

Oklahoma Police Pension & Retirement System

Investment Performance Review

June 30, 2018

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Market Overview

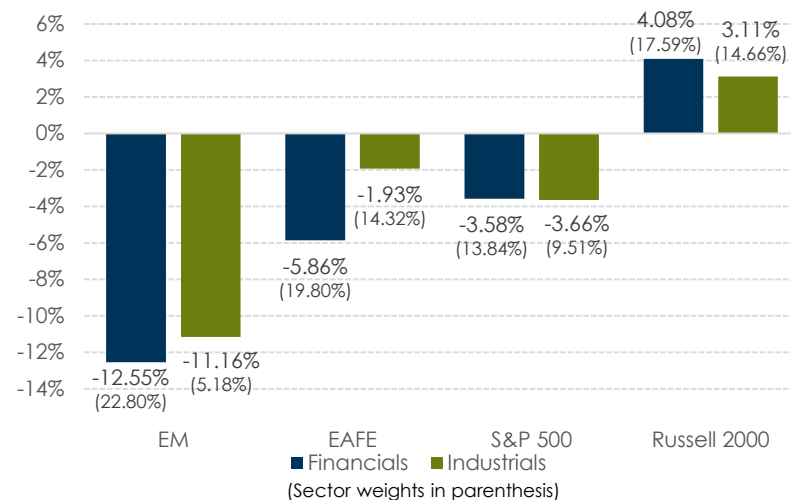
Global Long-Only Equity

After a tumultuous start to the year, the second quarter of 2018 continued to see increased volatility. **US markets advanced in the quarter and now are in positive territory for the year**, but International equities remain battered. The unpredictable behavior witnessed year-to-date is in part due to trade concerns and a **decoupling of the synchronized expansion that defined 2017**. As such, investors attempted to identify winners and losers, driving **wide sector and geographic dispersion**. Trade pressures were highlighted most meaningfully within the Industrials and Financial sectors of US Large Cap and International stocks as these two sectors are expected to be hurt the most by prolonged trade wars.

Among developed International equities, most countries delivered negative returns; the UK and Australia were notable exceptions. Within emerging markets, all major countries showed declines, as **trade-related anxiety and US dollar strength fueled significant investor concerns**. The US dollar strengthened against all major worldwide currencies, particularly versus Brazil, Turkey and South Africa. The euro and yuan both declined 5.0% during 2Q-18.

US Large Cap stocks trudged higher in 2Q-18 with **IT and Consumer Discretionary stocks continuing to rise** despite poor performance in the Industrials and Financials sectors, highlighting the high sector dispersion seen this year. **US small caps have held up**, in part on the thesis that companies with a domestic focus will be insulated from trade wars and currency translation issues. **All sectors within the Russell 2000 advanced** in the quarter and are positive year-to-date, with IT and Healthcare being notable leaders.

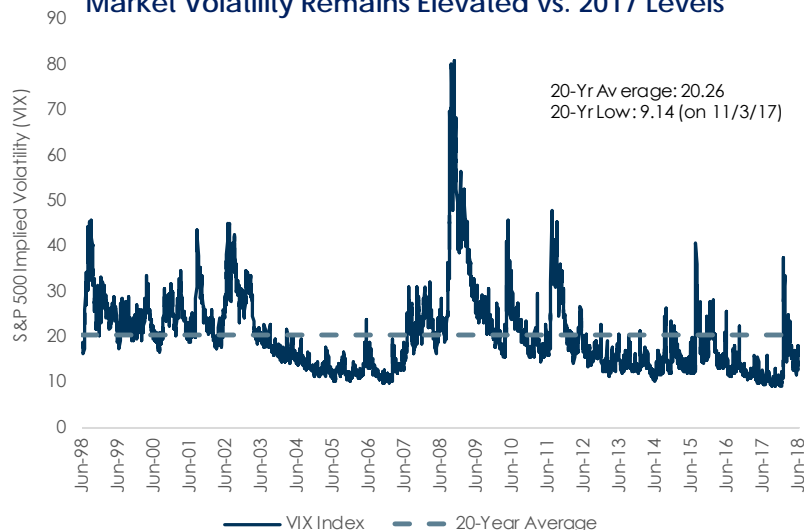
Equity Market Returns in 2Q-18 Reflect Trade War Fears



Sources: Bloomberg, FactSet, ACG Research

Global Long/Short Equity

Market Volatility Remains Elevated vs. 2017 Levels



Sources: Bloomberg, ACG Research

Managers remain positive about the equity outlook as gross exposure continues to track near historical post-crisis highs. Managers have benefitted from an **increase in dispersion** in both **sectors and companies** and we expect this will continue through the rest of the year. The **increased market volatility** has also **assisted equity long/short managers**, giving them a long-awaited **opportunity to provide downside protection**. The unpredictable macro environment with trade wars and mid-term elections will likely continue to create volatility, which should provide opportunities for managers to generate returns on both the long and the short side of their portfolios.

The possibility of continued interest rate increases is helpful to equity long/short managers as they start to earn rebates on their short portfolios (after not receiving a rebate on short sales for over a decade due to low rates).

The outlook for **event driven** strategies has improved as a number of large deals have finally been approved after many months of terminated or postponed deals. Global M&A hit a record \$2 trillion year-to-date with the tailwind from tax cuts and cash repatriation.

Technology continues to be a key area of interest. Tech exposure remains high among equity long/short managers as the sector has been a major contributor to returns and there continues to be a large amount of dispersion between winners and losers (which creates a **positive opportunity set for equity long/short stock pickers**).

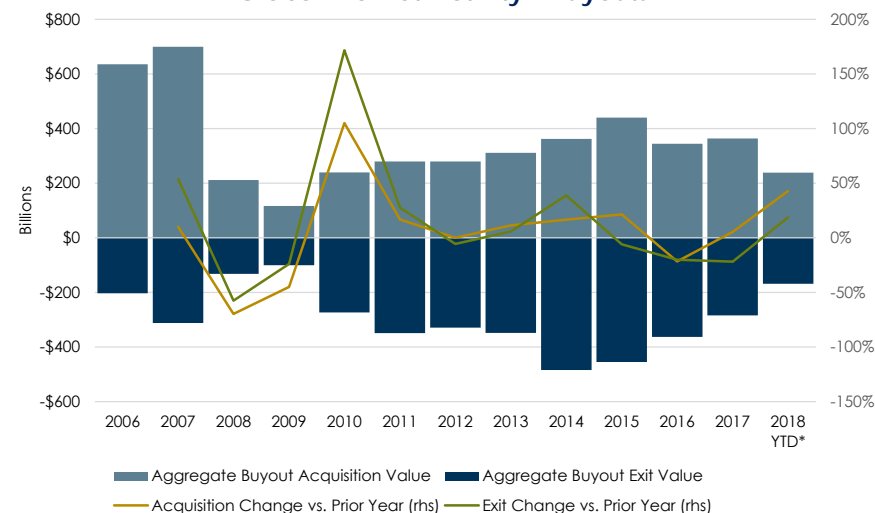
Global Private Equity

Much like public markets, valuations remain high for new deals in private markets, further bolstered by lower corporate tax rates' impact on the most common buyout valuation measure. The **median acquisition price for a private equity-backed company purchased in 1Q-18 was 10.2x EBITDA**, down marginally from 2017's all time high of 10.7x but still hovering near record levels. As EBITDA excludes tax expense, we are watching for signs that the boost in after-tax earnings is driving further expansion in acquisition multiples. Though recent leverage levels have been about 25% lower than 2007-vintage funds, rising interest rates and the possibility of slowing economic growth poses a risk to private equity-backed companies.

The pace of capital deployment among buyout funds continues to accelerate in an attempt to consume the record levels of dry powder available to private equity funds. **Through the first half of the year, buyout acquisition deal volume was nearly \$240 billion, on pace to surpass 2015's post-financial crisis record of \$440 billion in capital deployed and up nearly 50% relative to the first half of 2017.** This year's buyout activity has continued 2017's trend of more money being invested in acquisitions than harvested through exits.

High purchase prices today are likely to translate into lower returns going forward. The best managers recognize that **high multiples are unlikely to continue indefinitely and that patience and asset selection is key to driving strong investment outcomes** in this environment.

Global Market Activity - Buyouts

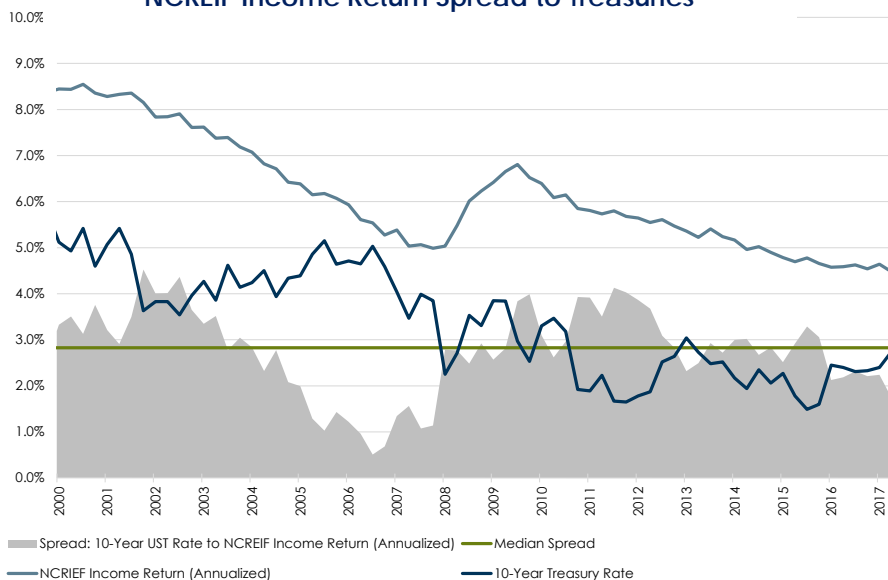


Sources: Preqin, ACG Research

*Acquisition and Exit Changes vs. Prior Year for 2018 YTD reflect the change over the comparable time period from the prior year.

Global Real Assets

NCREIF Income Return Spread to Treasuries



Sources: NCREIF, ACG Research

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US real estate assets continue to benefit from a solid economic outlook and generally low new supply. The NCREIF Property Index is expected to post its 33rd consecutive quarter of positive appreciation in 2Q-18. This is 11 quarters longer than the second longest winning streak since the benchmark's inception in 1978. In 1Q-18, NCREIF annualized income returns (a proxy for cap rates) decreased 16 bps to end at 4.48%. **Between tightening income returns and rising interest rates, the spread between NCREIF income returns and the 10-year UST yield ended the quarter at 174 bps, 109 bps tighter than the median spread since 2000.** This quarter marked the first time the spread has fallen below 200 bps since September 2008.

Though there have been no significant impacts to real estate valuations so far, **the potential for higher interest rates could put upward pressure on cap rates and lower future core real estate returns.** Real estate market fundamentals remain relatively solid, with no imminent signs of a dramatic imbalance between supply and demand outside of the long-challenged retail sector. **Given the potential for rising cap rates and the length of the current economic cycle, core real estate funds focused on income may outperform those focused on generating appreciation in the intermediate term.**

Up close to 0.4% during the quarter, the Bloomberg Commodity Index (BCOM) outperformed the Bloomberg Barclays US Aggregate Bond Index by 56 bps and underperformed the S&P 500 and MSCI ACWI by 225 bps and 39 bps, respectively. **Signs of rising inflation may be positive for commodities broadly,** though ongoing uncertainty about international trade policy and sanctions may drive further volatility in the near term.

Global Traditional Bond Markets

Fixed income headwinds persisted during 2Q-18. Despite geopolitical headlines, the **Federal Reserve** continued to operate in a predictable manner, with another 25 bps hike in mid-June. Forecasts were also revised to now include a total of four rate hikes in 2018, with three hikes expected to follow next year. The **US Treasury market adjusted** throughout the quarter, with longer-term rates reaching levels last seen in 2011, before retreating somewhat as risk-off sentiment spread with escalating trade concerns. The US yield curve continued its multi-year flattening trend, as front-end rates advanced.

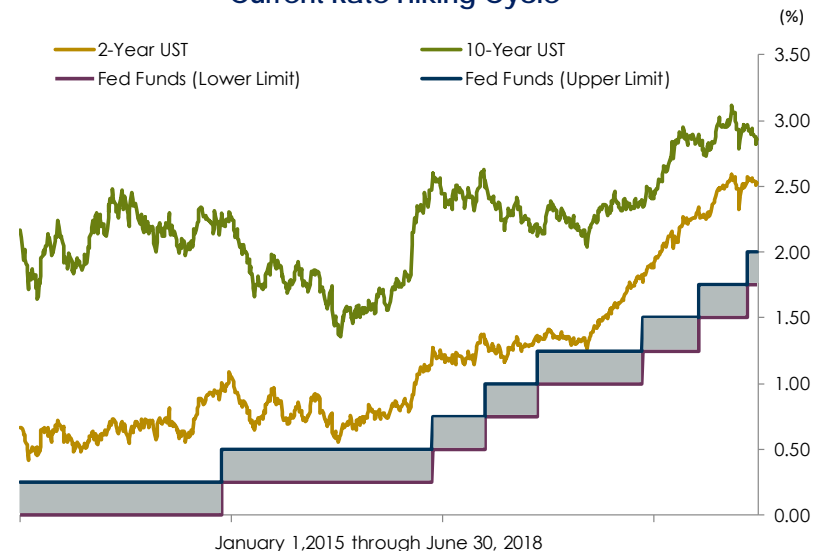
The **BloomBar Aggregate** suffered a modest loss. Despite high rate sensitivity, government-related issues performed well relative to IG corporates. Credit spread widening was most pronounced for longer (10+ year maturities) and lower-quality (BBB-rated) issues. Worth noting, the yield-to-worst for the broad index has moved up to nearly 3.3%.

High Yield avoided the supply/demand issues that hurt the IG market. Although spreads have now widened by 44 bps from January's tight, 2Q-18 performance stayed in positive territory. Higher beta, less rate sensitive issues outperformed given views on default risk.

Municipal Bonds performed well relative to taxable counterparts. With strong demand for short-term issues, the tax-exempt yield curve had contradictory steepening bias. Credit risk was the driving factor for the quarter, with BBB's again outperforming higher quality issues.

Unhedged Global government bonds, particularly those from **Emerging Markets**, underperformed domestic counterparts as the US dollar's strength weighed on returns.

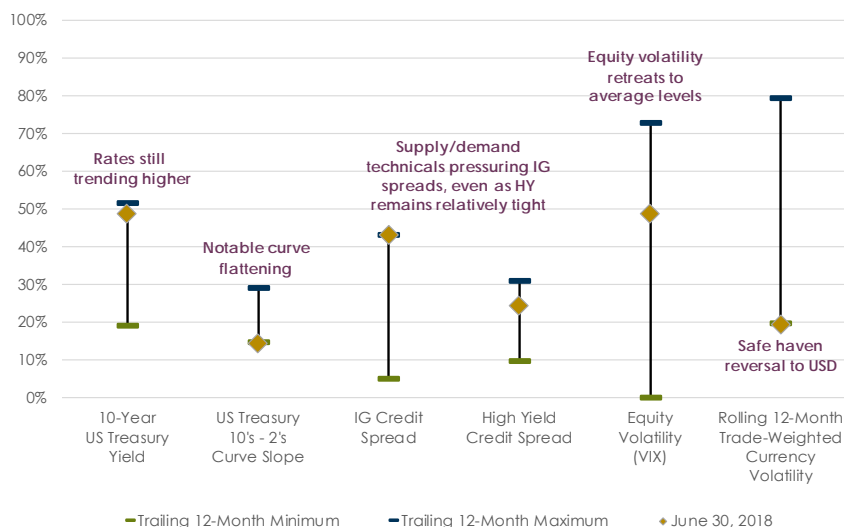
Current Rate Hiking Cycle



Sources: Bloomberg, ACG Research

Global Nontraditional Fixed Income

Percentile Rankings of Observations for Past 15-Years



Sources: Bloomberg, ACG Research

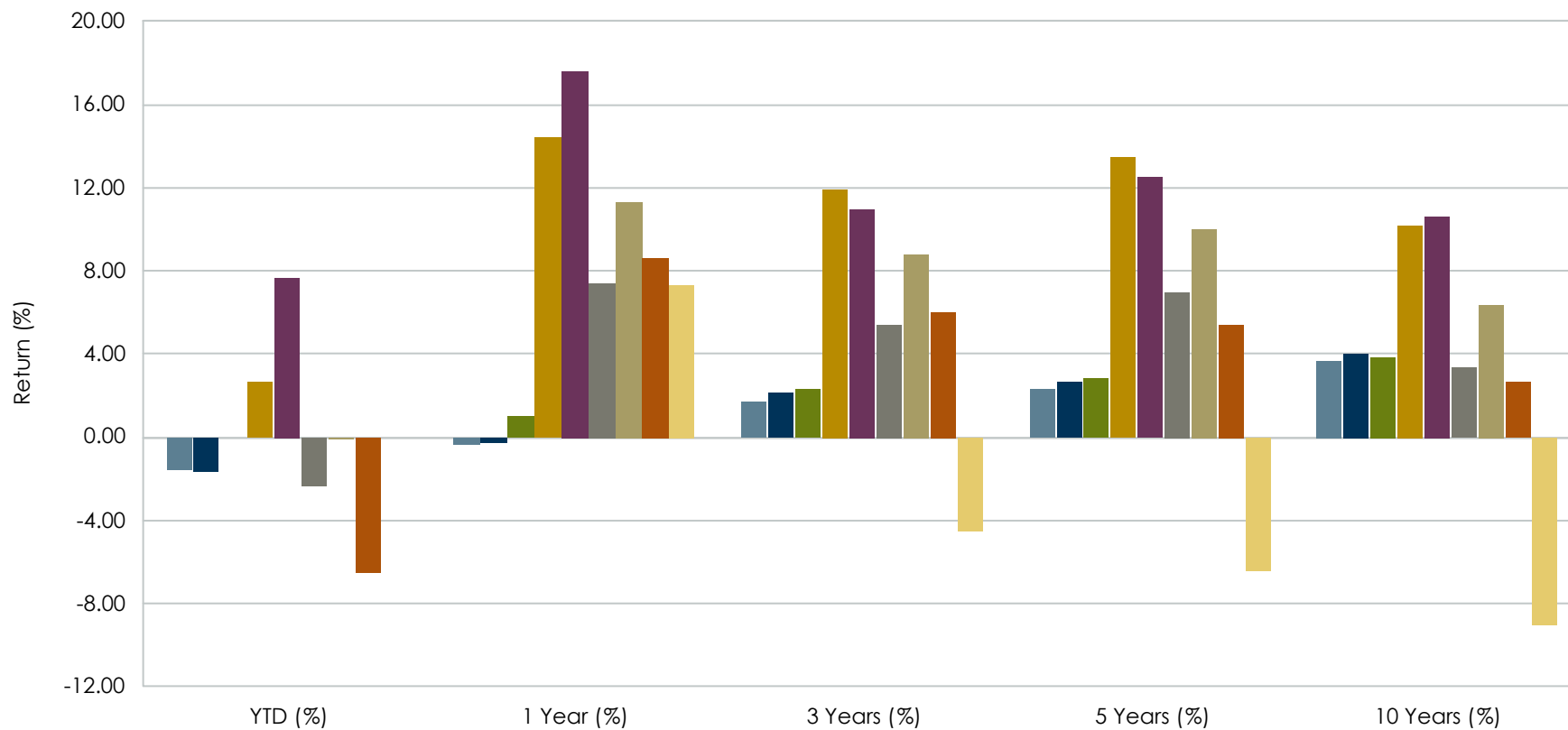
Liquid Absolute Return strategies produced varied results in 2Q-18, although the group remains comfortably ahead of traditional bond benchmarks in 2018. The diversification of risk factors within portfolios remains valuable, as this aids in downside protection and reduces key correlations. Achieving full-cycle alpha objectives becomes more challenging as cash rates increase, but **enhanced volatility in rates, spreads, and currency should provide opportunities**.

As the credit cycle lengthens, **managers are faced with the dilemma** of trying to find opportunities to deploy capital in ways that don't extend the risk level and directionality of their portfolios, while seeking to maintain upside participation. Though managers differ in their willingness to accept market risk, relative-value trades and IG market-making activities have received attention from managers looking for less directional allocations. In 2Q-18, Event-Driven and ABS-focused hedge funds tended toward positive performance, while performance of non-event corporate long/short strategies was more mixed. **We expect absolute return managers will increasingly seek relative value opportunities as the cycle progresses.**

Private Credit strategies (typically 5 to 10-year fund life) offer the opportunity to earn both a credit spread and an illiquidity premium versus publicly traded bond strategies. **Fundraising in the sector remains strong.** Preqin reported 22 private debt funds held a final close on \$25 billion of commitments in 2Q-18, up from \$20 billion in 1Q-18. **Perhaps sensing an overdue market correction, investors committed almost twice as much capital to new distressed funds as they committed to new direct lending funds during 2Q-18.** With many new entrants into the direct lending market over the past several years and an ever extending credit cycle, it has been difficult to separate the skilled from the fortunate. Any changes to the current low default rate environment should provide opportunity for some and insight into the skill level of others.

Market Environment

For the Periods Ending June 30, 2018

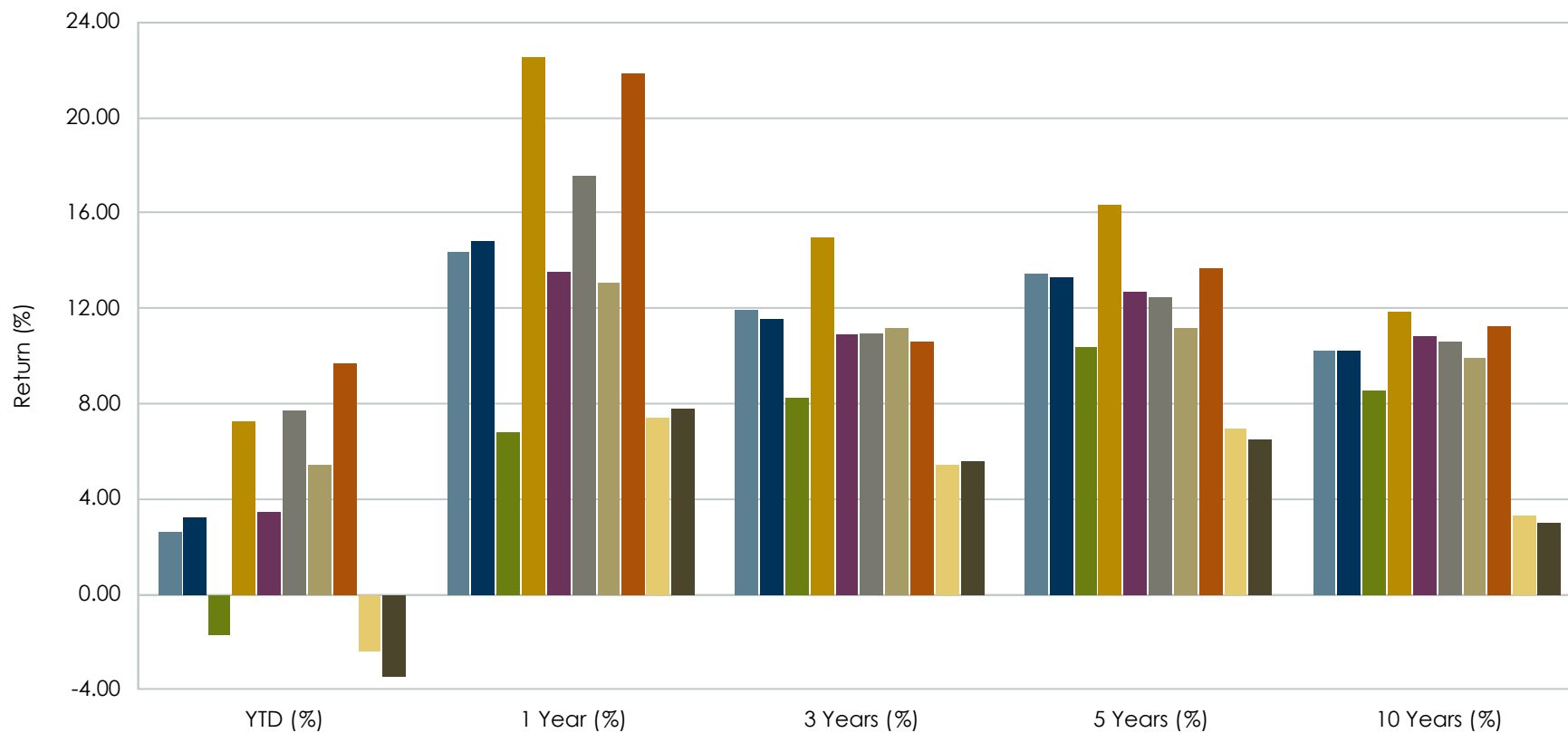


BloomBar US Aggregate	-1.62
BloomBar Universal	-1.67
BloomBar 1-15 Yr Municipal	-0.07
S&P 500	2.65
Russell 2000	7.66
MSCI EAFE	-2.37
MSCI ACWI	-0.13
MSCI Emerging Markets	-6.51
Bloomberg Commodity	0.00

1 Year (%)	3 Years (%)	5 Years (%)	10 Years (%)
-0.40	1.72	2.27	3.72
-0.28	2.12	2.63	4.07
1.01	2.29	2.85	3.89
14.37	11.93	13.42	10.17
17.57	10.96	12.46	10.60
7.37	5.41	6.93	3.33
11.31	8.78	10.00	6.37
8.59	5.98	5.39	2.60
7.35	-4.54	-6.40	-9.04

Equity Index Returns

For the Periods Ending June 30, 2018



S&P 500	2.65
Russell 3000	3.22
Russell 1000 Value	-1.69
Russell 1000 Growth	7.25
S&P Mid Cap 400	3.49
Russell 2000	7.66
Russell 2000 Value	5.44
Russell 2000 Growth	9.70
MSCI EAFE	-2.37
MSCI ACWI ex US	-3.44

1 Year (%)	14.37
1 Year (%)	14.78
1 Year (%)	6.77
1 Year (%)	22.51
1 Year (%)	13.50
1 Year (%)	17.57
1 Year (%)	13.10
1 Year (%)	21.86
1 Year (%)	7.37
1 Year (%)	7.79

3 Years (%)	11.93
3 Years (%)	11.58
3 Years (%)	8.26
3 Years (%)	14.98
3 Years (%)	10.89
3 Years (%)	10.96
3 Years (%)	11.22
3 Years (%)	10.60
3 Years (%)	5.41
3 Years (%)	5.56

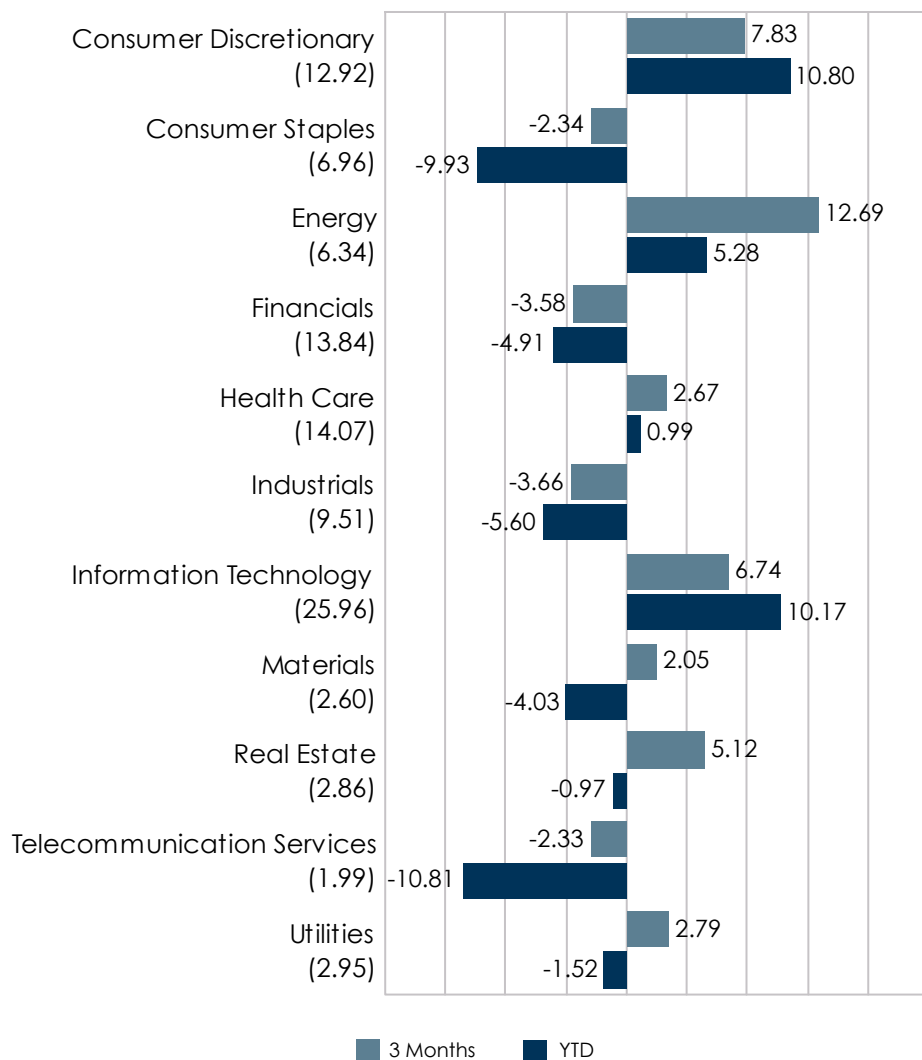
5 Years (%)	13.42
5 Years (%)	13.29
5 Years (%)	10.34
5 Years (%)	16.36
5 Years (%)	12.69
5 Years (%)	12.46
5 Years (%)	11.18
5 Years (%)	13.65
5 Years (%)	6.93
5 Years (%)	6.48

10 Years (%)	10.17
10 Years (%)	10.23
10 Years (%)	8.49
10 Years (%)	11.83
10 Years (%)	10.78
10 Years (%)	10.60
10 Years (%)	9.88
10 Years (%)	11.24
10 Years (%)	3.33
10 Years (%)	3.01

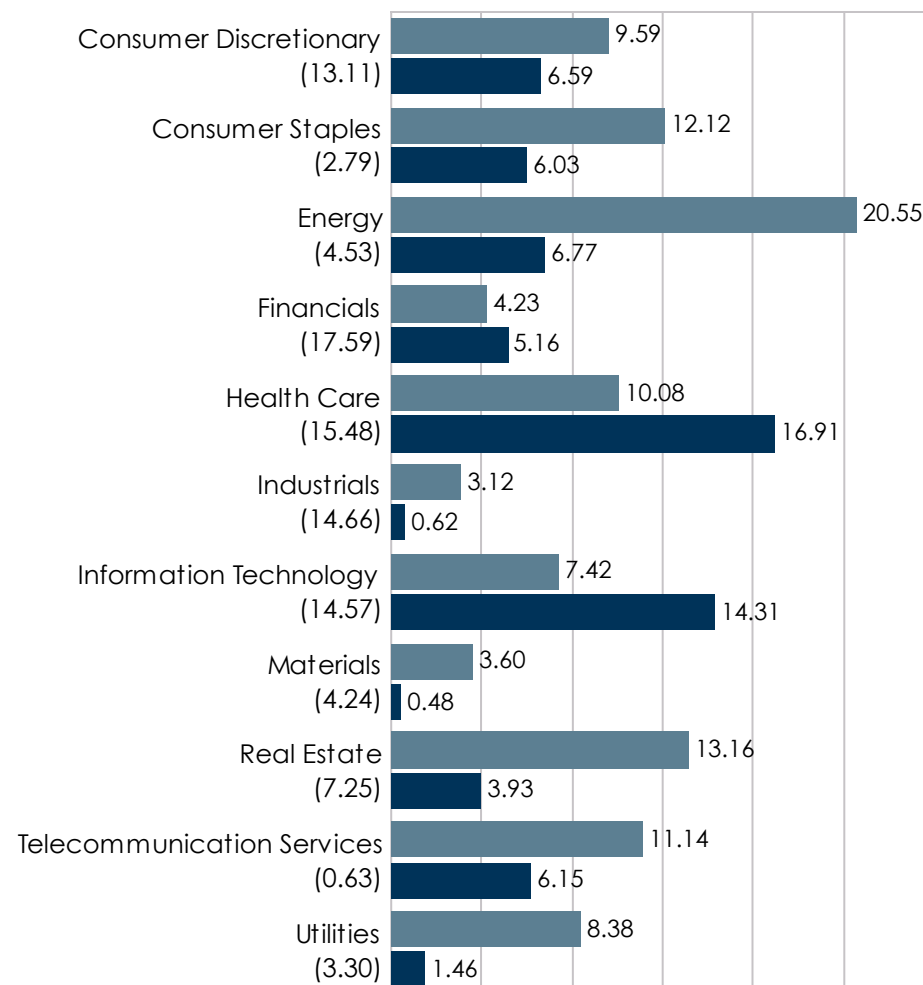
US Markets - Performance Breakdown

For the Periods Ending June 30, 2018

S&P 500 - Sector Returns (%)



Russell 2000 - Sector Returns (%)



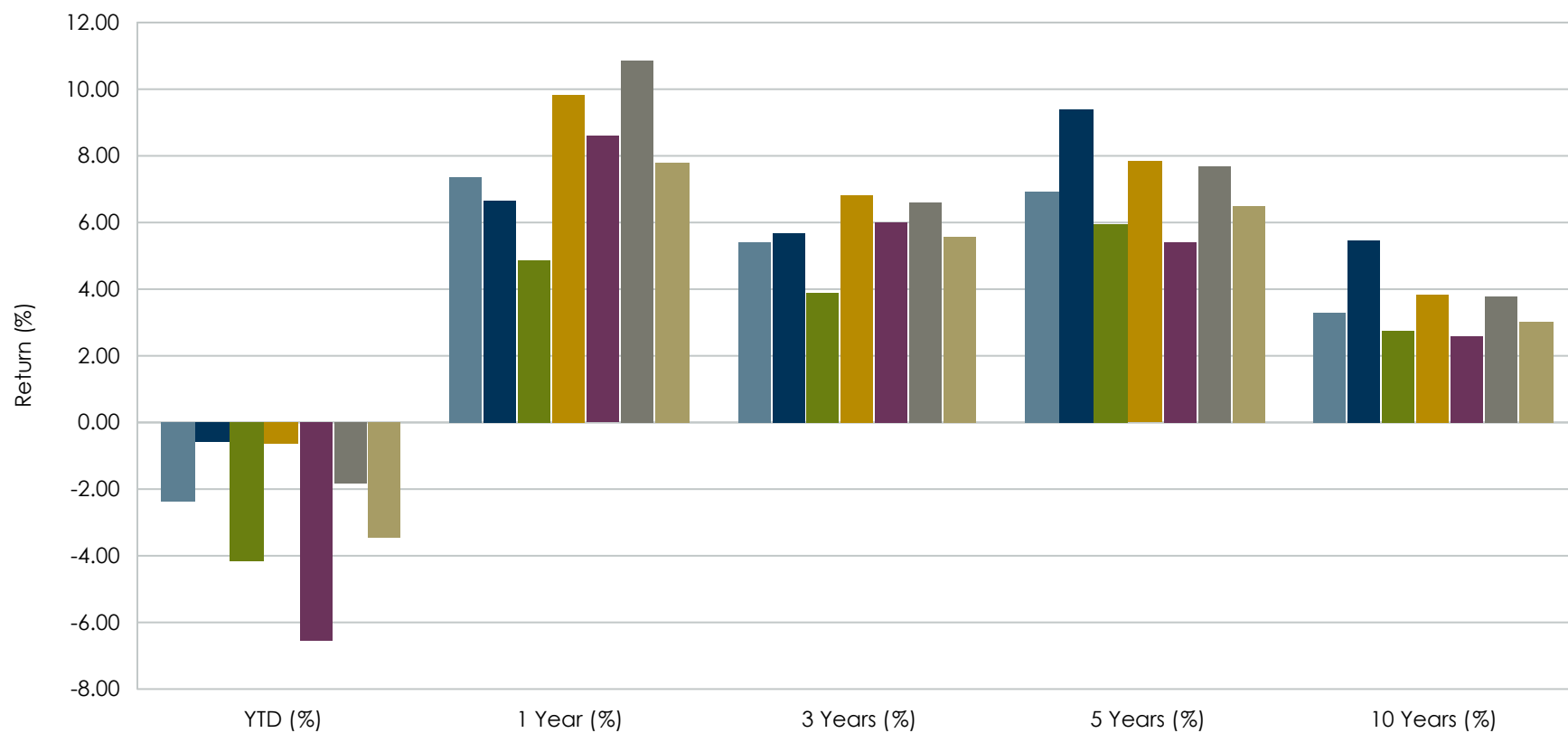
Numbers in parenthesis represent sector weightings of the index. Sector weights may not add to 100% due to rounding or securities that are not assigned to a Global Industry Classification Standard (GICS) sector.

