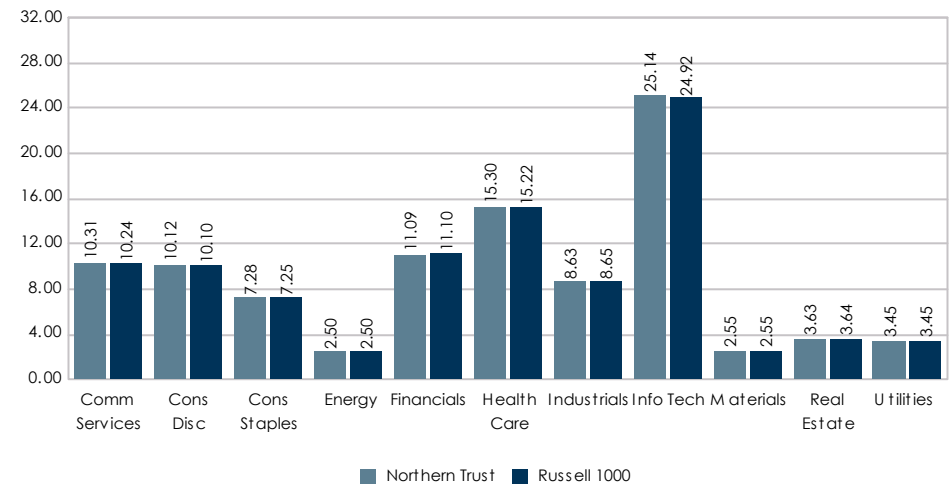
### Dollar Growth Summary (\$000s)

	FYTD	1 Year
<b>Beginning Market Value</b>	<b>465,476</b>	<b>446,539</b>
Net Additions	-47	-57
Return on Investment	-54,798	-35,851
<b>Ending Market Value</b>	<b>410,631</b>	<b>410,631</b>

### Characteristics



### Sector Allocation



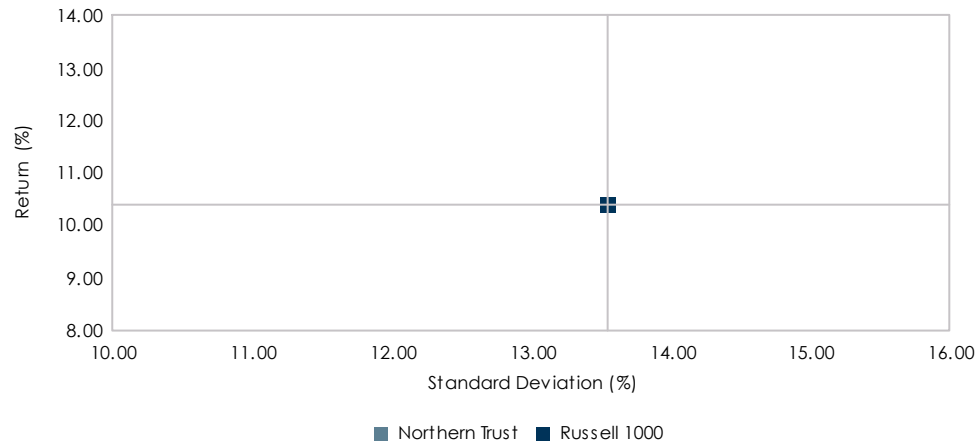
Characteristic and allocation charts represents data of the EB Daily Valued Large Cap Stock Index Fund (Non-Mutual Commingled).

Sector weights may not add to 100% due to securities that are not assigned to a Global Industry Classification Standard (GICS) sector.

## Northern Trust Russell 1000 Index

For the Periods Ending March 31, 2020

### 10 Year Risk / Return



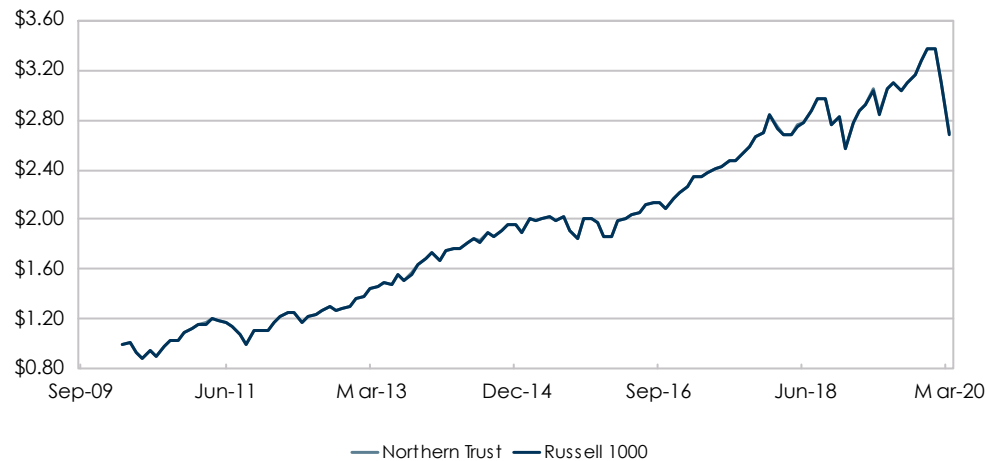
### 10 Year Portfolio Statistics

	Northern Trust	Russell 1000
Return (%)	10.40	10.39
Standard Deviation (%)	13.54	13.55
Sharpe Ratio	0.73	0.73

### Benchmark Relative Statistics

Beta	1.00
R Squared (%)	100.00
Alpha (%)	0.01
Tracking Error (%)	0.04
Batting Average (%)	60.00
Up Capture (%)	99.99
Down Capture (%)	99.94

### 10 Year Growth of a Dollar

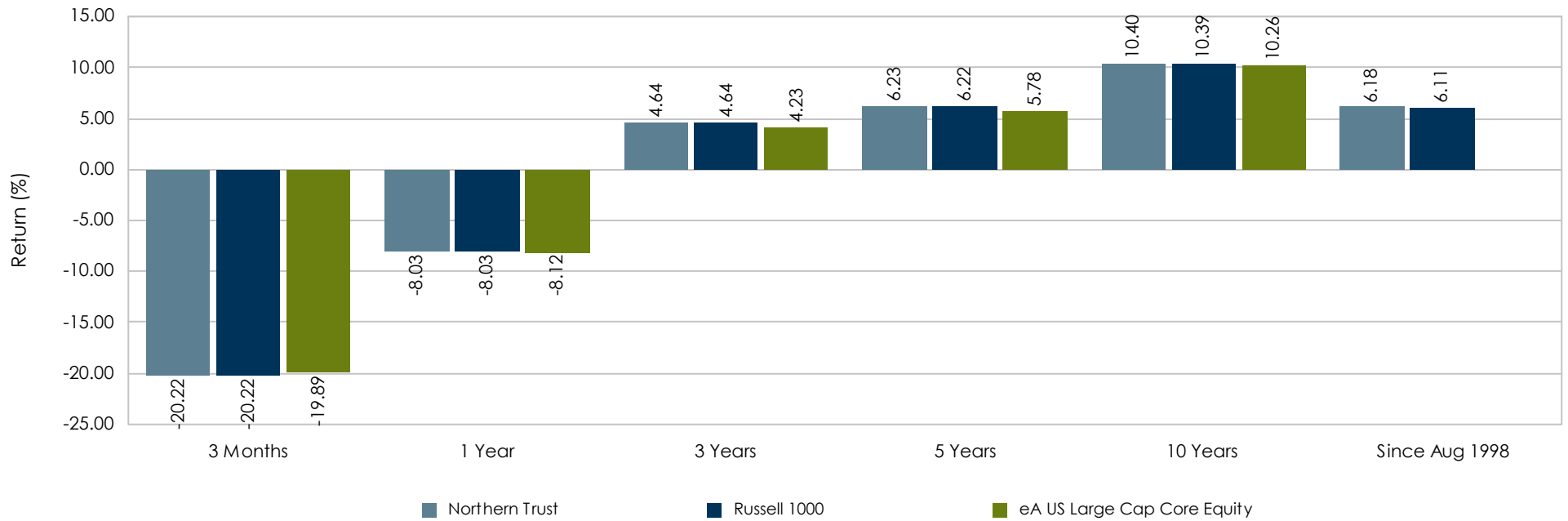


### 10 Year Return Analysis

	Northern Trust	Russell 1000
Number of Months	120	120
Highest Monthly Return (%)	11.20	11.21
Lowest Monthly Return (%)	-13.21	-13.21
Number of Positive Months	85	85
Number of Negative Months	35	35
% of Positive Months	70.83	70.83

## Northern Trust Russell 1000 Index

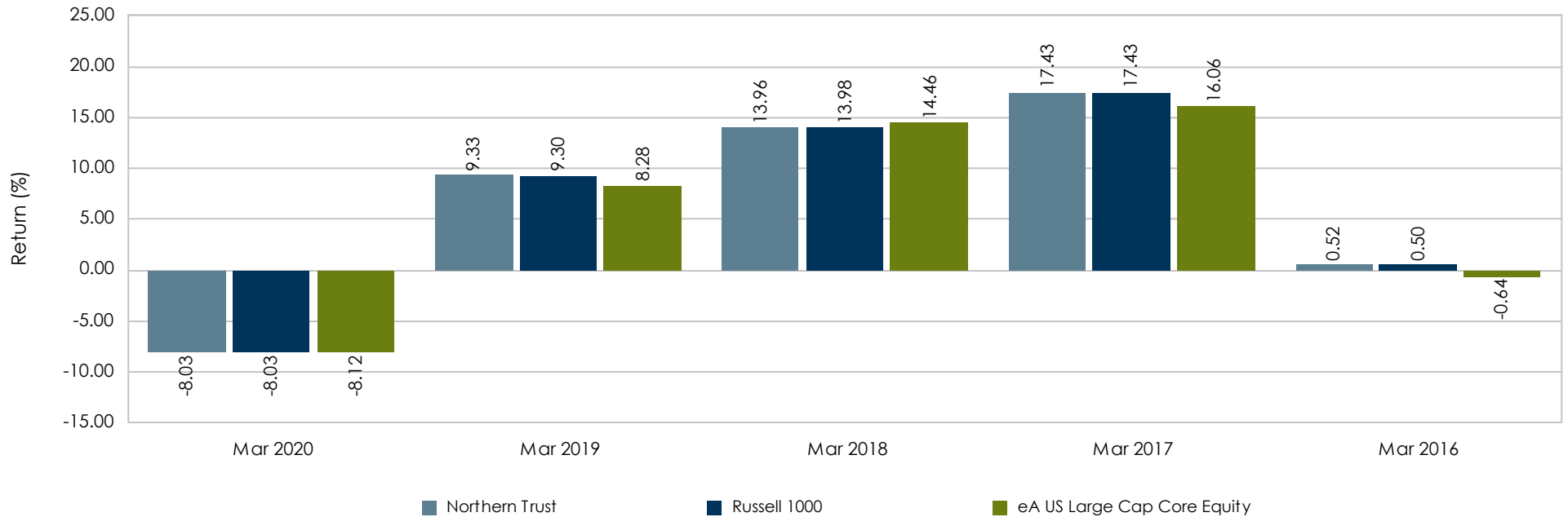
For the Periods Ending March 31, 2020



Ranking	56	49	43	41	42
5th Percentile	-14.93	-1.52	8.69	8.58	12.26
25th Percentile	-18.21	-5.64	5.96	6.81	10.81
50th Percentile	-19.89	-8.12	4.23	5.78	10.26
75th Percentile	-21.74	-10.93	2.31	4.51	9.50
95th Percentile	-26.19	-16.69	-0.25	2.21	8.01
Observations	351	351	332	309	238

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

**Northern Trust Russell 1000 Index**  
For the One Year Periods Ending March



Ranking	49	37	57	34	37
5th Percentile	-1.52	15.38	20.62	21.99	5.59
25th Percentile	-5.64	10.50	16.73	18.20	1.69
50th Percentile	-8.12	8.28	14.46	16.06	-0.64
75th Percentile	-10.93	5.74	12.18	13.99	-2.99
95th Percentile	-16.69	1.41	7.12	10.63	-6.78
Observations	351	404	398	394	371

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

## Boston Partners

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** US Small/Mid Cap Value
- **Vehicle** Separately Managed Account
- **Benchmarks** Russell 2500 Value and Russell 2000 Value
- **Performance Inception Date** January 1998
- **Fees** 60 bps base fee with annual performance fee

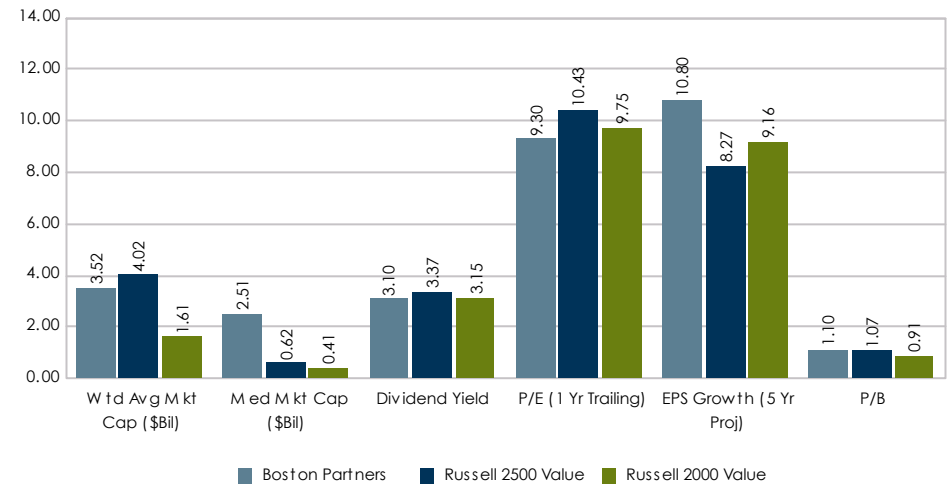
### Performance Goals

- Outperform the Russell 2500 Value and Russell 2000 Value.
- Over rolling three year periods, rank above the median in the eA US Mid Cap Value Equity universe.

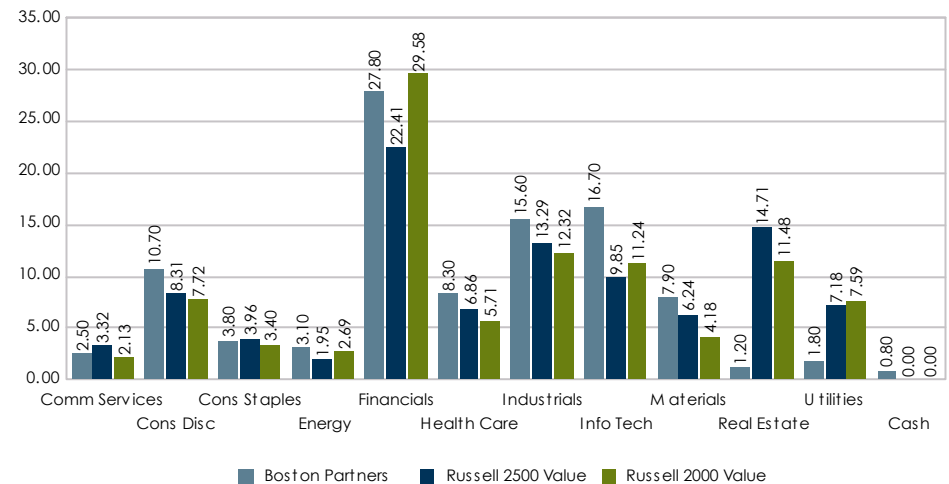
### Dollar Growth Summary (\$000s)

	FYTD	1 Year
<b>Beginning Market Value</b>	<b>88,741</b>	<b>84,665</b>
Net Additions	-12,868	-12,993
Return on Investment	-24,844	-20,642
Income	1,219	1,655
Gain/Loss	-26,062	-22,297
<b>Ending Market Value</b>	<b>51,029</b>	<b>51,029</b>

### Characteristics



### Sector Allocation



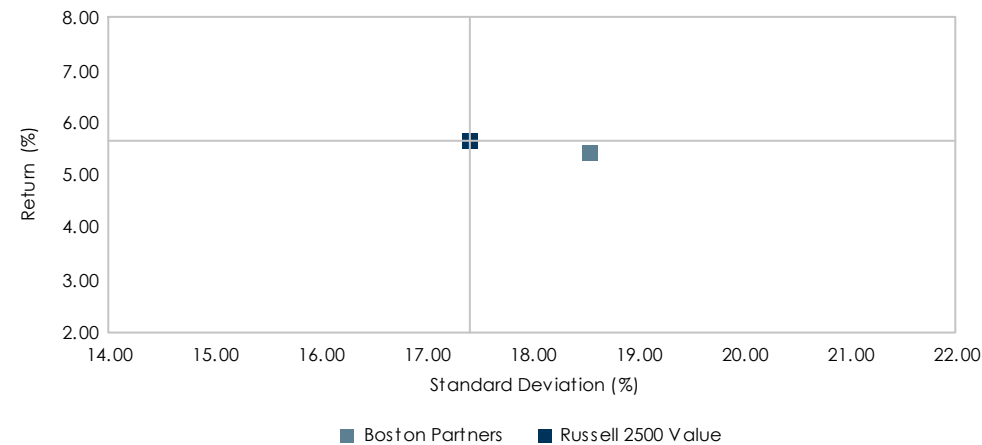
Sector weights may not add to 100% due to securities that are not assigned to a Global Industry Classification Standard (GICS) sector.



Boston Partners

For the Periods Ending March 31, 2020

10 Year Risk / Return



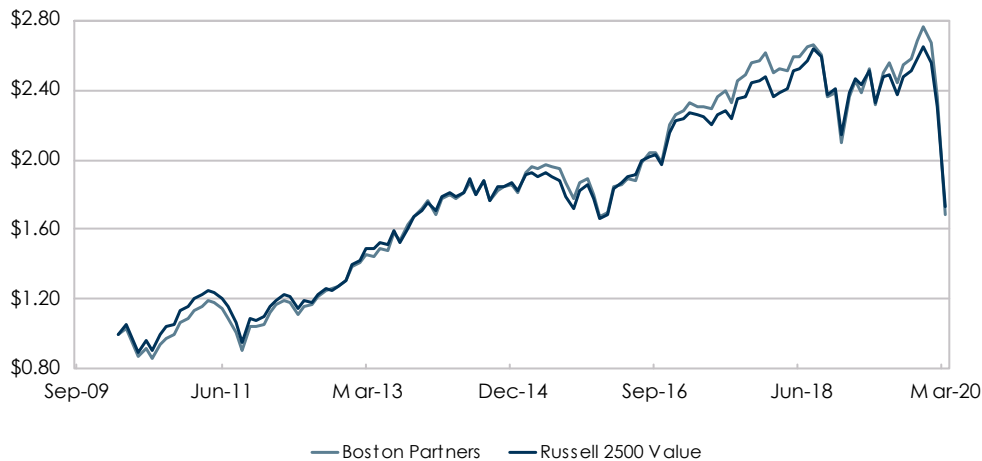
10 Year Portfolio Statistics

	Boston Partners	Russell 2500 Value
Return (%)	5.39	5.65
Standard Deviation (%)	18.54	17.41
Sharpe Ratio	0.26	0.29

Benchmark Relative Statistics

Beta	1.05
R Squared (%)	96.72
Alpha (%)	-0.35
Tracking Error (%)	3.46
Batting Average (%)	51.67
Up Capture (%)	102.07
Down Capture (%)	102.54

10 Year Growth of a Dollar

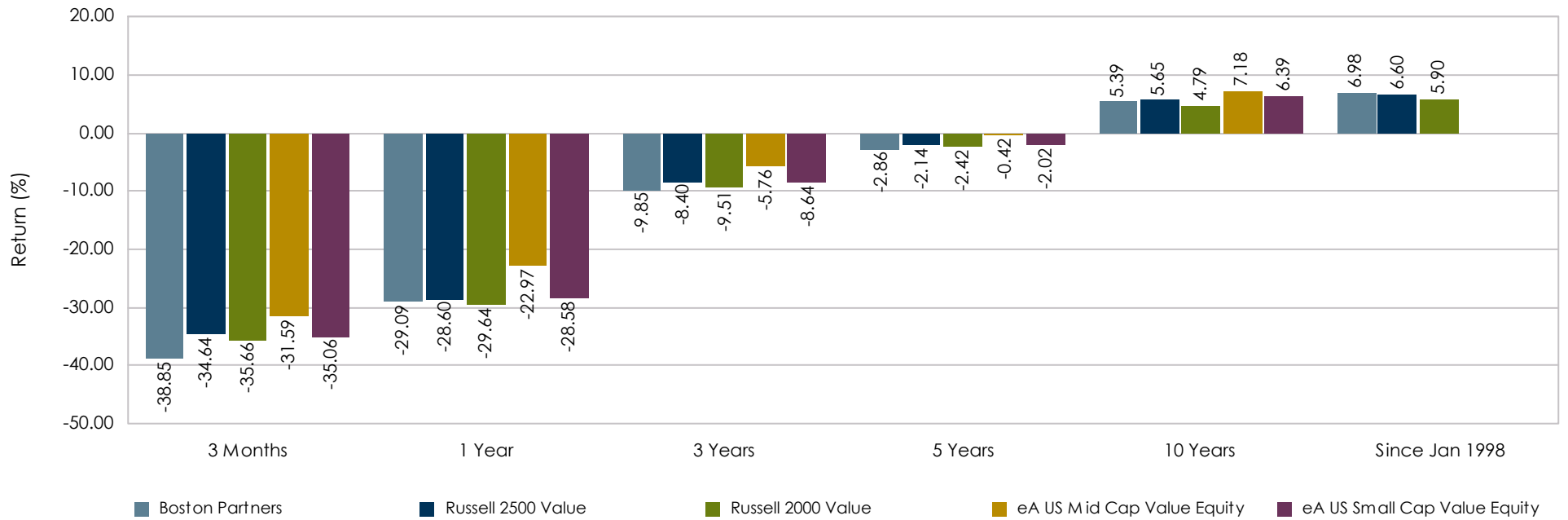


10 Year Return Analysis

	Boston Partners	Russell 2500 Value
Number of Months	120	120
Highest Monthly Return (%)	14.23	13.92
Lowest Monthly Return (%)	-28.24	-24.93
Number of Positive Months	77	78
Number of Negative Months	43	42
% of Positive Months	64.17	65.00

## Boston Partners

For the Periods Ending March 31, 2020

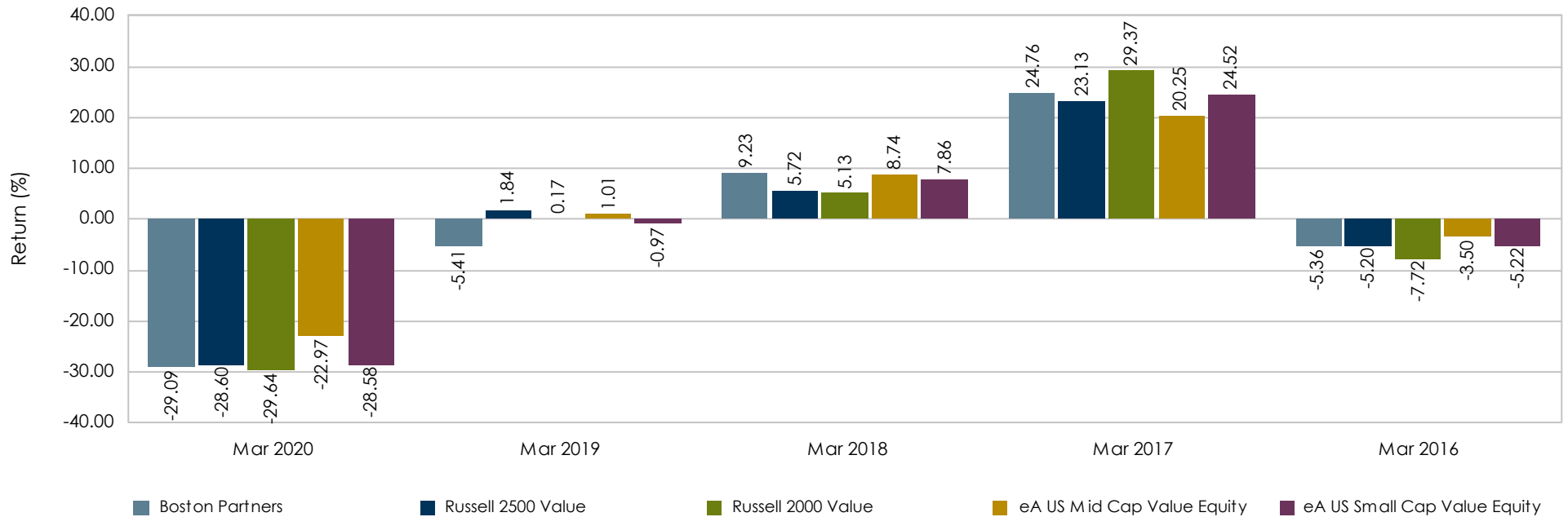


Ranking	91 / 84	83 / 55	88 / 64	82 / 67	89 / 81
5th Percentile	-24.98 / -25.81	-14.41 / -18.65	0.44 / -1.70	3.19 / 2.89	9.36 / 8.91
25th Percentile	-29.01 / -32.50	-19.43 / -24.40	-3.53 / -6.13	1.18 / -0.42	8.37 / 7.02
50th Percentile	-31.59 / -35.06	-22.97 / -28.58	-5.76 / -8.64	-0.42 / -2.02	7.18 / 6.39
75th Percentile	-34.55 / -37.45	-27.22 / -32.00	-7.77 / -10.59	-2.04 / -3.42	6.10 / 5.58
95th Percentile	-41.33 / -42.19	-35.96 / -37.62	-12.83 / -13.91	-5.37 / -6.96	4.54 / 3.46
Observations	93 / 228	93 / 227	92 / 220	90 / 211	80 / 188

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

## Boston Partners

For the One Year Periods Ending March



Ranking	83 / 55	92 / 86	43 / 37	7 / 48	68 / 52
5th Percentile	-14.41 / -18.65	7.60 / 9.32	16.09 / 15.84	27.13 / 34.10	2.60 / 0.96
25th Percentile	-19.43 / -24.40	4.30 / 2.19	10.93 / 10.80	22.88 / 27.89	-1.25 / -3.13
50th Percentile	-22.97 / -28.58	1.01 / -0.97	8.74 / 7.86	20.25 / 24.52	-3.50 / -5.22
75th Percentile	-27.22 / -32.00	-1.72 / -3.90	6.63 / 5.23	17.33 / 21.67	-6.28 / -8.10
95th Percentile	-35.96 / -37.62	-8.11 / -7.36	3.11 / 1.06	13.58 / 15.49	-10.96 / -13.84
Observations	93 / 227	104 / 249	111 / 247	114 / 251	109 / 248

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

## Silvercrest

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** US Small/Mid Cap Growth
- **Vehicle** Separately Managed Account
- **Benchmark** Russell 2000 Growth
- **Performance Inception Date** February 2014
- **Fees** First \$25M at 100 bps, next \$25M at 90 bps, balance at 80 bps

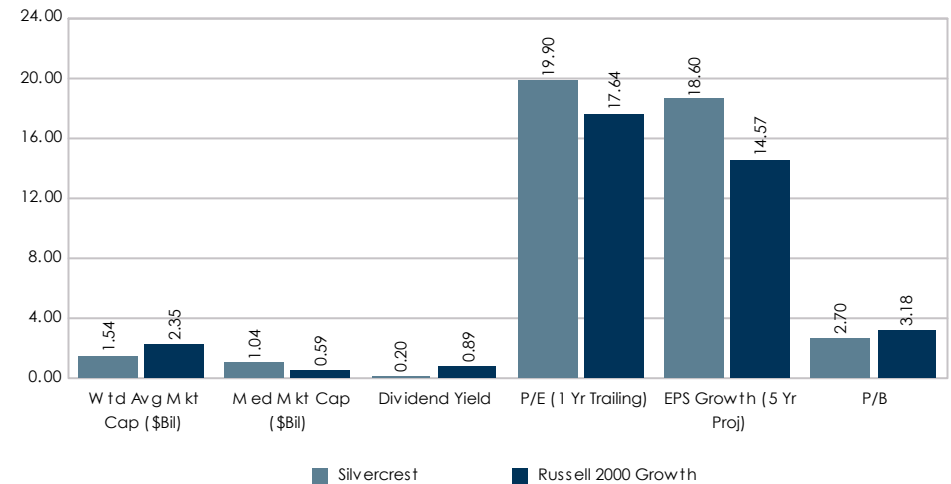
### Performance Goals

- Outperform the Russell 2000 Growth.
- Over rolling three year periods, rank above median in the eA US Small Cap Growth Equity universe.

