Oklahoma Police Pension & Retirement System

Investment Performance Review

December 31, 2019





We are proud to announce that ACG has been named a Greenwich Associates Quality Leader recognized as one of the top midsized 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 appreciative of this honor, and we are grateful to all those who have helped us get to where we are.



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Year in Review 2019

2019 Highlights

While the global economy extended its post-crisis recovery in 2019, growth occurred at its slowest pace since the global financial crisis. Despite the headwinds from a weak global economy, trade disputes, geopolitical tensions, and social unrest, it was a strong year for global equities.

Key Highlights:

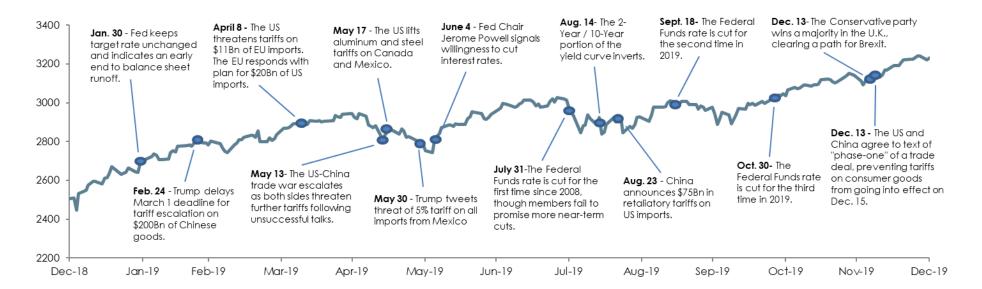
- Political and trade-related headlines fostered an environment of uncertainty
- Global economic momentum receded, despite notching another year of positive growth
- Central banks relented on monetary policy tightening, with the US Fed cutting rates three times
- Non-US stocks underperformed US stocks, with emerging markets lagging all year

The US economy grew for the tenth consecutive year in 2019, buoyed by strong consumer spending and a healthy job market. While recession alarms began to sound earlier in the year, that appeared to have been averted in the short term. The Fed's 75 bps of interest rate cuts, new repo programs, and "QE Lite," a \$60 billion Treasury bill purchase program, helped provide relief.

Following a weak 2018, there was concern central banks had few remaining levers to pull to avert a slowdown. This proved to be an underestimation, as in addition to the US Fed, approximately 40 other central banks cut rates more than a combined 60 times. Emerging market rate cuts in particular were numerous and helped limit trade war induced damage but further exhausted central bank tools to reverse any additional slowdown.



Price Change S&P 500



Sources: Bloomberg, ACG Research

Economic Conditions 2019

Global Economy

The global economy began 2019 in an uncertain state, with concerns including US-China trade tensions, a slowing manufacturing base, and Brexit prominent among a host of political and social fractures. The US Fed's willingness to be "patient" in light of global developments, and ultimately the "pivot" to a more accommodative policy stance was critical in setting a floor for the economy. Although the perceived threat of a US or global recession intensified through the summer, widespread policy accommodation and progress toward key resolutions fostered a more constructive outlook by year-end.

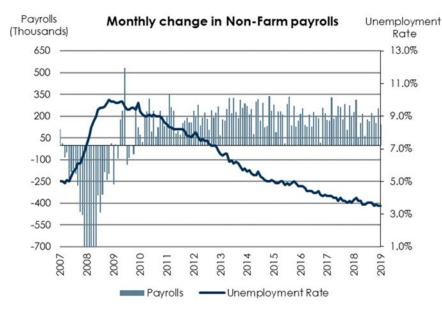
The relative strength of the US economy, favorable interest rate differentials, and its status as the world's reserve currency caused the USD to appreciate broadly for most the year. The emerging markets currency basket faced ongoing headwinds, given concern over global trade dynamics and the impact on developed market growth.

Chinese policymakers spent most of the year implementing a variety of stimulative monetary and fiscal policies in an effort to mitigate trade disruptions and to achieve targeted growth. While key structural reforms remain necessary going forward, the obvious impact of China's fortunes on countries across the globe required a shorter-term focus.



Sources: Bloomberg, ACG Research

US Economy



The US economy completed its tenth year of expansion in 2019 with generally strong fundamentals, particularly consumer spending and unemployment. Year-over-year growth in real GDP stands at 2.1% for the most recent reporting, representing a downshift from the prior year's above-trend results which benefited from the passage of Federal tax reform.

Core CPI increased to 2.3% by the end of the year, but this is a figure the US Fed appears willing to let drift higher in the quarters ahead. Despite having added 2.1 million jobs in 2019, wage growth is not excessive at 2.9% year-over-year. With 111 consecutive months of job growth, the unemployment rate matches the 50-year low of 3.5%. Consumer sentiment and personal consumption were well-supported throughout 2019, helping to carry the economy through the distractions of the trade war and the slowdown in manufacturing.

The housing market regained momentum as the Fed's rate cuts led to lower mortgage rates and housing starts rising more than expected in the latter half of the year. Despite enduring three consecutive monthly declines between August and October, the Conference Board's index of 10 Leading Economic Indicators was relatively steady throughout the year.

Sources: Bloomberg, ACG Research

In Brief...

- > 2019 was a strong year for global equities, with US equities outperforming Non-US and emerging markets trailing developed.
- > US bonds performed well, benefitting from falling interest rates following the Fed's shift to accommodative monetary policy.
- > A strong US Dollar was a drag on both developed and emerging Non-US returns for most of the year.
- > Commodities had a positive 2019, far surpassing the average of the previous ten years.

Best
Performing
A

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Russell 2000 26.85%	BloomBar Agg Bond 7.84%	FTSE EPRA/NAREIT Dev RE 28.65%	Russell 2000 38.82%	FTSE EPRA/NAREIT Dev RE 15.89%	S&P 500 1.38%	Russell 2000 21.31%	MSCI EM Free 37.75%	BloomBar 1-3 Mo. Treasury 1.82%	S&P 500 31.49%
Russell MidCap 25.48%	BloomBar EM Bond 6.97%	MSCI EM Free 18.63%	Russell MidCap 34.76%	S&P 500 13.69%	BloomBar EM Bond 1.29%	BloomBar High Yield 17.13%	MSCI EAFE 25.62%	BloomBar Agg Bond 0.01%	Russell MidCap 30.54%
FTSE EPRA/NAREIT Dev RE 20.40%	BloomBar Glbl Treas ex-US 5.24%	BloomBar EM Bond 17.95%	S&P 500 32.39%	Russell MidCap 13.22%	BloomBar Agg Bond 0.55%	Russell MidCap 13.80%	S&P 500 21.83%	HFRI FOF: Conserv. -0.88%	Russell 2000 25.52%
MSCI EM Free 19.20%	BloomBar High Yield 4.98%	MSCI EAFE 17.90%	MSCI EAFE 23.29%	BloomBar Agg Bond 5.97%	HFRI FOF: Conserv. 0.36%	S&P 500 11.96%	Russell MidCap 18.52%	BloomBar Glbl Treas ex-US -0.89%	FTSE EPRA/NAREIT Dev RE 23.06%
DJ-UBS Commodity 16.83%	S&P 500 2.11%	Russell MidCap 17.28%	HFRI Equity Hdg 14.28%	Russell 2000 4.89%	FTSE EPRA/NAREIT Dev RE 0.05%	Bloomberg Commodity 11.77%	Russell 2000 14.65%	BloomBar High Yield -2.08%	MSCI EAFE 22.66%
BloomBar High Yield 15.12%	BloomBar 1-3 Mo. Treasury 0.07%	Russell 2000 16.35%	HFRI FOF: Conserv. 7.70%	BloomBar EM Bond 4.76%	BloomBar 1-3 Mo. Treasury 0.03%	MSCI EM Free 11.60%	HFRI Equity Hdg 13.29%	BloomBar EM Bond -2.46%	MSCI EM Free 18.90%
S&P 500 15.06%	Russell MidCap -1.55%	S&P 500 16.00%	BloomBar High Yield 7.44%	HFRI FOF: Conserv. 3.12%	MSCI EAFE -0.39%	BloomBar EM Bond 9.88%	FTSE EPRA/NAREIT Dev RE 11.42%	S&P 500 -4.38%	BloomBar High Yield 14.32%
BloomBar EM Bond 12.84%	HFRI FOF: Conserv. -3.56%	BloomBar High Yield 15.81%	FTSE EPRA/NAREIT Dev RE 4.39%	BloomBar High Yield 2.45%	HFRI Equity Hdg -0.96%	HFRI Equity Hdg 5.47%	BloomBar Glbl Treas ex-US 9.31%	FTSE EPRA/NAREIT Dev RE -4.74%	HFRI Equity Hdg 13.89%
HFRI Equity Hdg 10.45%	Russell 2000 -4.18%	HFRI Equity Hdg 7.44%	BloomBar 1-3 Mo. Treasury 0.06%	HFRI Equity Hdg 1.81%	Russell MidCap -2.44%	FTSE EPRA/NAREIT Dev RE 4.99%	BloomBar EM Bond 8.17%	HFRI Equity Hdg -7.14%	BloomBar EM Bond 13.11%
MSCI EAFE 8.21%	FTSE EPRA/NAREIT Dev RE -5.82%	BloomBar Agg Bond 4.22%	BloomBar Agg Bond -2.02%	BloomBar 1-3 Mo. Treasury 0.03%	Russell 2000 -4.41%	BloomBar Agg Bond 2.65%	BloomBar High Yield 7.51%	Russell MidCap -9.06%	BloomBar Agg Bond 8.72%
BloomBar Agg Bond 6.54%	HFRI Equity Hdg -8.37%	HFRI FOF: Conserv. 4.21%	MSCI EM Free -2.27%	MSCI EM Free -1.82%	BloomBar High Yield -4.47%	HFRI FOF: Conserv. 1.88%	HFRI FOF: Conserv. 4.12%	Russell 2000 -11.01%	Bloomberg Commodity 7.69%
BloomBar Glbl Treas ex-US 6.12%	MSCI EAFE -11.73%	BloomBar Glbl Treas ex-US 1.77%	BloomBar EM Bond -4.12%	BloomBar Glbl Treas ex-US -2.77%	BloomBar Glbl Treas ex-US -4.84%	BloomBar Glbl Treas ex-US 1.87%	BloomBar Agg Bond 3.54%	Bloomberg Commodity -11.25%	HFRI FOF: Conserv. 5.96%
HFRI FOF: Conserv. 5.07%	DJ-UBS Commodity -13.32%	BloomBar 1-3 Mo. Treasury 0.09%	BloomBar Glbl Treas ex-US -4.88%	MSCI EAFE -4.48%	MSCI EM Free -14.60%	MSCI EAFE 1.51%	Bloomberg Commodity 1.70%	MSCI EAFE -13.36%	BloomBar Glbl Treas ex-US 5.04%
BloomBar 1-3 Mo. Treasury 0.13%	MSCI EM Free -18.17%	DJ-UBS Commodity -1.06%	DJ-UBS Commodity -9.52%	DJ-UBS Commodity -17.01%	DJ-UBS Commodity -24.66%	BloomBar 1-3 Mo. Treasury 0.28%	BloomBar 1-3 Mo. Treasury 0.82%	MSCI EM Free -14.25%	BloomBar 1-3 Mo. Treasury 2.22%

Sources: Bloomberg, ACG Research

Worst Performing Global Equity Update

Global Long-Only Equity

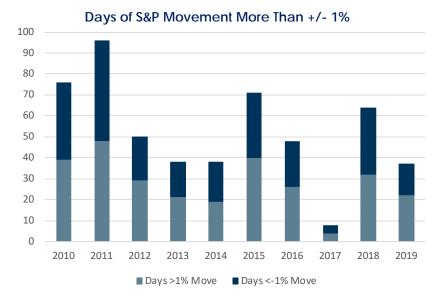
Global equities enjoyed a robust 2019 marked by an MSCI ACWI increase of 27.3% and solid gains across the globe. The year, notwithstanding a relatively depressed starting point, began with strong upward moves in the first two months. Global headlines then drove investor consternation (US/China trade tensions, Brexit, concerns of global economic slowdown, Hong Kong protests) resulting in seven months of volatility and a sideways trade. Ultimately investors moved back to a risk-on mentality in mid-October as concerns were mitigated from accommodative global central bank postures, announced progress on US-China trade and a possible, less disruptive resolution to the Brexit saga. Despite a brief rotation to Value at the end of the third quarter, Growth style indices outpaced their Value counterparts again this year.

US Large Caps led in 2019 with the S&P 500 returning 31.5% for the year. US Small Caps also advanced nicely with the Russell 2000 up 25.5%, generally following a similar pattern as the large caps. Gains in the US were broad-based across sectors, highlighted most meaningfully by 40%+ moves in IT, with the exception of Small Cap Energy which posted a single-digit decline.

International Markets posted double-digit advances but trailed US-based peers. Developed markets advanced 22.7% for the year as measured by the MSCI EAFE, with most countries tallying gains while Emerging Markets gained 18.9%. The US dollar was broadly higher for much of 2019, strengthening vs. the Euro and Yuan, but weakening vs. Sources: Bloomberg, ACG Research the Yen and Sterling.

Global Markets Advanced with Volatile 2019 Path 130 125 120

Global Long/Short Equity



Sources: Bloomberg, ACG Research

Market volatility was present (both positive and negative) during 2019. With heightened macro impacts, especially during an election year, we anticipate continued volatility will be the norm for 2020. An environment such as this typically helps to generate opportunities on both the long and short side, so equity long/short managers should stand to benefit.

Equity long/short managers generally had a strong showing in 2019, participating in market up moves while also protecting in drawdowns. Taking advantage of volatility, to provide both beta and alpha, is exactly what is desired from the equity long/short asset class. Gross exposure started 2019 near a multi-year low and ended the year at the highest level in more than five years, demonstrating increased optimism since mid-year when exposures were weighed down by macro concerns. Net exposure, which was low for most of the year, increased during 4Q as managers reported positive companyspecific data but remain concerned about potential market uncertainty due to political events.

Style exposure was a major contributor in 2019 as momentum/growth drove performance, both positively for most of the year as well as negatively in September and October. Managers with significant exposure to technology and health care saw the highest swings. Financials remains the most underweighted sector by equity long/short managers.

Brexit concerns caused European exposures to decrease to a multi-year low, but this reversed in 4Q as hope for a Brexit resolution drove European exposure to the highest level since 2015. Asia exposure also increased through the year, predominantly driven by Ching, as Japan exposure remains near historic lows.

Global Private Equity

Purchase prices continued their climb to record heights. The average price for a new LBO in the US rose to 12.0x EBITDA in 2019, up from 10.6x in 2018. Although some point to the composition of the completed sales as being heavy on technology and software companies as one reason for 2019's spike in pricing, it is not the only reason. Fundraising continues to be strong and private equity sponsors have over \$1 trillion in uninvested commitments ready and waiting to deploy. This uninvested capital puts upward pressure on all transaction prices.

Exit activity was resilient in 2019 as evidenced by the continuing strength of the US IPO market. Although the number of IPOs fell from 192 in 2018 to 160 in 2019, the amount of capital raised remained steady at over \$46 billion for the second consecutive year. The year was highlighted by Uber and Slack, which rank as two of the 10 largest U.S. IPOs of all-time. The year ended on a sour note as investors soundly rejected WeWork's accounting and governance missteps. Bitter medicine for WeWork investors but a much needed sanity check for public and private investors alike.

Outside the US, new transaction private equity activity slowed in 2019. In Asia, political unrest underscored by ongoing protests in Hong Kong dampened large scale dealmaking. Across the region, total transaction values fell almost 40% year-over-year. The drop-off in activity in Europe of 25%, mostly attributed to Brexit uncertainty, was not as severe, but still meaningful.

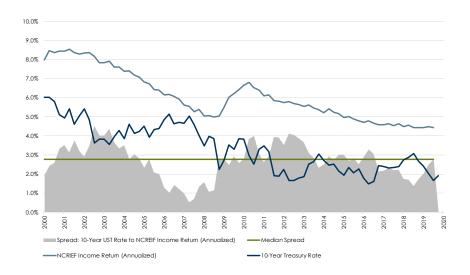
Purchase Multiples and Leverage Remain Elevated



Sources: S&P LCD, ACG Research

Global Real Assets

NCREIF Income Return Spread to Treasuries



Sources: NCREIF, ACG Research

The NCREIF Property Index (NPI) posted its 38th consecutive quarter (9.5 years) of positive appreciation in 3Q. This is 16 quarters longer than the second longest winning streak since the benchmark's inception in 1978. For the year, the NCREIF's annualized income return (a proxy for cap rates) has held steady at 4.4%.

Fundamental indicators remain strong across the four primary NPI property types with year-over-year income growth ranging from 2% - 8% and occupancy levels hovering above 94%, the all-time high for the index. The story of 2019 was the substantial headwinds faced by the retail sector, and more specifically, the mall sub-sector. These assets were written down substantially to start the year. Although overall transaction volume remains robust, a lack of bidders for saleable mall assets leaves the sub-sector searching for a bottom. Necessity and grocery-anchored retail assets continue to see solid transaction activity and fundamentals.

Overall, real estate assets continue to benefit from an ongoing economic expansion that has taken employment levels to new highs. The Fed's mid-year switch to a policy easing stance should also provide continuing, indirect support for real estate assets through low borrowing costs and a potential extension of this economic cycle.

The Bloomberg Commodity Index (BCOM) rose 7.7% in 2019, underperforming the BloomBar US Aggregate Bond Index by 1.0%, the S&P 500 by 23.8%, and the MSCI ACWI by 19.6%. Solid gains for gold and oil were offset by losses across natural gas and many base metals and agricultural products.

Global Traditional Bond Markets

US and global growth concerns drove risk-free rates lower throughout most of 2019, while robust demand for income allowed lower-quality credit to perform quite well. The **Federal Reserve's** "pivot" to a more accommodative stance led to rate cuts in July, September, and October and renewed balance sheet expansion. The Committee's latest projections suggest the targeted range for short-term rates will remain 1.50% to 1.75% throughout 2020. **The US Treasury yield curve (10's – 2's) ended steeper after briefly inverting.**

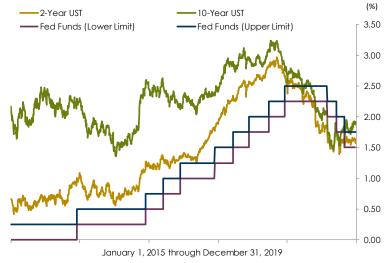
Given sensitivity to domestic interest rates, the **BloomBar US Aggregate** clearly outpaced expectations in 2019 with a total return of 8.7%. Despite modest losses to end the year, returns were positive in all four quarters. IG corporate credit was a top contributor given the 60 bps contraction in spreads. The benchmark's yield-to-worst is currently just 2.3%.

Despite a brief mid-year interruption in investor risk appetite, the **High Yield** bond category returned an impressive 14.3% in 2019. Index level spreads tightened a remarkable 190 bps during the year, and the meager yield-to-worst of 5.2% is approaching all-time lows.

Municipal Bonds were solidly positive, with the notable flattening of the tax-exempt yield curve rewarding investors with maturities beyond five years. A relatively strong fundamental backdrop and persistent category inflows allowed lower-rated credits to outperform.

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

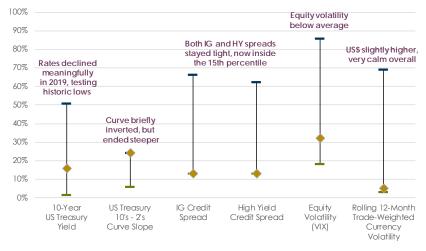
Evolving US Monetary Policy Cycle



Sources: Bloomberg, ACG Research

Global Nontraditional Fixed Income

Percentile Rankings of Observations for Past 15-Years



- Trailing 12-Month Minimum - Trailing 12-Month Maximum + December 31, 2019

Liquid Absolute Return strategies within our peer group produced an average return of just over 6.5% during 2019. The willingness to tactically assume modest portfolio duration alongside diversified credit exposures was a defining characteristic of outperformers. Managers implementing more defensive strategies, including meaningful cash reserves or credit hedges, tended to lag but remained universally positive. 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 head lower, and enhanced volatility in rates, spreads, and currency should provide alpha opportunities.**

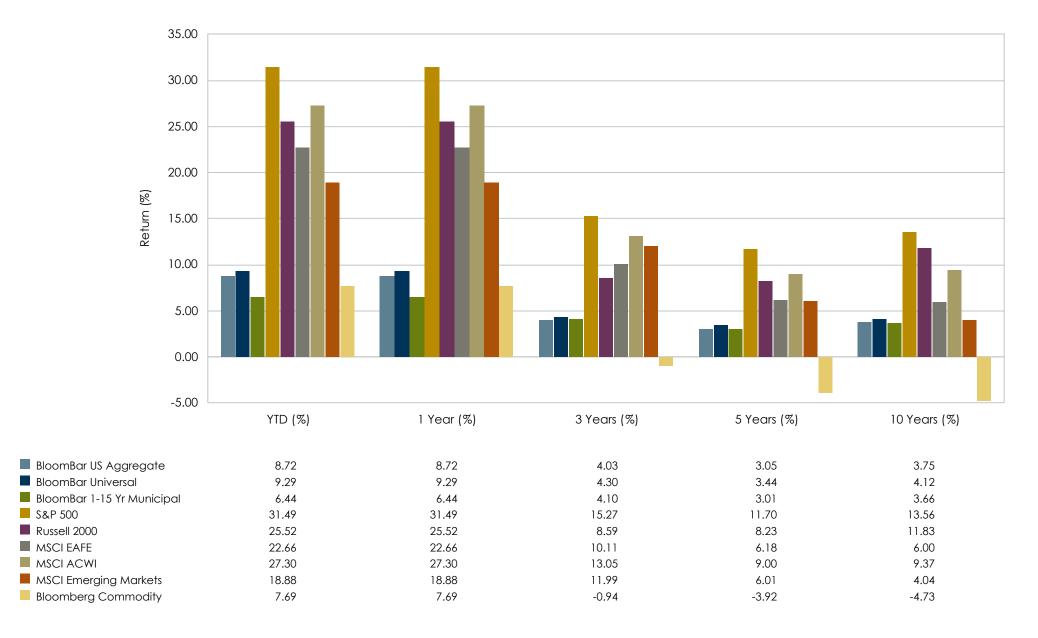
Long/Short Credit strategies broadly generated gains in 2019 despite lacking the duration tailwind of their more interest-rate sensitive, traditional fixed income counterparts. Managers also had to contend with an environment in which performance dispersion between high yield bonds and loans weighed on results within loan-heavy strategies. In the event-driven category, avoiding pitfalls was key to generating good performance. Some distressed managers struggled as several widely-held names performed poorly for those who didn't get the timing quite right. With credit spreads tight, we expect to see managers continue to employ a cautious approach, but volatility could create opportunities for long/short credit.