Source: ACG Research, Bloomberg

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Non-US Equity Index Returns

For the Periods Ending June 30, 2018



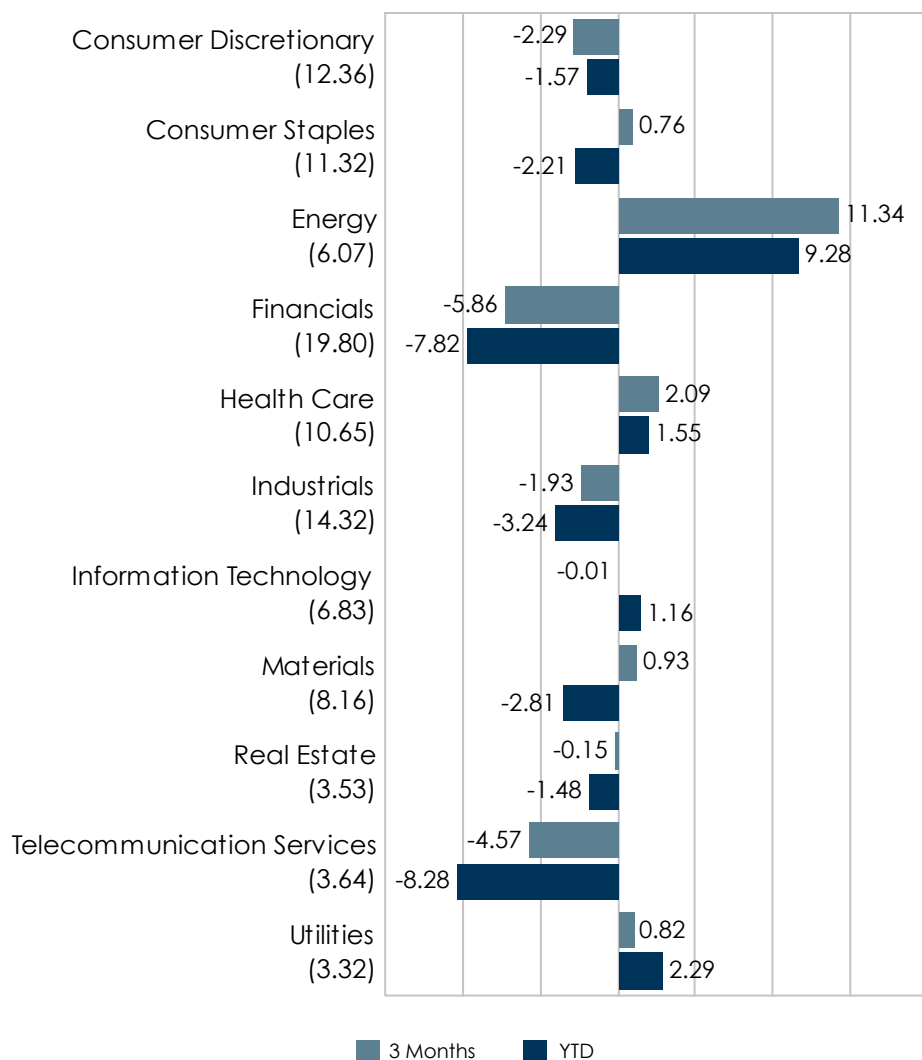
MSCI EAFE	-2.37
MSCI EAFE Local Currency	-0.57
MSCI EAFE Value	-4.16
MSCI EAFE Growth	-0.62
MSCI Emerging Markets	-6.51
MSCI Japan	-1.85
MSCI ACWI ex US	-3.44

7.37	5.41	6.93	3.33
6.64	5.69	9.43	5.47
4.87	3.90	5.95	2.76
9.84	6.82	7.83	3.83
8.59	5.98	5.39	2.60
10.88	6.60	7.70	3.78
7.79	5.56	6.48	3.01

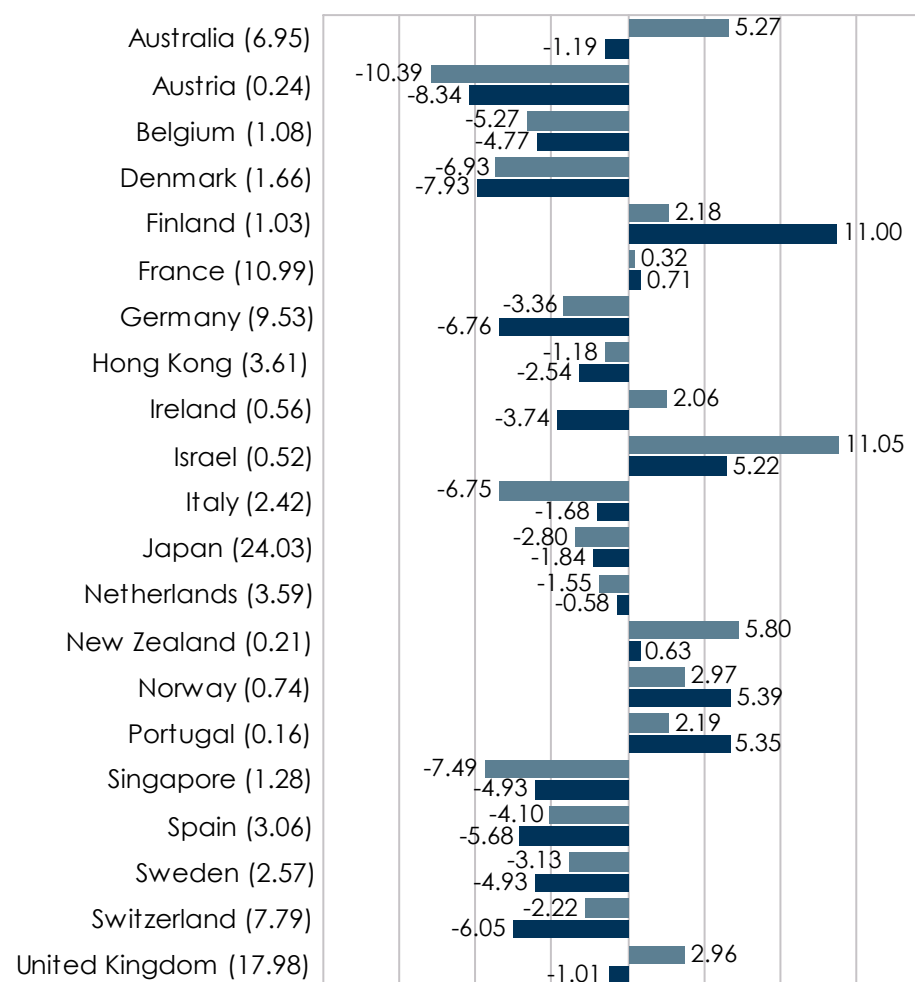
Non-US Equity - Performance Breakdown

For the Periods Ending June 30, 2018

MSCI EAFE - Sector Returns (%)



MSCI EAFE - Country Returns (%)



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

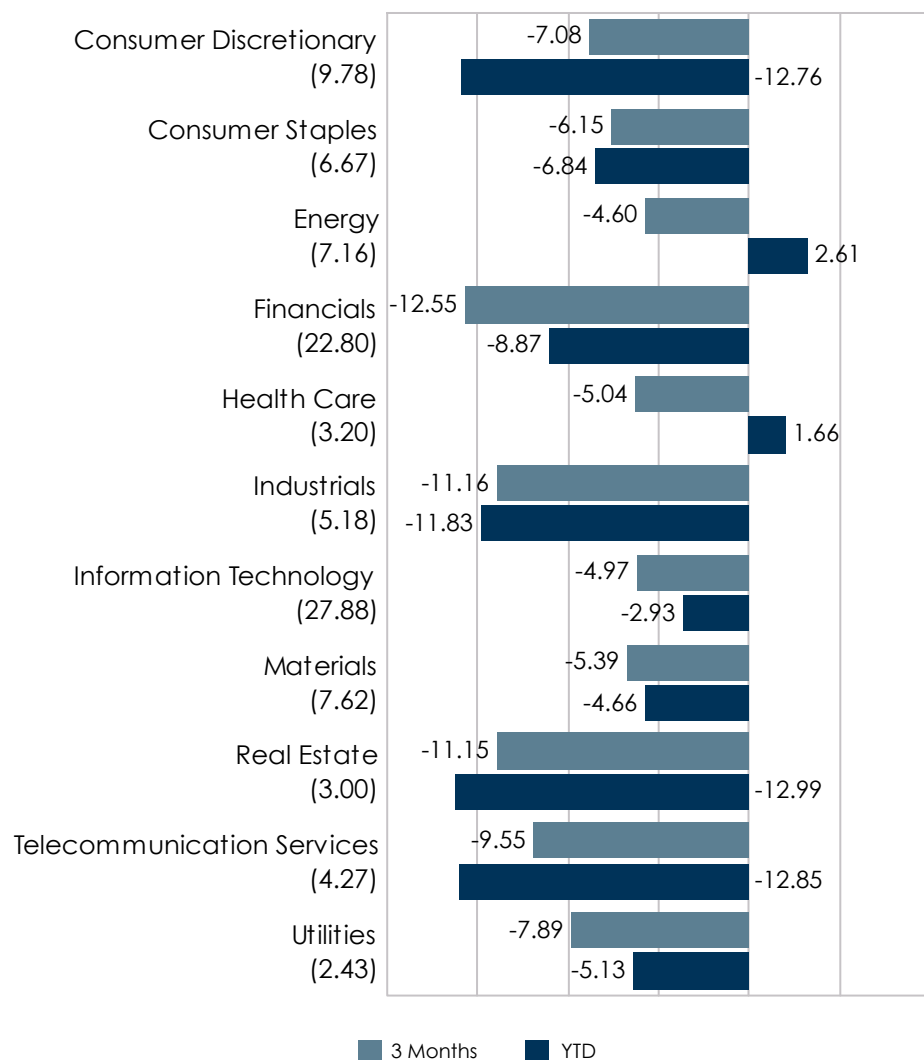
Source: ACG Research, Bloomberg

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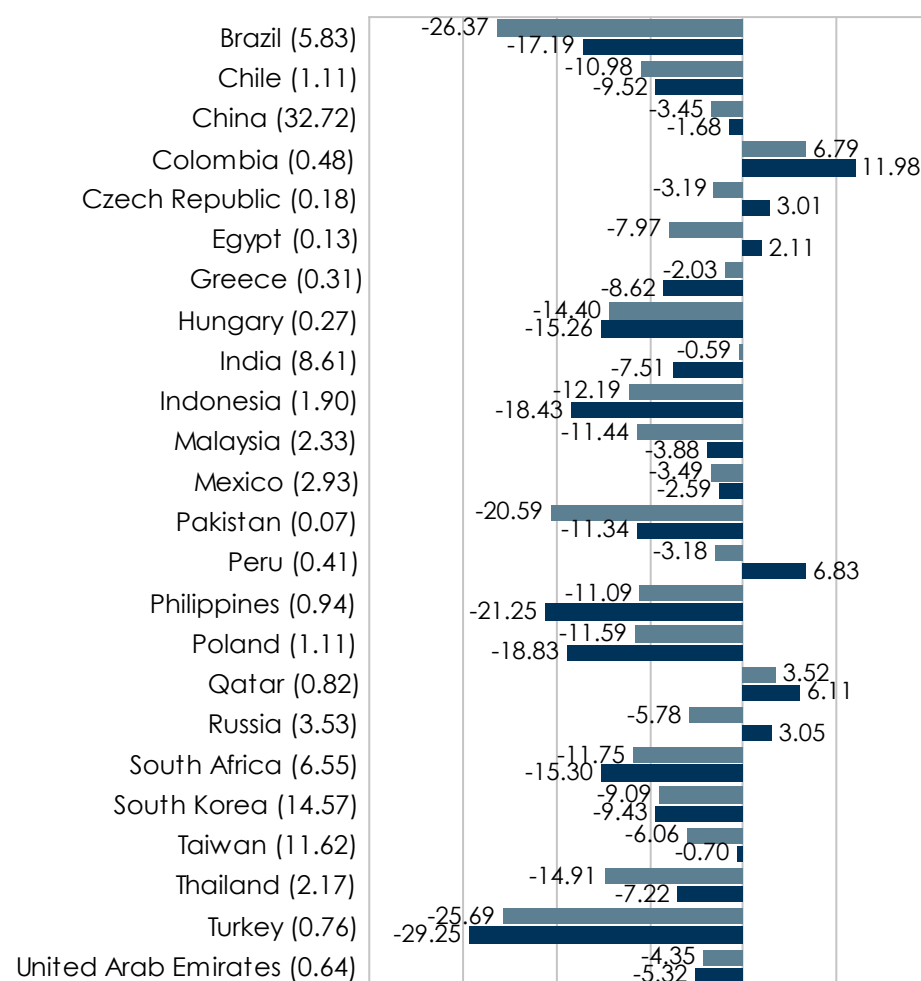
Emerging Markets - Performance Breakdown

For the Periods Ending June 30, 2018

MSCI Emerging Markets - Sector Returns (%)



MSCI Emerging Markets - Country Returns (%)



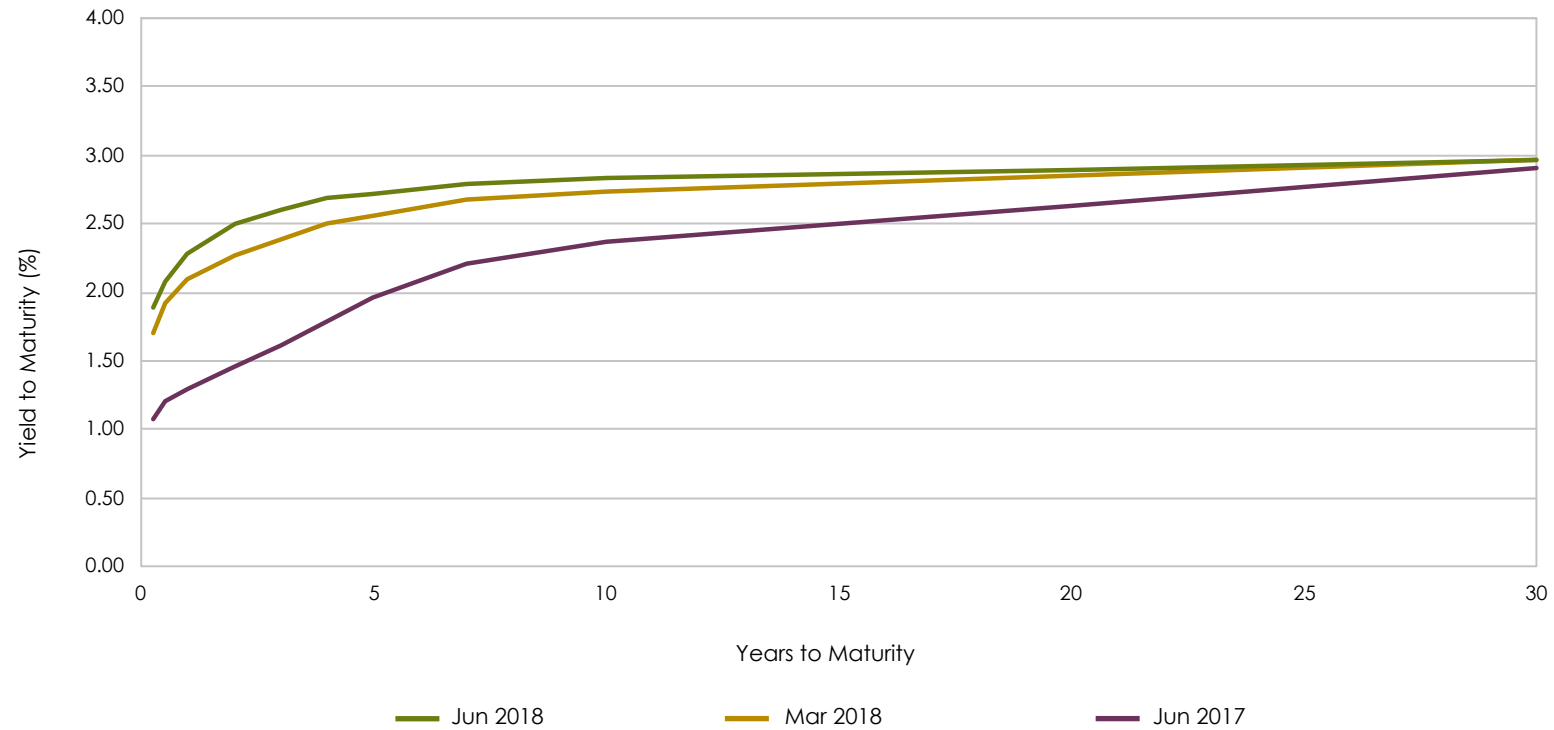
Numbers in parenthesis represent sector or country weights of the index. Sector or country weights may not add to 100% due to rounding.

Source: ACG Research, Bloomberg

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Interest Rate Term Structure

Government Issues - 3 Months to 30 Years Maturity

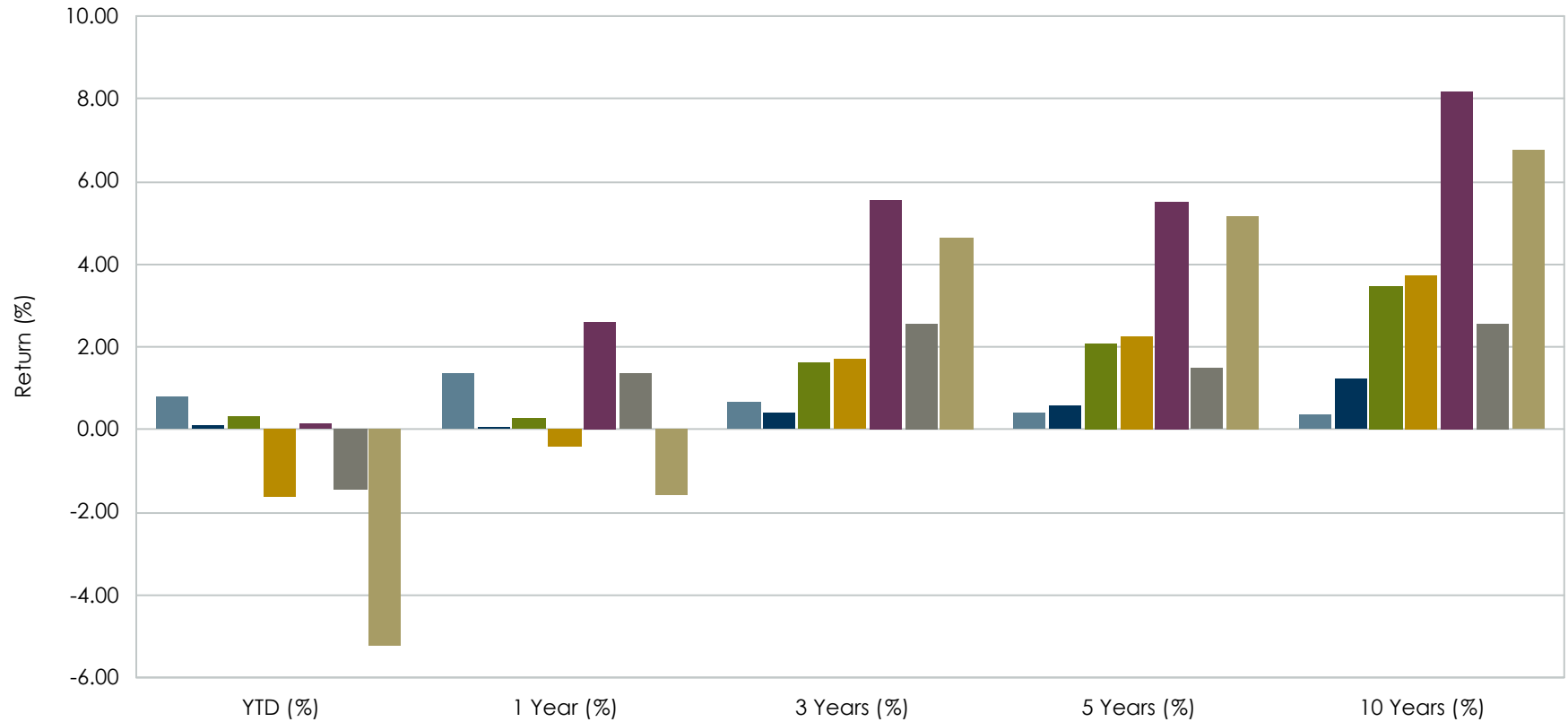


90 Days	1.92	1.71	1.01
180 Days	2.11	1.92	1.13
1 Year	2.31	2.09	1.23
2 Years	2.53	2.27	1.38
3 Years	2.62	2.38	1.55
4 Years	2.71	2.50	1.72
5 Years	2.74	2.56	1.89
7 Years	2.82	2.69	2.14
10 Years	2.86	2.74	2.30
20 Years	2.91	2.85	2.57
30 Years	2.99	2.97	2.84

Source: Bloomberg

Fixed Income Index Returns

For the Periods Ending June 30, 2018



US T-Bills 90 Day	0.81	1.36	0.68	0.42	0.36
ICE BofA ML 1-3 Yr Treasury	0.10	0.07	0.42	0.58	1.24
BloomBar 5 Yr Municipal	0.30	0.27	1.62	2.07	3.46
BloomBar US Aggregate	-1.62	-0.40	1.72	2.27	3.72
BloomBar US Corp High Yield	0.16	2.62	5.53	5.51	8.19
BloomBar Global Aggregate	-1.46	1.36	2.58	1.50	2.58
JPM EMBI Global Diversified	-5.23	-1.60	4.63	5.15	6.75

US Fixed Income Market Environment

For the Periods Ending June 30, 2018

Nominal Returns By Sector (%)

	<u>3 Months</u>	<u>YTD</u>	<u>1 Year</u>	<u>3 Years</u>
US Aggregate	-0.16	-1.62	-0.40	1.73
US Treasury	0.10	-1.08	-0.65	1.01
US Agg: Gov't-Related	-0.28	-1.30	0.12	1.69
US Corporate IG	-0.97	-3.27	-0.83	3.07
MBS	0.25	-0.95	0.16	1.46
CMBS	-0.07	-1.38	-0.26	1.83
ABS	0.42	0.04	0.45	1.26
US Corp High Yield	1.02	0.16	2.61	5.53

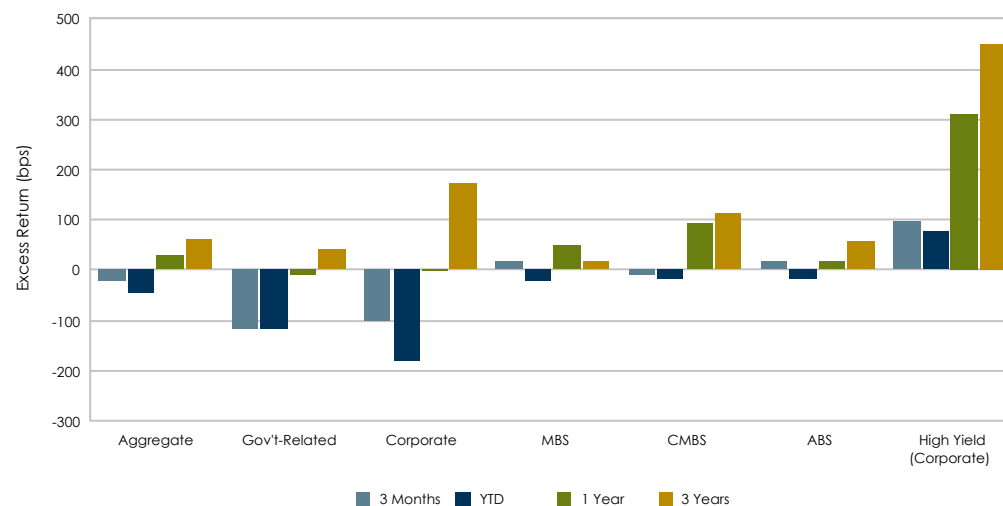
Nominal Returns by Quality (%)

	<u>3 Months</u>	<u>YTD</u>	<u>1 Year</u>	<u>3 Years</u>
AAA	0.14	-1.03	-0.32	1.23
AA	-0.21	-1.56	0.00	2.26
A	-0.86	-3.33	-1.00	2.83
BAA	-1.22	-3.35	-0.56	3.25
BA	-0.17	-1.77	0.59	4.77
B	1.41	0.86	3.00	4.80
CAA	2.87	3.17	6.83	8.69

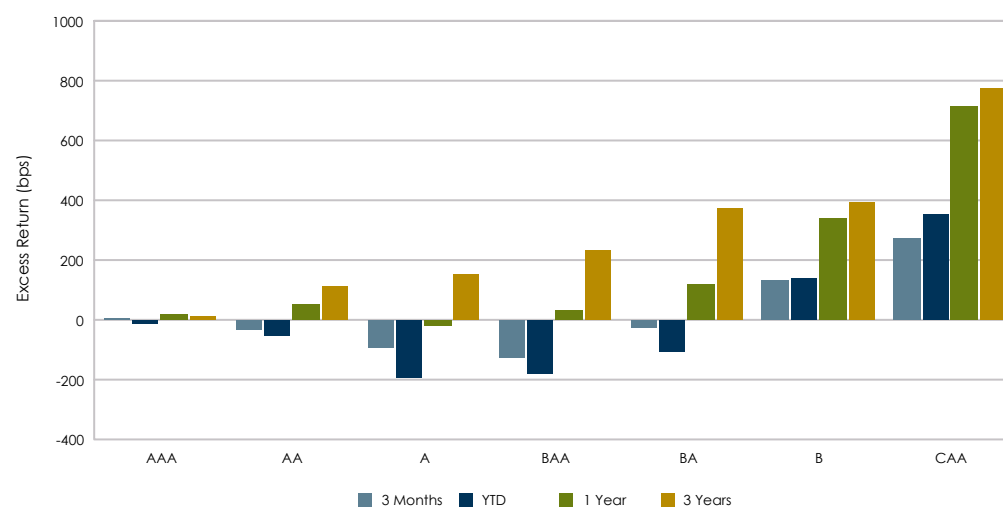
Nominal Returns by Maturity (%)

	<u>3 Months</u>	<u>YTD</u>	<u>1 Year</u>	<u>3 Years</u>
1-3 Yr.	0.29	0.09	0.23	0.74
3-5 Yr.	0.05	-0.81	-0.60	1.08
5-7 Yr.	0.02	-1.20	-0.46	1.35
7-10 Yr.	-0.01	-1.81	-0.54	1.76
10+ Yr.	-1.44	-4.95	-0.77	4.27

Excess Returns by Sector



Excess Returns by Quality



Source: Bloomberg

Excess returns are relative to the duration-neutral Treasury.

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Monthly Index Returns

For the Periods Ending June 30, 2018

Index Name	3 Months (%)	YTD (%)	1 Year (%)	3 Years (%)	5 Years (%)	7 Years (%)	10 Years (%)
Equity							
S&P 500	3.43	2.65	14.37	11.93	13.42	13.23	10.17
Russell 1000	3.57	2.85	14.54	11.64	13.37	13.12	10.20
Russell 1000 Growth	5.76	7.25	22.51	14.98	16.36	14.88	11.83
Russell 1000 Value	1.18	-1.69	6.77	8.26	10.34	11.27	8.49
Russell 2500	5.71	5.46	16.24	10.30	12.29	11.85	10.74
Russell 2000	7.75	7.66	17.57	10.96	12.46	11.83	10.60
Russell 2000 Growth	7.23	9.70	21.86	10.60	13.65	12.50	11.24
Russell 2000 Value	8.30	5.44	13.10	11.22	11.18	11.10	9.88
Wilshire 5000 Cap Wtd	3.83	3.04	14.66	11.85	13.36	13.03	10.23
MSCI ACWI	0.72	-0.13	11.31	8.78	10.00	8.54	6.37
MSCI ACWI ex US	-2.39	-3.44	7.79	5.56	6.48	4.28	3.01
MSCI EAFE	-0.97	-2.37	7.37	5.41	6.93	5.37	3.33
MSCI EAFE Local Currency	3.75	-0.57	6.64	5.69	9.43	8.84	5.47
MSCI EAFE Growth	0.35	-0.62	9.84	6.82	7.83	6.20	3.83
MSCI EAFE Value	-2.33	-4.16	4.87	3.90	5.95	4.48	2.76
MSCI Emerging Markets	-7.86	-6.51	8.59	5.98	5.39	1.78	2.60
Fixed Income							
ICE BofA ML 1-3 Yr Treasury	0.23	0.10	0.07	0.42	0.58	0.58	1.24
BloomBar 5 Yr Municipal	0.87	0.30	0.27	1.62	2.07	2.26	3.46
BloomBar US Aggregate	-0.16	-1.62	-0.40	1.72	2.27	2.57	3.72
BloomBar Gov't Bond	0.10	-1.05	-0.63	1.02	1.48	1.99	2.91
BloomBar US Credit	-0.88	-2.99	-0.65	2.86	3.37	3.86	5.15
BloomBar 10 Yr Municipal	0.90	-0.72	0.86	2.84	3.56	3.99	4.74
BloomBar US Corp High Yield	1.03	0.16	2.62	5.53	5.51	6.32	8.19
Citigroup World Govt Bond	-3.35	-0.94	1.90	2.81	1.11	0.51	2.07
BloomBar Global Aggregate	-2.78	-1.46	1.36	2.58	1.50	1.14	2.58
BloomBar Multiverse	-2.83	-1.58	1.34	2.78	1.67	1.34	2.78
JPM EMBI Global Diversified	-3.54	-5.23	-1.60	4.63	5.15	5.21	6.75
Real Assets							
NCREIF Property	1.81	3.54	7.20	8.26	9.77	10.23	6.22
NFI ODCE Net	1.81	3.82	7.47	8.37	10.03	10.36	4.33
FTSE NAREIT US Real Estate	10.04	1.02	3.50	8.06	8.31	9.12	7.94
Bloomberg Commodity	0.40	0.00	7.35	-4.54	-6.40	-7.81	-9.04
Cash and Equivalents							
US T-Bills 90 Day	0.46	0.81	1.36	0.68	0.42	0.32	0.36

Monthly Index Returns

For the Periods Ending July 31, 2018

Index Name	1 Month (%)	YTD (%)	1 Year (%)	3 Years (%)	5 Years (%)	7 Years (%)	10 Years (%)
Equity							
S&P 500	3.72	6.47	16.24	12.52	13.12	14.16	10.67
Russell 1000	3.45	6.40	16.19	12.20	12.96	14.03	10.70
Russell 1000 Growth	2.94	10.40	22.84	14.81	15.83	15.52	12.37
Russell 1000 Value	3.96	2.20	9.54	9.51	10.04	12.43	8.95
Russell 2500	1.93	7.50	17.28	11.08	11.30	12.79	10.87
Russell 2000	1.74	9.54	18.73	12.04	11.33	12.70	10.39
Russell 2000 Growth	1.72	11.58	22.91	11.08	12.38	13.42	11.17
Russell 2000 Value	1.77	7.31	14.37	12.92	10.19	11.91	9.52
Wilshire 5000 Cap Wtd	3.47	6.61	16.44	12.48	12.94	13.94	10.70
MSCI ACWI	3.05	2.91	11.55	9.54	9.62	9.26	6.97
MSCI ACWI ex US	2.42	-1.10	6.45	6.50	6.07	4.84	3.64
MSCI EAFE	2.47	0.04	6.93	5.54	6.35	5.98	3.92
MSCI EAFE Local Currency	2.64	2.06	8.72	5.39	9.09	9.80	5.96
MSCI EAFE Growth	2.07	1.44	9.46	6.70	7.28	6.61	4.41
MSCI EAFE Value	2.88	-1.40	4.40	4.29	5.35	5.29	3.36
MSCI Emerging Markets	2.28	-4.37	4.74	9.35	5.63	2.17	3.22
Fixed Income							
ICE BofA ML 1-3 Yr Treasury	0.00	0.10	-0.14	0.41	0.55	0.54	1.20
BloomBar Municipal	0.24	-0.01	0.99	2.69	3.76	3.82	4.41
BloomBar US Aggregate	0.02	-1.59	-0.80	1.49	2.25	2.34	3.73
BloomBar Gov't Bond	-0.41	-1.46	-1.20	0.61	1.41	1.69	2.83
BloomBar US Credit	0.72	-2.29	-0.66	2.89	3.37	3.61	5.29
BloomBar 10 Yr Municipal	0.38	-0.35	0.31	2.71	3.72	3.89	4.70
BloomBar US Corp High Yield	1.09	1.25	2.60	6.12	5.35	6.31	8.45
Citigroup World Govt Bond	-0.41	-1.35	-0.36	2.51	0.75	0.12	2.00
BloomBar Global Aggregate	-0.17	-1.62	-0.48	2.45	1.21	0.82	2.55
BloomBar Multiverse	-0.06	-1.63	-0.42	2.70	1.40	1.04	2.77
Real Assets							
Bloomberg Commodity	-2.13	-2.14	2.73	-1.61	-7.06	-8.47	-8.09
Cash and Equivalents							
US T-Bills 90 Day	0.16	0.97	1.43	0.73	0.45	0.35	0.35

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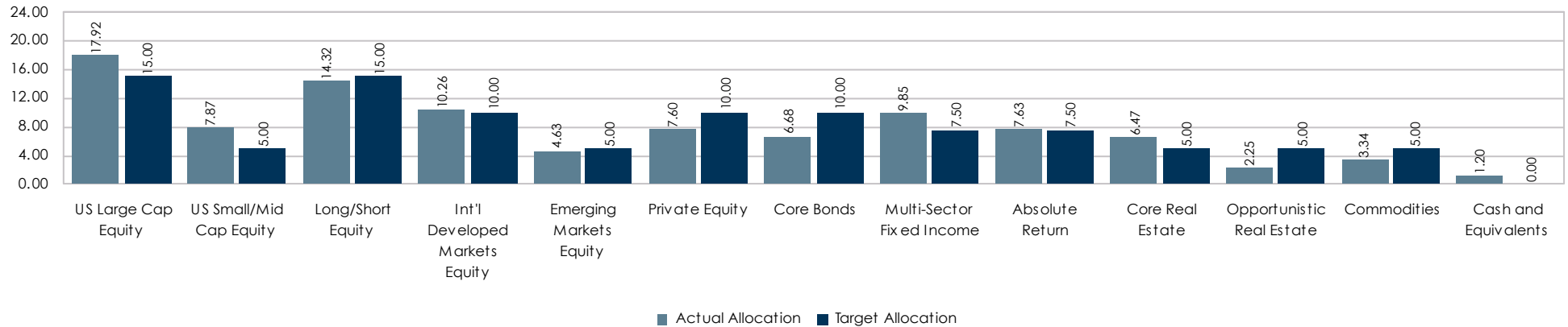
Total Portfolio Summary

Total Portfolio
Dollar Reconciliation (\$000s)
For the Periods Ending June 30, 2018

	3 Months	YTD	FYTD	5 Years
Beginning Market Value	2,510,357	2,508,222	2,389,563	1,968,204
Net Additions	-10,521	-22,853	-55,965	-265,086
Return on Investment	39,859	54,326	206,098	836,577
Ending Market Value	2,539,695	2,539,695	2,539,695	2,539,695

Total Portfolio

For the Period Ending June 30, 2018

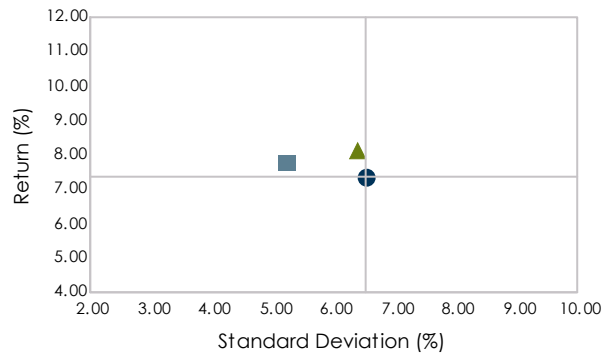


	Market Value (\$000s)	Actual Allocation (%)	Target Allocation (%)	Over/Under Target (%)	Range Min-Max (%)
Total Portfolio	2,539,695	100.00	100.00		
Equity	1,589,661	62.59	60.00	2.59	50.00 - 70.00
US Large Cap Equity	455,018	17.92	15.00	2.92	10.00 - 20.00
US Small/Mid Cap Equity	199,813	7.87	5.00	2.87	0.00 - 15.00
Long/Short Equity	363,676	14.32	15.00	-0.68	10.00 - 20.00
Int'l Developed Markets Equity	260,469	10.26	10.00	0.26	5.00 - 15.00
Emerging Markets Equity	117,673	4.63	5.00	-0.37	0.00 - 10.00
Private Equity	193,012	7.60	10.00	-2.40	5.00 - 15.00
Fixed Income	613,361	24.15	25.00	-0.85	15.00 - 35.00
Core Bonds	169,624	6.68	10.00	-3.32	7.50 - 20.00
Multi-Sector Fixed Income	250,051	9.85	7.50	2.35	5.00 - 10.00
Absolute Return	193,685	7.63	7.50	0.13	5.00 - 10.00
Real Assets	306,201	12.06	15.00	-2.94	0.00 - 20.00
Core Real Estate	164,239	6.47	5.00	1.47	0.00 - 10.00
Opportunistic Real Estate	57,106	2.25	5.00	-2.75	0.00 - 10.00
Commodities	84,855	3.34	5.00	-1.66	0.00 - 10.00
Cash and Equivalents	30,472	1.20	0.00	1.20	

Total Portfolio

For the Periods Ending June 30, 2018

5 Year Risk / Return



5 Year Relative Statistics

Total Fund Policy	
Beta	0.77
Up Capture (%)	86.70
Down Capture (%)	68.18

	Return (%)	Rank	Std Dev (%)	Sharpe Ratio
--	------------	------	-------------	--------------

3 Months

Total Portfolio	1.59	18	--	--
Total Fund Policy	0.57		--	--
IF TF Between 55 - 70% Equity	0.93		--	--

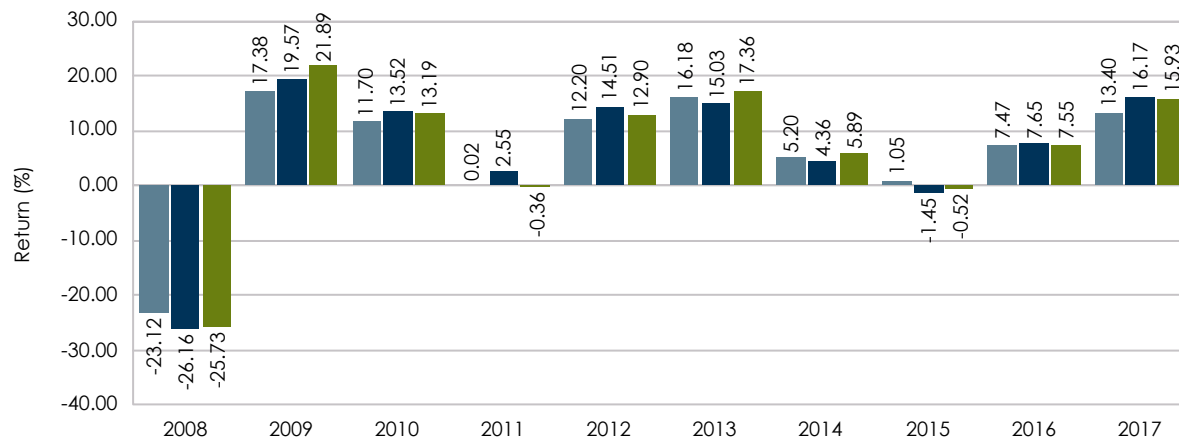
YTD

Total Portfolio	2.16	8	--	--
Total Fund Policy	-0.05		--	--
IF TF Between 55 - 70% Equity	0.67		--	--

FYTD

Total Portfolio	8.83	35	3.87	1.95
Total Fund Policy	7.83		5.32	1.23
IF TF Between 55 - 70% Equity	8.28		5.05	1.38

Calendar Year Returns



3 Years

Total Portfolio	6.61	65	5.22	1.15
Total Fund Policy	6.42		6.69	0.87
IF TF Between 55 - 70% Equity	6.96		6.55	0.96

5 Years

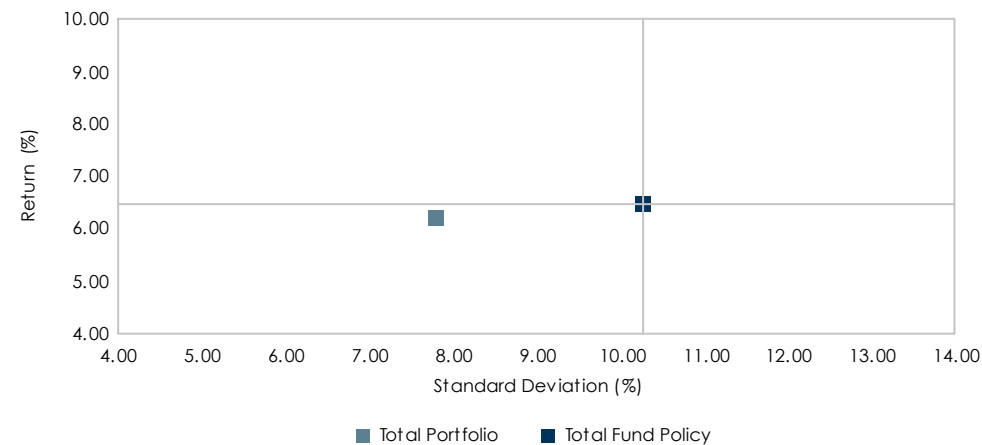
Total Portfolio	7.76	66	5.24	1.41
Total Fund Policy	7.35		6.53	1.07
IF TF Between 55 - 70% Equity	8.13		6.40	1.19