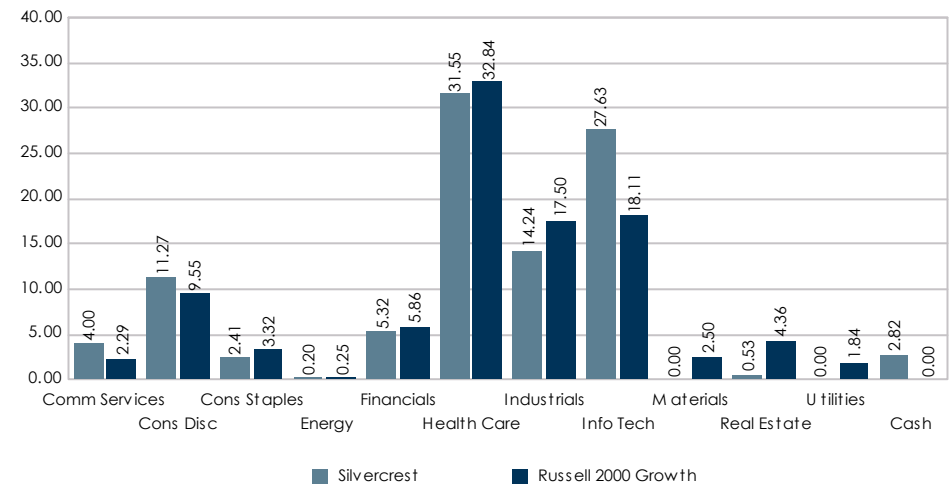
### Dollar Growth Summary (\$000s)

	FYTD	1 Year
<b>Beginning Market Value</b>	<b>95,035</b>	<b>94,235</b>
Net Additions	-13,016	-13,224
Return on Investment	-19,301	-18,293
Income	116	268
Gain/Loss	-19,417	-18,561
<b>Ending Market Value</b>	<b>62,718</b>	<b>62,718</b>

### Characteristics



### Sector Allocation

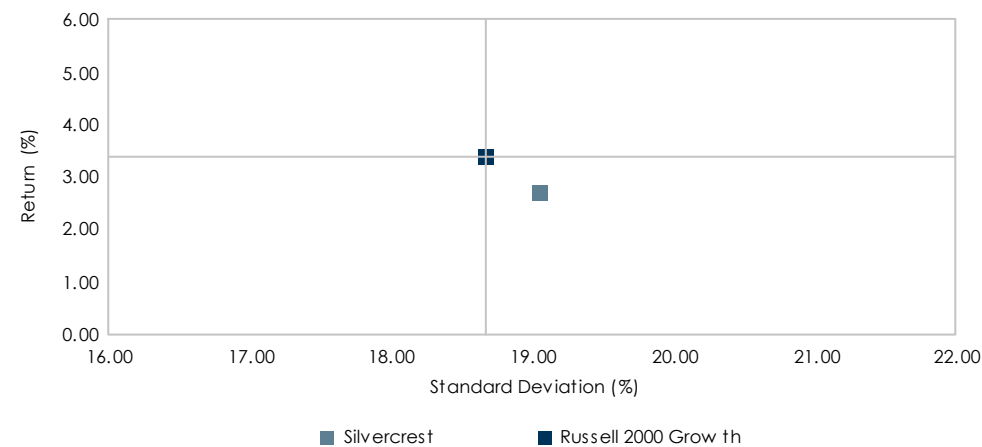


Sector weights may not add to 100% due to securities that are not assigned to a Global Industry Classification Standard (GICS) sector.

Silvercrest

For the Periods Ending March 31, 2020

6 Year Risk / Return



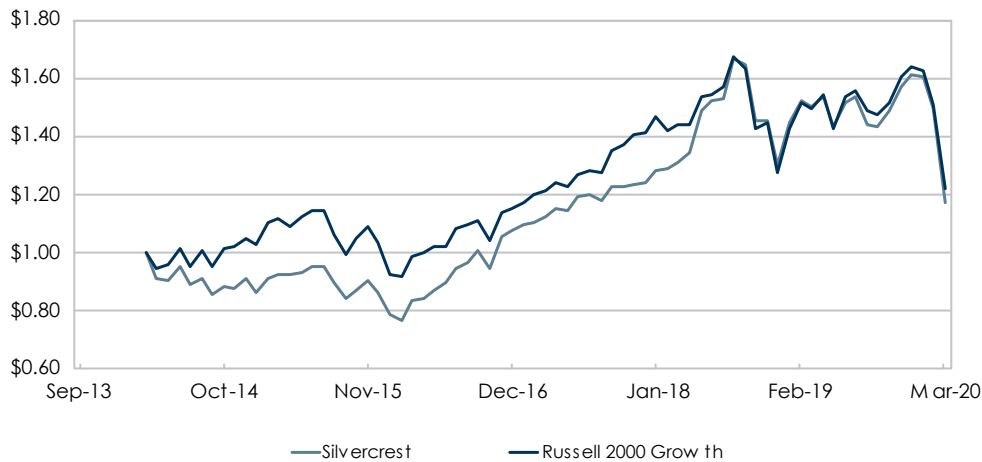
6 Year Portfolio Statistics

	Silvercrest	Russell 2000 Growth
Return (%)	2.68	3.36
Standard Deviation (%)	19.06	18.68
Sharpe Ratio	0.09	0.13

Benchmark Relative Statistics

Beta	0.97
R Squared (%)	90.49
Alpha (%)	-0.43
Tracking Error (%)	5.90
Batting Average (%)	54.17
Up Capture (%)	93.17
Down Capture (%)	97.41

6 Year Growth of a Dollar

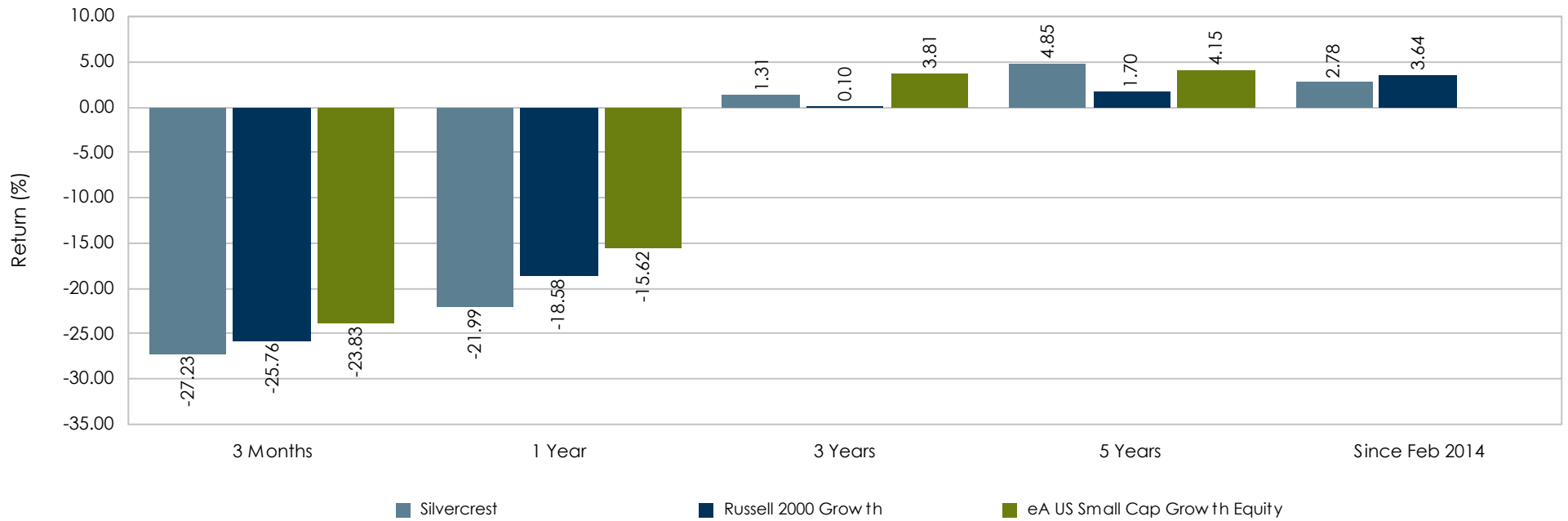


6 Year Return Analysis

	Silvercrest	Russell 2000 Growth
Number of Months	72	72
Highest Monthly Return (%)	11.26	11.55
Lowest Monthly Return (%)	-21.44	-19.10
Number of Positive Months	46	47
Number of Negative Months	26	25
% of Positive Months	63.89	65.28

## Silvercrest

For the Periods Ending March 31, 2020

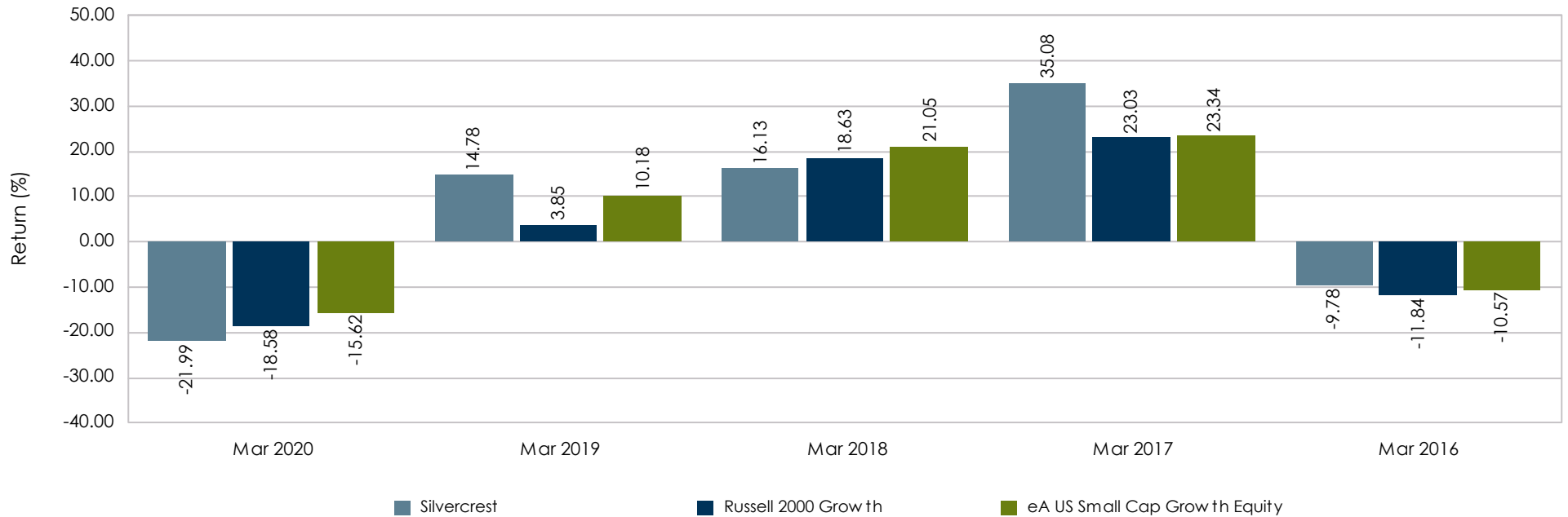


Ranking	79	80	70	43
5th Percentile	-14.18	-4.55	14.71	11.55
25th Percentile	-20.36	-11.08	7.95	6.57
50th Percentile	-23.83	-15.62	3.81	4.15
75th Percentile	-26.38	-20.48	0.39	2.64
95th Percentile	-31.67	-27.30	-5.62	-1.36
Observations	174	173	172	162

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

## Silvercrest

For the One Year Periods Ending March



Ranking	80	23	76	4	46
5th Percentile	-4.55	25.98	35.03	33.36	-0.22
25th Percentile	-11.08	14.28	25.10	26.77	-6.06
50th Percentile	-15.62	10.18	21.05	23.34	-10.57
75th Percentile	-20.48	5.26	16.25	19.56	-14.24
95th Percentile	-27.30	-1.10	11.02	14.10	-20.20
Observations	173	181	183	190	190

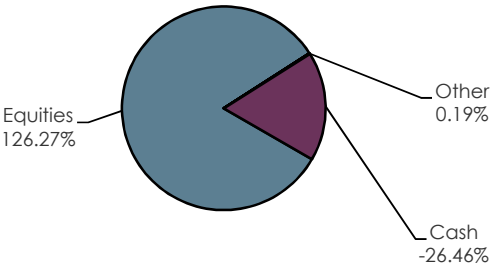
The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

Grosvenor Long/Short Equity

For the Periods Ending March 31, 2020

Strategy Allocation

Market Value: \$213,871,024



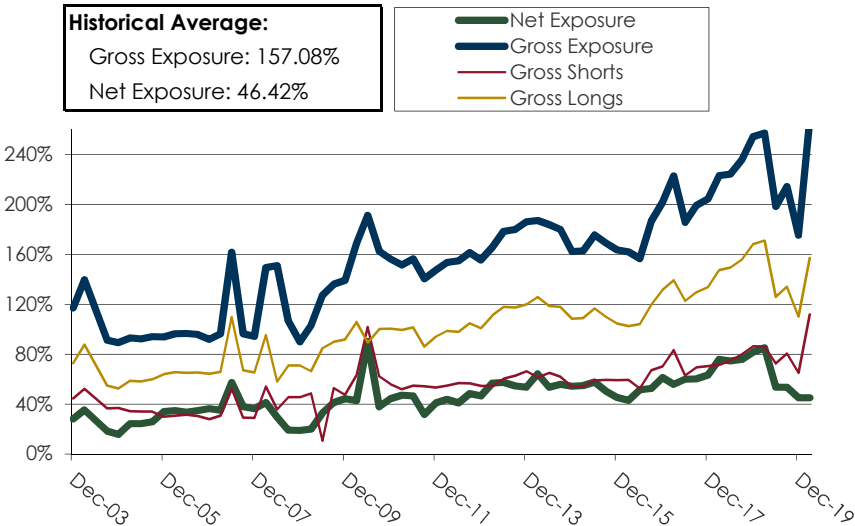
Strategy

- Equity Long/Short Hedge Fund of Funds
- Performance Inception Date: November 2003

Exposure

- Net Exposure: 45.11%
- Gross Exposure: 268.97%

Historical Net & Gross Exposure



Performance Goals

- Meet or exceed the return of the MSCI All Country World, over extended time periods (5 to 10 years).
- The volatility (standard deviation) of the portfolio should be less than two-thirds the volatility of the MSCI All Country World.
- The Beta of the portfolio relative to the MSCI All Country World Index should be < 0.7.

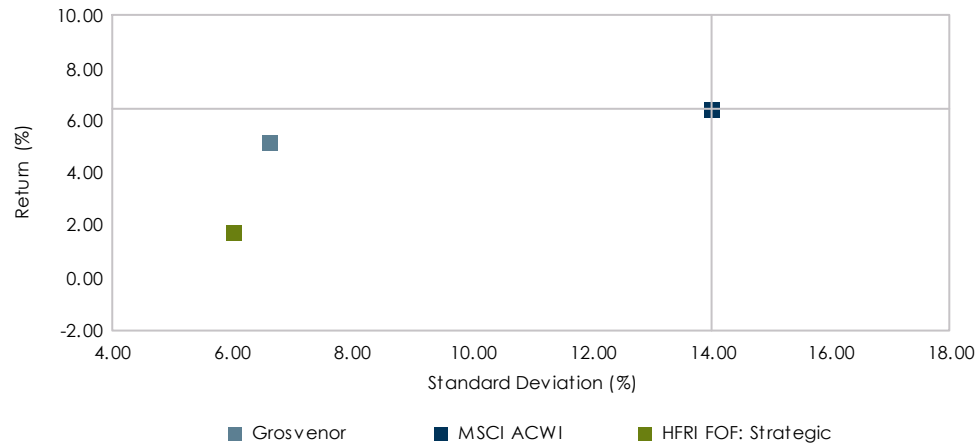
Characteristics provided by manager are the weighted average of GLSEF and GLSEF-B data.



## Grosvenor Long/Short Equity

For the Periods Ending March 31, 2020

### 10 Year Risk / Return



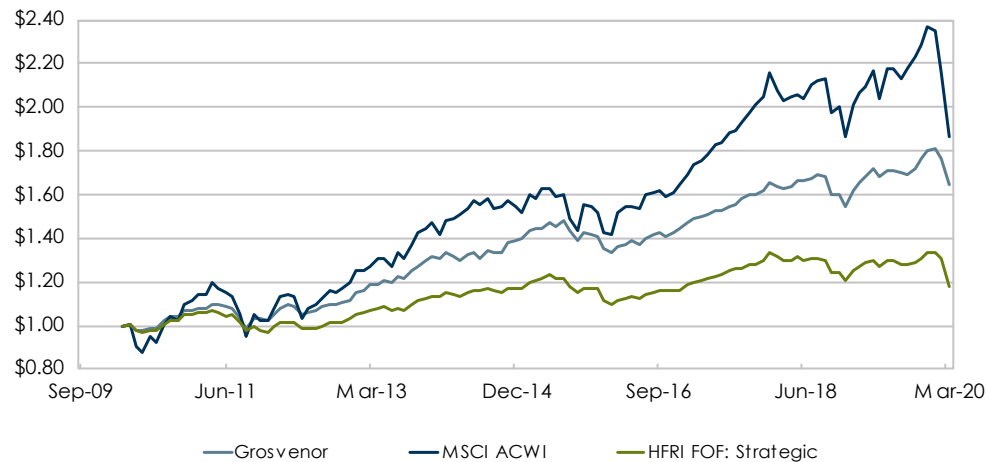
### 10 Year Portfolio Statistics

	Grosvenor	MSCI ACWI	HFRI FOF: Strategic
Return (%)	5.13	6.45	1.68
Standard Deviation (%)	6.64	14.00	6.04
Sharpe Ratio	0.69	0.42	0.18

### Benchmark Relative Statistics

Beta	0.41	1.01
R Squared (%)	75.04	84.00
Alpha (%)	2.27	3.42
Tracking Error (%)	8.89	2.66
Batting Average (%)	48.33	67.50
Up Capture (%)	44.99	130.16
Down Capture (%)	41.61	86.18

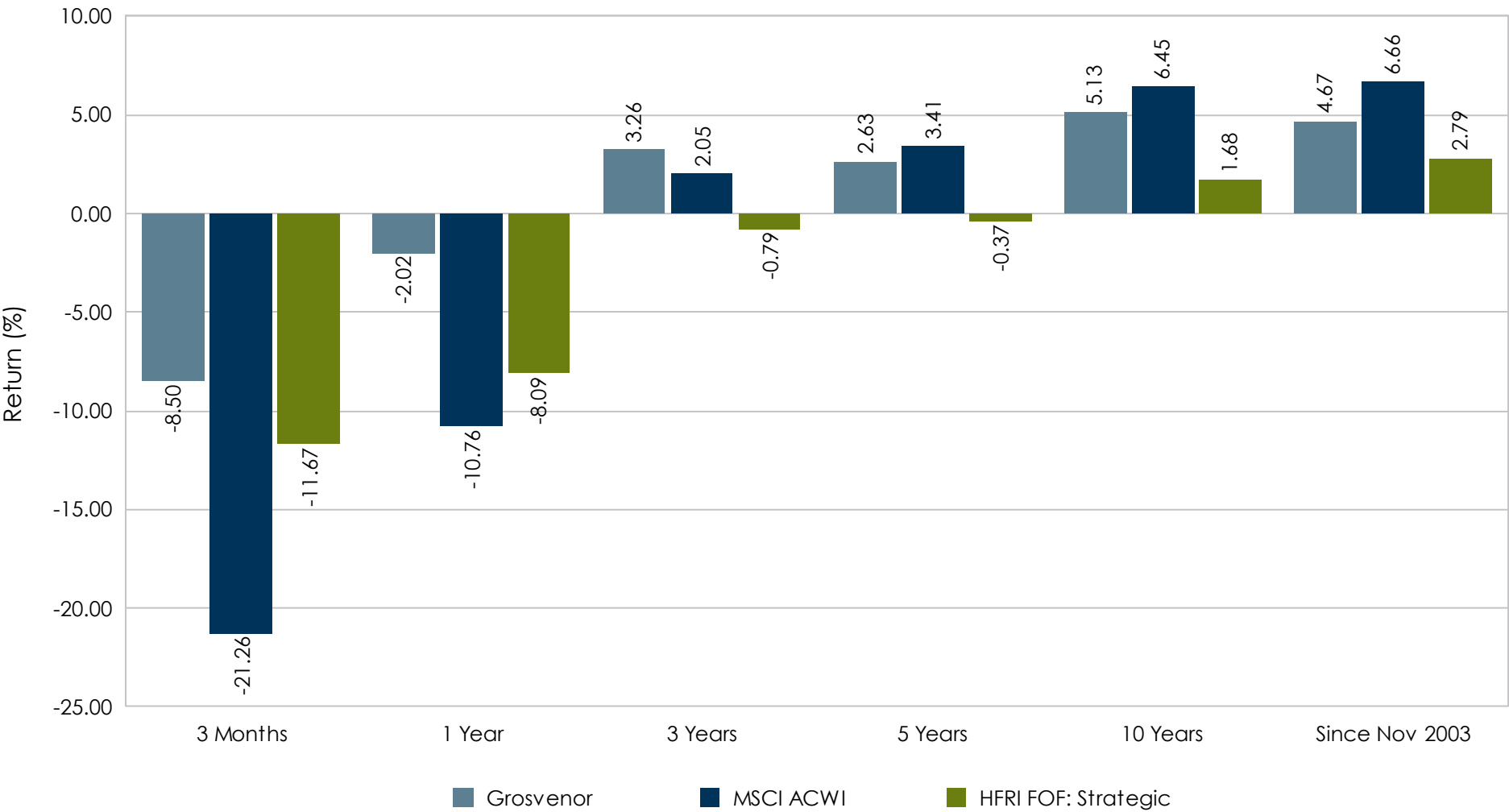
### 10 Year Growth of a Dollar



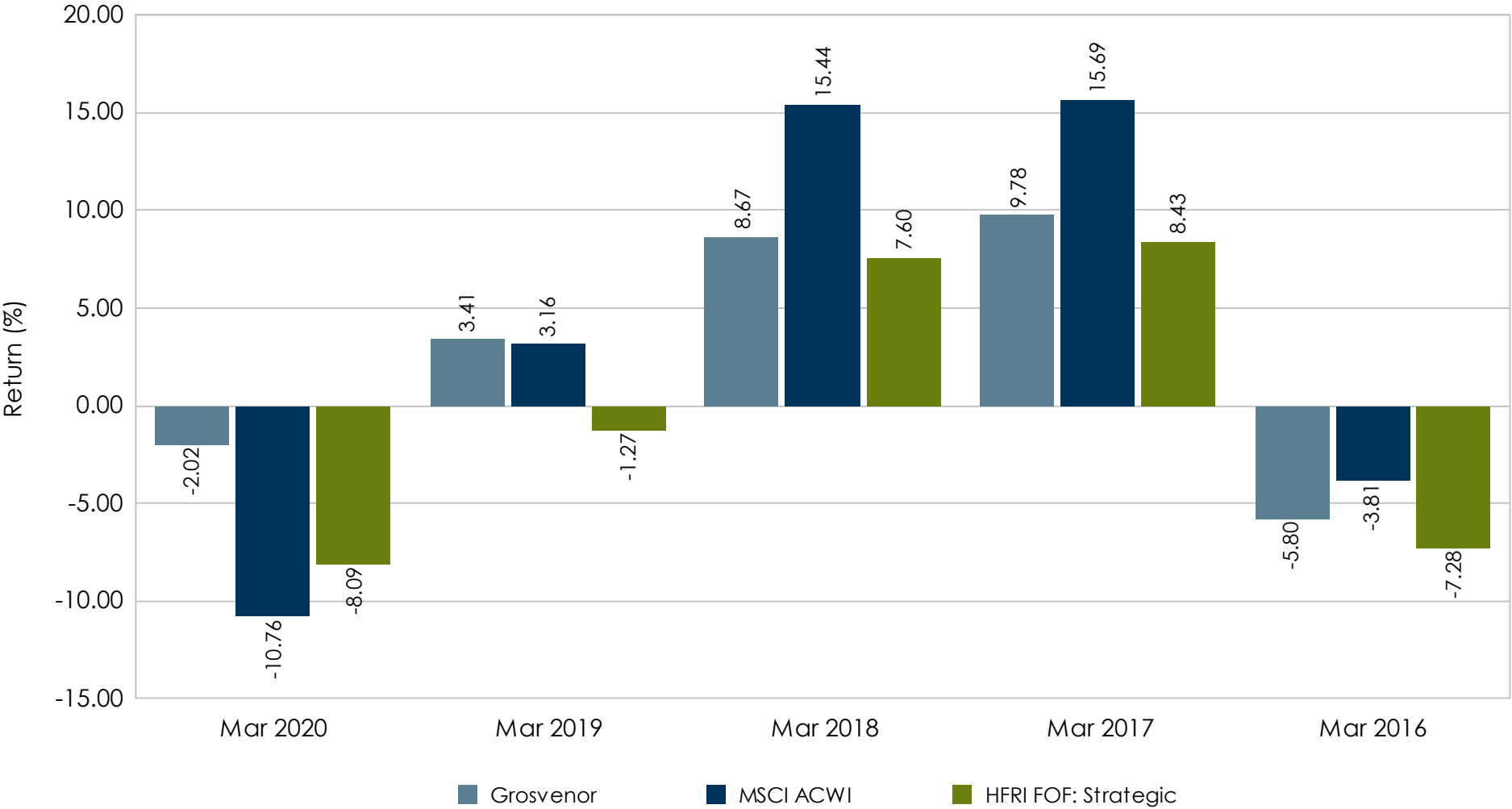
### 10 Year Return Analysis

	Grosvenor	MSCI ACWI	HFRI FOF: Strategic
Number of Months	120	120	120
Highest Monthly Return (%)	5.18	10.74	3.33
Lowest Monthly Return (%)	-6.74	-13.44	-9.47
Number of Positive Months	78	76	71
Number of Negative Months	42	44	49
% of Positive Months	65.00	63.33	59.17

Grosvenor Long/Short Equity  
For the Periods Ending March 31, 2020



**Grosvenor Long/Short Equity**  
*For the One Year Periods Ending March*



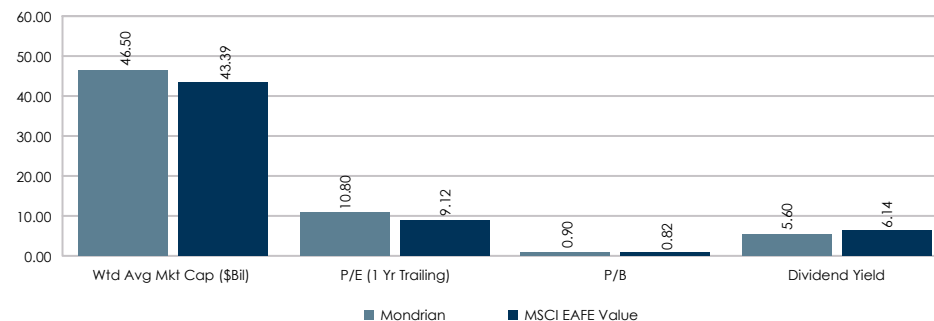
## Mondrian International

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** Int'l Developed Markets Equity
- **Vehicle** Limited Partnership
- **Benchmark** MSCI EAFE Value
- **Performance Inception Date** May 2004
- **Fees** 70 bps on the first \$20 million, 50 bps on the next \$30 million, 40 bps on the next \$50 million, 30 bps thereafter

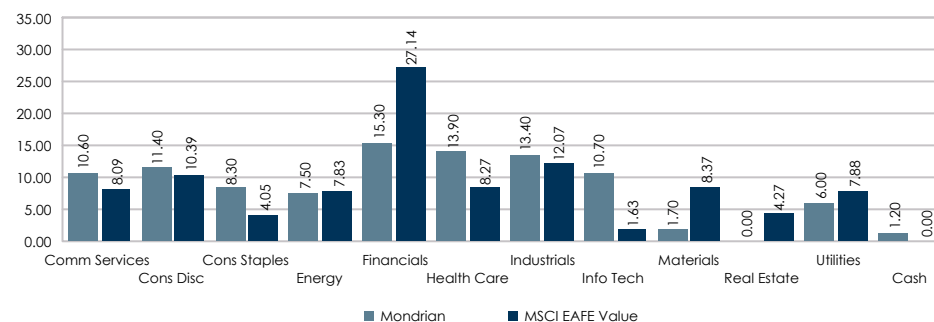
### Characteristics



### Performance Goals

- Outperform the MSCI EAFE Value.
- Over rolling three year periods, rank above the median in the eA EAFE All Cap Value Equity universe.

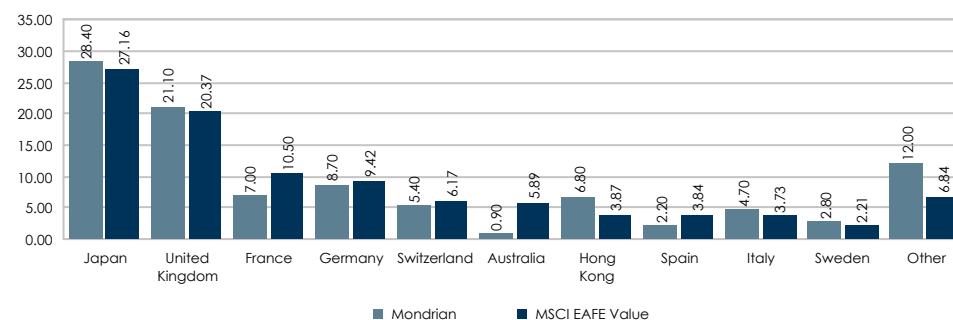
### Sector Allocation



### Dollar Growth Summary (\$000s)

	FYTD	1 Year
<b>Beginning Market Value</b>	<b>140,801</b>	<b>138,944</b>
Net Additions	0	0
Return on Investment	-28,600	-26,743
<b>Ending Market Value</b>	<b>112,201</b>	<b>112,201</b>

### Country Allocation

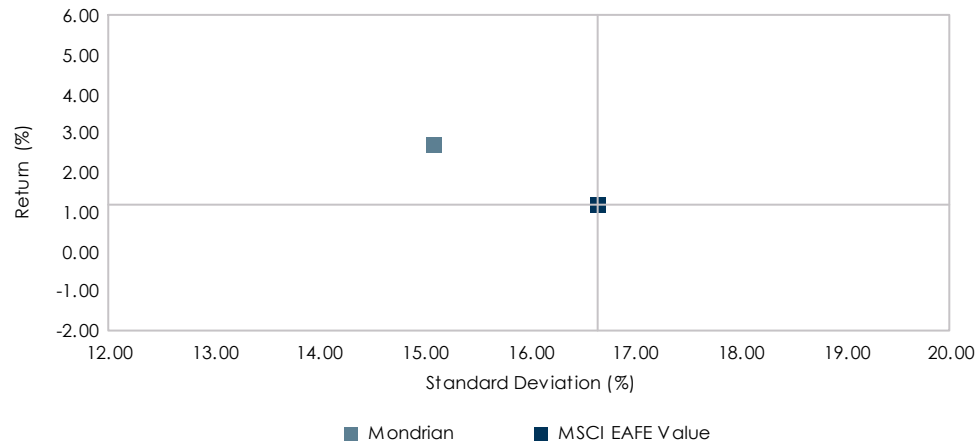


Characteristic and allocation charts represents data of the Mondrian International Equity Fund, LP (Limited Partnership).