Private Credit strategies (typically five- to ten-year fund life) offer the opportunity to earn both a credit spread and an illiquidity premium versus publicly traded fixed income strategies. Credit quality mattered in 2019 as higher rated BB/BB- spreads tightened on average while lower rated B+/B spreads widened noticeably.

Sources: Bloomberg, ACG Research

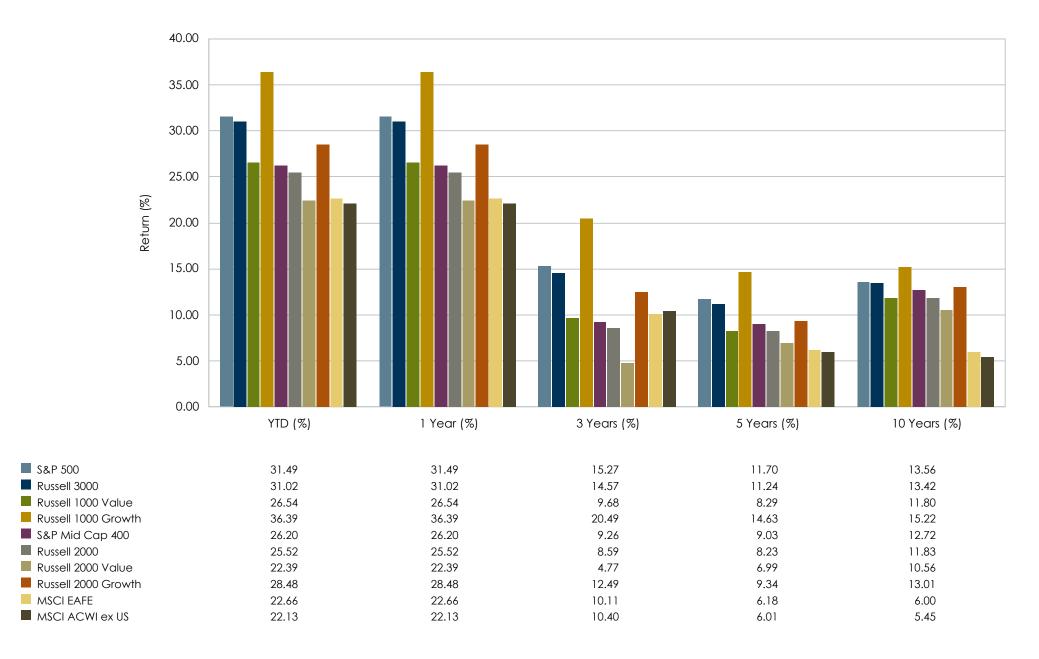
Market Environment

For the Periods Ending December 31, 2019



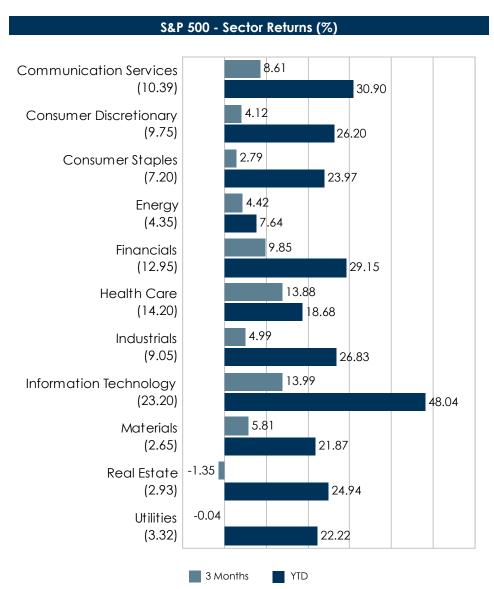
Equity Index Returns

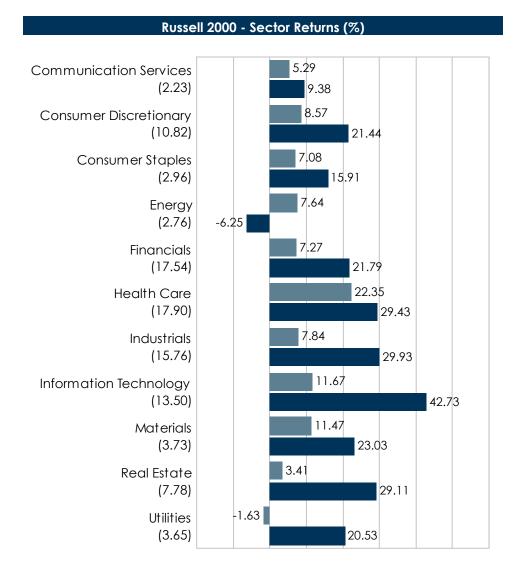
For the Periods Ending December 31, 2019



US Markets - Performance Breakdown

For the Periods Ending December 31, 2019

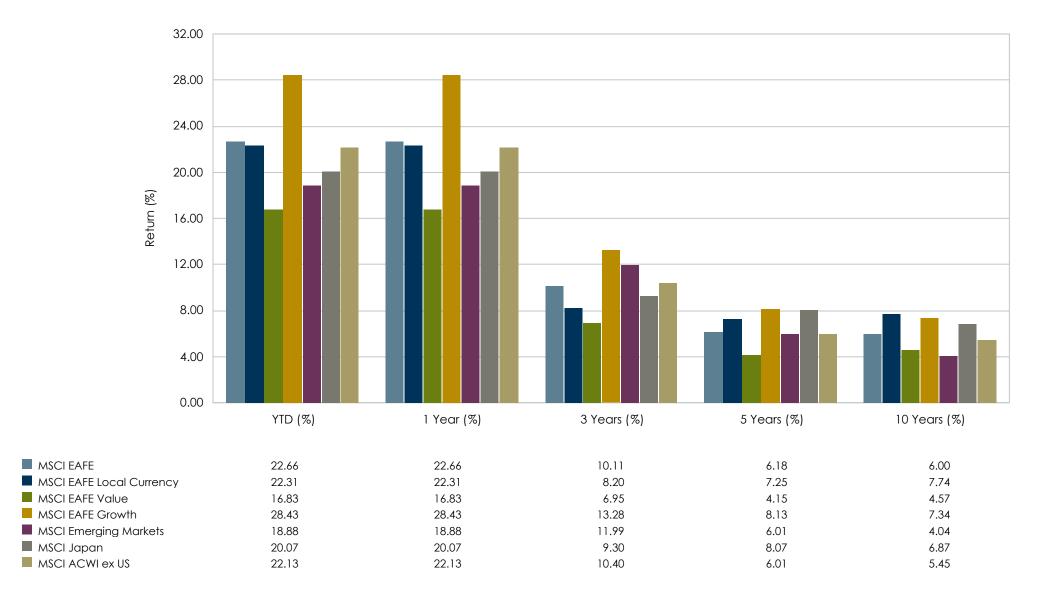




Numbers in parenthesis represent sector weightings of the index. Sector weights may not add to 100% due to rounding or securities that are not assigned to a Global Industry Classification Standard (GICS) sector.

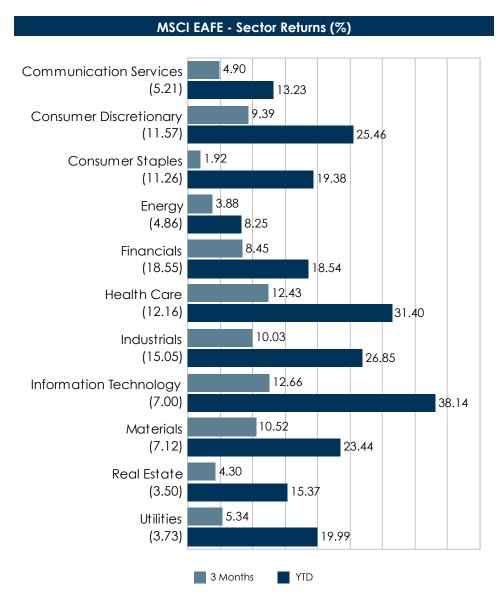
Non-US Equity Index Returns

For the Periods Ending December 31, 2019



Non-US Equity - Performance Breakdown

For the Periods Ending December 31, 2019



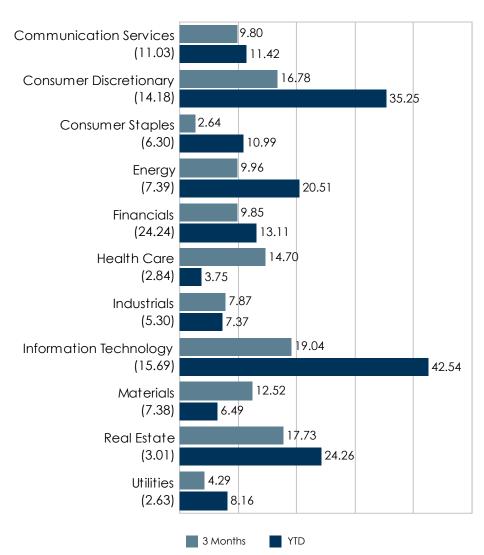
MSCI EAFE - Country Returns (%) 4.36 Australia (6.80) 23.16 8.03 Austria (0.22) 15.18 -0.88 Belgium (0.99) 21.43 13.09 Denmark (1.84) 29.00 3.11 Finland (0.94) 10.81 8.55 France (11.42) 26.94 9.90 Germany (8.65) 21.67 7.32 10.35 Hong Kong (3.49) 18.51 Ireland (0.59) 38.08 7.38 9.93 Israel (0.56) 8.12 Italy (2.34) 28.69 7.66 Japan (24.53) 20.07 7.43 Netherlands (3.97) 32.72 17.50 New Zealand (0.28) 38.83 4.53 Norway (0.62) 11.59 8.67 Portugal (0.16) 25.16 7.45 Singapore (1.28) 15.05 6.23 Spain (2.84) 12.69 13.37 Sweden (2.68) 22.85 7.64 Switzerland (9.33) 33.57 9.96 United Kingdom (16.47) 21.13

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

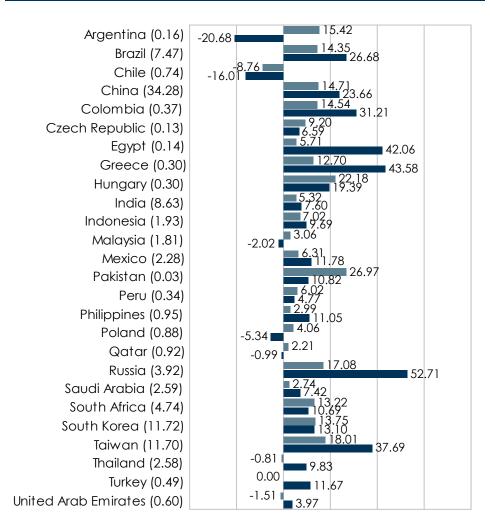
Emerging Markets - Performance Breakdown

For the Periods Ending December 31, 2019





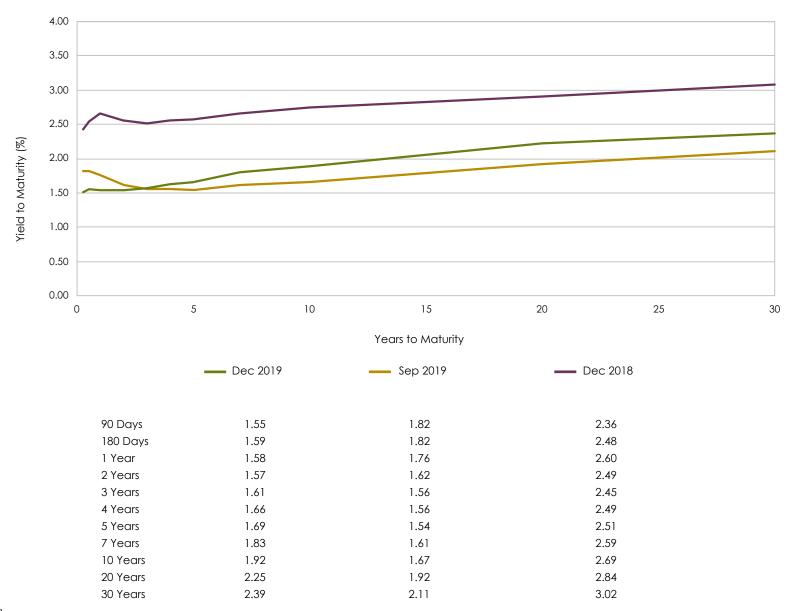
MSCI Emerging Markets - Country Returns (%)



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

Interest Rate Term Structure

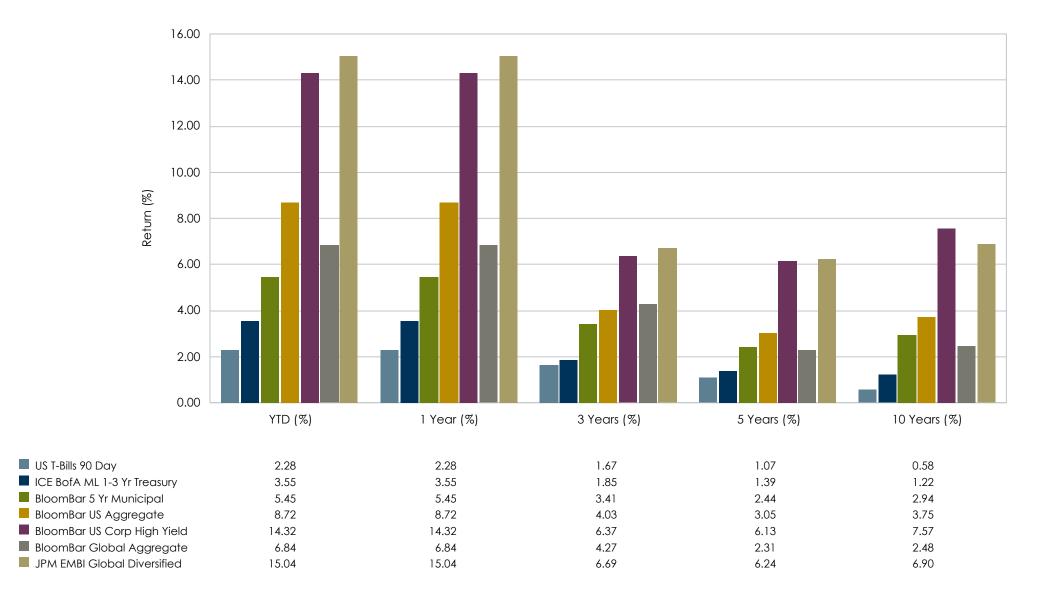
Government Issues - 3 Months to 30 Years Maturity



Source: Bloomberg

Fixed Income Index Returns

For the Periods Ending December 31, 2019



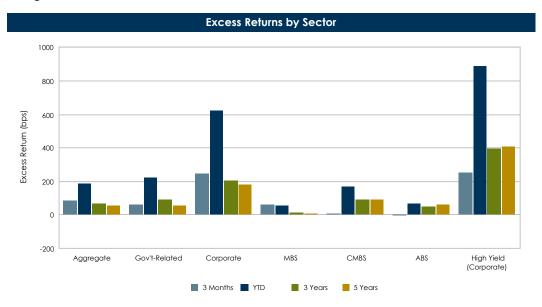
US Fixed Income Market Environment

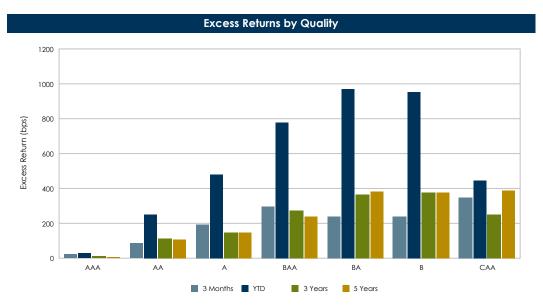
For the Periods Ending December 31, 2019

Nominal Returns By Sector (%)								
	3 Months	YTD	3 Years	<u> 5 Years</u>				
US Aggregate	0.18	8.73	4.04	3.06				
US Treasury	-0.79	6.85	3.30	2.35				
US Agg: Gov't-Related	0.24	9.04	4.43	3.11				
US Corporate IG	1.18	14.54	5.92	4.60				
MBS	0.71	6.34	3.25	2.59				
CMBS	-0.33	8.29	4.09	3.31				
ABS	0.39	4.51	2.61	2.21				
US Corp High Yield	2.62	14.31	6.37	6.13				

Nominal Returns by Quality (%)							
	3 Months	YTD	3 Years	<u> 5 Years</u>			
AAA	-0.18	6.68	3.30	2.48			
AA	-0.03	9.50	4.54	3.53			
Α	0.72	12.97	5.35	4.23			
BAA	1.69	16.44	6.69	4.97			
BA	2.45	15.50	6.55	6.19			
В	2.60	14.78	6.46	5.89			
CAA	3.74	9.53	5.15	6.09			

Nominal Returns by Maturity (%)								
	3 Months	<u>YTD</u>	3 Years	<u> 5 Years</u>				
1-3 Yr.	0.57	4.03	2.16	1.69				
3-5 Yr.	0.53	6.33	3.06	2.55				
5-7 Yr.	0.50	7.33	3.57	2.77				
7-10 Yr.	-0.03	9.79	4.41	3.33				
10+ Yr.	-1.12	19.57	8.03	5.41				





Source: Bloomberg

Excess returns are relative to the duration-neutral Treasury.

Monthly Index Returns

For the Periods Ending December 31, 2019

Index Name	3 Months (%)	YTD (%)	1 Year (%)	3 Years (%)	5 Years (%)	7 Years (%)	10 Years (%)
Equity							
S&P 500	9.07	31.49	31.49	15.27	11.70	14.73	13.56
Russell 1000	9.04	31.43	31.43	15.05	11.48	14.60	13.54
Russell 1000 Growth	10.62	36.39	36.39	20.49	14.63	16.92	15.22
Russell 1000 Value	7.41	26.54	26.54	9.68	8.29	12.20	11.80
Russell 2500	8.54	27.77	27.77	10.33	8.93	12.26	12.58
Russell 2000	9.94	25.52	25.52	8.59	8.23	11.65	11.83
Russell 2000 Growth	11.39	28.48	28.48	12.49	9.34	13.08	13.01
Russell 2000 Value	8.49	22.39	22.39	4.77	6.99	10.13	10.56
Wilshire 5000 Cap Wtd	9.08	31.02	31.02	14.52	11.38	14.44	13.44
MSCI ACWI	9.07	27.30	27.30	13.05	9.00	10.32	9.37
MSCI ACWI ex US	8.99	22.13	22.13	10.40	6.01	5.93	5.45
MSCI EAFE	8.21	22.66	22.66	10.11	6.18	6.85	6.00
MSCI EAFE Local Currency	5.23	22.31	22.31	8.20	7.25	9.80	7.74
MSCI EAFE Growth	8.48	28.43	28.43	13.28	8.13	8.27	7.34
MSCI EAFE Value	7.87	16.83	16.83	6.95	4.15	5.35	4.57
MSCI Emerging Markets	11.93	18.88	18.88	11.99	6.01	3.64	4.04
Fixed Income							
ICE BofA ML 1-3 Yr Treasury	0.51	3.55	3.55	1.85	1.39	1.13	1.22
BloomBar 5 Yr Municipal	1.03	5.45	5.45	3.41	2.44	2.32	2.94
BloomBar US Aggregate	0.18	8.72	8.72	4.03	3.05	2.72	3.75
BloomBar Gov't Bond	-0.77	6.83	6.83	3.31	2.36	1.99	3.03
BloomBar US Credit	1.05	13.80	13.80	5.75	4.39	3.89	5.32
BloomBar 10 Yr Municipal	0.79	7.70	7.70	4.95	3.68	3.52	4.64
BloomBar US Corp High Yield	2.61	14.32	14.32	6.37	6.13	5.78	7.57
FTSE World Govt Bond	-0.35	5.90	5.90	4.12	2.03	0.79	1.85
BloomBar Global Aggregate	0.49	6.84	6.84	4.27	2.31	1.35	2.48
BloomBar Multiverse	0.64	7.13	7.13	4.40	2.51	1.53	2.68
JPM EMBI Global Diversified	1.81	15.04	15.04	6.69	6.24	4.68	6.90
Real Assets							
NCREIF Property	1.55	6.43	6.43	6.71	8.25	9.14	10.18
NFI ODCE Net	1.29	4.41	4.41	6.14	7.99	9.17	10.39
ETCE NIA DEIT LIC Do al Fatarto	-0.76	26.00	26.00	8.14	7.21	9.51	11.94
FTSE NAREIT US Real Estate	0.70						
Bloomberg Commodity	4.42	7.69	7.69	-0.94	-3.92	-6.72	-4.73
		7.69	7.69	-0.94	-3.92	-6.72	-4.73