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

Total Portfolio

For the Periods Ending June 30, 2018

10 Year Risk / Return



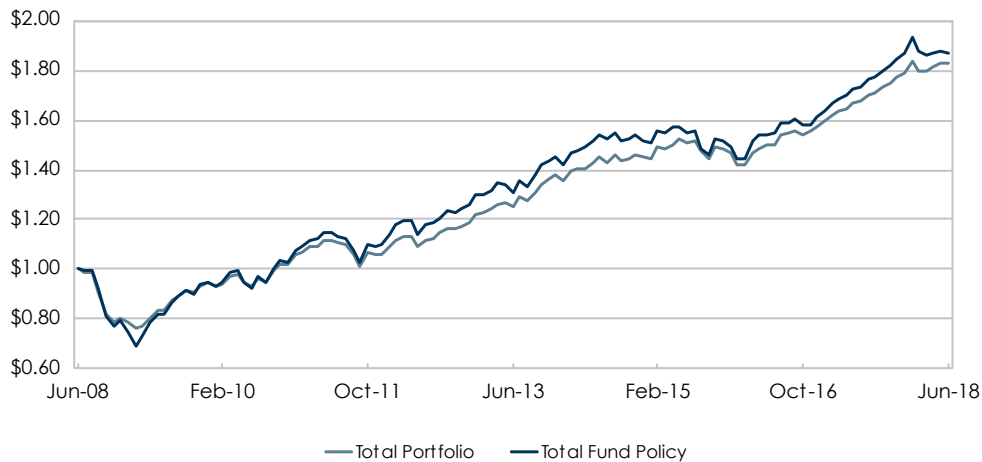
10 Year Portfolio Statistics

	Total Portfolio	Total Fund Policy
Return (%)	6.20	6.45
Standard Deviation (%)	7.78	10.28
Sharpe Ratio	0.76	0.60

Benchmark Relative Statistics

Beta	0.73
Up Capture (%)	76.95
Down Capture (%)	71.73

10 Year Growth of a Dollar

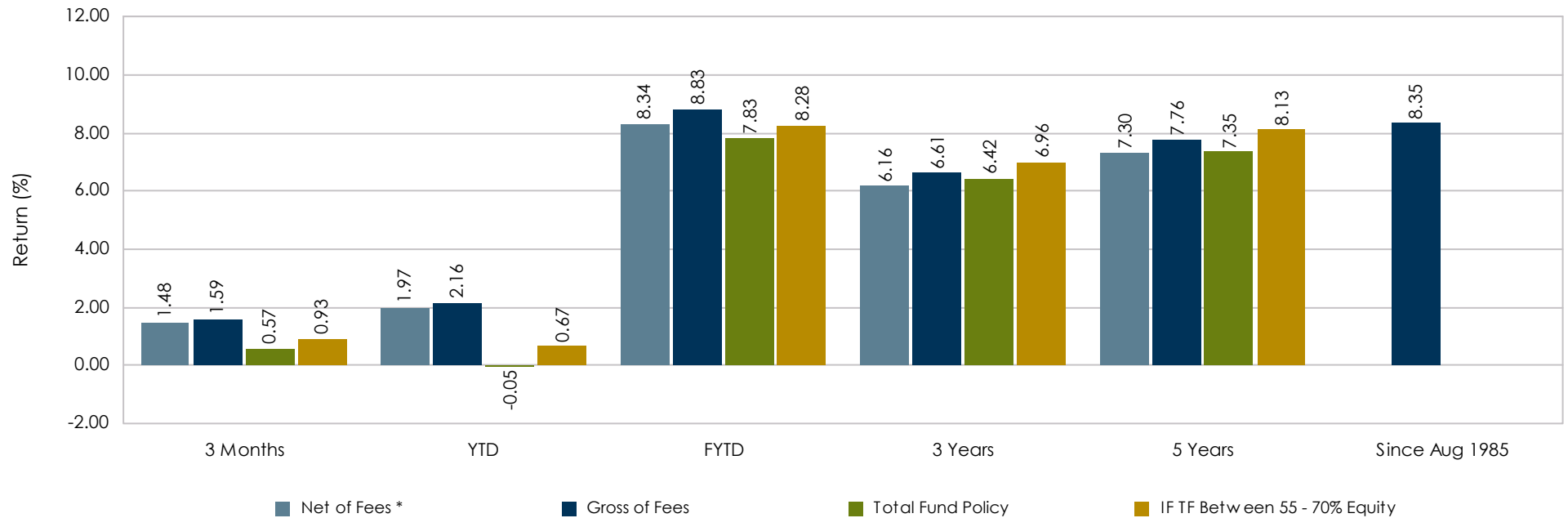


10 Year Return Analysis

	Total Portfolio	Total Fund Policy
Number of Months	120	120
Highest Monthly Return (%)	5.31	7.47
Lowest Monthly Return (%)	-9.92	-12.85
Number of Positive Months	81	76
Number of Negative Months	39	44
% of Positive Months	67.50	63.33

Total Portfolio

For the Periods Ending June 30, 2018



Ranking	18	8	35	65	66
5th Percentile	2.29	2.41	10.95	8.47	9.68
25th Percentile	1.39	1.29	9.23	7.57	8.69
50th Percentile	0.93	0.67	8.28	6.96	8.13
75th Percentile	0.48	0.21	7.53	6.32	7.48
95th Percentile	-0.23	-0.70	6.49	5.18	6.31
Observations	433	432	427	390	355

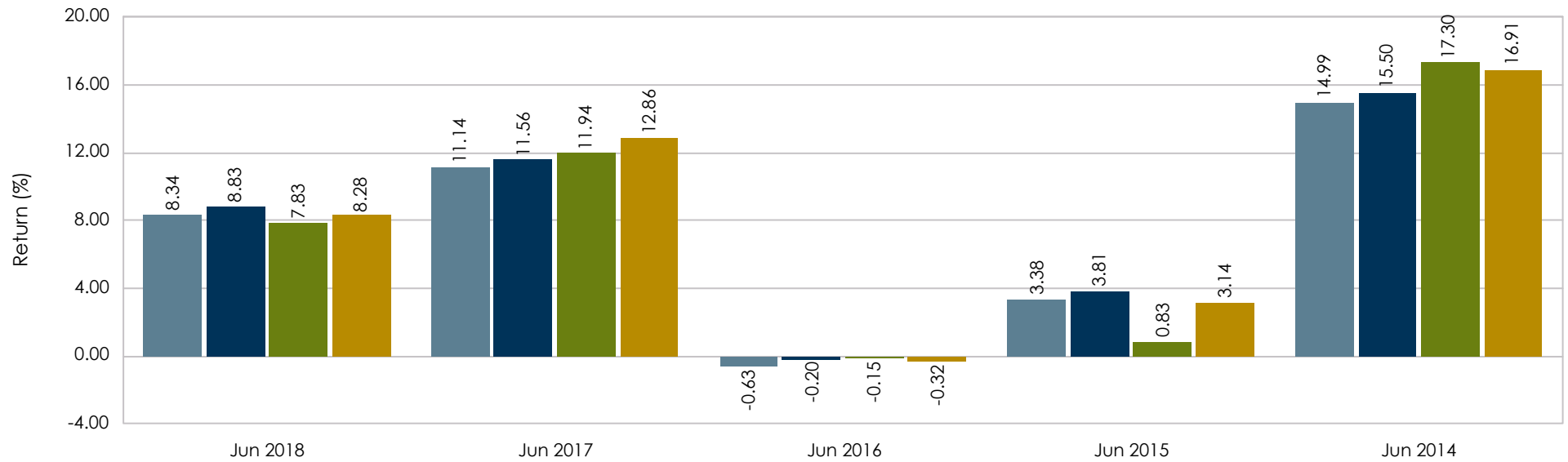
The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

* Performance is calculated using net of fee returns.

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Total Portfolio

For the One Year Periods Ending June



■ Net of Fees *
 ■ Gross Of Fees
 ■ Total Fund Policy
 ■ IF TF Between 55 - 70% Equity

Ranking	35	77	48	35	76
5th Percentile	10.95	15.93	3.42	5.88	19.67
25th Percentile	9.23	14.15	1.12	4.25	18.09
50th Percentile	8.28	12.86	-0.32	3.14	16.91
75th Percentile	7.53	11.67	-2.05	1.71	15.53
95th Percentile	6.49	10.00	-4.08	-1.08	13.38
Observations	427	651	509	488	459

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.

Rates of Return Summary & Universe Rankings

For the Periods Ending June 30, 2018

	Market Value (\$000s)	Actual Allocation (%)	3 Months (%)	Rank	YTD (%)	Rank	FYTD (%)	Rank	3 Years (%)	Rank	5 Years (%)	Rank	10 Years (%)
Total Portfolio * (06/05) ¹	2,539,695	100.00	1.48		1.97		8.34		6.16		7.30		5.84
Total Portfolio (08/85)			1.59	18	2.16	8	8.83	35	6.61	65	7.76	66	6.20
<i>Total Fund Policy ²</i>			0.57		-0.05		7.83		6.42		7.35		6.45
<i>IF TF Between 55 - 70% Equity</i>			0.93		0.67		8.28		6.96		8.13		6.78
Equity (01/98)	1,589,661	62.59	2.05		2.53		11.77		8.50		10.02		7.25
<i>MSCI ACWI</i>			0.72		-0.13		11.31		8.78		10.00		6.37
US Large Cap Equity	455,018	17.92											
Northern Trust Russell 1000 Index (08/98) ³	455,018	17.92	3.57	28	2.84	33	14.53	42	11.65	34	13.38	42	10.22
<i>Russell 1000</i>			3.57		2.85		14.54		11.64		13.37		10.20
<i>eA US Large Cap Core Equity</i>			2.79		1.99		13.83		10.91		13.09		10.16
US Small/Mid Cap Equity	199,813	7.87											
Boston Partners (01/98)	92,198	3.63	2.58	37 / 93	0.56	45 / 90	9.66	43 / 83	9.71	46 / 67	11.86	49 / 57	12.03
<i>Russell 2500 Value</i>			5.80		3.00		11.49		9.76		10.78		10.10
<i>eA US Mid Cap Value Equity</i>			2.20		0.21		8.79		9.40		11.79		10.63
<i>eA US Small Cap Value Equity</i>			5.70		3.83		12.76		10.53		12.13		11.57
Cortina (02/14)	107,615	4.24	16.21	5	22.84	5	27.81	37	16.72	15	--		--
<i>Russell 2000 Growth</i>			7.23		9.70		21.86		10.60		13.65		11.24
<i>eA US Small Cap Growth Equity</i>			8.81		12.45		24.90		12.29		14.63		12.48
Long/Short Equity	363,676	14.32											
Grosvenor Long/Short Equity (11/03)	363,676	14.32	2.32		3.08		8.84		4.57		6.82		4.40
<i>MSCI ACWI</i>			0.72		-0.13		11.31		8.78		10.00		6.37
<i>HFRI FOF: Strategic</i>			-0.04		0.37		5.73		2.22		4.04		1.57

FYTD: Fiscal year ending June.

* Net of fee return data.

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Rates of Return Summary & Universe Rankings

For the Periods Ending June 30, 2018

	Market Value (\$000s)	Actual Allocation (%)	3 Months (%)	Rank	YTD (%)	Rank	FYTD (%)	Rank	3 Years (%)	Rank	5 Years (%)	Rank	10 Years (%)
International Developed Market	260,469	10.26											
Mondrian International (05/04)	138,343	5.45	-1.98	51	-3.64	38	5.16	52	4.26	68	6.49	68	3.41
MSCI EAFE			-0.97		-2.37		7.37		5.41		6.93		3.33
eA EAFE All Cap Value Equity			-1.98		-4.04		5.30		5.15		6.83		4.78
Baring Focused International (03/12)	122,126	4.81	0.64	20	-0.82	32	10.01	33	8.28	22	7.98	53	--
MSCI EAFE			-0.97		-2.37		7.37		5.41		6.93		3.33
eA EAFE All Cap Equity			-1.47		-2.40		8.19		6.50		8.07		4.52
Emerging Markets Equity	117,673	4.63											
Wasatch Emerging Markets (09/12)	36,569	1.44	-6.06	14	-4.88	20	9.88	30	4.10	85	3.84	88	--
MSCI EM SC			-8.54		-8.35		5.96		2.85		4.63		4.74
eA Global Emerging Mkts Equity			-8.25		-6.67		7.88		6.56		5.90		3.76
AB EM Strategic Core Equity Fund (11/16)	81,104	3.19	-9.14	72	-6.74	51	2.83	87	--	--	--	--	--
MSCI Emerging Markets			-7.86		-6.51		8.59		5.98		5.39		2.60
eA Global Emerging Mkts Equity			-8.25		-6.67		7.88		6.56		5.90		3.76
Private Equity (07/03)	193,012	7.60	1.74		4.97		11.71		7.71		10.82		8.78
Fixed Income (01/98)	613,361	24.15	0.28		0.37		2.74		2.51		3.27		4.28
BloomBar Universal			-0.27		-1.67		-0.28		2.12		2.63		4.07
Core Bonds	169,624	6.68											
Agincourt Core Fixed Income (10/99)	169,624	6.68	-0.17	69	-1.69	80	-0.08	51	2.16	45	2.71	50	4.29
BloomBar US Aggregate			-0.16		-1.62		-0.40		1.72		2.27		3.72
eA US Core Fixed Income			-0.11		-1.46		-0.06		2.11		2.70		4.39

Rates of Return Summary & Universe Rankings

For the Periods Ending June 30, 2018

	Market Value (\$000s)	Actual Allocation (%)	3 Months (%)	Rank	YTD (%)	Rank	FYTD (%)	Rank	3 Years (%)	Rank	5 Years (%)	Rank	10 Years (%)
Multi Sector Fixed Income	250,051	9.85											
Multi Sector Fixed Income													
Oaktree Capital Management (02/98)	123,596	4.87	1.18		0.04		2.75		5.02		5.45		7.37
<i>BloomBar US Aggregate</i>			-0.16		-1.62		-0.40		1.72		2.27		3.72
Loomis Sayles (06/08)	96,749	3.81	-4.08	75	-1.51	49	2.28	36	3.80	34	1.90	68	3.43
<i>Citigroup World Govt Bond</i>			-3.35		-0.94		1.90		2.81		1.11		2.07
<i>eA All Global Fixed Income</i>			-2.21		-1.55		1.66		3.21		2.87		3.90
Private Credit (10/16)	29,706	1.17	2.56		4.81		12.64		--		--		--
Absolute Return	193,685	7.63											
PAAMCO (10/02)	130,351	5.13	1.93		2.13		3.67		1.02		3.21		2.40
<i>BloomBar US Aggregate</i>			-0.16		-1.62		-0.40		1.72		2.27		3.72
<i>HFRI FOF: Conservative</i>			1.06		1.63		4.16		1.92		3.01		1.22
Wellington Global Total Return (12/16)	63,335	2.49	2.49	2	4.26	2	6.04	3	--		--		--
<i>LIBOR 3 Month</i>			0.55		0.96		1.63		1.00		0.70		0.68
<i>eA Global Unconstrained Fixed Income</i>			-1.28		-1.08		1.60		2.83		2.76		3.58
Real Assets (01/98)	306,201	12.06	1.95		4.17		9.10		6.38		6.56		3.72
<i>Real Assets Blended Index ⁴</i>			1.38		2.60		7.51		2.19		2.71		0.80
Core Real Estate	164,239	6.47											
JP Morgan Strategic Property (12/07)	123,955	4.88	1.95		4.20		7.90		8.97		10.85		5.86
<i>NFI ODCE Net</i>			1.81		3.82		7.47		8.37		10.03		4.33
<i>NCREIF Property</i>			1.81		3.54		7.20		8.26		9.77		6.22
Blackstone Property Partners (01/15)	40,285	1.59	2.64		4.94		10.37		14.97		--		--
<i>NFI ODCE Net</i>			1.81		3.82		7.47		8.37		10.03		4.33
<i>NCREIF Property</i>			1.81		3.54		7.20		8.26		9.77		6.22

Rates of Return Summary & Universe Rankings

For the Periods Ending June 30, 2018

	Market Value (\$000s)	Actual Allocation (%)	3 Months (%)	Rank	YTD (%)	Rank	FYTD (%)	Rank	3 Years (%)	Rank	5 Years (%)	Rank	10 Years (%)
Opportunistic Real Estate	57,106	2.25											
Private Real Estate (08/11)	52,387	2.06	4.44		5.81		9.72		11.14		11.60		--
Private Real Estate Direct													
Columbus Square (01/98)	4,719	0.19	3.08		2.60		4.28		8.98		7.96		10.66
NCREIF Property			1.81		3.54		7.20		8.26		9.77		6.22
NFI ODCE Net			1.81		3.82		7.47		8.37		10.03		4.33
Commodities	84,855	3.34											
Mount Lucas Peak Partners (01/98)	31,700	1.25	-2.98		4.68		8.40		2.19		6.22		3.03
CS Hedge - Global Macro			1.27		1.85		5.65		1.71		2.76		3.87
Gresham Tap Fund (08/14)	53,155	2.09	1.93		1.87		12.38		-3.57		--		--
Bloomberg Commodity			0.40		0.00		7.35		-4.54		-6.40		-9.04
Cash and Equivalents	30,472	1.20											

Notes:

¹ Total Fund Policy Index history available in appendix.

² Total Fund Policy: Effective April 2016, the index consists of 60.0% MSCI ACWI, 25.0% BloomBar Universal, 10.0% NFI ODCE Net, 5.0% Bloomberg Commodity.

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 Real Assets Blended Index: Effective January 2016, the index consists of 67.0% NFI ODCE Net, 33.0% Bloomberg Commodity.

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Equity Manager Performance

Northern Trust Russell 1000 Index

For the Periods Ending June 30, 2018

Account Description

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

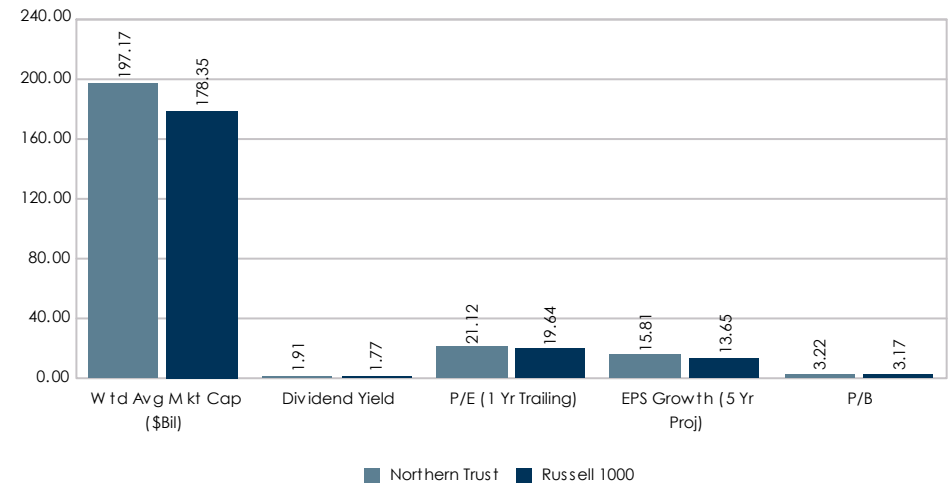
Performance Goals

- 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.

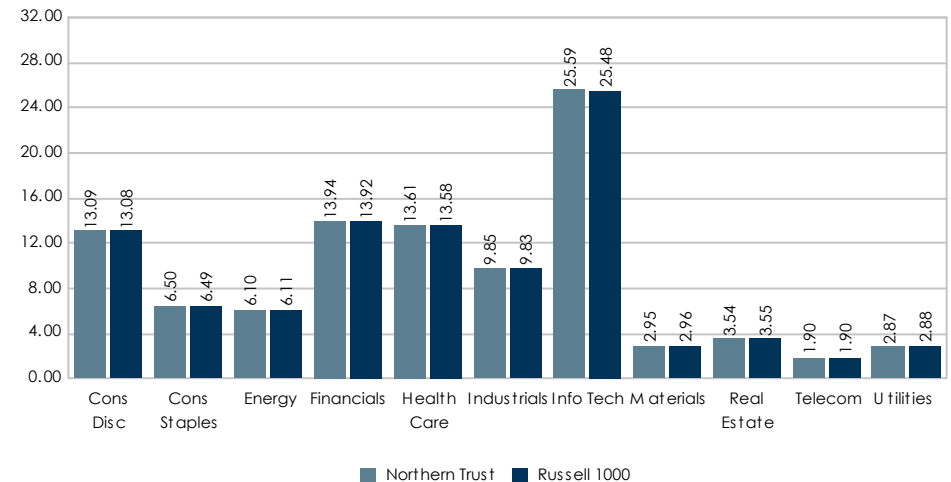
Dollar Growth Summary (\$000s)

	YTD	FYTD
Beginning Market Value	442,458	412,054
Net Additions	-11	-15,051
Return on Investment	12,571	58,015
Ending Market Value	455,018	455,018

Characteristics



Sector Allocation



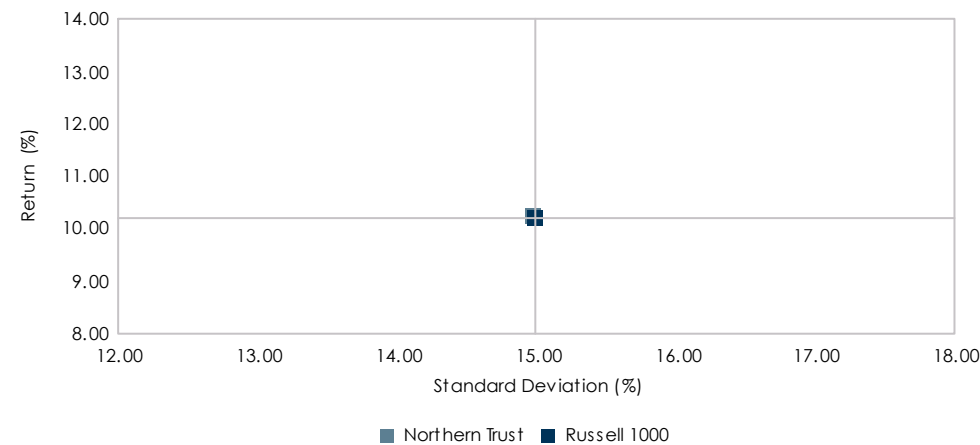
Characteristic and allocation charts represents data of the EB Daily Valued Large Cap Stock Index Fund (Non-Mutual Commingled).

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

Northern Trust Russell 1000 Index

For the Periods Ending June 30, 2018

10 Year Risk / Return



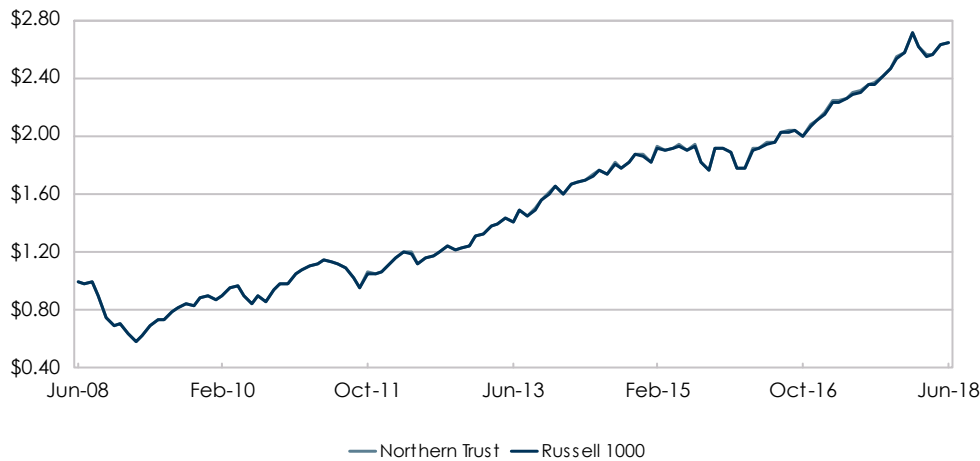
10 Year Portfolio Statistics

	Northern Trust	Russell 1000
Return (%)	10.22	10.20
Standard Deviation (%)	14.98	14.98
Sharpe Ratio	0.66	0.66

Benchmark Relative Statistics

Beta	1.00
R Squared (%)	100.00
Alpha (%)	0.02
Tracking Error (%)	0.05
Batting Average (%)	65.00
Up Capture (%)	100.00
Down Capture (%)	99.92

10 Year Growth of a Dollar

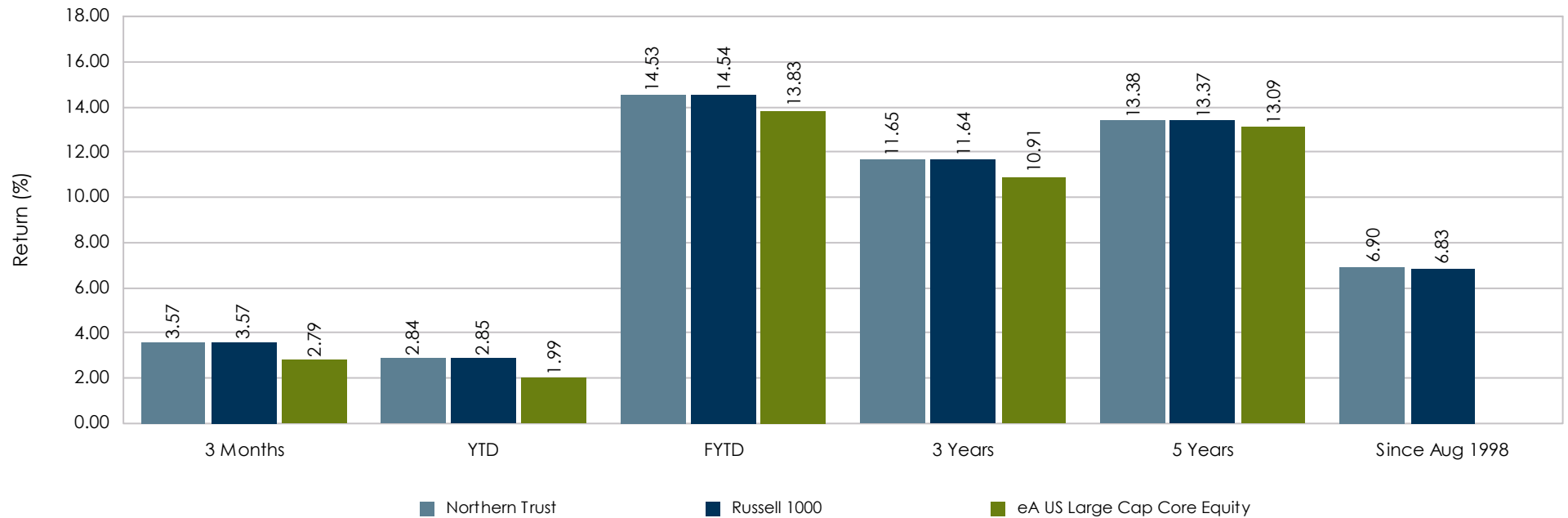


10 Year Return Analysis

	Northern Trust	Russell 1000
Number of Months	120	120
Highest Monthly Return (%)	11.20	11.21
Lowest Monthly Return (%)	-17.49	-17.46
Number of Positive Months	83	83
Number of Negative Months	37	37
% of Positive Months	69.17	69.17

Northern Trust Russell 1000 Index

For the Periods Ending June 30, 2018

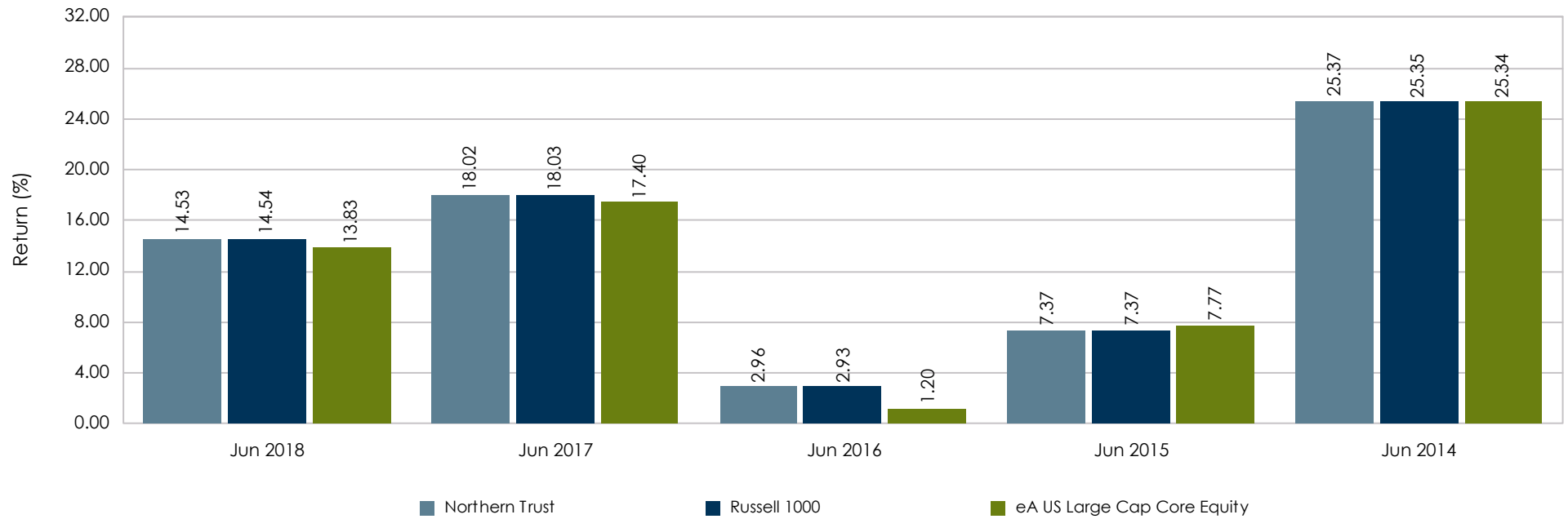


Ranking	28	33	42	34	42
5th Percentile	5.03	6.03	20.31	13.98	15.57
25th Percentile	3.65	3.36	16.18	12.01	13.87
50th Percentile	2.79	1.99	13.83	10.91	13.09
75th Percentile	1.90	0.83	11.56	9.74	12.07
95th Percentile	0.69	-1.52	7.19	7.35	9.81
Observations	346	346	345	330	311

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

Northern Trust Russell 1000 Index

For the One Year Periods Ending June



Ranking	42	47	34	57	50
5th Percentile	20.31	24.10	11.91	12.92	32.39
25th Percentile	16.18	20.21	4.41	9.92	27.29
50th Percentile	13.83	17.40	1.20	7.77	25.34
75th Percentile	11.56	14.84	-1.95	5.54	22.85
95th Percentile	7.19	10.02	-5.41	1.63	18.02
Observations	345	390	389	399	413

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

Boston Partners

For the Periods Ending June 30, 2018

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

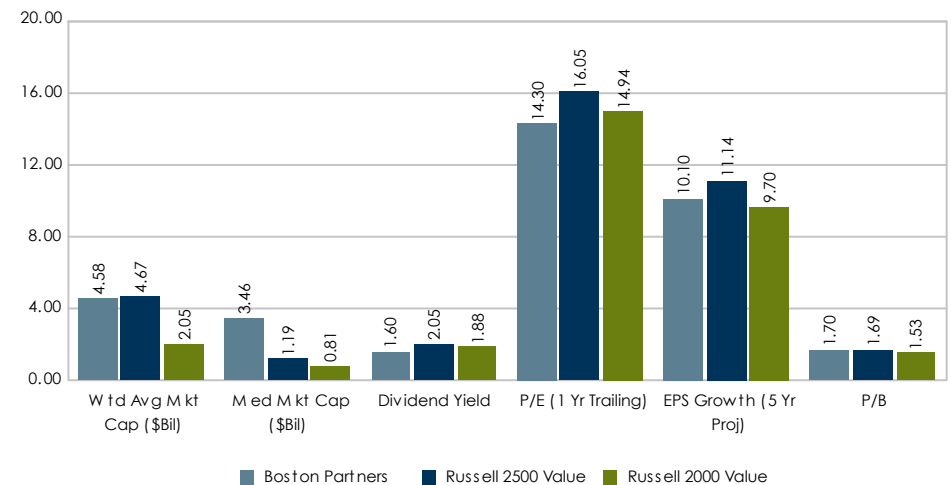
Performance Goals

- 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.

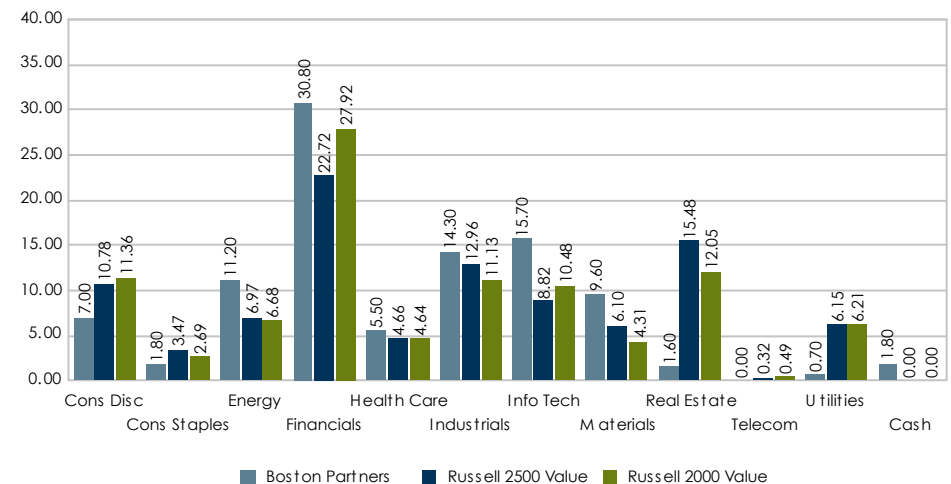
Dollar Growth Summary (\$000s)

	YTD	FYTD
Beginning Market Value	92,102	110,411
Net Additions	-416	-25,713
Return on Investment	512	7,500
Income	723	1,463
Gain/Loss	-211	6,037
Ending Market Value	92,198	92,198

Characteristics



Sector Allocation

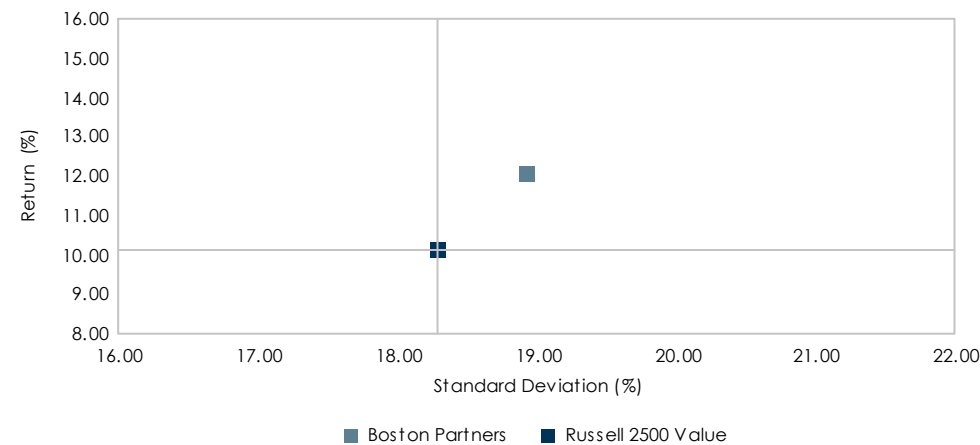


Sector weights may not add to 100% due to securities that are not assigned to a Global Industry Classification Standard (GICS) sector.