## Mondrian International

For the Periods Ending March 31, 2020

### 10 Year Risk / Return



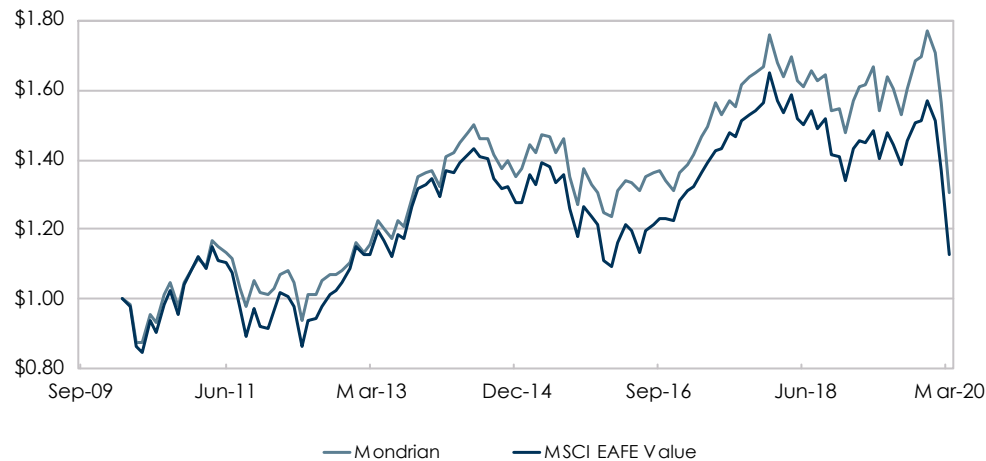
### 10 Year Portfolio Statistics

	Mondrian	MSCI EAFE Value
Return (%)	2.68	1.20
Standard Deviation (%)	15.09	16.65
Sharpe Ratio	0.14	0.04

### Benchmark Relative Statistics

Beta	0.88
R Squared (%)	94.23
Alpha (%)	1.52
Tracking Error (%)	4.14
Batting Average (%)	54.17
Up Capture (%)	88.44
Down Capture (%)	86.46

### 10 Year Growth of a Dollar

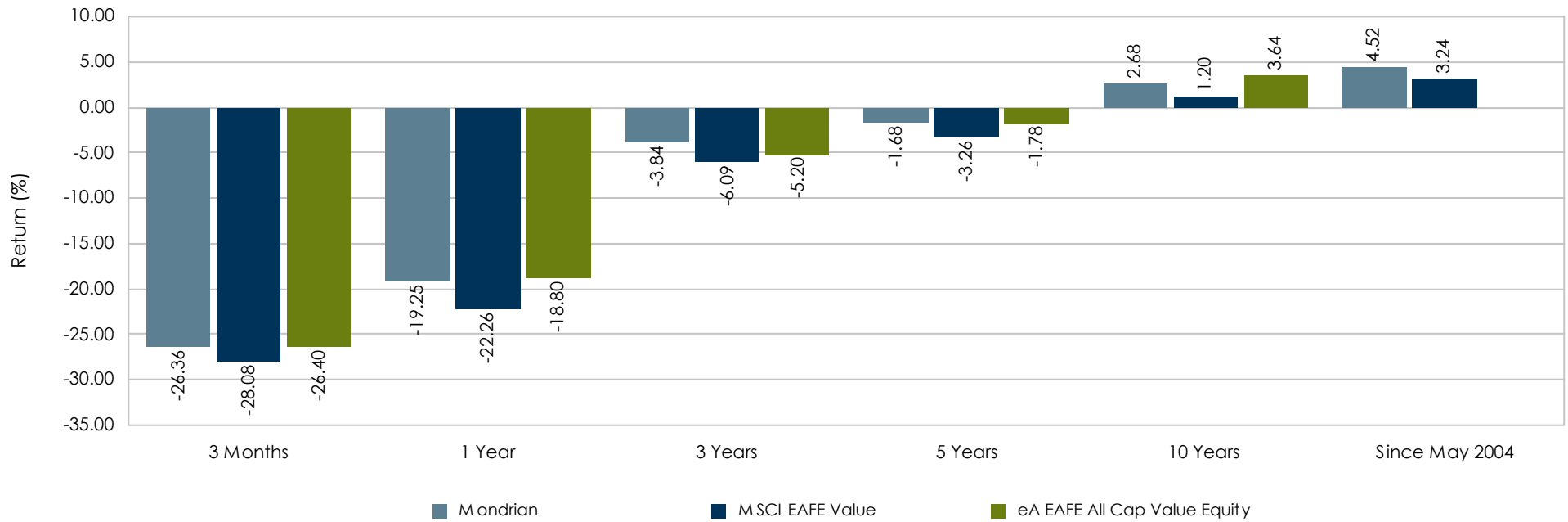


### 10 Year Return Analysis

	Mondrian	MSCI EAFE Value
Number of Months	120	120
Highest Monthly Return (%)	9.30	10.70
Lowest Monthly Return (%)	-16.55	-17.61
Number of Positive Months	66	64
Number of Negative Months	54	56
% of Positive Months	55.00	53.33

## Mondrian International

For the Periods Ending March 31, 2020

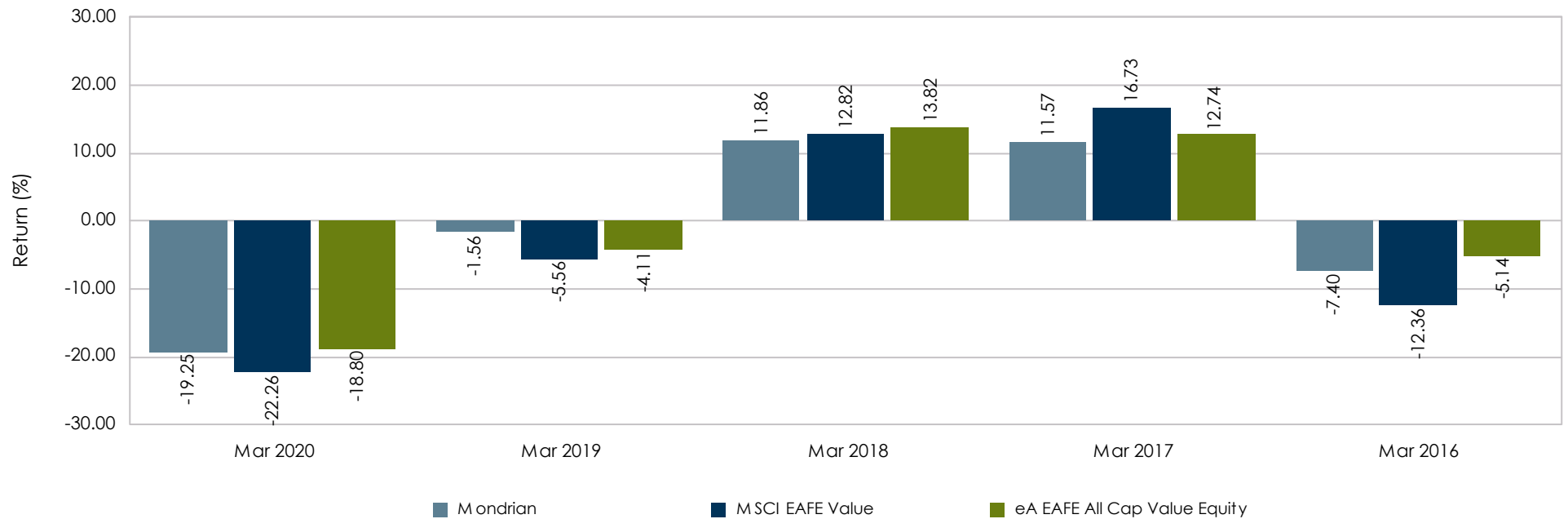


Ranking	49	54	42	48	59
5th Percentile	-17.50	-8.41	1.43	3.74	7.31
25th Percentile	-23.13	-15.73	-2.80	0.61	4.94
50th Percentile	-26.40	-18.80	-5.20	-1.78	3.64
75th Percentile	-28.81	-21.67	-6.16	-3.24	1.68
95th Percentile	-32.88	-26.19	-8.74	-4.13	0.47
Observations	34	34	33	31	27

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

## Mondrian International

For the One Year Periods Ending March



Ranking	54	21	82	61	73
5th Percentile	-8.41	0.66	20.09	23.47	5.01
25th Percentile	-15.73	-2.36	16.22	16.05	-3.06
50th Percentile	-18.80	-4.11	13.82	12.74	-5.14
75th Percentile	-21.67	-8.83	12.77	10.45	-7.72
95th Percentile	-26.19	-10.45	7.00	9.73	-12.32
Observations	34	36	33	33	35

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

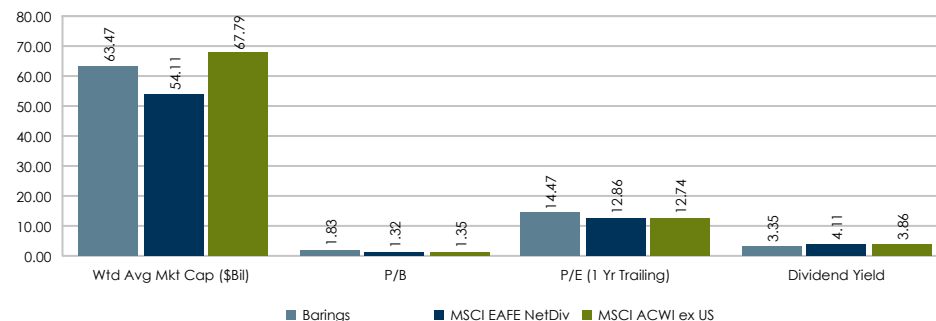
## Barings Focused EAFE Plus Equity

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** Int'l Developed Markets Equity
- **Vehicle** Non-Mutual Commingled
- **Benchmarks** MSCI EAFE NetDiv and MSCI ACWI ex US
- **Performance Inception Date** March 2012
- **Fees** 40 bps base fee plus performance based fee

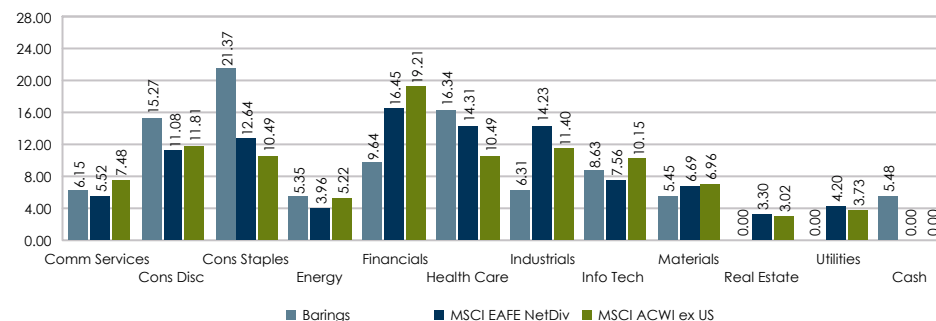
### Characteristics



### Performance Goals

- Outperform the MSCI EAFE NetDiv and MSCI ACWI ex US.
- Over rolling three year periods, rank above the median in the eA EAFE All Cap Equity universe.

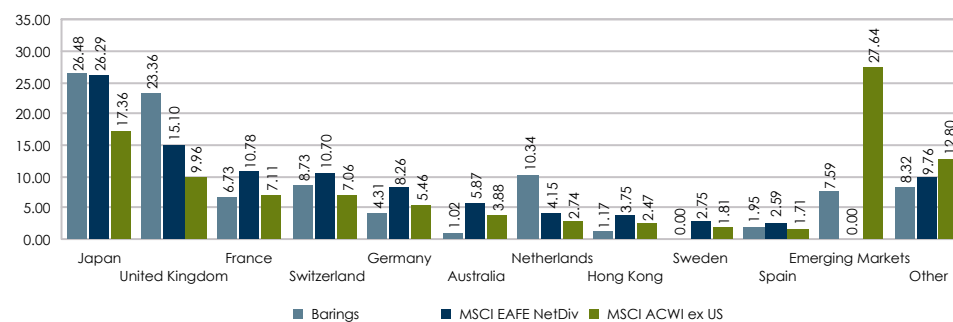
### Sector Allocation



### Dollar Growth Summary (\$000s)

	FYTD	1 Year
Beginning Market Value	120,844	116,359
Net Additions	29,497	29,383
Return on Investment	-20,738	-16,139
Ending Market Value	129,602	129,602

### Country Allocation



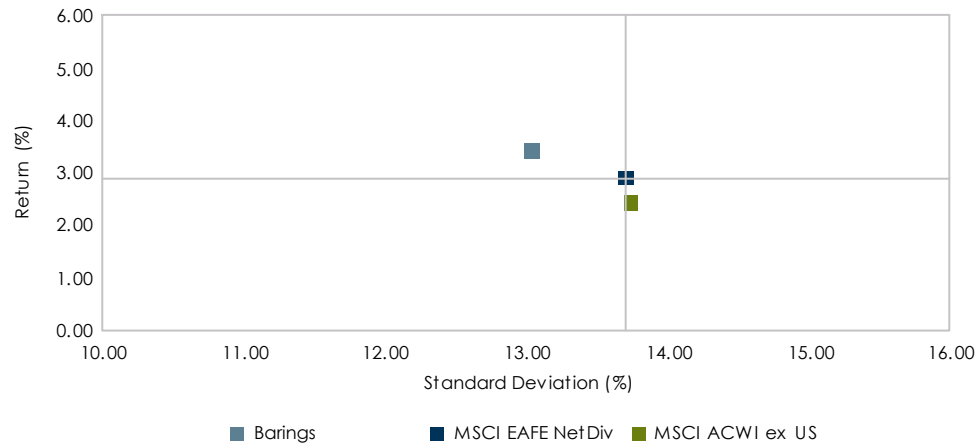
Characteristic and allocation charts represents data of the Baring Focused Int'l Equity (Non-Mutual Commingled).



## Barings Focused EAFE Plus Equity

For the Periods Ending March 31, 2020

### 8 Year Risk / Return



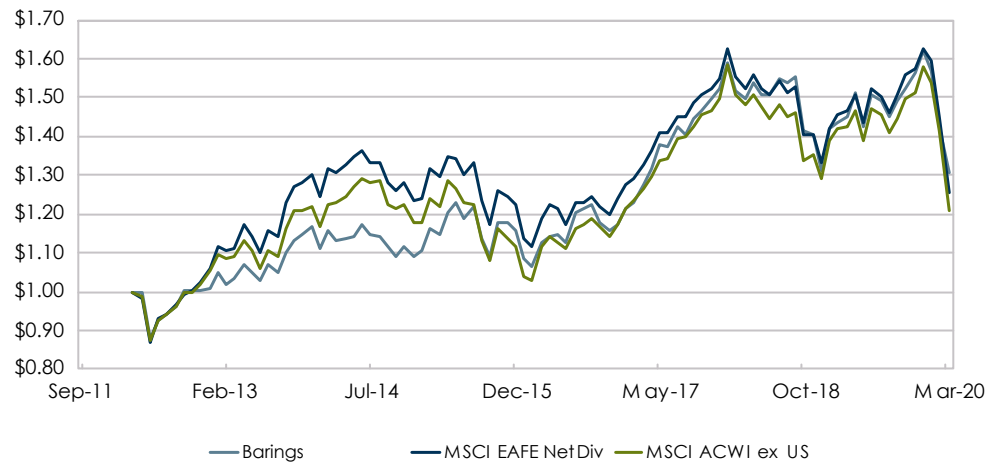
### 8 Year Portfolio Statistics

	Barings	MSCI EAFE NetDiv	MSCI ACWI ex US
Return (%)	3.42	2.89	2.42
Standard Deviation (%)	13.04	13.70	13.74
Sharpe Ratio	0.21	0.16	0.13

### Benchmark Relative Statistics

Beta	0.90	0.89
R Squared (%)	90.19	87.26
Alpha (%)	0.79	1.26
Tracking Error (%)	4.29	4.91
Batting Average (%)	54.17	51.04
Up Capture (%)	95.78	91.17
Down Capture (%)	94.08	88.13

### 8 Year Growth of a Dollar

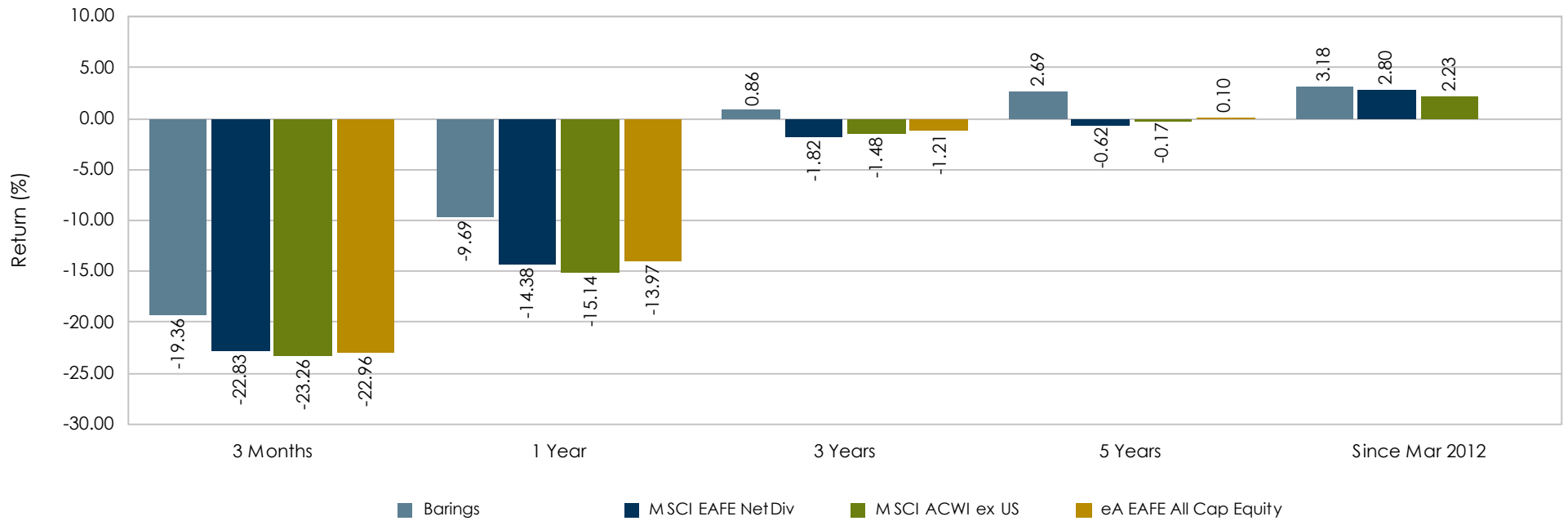


### 8 Year Return Analysis

	Barings	MSCI EAFE NetDiv	MSCI ACWI ex US
Number of Months	96	96	96
Highest Monthly Return (%)	8.31	7.82	8.21
Lowest Monthly Return (%)	-11.56	-13.35	-14.40
Number of Positive Months	54	54	57
Number of Negative Months	42	42	39
% of Positive Months	56.25	56.25	59.38

## Barings Focused EAFE Plus Equity

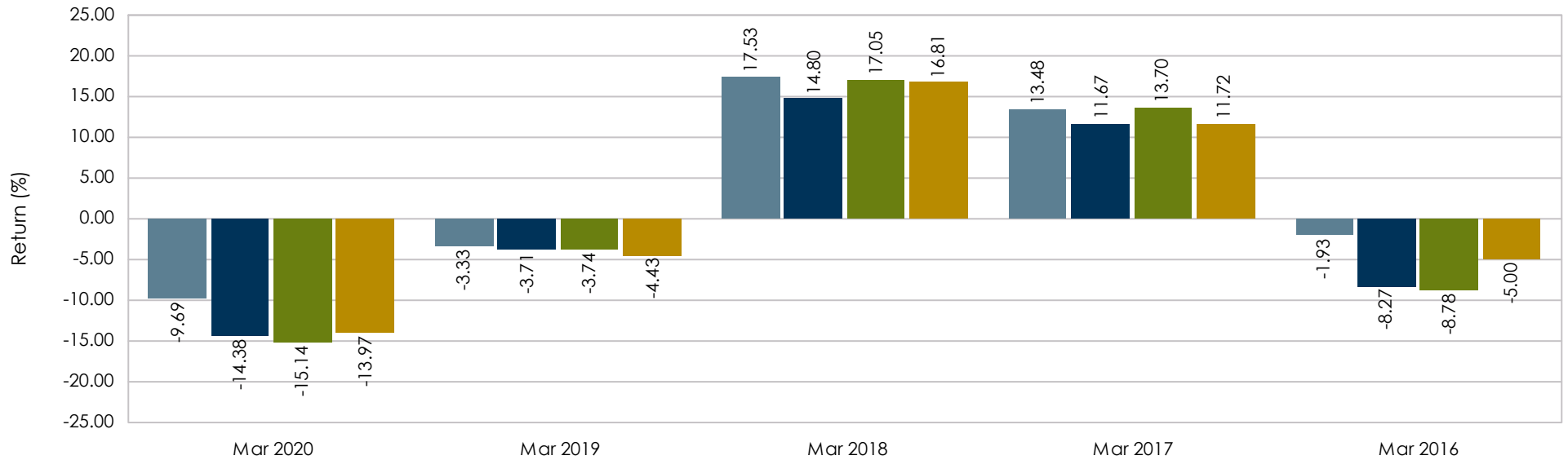
For the Periods Ending March 31, 2020



Ranking	23	26	25	16
5th Percentile	-16.28	-3.46	5.65	4.95
25th Percentile	-19.85	-9.60	0.70	1.77
50th Percentile	-22.96	-13.97	-1.21	0.10
75th Percentile	-25.65	-18.42	-3.78	-1.21
95th Percentile	-31.16	-23.79	-6.75	-3.53
Observations	125	125	121	109

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

**Barings Focused EAFE Plus Equity**  
For the One Year Periods Ending March



	Mar 2020	Mar 2019	Mar 2018	Mar 2017	Mar 2016
Ranking	26	38	40	25	25
5th Percentile	-3.46	1.93	27.21	17.84	1.83
25th Percentile	-9.60	-1.92	19.09	13.39	-2.03
50th Percentile	-13.97	-4.43	16.81	11.72	-5.00
75th Percentile	-18.42	-6.96	14.34	9.27	-7.21
95th Percentile	-23.79	-10.07	8.80	3.82	-11.14
Observations	125	137	130	124	118

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

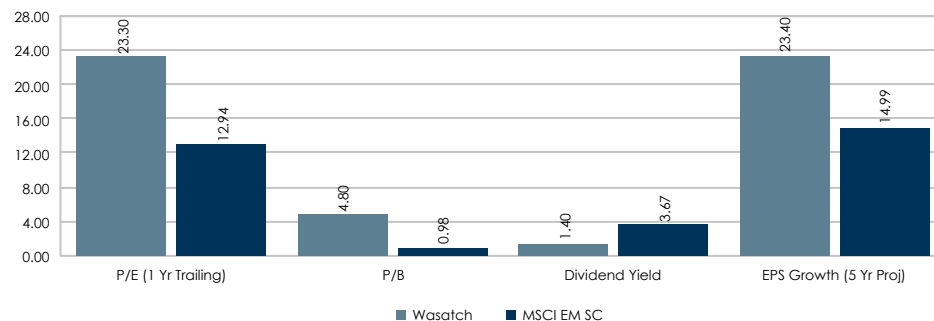
## Wasatch Emerging Markets

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** Emerging Markets Equity
- **Vehicle** Non-Mutual Commingled
- **Benchmark** MSCI EM SC
- **Performance Inception Date** September 2012
- **Fees** 135 bps

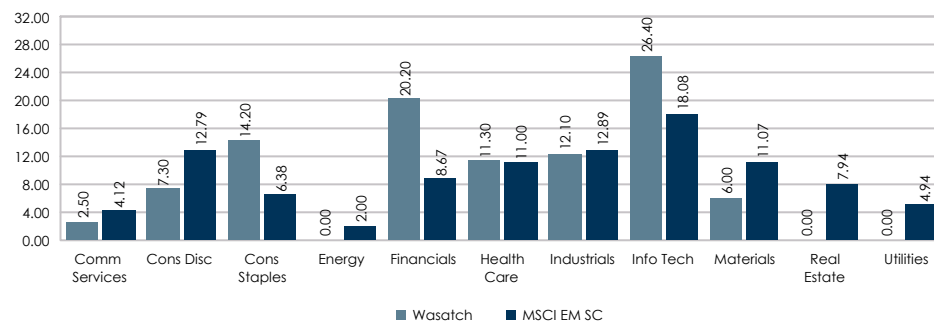
### Characteristics



### Performance Goals

- Outperform the MSCI EM SC over a market cycle.
- Rank above median in the eA Global Emerging Mkts Equity universe over a market cycle.

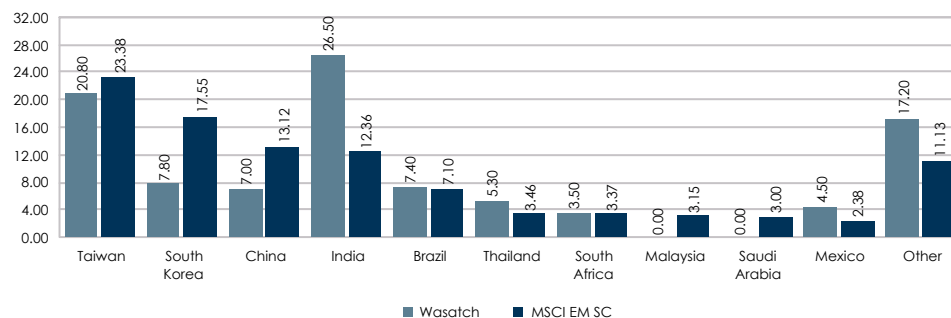
### Sector Allocation



### Dollar Growth Summary (\$000s)

	FYTD	1 Year
Beginning Market Value	36,169	34,971
Net Additions	-398	-531
Return on Investment	-3,996	-2,665
Ending Market Value	31,775	31,775

### Country Allocation

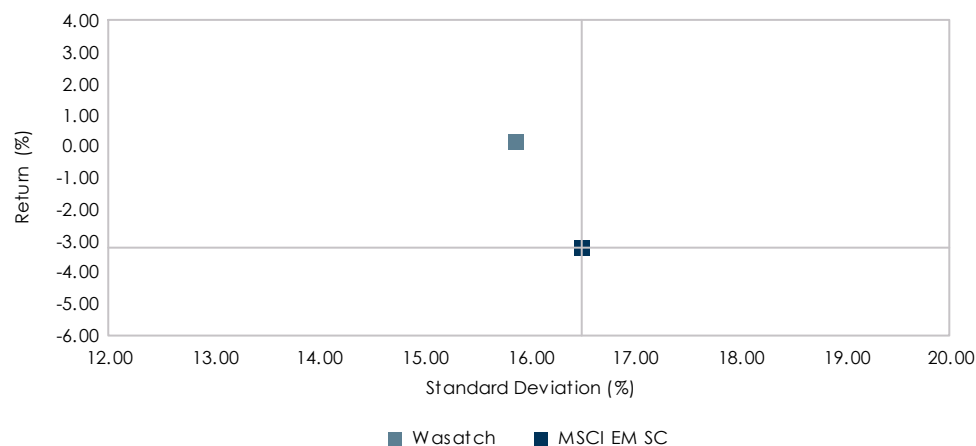


Characteristic and allocation charts represents data of the Wasatch Emerging Markets Small Cap CIT (Non-Mutual Commingled).