Monthly Index Returns

For the Periods Ending January 31, 2020

Index Name	1 Month (%)	YTD (%)	1 Year (%)	3 Years (%)	5 Years (%)	7 Years (%)	10 Years (%)
Equity							
S&P 500	-0.04	-0.04	21.68	14.54	12.37	13.90	13.97
Russell 1000	0.11	0.11	21.39	14.33	12.13	13.75	13.97
Russell 1000 Growth	2.24	2.24	27.94	20.04	15.49	16.59	15.99
Russell 1000 Value	-2.15	-2.15	14.88	8.63	8.70	10.85	11.87
Russell 2500	-2.03	-2.03	12.25	9.08	8.93	10.87	12.73
Russell 2000	-3.21	-3.21	9.21	7.28	8.23	10.17	11.88
Russell 2000 Growth	-1.10	-1.10	13.91	11.48	9.60	11.88	13.40
Russell 2000 Value	-5.39	-5.39	4.38	3.10	6.71	8.37	10.28
Wilshire 5000 Cap Wtd	0.01	0.01	20.60	13.85	12.01	13.58	13.84
MSCI ACWI	-1.08	-1.08	16.67	11.62	9.10	9.44	9.73
MSCI ACWI ex US	-2.67	-2.67	10.50	8.14	5.46	4.92	5.69
MSCI EAFE	-2.08	-2.08	12.68	8.30	5.63	5.74	6.25
MSCI EAFE Local Currency	-1.22	-1.22	14.55	7.72	6.35	8.71	7.98
MSCI EAFE Growth	-0.57	-0.57	19.95	11.83	7.74	7.48	7.74
MSCI EAFE Value	-3.60	-3.60	5.55	4.79	3.44	3.94	4.68
MSCI Emerging Markets	-4.66	-4.66	4.21	8.28	4.87	2.73	4.14
Fixed Income							
ICE BofA ML 1-3 Yr Treasury	0.54	0.54	3.83	1.98	1.40	1.21	1.20
BloomBar Municipal	1.80	1.80	8.65	5.12	3.53	3.60	4.47
BloomBar US Aggregate	1.92	1.92	9.64	4.62	3.01	3.10	3.79
BloomBar Gov't Bond	2.42	2.42	8.90	4.05	2.34	2.45	3.13
BloomBar US Credit	2.34	2.34	13.99	6.45	4.29	4.36	5.40
BloomBar 10 Yr Municipal	1.94	1.94	8.61	5.36	3.66	3.78	4.76
BloomBar US Corp High Yield	0.03	0.03	9.40	5.87	6.00	5.59	7.44
FTSE World Govt Bond	1.62	1.62	6.12	4.33	2.42	1.20	2.00
BloomBar Global Aggregate	1.28	1.28	6.58	4.32	2.60	1.66	2.56
BloomBar Multiverse	1.19	1.19	6.61	4.40	2.79	1.82	2.76
Real Assets							
Bloomberg Commodity	-7.36	-7.36	-5.38	-3.47	-4.74	-8.04	-4.74
Cash and Equivalents							
US T-Bills 90 Day	0.13	0.13	2.22	1.70	1.10	0.80	0.59

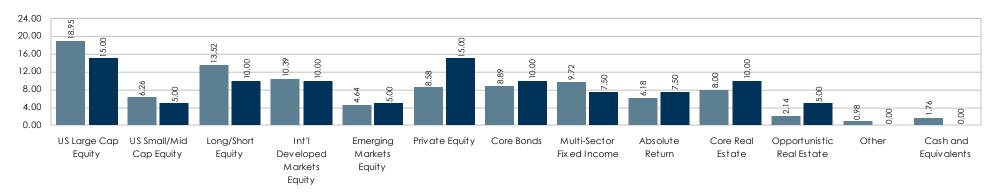
Total Portfolio Summary

Dollar Reconciliation (\$000s)

For the Periods Ending December 31, 2019

	FYTD	1 Year	5 Years	10 Years
Beginning Market Value	2,606,162	2,398,381	2,198,337	1,589,642
Net Additions	-32,004	-55,278	-275,826	-476,174
Return on Investment	142,258	373,313	793,905	1,602,949
Ending Market Value	2,716,417	2,716,417	2,716,417	2,716,417

For the Period Ending December 31, 2019



■ Actual Allocation ■ Target Allocation

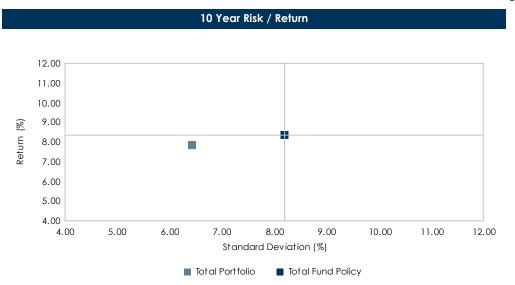
	Market Value (\$000s)	3.4		Over/Under Target (%)	Range Min-Max (%)
Total Portfolio	Portfolio 2,716,417 100.00		100.00		
Equity	1,693,343	62.34	60.00	2.34	50.00 - 70.00
US Large Cap Equity	514,727	18.95	15.00	3.95	10.00 - 20.00
US Small/Mid Cap Equity	170,134	6.26	5.00	1.26	0.00 - 15.00
Long/Short Equity	367,182	13.52	10.00	3.52	5.00 - 15.00
Int'l Developed Markets Equity	282,152	10.39	10.00	0.39	5.00 - 15.00
Emerging Markets Equity	126,012	4.64	5.00	-0.36	0.00 - 10.00
Private Equity	233,137	8.58	15.00	-6.42	5.00 - 20.00
Fixed Income	673,356	24.79	25.00	-0.21	15.00 - 35.00
Core Bonds	241,418	8.89	10.00	-1.11	5.00 - 15.00
Multi-Sector Fixed Income	264,001	9.72	7.50	2.22	2.50 - 12.50
Absolute Return	167,936	6.18	7.50	-1.32	2.50 - 12.50
Real Assets	301,928	11.11	15.00	-3.89	10.00 - 20.00
Core Real Estate	217,252	8.00	10.00	-2.00	5.00 - 15.00
Opportunistic Real Estate	58,060	2.14	5.00	-2.86	0.00 - 10.00
Other	26,616	0.98	0.00	0.98	
Cash and Equivalents	47,789	1.76	0.00	1.76	

For the Periods Ending December 31, 2019



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.

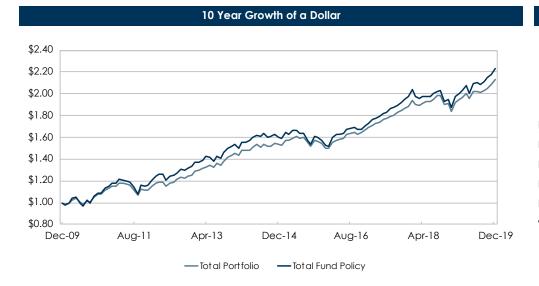
For the Periods Ending December 31, 2019



	Total	Total
	Portfolio	Fund Policy
Return (%)	7.85	8.35
Standard Deviation (%)	6.43	8.19
Sharpe Ratio	1.14	0.95

10 Year Portfolio Statistics

Benchmark Relative Statistics											
Beta	0.76										
Up Capture (%)	80.90										
Down Capture (%)	72.61										

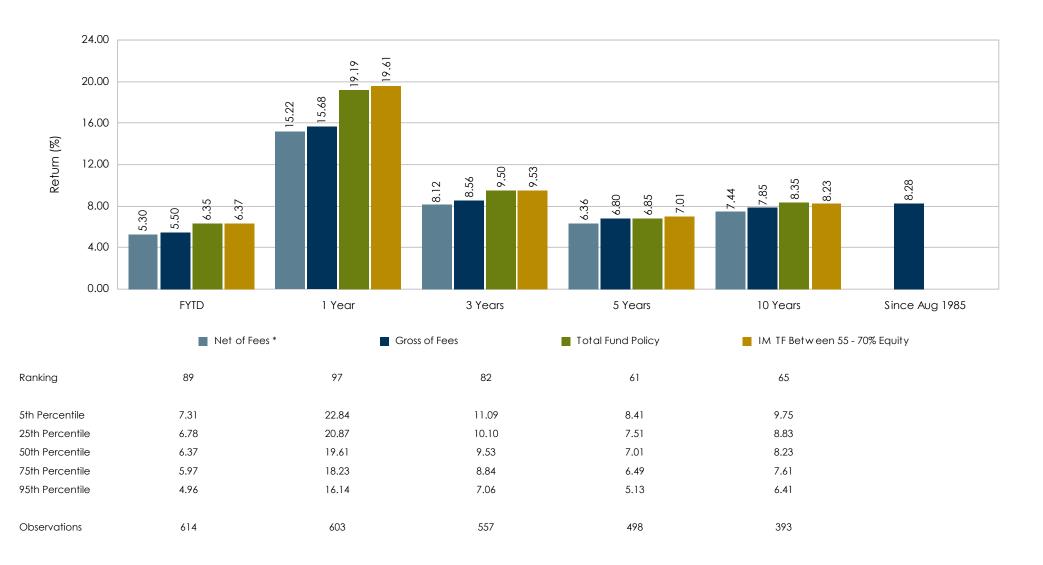


10 Year Return Analysis

	Total Portfolio	Total Fund Policy
Number of Months	120	120
Highest Monthly Return (%)	5.31	7.47
Lowest Monthly Return (%)	-4.27	-5.35
Number of Positive Months	85	80
Number of Negative Months	35	40
% of Positive Months	70.83	66.67

Total Portfolio

For the Periods Ending December 31, 2019

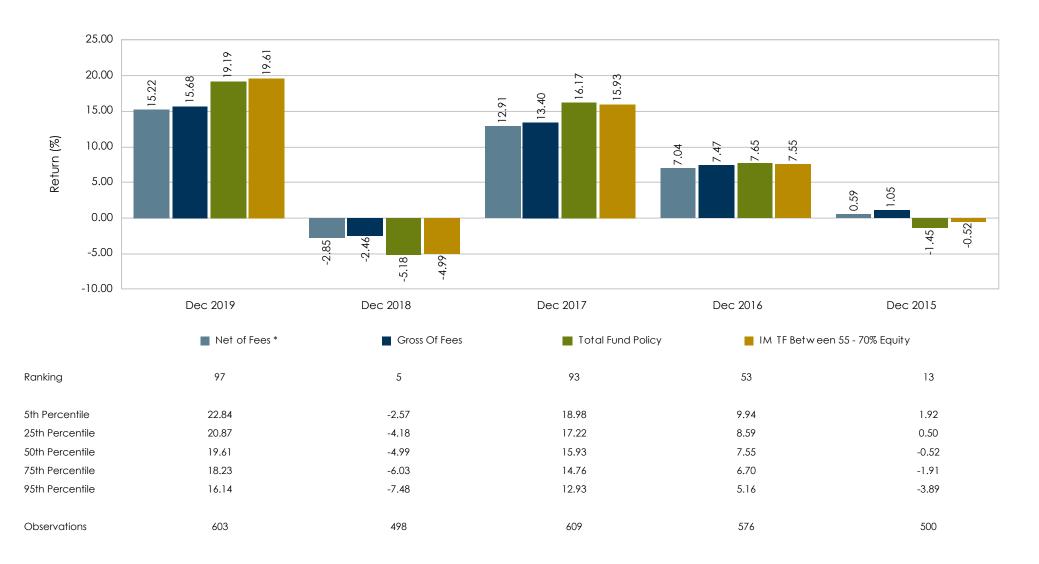


The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

^{*} Performance is calculated using net of fee returns.
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Total Portfolio

For the One Year Periods Ending December



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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For the Periods Ending December 31, 2019

	Market Value (\$000s)	Actual Allocation (%)	3 Months (%)	Rank	FYTD (%)	Rank	1 Year (%)	Rank	3 Years (%)	Rank	5 Years (%)	Rank	10 Years (%)
Total Portfolio * (06/05) 1	2,716,417	100.00	4.98		5.30		15.22		8.12		6.36		7.44
Total Portfolio (08/85)			5.08	82	5.50	89	15.68	97	8.56	82	6.80	61	7.85
Total Fund Policy ²			5.70		6.35		19.19		9.50		6.85		8.35
IM TF Between 55 - 70% Equity			5.63		6.37		19.61		9.53		7.01		8.23
Equity (01/98)	1,693,343	62.34	7.59		8.06		22.38		11.37		8.75		9.73
MSCI ACWI			9.07		9.18		27.30		13.05		9.00		9.37
US Large Cap Equity	514,727	18.95											
Northern Trust Russell 1000 Index (08/98) ³	514,727	18.95	9.04	33	10.59	34	31.43	33	15.05	40	11.49	35	13.55
Russell 1000			9.04		10.59		31.43		15.05		11.48		13.54
eA US Large Cap Core Equity			8.19		10.02		29.70		14.43		11.00		13.35
US Small/Mid Cap Equity	170,134	6.26											
Boston Partners (01/98)	83,751	3.08	8.73	14 / 31	10.47	17 / 11	31.92	17 / 8	6.96	79 / 34	8.28	53 / 32	11.82
Russell 2500 Value			7.07		7.21		23.56		6.12		7.18		11.25
eA US Mid Cap Value Equity			7.14		8.52		28.46		8.46		8.37		12.17
eA US Small Cap Value Equity			7.95		7.65		24.43		5.56		7.55		12.11
Silvercrest (02/14)	86,383	3.18	12.10	25	6.07	40	23.29	78	14.47	65	11.97	45	
Russell 2000 Growth			11.39		6.75		28.48		12.49		9.34		13.01
eA US Small Cap Growth Equity			9.63		5.09		29.54		16.07		11.59		14.57
Long/Short Equity	367,182	13.52											
Grosvenor Long/Short Equity (11/03)	367,182	13.52	6.36		5.43		16.85		7.73		5.34		6.12
MSCI ACWI			9.07		9.18		27.30		13.05		9.00		9.37
HFRI FOF: Strategic			4.59		2.79		10.59		4.71		2.68		3.08

FYTD: Fiscal year ending June.

^{*} Net of fee return data.

For the Periods Ending December 31, 2019

	Market Value (\$000s)	Actual Allocation (%)	3 Months (%)	Rank	FYTD (%)	Rank	1 Year (%)	Rank	3 Years (%)	Rank	5 Years (%)	Rank	10 Years (%)
International Developed Market	282,152	10.39											
Mondrian International (05/04)	152,373	5.61	10.43	12	8.22	26	19.54	52	9.08	37	5.57	43	5.69
MSCI EAFE Value			7.87		6.10		16.83		6.95		4.15		4.57
eA EAFE All Cap Value Equity			9.08		7.47		19.91		8.29		5.06		7.01
Barings Focused EAFE Plus Equity (03/12)	129,779	4.78	8.61	63	7.73	48	23.68	44	11.37	31	8.30	21	
MSCI EAFE NetDiv			8.17		7.01		22.01		9.56		5.67		5.50
eA EAFE All Cap Equity			8.97		7.53		22.76		10.19		6.92		7.11
Emerging Markets Equity	126,012	4.64											
Wasatch Emerging Markets (09/12)	40,933	1.51	12.41	27	13.98	2	30.72	6	14.81	17	6.17	54	
MSCI EM SC			9.61		4.77		11.92		7.07		3.30		3.26
eA Global Emerging Mkts Equity			11.41		7.07		19.49		11.55		6.28		5.16
AB EM Strategic Core Equity Fund (11/16)	85,079	3.13	8.35	88	5.99	67	16.75	72	8.89	85			
MSCI Emerging Markets			11.93		<i>7</i> .33		18.88		11.99		6.01		4.04
eA Global Emerging Mkts Equity			11.41		7.07		19.49		11.55		6.28		5.16
Private Equity (07/03)	233,137	8.58	1.25		5.40		10.51		11.77		11.04		11.96
Fixed Income (01/98)	673,356	24.79	0.98		2.06		7.74		4.56		3.25		4.52
BloomBar Universal			0.45		2.58		9.29		4.30		3.44		4.12
Core Bonds	241,418	8.89											
Agincourt Core Fixed Income (10/99)	241,418	8.89	0.25	48	2.60	48	9.50	40	4.52	35	3.53	41	4.36
BloomBar US Aggregate			0.18		2.45		8.72		4.03		3.05		3.75
eA US Core Fixed Income			0.23		2.58		9.30		4.40		3.45		4.28

For the Periods Ending December 31, 2019

	Market Value (\$000s)	Actual Allocation (%)	3 Months (%)	Rank	FYTD (%)	Rank	1 Year (%)	Rank	3 Years (%)	Rank	5 Years (%)	Rank	10 Years (%)
Multi Sector Fixed Income	264,001	9.72											
Multi Sector Fixed Income													
Oaktree Global Credit Fund (02/98)	131,118	4.83	2.47		1.83		9.15		4.58		4.98		6.78
Custom Blended Index ⁴			2.54		3.22		10.94		2.98		2.43		3.43
Loomis Sayles (06/08)	82,322	3.03	0.39	84	1.11	83	7.79	70	5.25	49	3.01	61	3.25
FTSE World Govt Bond			-0.35		0.50		5.90		4.12		2.03		1.85
eA All Global Fixed Income			1.94		2.69		9.46		5.17		3.60		4.15
Private Credit (10/16)	50,561	1.86	1.47		3.89		7.69		8.94				
Absolute Return	167,936	6.18											
PAAMCO (10/02)	90,945	3.35	1.97		1.81		5.48		2.97		1.65		3.66
BloomBar US Aggregate			0.18		2.45		8.72		4.03		3.05		3.75
HFRI FOF: Conservative			1.91		1.86		6.60		3.23		2.38		2.81
Wellington Global Total Return (12/16)	76,991	2.83	-0.03	99	0.92	88	3.46	89	4.29	59			
US T-Bills 90 Day + 4%			1.45		3.03		6.36		5.73		5.11		4.60
eA Global Unconstrained Fixed Income			2.23		2.60		8.13		4.53		3.30		3.55
Real Assets (01/98)	301,928	11.11	2.00		2.01		4.21		5.06		5.49		5.73
Real Assets Blended Index ⁵			2.34		2.46		5.57		3.84		2.64		6.25
Core Real Estate	217,252	8.00											
JP Morgan Strategic Property (12/07)	132,392	4.87	2.27		2.73		4.39		6.53		8.59		11.18
NFI ODCE Net			1.29		2.38		4.41		6.14		7.99		10.39
NCREIF Property			1.55		2.98		6.43		6.71		8.25		10.18
Blackstone Property Partners (01/15)	84,861	3.12	1.38		2.74		6.55		9.30		12.03		
NFI ODCE Net			1.29		2.38		4.41		6.14		7.99		10.39
NCREIF Property			1.55		2.98		6.43		6.71		8.25		10.18

For the Periods Ending December 31, 2019

	Market	Actual	3 Months	Rank	FYTD	Rank	1 Year	Rank	3 Years	Rank	5 Years	Rank	10 Years
	Value (\$000s)	Allocation (%)	(%)		(%)		(%)		(%)		(%)		(%)
Opportunistic Real Estate	58,060	2.14											
Private Real Estate (08/11)	53,210	1.96	1.97		5.28		9.64		10.70		11.71		
Private Real Estate Direct													
Columbus Square (01/98)	4,849	0.18	0.48		1.56		4.48		7.08		7.93		11.01
NCREIF Property			1.55		2.98		6.43		6.71		8.25		10.18
NFI ODCE Net			1.29		2.38		4.41		6.14		<i>7</i> .99		10.39
Other	26,616	0.98											
Mount Lucas Peak Partners (01/98)	26,616	0.98	3.07		-0.04		-5.98		-4.20		-1.66		-0.06
CS Hedge - Global Macro			0.75		2.89		10.38		4.04		3.16		4.73
Cash and Equivalents	47,789	1.76											

Notes:

¹ Total Fund Policy Index history available in appendix.

² Total Fund Policy: Effective September 2019, the index consists of 60.0% MSCI ACWI, 25.0% BloomBar Universal, 15.0% NFI ODCE Net.

³ 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.

⁴ Custom Blended Index: Effective November 2018, the index consists of 50.0% ICE BofA ML Global HY Const, 50.0% CSFB Leveraged Loan.

⁵ 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

For the Periods Ending December 31, 2019

Account Description

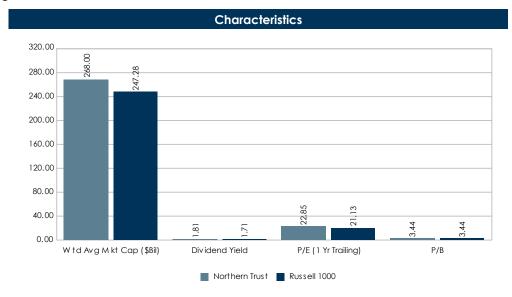
- Strategy US Large Cap Core
- Vehicle Non-Mutual Commingled
- Benchmark Russell 1000
- Performance Inception Date August 1998
- Fees 1 bps

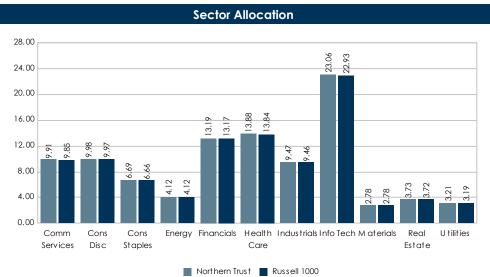
Performance Goals

- 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

	FYTD	1 Year
Beginning Market Value	465,476	391,678
Net Additions	-35	-57
Return on Investment	49,285	123,105
Ending Market Value	514 727	514 727

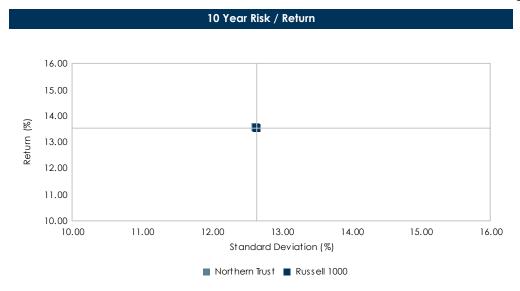




Characteristic and allocation charts represents data of the EB Daily Valued Large Cap Stock Index Fund (Non-Mutual Commingled).

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

For the Periods Ending December 31, 2019

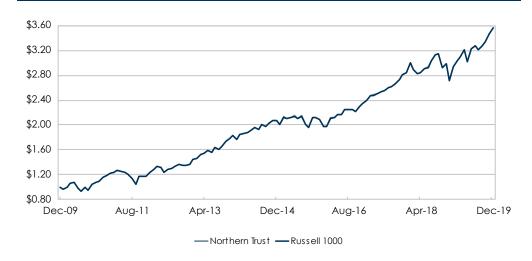


10 Year Portfolio Statistics

	Northern	
	Trust	Russell 1000
Return (%)	13.55	13.54
Standard Deviation (%)	12.64	12.64
Sharpe Ratio	1.03	1.03

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 (%)	99.92	
,		

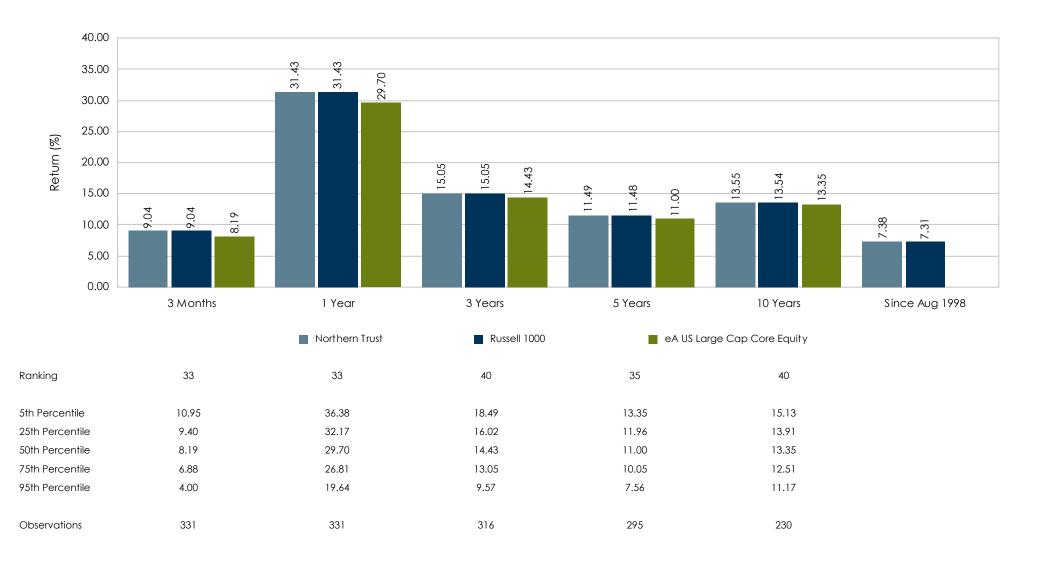




10 Year Return Analysis

	Northern Trust	Russell 1000
Number of Months	120	120
Highest Monthly Return (%)	11.20	11.21
Lowest Monthly Return (%)	-9.09	-9.11
Number of Positive Months	86	86
Number of Negative Months	34	34
% of Positive Months	71.67	71.67

For the Periods Ending December 31, 2019



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.