Boston Partners

For the Periods Ending June 30, 2018

10 Year Risk / Return



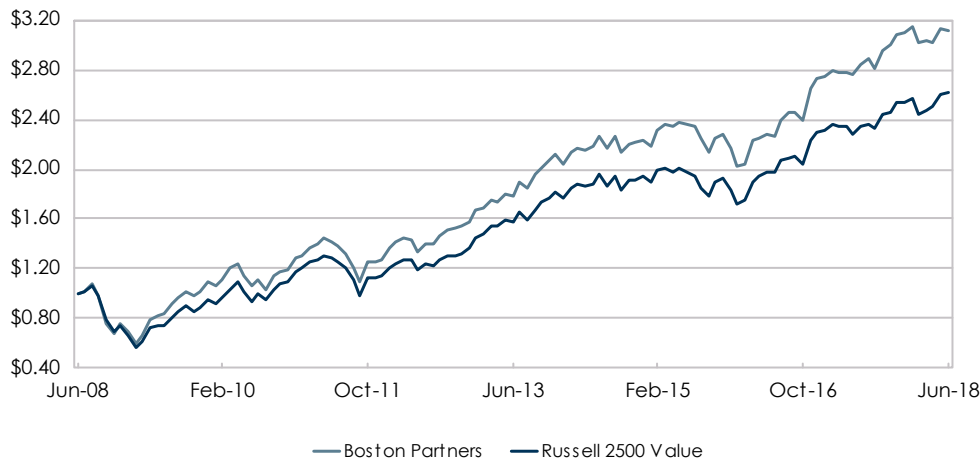
10 Year Portfolio Statistics

	Boston Partners	Russell 2500 Value
Return (%)	12.03	10.10
Standard Deviation (%)	18.93	18.28
Sharpe Ratio	0.62	0.54

Benchmark Relative Statistics

Beta	1.01
R Squared (%)	95.84
Alpha (%)	1.73
Tracking Error (%)	3.87
Batting Average (%)	53.33
Up Capture (%)	103.08
Down Capture (%)	96.02

10 Year Growth of a Dollar

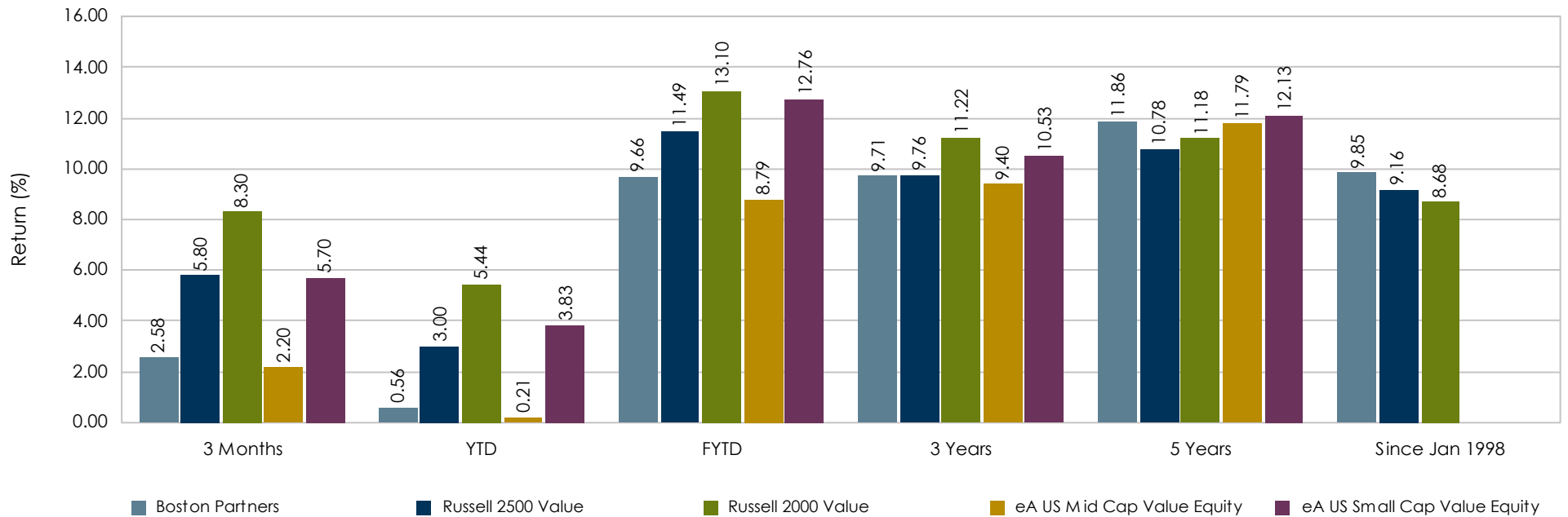


10 Year Return Analysis

	Boston Partners	Russell 2500 Value
Number of Months	120	120
Highest Monthly Return (%)	19.35	15.95
Lowest Monthly Return (%)	-22.79	-20.65
Number of Positive Months	79	79
Number of Negative Months	41	41
% of Positive Months	65.83	65.83

Boston Partners

For the Periods Ending June 30, 2018

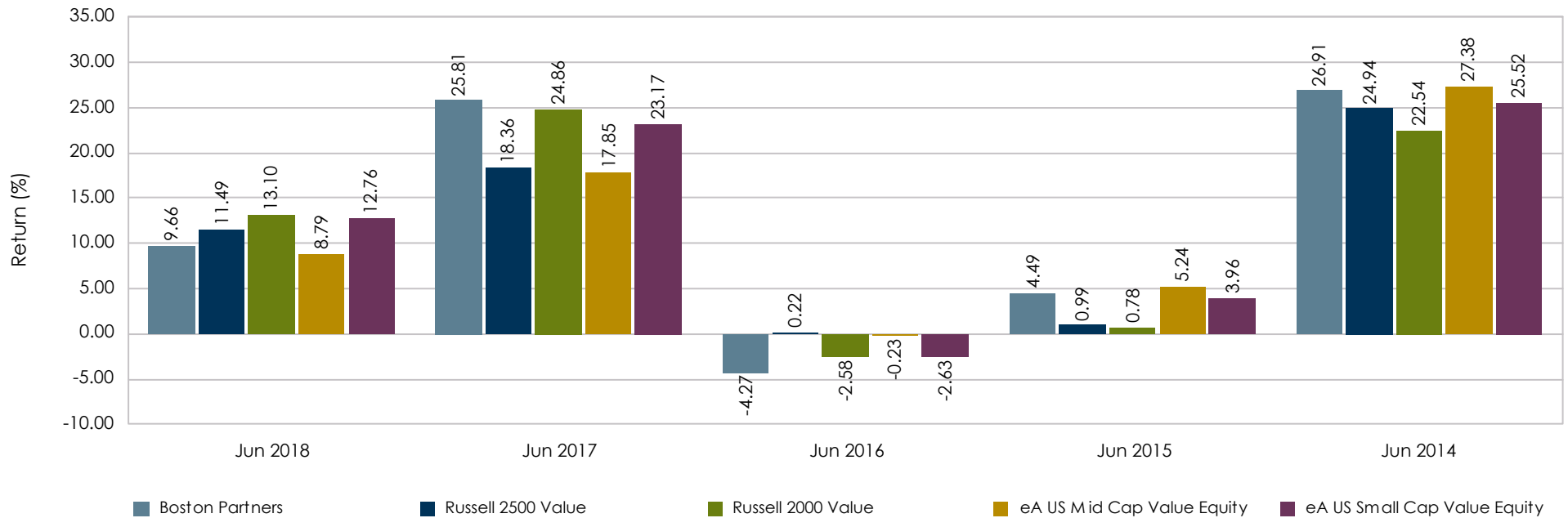


Ranking	37 / 93	45 / 90	43 / 83	46 / 67	49 / 57
5th Percentile	6.09 / 11.46	5.58 / 9.75	15.50 / 21.28	12.44 / 14.93	14.22 / 14.78
25th Percentile	3.26 / 7.49	1.77 / 5.81	12.59 / 16.12	10.54 / 12.33	12.63 / 13.13
50th Percentile	2.20 / 5.70	0.21 / 3.83	8.79 / 12.76	9.40 / 10.53	11.79 / 12.13
75th Percentile	0.98 / 4.27	-1.50 / 1.94	7.44 / 10.46	7.99 / 9.00	10.73 / 10.93
95th Percentile	-1.18 / 2.27	-3.42 / -0.52	4.99 / 6.43	4.49 / 4.41	8.25 / 7.89
Observations	107 / 233	107 / 233	107 / 233	106 / 224	104 / 214

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

Boston Partners

For the One Year Periods Ending June



Ranking	43 / 83	12 / 27	80 / 67	60 / 43	55 / 37
5th Percentile	15.50 / 21.28	29.95 / 31.34	8.51 / 4.44	10.69 / 10.32	34.19 / 33.59
25th Percentile	12.59 / 16.12	21.53 / 26.02	3.18 / -0.07	7.32 / 6.48	29.67 / 28.36
50th Percentile	8.79 / 12.76	17.85 / 23.17	-0.23 / -2.63	5.24 / 3.96	27.38 / 25.52
75th Percentile	7.44 / 10.46	15.81 / 20.25	-3.87 / -5.28	2.35 / 0.59	24.64 / 23.17
95th Percentile	4.99 / 6.43	11.45 / 14.24	-10.39 / -14.10	-3.10 / -8.24	18.92 / 18.97
Observations	107 / 233	114 / 249	112 / 243	113 / 253	118 / 255

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.

Cortina

For the Periods Ending June 30, 2018

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

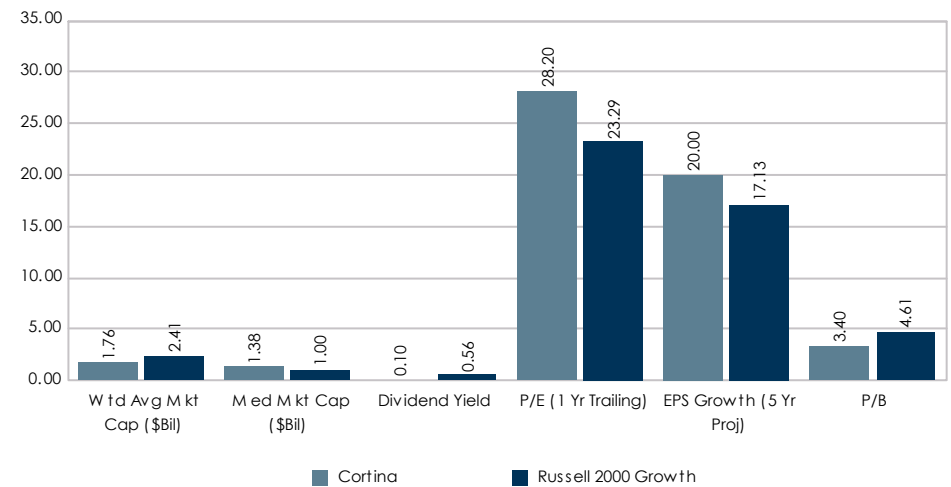
Performance Goals

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

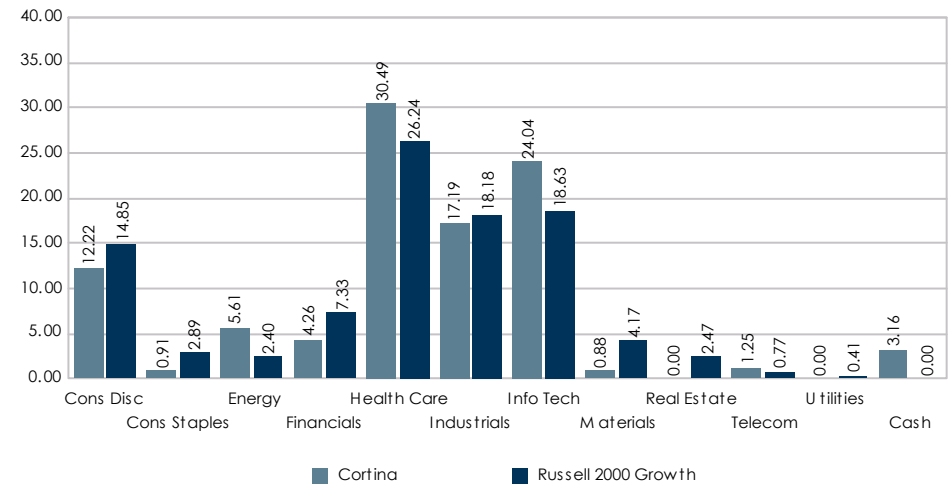
Dollar Growth Summary (\$000s)

	YTD	FYTD
Beginning Market Value	87,988	84,927
Net Additions	-399	-770
Return on Investment	20,027	23,458
Income	163	210
Gain/Loss	19,864	23,249
Ending Market Value	107,615	107,615

Characteristics



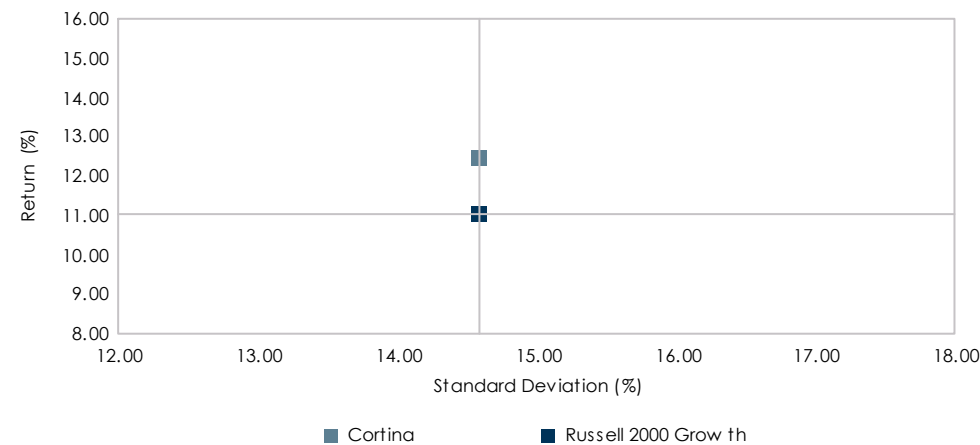
Sector Allocation



Cortina

For the Periods Ending June 30, 2018

4 Year Risk / Return



4 Year Portfolio Statistics

	Cortina	Russell 2000 Growth
Return (%)	12.46	11.03
Standard Deviation (%)	14.60	14.59
Sharpe Ratio	0.82	0.73

Benchmark Relative Statistics

Beta	0.91
R Squared (%)	82.70
Alpha (%)	2.35
Tracking Error (%)	6.21
Batting Average (%)	58.33
Up Capture (%)	96.94
Down Capture (%)	89.67

4 Year Growth of a Dollar

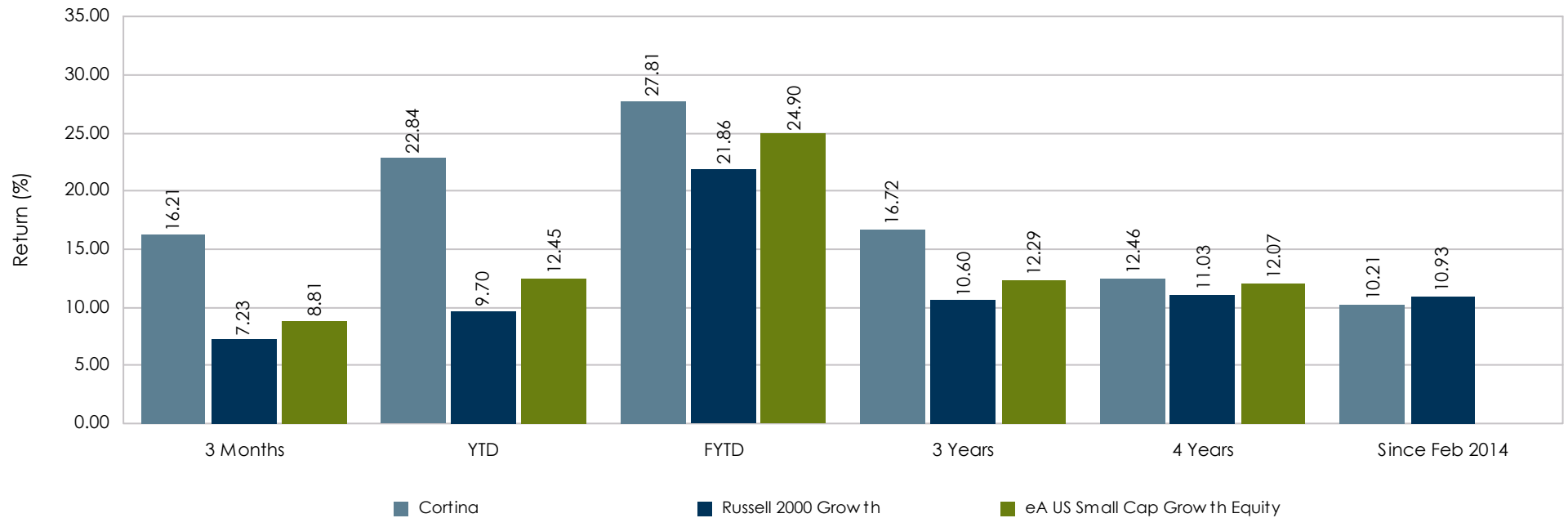


4 Year Return Analysis

	Cortina	Russell 2000 Growth
Number of Months	48	48
Highest Monthly Return (%)	11.26	8.95
Lowest Monthly Return (%)	-9.33	-10.83
Number of Positive Months	34	34
Number of Negative Months	14	14
% of Positive Months	70.83	70.83

Cortina

For the Periods Ending June 30, 2018

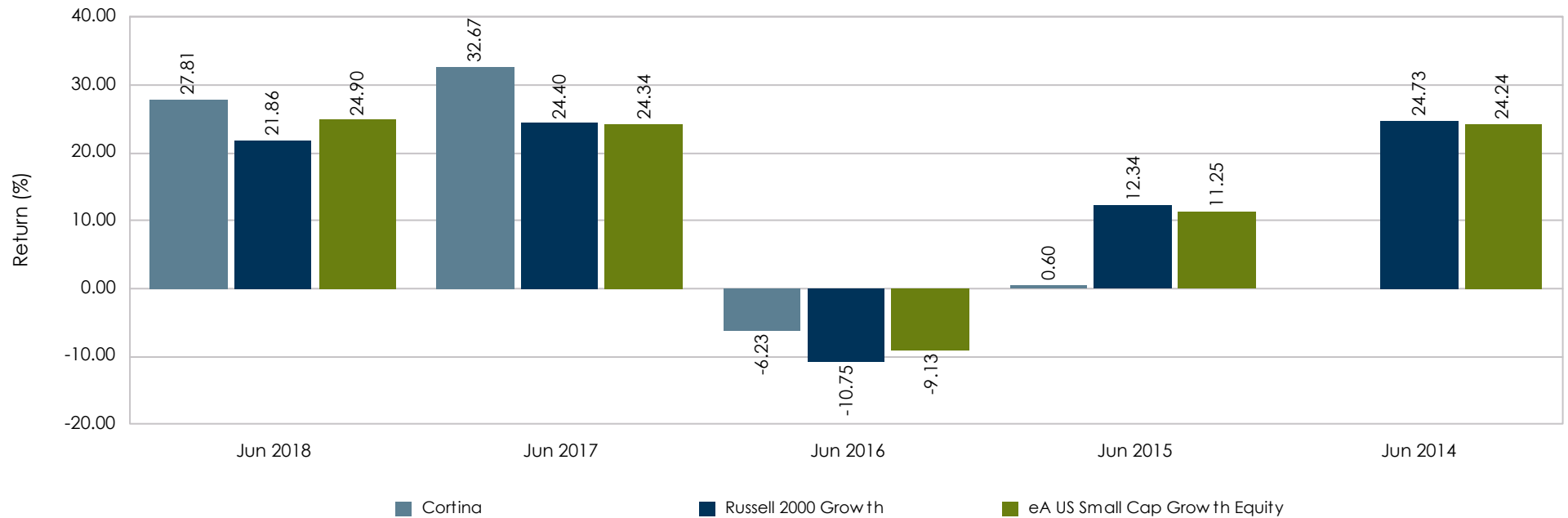


Ranking	5	5	37	15	45
5th Percentile	15.51	22.07	42.18	19.93	18.39
25th Percentile	11.36	16.08	29.41	14.68	14.07
50th Percentile	8.81	12.45	24.90	12.29	12.07
75th Percentile	7.19	9.09	20.25	10.16	10.33
95th Percentile	4.83	4.96	15.02	6.18	6.97
Observations	178	178	178	172	169

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.

Cortina

For the One Year Periods Ending June



Ranking	37	13	35	97	
5th Percentile	42.18	35.75	2.05	19.96	34.48
25th Percentile	29.41	28.46	-5.32	14.50	27.77
50th Percentile	24.90	24.34	-9.13	11.25	24.24
75th Percentile	20.25	21.17	-13.66	8.44	20.42
95th Percentile	15.02	15.83	-18.75	1.59	15.81
Observations	178	189	196	199	208

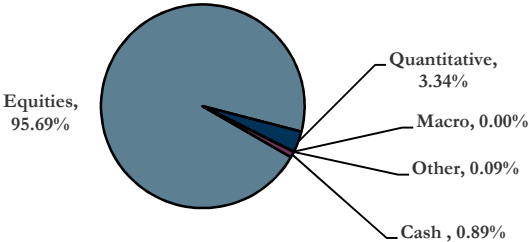
The rankings represent the portfolio's returns versus a peer universe. The rankings are on a scale of 1 to 100 with 1 being the best.

Grosvenor Long/Short Equity

For the Periods Ending June 30, 2018

Strategy Allocation

Market Value: \$363,676,282



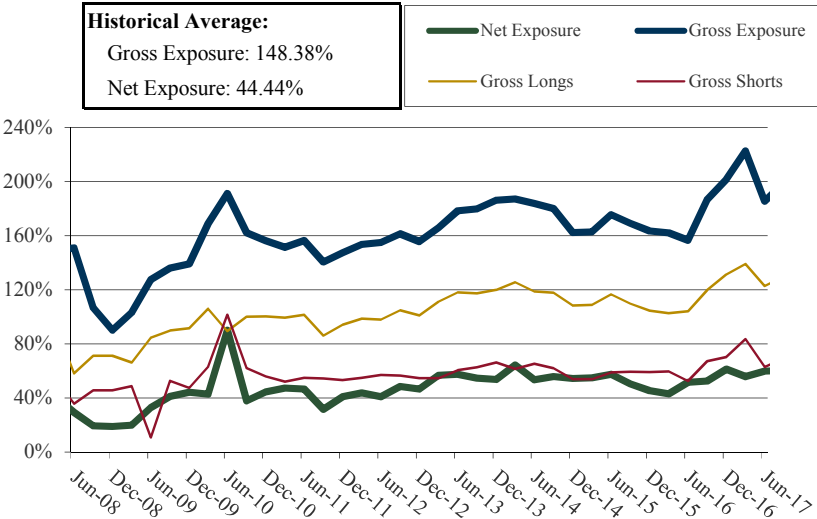
Strategy

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

Exposure

- Net Exposure: 74.5%
- Gross Exposure: 224.31%

Historical Net & Gross Exposure



Performance Goals

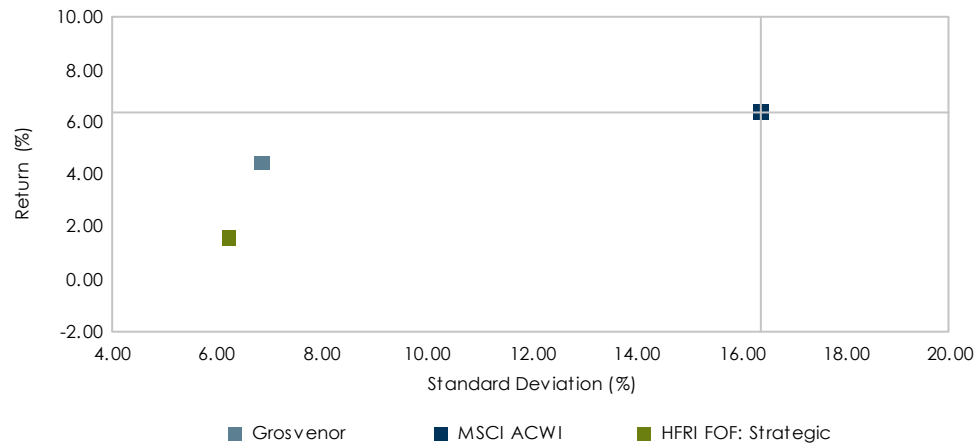
- Meet or exceed the return of the MSCI All Country World, over extended time periods (5 to 10 years).
- The volatility (standard deviation) of the portfolio should be less than two-thirds the volatility of the MSCI All Country World.
- The Beta of the portfolio relative to the MSCI All Country World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

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

Grosvenor Long/Short Equity

For the Periods Ending June 30, 2018

10 Year Risk / Return



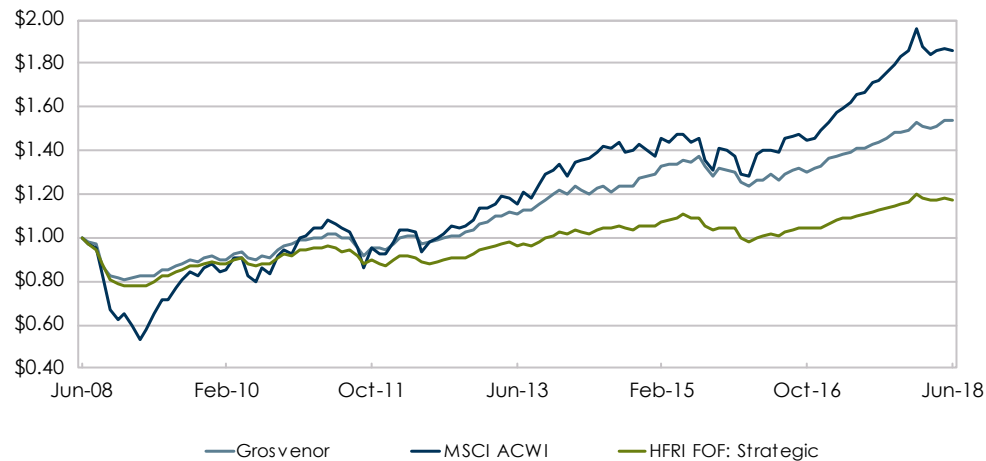
10 Year Portfolio Statistics

	Grosvenor	MSCI ACWI	HFRI FOF: Strategic
Return (%)	4.40	6.37	1.57
Standard Deviation (%)	6.87	16.41	6.23
Sharpe Ratio	0.60	0.37	0.21

Benchmark Relative Statistics

Beta	0.32	1.00
R Squared (%)	60.00	82.53
Alpha (%)	2.12	2.83
Tracking Error (%)	11.91	2.87
Batting Average (%)	48.33	65.83
Up Capture (%)	37.15	122.94
Down Capture (%)	37.33	87.80

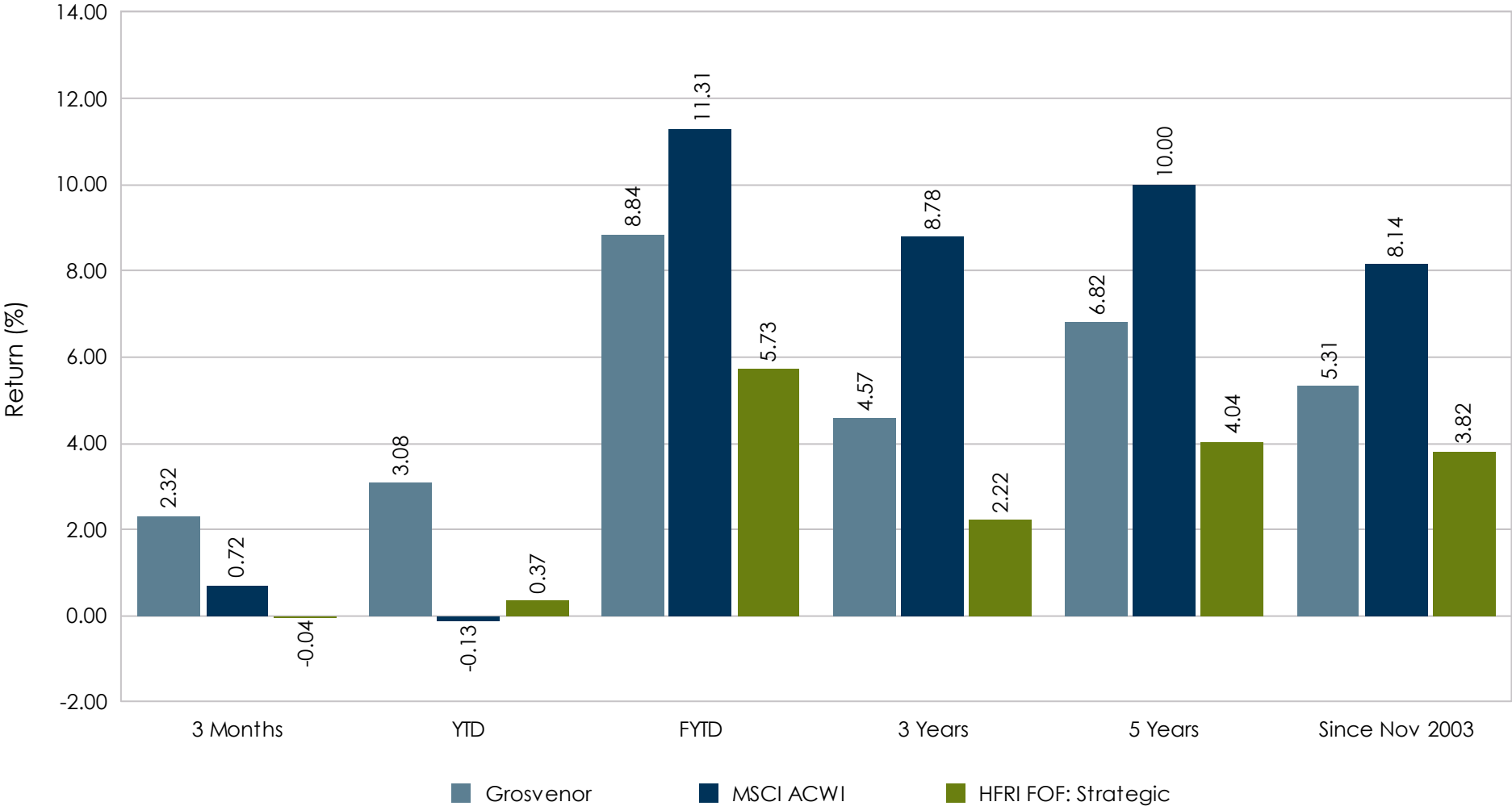
10 Year Growth of a Dollar



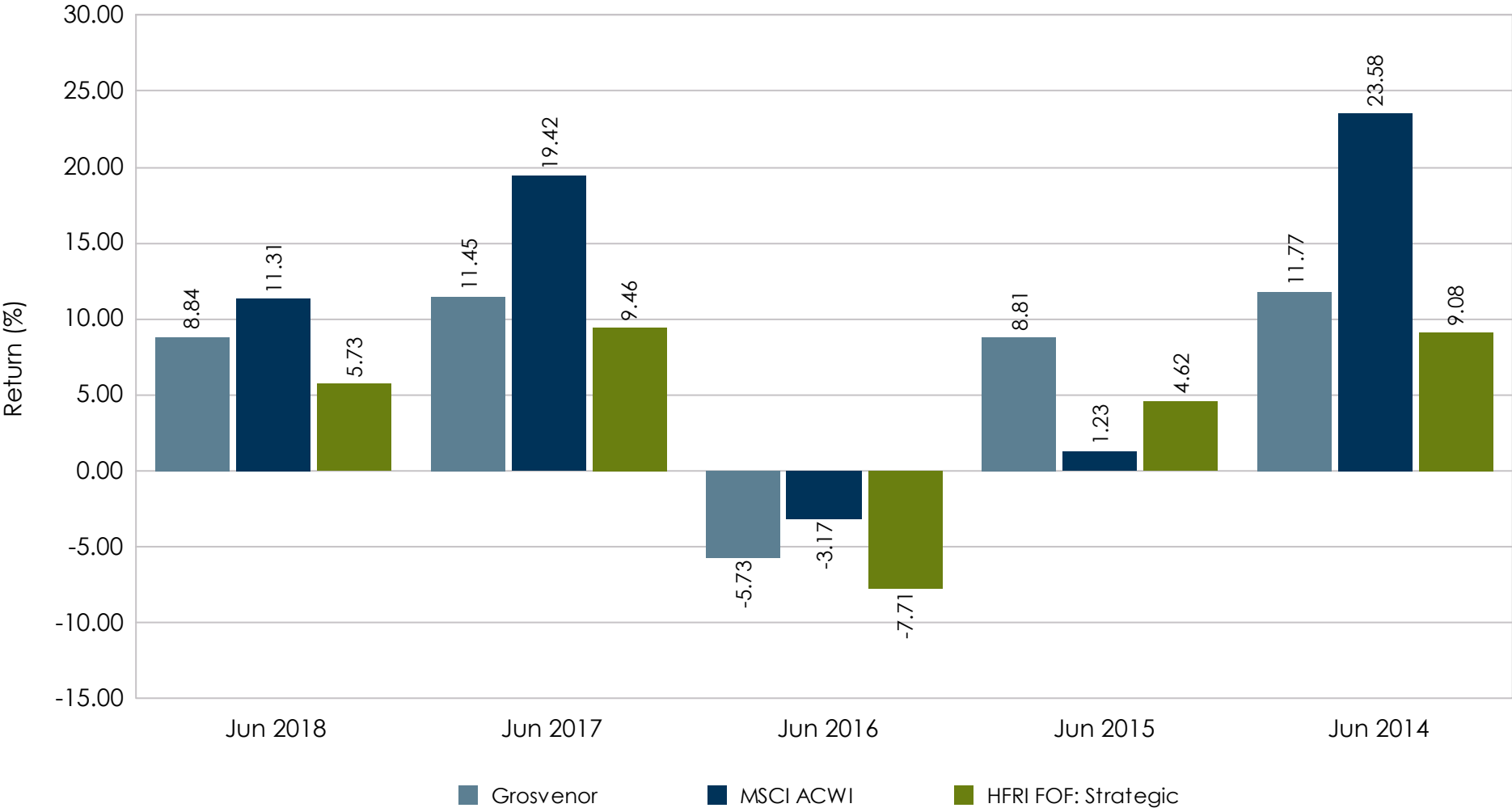
10 Year Return Analysis

	Grosvenor	MSCI ACWI	HFRI FOF: Strategic
Number of Months	120	120	120
Highest Monthly Return (%)	4.12	11.90	4.25
Lowest Monthly Return (%)	-10.06	-19.79	-7.66
Number of Positive Months	79	73	72
Number of Negative Months	41	47	48
% of Positive Months	65.83	60.83	60.00

Grosvenor Long/Short Equity
For the Periods Ending June 30, 2018



Grosvenor Long/Short Equity
For the One Year Periods Ending June



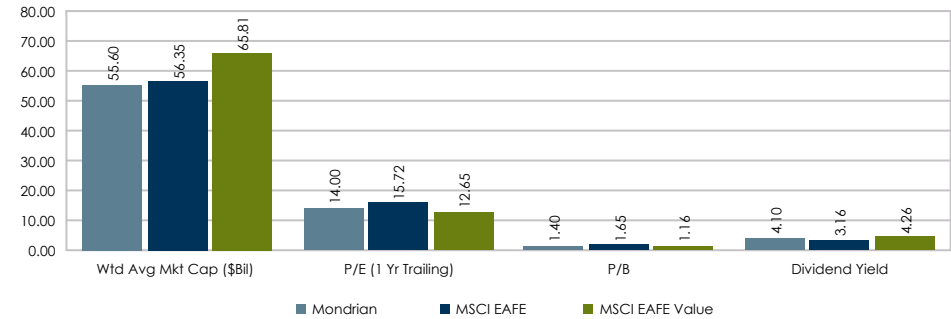
Mondrian International

For the Periods Ending June 30, 2018

Account Description

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

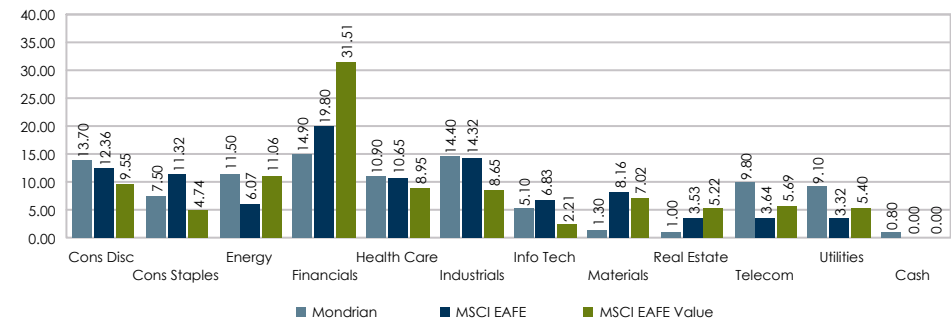
Characteristics



Performance Goals

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

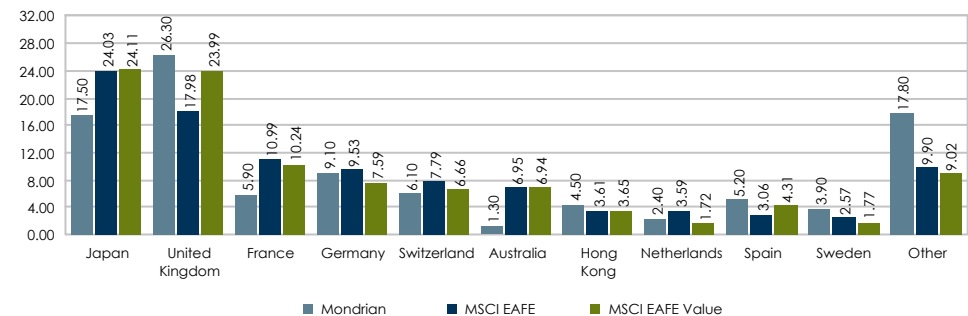
Sector Allocation



Dollar Growth Summary (\$000s)

	YTD	FYTD
Beginning Market Value	143,575	131,552
Net Additions	0	0
Return on Investment	-5,231	6,792
Ending Market Value	138,343	138,343

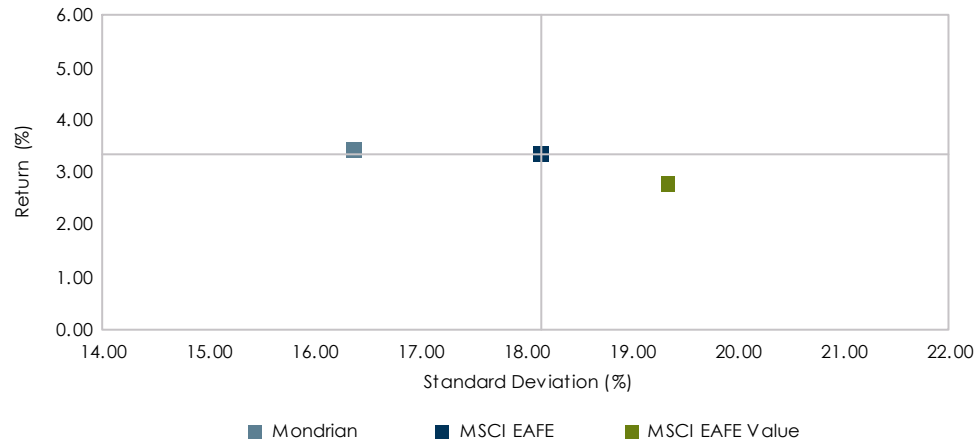
Country Allocation



Mondrian International

For the Periods Ending June 30, 2018

10 Year Risk / Return



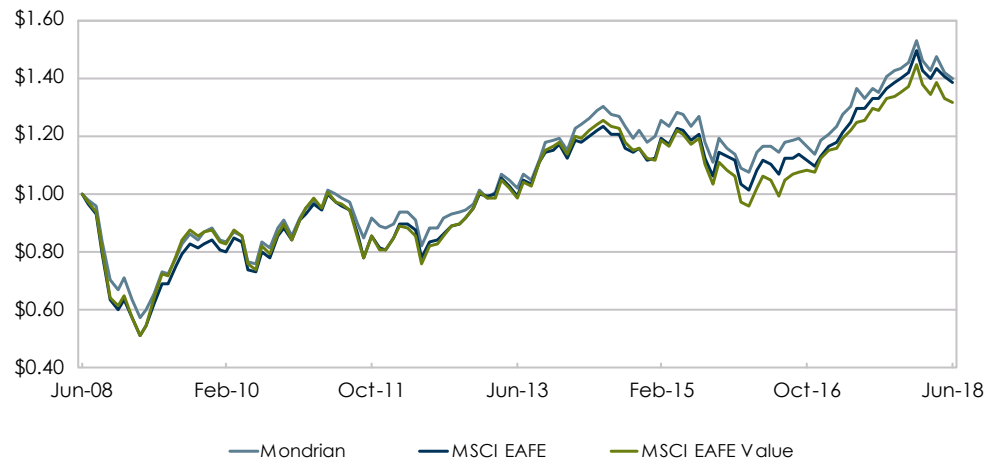
10 Year Portfolio Statistics

	Mondrian	MSCI EAFE	MSCI EAFE Value
Return (%)	3.41	3.33	2.76
Standard Deviation (%)	16.37	18.15	19.34
Sharpe Ratio	0.19	0.17	0.13

Benchmark Relative Statistics

Beta	0.88	0.82
R Squared (%)	95.03	94.25
Alpha (%)	0.36	0.92
Tracking Error (%)	4.26	5.23
Batting Average (%)	48.33	50.83
Up Capture (%)	91.72	82.59
Down Capture (%)	93.57	85.26

10 Year Growth of a Dollar

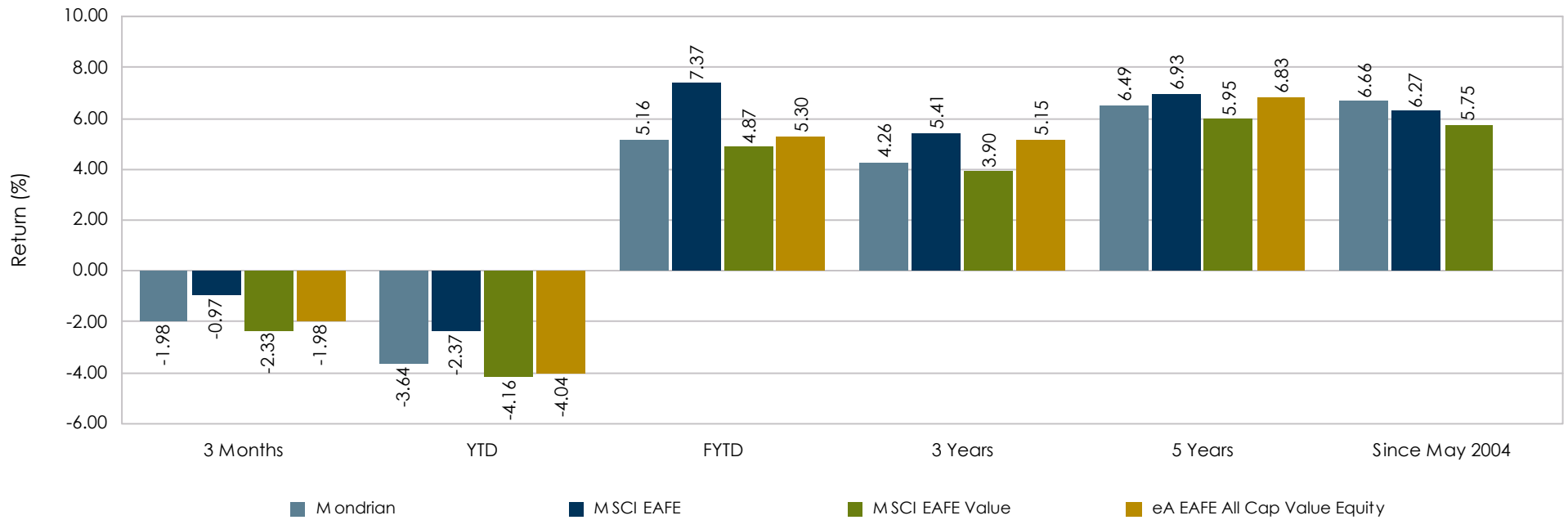


10 Year Return Analysis

	Mondrian	MSCI EAFE	MSCI EAFE Value
Number of Months	120	120	120
Highest Monthly Return (%)	11.12	12.96	17.46
Lowest Monthly Return (%)	-15.52	-20.17	-20.56
Number of Positive Months	64	63	64
Number of Negative Months	56	57	56
% of Positive Months	53.33	52.50	53.33

Mondrian International

For the Periods Ending June 30, 2018

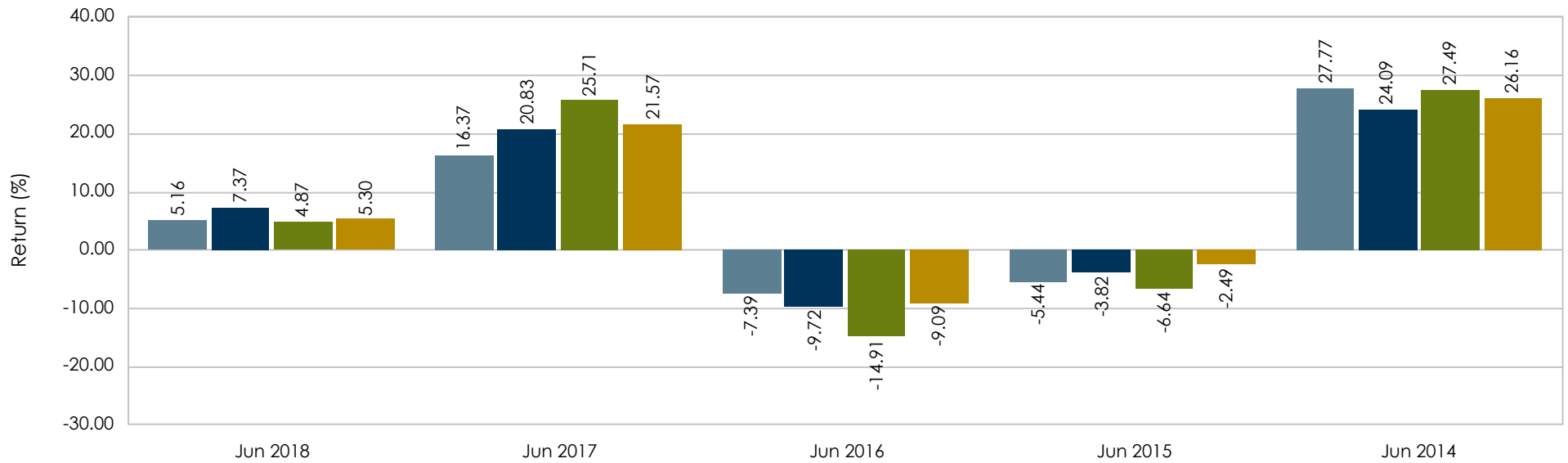


Ranking	51	38	52	68	68
5th Percentile	1.28	-0.07	11.36	10.00	11.06
25th Percentile	-1.04	-1.81	7.10	7.26	8.70
50th Percentile	-1.98	-4.04	5.30	5.15	6.83
75th Percentile	-2.57	-4.68	3.16	3.79	6.08
95th Percentile	-4.40	-6.76	0.73	2.71	5.34
Observations	31	31	31	31	30

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

Mondrian International

For the One Year Periods Ending June



	Mondrian	MSCI EAFE	MSCI EAFE Value	eA EAFE All Cap Value Equity	
Ranking	52	91	39	78	28
5th Percentile	11.36	29.95	0.04	1.24	31.06
25th Percentile	7.10	24.16	-4.89	-0.83	27.91
50th Percentile	5.30	21.57	-9.09	-2.49	26.16
75th Percentile	3.16	17.65	-11.62	-5.43	23.76
95th Percentile	0.73	16.17	-15.40	-7.73	19.59
Observations	31	32	35	33	33

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.