## Wasatch Emerging Markets

For the Periods Ending March 31, 2020

### 7 Year Risk / Return



### 7 Year Portfolio Statistics

	Wasatch	MSCI EM SC
Return (%)	0.11	-3.22
Standard Deviation (%)	15.88	16.49
Sharpe Ratio	-0.04	-0.24

### Benchmark Relative Statistics

Beta	0.87
R Squared (%)	81.55
Alpha (%)	3.06
Tracking Error (%)	7.15
Batting Average (%)	51.19
Up Capture (%)	100.37
Down Capture (%)	88.01

### 7 Year Growth of a Dollar

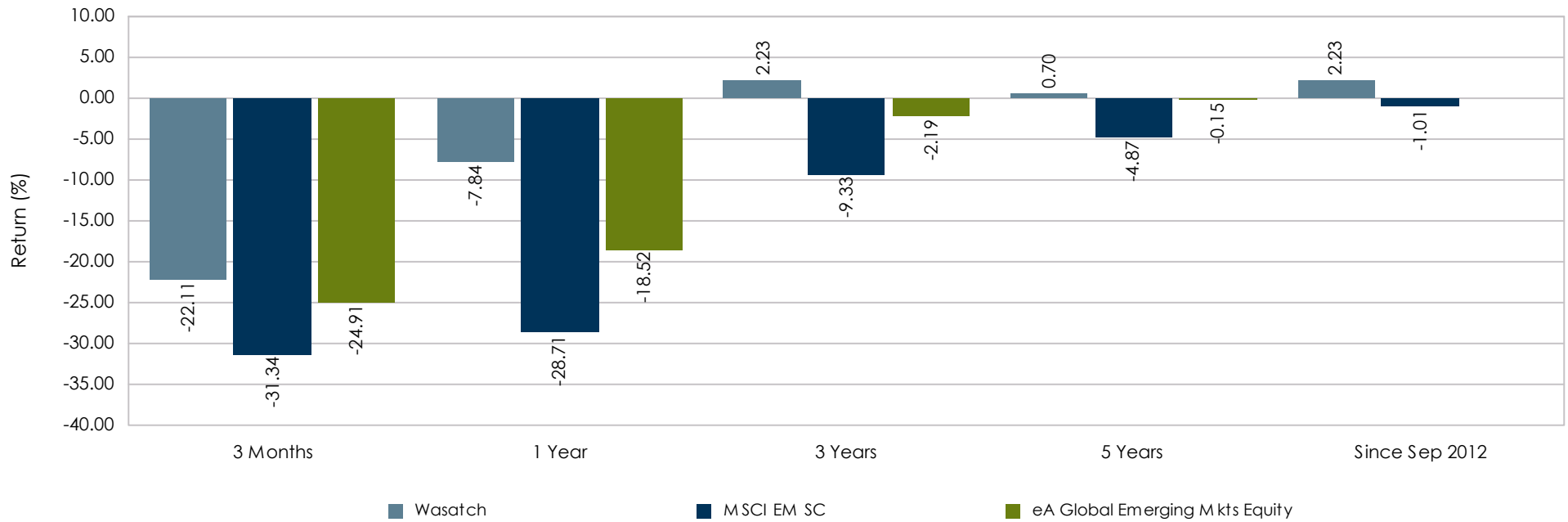


### 7 Year Return Analysis

	Wasatch	MSCI EM SC
Number of Months	84	84
Highest Monthly Return (%)	8.10	10.01
Lowest Monthly Return (%)	-20.86	-23.07
Number of Positive Months	46	47
Number of Negative Months	38	37
% of Positive Months	54.76	55.95

## Wasatch Emerging Markets

For the Periods Ending March 31, 2020

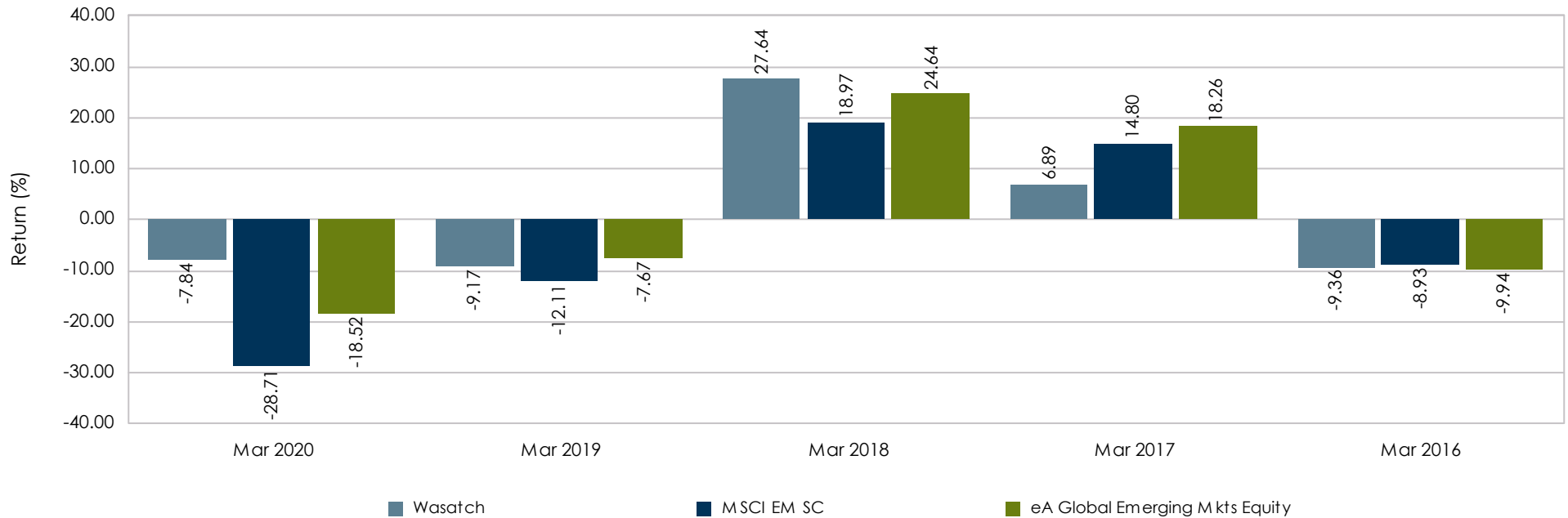


Ranking	16	4	11	36
5th Percentile	-19.74	-9.71	3.35	3.74
25th Percentile	-22.95	-15.19	0.06	1.47
50th Percentile	-24.91	-18.52	-2.19	-0.15
75th Percentile	-27.89	-22.82	-4.43	-1.59
95th Percentile	-32.23	-28.75	-8.59	-3.76
Observations	509	505	464	410

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

## Wasatch Emerging Markets

For the One Year Periods Ending March



Ranking	4	69	29	97	44
5th Percentile	-9.71	-1.75	35.21	28.02	-3.77
25th Percentile	-15.19	-5.38	28.51	22.02	-7.32
50th Percentile	-18.52	-7.67	24.64	18.26	-9.94
75th Percentile	-22.82	-9.81	20.23	15.22	-11.84
95th Percentile	-28.75	-14.83	15.01	8.22	-14.52
Observations	505	527	512	502	451

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

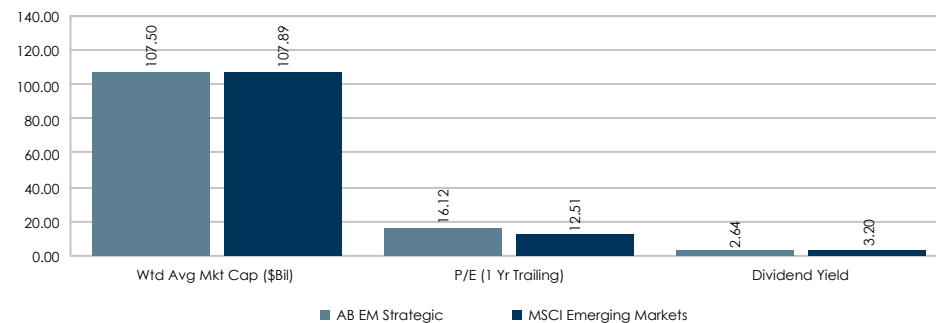
## AB EM Strategic Core Equity Fund

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** Emerging Markets Equity
- **Vehicle** Non-Mutual Commingled
- **Benchmark** MSCI Emerging Markets
- **Performance Inception Date** November 2016
- **Fees** 65 bps (preferred fee)

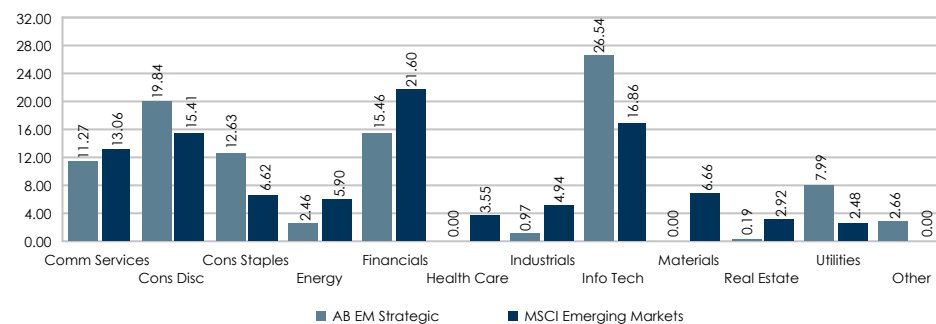
### Characteristics



### Performance Goals

- Outperform the MSCI Emerging Markets.
- Over rolling three year periods, rank above the median in the eA Global Emerging Mkts Equity universe.

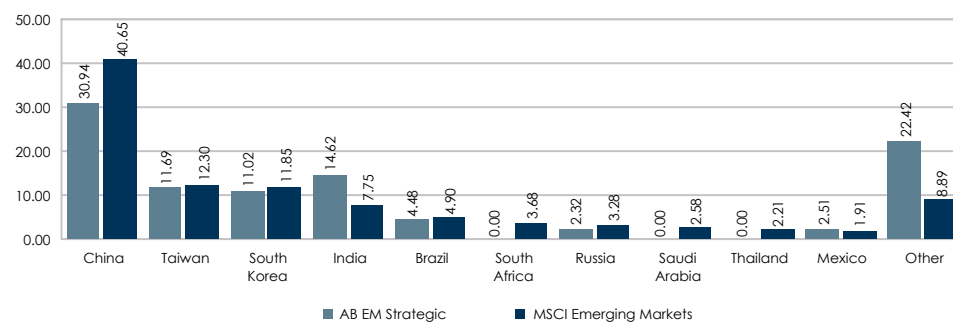
### Sector Allocation



### Dollar Growth Summary (\$000s)

	FYTD	1 Year
Beginning Market Value	80,267	78,733
Net Additions	10,000	10,000
Return on Investment	-15,100	-13,566
Ending Market Value	75,167	75,167

### Country Allocation

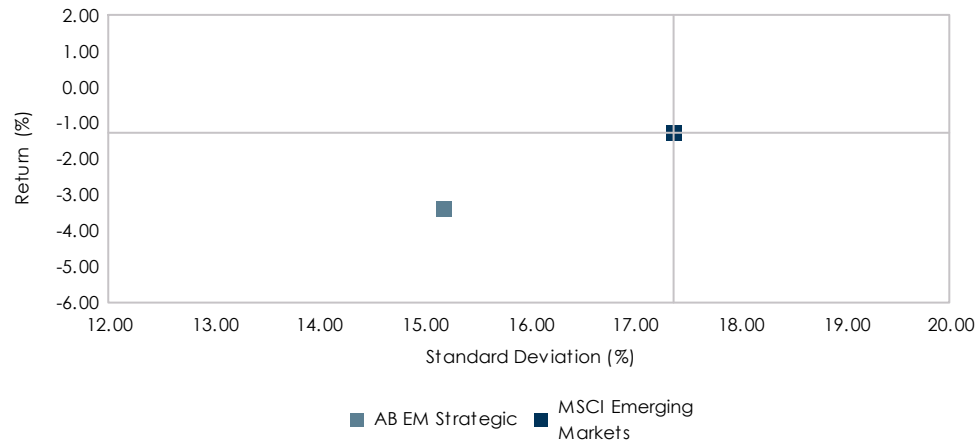




## AB EM Strategic Core Equity Fund

For the Periods Ending March 31, 2020

### 3 Year Risk / Return



### 3 Year Portfolio Statistics

	AB EM Strategic	MSCI Emerging Markets
Return (%)	-3.38	-1.25
Standard Deviation (%)	15.19	17.38
Sharpe Ratio	-0.33	-0.17

### Benchmark Relative Statistics

Beta	0.85
R Squared (%)	94.54
Alpha (%)	-2.46
Tracking Error (%)	4.41
Batting Average (%)	38.89
Up Capture (%)	71.56
Down Capture (%)	88.95

### 3 Year Growth of a Dollar

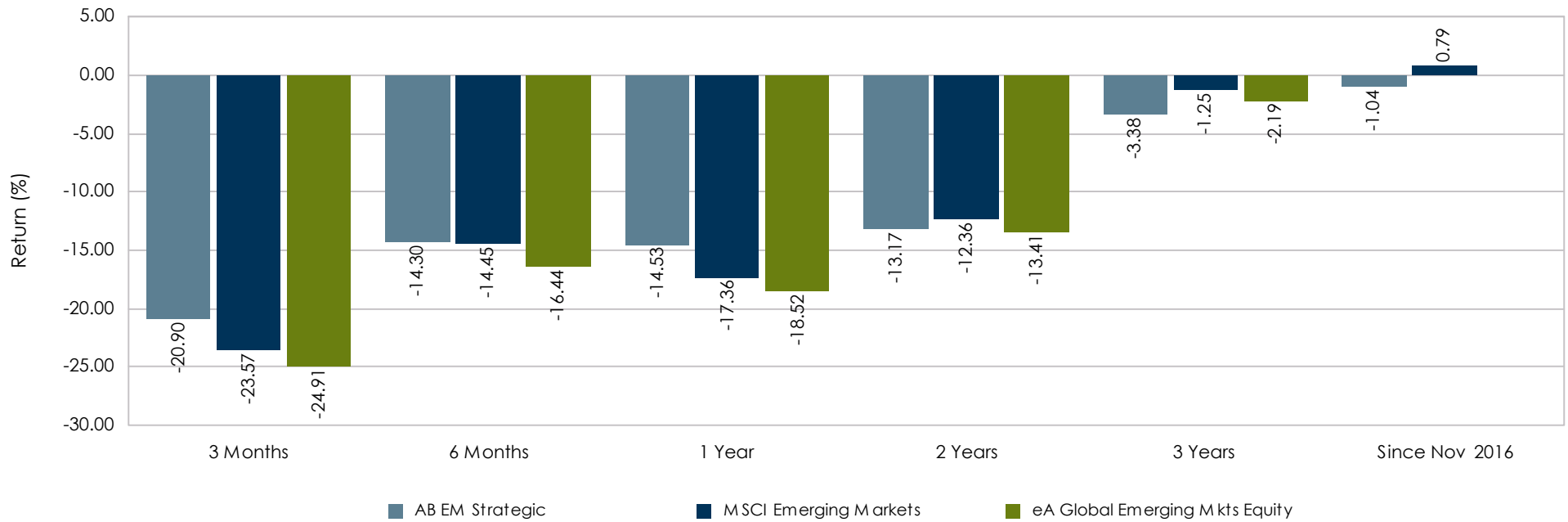


### 3 Year Return Analysis

	AB EM Strategic	MSCI Emerging Markets
Number of Months	36	36
Highest Monthly Return (%)	7.70	8.76
Lowest Monthly Return (%)	-14.60	-15.38
Number of Positive Months	20	19
Number of Negative Months	16	17
% of Positive Months	55.56	52.78

## AB EM Strategic Core Equity Fund

For the Periods Ending March 31, 2020

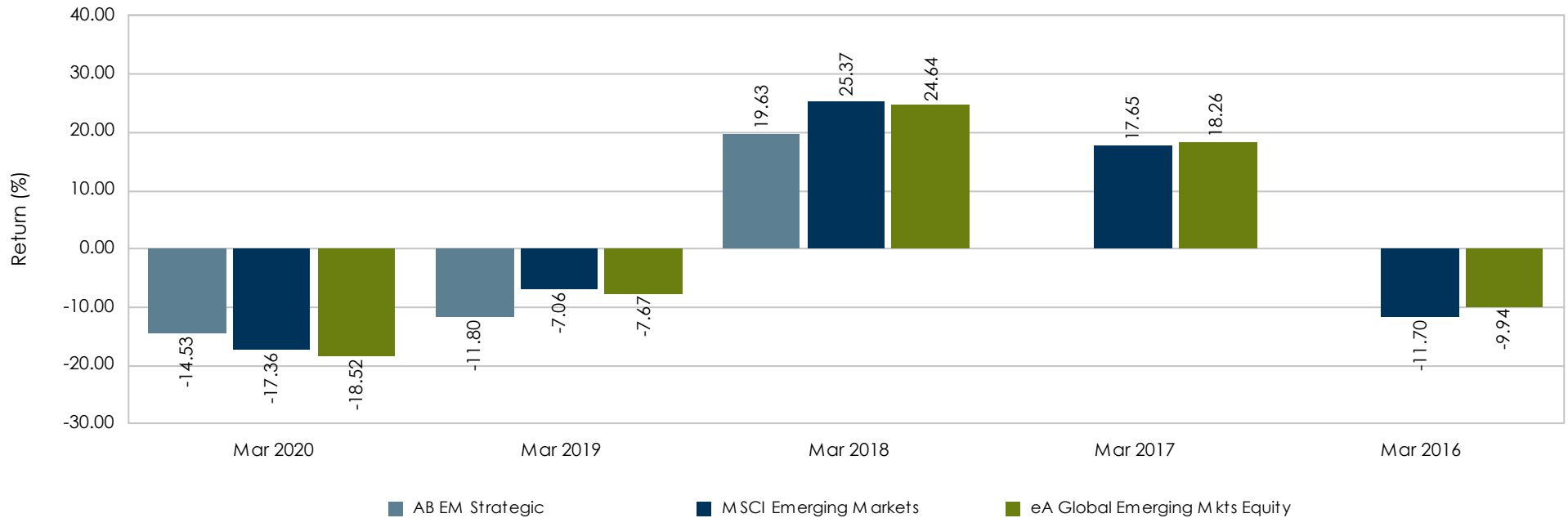


Ranking	10	29	22	47	64
5th Percentile	-19.74	-10.49	-9.71	-7.43	3.35
25th Percentile	-22.95	-13.97	-15.19	-11.25	0.06
50th Percentile	-24.91	-16.44	-18.52	-13.41	-2.19
75th Percentile	-27.89	-20.31	-22.82	-15.58	-4.43
95th Percentile	-32.23	-25.59	-28.75	-20.50	-8.59
Observations	509	509	505	485	464

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

### AB EM Strategic Core Equity Fund

For the One Year Periods Ending March



Ranking	22	85	78		
5th Percentile	-9.71	-1.75	35.21	28.02	-3.77
25th Percentile	-15.19	-5.38	28.51	22.02	-7.32
50th Percentile	-18.52	-7.67	24.64	18.26	-9.94
75th Percentile	-22.82	-9.81	20.23	15.22	-11.84
95th Percentile	-28.75	-14.83	15.01	8.22	-14.52
Observations	505	527	512	502	451

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

## Private Equity - Active Funds

For the Period Ending March 31, 2020

## Summary of Cash Flows for 6 Months

Cash Outflows	Cash Inflows	Net Cash Flows
-24,139,032	27,666,257	3,527,225

## Summary of Portfolio Inception to Date (Category totals include active and closed funds)

	Inception Date	Committed	Drawn to Date	Remaining Commitment	Distributions to Date	Adjusted Ending Value	Total Value	Total Value to Paid-in
<b>Total</b>	<b>Feb-98</b>	<b>800,700,000</b>	<b>602,763,878</b>	<b>224,288,134</b>	<b>671,669,514</b>	<b>233,912,365</b>	<b>905,581,879</b>	<b>1.50x</b>
<b>Buyout</b>	<b>Apr-99</b>	<b>278,200,000</b>	<b>205,588,194</b>	<b>87,145,186</b>	<b>262,009,941</b>	<b>63,923,717</b>	<b>325,933,658</b>	<b>1.59x</b>
Levine Leichtman	Feb-03	10,000,000	10,612,096	-	18,254,382	63,871	18,318,253	1.73x
Thompson Street C.P. II	Dec-06	10,000,000	10,020,777	655,026	19,113,247	2,111,820	21,225,067	2.12x
Arsenal Capital Partners II	Dec-06	15,000,000	15,032,366	668,860	36,302,596	-	36,302,596	2.41x
Sun Capital Partners V	May-07	12,500,000	12,500,000	1,116,365	11,366,767	3,164,453	14,531,220	1.16x
Calera Capital Fund IV	Apr-08	10,000,000	8,835,037	2,727,541	13,709,533	-	13,709,533	1.55x
Levine Leichtman IV	Sep-08	10,000,000	9,284,222	1,065,574	15,390,212	889,448	16,279,660	1.75x
Thompson Street Capital III	Oct-11	7,500,000	7,534,753	563,223	7,632,084	4,526,673	12,158,757	1.61x
Arsenal Capital Partners III	Apr-12	7,500,000	7,649,536	1,268,332	14,464,035	1,949,277	16,413,312	2.15x
Apollo Investment Fund VIII	Feb-14	7,500,000	7,500,965	1,179,489	3,905,251	6,278,563	10,183,814	1.36x
Francisco Partners Fund IV	Apr-15	8,000,000	7,796,000	204,000	6,406,372	10,435,177	16,841,549	2.16x
CenterOak Equity Fund I	Dec-15	7,500,000	6,430,424	1,657,398	2,082,465	6,637,804	8,720,269	1.36x
Thompson Street Capital Partners IV	Jan-16	7,500,000	7,220,572	934,064	1,562,736	8,526,917	10,089,653	1.40x
Leonard Green Equity Investors VII	May-17	7,500,000	5,820,344	1,746,773	67,117	6,883,269	6,950,386	1.19x
Francisco Partners Fund V	Jul-18	10,000,000	5,200,000	4,800,000	-	5,921,521	5,921,521	1.14x
Thompson Street Capital V	Aug-18	12,700,000	4,710,151	7,989,849	-	4,431,412	4,431,412	0.94x
Apollo Investment Fund IX	Mar-19	13,000,000	2,436,565	10,568,692	24,240	2,103,512	2,127,752	0.87x
Leonard Green Jade	Apr-20	10,000,000	-	10,000,000	-	-	-	-
Francisco Partners VI		20,000,000	-	20,000,000	-	-	-	-
Francisco Partners Agility II		5,000,000	-	5,000,000	-	-	-	-
Leonard Green VIII		15,000,000	-	15,000,000	-	-	-	-

## Private Equity - Active Funds

For the Period Ending March 31, 2020

## Summary of Portfolio Inception to Date (Category totals include active and closed funds)

	Inception Date	Committed	Drawn to Date	Remaining Commitment	Distributions to Date	Adjusted Ending Value	Total Value	Total Value to Paid-in
<b>Distressed</b>	Feb-98	<b>143,500,000</b>	<b>128,448,045</b>	<b>14,930,274</b>	<b>167,033,598</b>	<b>21,292,056</b>	<b>188,325,654</b>	<b>1.47x</b>
Oaktree Opportunities Fund V	Jun-04	4,000,000	4,000,000	-	6,608,433	1,907	6,610,340	1.65x
Oaktree Opportunities Fund VI	Aug-05	4,000,000	4,000,000	-	6,326,002	368	6,326,370	1.58x
Siguler Guff Dist Opp II	Sep-05	20,000,000	20,000,000	-	28,240,669	-	28,240,669	1.41x
Oaktree Opportunities VII A	Mar-07	7,500,000	7,500,000	-	10,086,712	279,747	10,366,459	1.38x
Oaktree Opportunities VII B	Jun-08	7,500,000	6,750,000	375,000	11,561,496	136,073	11,697,569	1.73x
Siguler Guff Dist Opp III	Sep-08	15,000,000	14,550,000	450,000	21,227,565	2,326,038	23,553,603	1.62x
Oaktree Opportunities VIII	Dec-09	7,500,000	7,500,000	-	10,585,573	337,199	10,922,772	1.46x
Oaktree Opportunities IX	Mar-13	7,500,000	7,500,000	-	3,592,158	5,525,674	9,117,832	1.22x
Oaktree European Dislocation Fund	Nov-13	7,500,000	4,293,000	750,000	4,570,399	225,326	4,795,725	1.12x
Oaktree Opportunities Fund X	Jul-15	7,500,000	6,975,000	1,275,000	1,667,949	7,029,359	8,697,308	1.25x
Apollo EPF III	Jan-18	10,000,000	5,936,629	6,455,274	2,709,090	3,620,827	6,329,917	1.07x
Oaktree Opportunities Fund Xb	Jun-18	7,500,000	1,875,000	5,625,000	-	1,809,538	1,809,538	0.97x
<b>Emerging Markets Focused</b>	Mar-12	<b>7,500,000</b>	<b>8,007,381</b>	<b>1,022,792</b>	<b>5,357,617</b>	<b>4,988,163</b>	<b>10,345,780</b>	<b>1.29x</b>
Actis EM IV	Mar-12	7,500,000	8,007,381	1,022,792	5,357,617	4,988,163	10,345,780	1.29x
<b>Mezzanine</b>	Mar-99	<b>49,500,000</b>	<b>51,446,479</b>	<b>4,726,007</b>	<b>72,983,225</b>	<b>1,306,491</b>	<b>74,289,716</b>	<b>1.44x</b>
TCW Mezzanine Fund V	Mar-08	10,000,000	7,507,009	2,492,991	10,456,648	414,930	10,871,578	1.45x
Newstone Capital Partners II	Dec-10	7,500,000	10,036,257	311,940	11,552,777	891,561	12,444,338	1.24x
<b>Other</b>	Feb-13	<b>71,500,000</b>	<b>35,426,082</b>	<b>41,164,567</b>	<b>11,633,161</b>	<b>28,704,555</b>	<b>40,337,716</b>	<b>1.14x</b>
EnCap Energy Fund IX	Feb-13	6,500,000	7,336,155	400,260	5,132,653	3,262,373	8,395,026	1.14x
EnCap Energy Fund X	Apr-15	7,500,000	6,798,572	1,197,666	1,464,202	6,633,767	8,097,969	1.19x
ArcLight Energy Partners VI	Aug-15	7,500,000	7,807,282	1,050,714	3,036,306	6,339,341	9,375,647	1.20x
EnCap Energy Fund XI	Jul-17	10,000,000	2,955,003	7,044,997	-	2,348,605	2,348,605	0.79x
North Sky Clean Growth V	Sep-19	25,000,000	9,562,500	17,437,500	2,000,000	9,649,358	11,649,358	1.22x
ArcLight Energy Partners Fund VII, L.P	Feb-20	15,000,000	966,570	14,033,430	-	471,111	471,111	0.49x
<b>Secondary Fund of Funds</b>	Dec-05	<b>20,000,000</b>	<b>21,226,531</b>	<b>-</b>	<b>28,112,565</b>	<b>1,465,987</b>	<b>29,578,552</b>	<b>1.39x</b>
Lexington VI	Dec-05	20,000,000	21,226,531	-	28,112,565	1,465,987	29,578,552	1.39x

## Private Equity - Active Funds

For the Period Ending March 31, 2020

## Summary of Portfolio Inception to Date (Category totals include active and closed funds)

	Inception Date	Committed	Drawn to Date	Remaining Commitment	Distributions to Date	Adjusted Ending Value	Total Value	Total Value to Paid-in
<b>Venture Capital</b>	Jul-99	<b>230,500,000</b>	<b>152,621,166</b>	<b>75,299,308</b>	<b>124,539,407</b>	<b>112,231,396</b>	<b>236,770,803</b>	<b>1.55x</b>
Accel Europe	May-01	10,000,000	10,000,000	-	12,403,731	<b>877,830</b>	13,281,561	1.33x
Knightsbridge Fund VI	Dec-04	12,000,000	10,960,000	1,040,000	12,340,368	<b>5,590,665</b>	17,931,033	1.64x
Firstmark I (Pequot, Firstmark IV)	Nov-05	5,000,000	4,950,000	50,000	18,690,837	<b>15,326,286</b>	34,017,123	6.87x
Weathergage Venture Capital	Mar-07	7,500,000	6,862,500	637,500	10,005,343	<b>4,371,128</b>	14,376,471	2.09x
Warburg Pincus	Oct-07	15,000,000	15,000,000	-	21,447,458	<b>3,628,662</b>	25,076,120	1.67x
Weathergage Venture Cap II	Apr-11	7,500,000	6,975,000	525,000	5,423,421	<b>10,581,356</b>	16,004,777	2.29x
Firstmark II (Firstmark V)	Aug-11	5,000,000	5,022,365	-	1,088,237	<b>10,238,137</b>	11,326,374	2.26x
Warburg Pincus XI	Nov-12	7,500,000	7,500,000	-	7,523,325	<b>4,657,858</b>	12,181,183	1.62x
Firstmark Capital Fund III	Feb-14	5,000,000	4,900,000	100,000	141,977	<b>9,653,714</b>	9,795,691	2.00x
Firstmark Capital Opportunity Fund I	Jun-14	5,000,000	5,075,000	186,808	1,486,793	<b>6,304,701</b>	7,791,494	1.54x
Warburg Pincus XII	Dec-15	10,000,000	9,605,000	395,000	943,230	<b>11,182,942</b>	12,126,172	1.26x
Weathergage Venture Capital IV	Dec-16	10,000,000	6,800,000	3,200,000	-	<b>7,980,333</b>	7,980,333	1.17x
FirstMark Capital Fund IV	Apr-17	7,500,000	4,575,000	2,925,000	-	<b>4,805,114</b>	4,805,114	1.05x
FirstMark Capital Opportunity Fund II	Jan-18	7,500,000	7,200,000	300,000	-	<b>8,620,456</b>	8,620,456	1.20x
Warburg Pincus Global Growth	Mar-19	40,000,000	7,560,000	32,440,000	-	<b>6,991,665</b>	6,991,665	0.92x
TA XIII	Dec-19	10,000,000	1,500,000	8,500,000	-	<b>1,420,549</b>	1,420,549	0.95x
FirstMark Capital Fund V		12,500,000	-	12,500,000	-	-	-	-
FirstMark Cap Opp Fund III		12,500,000	-	12,500,000	-	-	-	-

## **Fixed Income Manager Performance**

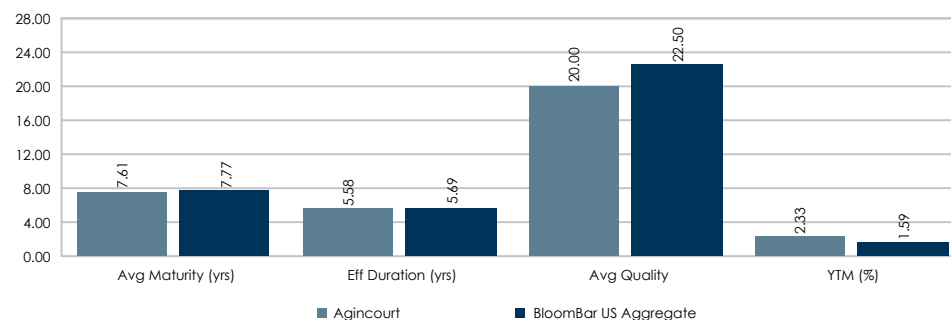
## Agincourt Core Fixed Income

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** Core Bonds
- **Vehicle** Separately Managed Account
- **Benchmark** BloomBar US Aggregate
- **Performance Inception Date** October 1999
- **Fees** 25 bps on the first \$25 million, 20 bps on the next \$75 million, 15 bps on the next \$50 million, and 10 bps on the next \$50 million

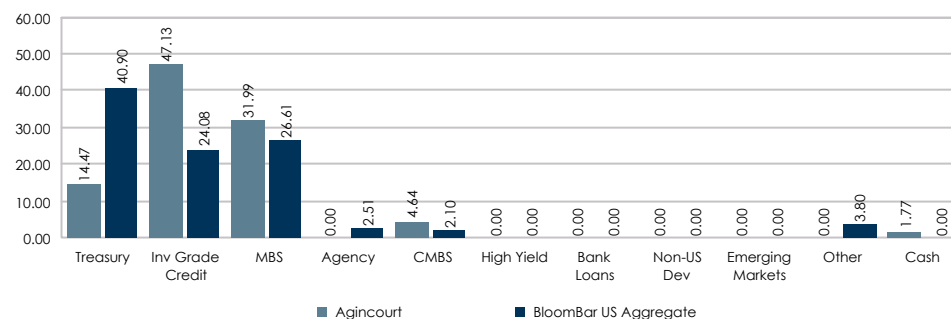
### Characteristics



### Performance Goals

- Outperform the BloomBar US Aggregate.
- Over rolling three year periods, rank above the median in the eA US Core Fixed Income universe.