For the One Year Periods Ending December



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.

For the Periods Ending December 31, 2019

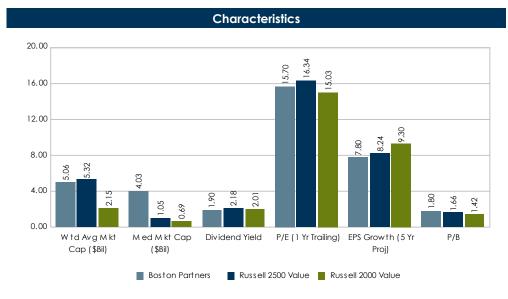
Account Description

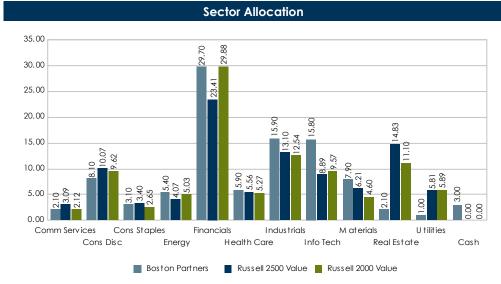
- Strategy US Small/Mid Cap Value
- Vehicle Separately Managed Account
- Benchmarks Russell 2500 Value and Russell 2000 Value
- Performance Inception Date January 1998
- Fees 60 bps base fee with annual performance fee

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 **Beginning Market Value** 88,741 74,519 Net Additions -12,616 -12,854 Return on Investment 7,626 22,086 847 1.758 Income Gain/Loss 6,779 20,327 **Ending Market Value** 83,751 83,751



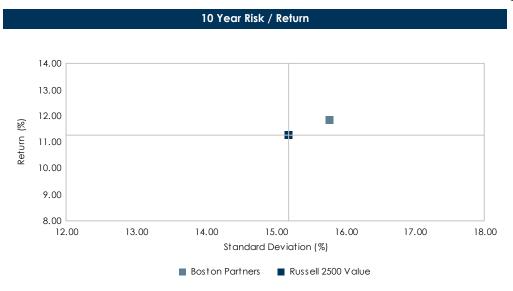


Sector weights may not add to 100% due to securities that are not assigned to a Global Industry Classification Standard (GICS) sector.

For the Periods Ending December 31, 2019

Return (%)

Sharpe Ratio



Boston Russell **Partners** 2500 Value 11.82 11.25 15.18 Standard Deviation (%) 15.78

10 Year Portfolio Statistics

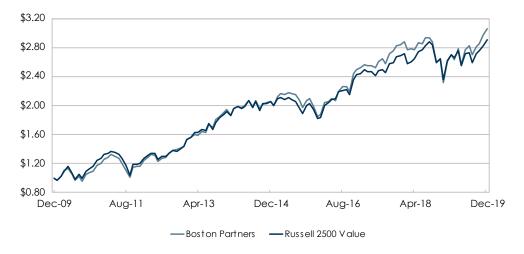
0.72

0.71

Benchmark Relative Statistics		
Beta	1.02	
R Squared (%)	95.80	
Alpha (%)	0.40	
Tracking Error (%)	3.24	
Batting Average (%)	52.50	
Up Capture (%)	102.18	
Down Capture (%)	99.82	

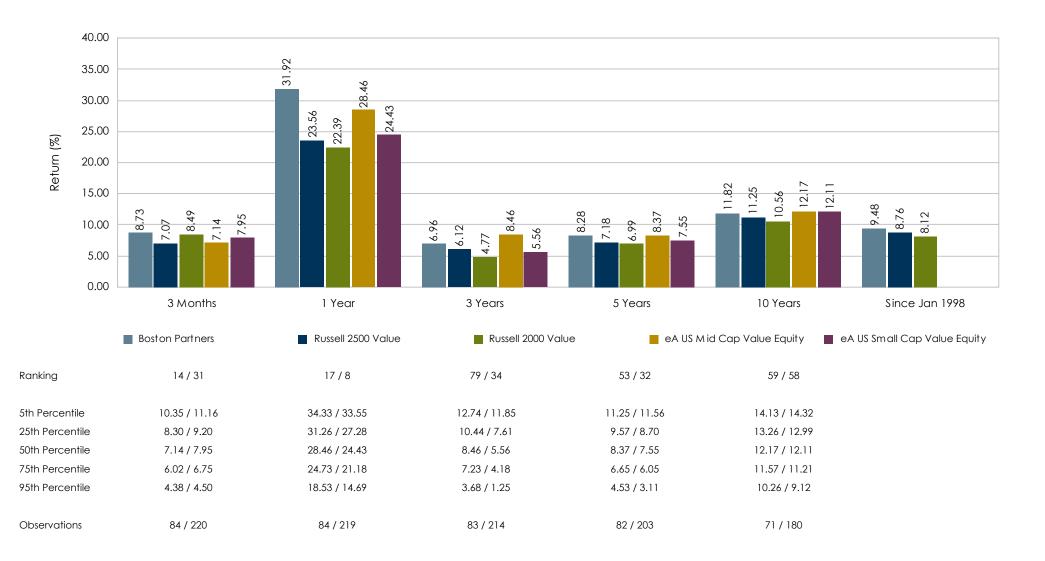
10 Year Return Analysis

10 Year Growth of a Dollar



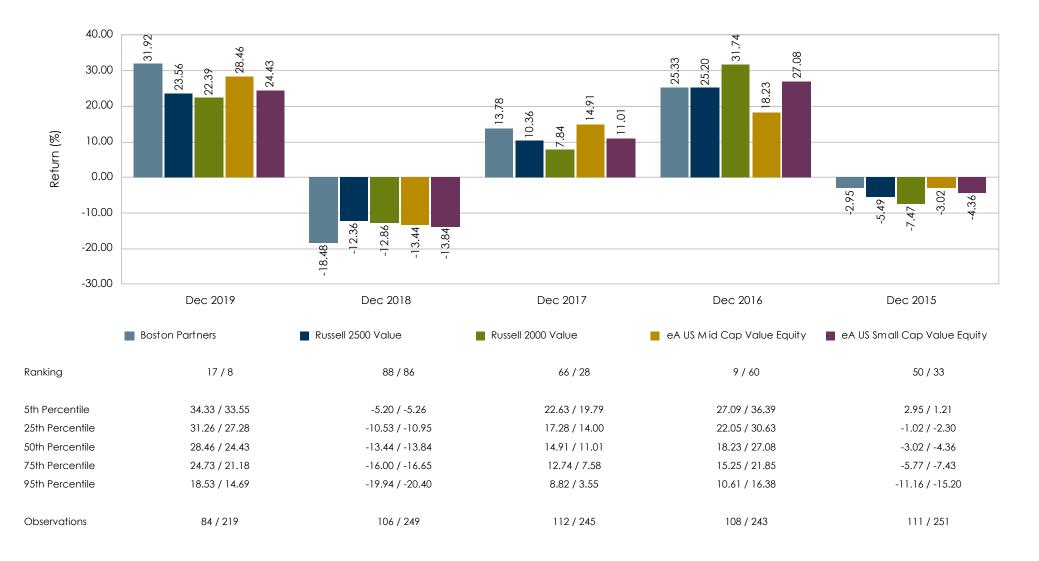
	Boston Partners	Russell 2500 Value
Number of Months	120	120
Highest Monthly Return (%)	14.23	13.92
Lowest Monthly Return (%)	-12.07	-11.05
Number of Positive Months	79	80
Number of Negative Months	41	40
% of Positive Months	65.83	66.67

For the Periods Ending December 31, 2019



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.

For the One Year Periods Ending December



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 December 31, 2019

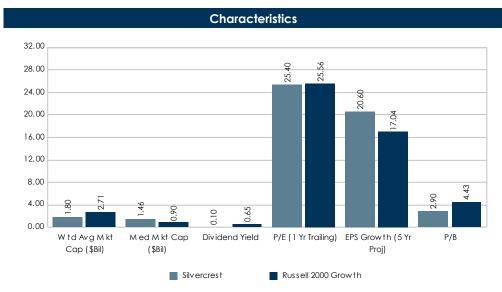
Account Description

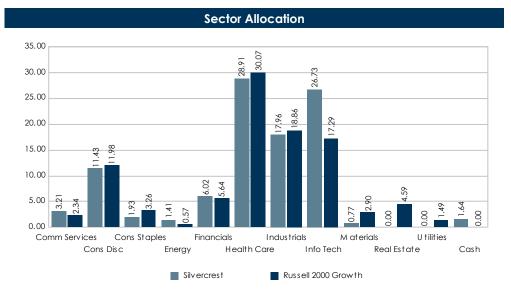
- Strategy US Small/Mid Cap Growth
- Vehicle Separately Managed Account
- Benchmark Russell 2000 Growth
- Performance Inception Date February 2014
- Fees First \$25M at 100 bps, next \$25M at 90 bps, balance at 80 bps

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 **Beginning Market Value** 95,035 82,109 Net Additions -12,824 -13,215 Return on Investment 4,173 17,490 78 268 Income Gain/Loss 4.094 17,222 **Ending Market Value** 86,383 86,383

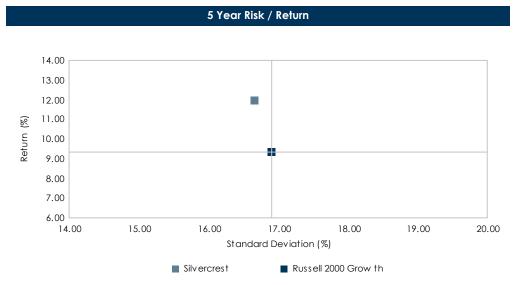




Sector weights may not add to 100% due to securities that are not assigned to a Global Industry Classification Standard (GICS) sector.

Silvercrest

For the Periods Ending December 31, 2019



Return (%) 11.97 9.34 Standard Deviation (%) 16.66 16.90 Sharpe Ratio 0.66 0.49

Benchmark Relative Statistics		
0.93		
88.88		
3.12		
5.68		
60.00		
100.13		
89.97		
	88.88 3.12 5.68 60.00 100.13	

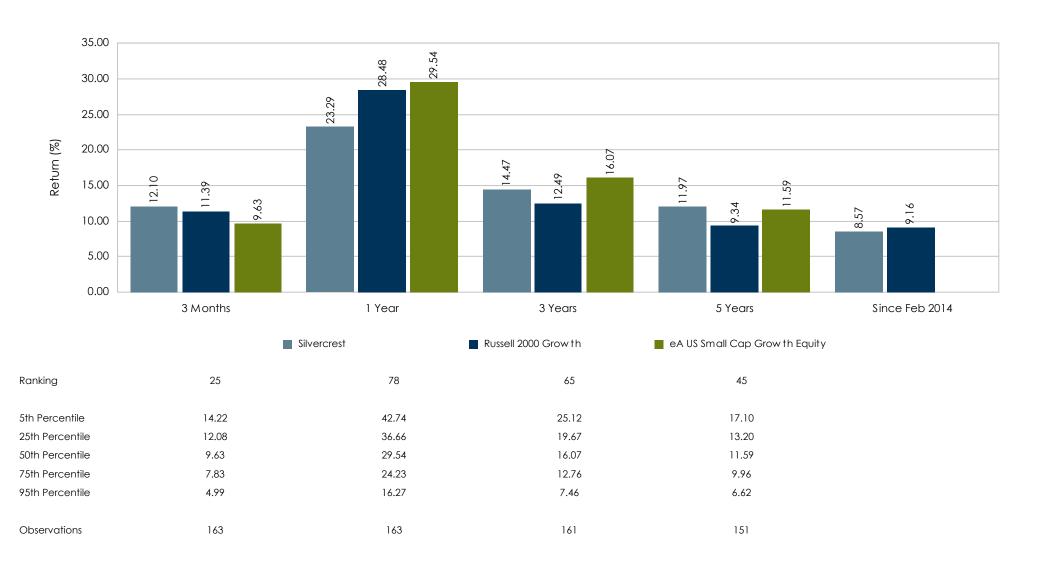
5 Year Return Analysis

5 Year Portfolio Statistics



	Silvercrest	Russell 2000 Growth
Number of Months	60	60
Highest Monthly Return (%)	11.26	11.55
Lowest Monthly Return (%)	-11.40	-12.65
Number of Positive Months	42	41
Number of Negative Months	18	19
% of Positive Months	70.00	68.33

SilvercrestFor the Periods Ending December 31, 2019



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.

SilvercrestFor the One Year Periods Ending December

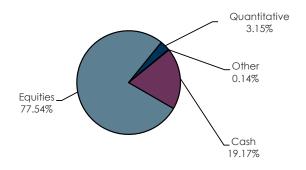


The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

For the Periods Ending December 31, 2019

Strategy Allocation

Market Value: \$367,182,014



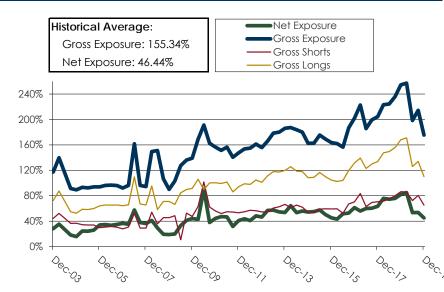
Strategy

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

Exposure

Net Exposure: 45.1%Gross Exposure: 175.4%

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.

For the Periods Ending December 31, 2019

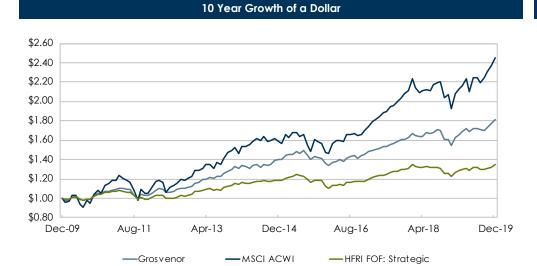


HFRI FOF: Grosvenor MSCI ACWI Strategic 9.37 3.08 Return (%) 6.12 13.18 5.19 Standard Deviation (%) 6.29 **Sharpe Ratio** 0.89 0.67 0.49

10 Year Portfolio Statistics

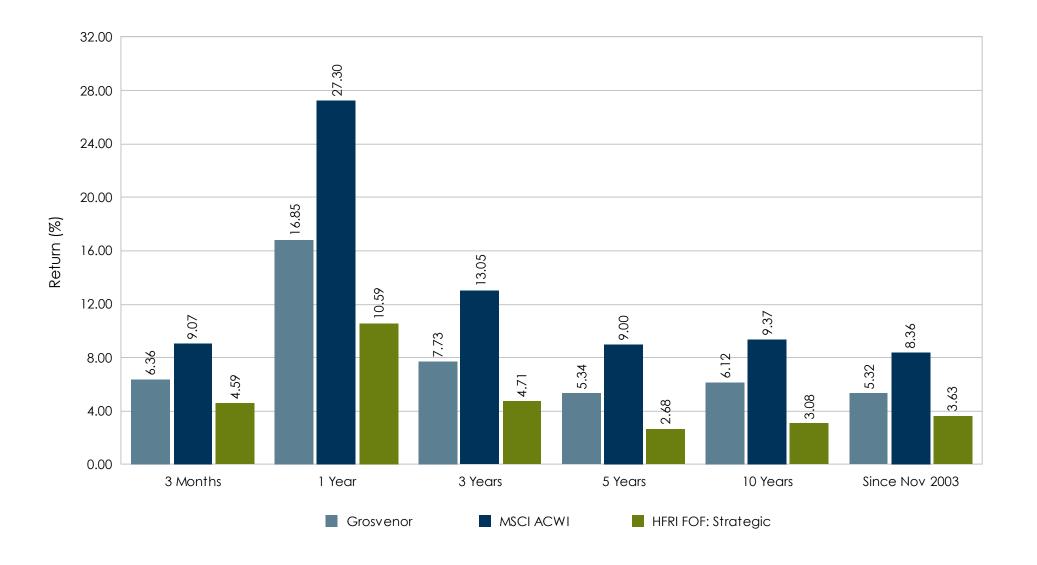
Benchmark Relative Statistics		
Beta	0.41	1.11
R Squared (%)	72.75	83.49
Alpha (%)	2.17	2.67
Tracking Error (%)	8.48	2.62
Batting Average (%)	46.67	65.83
Up Capture (%)	44.64	130.39
Down Capture (%)	41.73	91.68

10 Year Return Analysis

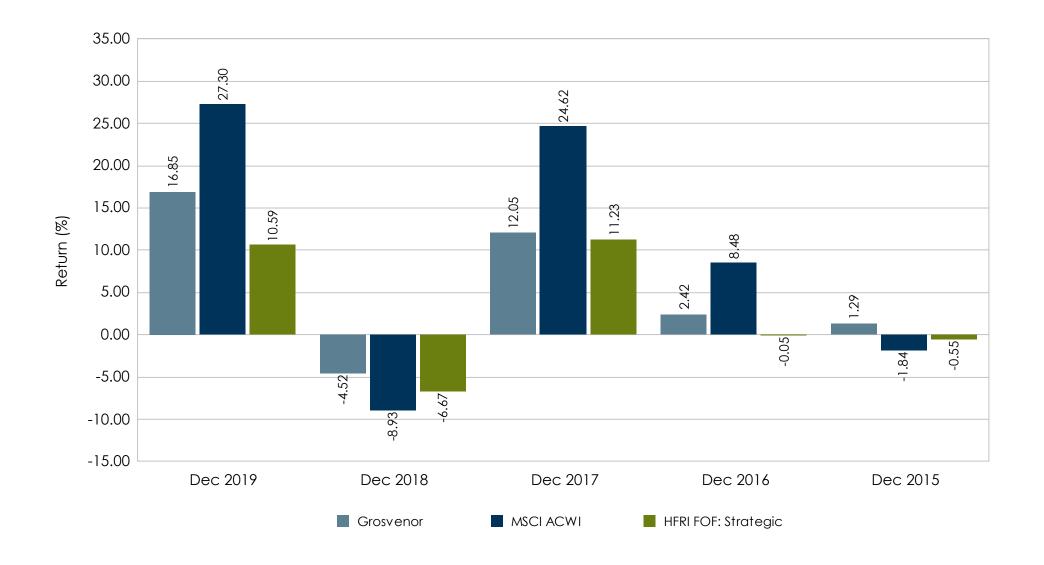


	Grosvenor	MSCI ACWI	HFRI FOF: Strategic
Number of Months	120	120	120
Highest Monthly Return (%)	5.18	10.74	3.33
Lowest Monthly Return (%)	-4.90	-9.40	-4.49
Number of Positive Months	79	78	73
Number of Negative Months	41	42	47
% of Positive Months	65.83	65.00	60.83

For the Periods Ending December 31, 2019



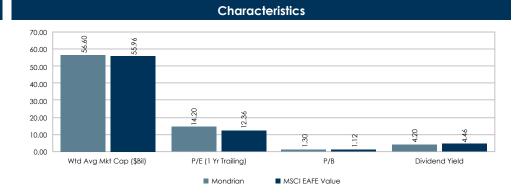
For the One Year Periods Ending December



For the Periods Ending December 31, 2019

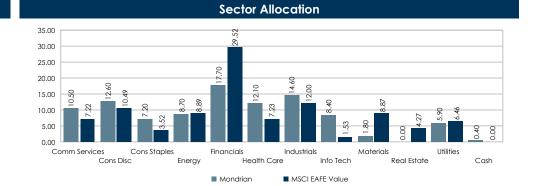
Account Description

- 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

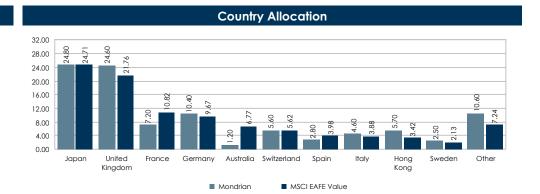


Performance Goals

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



Beginning Market Value 140,801 127,462 Net Additions 0 0 Return on Investment 11,572 24,911 Ending Market Value 152,373 152,373

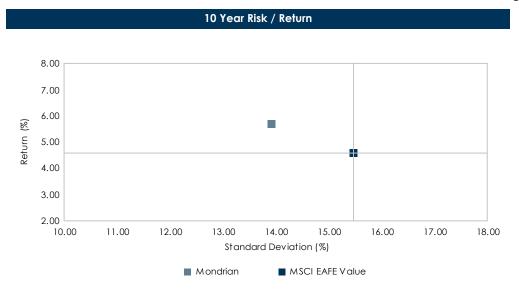


For the Periods Ending December 31, 2019

Return (%)

Sharpe Ratio

Standard Deviation (%)