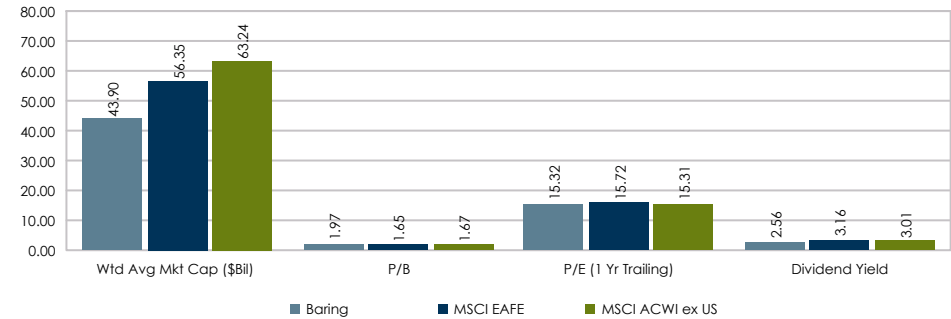
Baring Focused International

For the Periods Ending June 30, 2018

Account Description

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

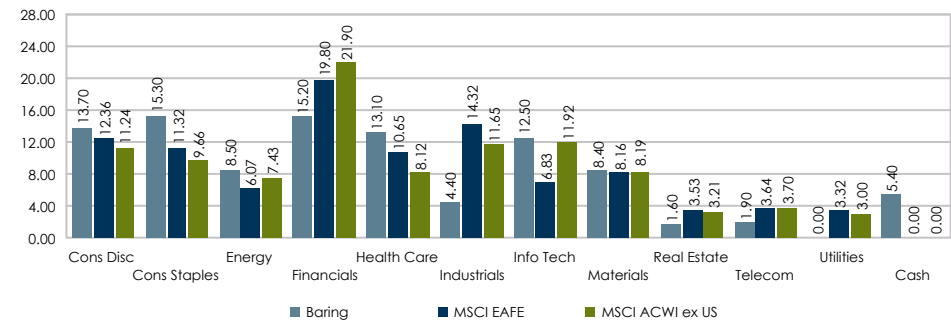
Characteristics



Performance Goals

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

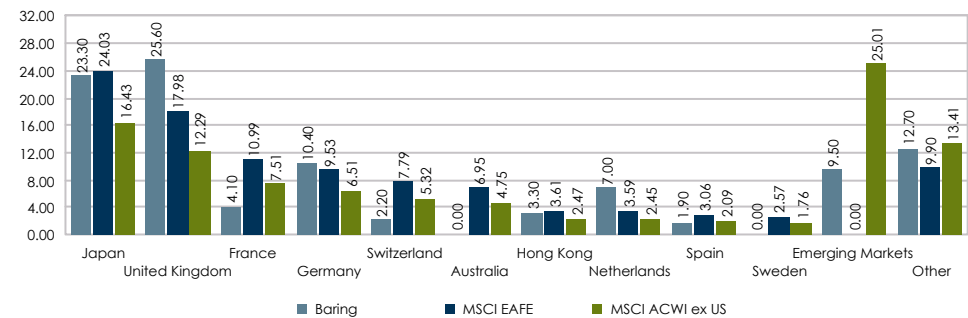
Sector Allocation



Dollar Growth Summary (\$000s)

	YTD	FYTD
Beginning Market Value	123,385	112,010
Net Additions	-245	-1,051
Return on Investment	-1,014	11,167
Ending Market Value	122,126	122,126

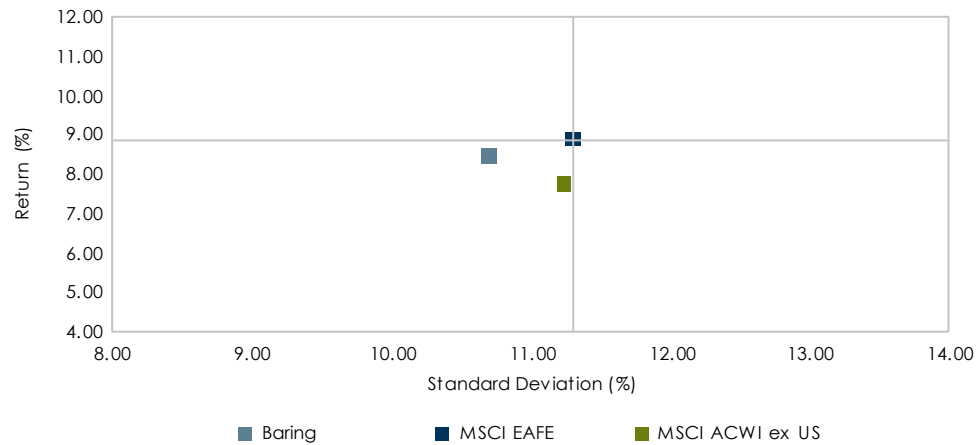
Country Allocation



Baring Focused International

For the Periods Ending June 30, 2018

6 Year Risk / Return



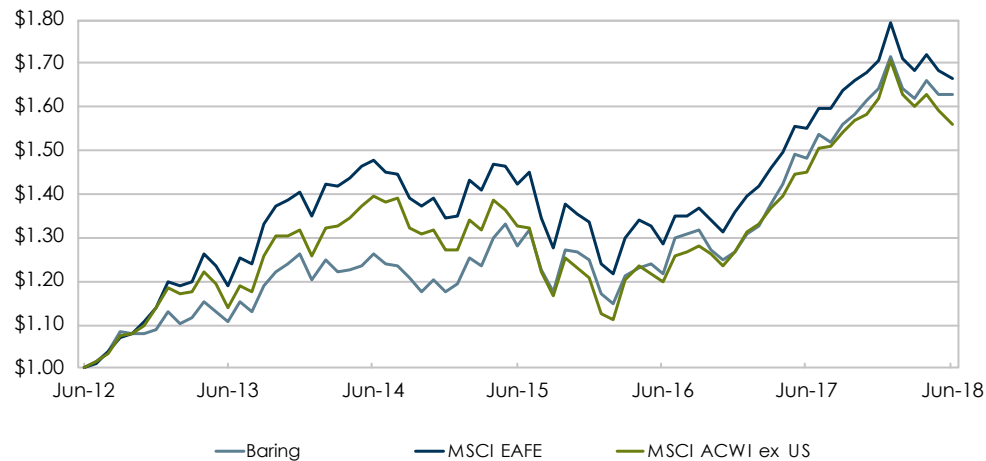
6 Year Portfolio Statistics

	Baring	MSCI EAFE	MSCI ACWI ex US
Return (%)	8.46	8.87	7.72
Standard Deviation (%)	10.70	11.30	11.24
Sharpe Ratio	0.76	0.76	0.66

Benchmark Relative Statistics

Beta	0.89	0.87
R Squared (%)	87.95	83.17
Alpha (%)	0.58	1.72
Tracking Error (%)	3.92	4.63
Batting Average (%)	54.17	51.39
Up Capture (%)	92.64	89.11
Down Capture (%)	93.37	81.51

6 Year Growth of a Dollar

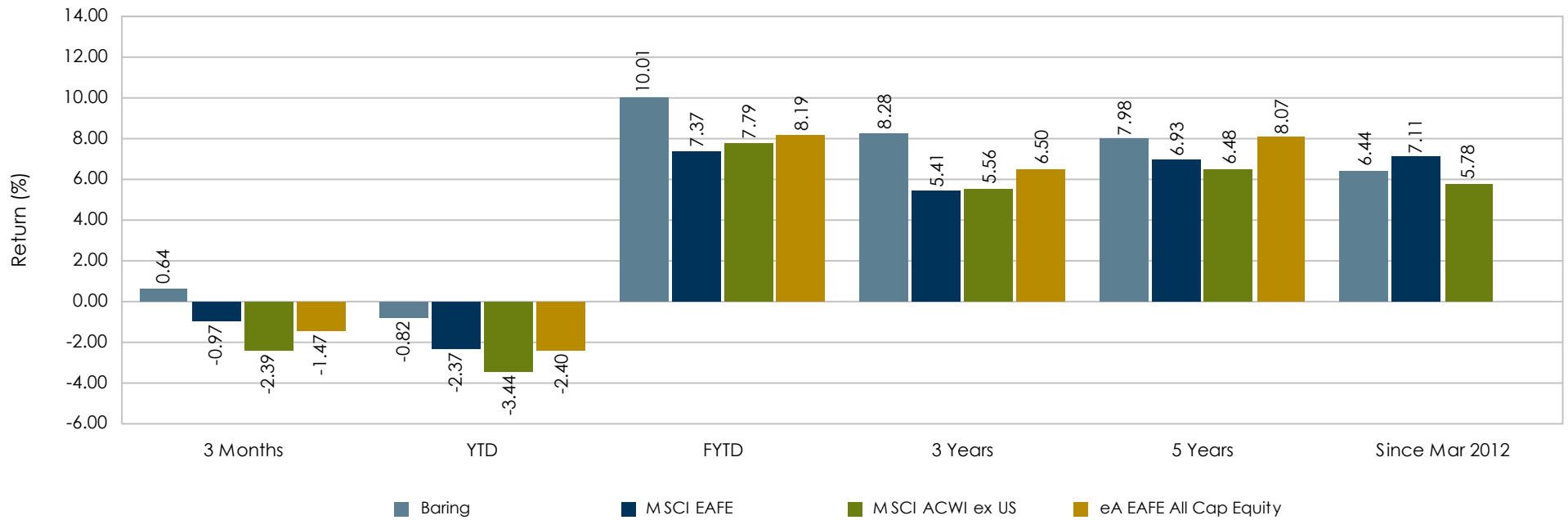


6 Year Return Analysis

	Baring	MSCI EAFE	MSCI ACWI ex US
Number of Months	72	72	72
Highest Monthly Return (%)	8.27	7.82	8.21
Lowest Monthly Return (%)	-7.13	-7.35	-7.63
Number of Positive Months	42	42	44
Number of Negative Months	30	30	28
% of Positive Months	58.33	58.33	61.11

Baring Focused International

For the Periods Ending June 30, 2018

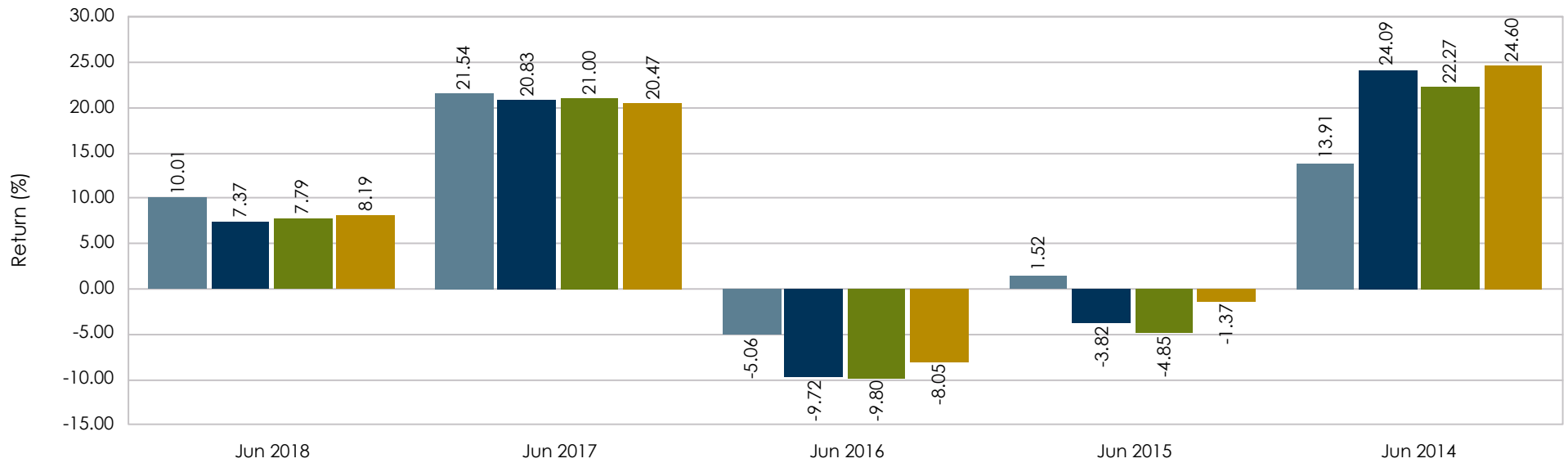


Ranking	20	32	33	22	53
5th Percentile	2.70	3.51	16.02	11.35	11.43
25th Percentile	0.18	-0.55	10.95	8.08	9.42
50th Percentile	-1.47	-2.40	8.19	6.50	8.07
75th Percentile	-2.23	-3.77	5.43	4.84	6.86
95th Percentile	-3.85	-5.91	1.89	3.15	5.50
Observations	115	115	115	110	101

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.

Baring Focused International

For the One Year Periods Ending June



	<div><div></div>Baring</div>	<div><div></div>MSCI EAFE</div>	<div><div></div>MSCI ACWI ex US</div>	<div><div></div>eA EAFE All Cap Equity</div>	
Ranking	33	41	27	15	99
5th Percentile	16.02	29.70	0.89	3.75	30.60
25th Percentile	10.95	23.32	-4.82	0.43	27.57
50th Percentile	8.19	20.47	-8.05	-1.37	24.60
75th Percentile	5.43	17.44	-11.08	-4.27	21.98
95th Percentile	1.89	12.82	-13.49	-7.95	17.18
Observations	115	124	122	117	115

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

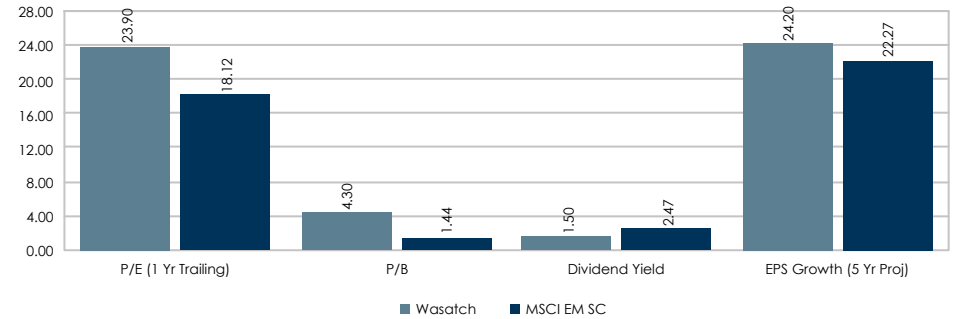
Wasatch Emerging Markets

For the Periods Ending June 30, 2018

Account Description

- **Strategy** Emerging Markets Equity
- **Vehicle** Non-Mutual Commingled
- **Benchmark** MSCI EM SC
- **Performance Inception Date** September 2012
- **Fees** 150 bps

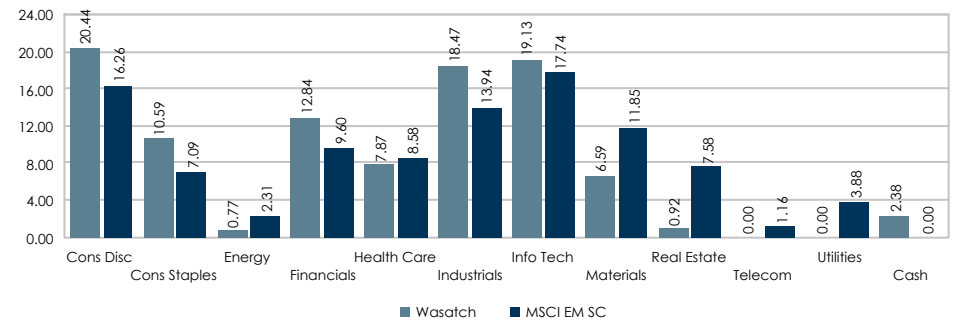
Characteristics



Performance Goals

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

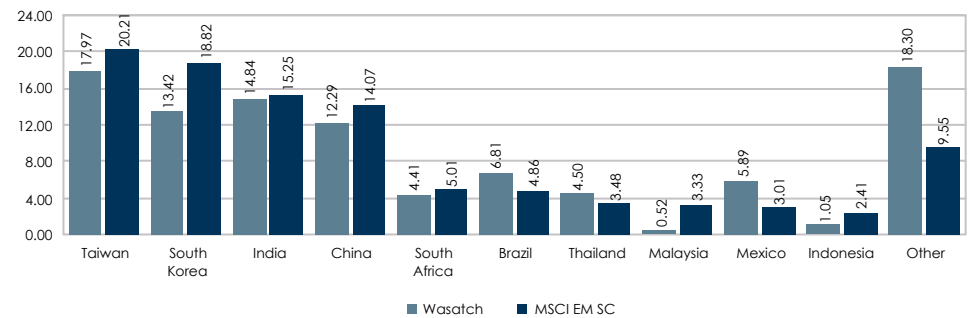
Sector Allocation



Dollar Growth Summary (\$000s)

	YTD	FYTD
Beginning Market Value	38,720	33,773
Net Additions	-272	-548
Return on Investment	-1,879	3,344
Ending Market Value	36,569	36,569

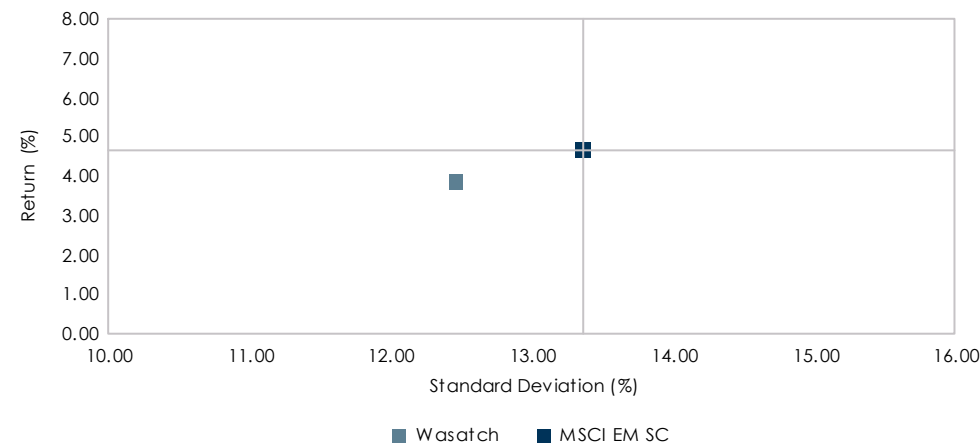
Country Allocation



Wasatch Emerging Markets

For the Periods Ending June 30, 2018

5 Year Risk / Return



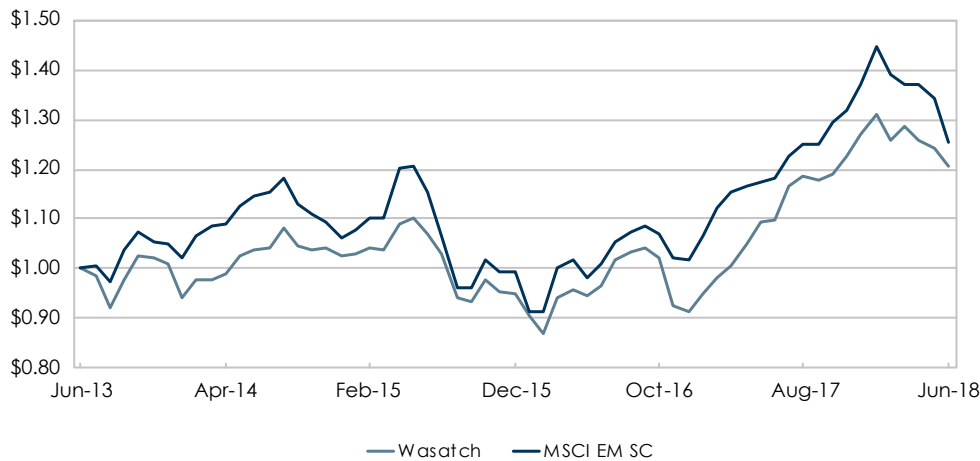
5 Year Portfolio Statistics

	Wasatch	MSCI EM SC
Return (%)	3.84	4.63
Standard Deviation (%)	12.47	13.36
Sharpe Ratio	0.28	0.32

Benchmark Relative Statistics

Beta	0.80
R Squared (%)	74.35
Alpha (%)	0.19
Tracking Error (%)	6.83
Batting Average (%)	43.33
Up Capture (%)	86.87
Down Capture (%)	91.80

5 Year Growth of a Dollar

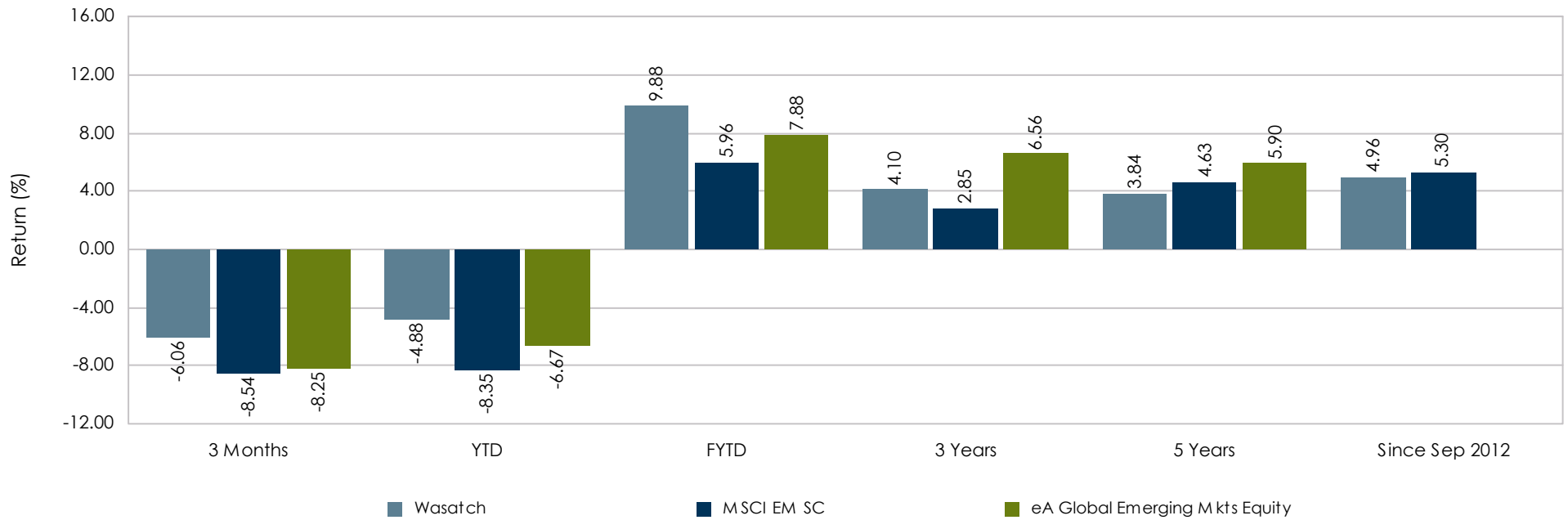


5 Year Return Analysis

	Wasatch	MSCI EM SC
Number of Months	60	60
Highest Monthly Return (%)	8.10	10.01
Lowest Monthly Return (%)	-9.57	-9.60
Number of Positive Months	34	36
Number of Negative Months	26	24
% of Positive Months	56.67	60.00

Wasatch Emerging Markets

For the Periods Ending June 30, 2018

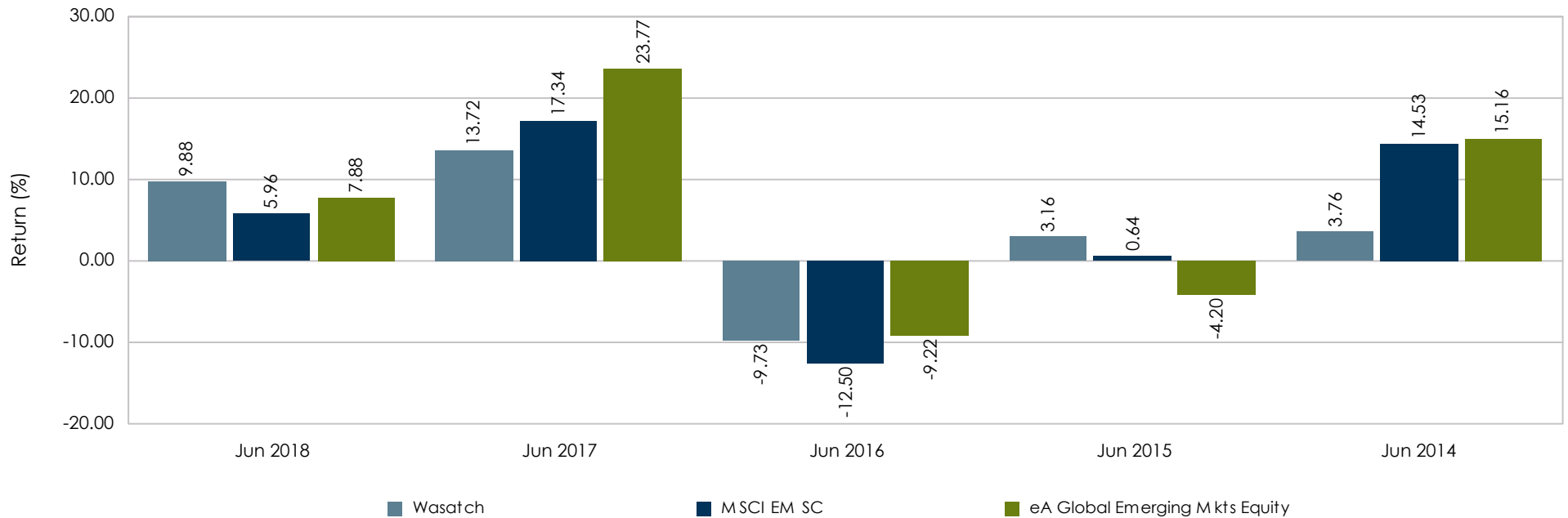


Ranking	14	20	30	85	88
5th Percentile	-4.44	-2.69	15.40	11.13	10.05
25th Percentile	-6.95	-5.32	10.61	8.47	7.43
50th Percentile	-8.25	-6.67	7.88	6.56	5.90
75th Percentile	-9.33	-8.09	4.89	5.00	4.74
95th Percentile	-11.29	-10.99	-0.63	2.66	2.56
Observations	462	462	458	433	369

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

Wasatch Emerging Markets

For the One Year Periods Ending June



Ranking	30	95	56	7	99
5th Percentile	15.40	32.42	-1.69	4.03	25.14
25th Percentile	10.61	26.82	-6.17	-1.27	18.20
50th Percentile	7.88	23.77	-9.22	-4.20	15.16
75th Percentile	4.89	19.84	-11.87	-7.29	12.85
95th Percentile	-0.63	13.01	-14.61	-11.68	8.57
Observations	458	498	480	449	444

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

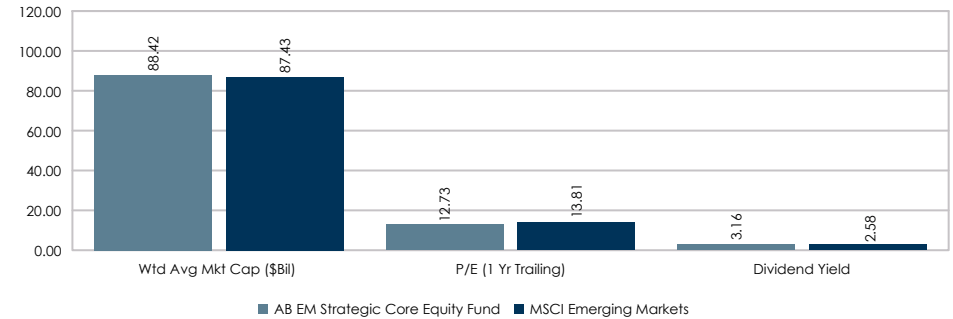
AB EM Strategic Core Equity Fund

For the Periods Ending June 30, 2018

Account Description

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

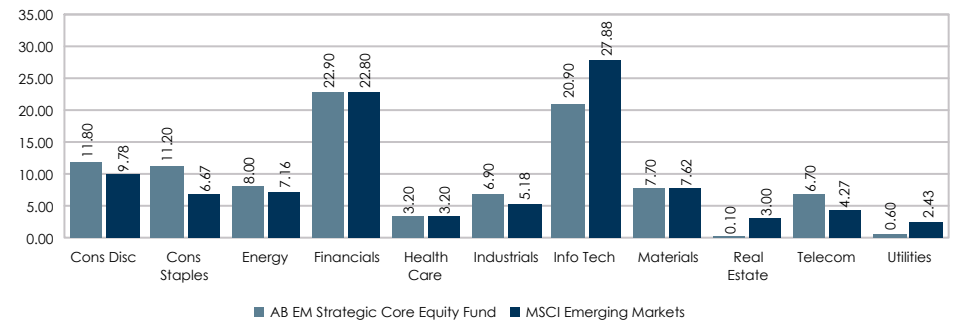
Characteristics



Performance Goals

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

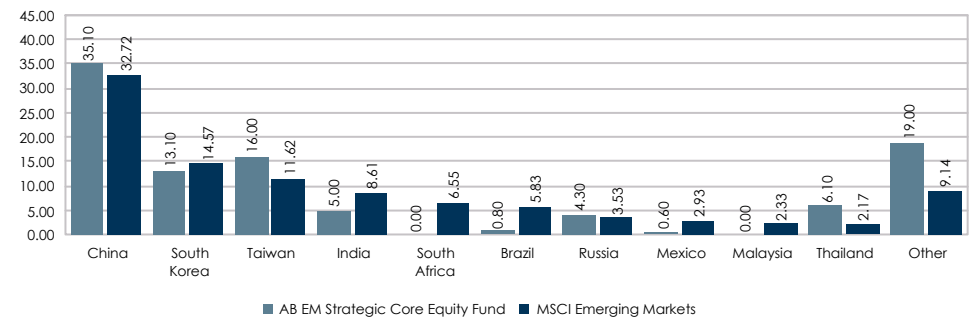
Sector Allocation



Dollar Growth Summary (\$000s)

	YTD	FYTD
Beginning Market Value	86,962	78,872
Net Additions	0	0
Return on Investment	-5,858	2,232
Ending Market Value	81,104	81,104

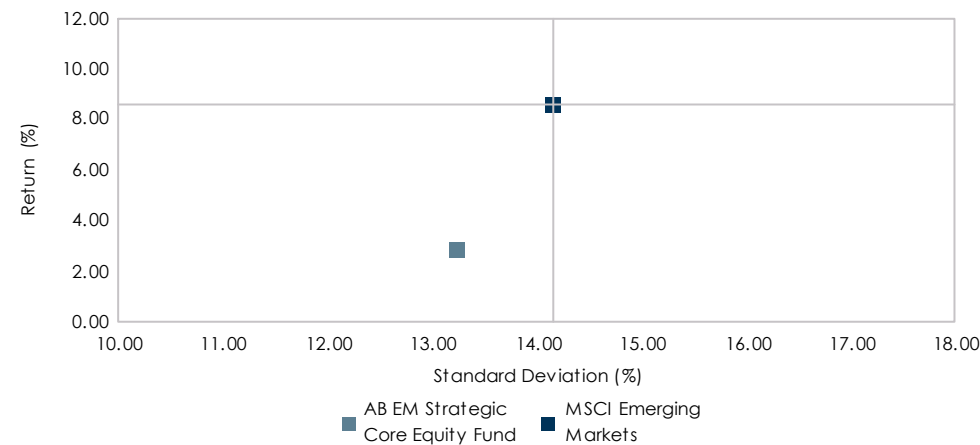
Country Allocation



AB EM Strategic Core Equity Fund

For the Periods Ending June 30, 2018

1 Year Risk / Return



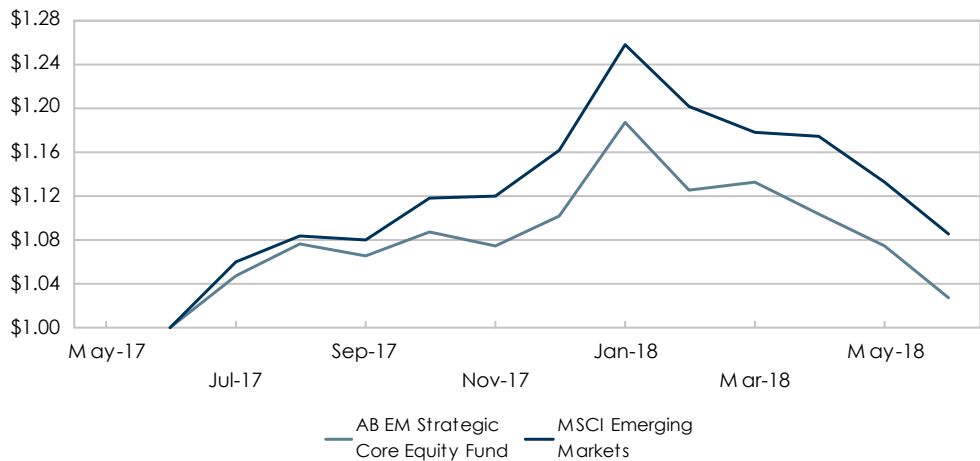
1 Year Portfolio Statistics

	AB EM Strategic Core	MSCI Emerging Markets
Return (%)	2.83	8.59
Standard Deviation (%)	13.25	14.16
Sharpe Ratio	0.12	0.52