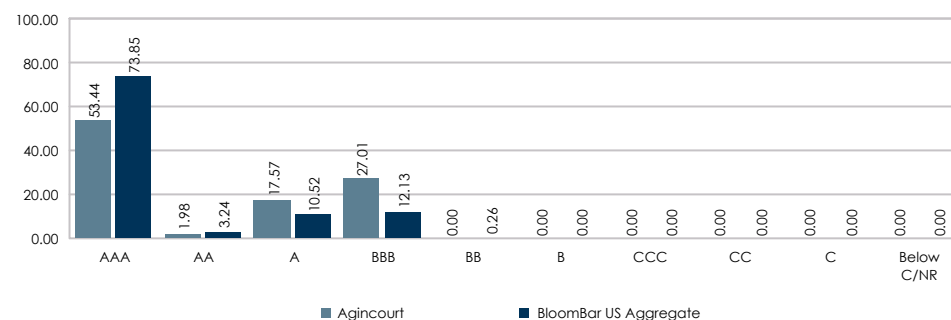
### Sector Allocation



### Dollar Growth Summary (\$000s)

	FYTD	1 Year
<b>Beginning Market Value</b>	<b>220,459</b>	<b>198,703</b>
Net Additions	14,727	29,645
Return on Investment	12,051	18,889
Income	6,168	7,664
Gain/Loss	5,883	11,225
<b>Ending Market Value</b>	<b>247,237</b>	<b>247,237</b>

### Quality Allocation



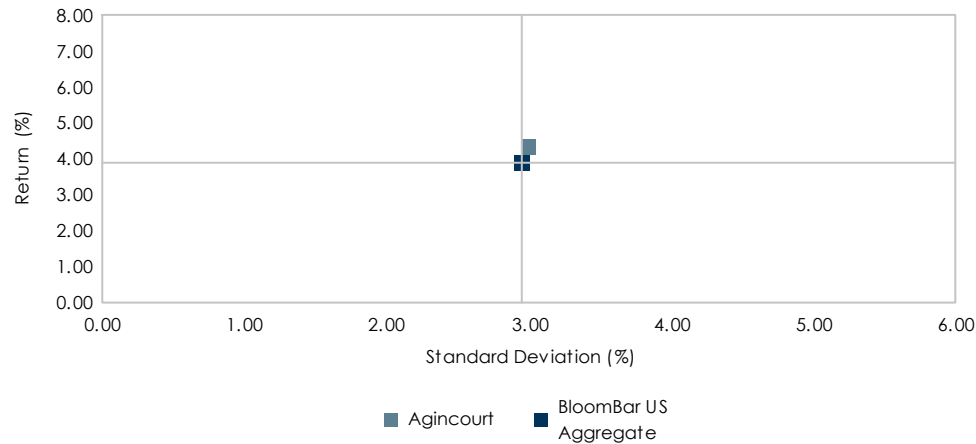
The Other sector consists of ABS, CMO, Convertibles, Municipals, Private Placements/144As and TIPS.



## Agincourt Core Fixed Income

For the Periods Ending March 31, 2020

### 10 Year Risk / Return



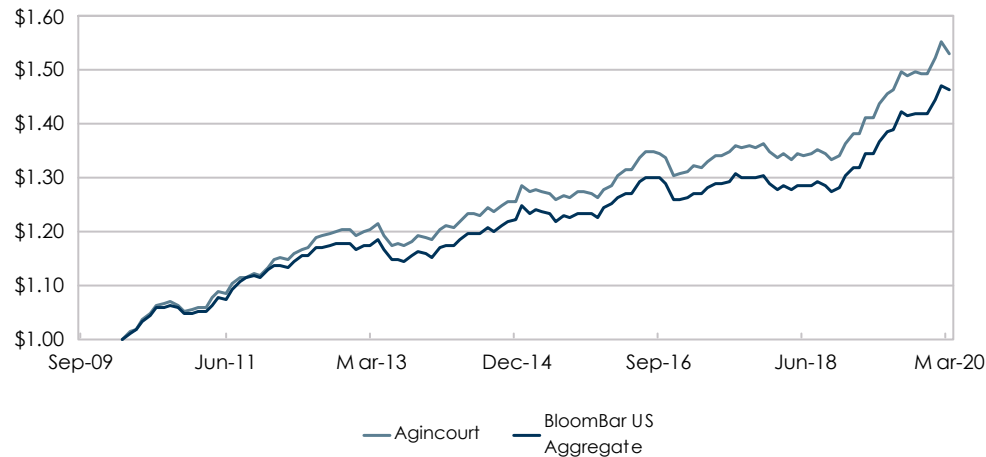
### 10 Year Portfolio Statistics

	Agincourt	BloomBar US Aggregate
Return (%)	4.36	3.88
Standard Deviation (%)	3.00	2.94
Sharpe Ratio	1.26	1.13

### Benchmark Relative Statistics

Beta	1.00
R Squared (%)	95.90
Alpha (%)	0.47
Tracking Error (%)	0.61
Batting Average (%)	64.17
Up Capture (%)	107.27
Down Capture (%)	98.48

### 10 Year Growth of a Dollar

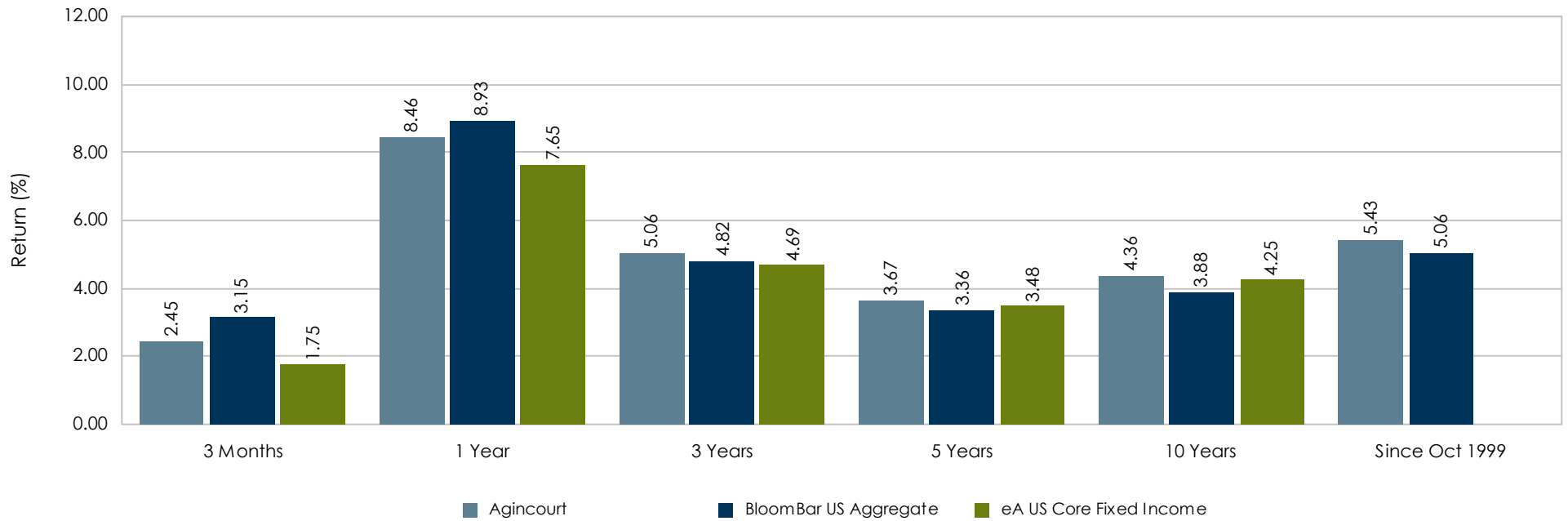


### 10 Year Return Analysis

	Agincourt	BloomBar US Aggregate
Number of Months	120	120
Highest Monthly Return (%)	2.43	2.59
Lowest Monthly Return (%)	-2.37	-2.37
Number of Positive Months	79	78
Number of Negative Months	41	42
% of Positive Months	65.83	65.00

## Agincourt Core Fixed Income

For the Periods Ending March 31, 2020

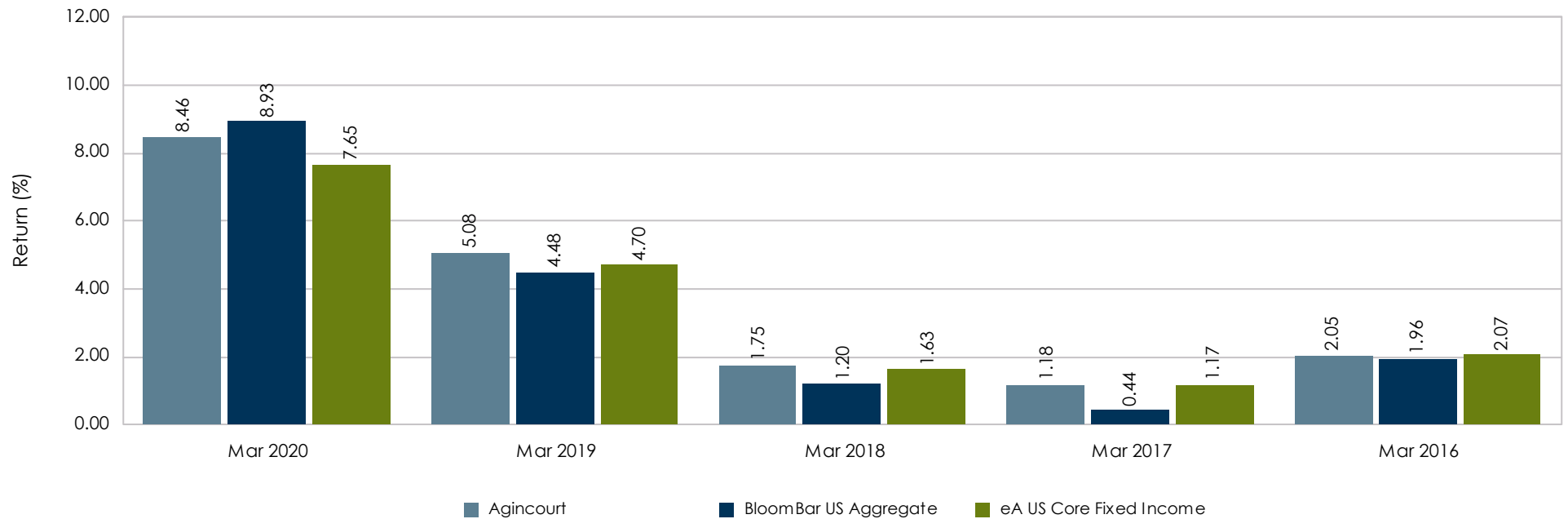


Ranking	33	31	22	29	41
5th Percentile	4.62	10.43	5.51	4.07	5.17
25th Percentile	2.87	8.72	5.00	3.70	4.53
50th Percentile	1.75	7.65	4.69	3.48	4.25
75th Percentile	0.66	6.65	4.34	3.28	4.05
95th Percentile	-2.28	3.62	3.70	2.87	3.68
Observations	242	242	238	232	214

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

## Agincourt Core Fixed Income

For the One Year Periods Ending March



Ranking	31	16	43	50	53
5th Percentile	10.43	5.40	2.69	3.90	3.07
25th Percentile	8.72	4.92	1.97	2.02	2.43
50th Percentile	7.65	4.70	1.63	1.17	2.07
75th Percentile	6.65	4.50	1.33	0.61	1.71
95th Percentile	3.62	4.06	0.85	0.02	0.95
Observations	242	266	276	263	253

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

## Oaktree Global Credit Fund

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** Multi-Sector Fixed Income
- **Vehicle** Limited Partnership
- **Benchmark** Custom Blended Index
- **Performance Inception Date** February 1998
- **Fees** 50 bps plus operating expenses

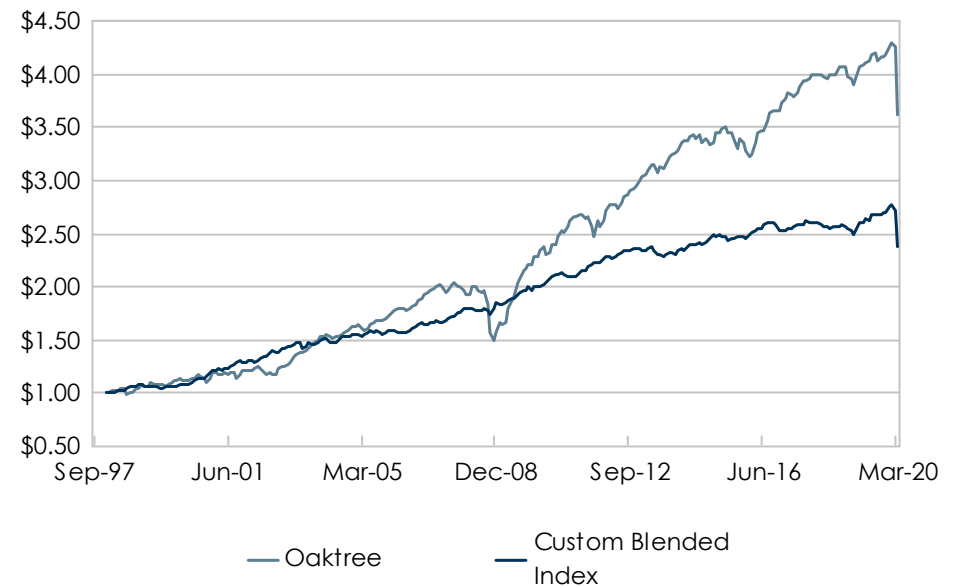
### Performance Goals

- Outperform the Custom Blended Index.

### Dollar Growth Summary (\$000s)

	FYTD	1 Year
<b>Beginning Market Value</b>	<b>129,151</b>	<b>126,239</b>
Net Additions	-587	-797
Return on Investment	-17,549	-14,427
<b>Ending Market Value</b>	<b>111,015</b>	<b>111,015</b>

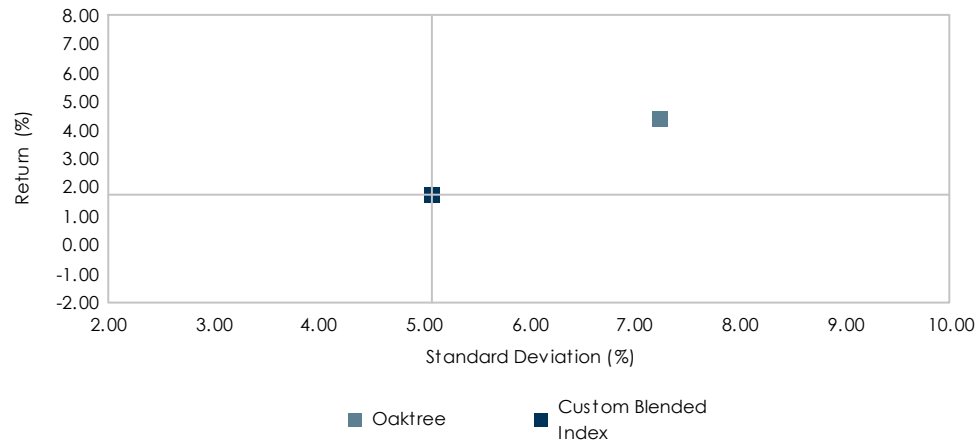
### Growth of a Dollar



## Oaktree Global Credit Fund

For the Periods Ending March 31, 2020

### 10 Year Risk / Return



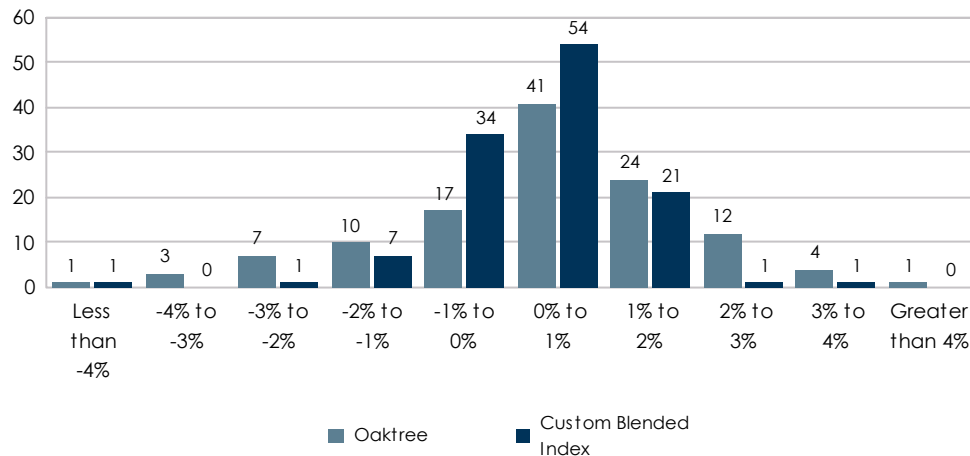
### 10 Year Portfolio Statistics

	Oaktree	Custom Blended Index
Return (%)	4.40	1.75
Standard Deviation (%)	7.24	5.07
Sharpe Ratio	0.53	0.23

### Benchmark Relative Statistics

Beta	0.91
R Squared (%)	40.99
Alpha (%)	2.92
Tracking Error (%)	5.58
Batting Average (%)	60.00
Up Capture (%)	115.32
Down Capture (%)	57.60

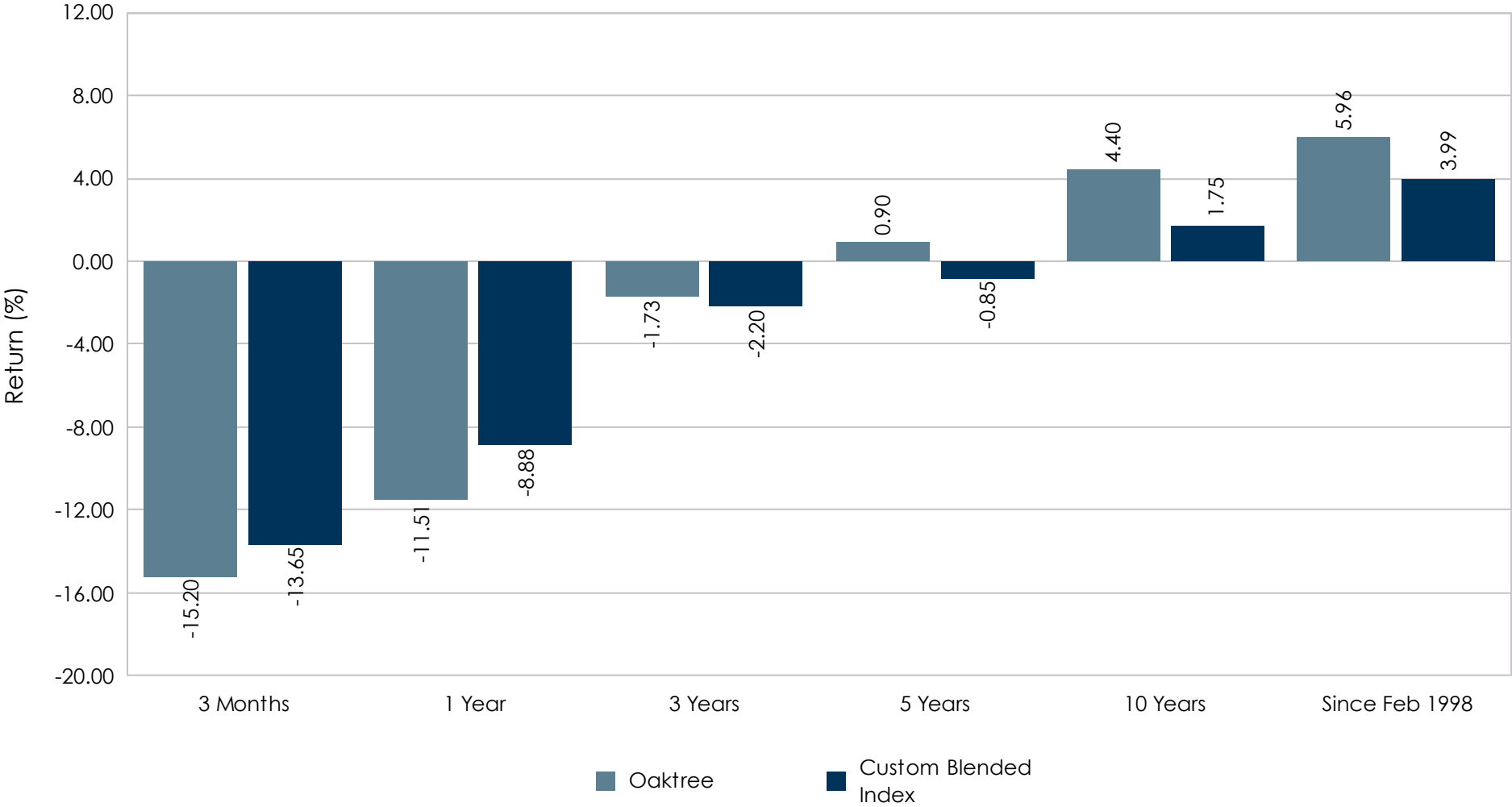
### 10 Year Return Histogram



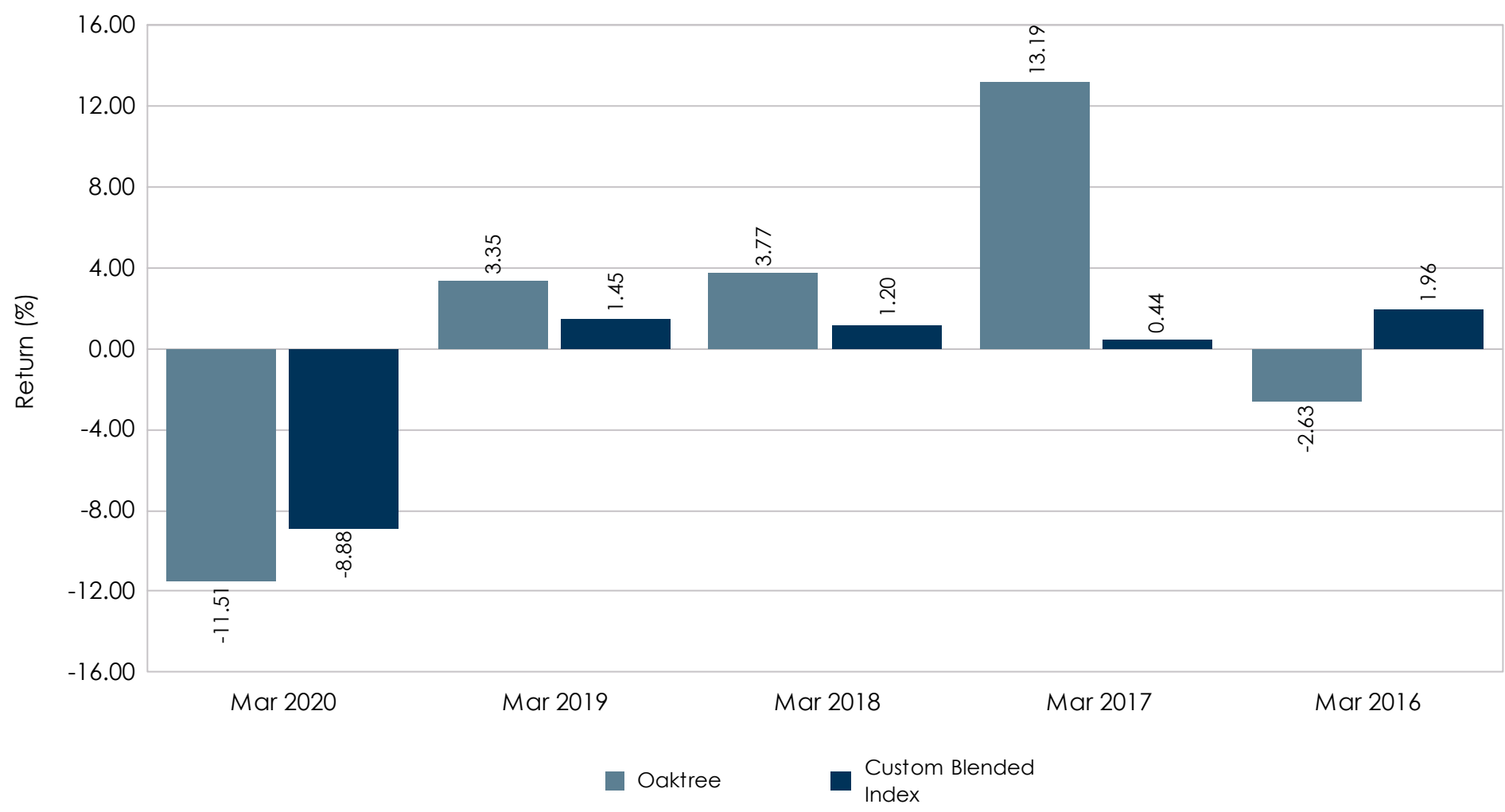
### 10 Year Return Analysis

	Oaktree	Custom Blended Index
Number of Months	120	120
Highest Monthly Return (%)	5.85	3.21
Lowest Monthly Return (%)	-14.98	-12.62
Number of Positive Months	82	77
Number of Negative Months	38	43
% of Positive Months	68.33	64.17

**Oaktree Global Credit Fund**  
*For the Periods Ending March 31, 2020*



**Oaktree Global Credit Fund**  
*For the One Year Periods Ending March*



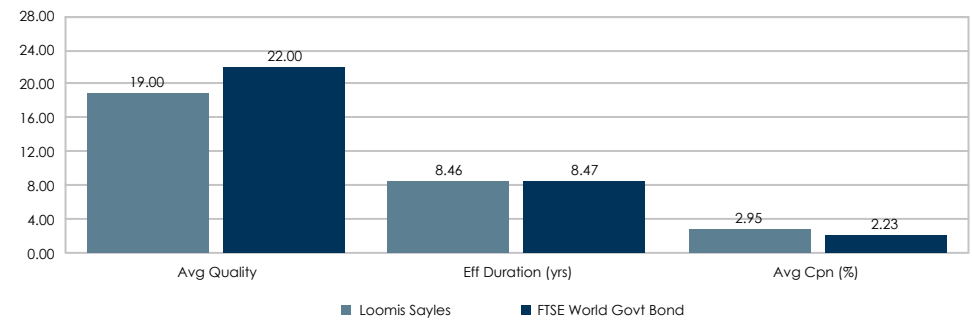
## Loomis Sayles

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** Multi-Sector Fixed Income
- **Vehicle** Non-Mutual Commingled
- **Benchmark** FTSE World Govt Bond
- **Performance Inception Date** June 2008
- **Fees** First \$75M at 35 bps, balance at 25 bps

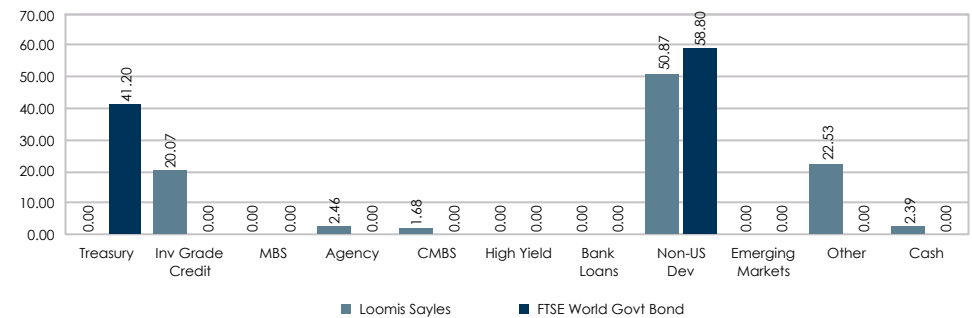
### Characteristics



### Performance Goals

- Outperform the FTSE World Govt Bond.
- Over rolling three year periods, rank above the median in the eA All Global Fixed Income universe.