MSCI Mondrian EAFE Value 5.69 4.57

13.93

0.37

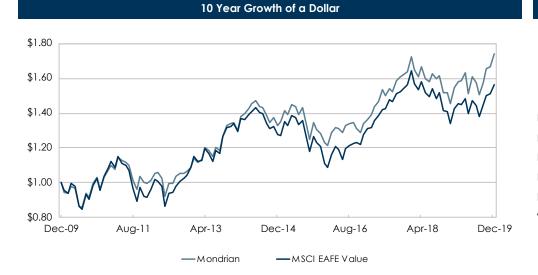
15.47

0.26

10 Year Portfolio Statistics

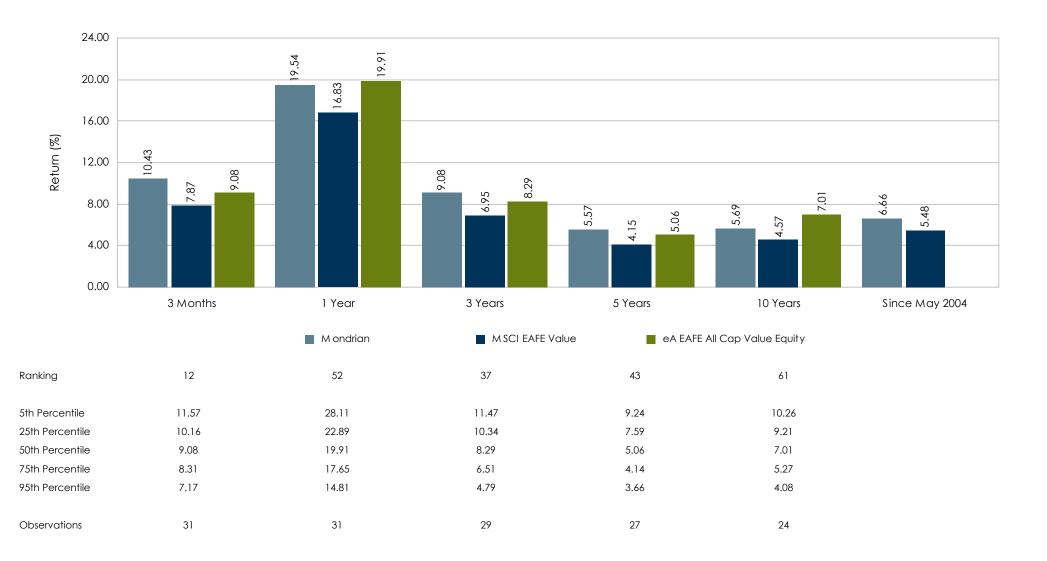
Benchmark Relative Statistics		
Beta	0.87	
R Squared (%)	93.19	
Alpha (%)	1.59	
Tracking Error (%)	4.16	
Batting Average (%)	52.50	
Up Capture (%)	87.97	
Down Capture (%)	85.26	

10 Year Return Analysis



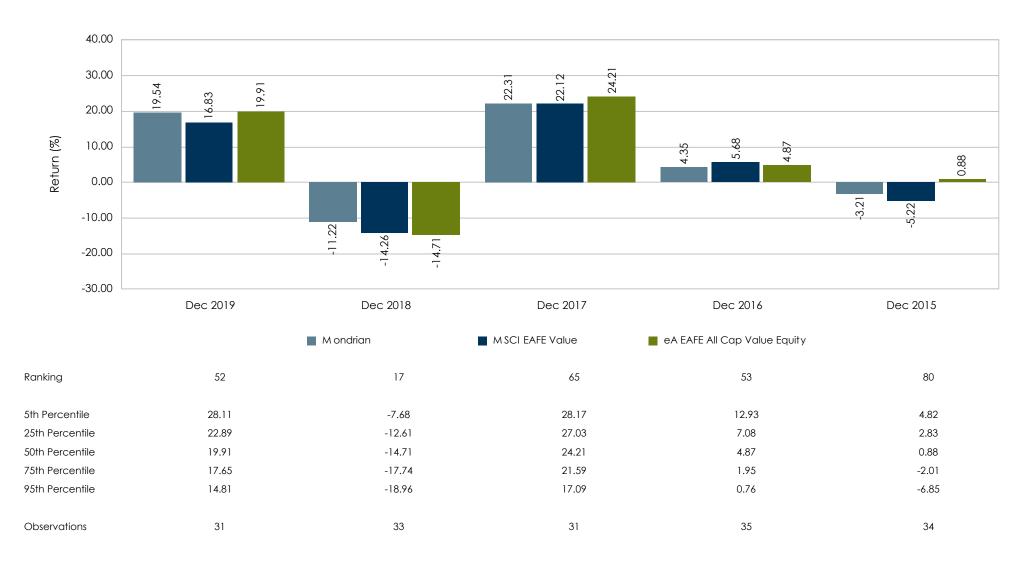
Mondrian	MSCI EAFE Value
120	120
9.30	10.70
-10.81	-11.86
67	65
53	55
55.83	54.17
	120 9.30 -10.81 67 53

For the Periods Ending December 31, 2019



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For the One Year Periods Ending December



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.

For the Periods Ending December 31, 2019

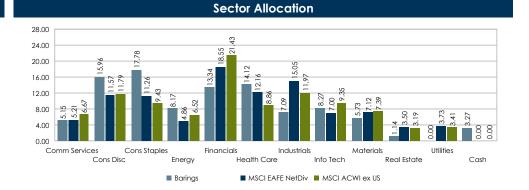
Account Description

- 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

Performance Goals

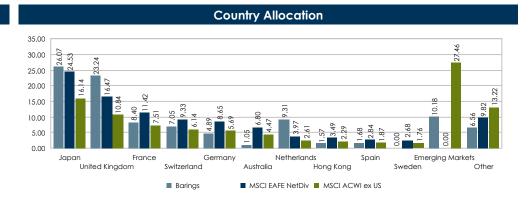
- Outperform the MSCI EAFE NetDiv and MSCI ACWI ex US.
- Over rolling three year periods, rank above the median in the eA EAFE All Cap Equity universe.

Characteristics 100.00 80.00 40.00 Wtd Avg Mkt Cap (\$Bil) Barings MSCI EAFE NetDiv MSCI ACWI ex US



	FYTD	1 Year
Beginning Market Value	120,844	105,466
Net Additions	-377	-602
Return on Investment	9,312	24,915
Ending Market Value	129,779	129,779

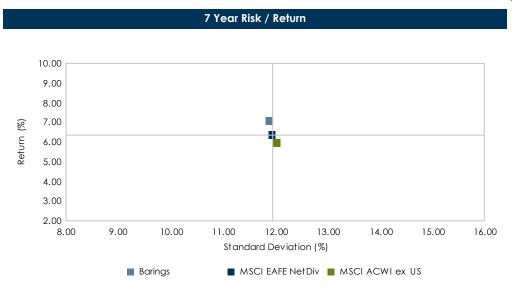
Dollar Growth Summary (\$000s)



Characteristic and allocation charts represents data of the Baring Focused Int'l Equity (Non-Mutual Commingled).
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For the Periods Ending December 31, 2019

Sharpe Ratio



Return (%) 7.03 6.35 5.93 Standard Deviation (%) 11.88 11.94 12.02

0.53

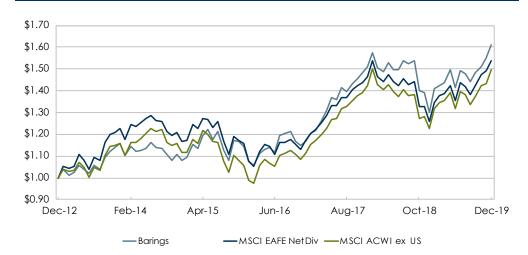
0.47

0.43

7 Year Portfolio Statistics

Benchmark Relative Statistics					
Beta	0.95	0.92			
R Squared (%)	90.60	86.96			
Alpha (%)	1.01	1.54			
Tracking Error (%)	3.70	4.39			
Batting Average (%)	57.14	53.57			
Up Capture (%)	100.49	94.29			
Down Capture (%)	96.53	87.67			

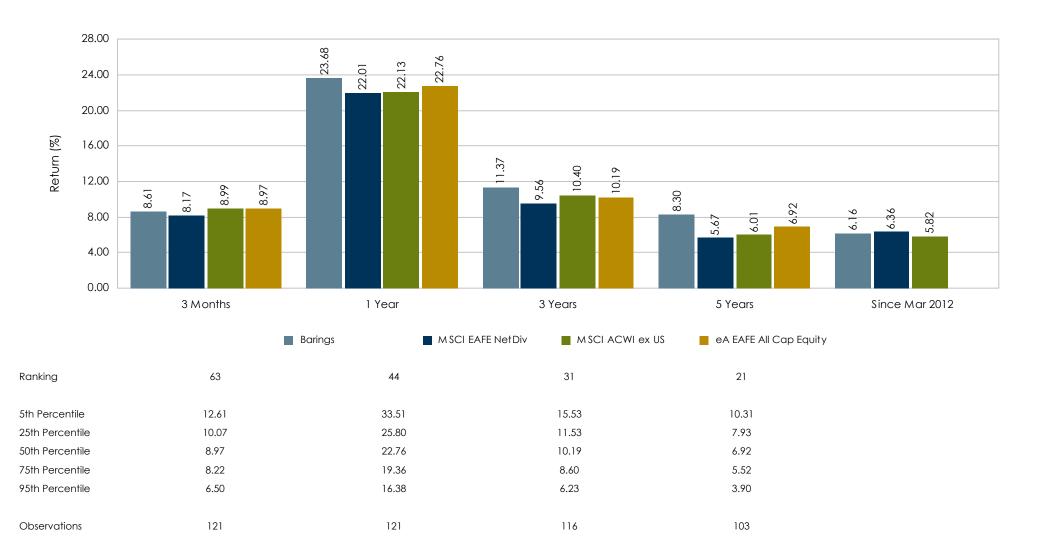
7 Year Growth of a Dollar



7 Year Return Analysis

	Barings	MSCI EAFE NetDiv	MSCI ACWI ex US
Number of Months	84	84	84
Highest Monthly Return (%)	8.31	7.82	8.21
Lowest Monthly Return (%)	-8.97	-7.96	-8.12
Number of Positive Months	49	47	50
Number of Negative Months	35	37	34
% of Positive Months	58.33	55.95	59.52

For the Periods Ending December 31, 2019



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For the One Year Periods Ending December



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.

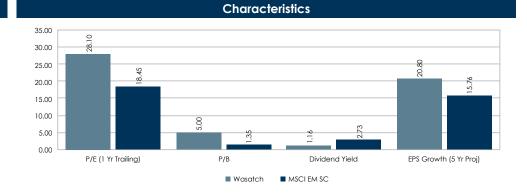
For the Periods Ending December 31, 2019

Cons Disc

Energy

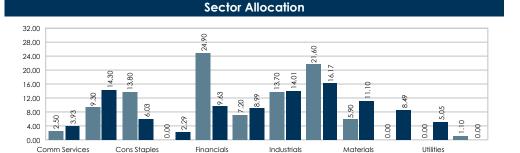
Account Description

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



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.



Health Care

■ Wasatch

Info Tech

■ MSCI EM SC

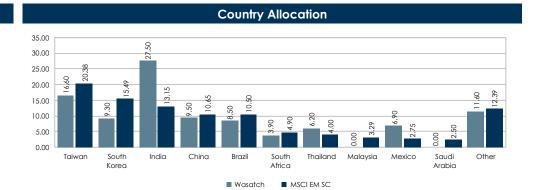
Real Estate

Cash

62

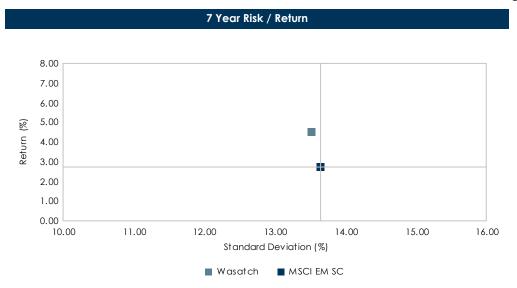
Dollar Growth Summary (\$000s)

	FYTD	1 Year
Beginning Market Value	36,169	31,775
Net Additions	-270	-530
Return on Investment	5,033	9,688
Ending Market Value	40,933	40,933



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

For the Periods Ending December 31, 2019



7 Year Portfolio Statistics

	Wasatch	MSCI EM SC
Return (%)	4.51	2.73
Standard Deviation (%)	13.52	13.64
Sharpe Ratio	0.28	0.15

Benchmark Relative Statistics					
Beta	0.88				
R Squared (%)	78.24				
Alpha (%)	2.17				
Tracking Error (%)	6.53				
Batting Average (%)	50.00				
Up Capture (%)	101.17				
Down Capture (%)	92.55				

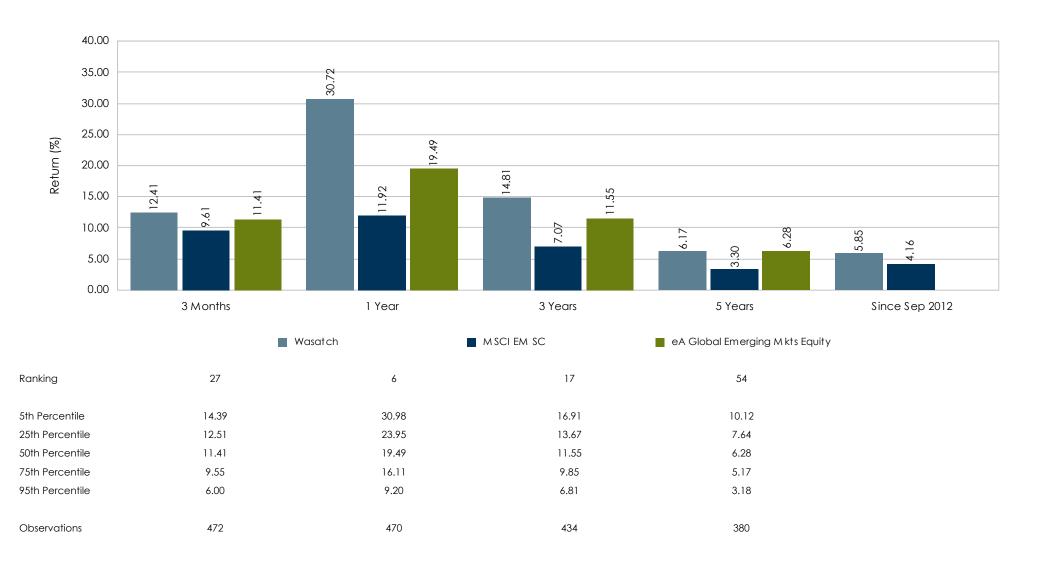
7 Year Growth of a Dollar



7 Year Return Analysis

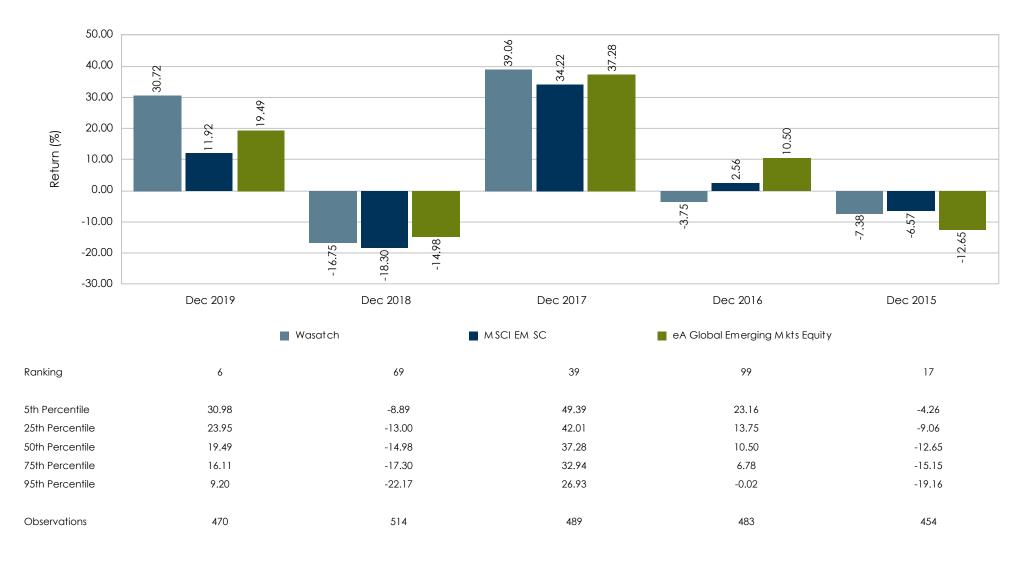
	Wasatch	MSCI EM SC
Number of Months	84	84
Highest Monthly Return (%)	8.10	10.01
Lowest Monthly Return (%)	-12.45	-10.53
Number of Positive Months	48	50
Number of Negative Months	36	34
% of Positive Months	57.14	59.52

For the Periods Ending December 31, 2019



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.

For the One Year Periods Ending December

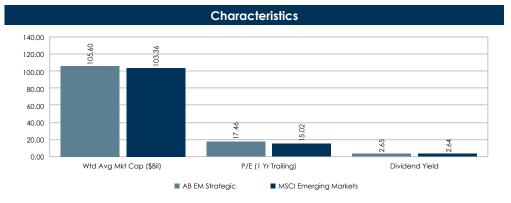


The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

For the Periods Ending December 31, 2019

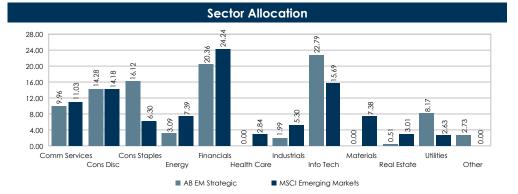
Account Description

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

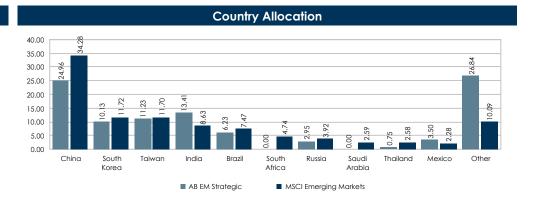


Performance Goals

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



PYTD 1 Year Beginning Market Value 80,267 72,875 Net Additions 0 0 Return on Investment 4,812 12,204 Ending Market Value 85,079 85,079



For the Periods Ending December 31, 2019



	AB EM Strategic	MSCI Emerging Markets
Return (%)	8.89	11.99
Standard Deviation (%)	12.83	14.38
Sharpe Ratio	0.57	0.72

Benchmark Relative Statistics					
Beta	0.85				
R Squared (%)	91.09				
Alpha (%)	-1.19				
Tracking Error (%)	4.38				
Batting Average (%)	36.11				
Up Capture (%)	77.60				
Down Capture (%)	87.72				

3 Year Portfolio Statistics

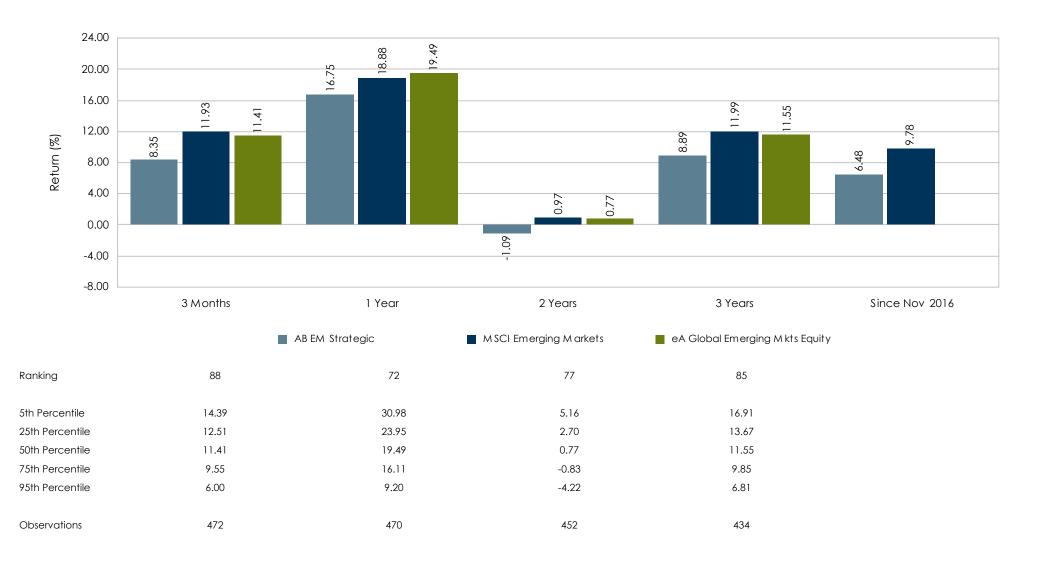
3 Year Growth of a Dollar



3 Year Return Analysis

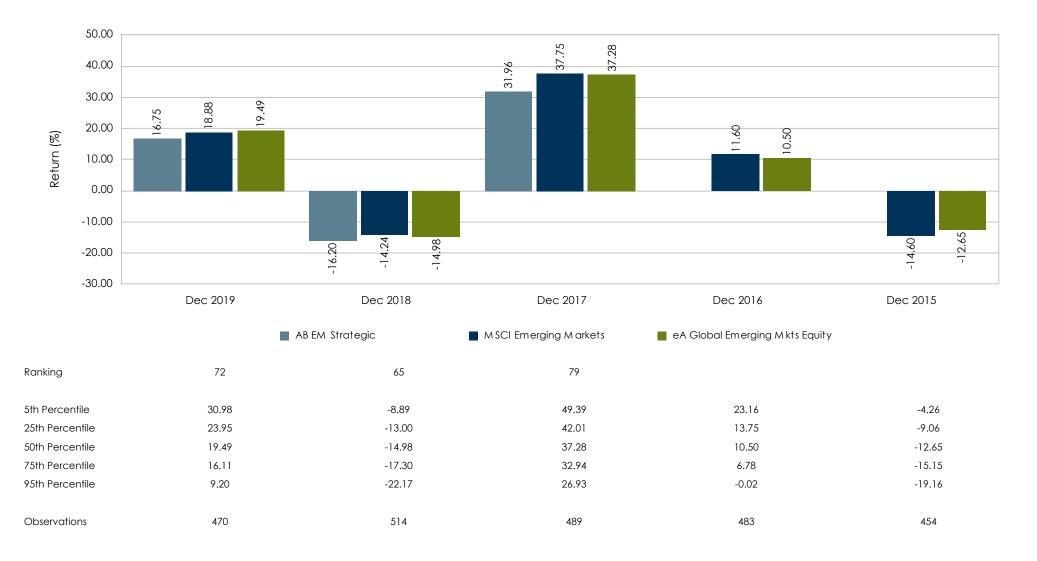
	AB EM Strategic	MSCI Emerging Markets
Number of Months	36	36
Highest Monthly Return (%)	7.70	8.76
Lowest Monthly Return (%)	-9.21	-8.70
Number of Positive Months	23	22
Number of Negative Months	13	14
% of Positive Months	63.89	61.11