Benchmark Relative Statistics

Beta	0.89
R Squared (%)	90.71
Alpha (%)	-4.49
Tracking Error (%)	4.32
Batting Average (%)	25.00
Up Capture (%)	75.74
Down Capture (%)	101.62

1 Year Growth of a Dollar

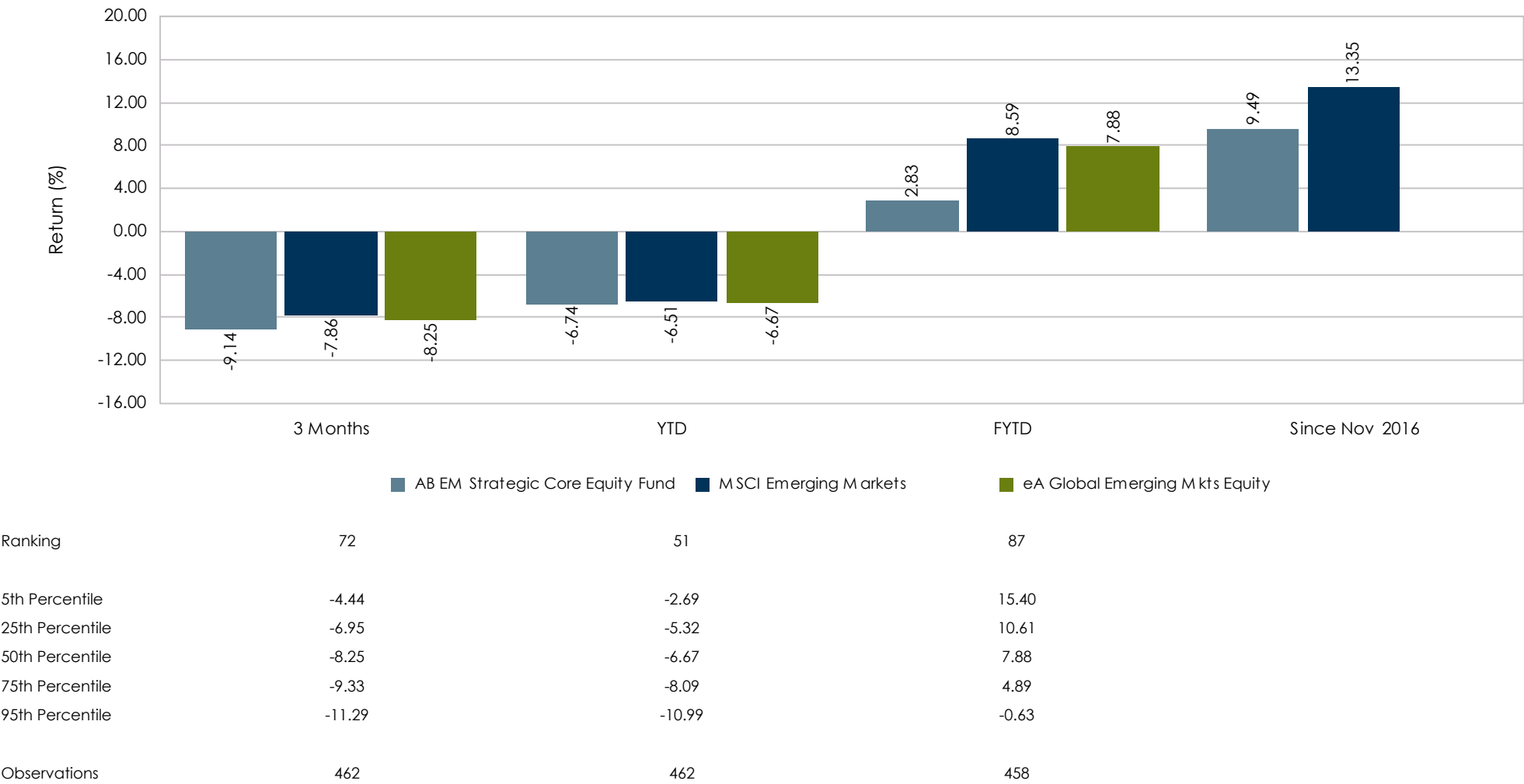


1 Year Return Analysis

	AB EM Strategic Core	MSCI Emerging Markets
Number of Months	12	12
Highest Monthly Return (%)	7.70	8.34
Lowest Monthly Return (%)	-5.29	-4.60
Number of Positive Months	6	6
Number of Negative Months	6	6
% of Positive Months	50.00	50.00

AB EM Strategic Core Equity Fund

For the Periods Ending June 30, 2018



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

For the Period Ending June 30, 2018

Summary of Cash Flows for 6 Months

Cash Outflows	Cash Inflows	Net Cash Flows
-15,885,698	14,709,903	-1,175,795

Summary of Portfolio Inception to Date

	Inception Date	Committed	Drawn to Date	Remaining Commitment	Distributions to Date	Adjusted Ending Value	Total Value	Total Value to Paid-in
Total	Feb-98	635,700,000	531,747,854	128,252,309	593,261,838	193,011,865	786,273,703	1.48x
Buyout	Apr-99	228,200,000	186,433,105	57,566,429	230,620,004	57,946,320	288,566,324	1.55x
Marathon IV	Apr-99	7,000,000	7,462,426	-	10,188,872	-	10,188,872	1.37x
Hicks, Muse	Nov-01	15,000,000	16,211,210	-	28,272,306	-	28,272,306	1.74x
Calera Capital (Fremont III)	Jan-02	10,000,000	10,998,419	271,104	10,299,220	-	10,299,220	0.94x
Arsenal Capital Partners	Jan-03	15,000,000	16,154,576	-	28,622,510	-	28,622,510	1.77x
Levine Leichtman	Feb-03	10,000,000	10,612,096	439,719	18,254,382	72,647	18,327,029	1.73x
Marathon Fund Limited Partnership V	Dec-04	10,000,000	10,557,584	-	19,631,139	-	19,631,139	1.86x
Thompson Street C.P. II	Dec-06	10,000,000	10,587,195	962,140	19,089,442	1,872,450	20,961,892	1.98x
Arsenal Capital Partners II	Dec-06	15,000,000	14,898,996	668,860	25,056,057	7,260,210	32,316,267	2.17x
Sun Capital Partners V	May-07	12,500,000	12,715,512	2,055,183	10,336,464	6,013,853	16,350,317	1.29x
HM Capital Sector Performance Fund	Jul-07	15,000,000	15,604,226	647,720	14,690,140	-	14,690,140	0.94x
Calera Capital Fund IV	Apr-08	10,000,000	8,750,484	1,249,516	12,660,178	1,239,786	13,899,964	1.59x
Levine Leichtman IV	Sep-08	10,000,000	9,284,222	1,065,574	13,520,193	3,833,275	17,353,468	1.87x
Thompson Street Capital III	Oct-11	7,500,000	7,704,067	506,139	7,152,961	4,840,144	11,993,105	1.56x
Arsenal Capital Partners III	Apr-12	7,500,000	7,920,224	1,803,995	8,399,887	5,680,830	14,080,717	1.78x
Apollo Investment Fund VIII	Feb-14	7,500,000	6,850,865	1,704,160	2,120,132	6,593,908	8,714,040	1.27x
Francisco Partners Fund IV	Apr-15	8,000,000	7,796,000	204,000	828,000	9,581,667	10,409,667	1.34x
CenterOak Equity Fund I	Dec-15	7,500,000	3,848,800	3,651,200	27,338	3,276,260	3,303,598	0.86x
Thompson Street Capital Partners IV	Jan-16	7,500,000	5,685,813	1,895,502	1,438,776	5,026,081	6,464,857	1.14x
Leonard Green Equity Investors VII	May-17	7,500,000	2,790,390	4,741,617	32,007	2,655,209	2,687,216	0.96x
Apollo Investment Fund IX		13,000,000	-	13,000,000	-	-	-	-
Francisco Partners Fund V		10,000,000	-	10,000,000	-	-	-	-
Thompson Street Capital V		12,700,000	-	12,700,000	-	-	-	-

Private Equity

For the Period Ending June 30, 2018

Summary of Portfolio Inception to Date

	Inception Date	Committed	Drawn to Date	Remaining Commitment	Distributions to Date	Adjusted Ending Value	Total Value	Total Value to Paid-in
Distressed	Feb-98	143,500,000	120,042,128	23,916,862	158,713,159	19,022,822	177,735,981	1.48x
Oaktree Opportunities Fund II	Feb-98	3,000,000	3,000,000	-	4,525,923	-	4,525,923	1.51x
Oaktree Opportunities Fund III	Sep-99	5,000,000	5,000,000	-	7,535,740	-	7,535,740	1.51x
Oaktree Opportunities Fund IV	Dec-01	10,000,000	10,000,000	-	16,804,559	-	16,804,559	1.68x
Siguler Guff Dist Opp I	Feb-03	20,000,000	19,568,416	-	30,991,330	-	30,991,330	1.58x
Oaktree Opportunities Fund V	Jun-04	4,000,000	4,000,000	-	6,502,265	59,156	6,561,421	1.64x
Oaktree Opportunities Fund VI	Aug-05	4,000,000	4,000,000	-	6,317,103	240	6,317,343	1.58x
Siguler Guff Dist Opp II	Sep-05	20,000,000	20,005,669	375	27,917,929	556,534	28,474,463	1.42x
Oaktree Opportunities VII A	Mar-07	7,500,000	7,554,219	-	9,853,784	526,465	10,380,249	1.37x
Oaktree Opportunities VII B	Jun-08	7,500,000	6,750,000	750,000	11,253,433	445,589	11,699,022	1.73x
Siguler Guff Dist Opp III	Sep-08	15,000,000	14,480,311	600,000	20,381,862	2,678,850	23,060,712	1.59x
Oaktree Opportunities VIII	Dec-09	7,500,000	6,750,000	750,000	9,223,044	785,280	10,008,324	1.48x
Oaktree Opportunities IX	Mar-13	7,500,000	7,500,000	-	2,388,312	5,804,620	8,192,932	1.09x
Oaktree European Dislocation Fund	Nov-13	7,500,000	4,285,544	3,214,456	4,267,875	671,249	4,939,124	1.15x
Oaktree Opportunities Fund X	Jul-15	7,500,000	5,250,000	3,000,000	750,000	5,596,870	6,346,870	1.21x
Apollo EPF III	Jan-18	10,000,000	1,710,469	8,289,531	-	1,710,469	1,710,469	1.00x
Oaktree Opportunities Fund Xb	Jun-18	7,500,000	187,500	7,312,500	-	187,500	187,500	1.00x
Emerging Markets Focused	Mar-12	7,500,000	6,818,669	1,417,726	1,200,294	6,049,392	7,249,686	1.06x
Actis EM IV	Mar-12	7,500,000	6,818,669	1,417,726	1,200,294	6,049,392	7,249,686	1.06x
Mezzanine	Mar-99	49,500,000	49,880,781	5,268,087	69,157,717	2,636,632	71,794,349	1.44x
TCW Crescent II	Mar-99	7,000,000	6,726,192	-	9,793,612	-	9,793,612	1.46x
TCW Crescent Mezzanine Partner III	Jul-01	10,000,000	10,188,852	200,324	20,545,737	327,166	20,872,903	2.05x
TCW Crescent IV	Jun-06	10,000,000	9,873,180	1,921,076	11,226,828	8,342	11,235,170	1.14x
Newstone Capital Partners	Nov-06	5,000,000	5,697,863	116,709	7,070,952	20,441	7,091,393	1.24x
TCW Mezzanine Fund V	Mar-08	10,000,000	7,336,349	2,663,651	9,958,042	662,070	10,620,112	1.45x
Newstone Capital Partners II	Dec-10	7,500,000	10,058,345	366,327	10,562,546	1,618,613	12,181,159	1.21x
Other	Feb-13	31,500,000	20,455,943	12,478,999	7,011,856	16,881,173	23,893,029	1.17x
EnCap Energy Fund IX	Feb-13	6,500,000	6,961,061	212,850	3,866,422	4,974,939	8,841,361	1.27x
EnCap Energy Fund X	Apr-15	7,500,000	5,829,969	2,236,179	1,712,268	5,249,310	6,961,578	1.19x
ArcLight Energy Partners VI	Aug-15	7,500,000	6,833,255	861,628	1,433,166	5,954,027	7,387,193	1.08x
EnCap Energy Fund XI	Jul-17	10,000,000	831,658	9,168,342	-	702,897	702,897	0.85x
Secondary Fund of Funds	Dec-05	20,000,000	21,439,062	326,939	26,937,652	2,335,135	29,272,787	1.37x
Lexington VI	Dec-05	20,000,000	21,439,062	326,939	26,937,652	2,335,135	29,272,787	1.37x

Private Equity

For the Period Ending June 30, 2018

Summary of Portfolio Inception to Date

	Inception Date	Committed	Drawn to Date	Remaining Commitment	Distributions to Date	Adjusted Ending Value	Total Value	Total Value to Paid-in
Venture Capital	Jul-99	155,500,000	126,678,166	27,277,267	99,621,156	88,140,391	187,761,547	1.48x
Weiss, Peck & Greer V, LLC	Jul-99	7,000,000	6,932,406	67,594	4,507,097	-	4,507,097	0.65x
Firstmark Venture Partners II (Pequot)	Feb-00	1,000,000	955,000	-	322,553	-	322,553	0.34x
Midtown Fund III (Firstmark III, Pequot)	May-00	15,000,000	14,738,625	-	12,141,249	-	12,141,249	0.82x
Lightspeed Venture Partners VI (WPG)	Oct-00	12,000,000	11,010,270	989,730	10,396,934	141,270	10,538,204	0.96x
Venture Lending & Leasing Fund	May-01	6,000,000	4,500,000	-	5,595,215	-	5,595,215	1.24x
Accel Europe	May-01	10,000,000	10,000,000	-	12,403,731	1,006,085	13,409,816	1.34x
Knightsbridge Fund VI	Dec-04	12,000,000	11,232,000	768,000	9,264,368	6,418,478	15,682,846	1.40x
Firstmark I (Pequot, Firstmark IV)	Nov-05	5,000,000	4,950,000	50,000	13,391,369	21,066,385	34,457,754	6.96x
Weathergag Venture Capital	Mar-07	7,500,000	6,862,500	637,500	7,803,343	5,891,196	13,694,539	2.00x
Warburg Pincus	Oct-07	15,000,000	15,000,000	-	16,119,108	6,894,008	23,013,116	1.53x
Weathergag Venture Cap II	Apr-11	7,500,000	6,975,000	525,000	2,247,504	10,202,621	12,450,125	1.78x
Firstmark II (Firstmark V)	Aug-11	5,000,000	4,822,365	177,635	497,531	6,677,111	7,174,642	1.49x
Warburg Pincus XI	Nov-12	7,500,000	7,500,000	-	4,200,679	6,885,649	11,086,328	1.48x
Firstmark Capital Fund III	Feb-14	5,000,000	4,475,000	525,000	141,977	5,567,273	5,709,250	1.28x
Firstmark Capital Opportunity Fund I	Jun-14	5,000,000	5,075,000	186,808	441,498	5,600,780	6,042,278	1.19x
Warburg Pincus XII	Dec-15	10,000,000	5,325,000	4,675,000	147,000	5,789,715	5,936,715	1.11x
Weathergag Venture Capital IV	Dec-16	10,000,000	2,900,000	7,100,000	-	2,759,958	2,759,958	0.95x
FirstMark Capital Fund IV	Apr-17	7,500,000	1,650,000	5,850,000	-	1,479,728	1,479,728	0.90x
FirstMark Capital Opportunity Fund II	Jan-18	7,500,000	1,775,000	5,725,000	-	1,760,134	1,760,134	0.99x

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Fixed Income Manager Performance

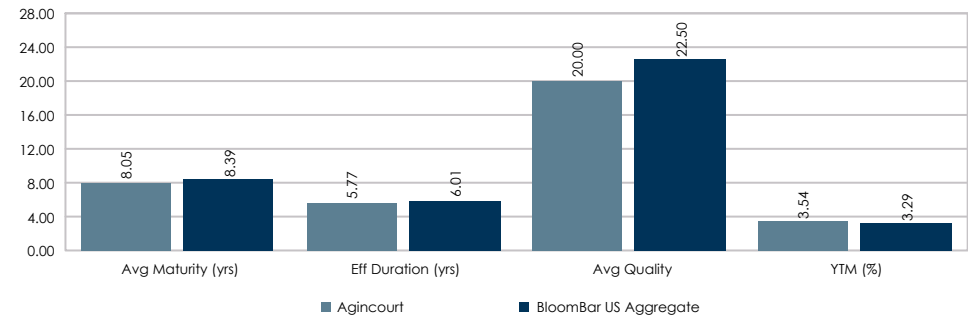
Agincourt Core Fixed Income

For the Periods Ending June 30, 2018

Account Description

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

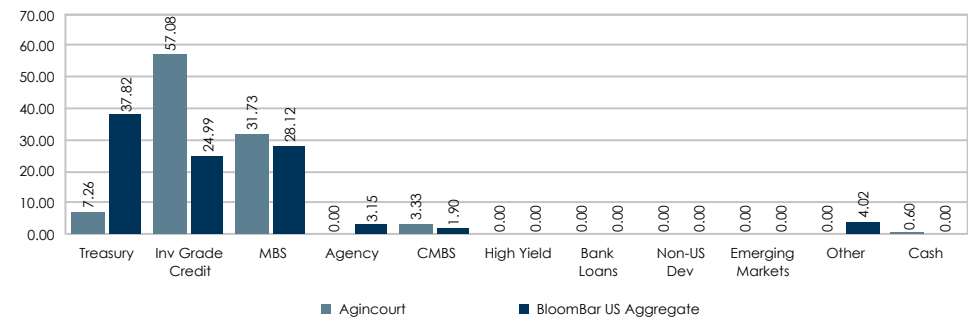
Characteristics



Performance Goals

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

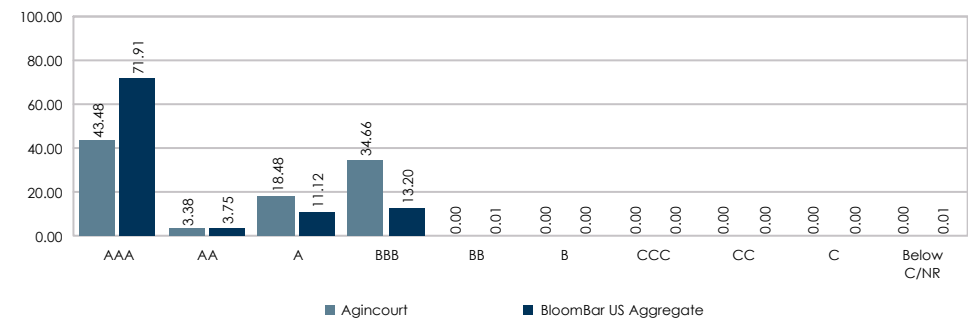
Sector Allocation



Dollar Growth Summary (\$000s)

	YTD	FYTD
Beginning Market Value	172,704	170,040
Net Additions	-153	-284
Return on Investment	-2,927	-131
Income	3,291	6,542
Gain/Loss	-6,218	-6,673
Ending Market Value	169,624	169,624

Quality Allocation

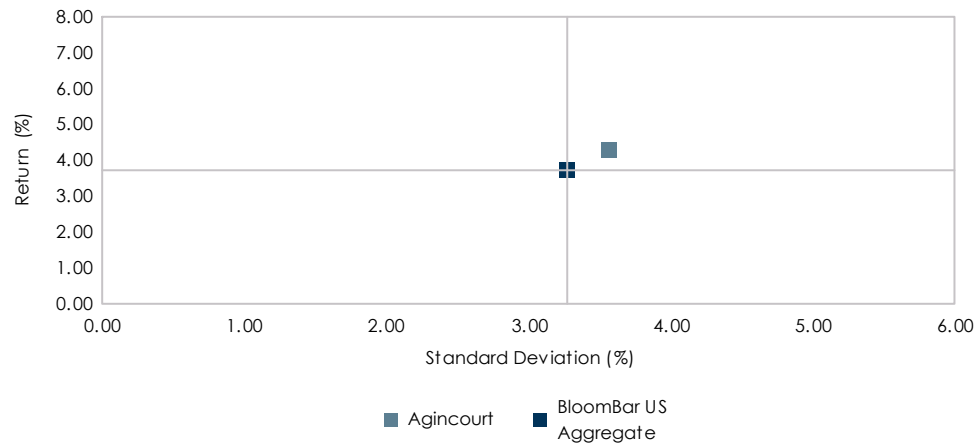


The Other sector consists of ABS, CMO, Convertibles, Municipals, Private Placements/144As and TIPS.

Agincourt Core Fixed Income

For the Periods Ending June 30, 2018

10 Year Risk / Return



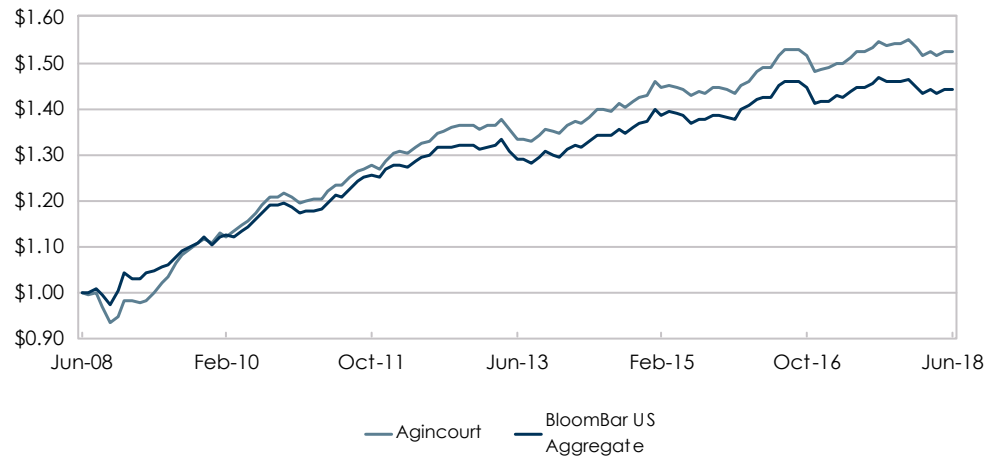
10 Year Portfolio Statistics

	Agincourt	BloomBar US Aggregate
Return (%)	4.29	3.72
Standard Deviation (%)	3.57	3.27
Sharpe Ratio	1.13	1.06

Benchmark Relative Statistics

Beta	0.99
R Squared (%)	82.05
Alpha (%)	0.61
Tracking Error (%)	1.51
Batting Average (%)	61.67
Up Capture (%)	109.28
Down Capture (%)	100.24

10 Year Growth of a Dollar

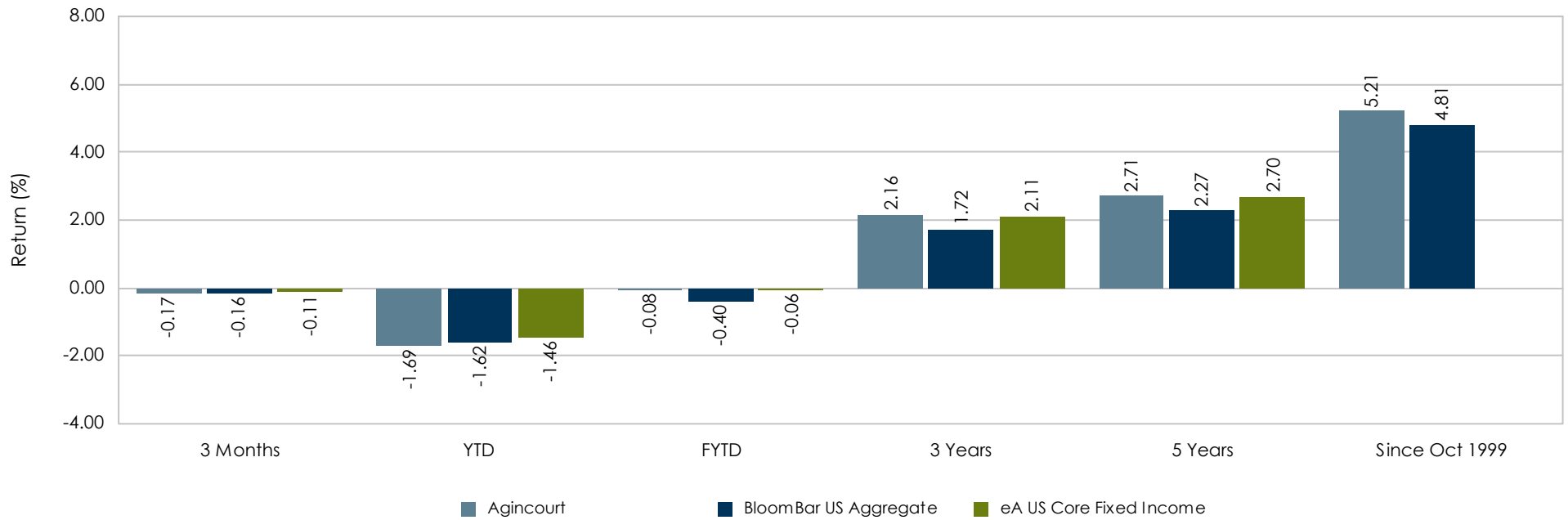


10 Year Return Analysis

	Agincourt	BloomBar US Aggregate
Number of Months	120	120
Highest Monthly Return (%)	3.80	3.73
Lowest Monthly Return (%)	-3.54	-2.37
Number of Positive Months	79	78
Number of Negative Months	41	42
% of Positive Months	65.83	65.00

Agincourt Core Fixed Income

For the Periods Ending June 30, 2018

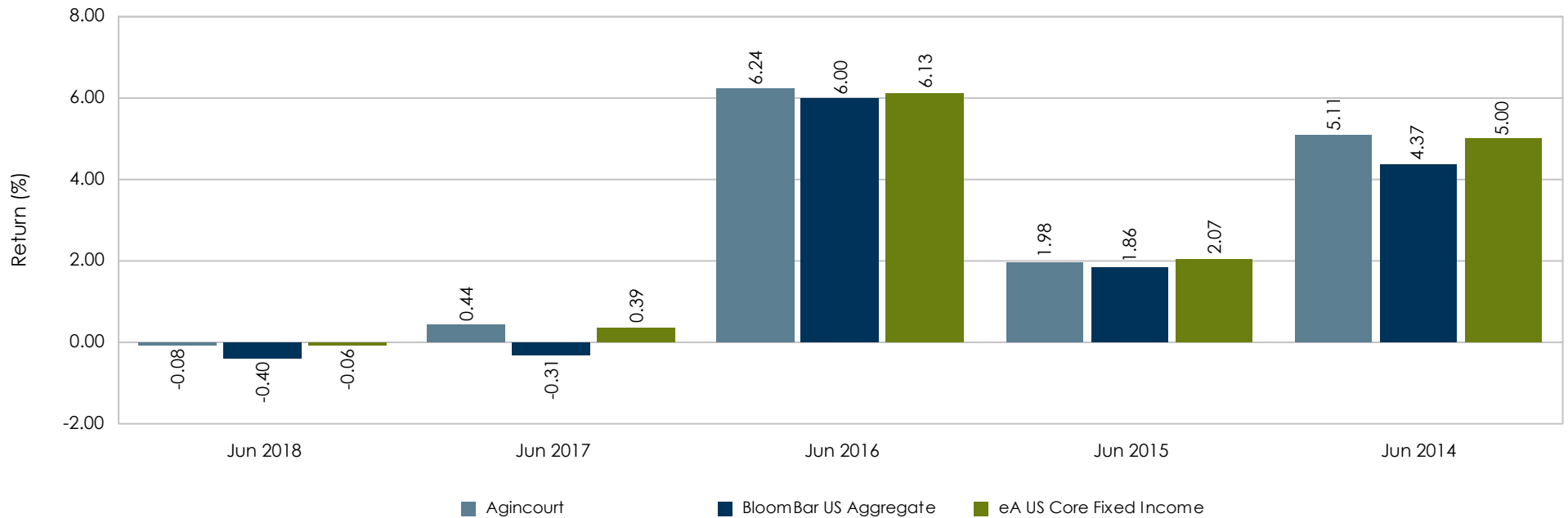


Ranking	69	80	51	45	50
5th Percentile	0.30	-0.44	1.14	3.10	3.71
25th Percentile	0.00	-1.22	0.26	2.42	2.98
50th Percentile	-0.11	-1.46	-0.06	2.11	2.70
75th Percentile	-0.19	-1.64	-0.34	1.89	2.46
95th Percentile	-0.45	-2.03	-0.70	1.57	2.13
Observations	246	246	246	240	235

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

Agincourt Core Fixed Income

For the One Year Periods Ending June



Ranking	51	47	40	59	45
5th Percentile	1.14	2.59	7.28	2.96	6.84
25th Percentile	0.26	1.03	6.57	2.38	5.56
50th Percentile	-0.06	0.39	6.13	2.07	5.00
75th Percentile	-0.34	-0.09	5.68	1.75	4.36
95th Percentile	-0.70	-0.70	4.53	1.21	3.31
Observations	246	265	259	263	276

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

Oaktree Capital Management

For the Periods Ending June 30, 2018

Account Description

- **Strategy** Multi-Sector Fixed Income
- **Vehicle** Non-Mutual Commingled
- **Benchmark** BloomBar US Aggregate
- **Performance Inception Date** February 1998
- **Fees** 50 bps plus operating expenses

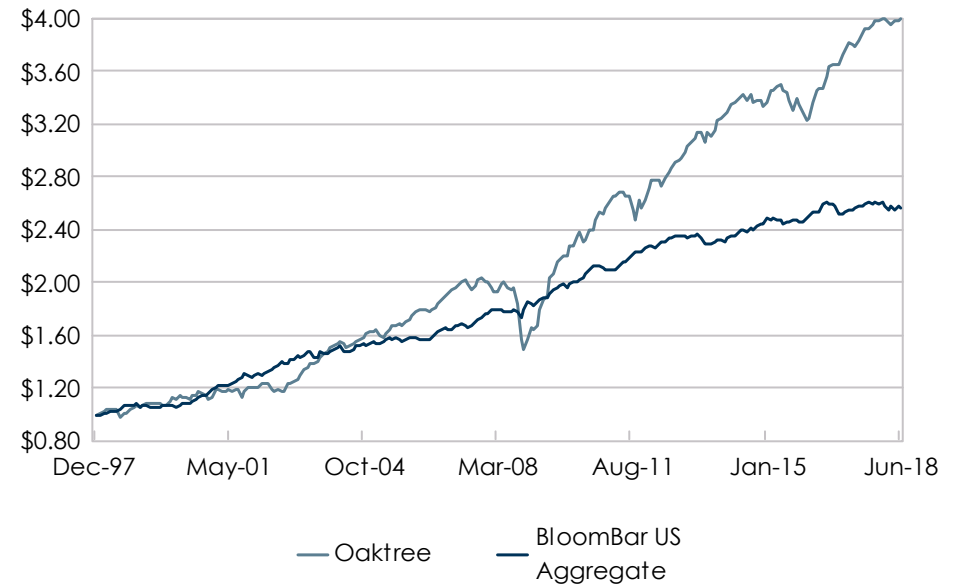
Performance Goals

- Outperform the BloomBar US Aggregate.
- Each underlying strategy should outperform its relevant benchmark.

Dollar Growth Summary (\$000s)

	YTD	FYTD
Beginning Market Value	123,392	120,555
Net Additions	155	-264
Return on Investment	49	3,305
Ending Market Value	123,596	123,596

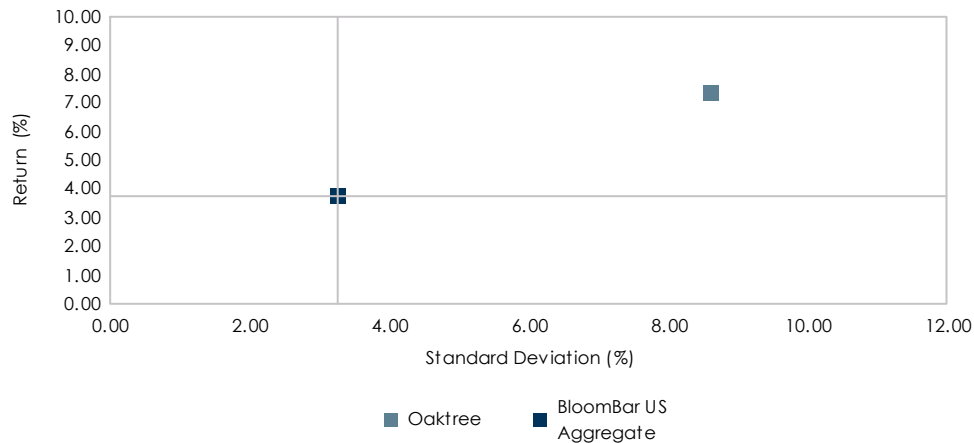
Growth of a Dollar



Oaktree Capital Management

For the Periods Ending June 30, 2018

10 Year Risk / Return



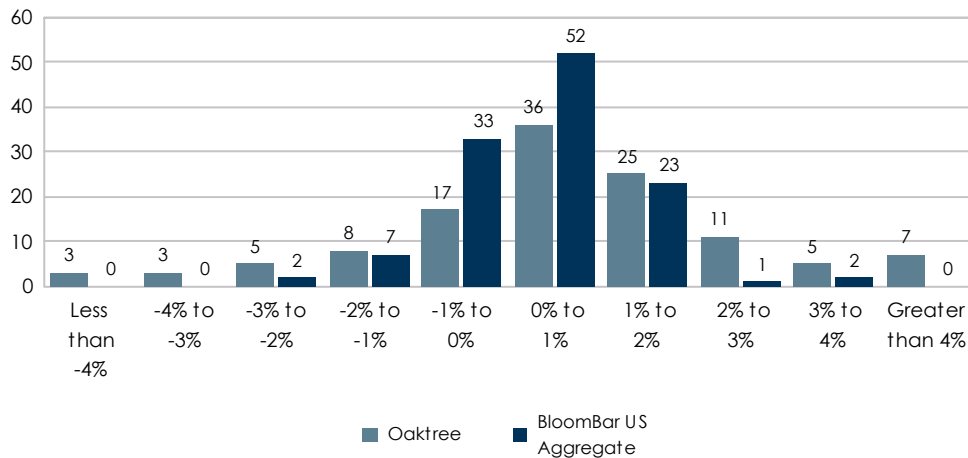
10 Year Portfolio Statistics

	Oaktree	BloomBar US Aggregate
Return (%)	7.37	3.72
Standard Deviation (%)	8.62	3.27
Sharpe Ratio	0.82	1.06

Benchmark Relative Statistics

Beta	0.74
R Squared (%)	7.81
Alpha (%)	4.88
Tracking Error (%)	8.33
Batting Average (%)	60.00
Up Capture (%)	138.00
Down Capture (%)	55.33

10 Year Return Histogram

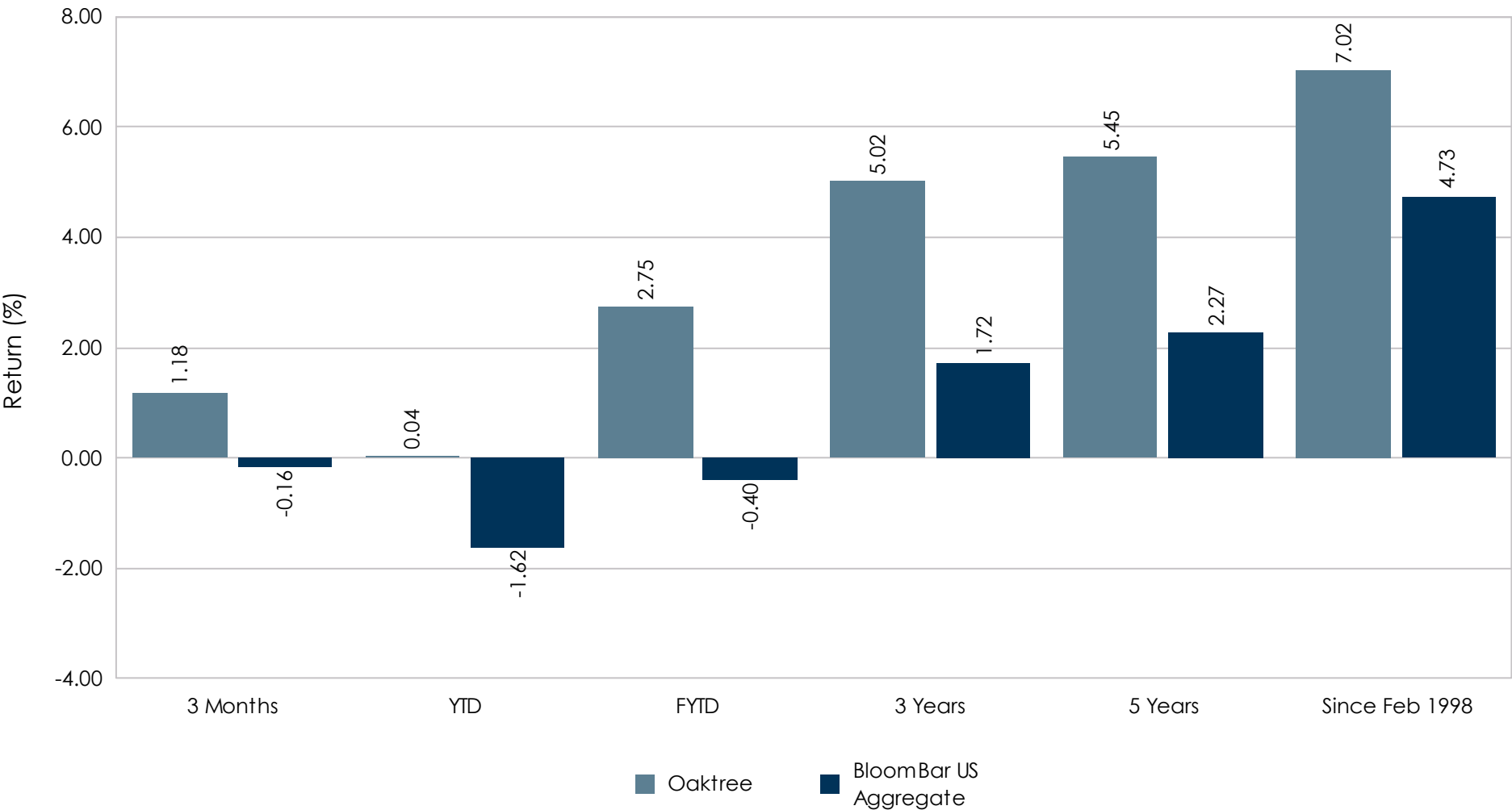


10 Year Return Analysis

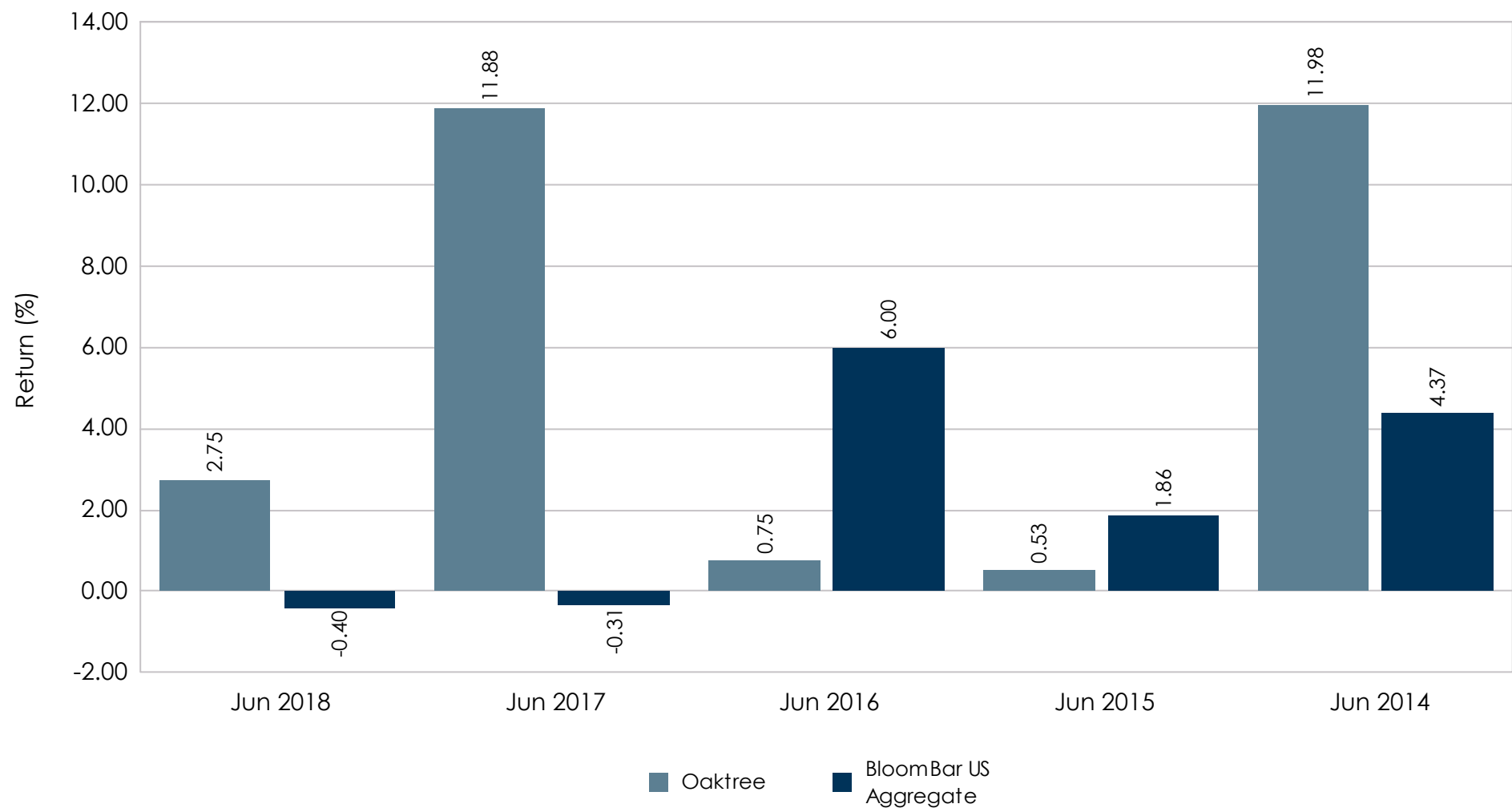
	Oaktree	BloomBar US Aggregate
Number of Months	120	120
Highest Monthly Return (%)	7.58	3.73
Lowest Monthly Return (%)	-14.86	-2.37
Number of Positive Months	84	78
Number of Negative Months	36	42
% of Positive Months	70.00	65.00