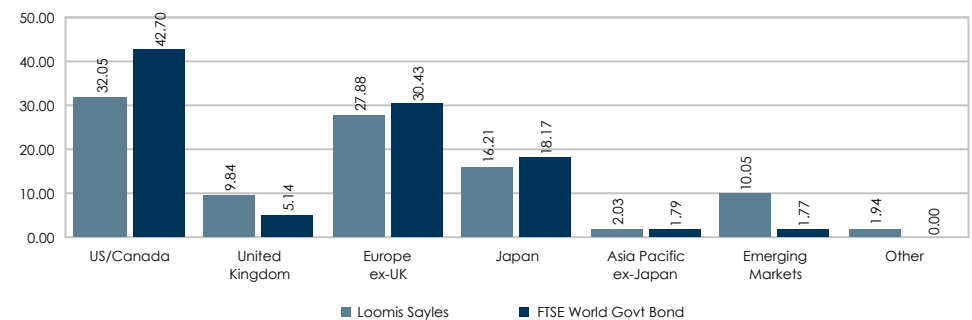
### Sector Allocation



### Dollar Growth Summary (\$000s)

	FYTD	1 Year
<b>Beginning Market Value</b>	<b>81,552</b>	<b>78,685</b>
Net Additions	-209	-284
Return on Investment	-1,332	1,609
<b>Ending Market Value</b>	<b>80,011</b>	<b>80,011</b>

### Regional Allocation



Characteristic and allocation charts represents data of the Loomis World Bond NH Trust (Non-Mutual Commingled).

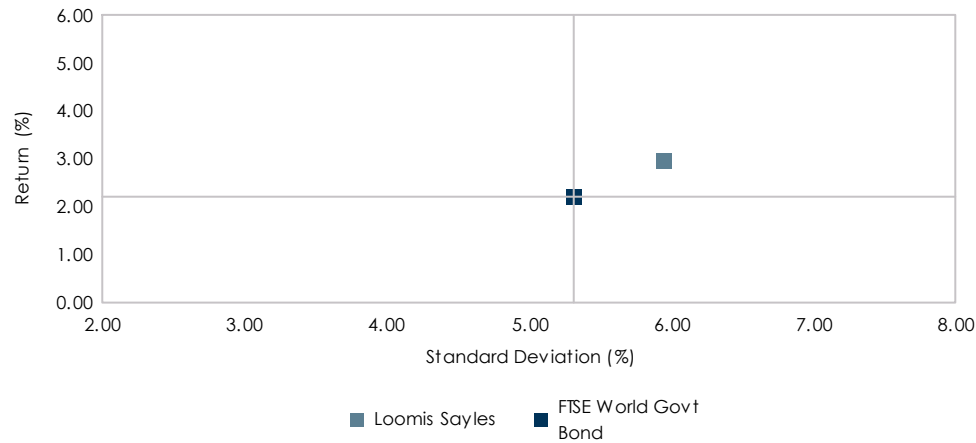
The Other sector consists of ABS, CMO, Convertibles, Municipals, Private Placements/144As and TIPS.



## Loomis Sayles

For the Periods Ending March 31, 2020

### 10 Year Risk / Return



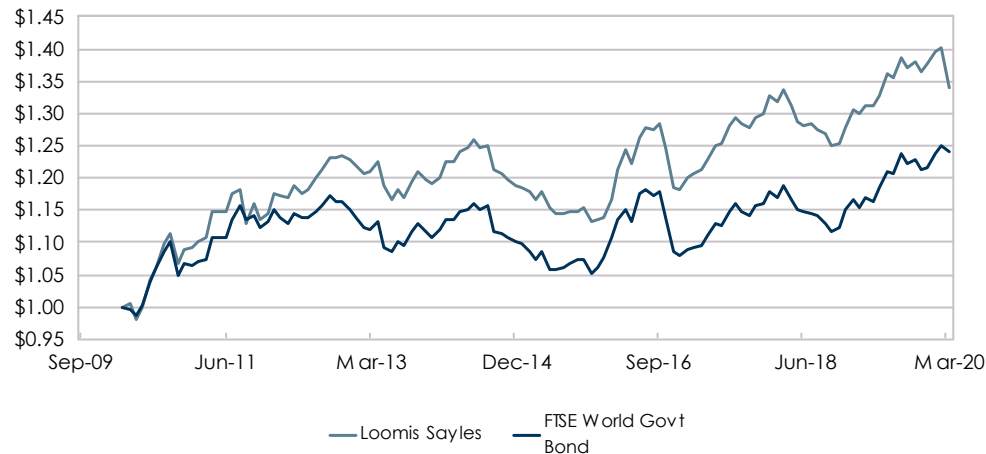
### 10 Year Portfolio Statistics

	Loomis Sayles	FTSE World Govt Bond
Return (%)	2.97	2.19
Standard Deviation (%)	5.94	5.31
Sharpe Ratio	0.40	0.31

### Benchmark Relative Statistics

Beta	1.02
R Squared (%)	83.73
Alpha (%)	0.74
Tracking Error (%)	2.40
Batting Average (%)	61.67
Up Capture (%)	111.56
Down Capture (%)	101.91

### 10 Year Growth of a Dollar

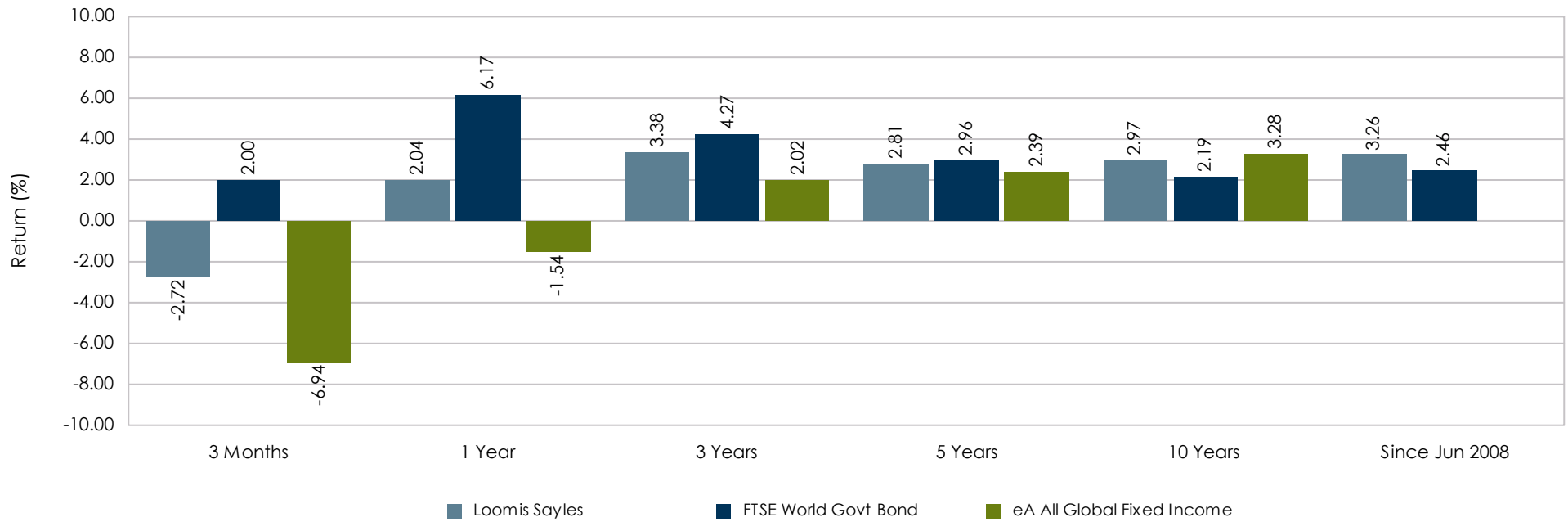


### 10 Year Return Analysis

	Loomis Sayles	FTSE World Govt Bond
Number of Months	120	120
Highest Monthly Return (%)	4.20	3.69
Lowest Monthly Return (%)	-4.95	-4.78
Number of Positive Months	72	64
Number of Negative Months	48	56
% of Positive Months	60.00	53.33

## Loomis Sayles

For the Periods Ending March 31, 2020

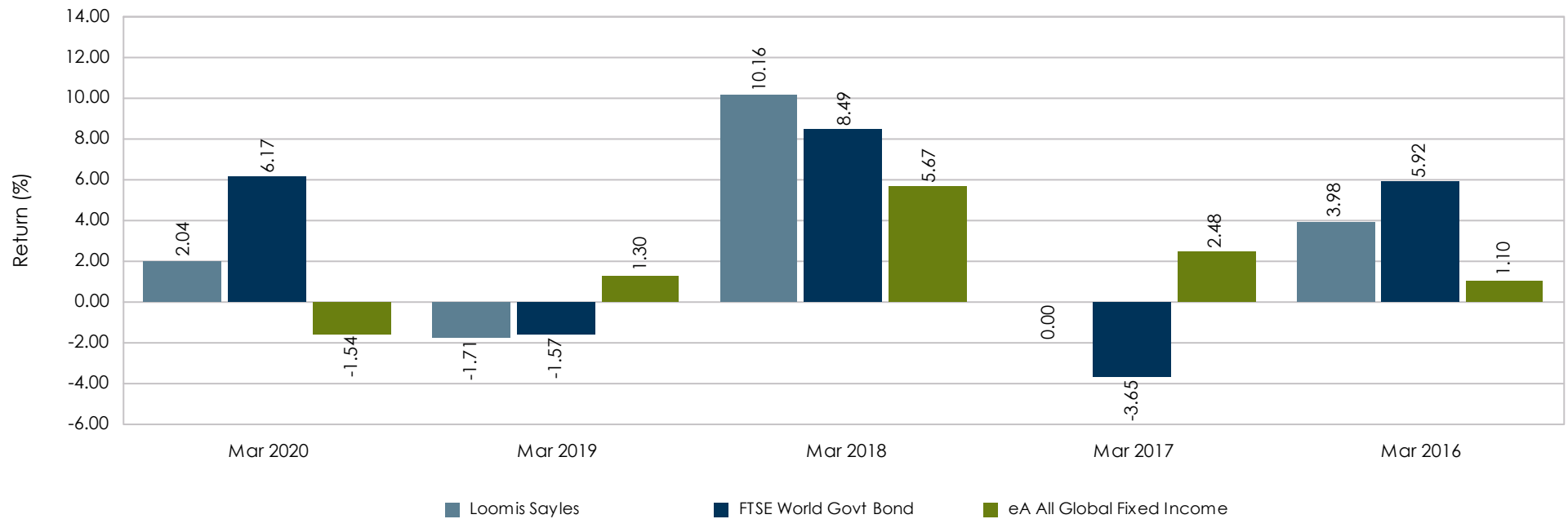


Ranking	26	30	27	37	60
5th Percentile	1.65	6.67	4.79	4.13	6.05
25th Percentile	-2.63	2.78	3.41	3.14	4.66
50th Percentile	-6.94	-1.54	2.02	2.39	3.28
75th Percentile	-12.06	-6.60	0.34	1.33	2.18
95th Percentile	-17.51	-12.68	-2.77	-1.20	0.25
Observations	720	719	672	591	341

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

## Loomis Sayles

For the One Year Periods Ending March



Ranking	30	71	22	68	20
5th Percentile	6.67	5.85	17.35	14.23	6.33
25th Percentile	2.78	4.31	9.13	7.17	3.26
50th Percentile	-1.54	1.30	5.67	2.48	1.10
75th Percentile	-6.60	-2.64	3.67	-1.10	-1.05
95th Percentile	-12.68	-8.24	1.45	-5.70	-4.39
Observations	719	812	748	710	668

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

**Private Credit - Active Funds***For the Period Ending March 31, 2020***Summary of Cash Flows for 6 Months**

Cash Outflows	Cash Inflows	Net Cash Flows
-22,245,885	11,332,628	-10,913,257

**Summary of Portfolio Inception to Date (Category totals include active and closed funds)**

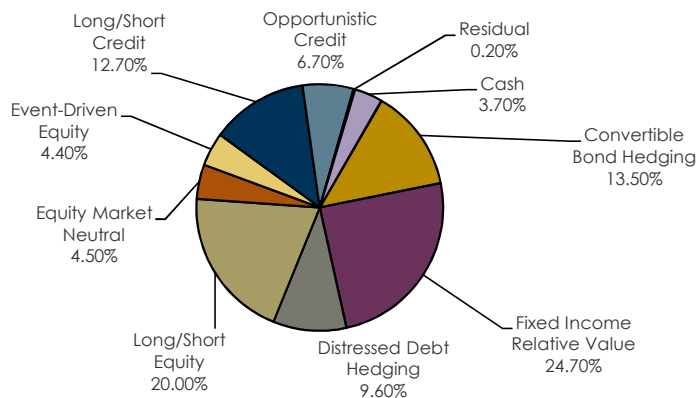
	Inception Date	Committed	Drawn to Date	Remaining Commitment	Distributions to Date	Adjusted Ending Value	Total Value	Total Value to Paid-in
<b>Total</b>	<b>Sep-16</b>	<b>115,000,000</b>	<b>85,018,995</b>	<b>40,267,086</b>	<b>32,819,332</b>	<b>61,692,850</b>	<b>94,512,182</b>	<b>1.11x</b>
<b>Mezzanine</b>	Jan-17	20,000,000	19,918,995	1,540,859	6,918,943	16,898,414	23,817,357	1.20x
Newstone Capital Partners III	Jan-17	20,000,000	19,918,995	1,540,859	6,918,943	16,898,414	23,817,357	1.20x
<b>Other</b>	Sep-16	95,000,000	65,100,000	38,726,227	25,900,389	44,794,436	70,694,825	1.09x
LBC Credit Partners Fund IV	Sep-16	40,000,000	36,000,000	12,826,227	14,661,754	25,613,783	40,275,537	1.12x
Apollo Accord II	Oct-18	11,400,000	10,500,000	900,000	11,238,635	423,426	11,662,061	1.11x
Apollo Accord III	Oct-19	18,600,000	18,600,000	-	-	18,757,227	18,757,227	1.01x
Apollo Accord Fund III B		25,000,000	-	25,000,000	-	-	-	-

## PAAMCO

For the Periods Ending March 31, 2020

### Sector Allocation

Market Value: \$83,369,054



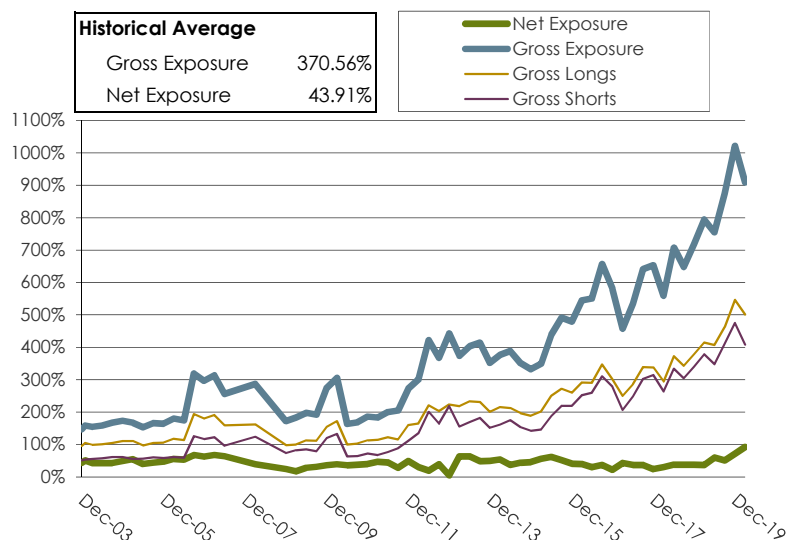
### Strategy

- Low Volatility Hedge Fund of Funds
- Performance Inception Date: October 2002
- Redemption: Quarterly with 60 days written notice

### Objectives and Constraints

- Target annualized return: 10-12%
- Target annualized standard deviation: approximate the standard deviation of the Barclays Capital Aggregate
- Maximum number of managers: 55
- Allocation to any manager: not to exceed 5% at cost or 7% at market value
- Allocation to Convertible Bond Hedging: 20-40%
- Allocation to Sovereign Debt & Mortgage Hedging: 0-10%
- Allocation to Credit Hedging & Distressed Debt Hedging: 0-25%
- Allocation to Merger Arbitrage: 0-20%
- Allocation to Equity Market Neutral & Long/Short Equity: 20-45%
- Allocation to Short Biased: 0-5%
- Allocation to Cash: 0-5%

### Historical Net & Gross Exposure



### Exposure

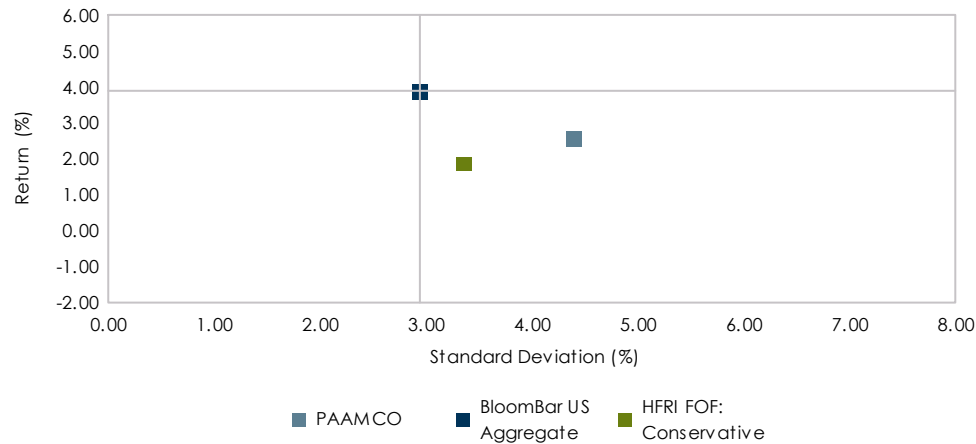
- Net Exposure: 92.50%
- Gross Exposure: 909.30%

Characteristic data provided by manager.

## PAAMCO

For the Periods Ending March 31, 2020

### 10 Year Risk / Return



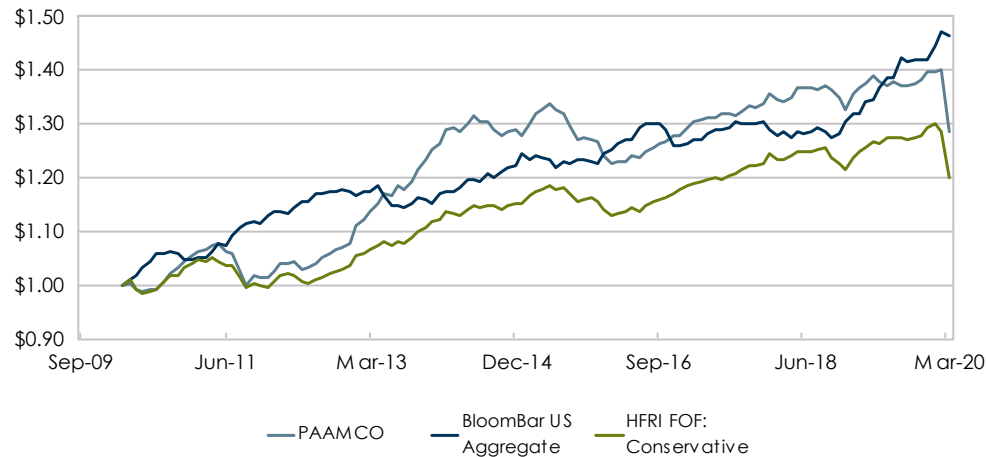
### 10 Year Portfolio Statistics

	PAAMCO	BloomBar US Aggregate	HFRI FOF: Conservative
Return (%)	2.54	3.88	1.86
Standard Deviation (%)	4.39	2.94	3.36
Sharpe Ratio	0.45	1.13	0.38

### Benchmark Relative Statistics

Beta	-0.21	1.20
R Squared (%)	2.07	84.30
Alpha (%)	3.49	0.32
Tracking Error (%)	5.63	1.87
Batting Average (%)	58.33	56.67
Up Capture (%)	30.21	118.78
Down Capture (%)	-28.16	107.27

### 10 Year Growth of a Dollar

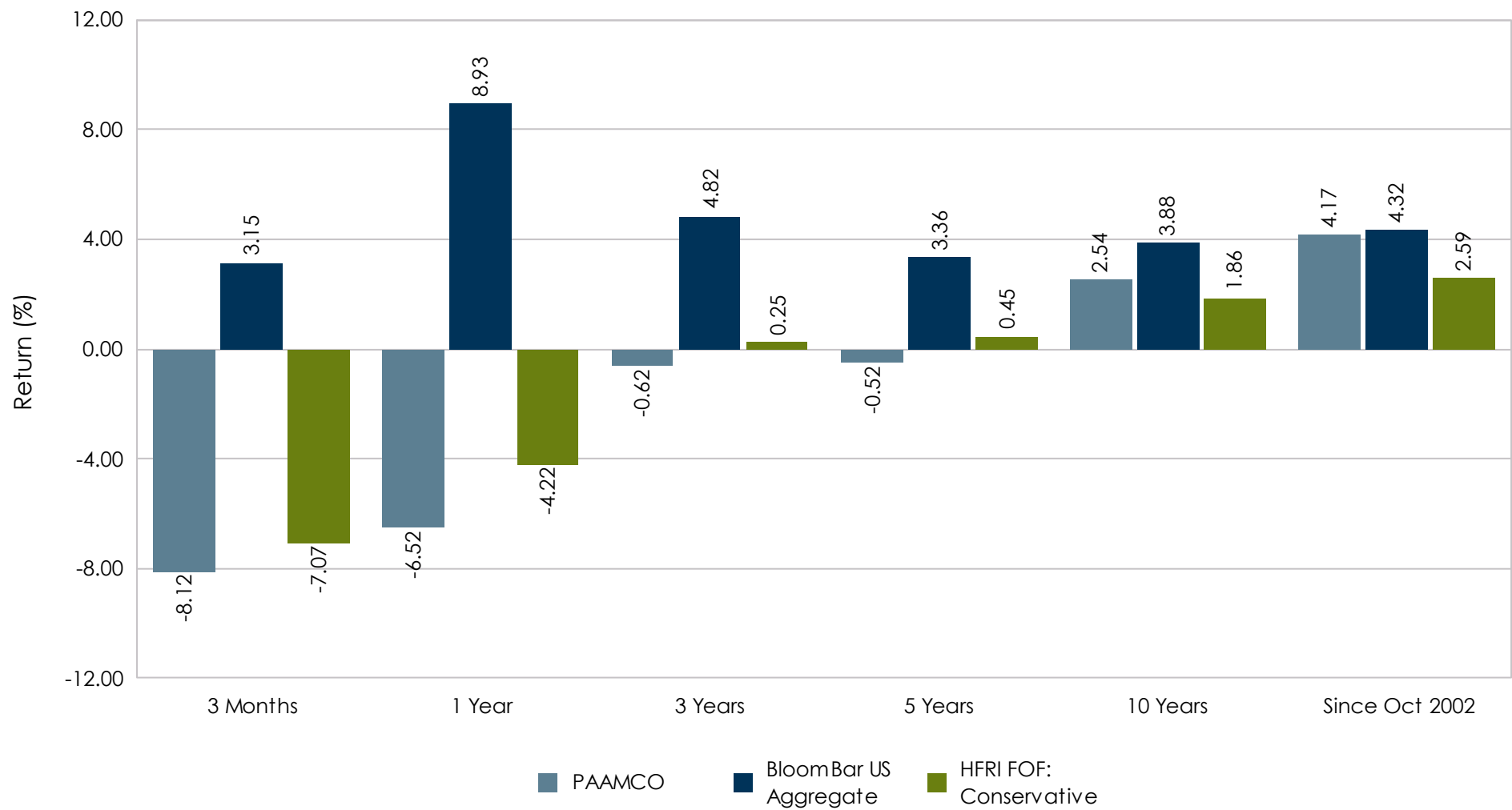


### 10 Year Return Analysis

	PAAMCO	BloomBar US Aggregate	HFRI FOF: Conservative
Number of Months	120	120	120
Highest Monthly Return (%)	2.84	2.59	1.84
Lowest Monthly Return (%)	-8.32	-2.37	-6.60
Number of Positive Months	78	78	83
Number of Negative Months	42	42	37
% of Positive Months	65.00	65.00	69.17

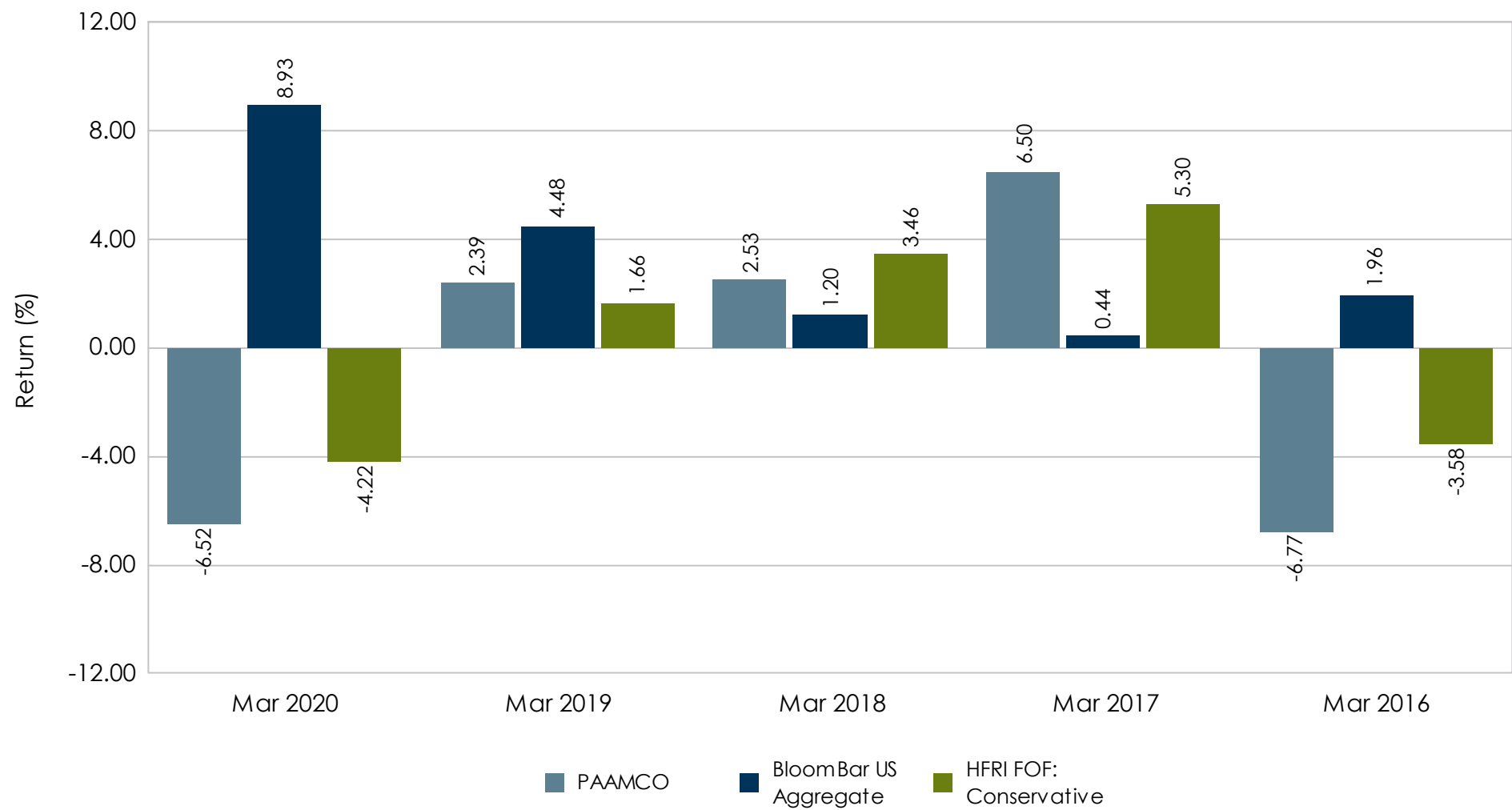
PAAMCO

For the Periods Ending March 31, 2020



PAAMCO

For the One Year Periods Ending March





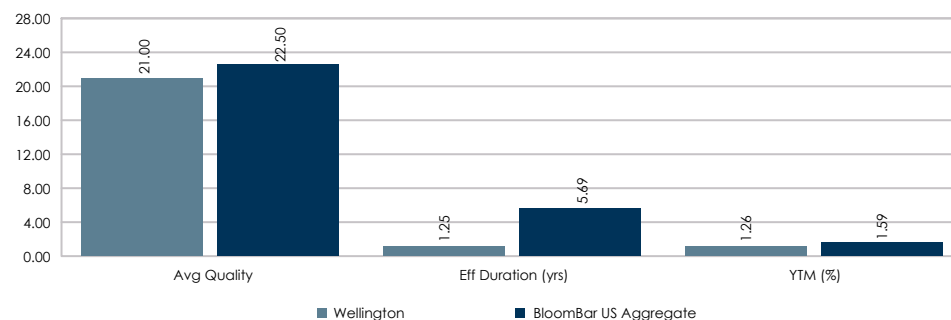
## Wellington Global Total Return

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** Absolute Return
- **Vehicle** Non-Mutual Commingled
- **Benchmarks** US T-Bills 90 Day + 4% and BloomBar US Aggregate
- **Performance Inception Date** December 2016
- **Fees** 25 bps, plus 20% of excess return beyond cash + 1%

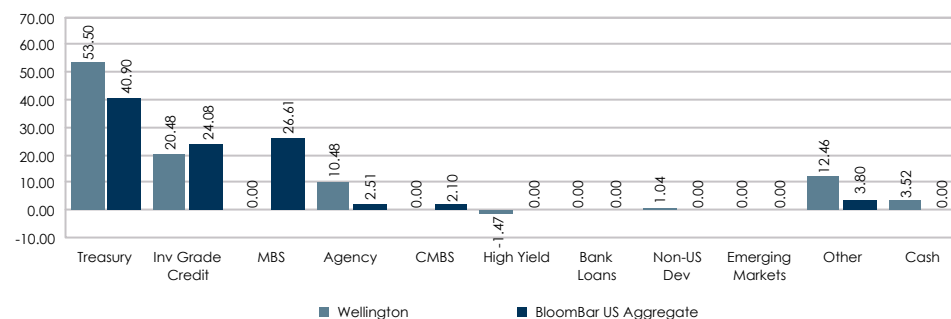
### Characteristics



### Performance Goals

- Outperform the US T-Bills 90 Day + 4%.
- Over rolling three year periods, rank above the median in the eA Global Unconstrained Fixed Income universe.