For the Periods Ending December 31, 2019



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For the One Year Periods Ending December



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 December 31, 2019

Summary of Cash Flows for 6 Months

Cash Outflows	Cash Inflows	Net Cash Flows
-28,704,193	23,217,964	-5,486,229

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
Total	Feb-98	750,700,000	594,254,244	181,677,752	658,513,079	233,136,990	891,650,069	1.50x
Buyout	Apr-99	253,200,000	201,801,002	66,055,216	255,574,248	63,501,587	319,075,835	1.58x
Levine Leichtman	Feb-03	10,000,000	10,612,096	-	18,254,382	69,506	18,323,888	1.73x
Thompson Street C.P. II	Dec-06	10,000,000	10,020,777	677,776	19,113,247	2,047,179	21,160,426	2.11x
Arsenal Capital Partners II	Dec-06	15,000,000	15,032,366	668,860	30,068,889	5,910,249	35,979,138	2.39x
Sun Capital Partners V	May-07	12,500,000	12,650,420	1,111,531	11,366,767	3,059,599	14,426,366	1.14x
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	15,354,090	938,056	16,292,146	1.75x
Thompson Street Capital III	Oct-11	7,500,000	7,513,118	564,345	7,632,084	4,309,337	11,941,421	1.59x
Arsenal Capital Partners III	Apr-12	7,500,000	7,649,536	1,270,818	14,464,035	2,297,109	16,761,144	2.19x
Apollo Investment Fund VIII	Feb-14	7,500,000	7,469,849	1,210,605	3,739,387	6,100,107	9,839,494	1.32x
Francisco Partners Fund IV	Apr-15	8,000,000	7,796,000	204,000	6,406,372	9,842,474	16,248,846	2.08x
CenterOak Equity Fund I	Dec-15	7,500,000	6,216,138	1,871,684	2,082,465	6,040,056	8,122,521	1.31x
Thompson Street Capital Partners IV	Jan-16	7,500,000	7,128,708	998,457	1,562,736	7,802,095	9,364,831	1.31x
Leonard Green Equity Investors VII	May-17	7,500,000	5,232,902	2,334,215	67,117	5,947,062	6,014,179	1.15x
Francisco Partners Fund V	Jul-18	10,000,000	5,125,000	4,875,000	-	5,555,462	5,555,462	1.08x
Thompson Street Capital V	Aug-18	12,700,000	1,793,882	10,906,118	-	1,541,914	1,541,914	0.86x
Apollo Investment Fund IX	Mar-19	13,000,000	2,436,565	10,568,692	24,240	2,041,382	2,065,622	0.85x
Leonard Green VIII		15,000,000	-	15,000,000	-	-	-	-
Leonard Green Jade		10,000,000	-	10,000,000	-	-	-	-

Private Equity - Active Funds

For the Period Ending December 31, 2019

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

	Inception	Committed	Drawn to Date	Remaining	Distributions to Date	Adjusted Ending Value	Total Value	Total Value to Paid-in
	Date			Commitment				
Distressed	Feb-98	143,500,000	128,179,049	13,938,342	164,975,918	22,676,835	187,652,753	1.46x
Oaktree Opportunities Fund V	Jun-04	4,000,000	4,000,000	-	6,608,433	2,045	6,610,478	1.65x
Oaktree Opportunities Fund VI	Aug-05	4,000,000	4,000,000	-	6,326,002	532	6,326,534	1.58x
Siguler Guff Dist Opp II	Sep-05	20,000,000	20,000,000	-	27,923,981	293,745	28,217,726	1.41x
Oaktree Opportunities VII A	Mar-07	7,500,000	7,500,000	-	10,086,712	321,330	10,408,042	1.39x
Oaktree Opportunities VII B	Jun-08	7,500,000	6,750,000	375,000	11,561,496	131,706	11,693,202	1.73x
Siguler Guff Dist Opp III	Sep-08	15,000,000	14,550,000	450,000	21,064,689	2,267,242	23,331,931	1.60x
Oaktree Opportunities VIII	Dec-09	7,500,000	7,500,000	-	10,585,573	315,703	10,901,276	1.45x
Oaktree Opportunities IX	Mar-13	7,500,000	7,500,000	-	3,592,158	5,301,248	8,893,406	1.19x
Oaktree European Dislocation Fund	Nov-13	7,500,000	4,293,000	750,000	4,570,399	270,478	4,840,877	1.13x
Oaktree Opportunities Fund X	Jul-15	7,500,000	6,975,000	1,275,000	1,667,949	7,067,154	8,735,103	1.25x
Apollo EPF III	Jan-18	10,000,000	5,667,633	5,463,342	1,130,974	4,959,254	6,090,228	1.07x
Oaktree Opportunities Fund Xb	Jun-18	7,500,000	1,875,000	5,625,000	-	1,746,398	1,746,398	0.93x
merging Markets Focused	Mar-12	7,500,000	7,934,303	1,022,792	3,316,702	6,821,000	10,137,702	1.28x
Actis EM IV	Mar-12	7,500,000	7,934,303	1,022,792	3,316,702	6,821,000	10,137,702	1.28x
Mezzanine	Mar-99	49,500,000	51,446,479	4,726,007	72,838,077	1,130,307	73,968,384	1.44x
TCW Crescent IV	Jun-06	10,000,000	9,873,180	1,921,076	11,250,305	-	11,250,305	1.14x
Newstone Capital Partners	Nov-06	5,000,000	7,114,989	-	9,069,321	-	9,069,321	1.27x
TCW Mezzanine Fund V	Mar-08	10,000,000	7,507,009	2,492,991	10,456,648	274,294	10,730,942	1.43x
Newstone Capital Partners II	Dec-10	7,500,000	10,036,257	311,940	11,407,629	856,013	12,263,642	1.22x
Other	Feb-13	71,500,000	34,410,714	42,171,087	11,194,012	27,757,498	38,951,510	1.13x
EnCap Energy Fund IX	Feb-13	6,500,000	7,336,155	399,781	5,046,897	4,059,854	9,106,751	1.24x
EnCap Energy Fund X	Apr-15	7,500,000	6,749,774	1,245,736	1,383,300	6,668,939	8,052,239	1.19x
ArcLight Energy Partners VI	Aug-15	7,500,000	7,807,282	1,043,073	2,763,815	6,891,190	9,655,005	1.24x
EnCap Energy Fund XI	Jul-17	10,000,000	2,955,003	7,044,997	-	2,575,015	2,575,015	0.87x
North Sky Clean Growth V	Sep-19	25,000,000	9,562,500	17,437,500	2,000,000	7,562,500	9,562,500	1.00x
ArcLight Energy Partners Fund VII, L.P		15,000,000		15,000,000	-	-	-	
econdary Fund of Funds	Dec-05	20,000,000	21,226,531	-	27,994,796	1,583,756	29,578,552	1.39x
Lexington VI	Dec-05	20,000,000	21,226,531	-	27,994,796	1,583,756	29,578,552	1.39x

Private Equity - Active Funds

For the Period Ending December 31, 2019

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

	Inception		Drawn	Remaining	Distributions	Adjusted		Total Value to
	Date	Committed	to Date	Commitment	to Date	Ending Value	Total Value	Paid-in
Venture Capital	Jul-99	205,500,000	149,256,166	53,764,308	122,619,326	109,666,007	232,285,333	1.56x
Lightspeed Venture Partners VI (WPG)	Oct-00	12,000,000	11,010,270	-	10,478,573	-	10,478,573	0.95x
Accel Europe	May-01	10,000,000	10,000,000	-	12,403,731	868,192	13,271,923	1.33x
Knightsbridge Fund VI	Dec-04	12,000,000	10,960,000	1,040,000	11,760,368	6,170,665	17,931,033	1.64x
Firstmark I (Pequot, Firstmark IV)	Nov-05	5,000,000	4,950,000	50,000	18,690,837	19,056,495	37,747,332	7.63x
Weathergage Venture Capital	Mar-07	7,500,000	6,862,500	637,500	9,744,343	4,632,128	14,376,471	2.09x
Warburg Pincus	Oct-07	15,000,000	15,000,000	-	20,757,071	4,381,520	25,138,591	1.68x
Weathergage Venture Cap II	Apr-11	7,500,000	6,975,000	525,000	5,033,985	10,970,792	16,004,777	2.29x
Firstmark II (Firstmark V)	Aug-11	5,000,000	5,122,365	-	1,088,237	9,055,241	10,143,478	1.98x
Warburg Pincus XI	Nov-12	7,500,000	7,500,000	-	7,524,067	4,645,248	12,169,315	1.62x
Firstmark Capital Fund III	Feb-14	5,000,000	4,900,000	100,000	141,977	7,227,548	7,369,525	1.50x
Firstmark Capital Opportunity Fund I	Jun-14	5,000,000	5,075,000	186,808	1,486,793	6,126,244	7,613,037	1.50x
Warburg Pincus XII	Dec-15	10,000,000	9,405,000	595,000	943,230	10,575,573	11,518,803	1.22x
Weathergage Venture Capital IV	Dec-16	10,000,000	6,400,000	3,600,000	-	7,580,333	7,580,333	1.18x
FirstMark Capital Fund IV	Apr-17	7,500,000	4,237,500	3,262,500	-	4,552,163	4,552,163	1.07x
FirstMark Capital Opportunity Fund II	Jan-18	7,500,000	5,812,500	1,687,500	-	6,167,398	6,167,398	1.06x
Warburg Pincus Global Growth	Mar-19	40,000,000	6,420,000	33,580,000	-	6,156,467	6,156,467	0.96x
TA XIII	Dec-19	10,000,000	1,500,000	8,500,000	-	1,500,000	1,500,000	1.00x

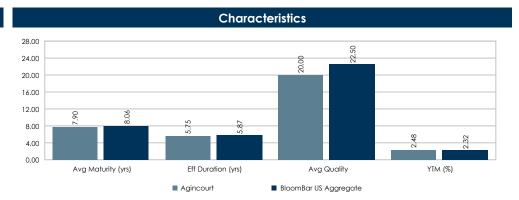


Fixed Income Manager Performance

For the Periods Ending December 31, 2019

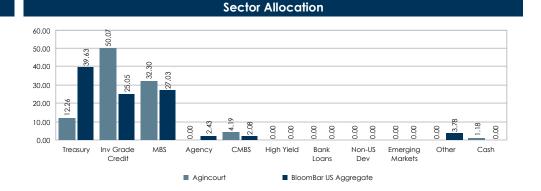
Account Description

- 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

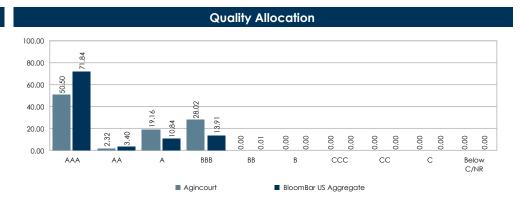


Performance Goals

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

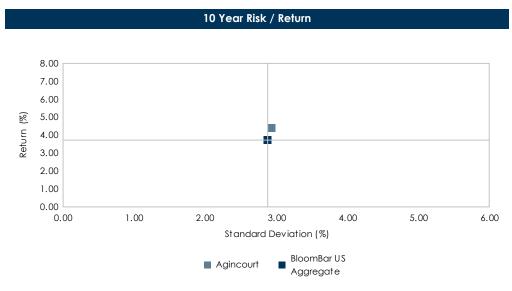


Dollar Growth Summary (\$000s) FYTD 1 Year **Beginning Market Value** 220,459 172,421 Net Additions 14,817 49,690 Return on Investment 19,307 6,143 Income 3,962 7,209 2.181 12.097 Gain/Loss **Ending Market Value** 241,418 241,418



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

For the Periods Ending December 31, 2019

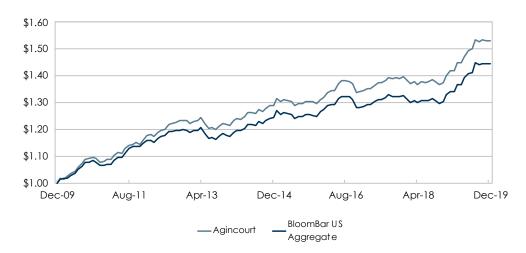


10 Year Portfolio Statistics

	Agincourt	BloomBar US Aggregate
Return (%)	4.36	3.75
Standard Deviation (%)	2.93	2.87
Sharpe Ratio	1.31	1.12

Benchmark Relative Statistics				
Beta	0.99			
R Squared (%)	93.84			
Alpha (%)	0.65			
Tracking Error (%)	0.73			
Batting Average (%)	64.17			
Up Capture (%)	106.45			
Down Capture (%)	89.90			

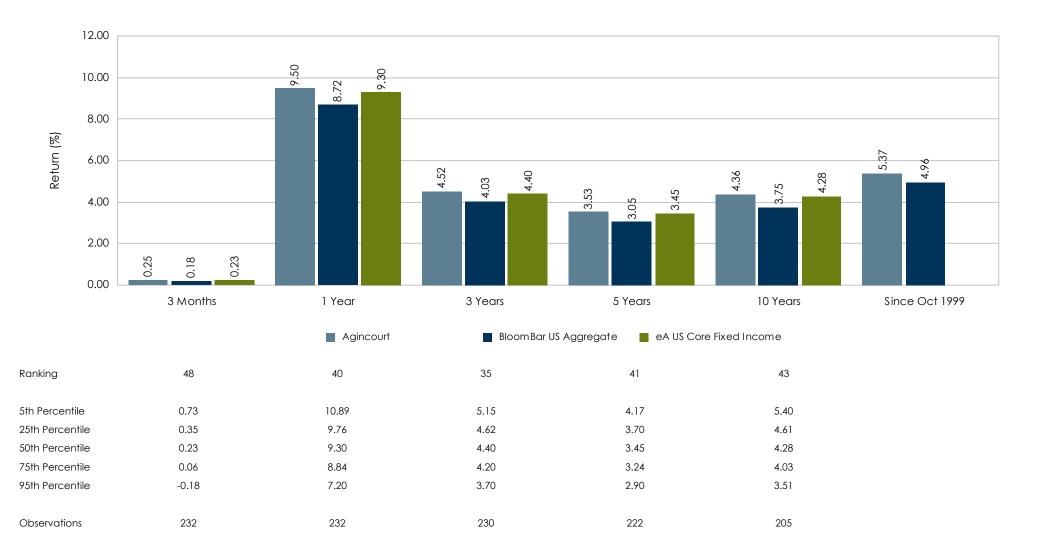
10 Year Growth of a Dollar



10 Year Return Analysis

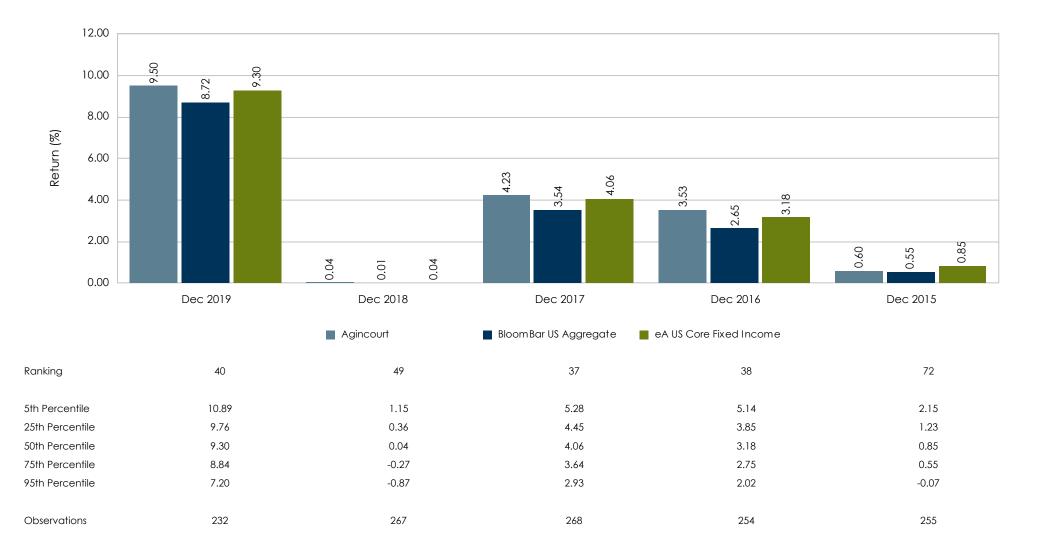
	Agincourt	BloomBar US Aggregate
Number of Months	120	120
Highest Monthly Return (%)	2.43	2.59
Lowest Monthly Return (%)	-2.37	-2.37
Number of Positive Months	79	78
Number of Negative Months	41	42
% of Positive Months	65.83	65.00

For the Periods Ending December 31, 2019



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.

For the One Year Periods Ending December



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.

For the Periods Ending December 31, 2019

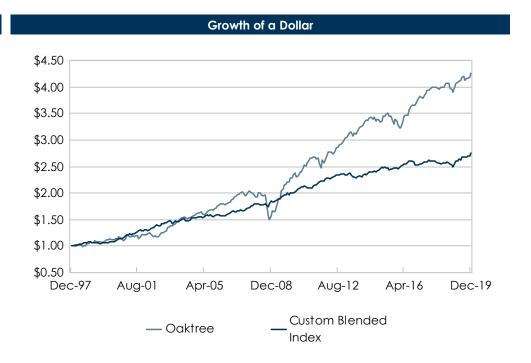
Account Description

Performance Goals

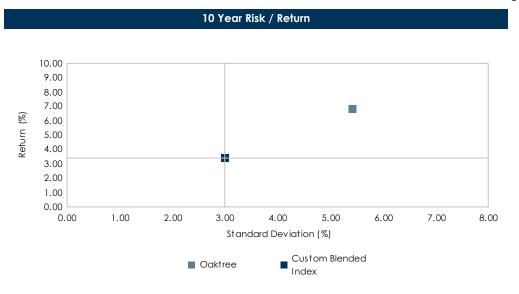
Outperform the Custom Blended Index.

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

Dollar Growth Summary (\$000s)					
	FYTD	1 Year			
Beginning Market Value	129,151	120,339			
Net Additions	-394	-229			
Return on Investment	2,361	11,008			
Ending Market Value 131,118 131,118					



For the Periods Ending December 31, 2019

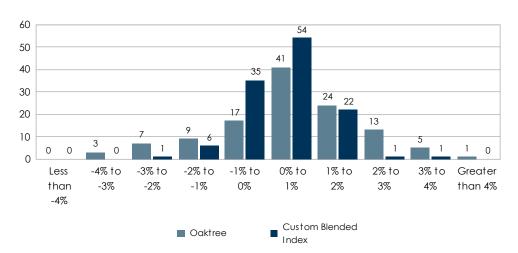


	Oaktree	Custom Blended Index
Return (%)	6.78	3.43
Standard Deviation (%)	5.41	2.99
Sharpe Ratio	1.15	0.97

Benchmark Relative Statistics				
Beta	0.39			
R Squared (%)	4.59			
Alpha (%)	5.53			
Tracking Error (%)	5.60			
Batting Average (%)	60.00			
Up Capture (%)	116.49			
Down Capture (%)	9.44			
Alpha (%) Tracking Error (%) Batting Average (%) Up Capture (%)	5.53 5.60 60.00 116.49			

10 Year Portfolio Statistics

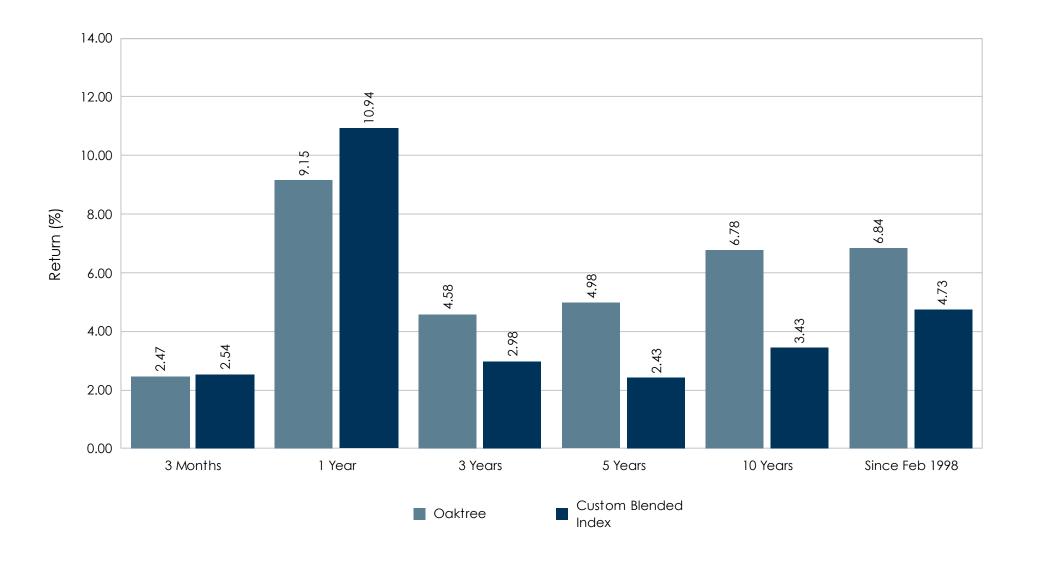
10 Year Return Histogram



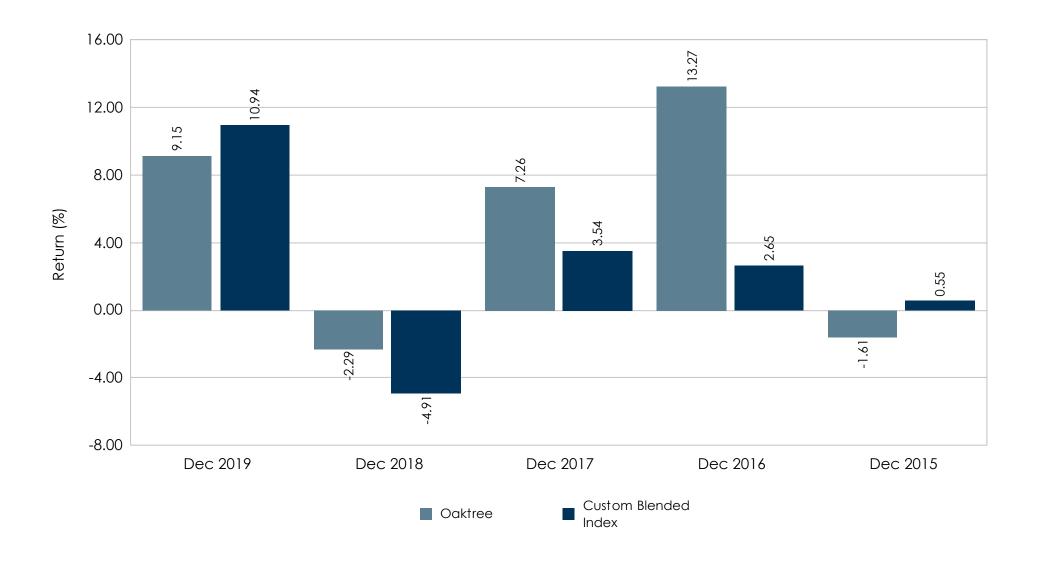
10 Year Return Analysis

	Custom Blended
Oaktree	Index
120	120
5.85	3.21
-3.96	-2.37
84	78
36	42
70.00	65.00
	120 5.85 -3.96 84 36