Oaktree Capital Management

For the Periods Ending June 30, 2018



Oaktree Capital Management
For the One Year Periods Ending June



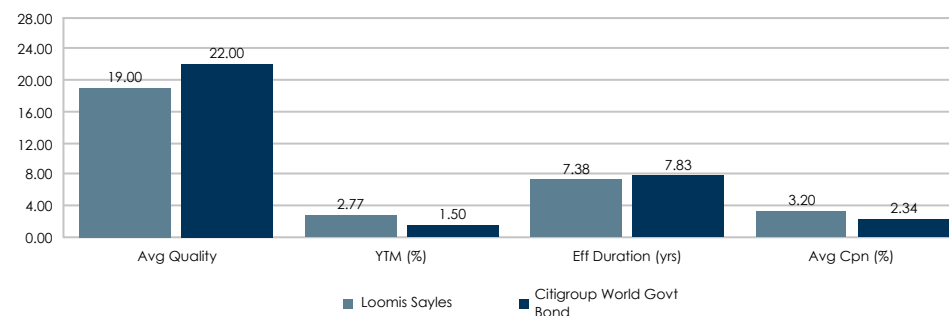
Loomis Sayles

For the Periods Ending June 30, 2018

Account Description

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

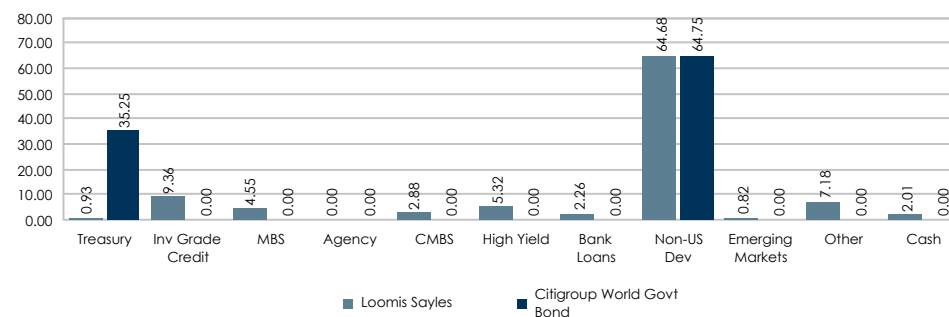
Characteristics



Performance Goals

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

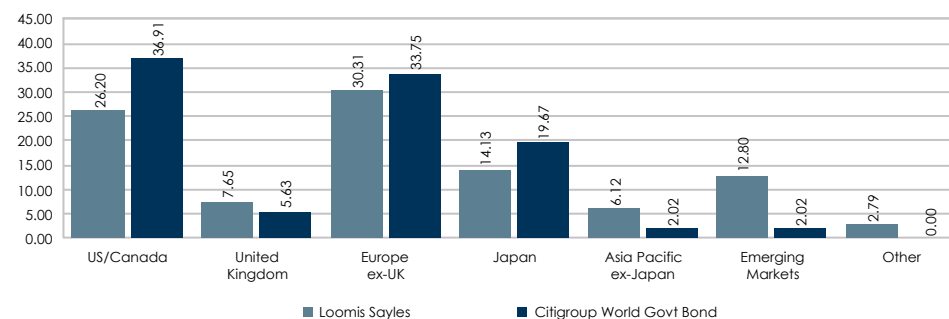
Sector Allocation



Dollar Growth Summary (\$000s)

	YTD	FYTD
Beginning Market Value	98,389	94,897
Net Additions	-160	-317
Return on Investment	-1,480	2,169
Ending Market Value	96,749	96,749

Regional Allocation



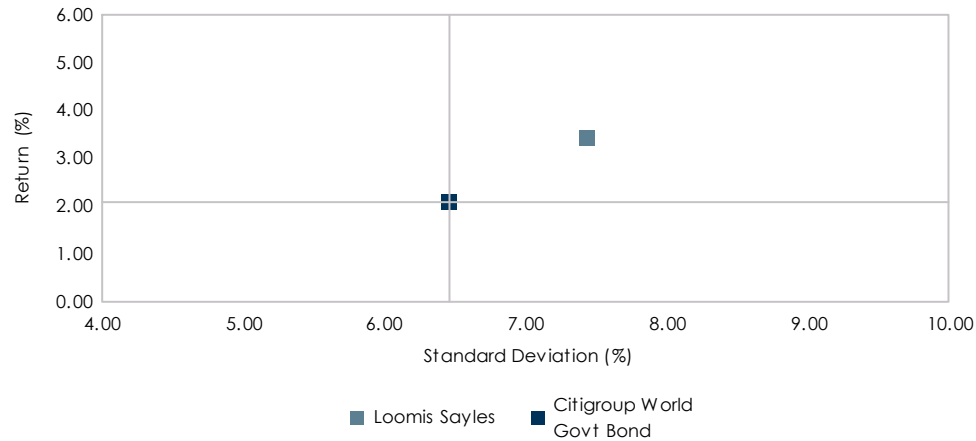
Characteristic and allocation charts represents data of the Loomis World Bond NH Trust (Non-Mutual Commingled).

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

Loomis Sayles

For the Periods Ending June 30, 2018

10 Year Risk / Return



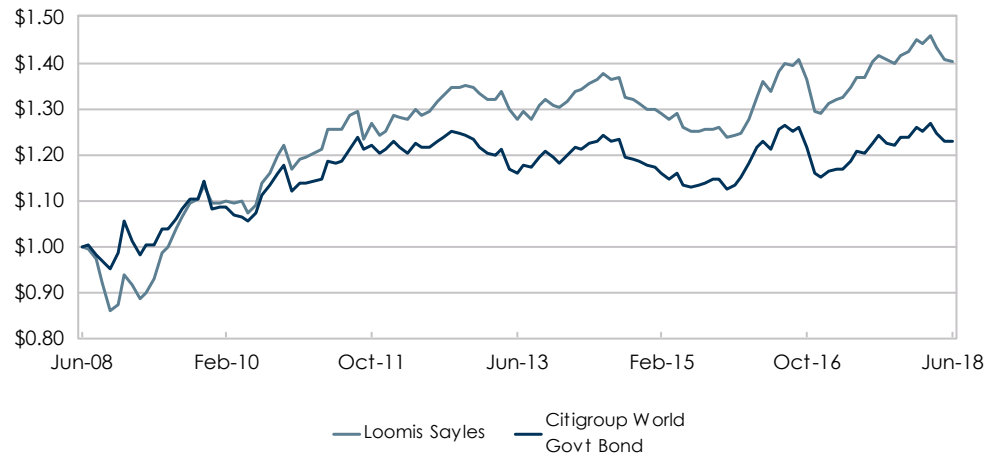
10 Year Portfolio Statistics

	Loomis Sayles	Citigroup World Govt Bond
Return (%)	3.43	2.07
Standard Deviation (%)	7.44	6.46
Sharpe Ratio	0.43	0.28

Benchmark Relative Statistics

Beta	1.03
R Squared (%)	79.26
Alpha (%)	1.35
Tracking Error (%)	3.39
Batting Average (%)	64.17
Up Capture (%)	119.74
Down Capture (%)	104.49

10 Year Growth of a Dollar

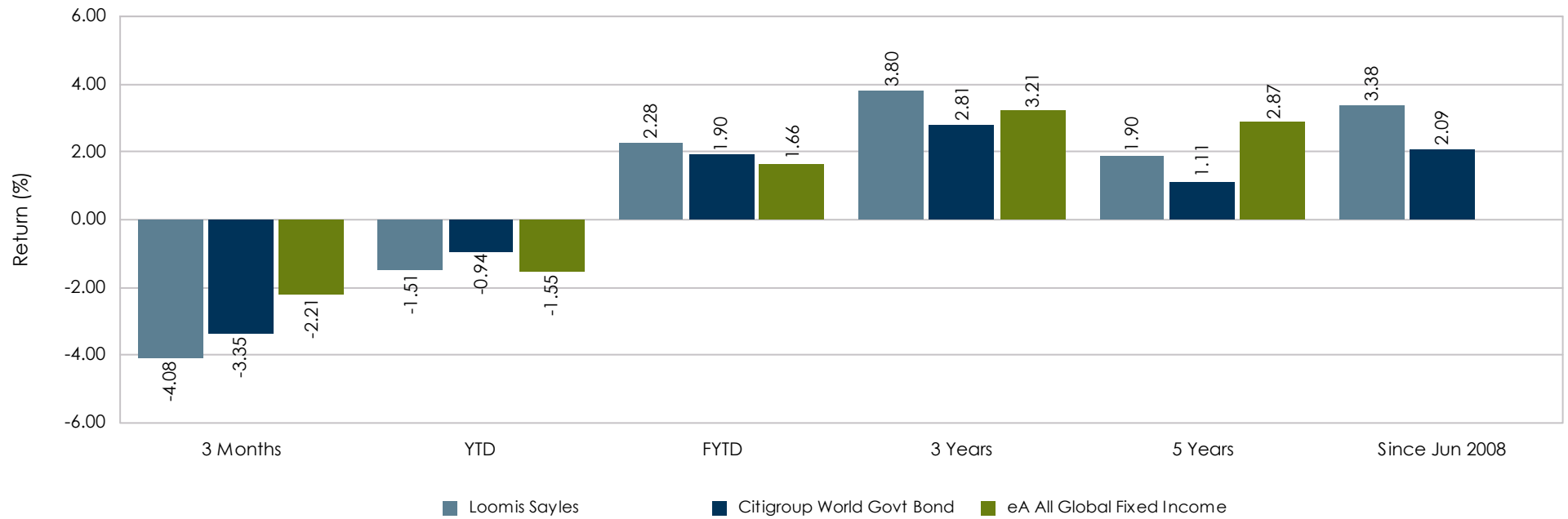


10 Year Return Analysis

	Loomis Sayles	Citigroup World Govt Bond
Number of Months	120	120
Highest Monthly Return (%)	7.16	7.11
Lowest Monthly Return (%)	-6.59	-5.03
Number of Positive Months	73	67
Number of Negative Months	47	53
% of Positive Months	60.83	55.83

Loomis Sayles

For the Periods Ending June 30, 2018

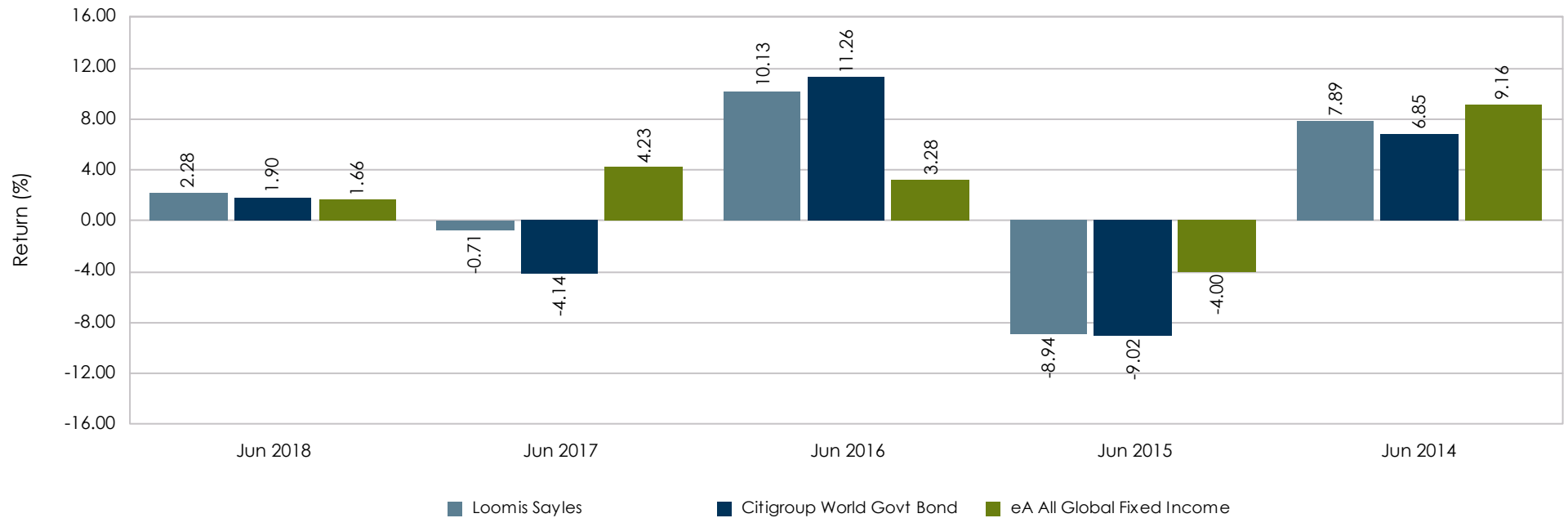


Ranking	75	49	36	34	68
5th Percentile	0.92	1.60	5.02	6.06	6.24
25th Percentile	-0.19	-0.28	2.85	4.28	4.40
50th Percentile	-2.21	-1.55	1.66	3.21	2.87
75th Percentile	-4.09	-3.02	0.69	2.32	1.46
95th Percentile	-6.78	-5.19	-1.80	-0.88	-0.43
Observations	662	662	660	620	538

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 June



Ranking	36	86	6	76	62
5th Percentile	5.02	13.53	10.59	3.66	19.51
25th Percentile	2.85	8.43	6.47	1.12	12.27
50th Percentile	1.66	4.23	3.28	-4.00	9.16
75th Percentile	0.69	1.04	0.60	-8.71	6.70
95th Percentile	-1.80	-2.90	-6.28	-16.84	2.80
Observations	660	708	693	673	662

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

For the Period Ending June 30, 2018

Summary of Cash Flows for 6 Months

Cash Outflows	Cash Inflows	Net Cash Flows
-3,000,000	3,496,493	496,493

Summary of Portfolio Inception to Date

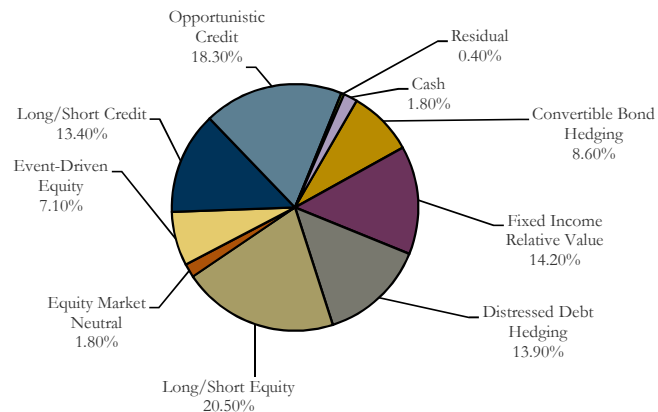
	Inception Date	Committed	Drawn to Date	Remaining Commitment	Distributions to Date	Adjusted Ending Value	Total Value	Total Value to Paid-in
Total	Sep-16	90,000,000	31,882,292	58,820,986	5,609,361	29,706,333	35,315,694	1.11x
Mezzanine	Jan-17	20,000,000	12,882,292	7,142,008	3,525,244	11,102,073	14,627,317	1.14x
Newstone Capital Partners III	Jan-17	20,000,000	12,882,292	7,142,008	3,525,244	11,102,073	14,627,317	1.14x
Other	Sep-16	70,000,000	19,000,000	51,678,978	2,084,117	18,604,260	20,688,377	1.09x
LBC Credit Partners Fund IV	Sep-16	40,000,000	19,000,000	21,678,978	2,084,117	18,604,260	20,688,377	1.09x
Apollo Accord II	Jun-18	30,000,000	-	30,000,000	-	-	-	-

PAAMCO

For the Periods Ending June 30, 2018

Sector Allocation

Market Value: \$130,350,680



Strategy

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

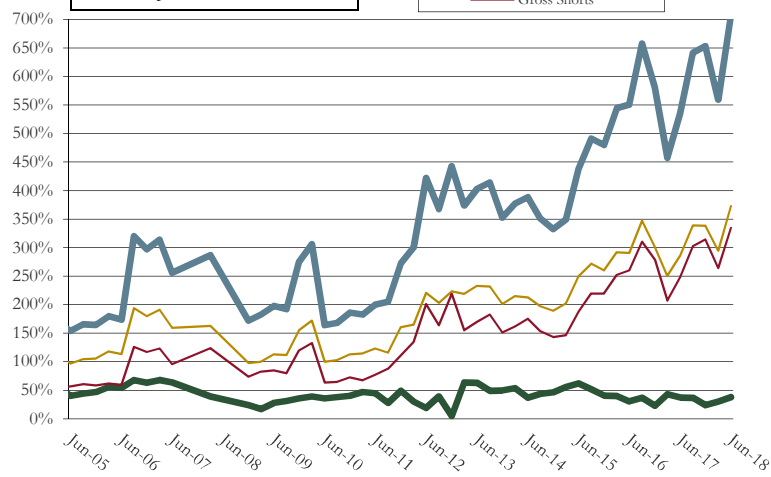
Objectives and Constraints

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

Historical Net & Gross Exposure

Historical Average	
Gross Exposure	317.52%
Net Exposure	42.53%

Net Exposure	
Gross Exposure	
Gross Longs	
Gross Shorts	



Exposure

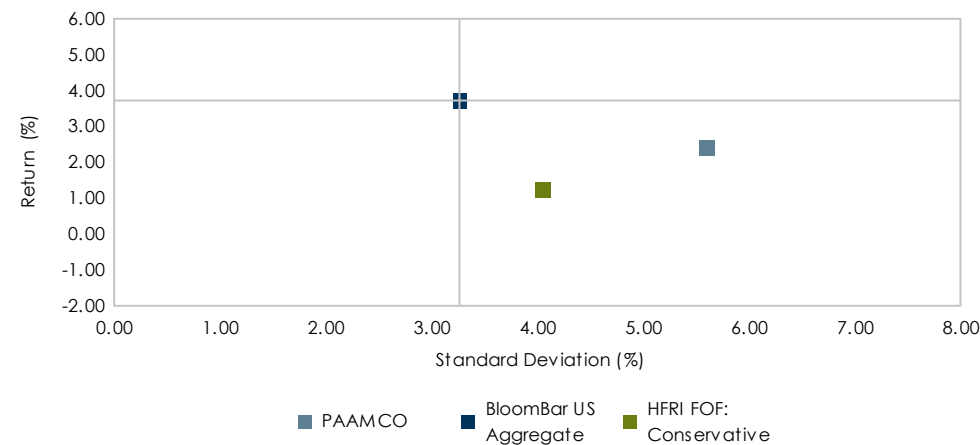
- Net Exposure: 38.21%
- Gross Exposure: 707.41%

Characteristic data provided by manager.

PAAMCO

For the Periods Ending June 30, 2018

10 Year Risk / Return



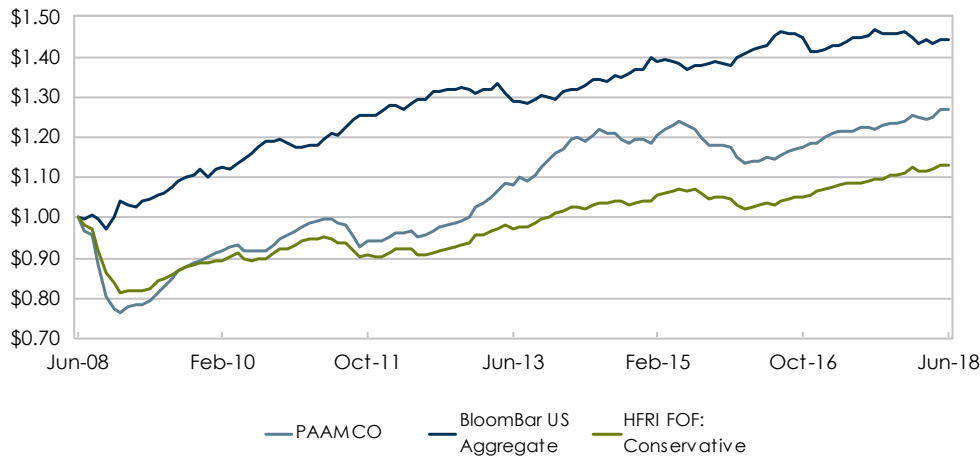
10 Year Portfolio Statistics

	PAAMCO	BloomBar US Aggregate	HFRI FOF: Conservative
Return (%)	2.40	3.72	1.22
Standard Deviation (%)	5.60	3.27	4.06
Sharpe Ratio	0.38	1.06	0.24

Benchmark Relative Statistics

Beta	0.04	1.30
R Squared (%)	0.05	88.63
Alpha (%)	2.42	0.86
Tracking Error (%)	6.42	2.24
Batting Average (%)	59.17	60.83
Up Capture (%)	40.86	134.69
Down Capture (%)	10.93	113.59

10 Year Growth of a Dollar

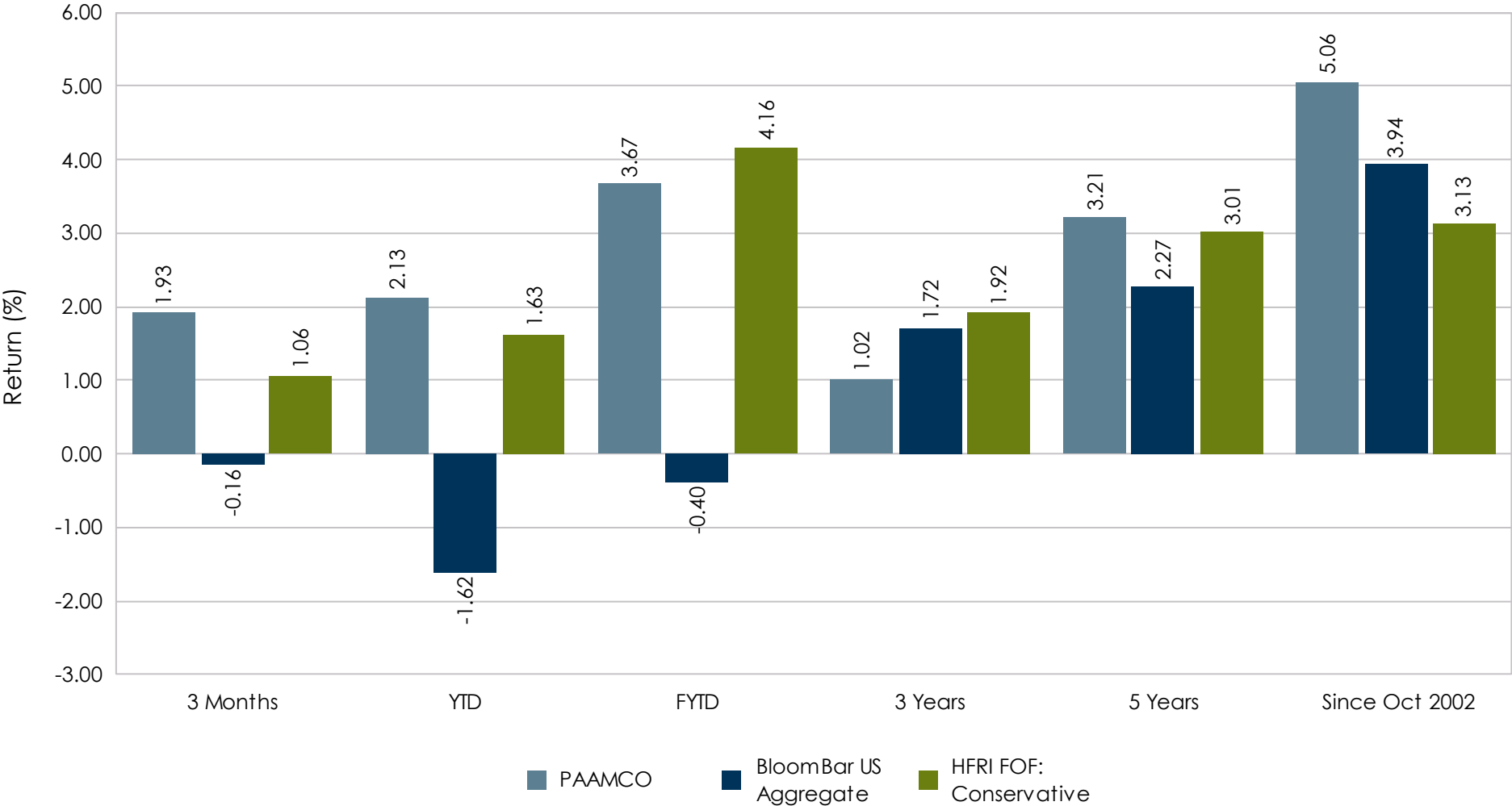


10 Year Return Analysis

	PAAMCO	BloomBar US Aggregate	HFRI FOF: Conservative
Number of Months	120	120	120
Highest Monthly Return (%)	2.84	3.73	2.42
Lowest Monthly Return (%)	-9.06	-2.37	-5.91
Number of Positive Months	80	78	83
Number of Negative Months	40	42	37
% of Positive Months	66.67	65.00	69.17

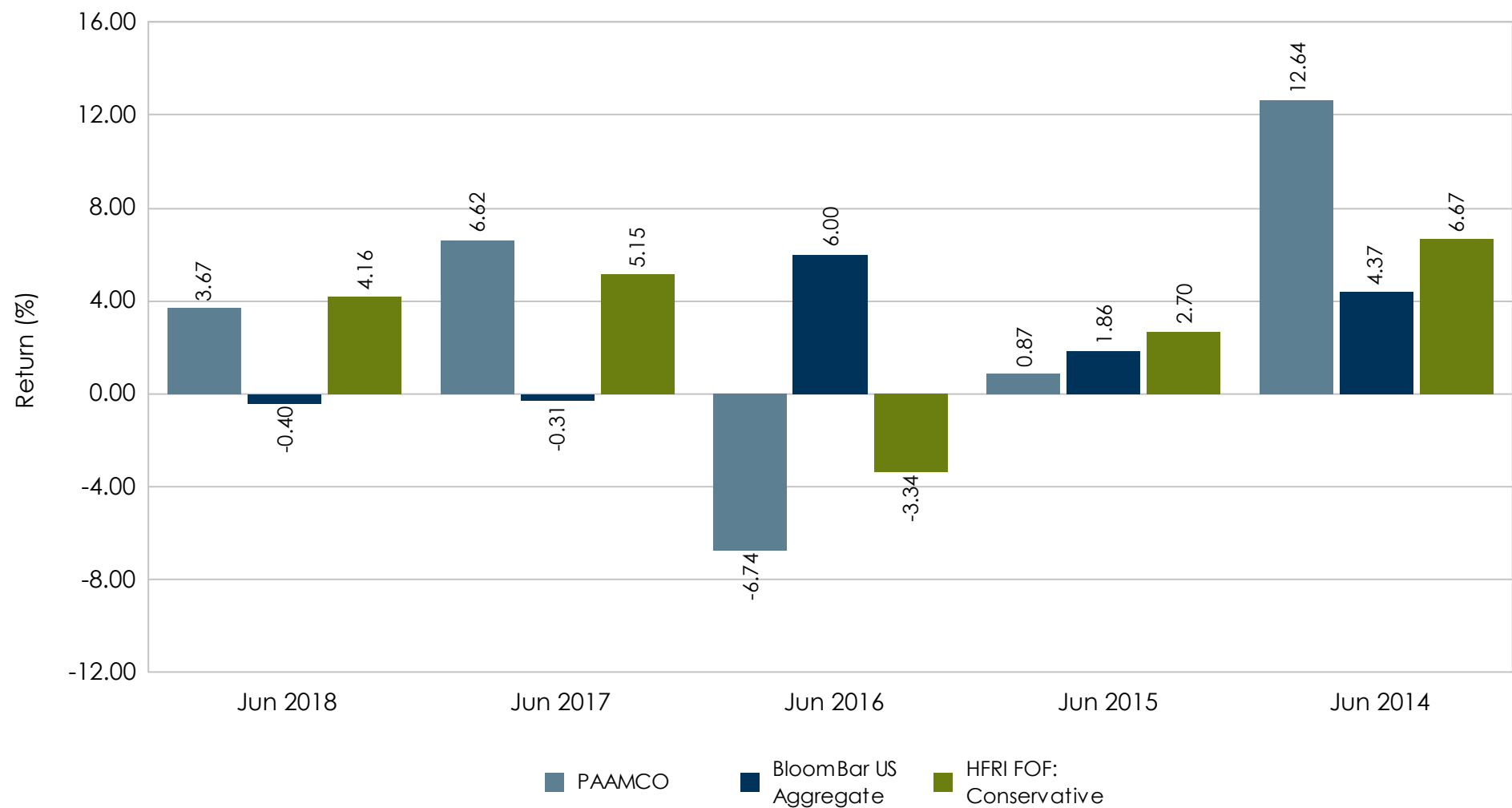
PAAMCO

For the Periods Ending June 30, 2018



PAAMCO

For the One Year Periods Ending June



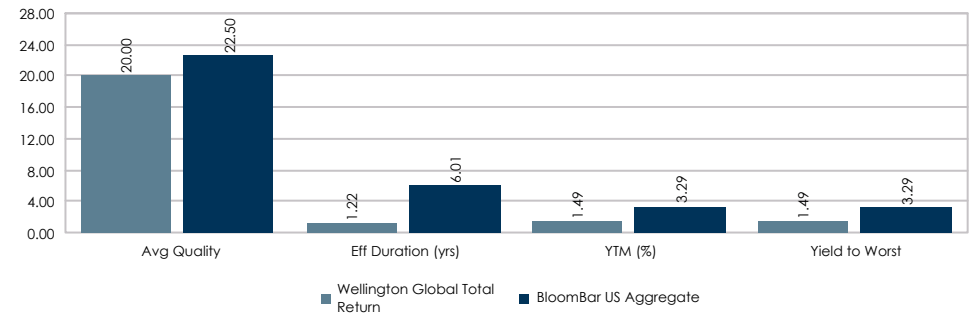
Wellington Global Total Return

For the Periods Ending June 30, 2018

Account Description

- **Strategy** Absolute Return
- **Vehicle** Non-Mutual Commingled
- **Benchmark** BloomBar US Aggregate
- **Performance Inception Date** December 2016
- **Fees** 25 bps, plus 20% of excess return beyond cash + 1%

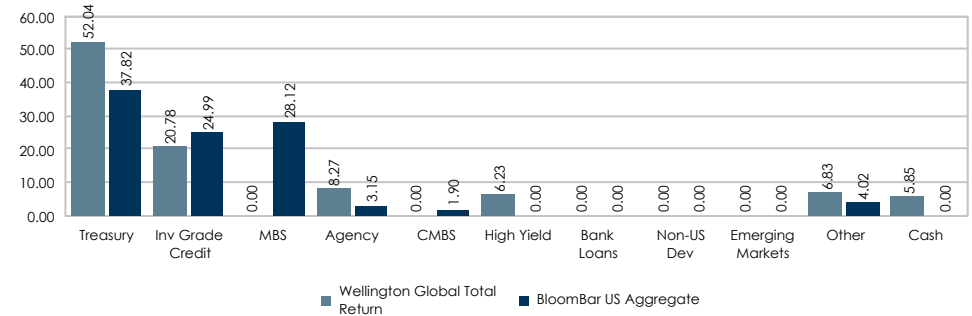
Characteristics



Performance Goals

- Outperform the LIBOR 3 Month.
- Over rolling three year periods, rank above the median in the eA Global Unconstrained Fixed Income universe.

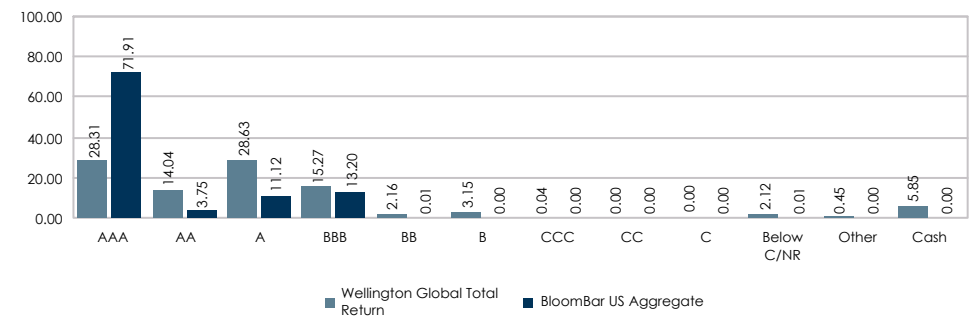
Sector Allocation



Dollar Growth Summary (\$000s)

	YTD	FYTD
Beginning Market Value	60,819	59,877
Net Additions	-77	-151
Return on Investment	2,592	3,609
Ending Market Value	63,335	63,335

Quality Allocation

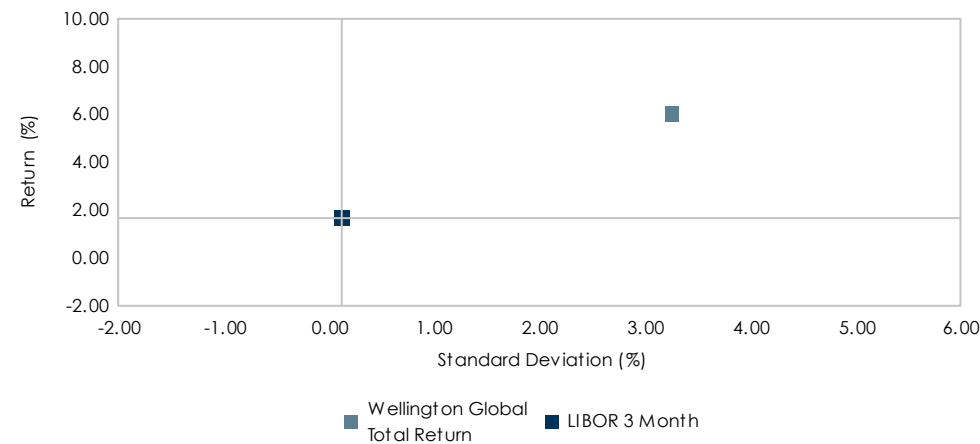


The Other sector consists of ABS, CMO, Convertibles, Municipals, Private Placements/144As and TIPS.