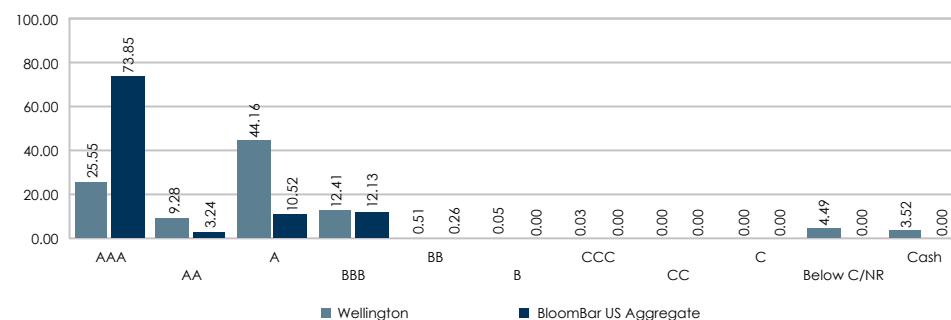
### Sector Allocation



### Dollar Growth Summary (\$000s)

	FYTD	1 Year
<b>Beginning Market Value</b>	<b>66,411</b>	<b>65,320</b>
Net Additions	9,867	9,826
Return on Investment	1,063	2,194
<b>Ending Market Value</b>	<b>77,340</b>	<b>77,340</b>

### Quality Allocation

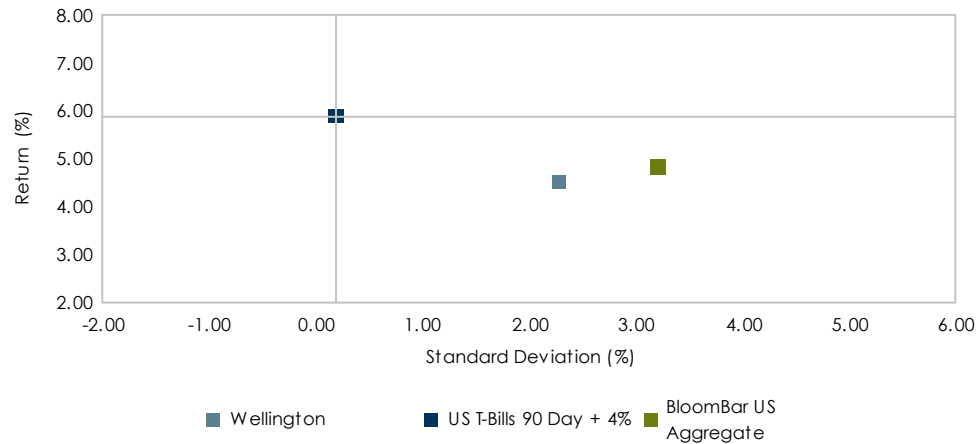


The Other sector consists of ABS, CMO, Convertibles, Municipals, Private Placements/144As and TIPS.

## Wellington Global Total Return

For the Periods Ending March 31, 2020

### 3 Year Risk / Return



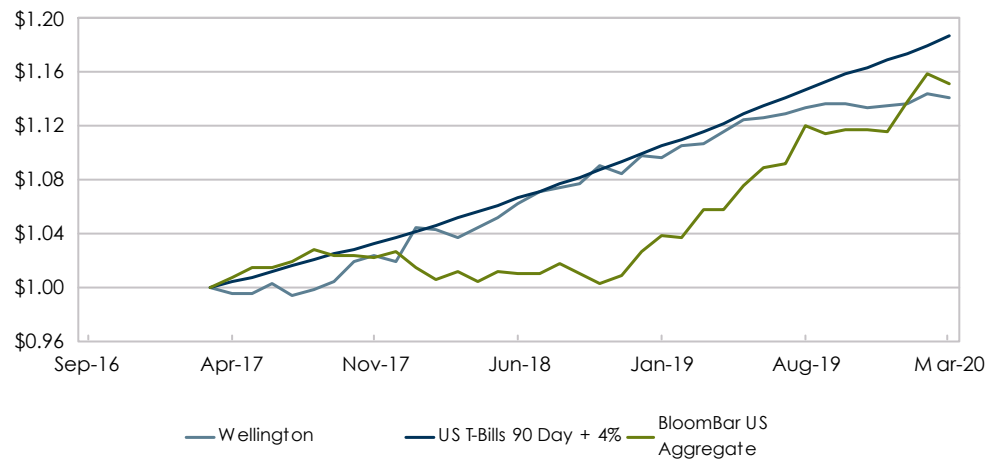
### 3 Year Portfolio Statistics

	Wellington	US T-Bills 90 Day + 4%	BloomBar US Aggregate
Return (%)	4.52	5.89	4.82
Standard Deviation (%)	2.28	0.19	3.20
Sharpe Ratio	1.24	22.53	0.98

### Benchmark Relative Statistics

Beta	0.34	-0.14
R Squared (%)	0.08	4.11
Alpha (%)	2.52	5.27
Tracking Error (%)	2.28	4.28
Batting Average (%)	44.44	47.22
Up Capture (%)	76.70	25.49
Down Capture (%)		-128.95

### 3 Year Growth of a Dollar

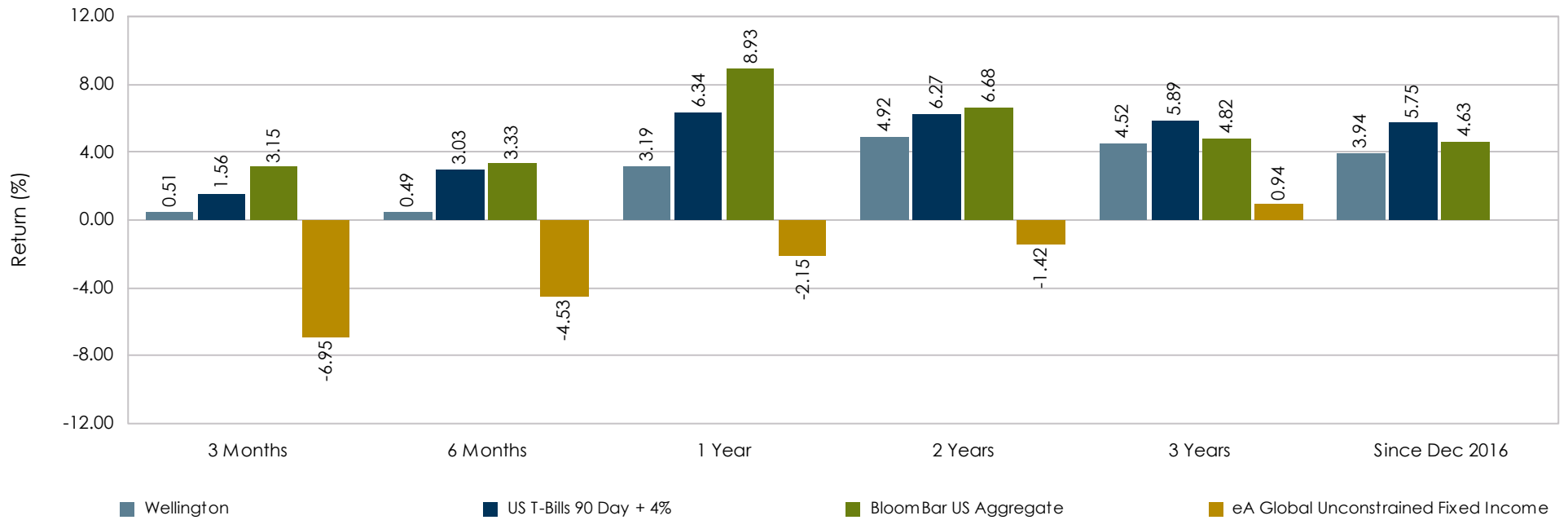


### 3 Year Return Analysis

	Wellington	US T-Bills 90 Day + 4%	BloomBar US Aggregate
Number of Months	36	36	36
Highest Monthly Return (%)	2.45	0.62	2.59
Lowest Monthly Return (%)	-0.87	0.38	-1.15
Number of Positive Months	26	36	22
Number of Negative Months	10	0	14
% of Positive Months	72.22	100.00	61.11

## Wellington Global Total Return

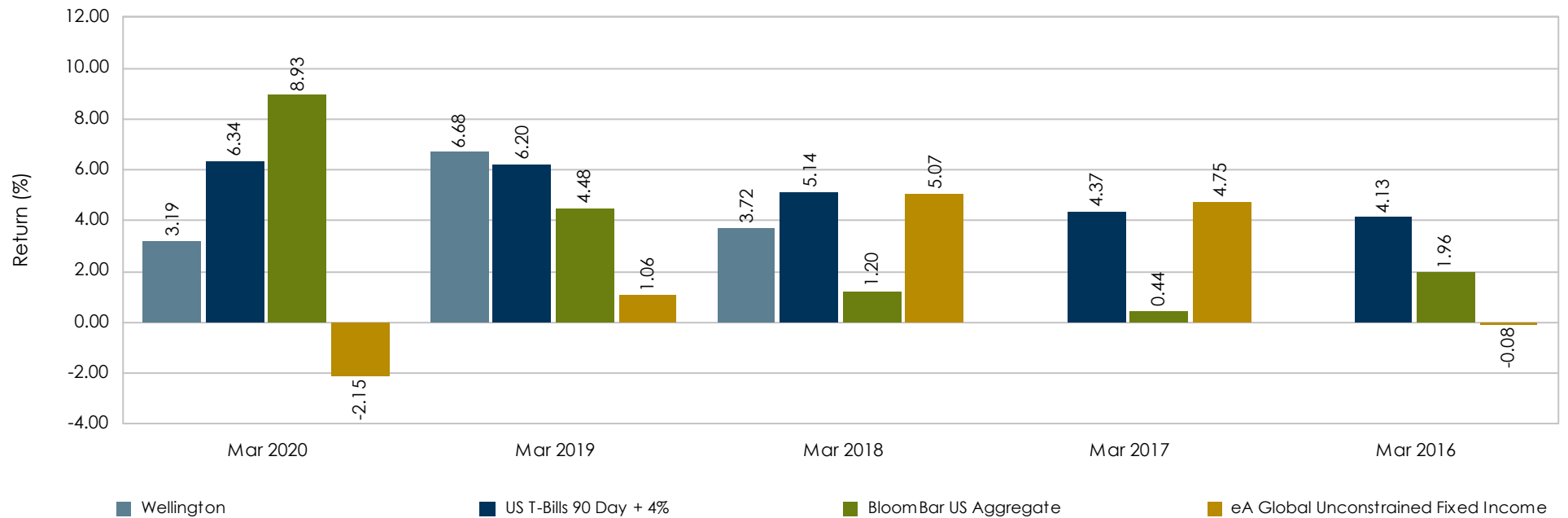
For the Periods Ending March 31, 2020



Ranking	5	8	10	5	4
5th Percentile	-0.02	0.93	4.09	4.41	4.31
25th Percentile	-4.54	-1.82	0.22	1.23	2.21
50th Percentile	-6.95	-4.53	-2.15	-1.42	0.94
75th Percentile	-11.44	-7.89	-6.20	-4.84	-0.39
95th Percentile	-17.34	-14.17	-12.84	-9.41	-4.83
Observations	116	116	116	115	111

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

**Wellington Global Total Return**  
For the One Year Periods Ending March



Ranking	10	3	68		
5th Percentile	4.09	5.52	17.37	11.63	6.13
25th Percentile	0.22	3.68	11.42	7.94	1.39
50th Percentile	-2.15	1.06	5.07	4.75	-0.08
75th Percentile	-6.20	-4.22	3.40	-0.15	-2.20
95th Percentile	-12.84	-9.28	1.37	-9.19	-5.98
Observations	116	136	169	151	177

The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

## **Real Assets Manager Performance**

## JP Morgan Strategic Property

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** Core Real Estate
- **Vehicle** Non-Mutual Commingled
- **Benchmarks** NFI ODCE Net and NCREIF Property
- **Performance Inception Date** December 2007
- **Fees** First \$100M at 92 bps, next \$150M at 80 bps, next \$250M at 70 bps, balance at 50 bps

### Performance Goals

- Outperform the NFI ODCE Net.

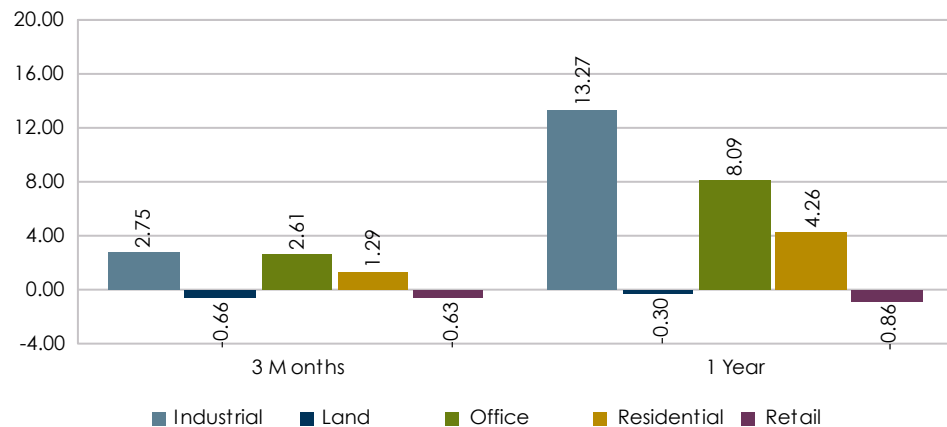
### Account Information

- **Ending Market Value** \$134,171,132

### Fund Information

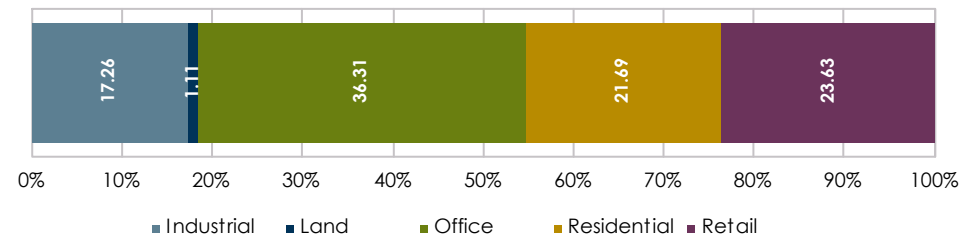
- **Gross Market Value** \$40,805,884,046
- **Net Market Value** \$30,981,655,161
- **Cash Balance of Fund** \$820,806,268
- **# of Properties** 162
- **# of Participants** 369

### Returns by Property Type (%)

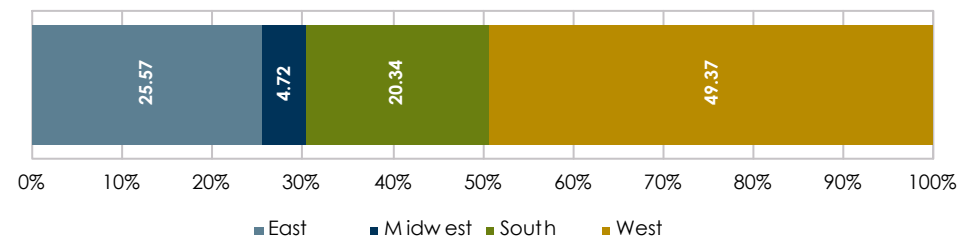


### Allocations

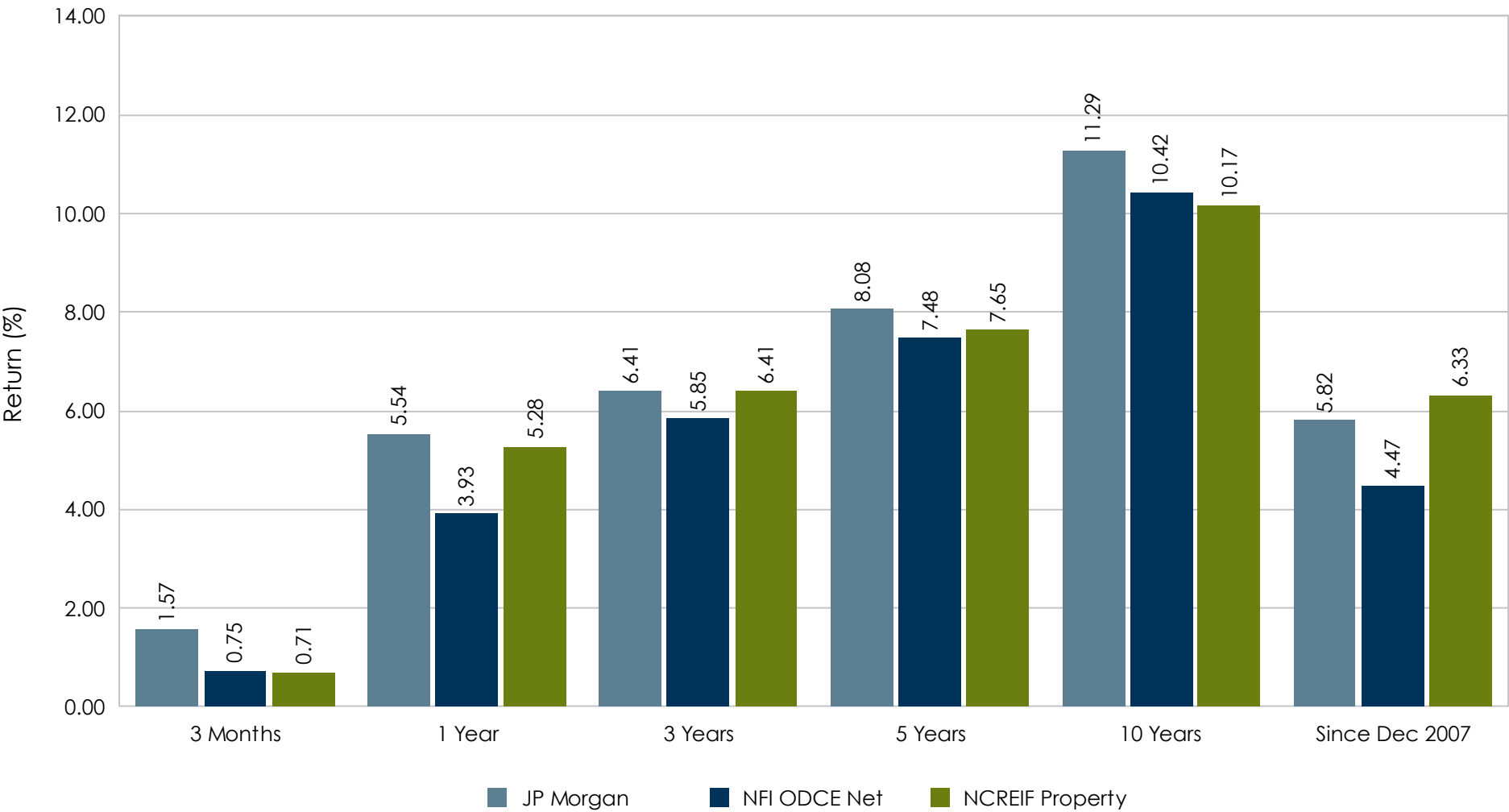
#### Property Type



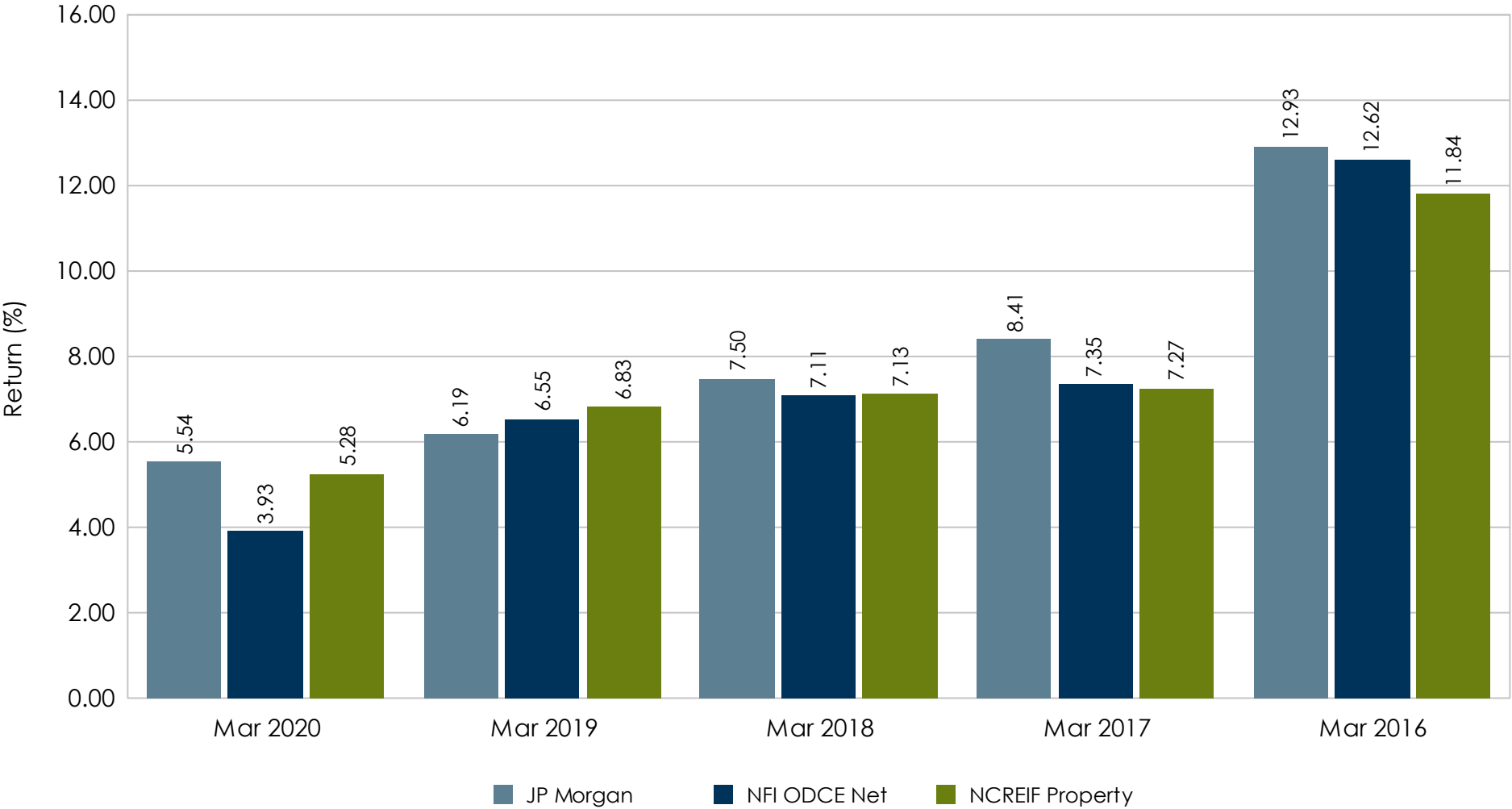
#### Geographic Region



**JP Morgan Strategic Property**  
*For the Periods Ending March 31, 2020*



**JP Morgan Strategic Property**  
*For the One Year Periods Ending March*





## Blackstone Property Partners

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** Core Real Estate
- **Vehicle** Limited Partnership
- **Benchmarks** NFI ODCE Net and NCREIF Property
- **Performance Inception Date** January 2015

### Account Information

- **Ending Market Value** \$86,879,229

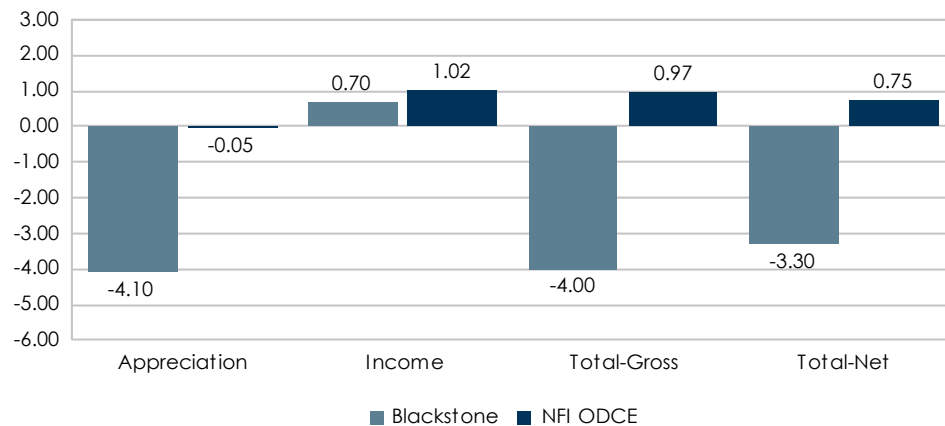
### Fund Information

- **Net Market Value** \$11,000,000,000
- **# of Properties** 40

### Performance Goals

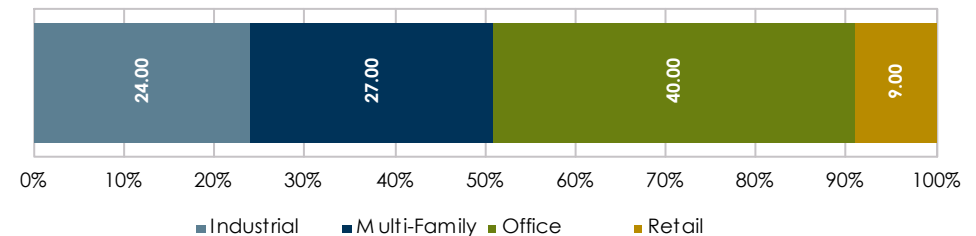
- Outperform the NFI ODCE Net and NCREIF Property.