For the Periods Ending December 31, 2019



For the One Year Periods Ending December

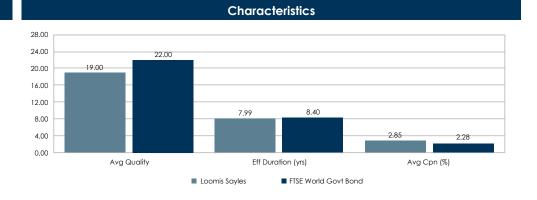


Loomis Sayles

For the Periods Ending December 31, 2019

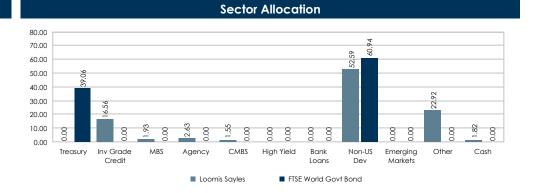
Account Description

- 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

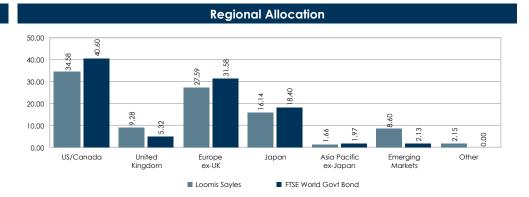


Performance Goals

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



Dollar Growth Summary (\$000s) FYTD 1 Year Beginning Market Value 81,552 96,319 Net Additions -139 -20,292 Return on Investment 908 6,294 Ending Market Value 82,322 82,322



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 December 31, 2019



Loomis Sayles FTSE World Govt Bond Return (%) 3.25 1.85 Standard Deviation (%) 5.75 5.31 Sharpe Ratio 0.47 0.25

Benchmark Relative Statistics				
Beta	1.01			
R Squared (%)	86.92			
Alpha (%)	1.39			
Tracking Error (%)	2.08			
Batting Average (%)	63.33			
Up Capture (%)	113.10			
Down Capture (%)	94.21			

10 Year Return Analysis

10 Year Portfolio Statistics

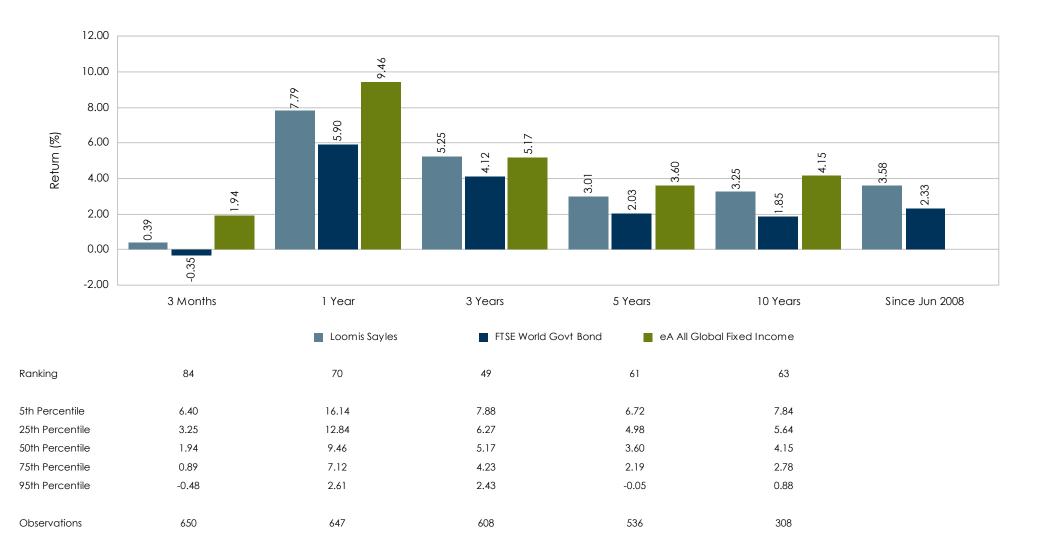
\$1.40 \$1.35 \$1.30 \$1.25 \$1.20 \$1.15 \$1.10 \$1.05 \$1.00 \$0.95 Dec-09 Aug-11 Apr-13 Dec-14 Apr-18 Dec-19 Aug-16 FTSE World Govt —Loomis Sayles

10 Year Growth of a Dollar

	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

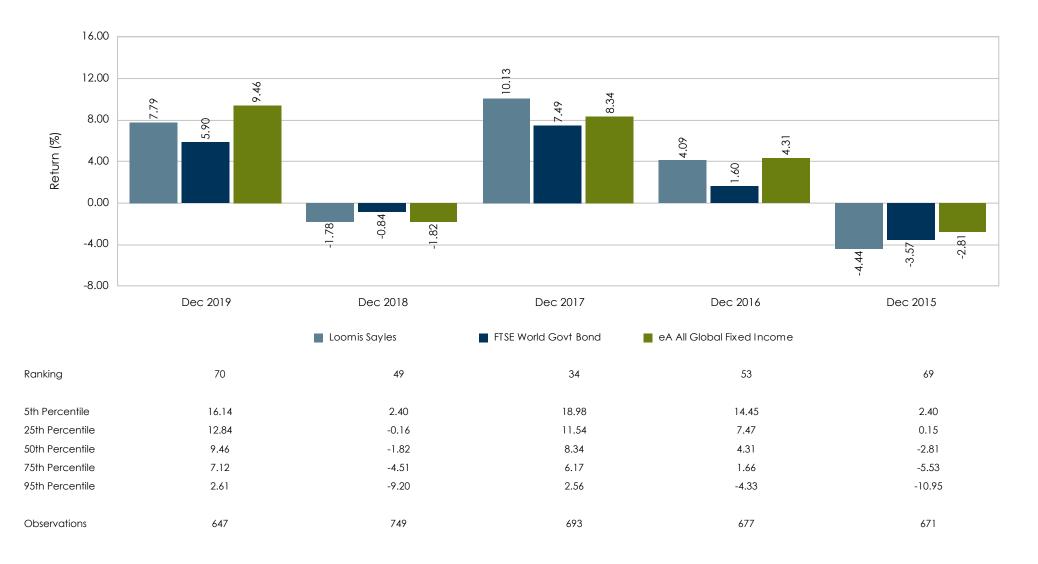
For the Periods Ending December 31, 2019



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 December



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 December 31, 2019

Summary of Cash Flows for 6 Months

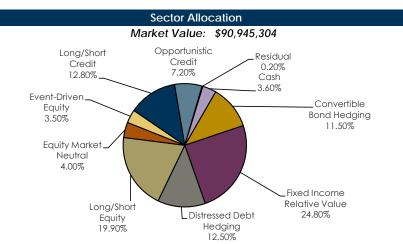
Cash Outflows	Cash Inflows	Net Cash Flows
-8,295,885	13,088,334	4,792,449

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

	Inception		Drawn	Remaining	Distributions	Adjusted		Total Value to
	Date	Committed	to Date	Commitment	to Date	Ending Value	Total Value	Paid-in
Total	Sep-16	90,000,000	71,068,995	29,217,086	28,858,513	50,561,044	79,419,557	1.12x
Mezzanine	Jan-17	20,000,000	19,918,995	1,540,859	6,575,196	16,975,853	23,551,049	1.18x
Newstone Capital Partners III	Jan-17	20,000,000	19,918,995	1,540,859	6,575,196	16,975,853	23,551,049	1.18x
Other	Sep-16	70,000,000	51,150,000	27,676,227	22,283,317	33,585,191	55,868,508	1.09x
LBC Credit Partners Fund IV	Sep-16	40,000,000	36,000,000	12,826,227	13,910,215	25,993,745	39,903,960	1.11x
Apollo Accord II	Oct-18	11,400,000	10,500,000	900,000	8,373,102	2,941,446	11,314,548	1.08x
Apollo Accord III	Oct-19	18,600,000	4,650,000	13,950,000	-	4,650,000	4,650,000	1.00x

PAAMCO

For the Periods Ending December 31, 2019



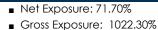
Strategy

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

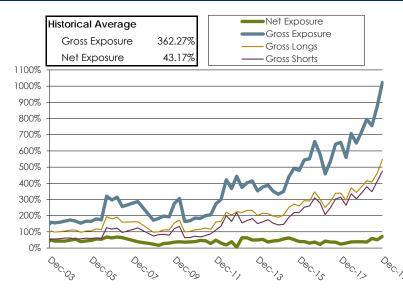
Objectives and Constraints

- 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%

Exposure



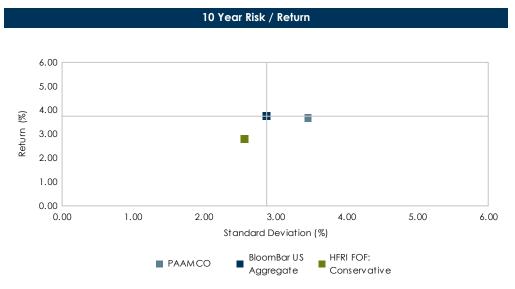
Historical Net & Gross Exposure



Characteristic data provided by manager.

PAAMCO

For the Periods Ending December 31, 2019

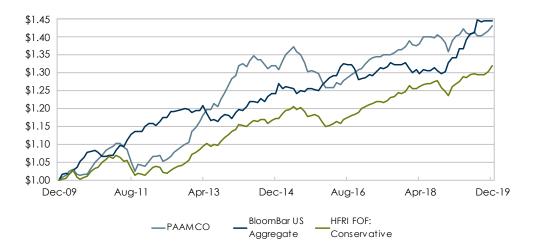


BloomBar US HFRI FOF: Conservative **PAAMCO** Aggregate 3.66 3.75 2.81 Return (%) 2.87 2.57 Standard Deviation (%) 3.46 **Sharpe Ratio** 0.90 1.12 0.89

10 Year Portfolio Statistics

Benchmark Relative Statistics				
Beta	-0.31	1.18		
R Squared (%)	6.60	76.95		
Alpha (%)	4.92	0.35		
Tracking Error (%)	5.03	1.72		
Batting Average (%)	60.00	57.50		
Up Capture (%)	32.95	120.51		
Down Capture (%)	-76.29	107.73		

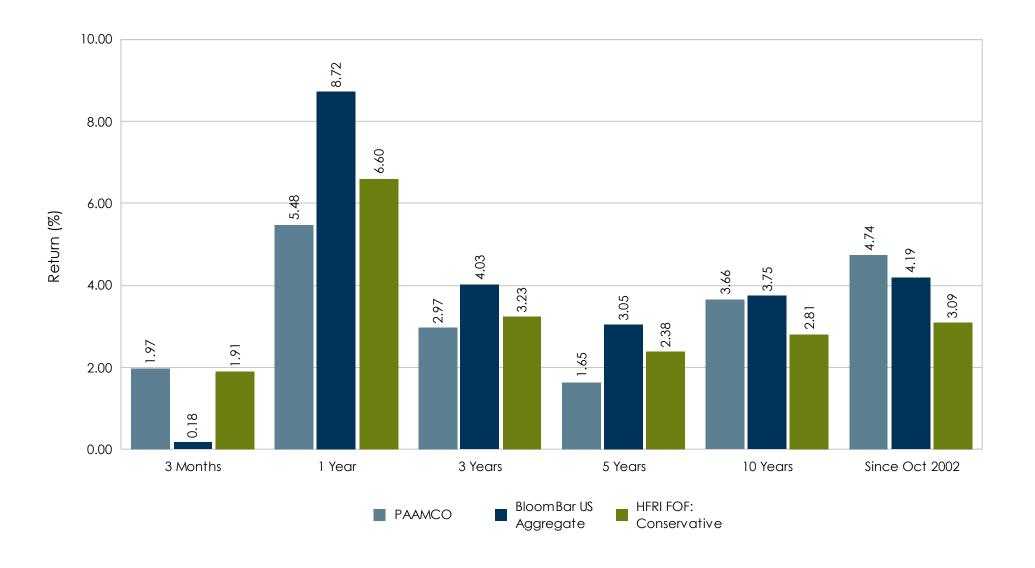
10 Year Growth of a Dollar



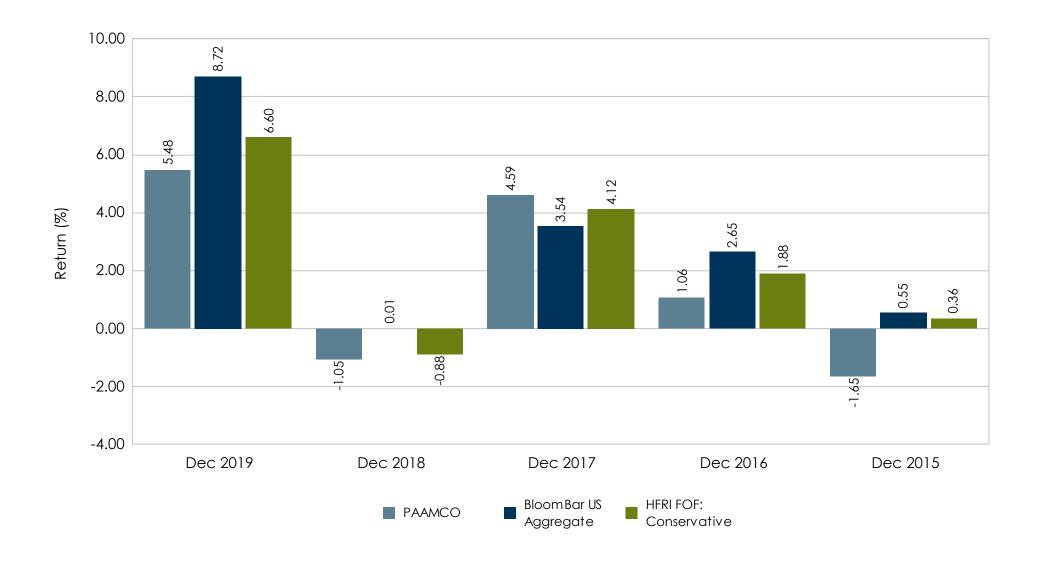
10 Year Return Analysis

	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 (%)	-2.99	-2.37	-2.13
Number of Positive Months	80	78	85
Number of Negative Months	40	42	35
% of Positive Months	66.67	65.00	70.83

PAAMCOFor the Periods Ending December 31, 2019



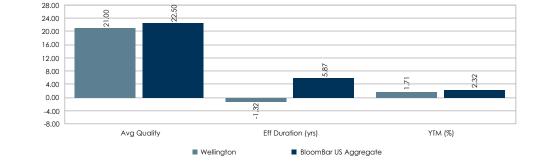
PAAMCOFor the One Year Periods Ending December



For the Periods Ending December 31, 2019

Account Description

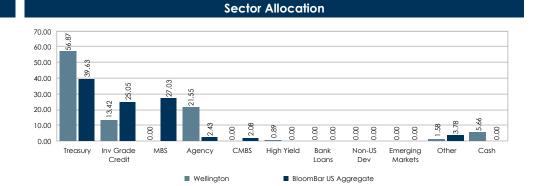
- Strategy Absolute Return
- Vehicle Non-Mutual Commingled
- Benchmarks US T-Bills 90 Day + 4% and BloomBar US Aggregate
- Performance Inception Date December 2016
- Fees 25 bps, plus 20% of excess return beyond cash + 1%



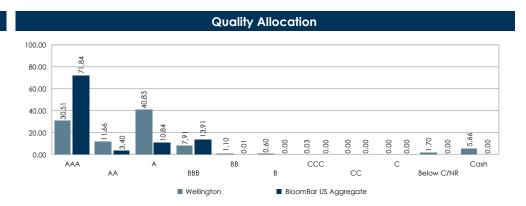
Characteristics

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.

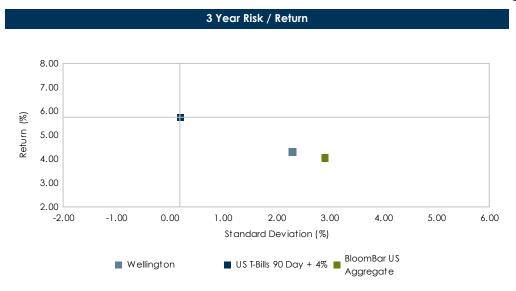


PYTD 1 Year Beginning Market Value 66,411 65,342 Net Additions 9,911 9,351 Return on Investment 669 2,298 Ending Market Value 76,991 76,991



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

For the Periods Ending December 31, 2019

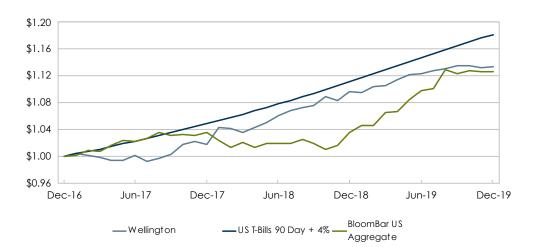


	Wellington	US T-Bills 90 Day + 4%	BloomBar US Aggregate
Return (%)	4.29	5.73	4.03
Standard Deviation (%)	2.30	0.20	2.91
Sharpe Ratio	1.17	20.72	0.83

3 Year Portfolio Statistics

Benchma	rk Relative Statistics	
Beta	2.26	-0.20
R Squared (%)	3.83	6.23
Alpha (%)	-8.08	5.14
Tracking Error (%)	2.27	4.14
Batting Average (%)	44.44	47.22
Up Capture (%)	74.94	26.20
Down Capture (%)		-140.31

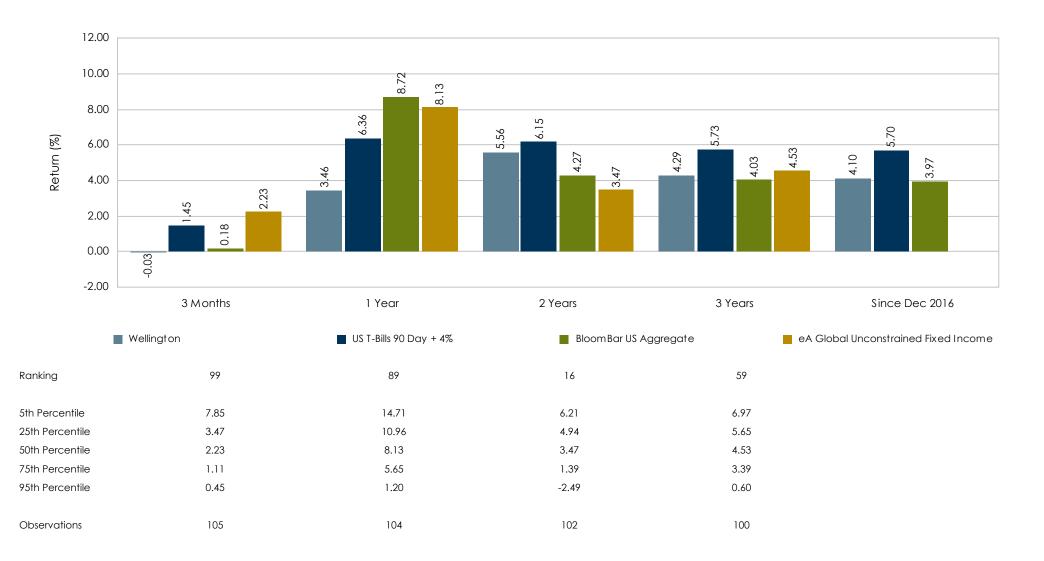
3 Year Growth of a Dollar



3 Year Return Analysis

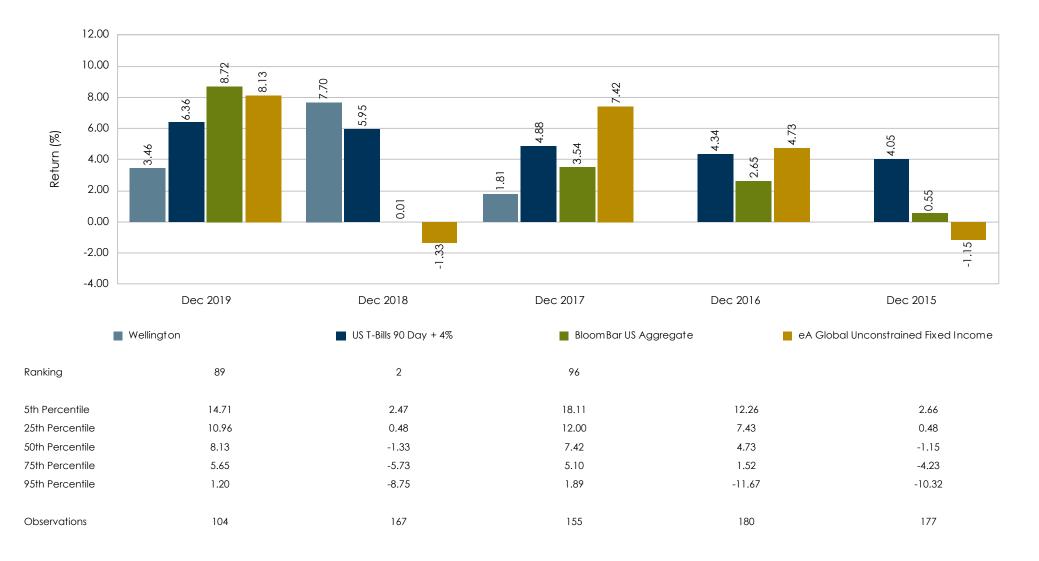
	Wellington	US T-Bills 90 Day + 4%	BloomBar US Aggregate
Number of Months	36	36	36
Highest Monthly Return (%)	2.45	0.56	2.59
Lowest Monthly Return (%)	-0.87	0.34	-1.15
Number of Positive Months	25	36	22
Number of Negative Months	11	0	14
% of Positive Months	69.44	100.00	61.11

For the Periods Ending December 31, 2019



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.