### Current Quarter Returns (%)

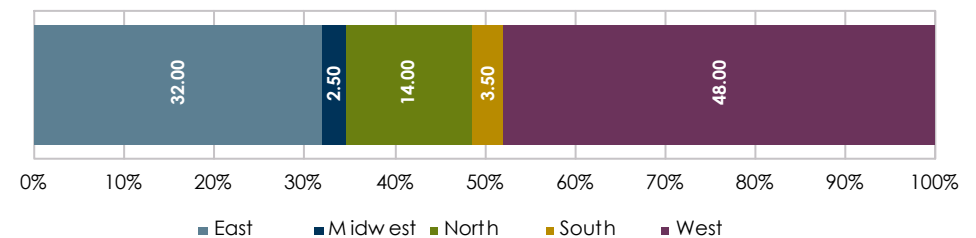


### Allocations

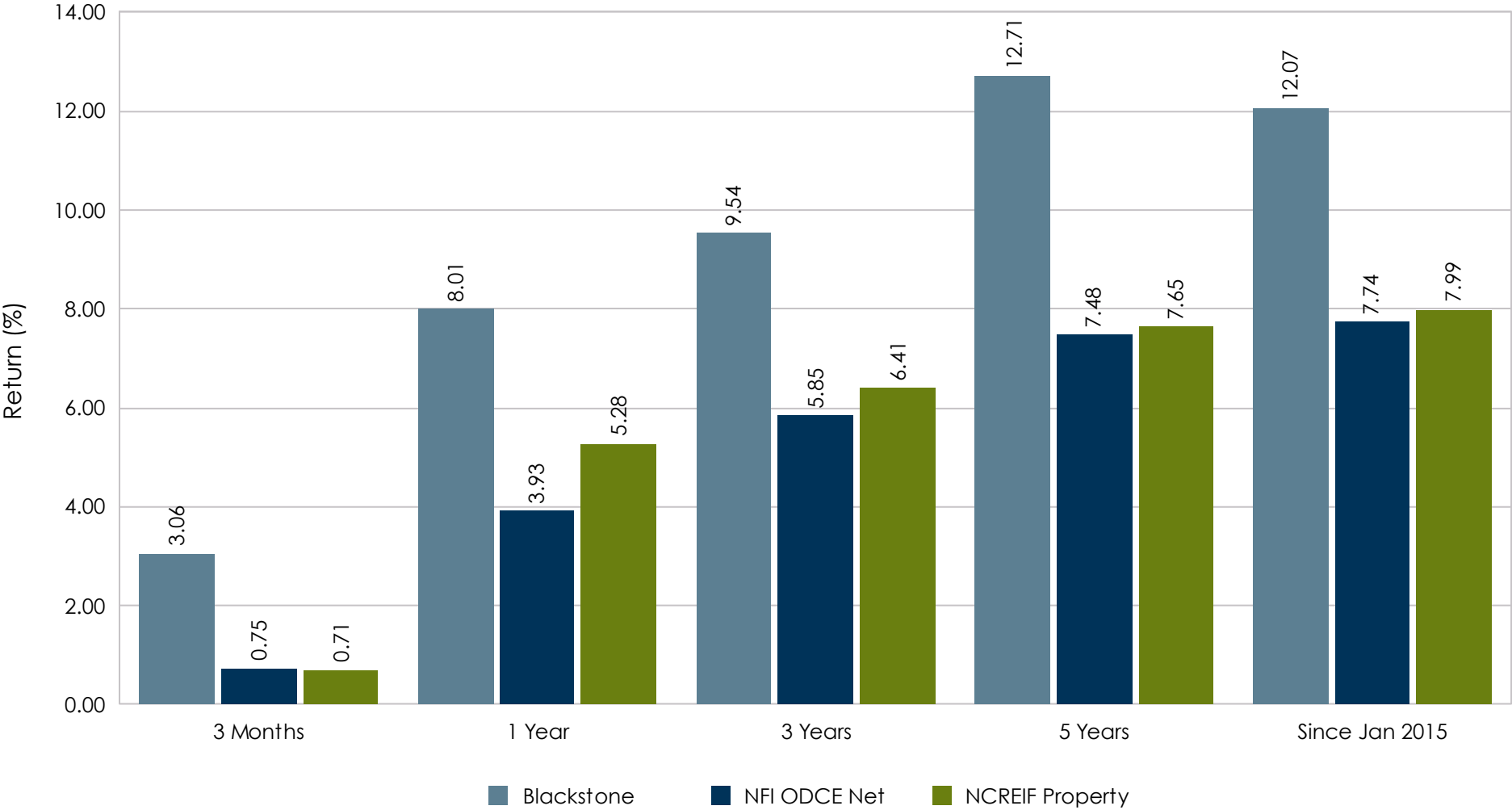
#### Property Type



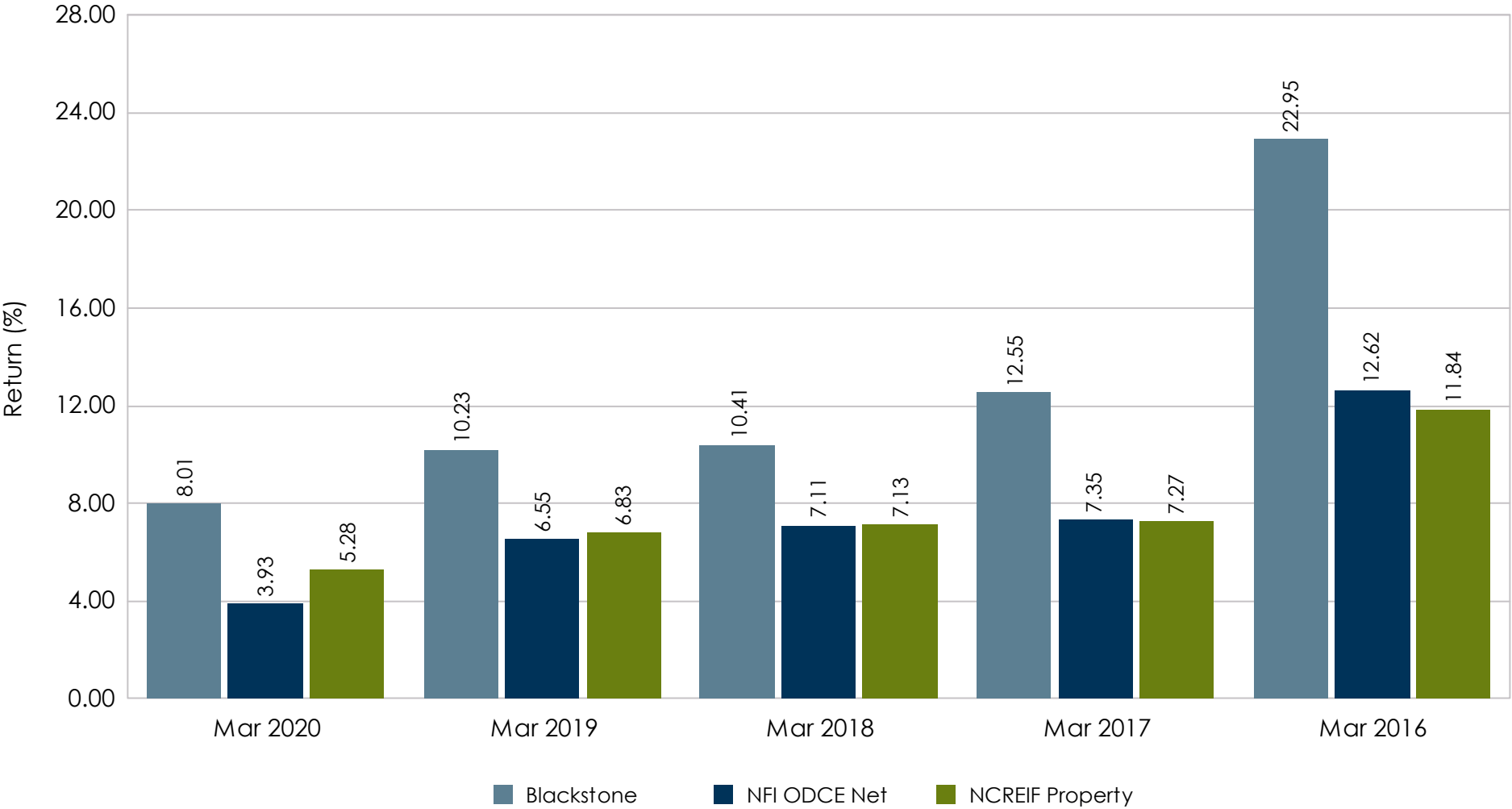
#### Geographic Region



**Blackstone Property Partners**  
*For the Periods Ending March 31, 2020*



**Blackstone Property Partners**  
*For the One Year Periods Ending March*



**Private Real Estate - Active Funds***For the Period Ending March 31, 2020***Summary of Cash Flows for 6 Months**

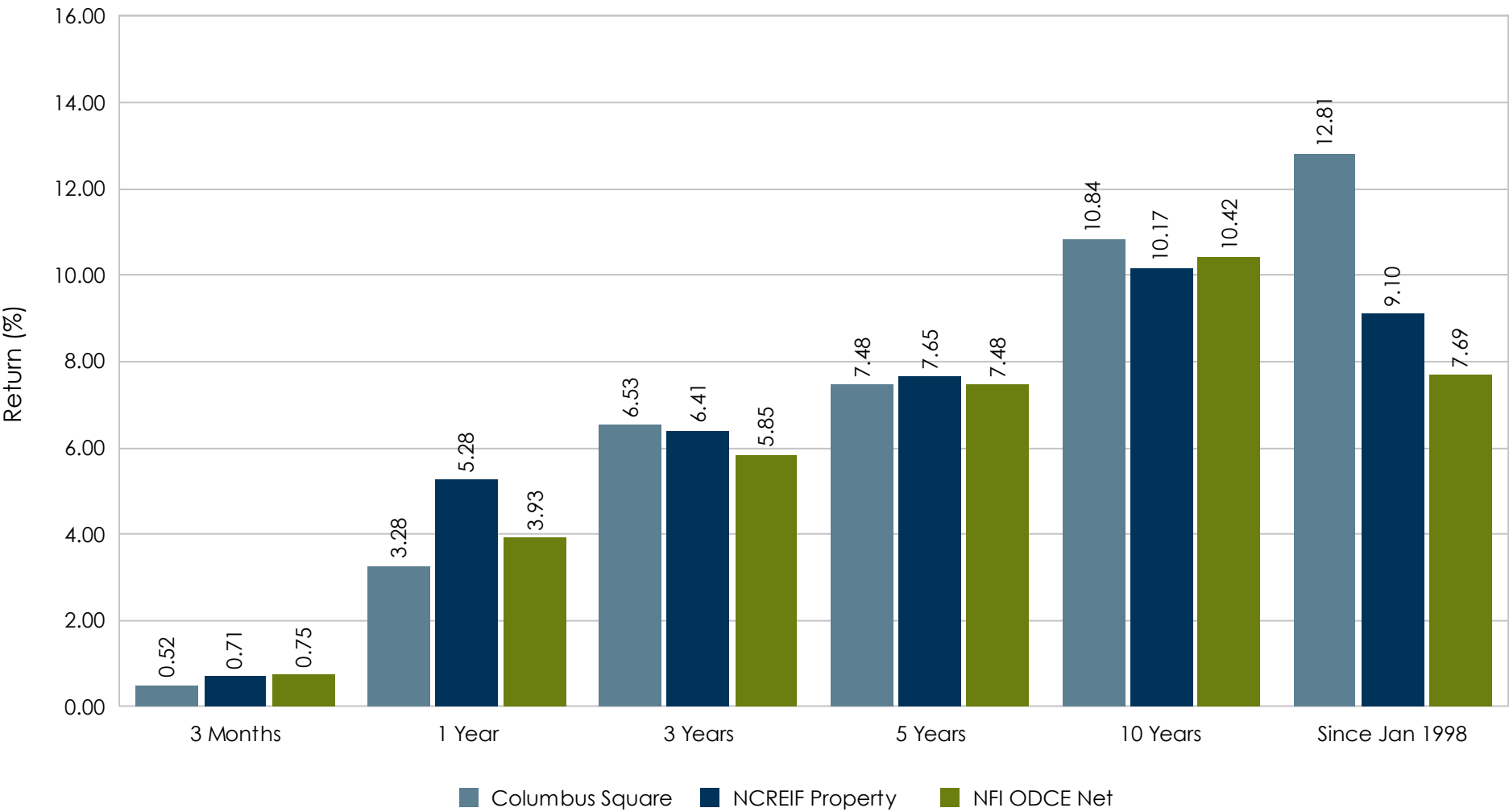
Cash Outflows	Cash Inflows	Net Cash Flows
-6,776,303	3,147,421	-3,628,882

**Summary of Portfolio Inception to Date (Category totals include active and closed funds)**

	Inception Date	Committed	Drawn to Date	Remaining Commitment	Distributions to Date	Adjusted Ending Value	Total Value	Total Value to Paid-in
<b>Total</b>	<b>Aug-11</b>	<b>130,500,000</b>	<b>94,664,199</b>	<b>47,588,455</b>	<b>78,232,431</b>	<b>53,814,793</b>	<b>132,047,224</b>	<b>1.39x</b>
<b>Real Estate</b>	<b>Aug-11</b>	<b>130,500,000</b>	<b>94,664,199</b>	<b>47,588,455</b>	<b>78,232,431</b>	<b>53,814,793</b>	<b>132,047,224</b>	<b>1.39x</b>
Siguler Guff Dist. Real Estate Opp.	Aug-11	10,000,000	9,250,000	750,000	12,346,132	<b>4,088,203</b>	16,434,335	1.78x
TA Associates Realty X	Jan-13	20,000,000	20,000,000	-	30,064,935	<b>2,411,917</b>	32,476,852	1.62x
Cerberus Real Estate Fund III	Jul-13	20,000,000	25,185,319	4,871,659	25,979,622	<b>9,986,415</b>	35,966,037	1.43x
Hall Capital Fund III	Nov-14	7,500,000	7,080,261	419,739	2,880,272	<b>5,611,338</b>	8,491,610	1.20x
Siguler Guff Dist. Real Estate Opp. II	Dec-14	10,000,000	8,715,000	1,285,000	5,231,995	<b>6,797,031</b>	12,029,026	1.38x
Cerberus Institutional Real Estate Partners 4	Jun-16	15,000,000	11,563,804	4,999,645	1,563,559	<b>11,722,900</b>	13,286,459	1.15x
Siguler Guff Dist. Real Estate Opp. II B	Dec-17	10,000,000	5,410,000	4,590,000	-	<b>6,091,380</b>	6,091,380	1.13x
Angelo Gordon Realty Value Fund X	Jun-19	20,000,000	4,200,000	15,800,000	52,310	<b>3,978,970</b>	4,031,280	0.96x
Blackstone Real Estate Partners Fund IX, L.P	Sep-19	18,000,000	3,259,815	14,872,412	113,606	<b>3,126,639</b>	3,240,245	0.99x

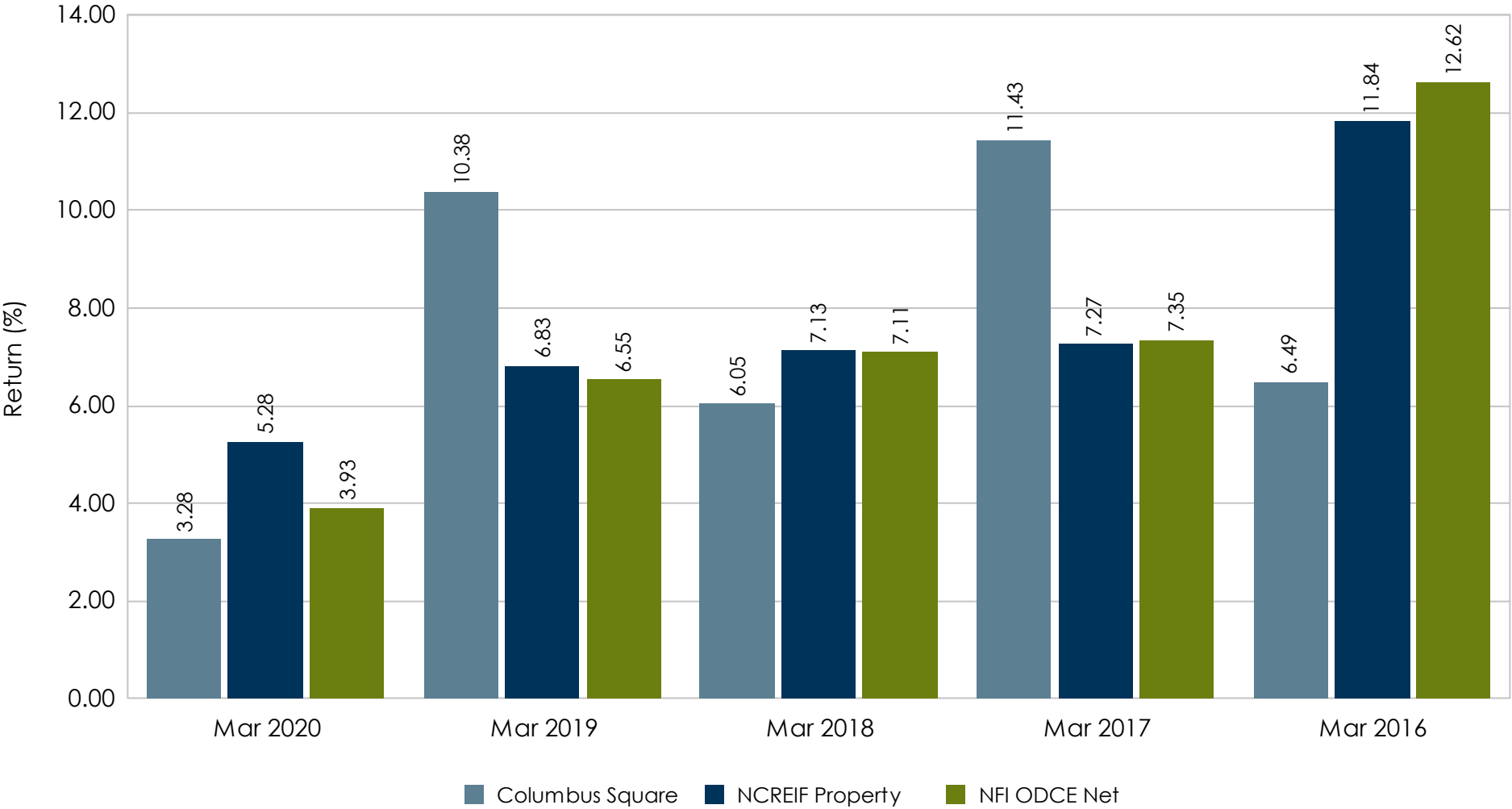
Columbus Square

For the Periods Ending March 31, 2020



Columbus Square

For the One Year Periods Ending March



## Mount Lucas Peak Partners

For the Periods Ending March 31, 2020

### Account Description

- **Strategy** Other
- **Vehicle** Non-Mutual Commingled
- **Benchmark** CS Hedge - Global Macro
- **Performance Inception Date** January 1998
- **Fees** 100 bps and an annual incentive fee

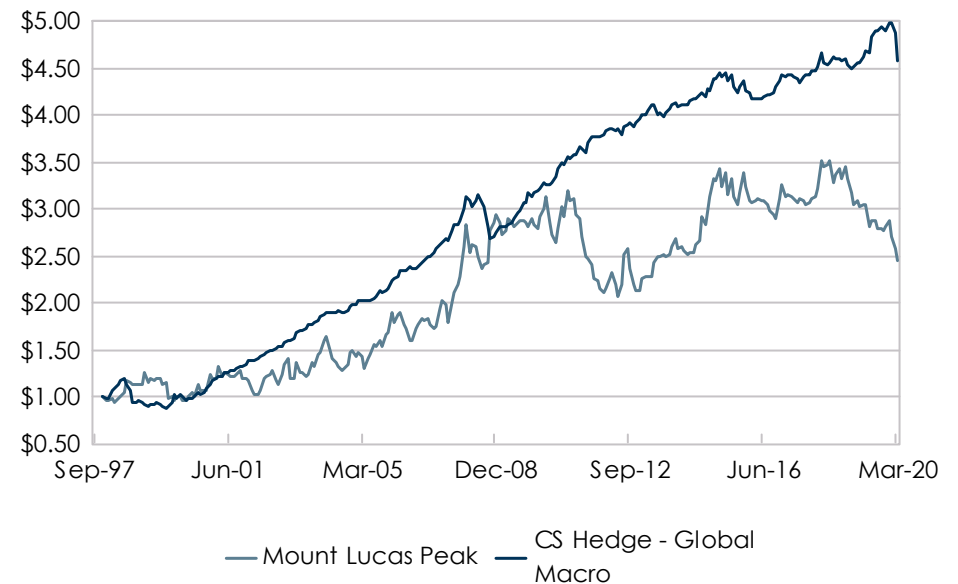
### Performance Goals

- Outperform the CS Hedge - Global Macro.

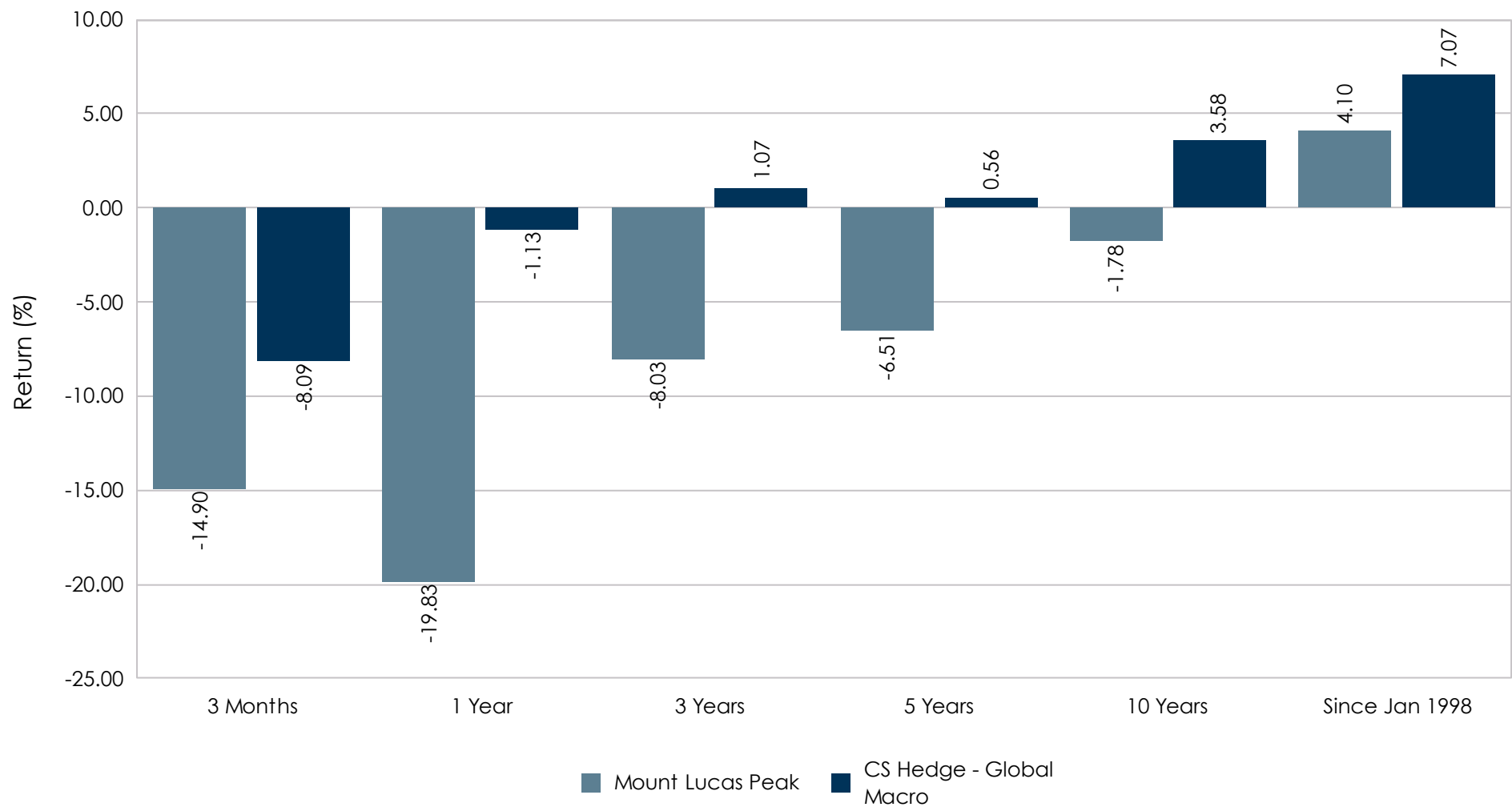
### Dollar Growth Summary (\$000s)

	FYTD	1 Year
<b>Beginning Market Value</b>	<b>26,764</b>	<b>28,473</b>
Net Additions	-196	-266
Return on Investment	-3,975	-5,613
<b>Ending Market Value</b>	<b>22,594</b>	<b>22,594</b>

### Growth of a Dollar

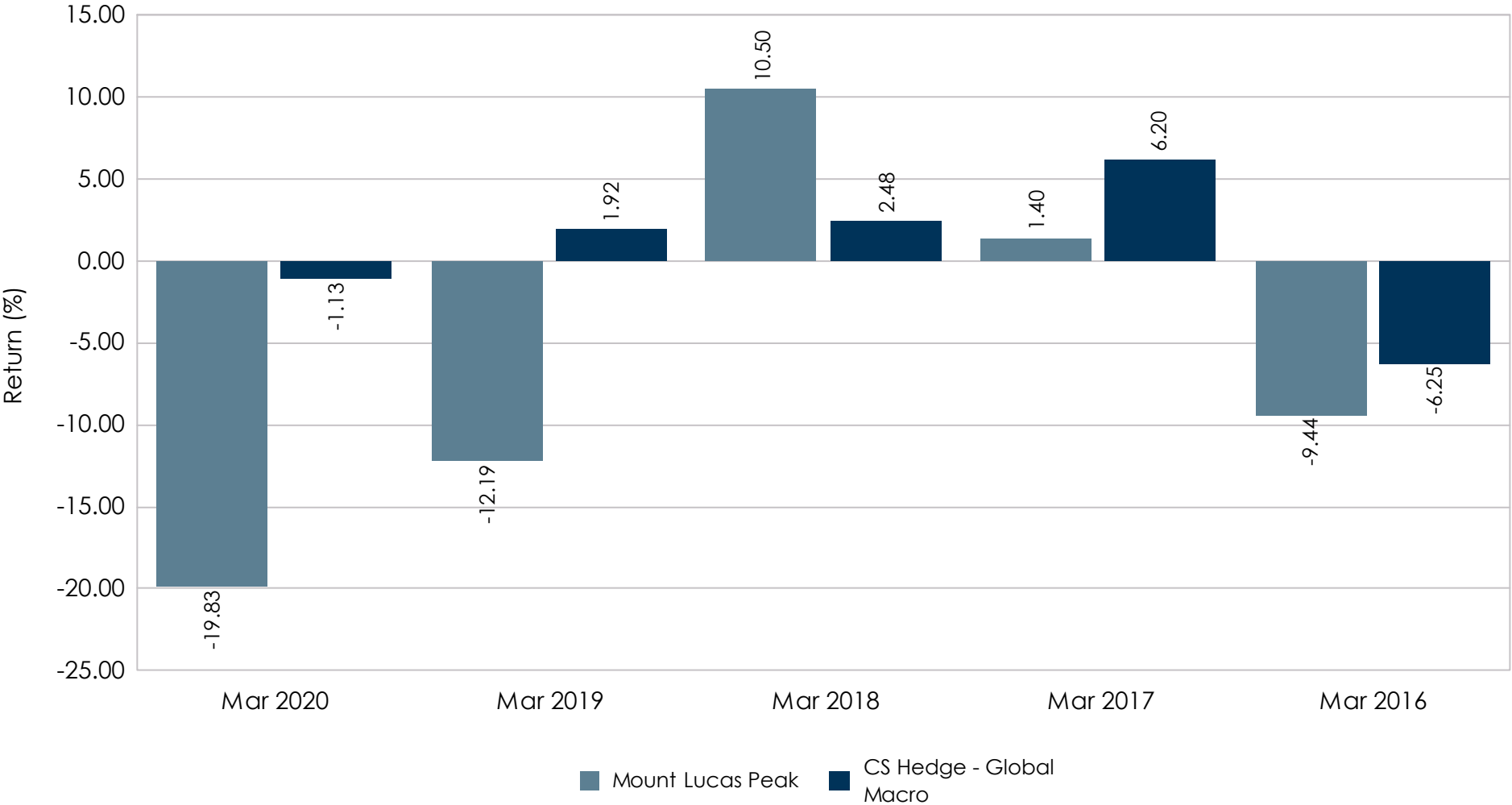


**Mount Lucas Peak Partners**  
*For the Periods Ending March 31, 2020*





**Mount Lucas Peak Partners**  
*For the One Year Periods Ending March*



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**Appendix**

### Securities Lending Income

	<u>Domestic Equity</u>	<u>Fixed Income</u>	<u>Total</u>
<b>2019</b>			
Q1	\$0	\$0	\$0
Q2	\$0	\$0	\$0
Q3	\$12,071	\$1,047	\$13,117
Q4	\$8,463	\$599	\$9,062
<b>2019 Total</b>	<u>\$20,533</u>	<u>\$1,645</u>	<u>\$22,179</u>
<b>2020</b>			
Q1	\$15,261	\$817	\$16,078
Q2			\$0
Q3			\$0
Q4			\$0
<b>2020 Total</b>	<u>\$15,261</u>	<u>\$817</u>	<u>\$16,078</u>

## Definitions of Statistical Measures

**Alpha** - the annualized difference between the manager's actual return and the manager's expected return given its relative risk vs. the benchmark (which is represented by beta, a measure that tracks volatility to an index).

**Batting Average** - a measure used to quantify a manager's ability to meet or beat a benchmark. A manager who outperforms the benchmark 20 out of a possible 40 times has a batting average of 50.

**Beta** - measures the portfolio's sensitivity of returns to market movements represented by the primary benchmark.

**Down Capture** - demonstrates the ratio of the portfolio's average returns relative to the benchmark in periods in which the benchmark had a negative return. For instance, a down-capture of 96% indicates that, on average, the portfolio is down 96% when the benchmark is down 100%. Lower portfolio down-capture is preferred.

**R Squared** - the amount of the manager's return that can be explained by the benchmark. A R Squared of 100 indicates a perfect correlation, while a R Squared of 0 indicates no correlation at all.

**Sharpe Ratio** - a measure of return per unit of risk. Higher sharpe ratios are preferred while negative ratios are generally meaningless and cannot be used for comparison purposes.

**Standard Deviation** - a measure of the portfolio's volatility. A large standard deviation relative to the benchmark represents volatile portfolio returns.

**Tracking Error** - a measure that reports the difference between the return of a manager that is received and that of a benchmark that the manager is attempting to track.

**Up Capture** - demonstrates the ratio of the portfolio's average returns relative to the benchmark in periods in which the benchmark had a positive return. For instance, an up-capture of 96% indicates that, on average, the portfolio is up 96% when the benchmark is up 100%. Higher portfolio up-capture is preferred.

## Quality Rating Scale

Moody's Rating	S&P Rating	Prior to 1Q09	Beginning 1Q09	Beginning 3Q11	Moody's Rating	S&P Rating	Prior to 1Q09	Beginning 1Q09	Beginning 3Q11
TSY	TSY	10	26	24	Ba2	BB	6	13	13
AGY	AGY	10	25	24	Ba	BB		13	13
Aaa	AAA	10	24	24	MIG4		6	13	13
Aa1	AA+	9.3	23	23	Ba3	BB-	5.7	12	12
Aa2	AA		22	22	B1	B+	5.3	11	11
Aa	AA	9	22	22	B2	B	5	10	10
MIG1		9	22	22	B	B		10	10
Aa3	AA-	8.7	21	21	B3	B-	4.7	9	9
A1	A+	8.3	20	20	Caa1	CCC+	4.3	8	8
A-1			20	20	Caa2	CCC	4	7	7
A2	A	8	19	19	Caa	CCC		7	7
A	A		19	19	Caa3	CCC-	3.7	6	6
MIG2		8	19	19	Ca	CC	3	5	5
A3	A-		18	18	C	C	2	4	4
Baa1	BBB+	7.7	17	17		DDD	1	3	3
Baa2	BBB	7.3	16	16		DD		2	2
Baa	BBB	7	16	16		D		1	1
MIG3			16	16	NR	NR	N/A	-1	-1
Baa3	BBB-	7	15	15	NA	NA	N/A		
Ba1	BB+	6.7	14	14	N/A	N/A			

Historical Benchmark Composition

Total Fund Policy

10/31/1990	The index consists of 55.0% Russell 3000, 35.0% BloomBar US Aggregate, 10.0% MSCI EAFE.
06/30/2007	The index consists of 55.0% Russell 3000, 35.0% BloomBar Universal, 10.0% MSCI EAFE.
11/30/2007	The index consists of 55.0% Russell 3000, 10.0% MSCI EAFE, 30.0% BloomBar Universal, 5.0% NFI ODCE Net.
08/31/2012	The index consists of 65.0% MSCI ACWI, 30.0% BloomBar Universal, 5.0% NFI ODCE Net.
08/31/2014	The index consists of 60.0% MSCI ACWI, 30.0% BloomBar Universal, 5.0% NFI ODCE Net, 5.0% Bloomberg Commodity.
04/30/2016	The index consists of 60.0% MSCI ACWI, 25.0% BloomBar Universal, 10.0% NFI ODCE Net, 5.0% Bloomberg Commodity.
09/30/2019	The index consists of 60.0% MSCI ACWI, 25.0% BloomBar Universal, 15.0% NFI ODCE Net.

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