For the One Year Periods Ending December



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 December 31, 2019

Ending Market Value

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

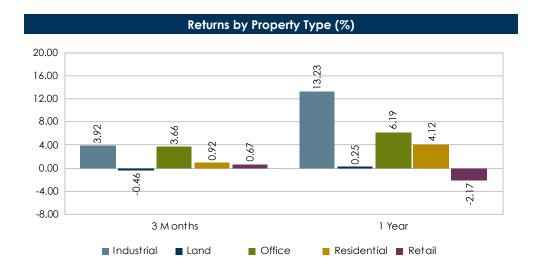
Performance Goals

Outperform the NFI ODCE Net.

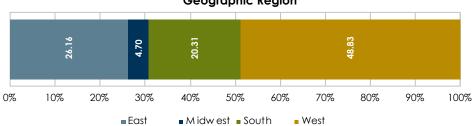


Account Information

of Properties# of Participants427





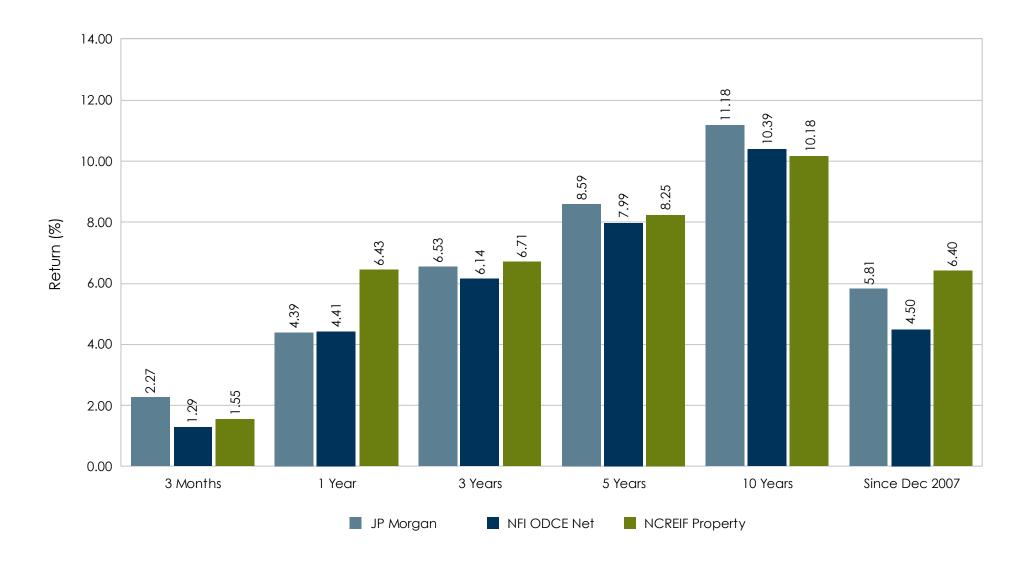


Characteristic and allocation charts represents data of the Strategic Property Fund FIV1 (Comminged Pension Fund Trust Fund) (Non-Mutual Commingled).
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\$132,391,560

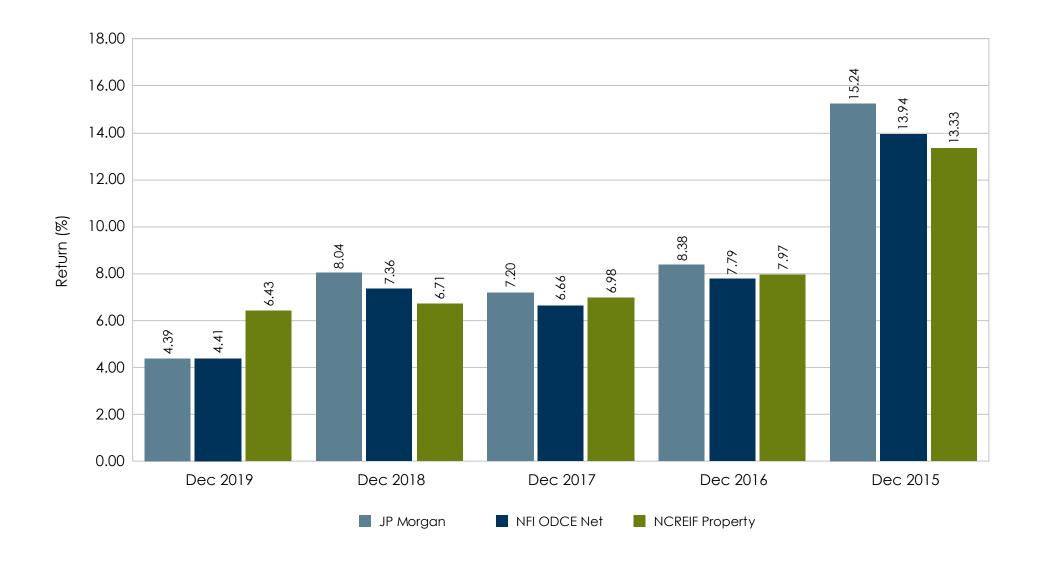
JP Morgan Strategic Property

For the Periods Ending December 31, 2019



JP Morgan Strategic Property

For the One Year Periods Ending December



Blackstone Property Partners

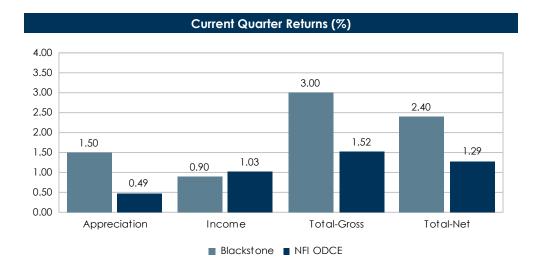
For the Periods Ending December 31, 2019

Account Description

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

Performance Goals

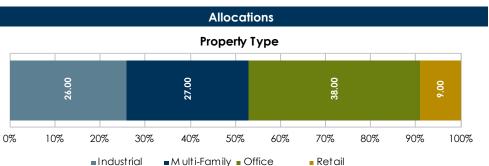
Outperform the NFI ODCE Net and NCREIF Property.

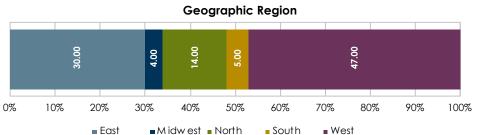




■ Ending Market Value \$84,860,746

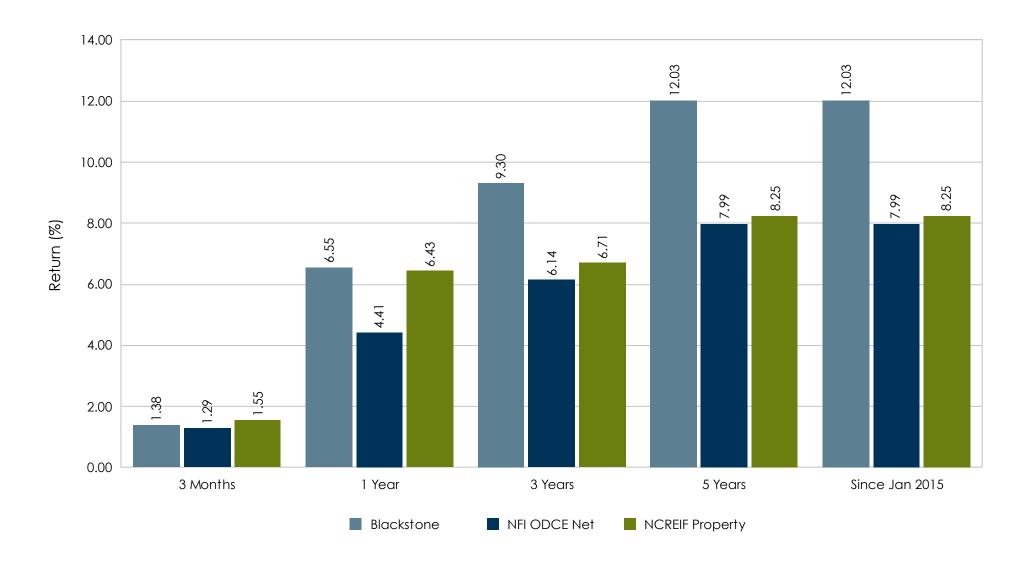
Fund Info	rmation
■ Net Market Value	\$11,400,000,000
# of Properties	39





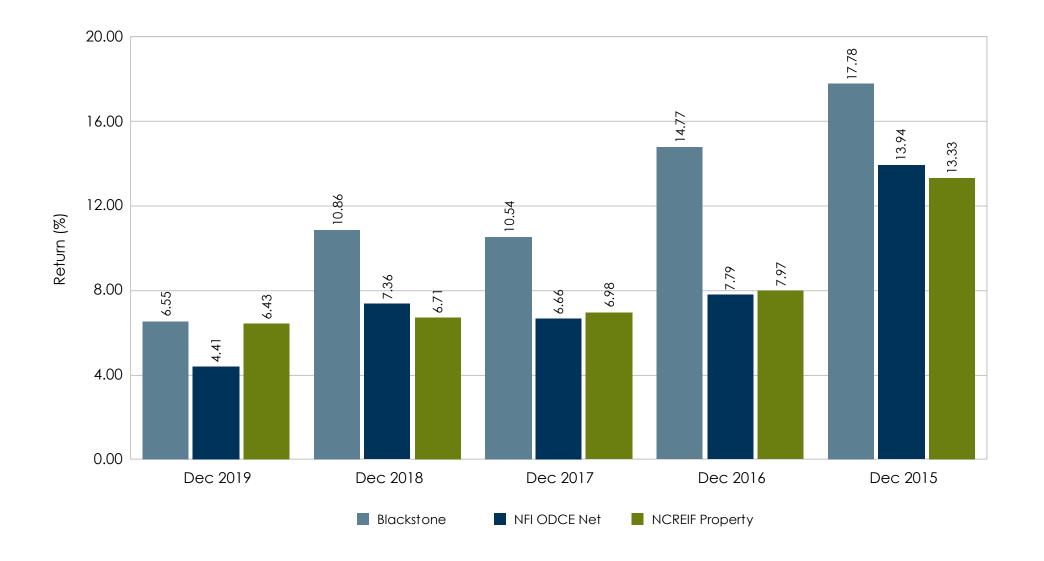
Blackstone Property Partners

For the Periods Ending December 31, 2019



Blackstone Property Partners

For the One Year Periods Ending December



Private Real Estate - Active Funds

For the Period Ending December 31, 2019

Summary of Cash Flows for 6 Months

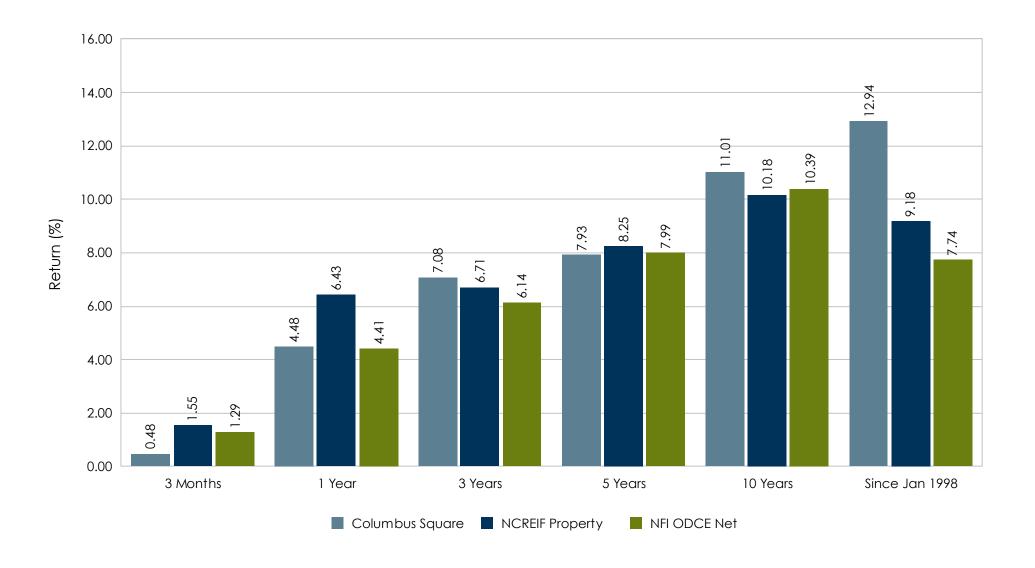
Cash Outflows	Cash Inflows	Net Cash Flows
-7,753,207	8,848,295	1,095,088

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

	Inception		Drawn	Remaining	Distributions	Adjusted		Total Value to
	Date	Committed	to Date	Commitment	to Date	Ending Value	Total Value	Paid-in
Total	Aug-11	130,500,000	93,836,955	48,331,642	76,418,316	53,210,254	129,628,570	1.38x
Real Estate	Aug-11	130,500,000	93,836,955	48,331,642	76,418,316	53,210,254	129,628,570	1.38x
Siguler Guff Dist. Real Estate Opp.	Aug-11	10,000,000	9,250,000	750,000	11,837,234	4,404,495	16,241,729	1.76x
TA Associates Realty X	Jan-13	20,000,000	20,000,000	-	29,020,186	3,390,137	32,410,323	1.62x
Cerberus Real Estate Fund III	Jul-13	20,000,000	25,185,319	4,871,659	25,979,622	9,527,635	35,507,257	1.41x
Hall Capital Fund III	Nov-14	7,500,000	7,080,261	419,739	2,880,272	5,429,994	8,310,266	1.17x
Siguler Guff Dist. Real Estate Opp. II	Dec-14	10,000,000	8,715,000	1,285,000	5,016,044	6,764,720	11,780,764	1.35x
Cerberus Institutional Real Estate Partners 4	Jun-16	15,000,000	11,563,804	4,999,645	1,563,559	11,493,576	13,057,135	1.13x
Siguler Guff Dist. Real Estate Opp. II B	Dec-17	10,000,000	4,730,000	5,270,000	-	5,278,913	5,278,913	1.12x
Angelo Gordon Realty Value Fund X	Jun-19	20,000,000	4,200,000	15,800,000	52,310	3,879,730	3,932,040	0.94x
Blackstone Real Estate Partners Fund IX, L.P	Sep-19	18,000,000	3,112,571	14,935,599	69,089	3,041,054	3,110,143	1.00x

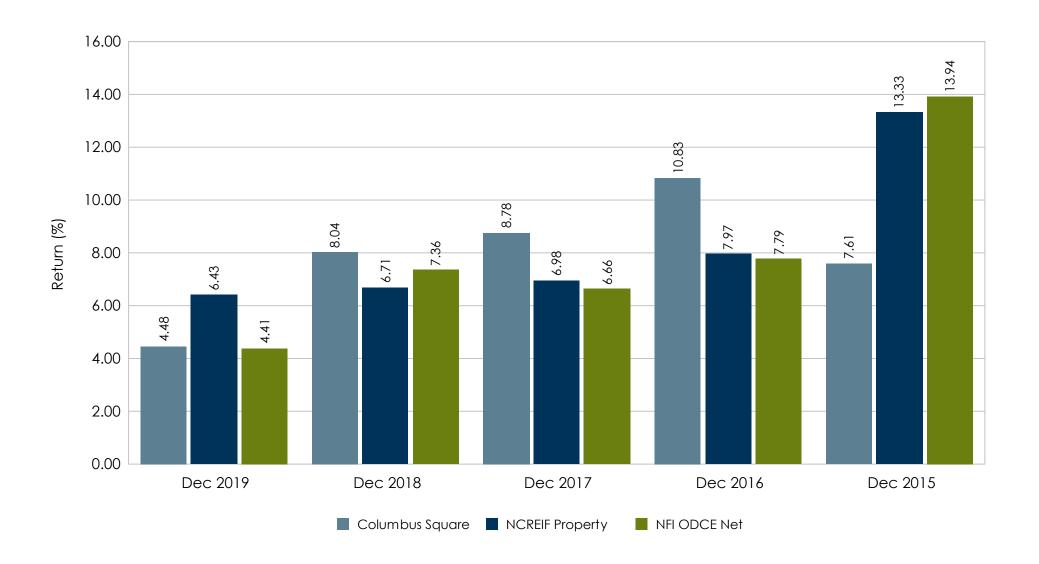
Columbus Square

For the Periods Ending December 31, 2019



Columbus Square

For the One Year Periods Ending December



Mount Lucas Peak Partners

For the Periods Ending December 31, 2019

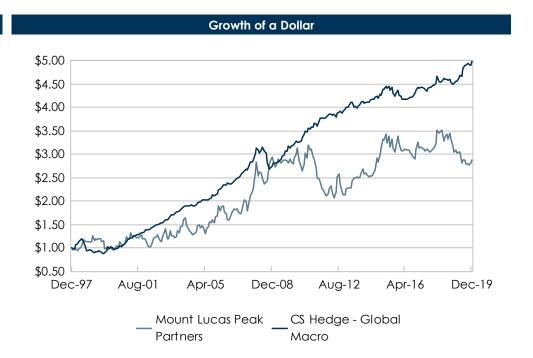
Account Description

Performance Goals

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

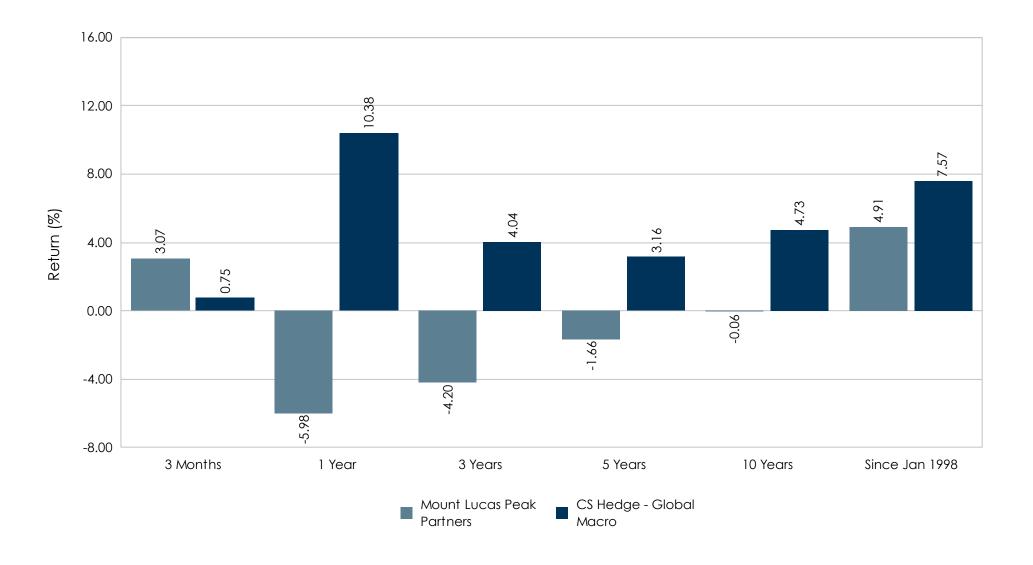
Outperform the	e CS Hedge - Globo	Il Macro.

Dollar Growth Summary (\$000s)				
	FYTD	1 Year		
Beginning Market Value	26,764	28,601		
Net Additions	-136	-279		
Return on Investment	-12	-1,706		
Ending Market Value	26,616	26,616		



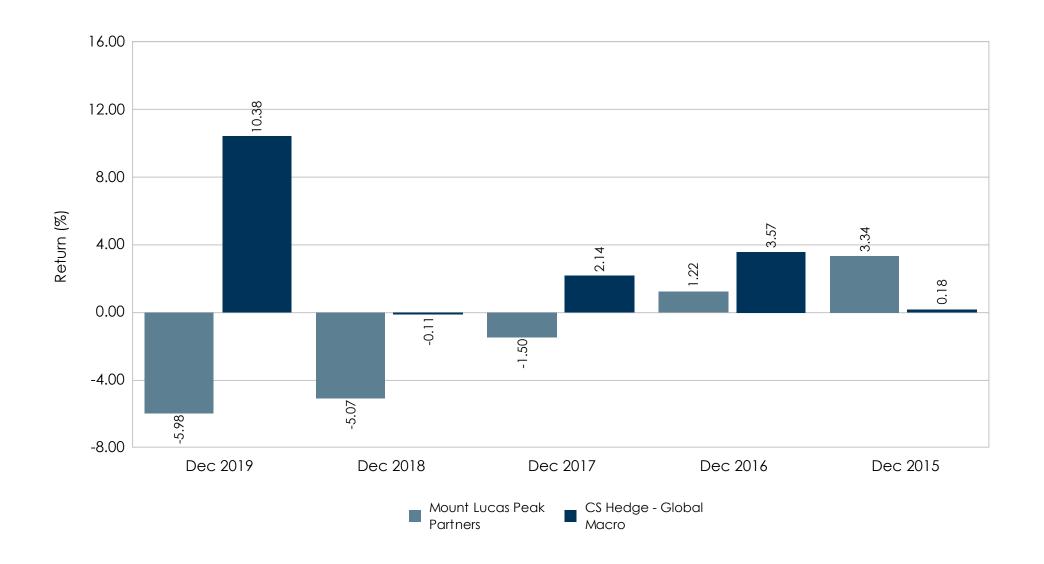
Mount Lucas Peak Partners

For the Periods Ending December 31, 2019



Mount Lucas Peak Partners

For the One Year Periods Ending December





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Appendix

Securities Lending Income

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

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	Ва2	ВВ	6	13	13
AGY	AGY	10	25	24	Ва	ВВ		13	13
Aaa	AAA	10	24	24	MIG4		6	13	13
Aal	AA+	9.3	23	23	ВаЗ	BB-	5.7	12	12
Aa2	AA		22	22	В1	B+	5.3	11	11
Aa	AA	9	22	22	B2	В	5	10	10
MIG1		9	22	22	В	В		10	10
Aa3	AA-	8.7	21	21	В3	B-	4.7	9	9
A1	A+	8.3	20	20	Caal	CCC+	4.3	8	8
A-1			20	20	Caa2	CCC	4	7	7
A2	Α	8	19	19	Caa	CCC		7	7
Α	Α		19	19	Caa3	CCC-	3.7	6	6
MIG2		8	19	19	Ca	CC	3	5	5
A3	A-		18	18	С	С	2	4	4
Baal	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		
Bal	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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