Wellington Global Total Return

For the Periods Ending June 30, 2018

1 Year Risk / Return



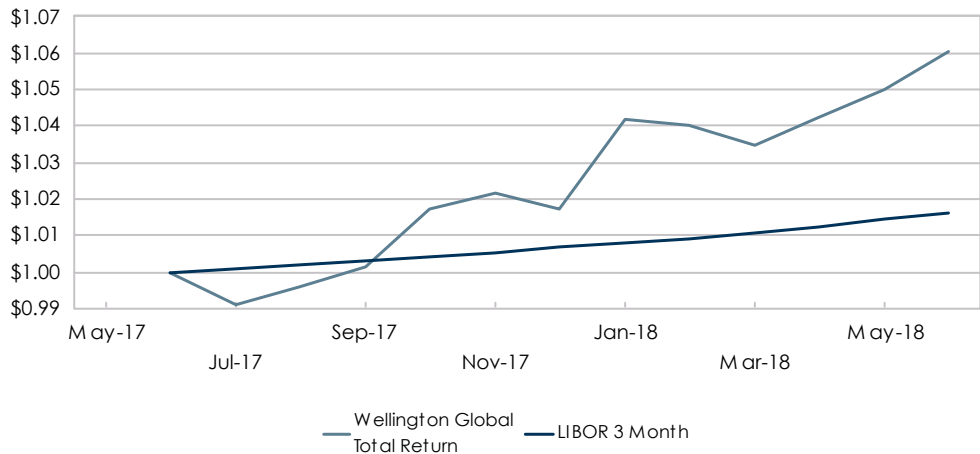
1 Year Portfolio Statistics

	Wellington Global Total Return	LIBOR 3 Month
Return (%)	6.04	1.63
Standard Deviation (%)	3.26	0.11
Sharpe Ratio	1.46	3.10

Benchmark Relative Statistics

Beta	5.28
R Squared (%)	3.46
Alpha (%)	-2.58
Tracking Error (%)	3.24
Batting Average (%)	66.67
Up Capture (%)	370.60
Down Capture (%)	

1 Year Growth of a Dollar

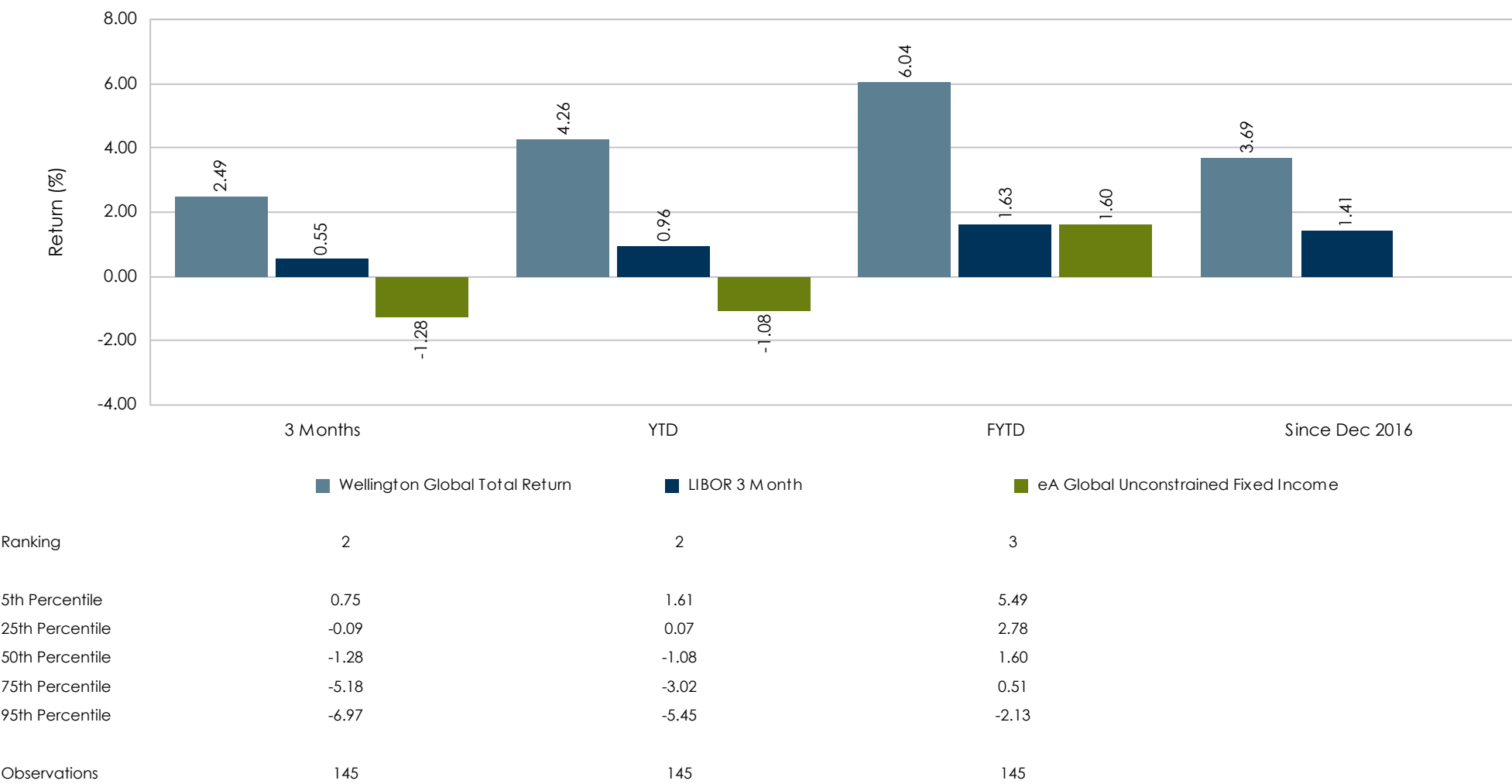


1 Year Return Analysis

	Wellington Global Total Return	LIBOR 3 Month
Number of Months	12	12
Highest Monthly Return (%)	2.45	0.20
Lowest Monthly Return (%)	-0.87	0.10
Number of Positive Months	8	12
Number of Negative Months	4	0
% of Positive Months	66.67	100.00

Wellington Global Total Return

For the Periods Ending June 30, 2018



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.

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Real Assets Manager Performance

JP Morgan Strategic Property

For the Periods Ending June 30, 2018

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 85 bps, next \$250M at 80 bps, balance at 75 bps

Performance Goals

- Outperform the NFI ODCE Net.

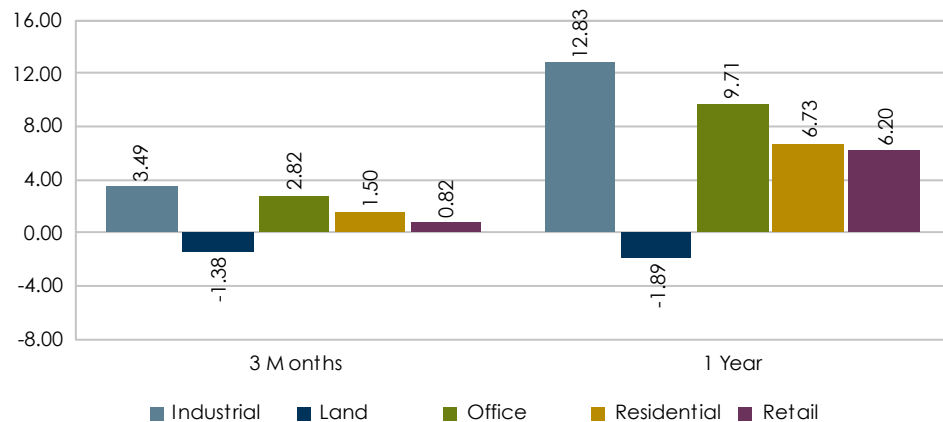
Account Information

- **Ending Market Value** \$123,954,500

Fund Information

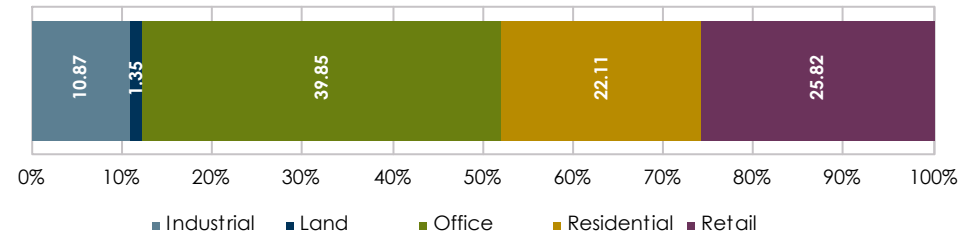
- **Gross Market Value** \$42,129,523,204
- **Net Market Value** \$32,360,689,604
- **Cash Balance of Fund** \$964,530,632
- **# of Properties** 163
- **# of Participants** 425

Returns by Property Type (%)

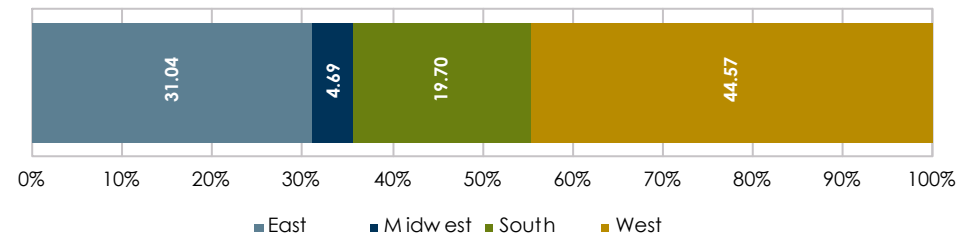


Allocations

Property Type

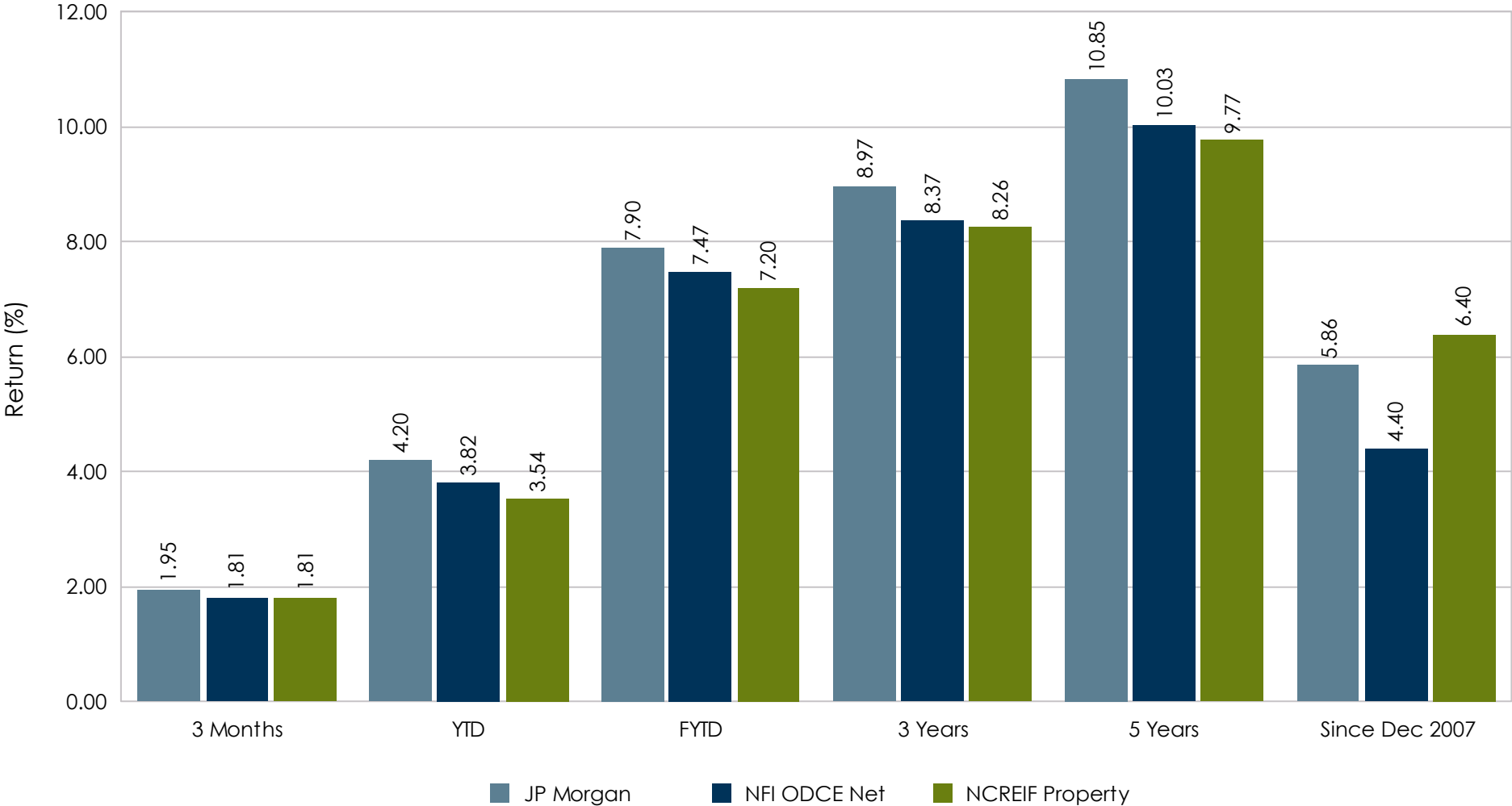


Geographic Region

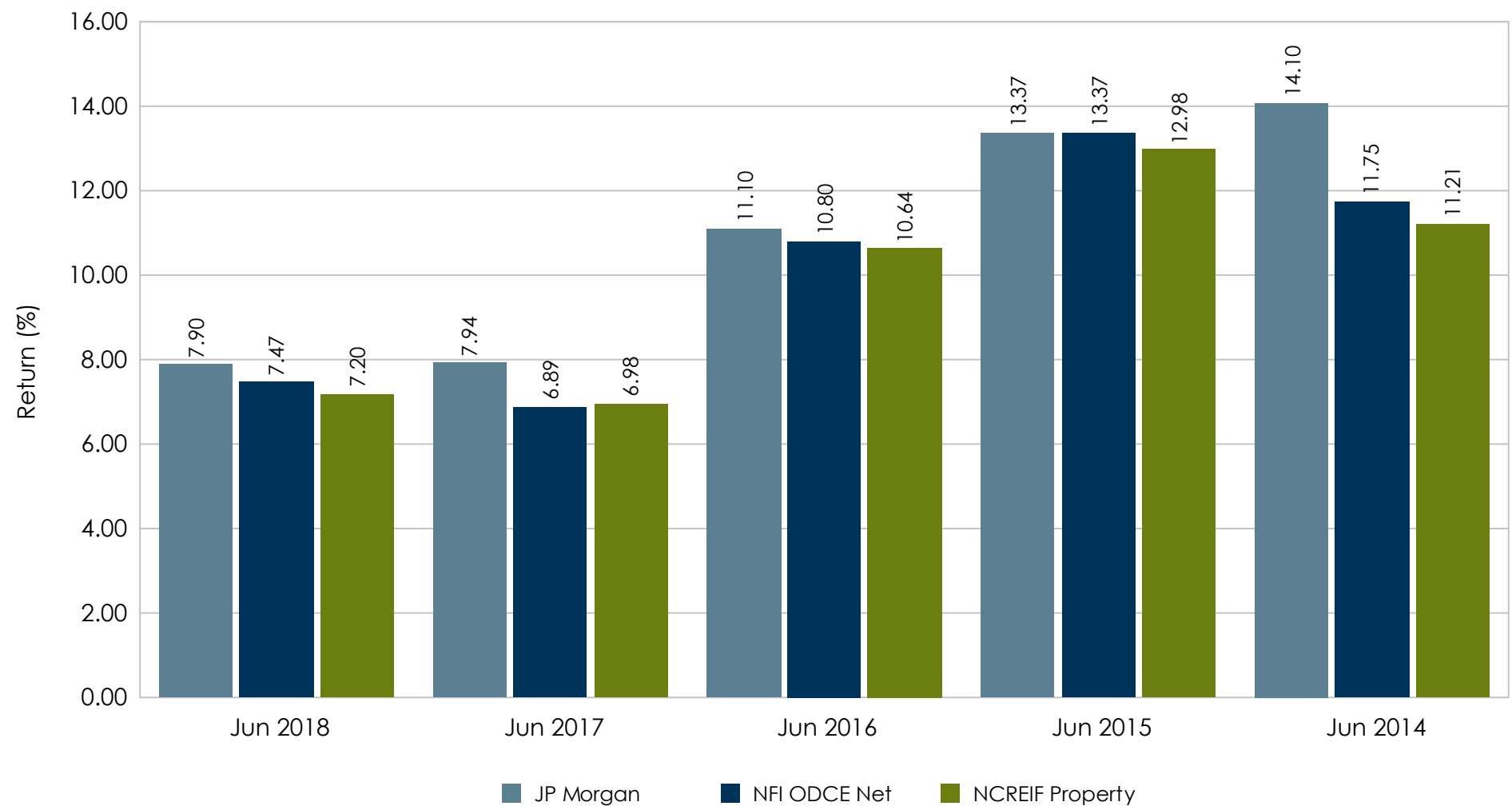


JP Morgan Strategic Property

For the Periods Ending June 30, 2018



JP Morgan Strategic Property
For the One Year Periods Ending June



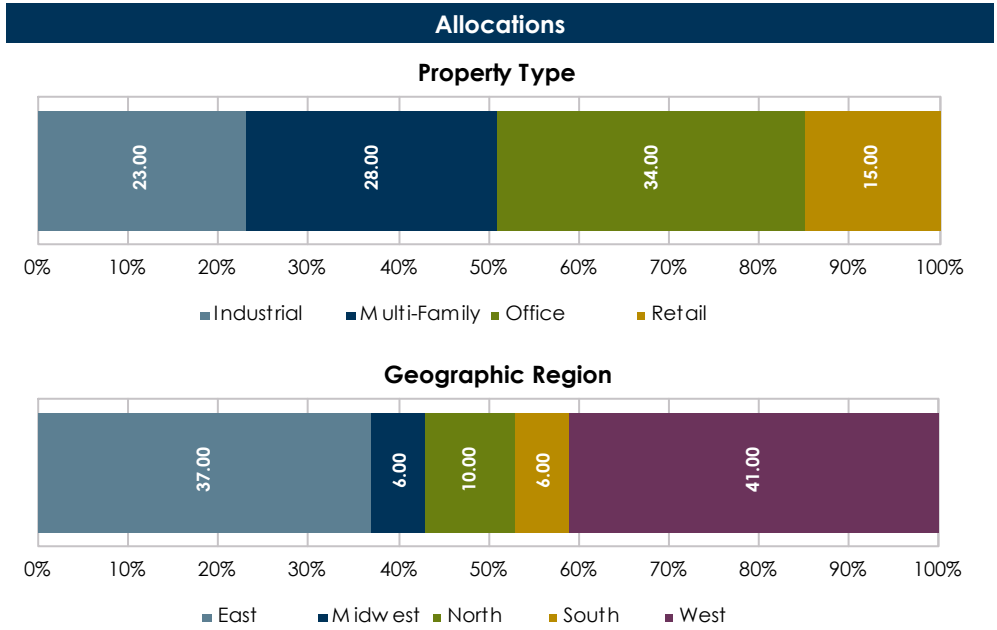
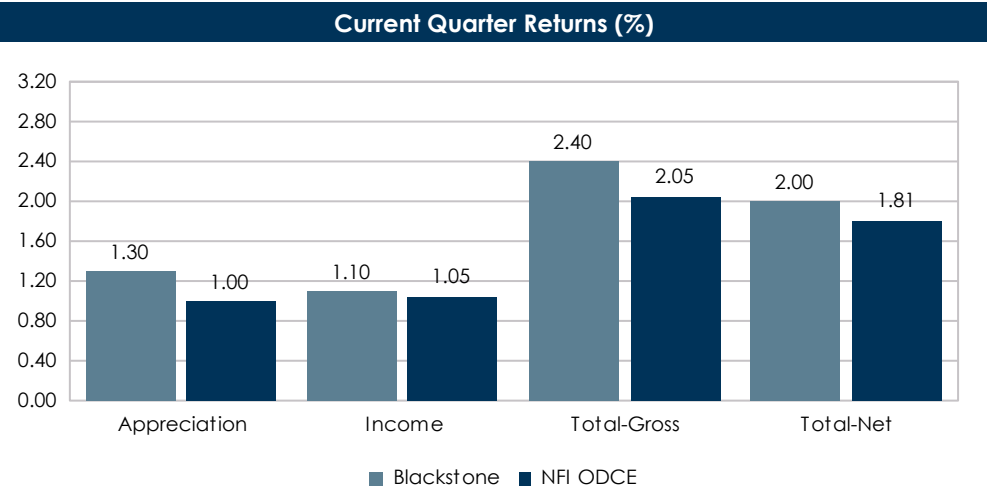
Blackstone Property Partners
For the Periods Ending June 30, 2018

Account Description
■ Strategy Core Real Estate
■ Vehicle Limited Partnership
■ Benchmarks NFI ODCE Net and NCREIF Property
■ Performance Inception Date January 2015

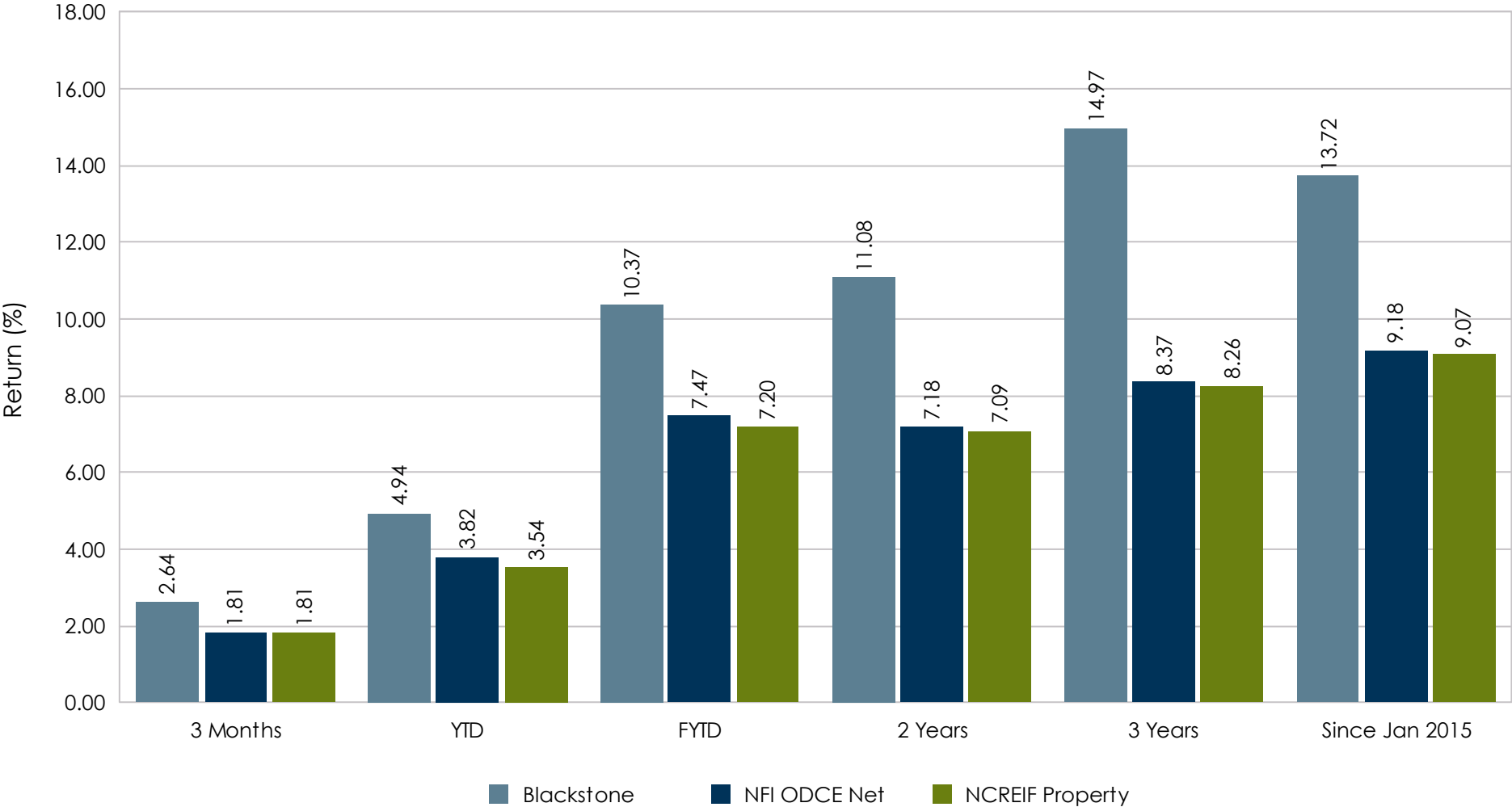
Account Information
■ Ending Market Value \$40,284,681

Fund Information
■ Net Market Value \$8,300,000,000
■ # of Properties 24

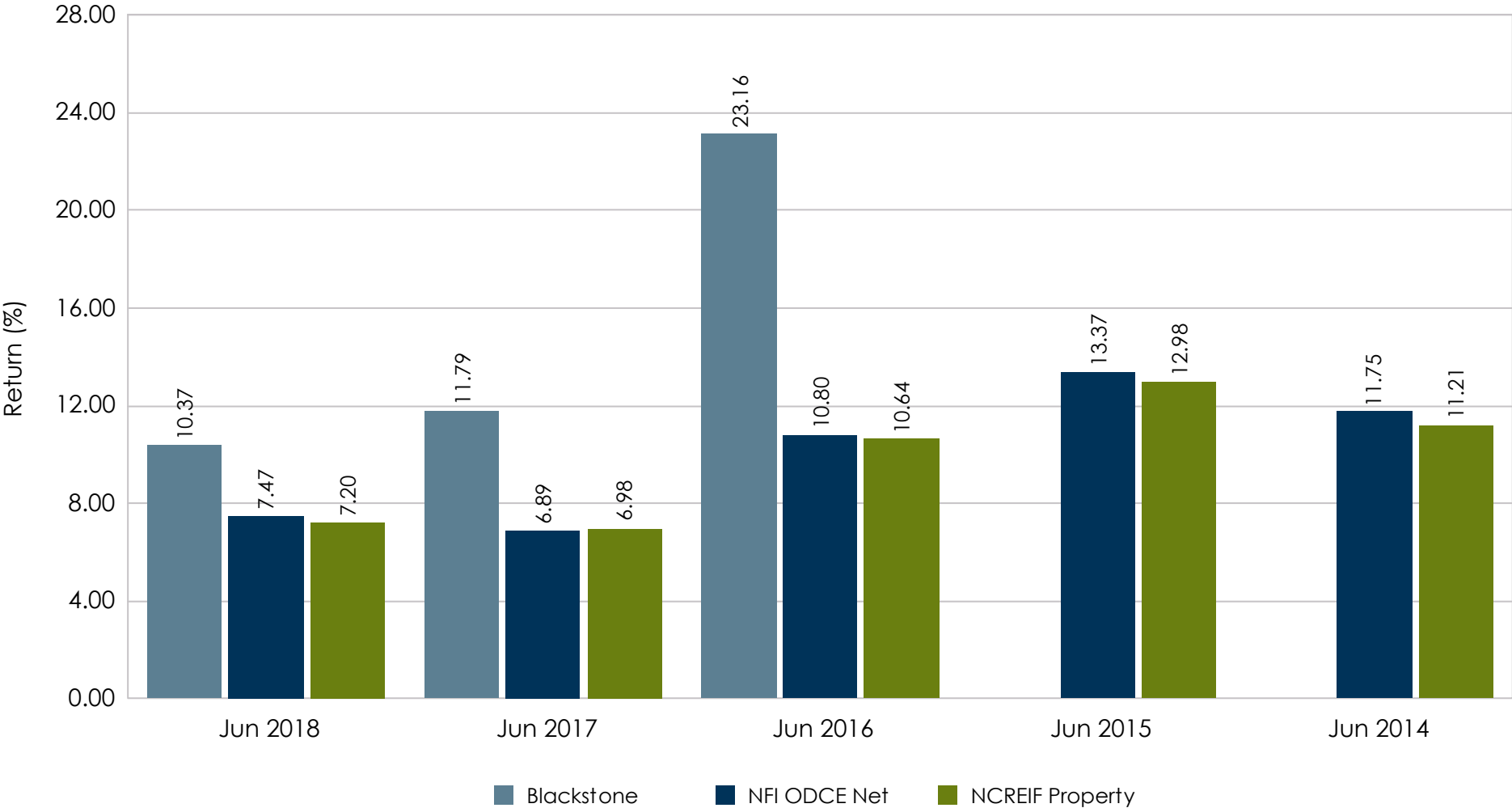
Performance Goals
■ Outperform the NFI ODCE Net and NCREIF Property.



Blackstone Property Partners
For the Periods Ending June 30, 2018



Blackstone Property Partners
For the One Year Periods Ending June



Private Real Estate

For the Period Ending June 30, 2018

Summary of Cash Flows for 6 Months

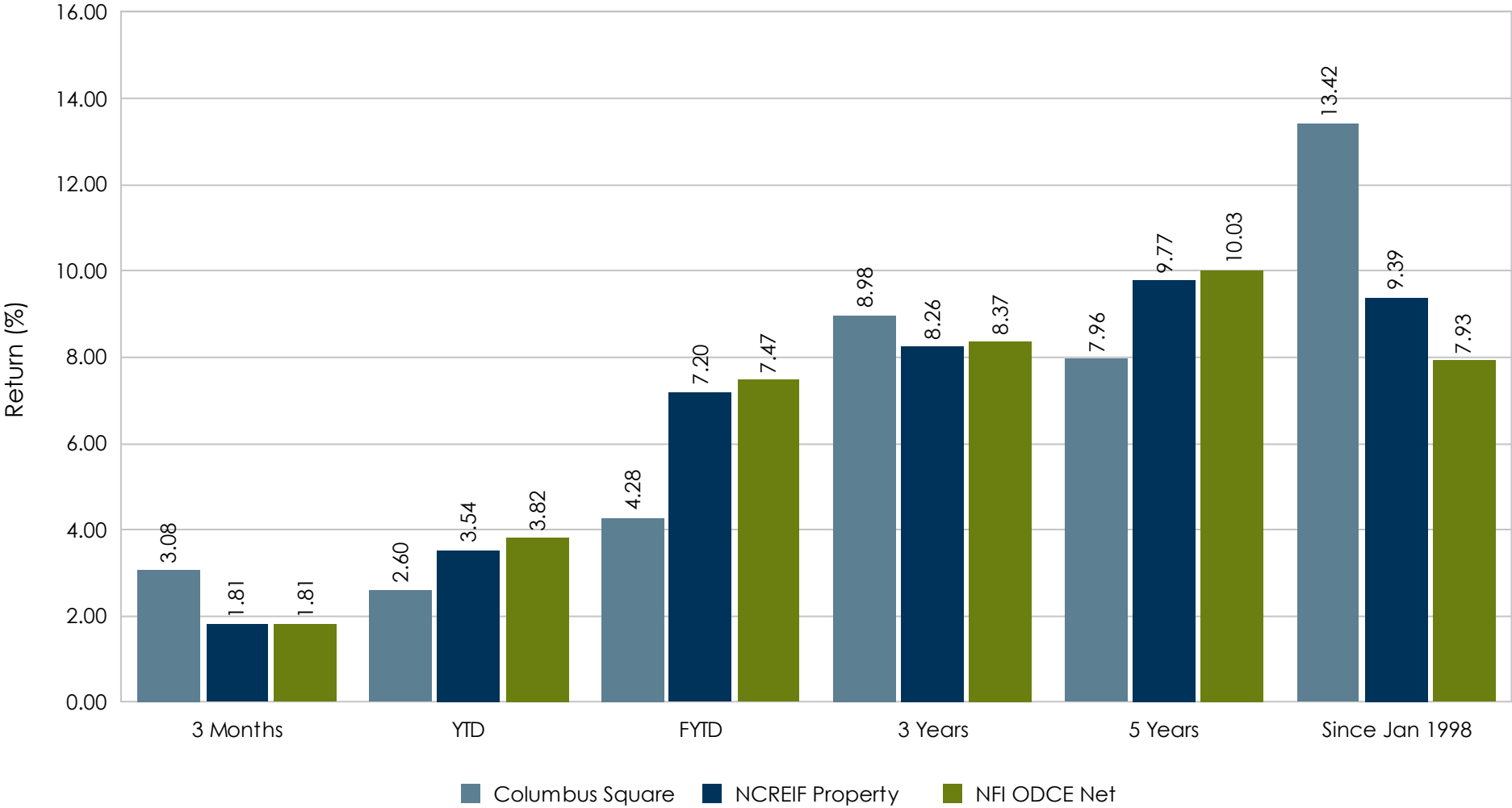
Cash Outflows	Cash Inflows	Net Cash Flows
-1,028,585	9,535,447	8,506,862

Summary of Portfolio Inception to Date

	Inception Date	Committed	Drawn to Date	Remaining Commitment	Distributions to Date	Adjusted Ending Value	Total Value	Total Value to Paid-in
Total	Aug-11	92,500,000	77,038,804	25,604,218	51,575,596	52,386,911	103,962,507	1.35x
Real Estate	Aug-11	92,500,000	77,038,804	25,604,218	51,575,596	52,386,911	103,962,507	1.35x
Siguler Guff Dist. Real Estate Opp.	Aug-11	10,000,000	8,608,587	1,650,773	8,140,931	7,008,907	15,149,838	1.76x
TA Associates Realty X	Jan-13	20,000,000	20,000,000	-	17,128,919	12,585,908	29,714,827	1.49x
Cerberus Real Estate Fund III	Jul-13	20,000,000	25,185,319	3,552,375	19,562,053	14,102,245	33,664,298	1.34x
Hall Capital Fund III	Nov-14	7,500,000	6,959,483	540,517	2,009,312	5,656,570	7,665,882	1.10x
Siguler Guff Dist. Real Estate Opp. II	Dec-14	10,000,000	8,037,577	1,962,423	2,922,815	7,445,280	10,368,095	1.29x
Cerberus Institutional Real Estate Partners 4	Jun-16	15,000,000	7,347,838	8,798,130	1,811,566	4,575,866	6,387,432	0.87x
Siguler Guff Dist. Real Estate Opp. II B	Dec-17	10,000,000	900,000	9,100,000	-	1,012,135	1,012,135	1.12x

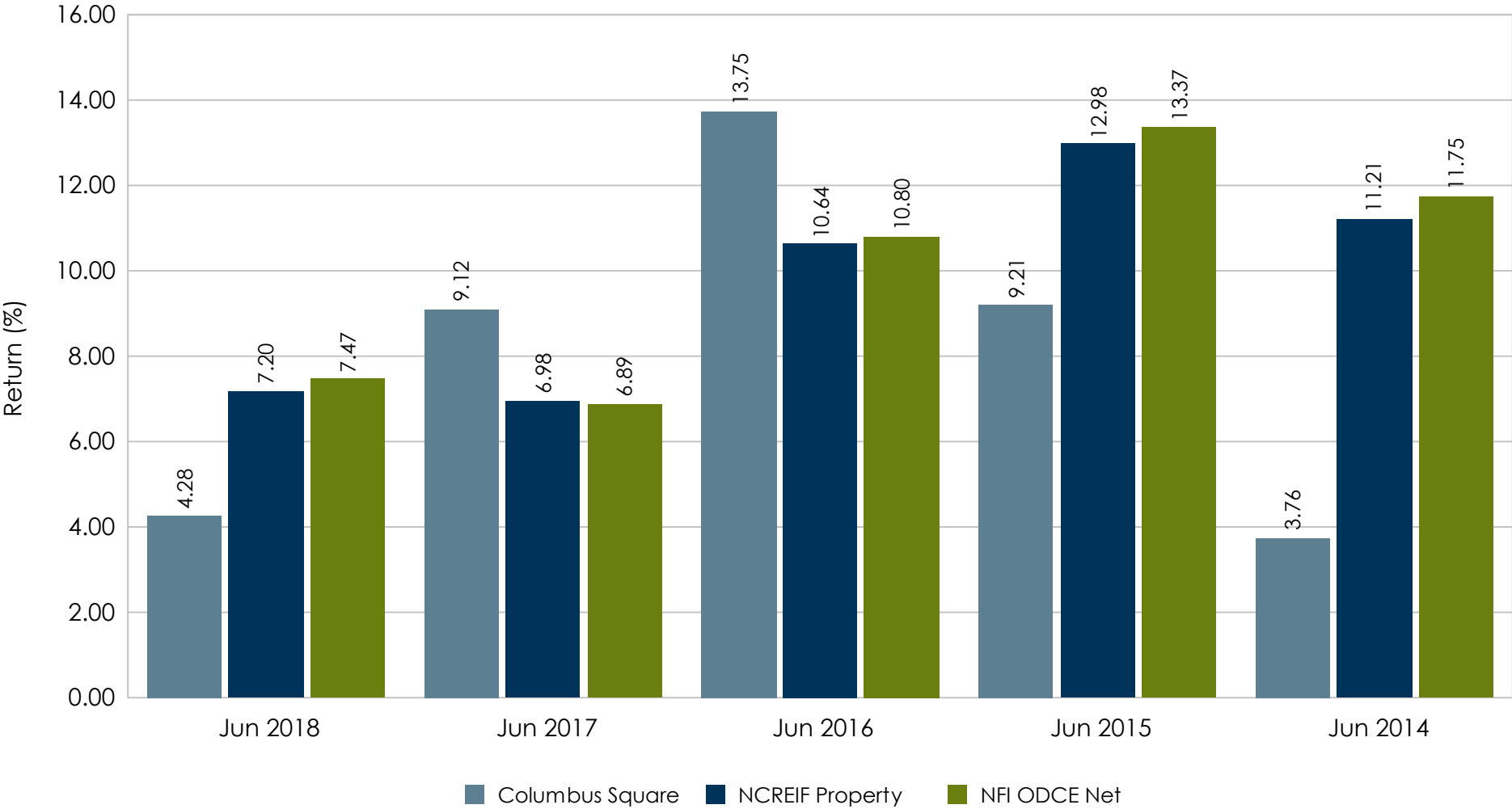
Columbus Square

For the Periods Ending June 30, 2018



Columbus Square

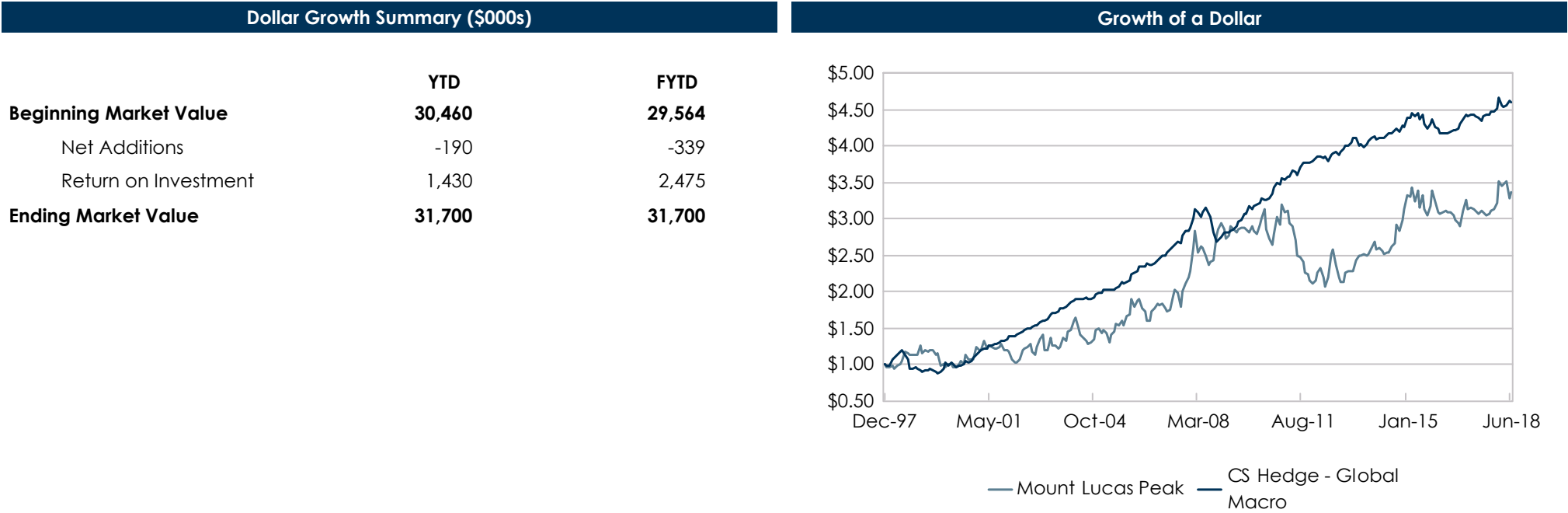
For the One Year Periods Ending June



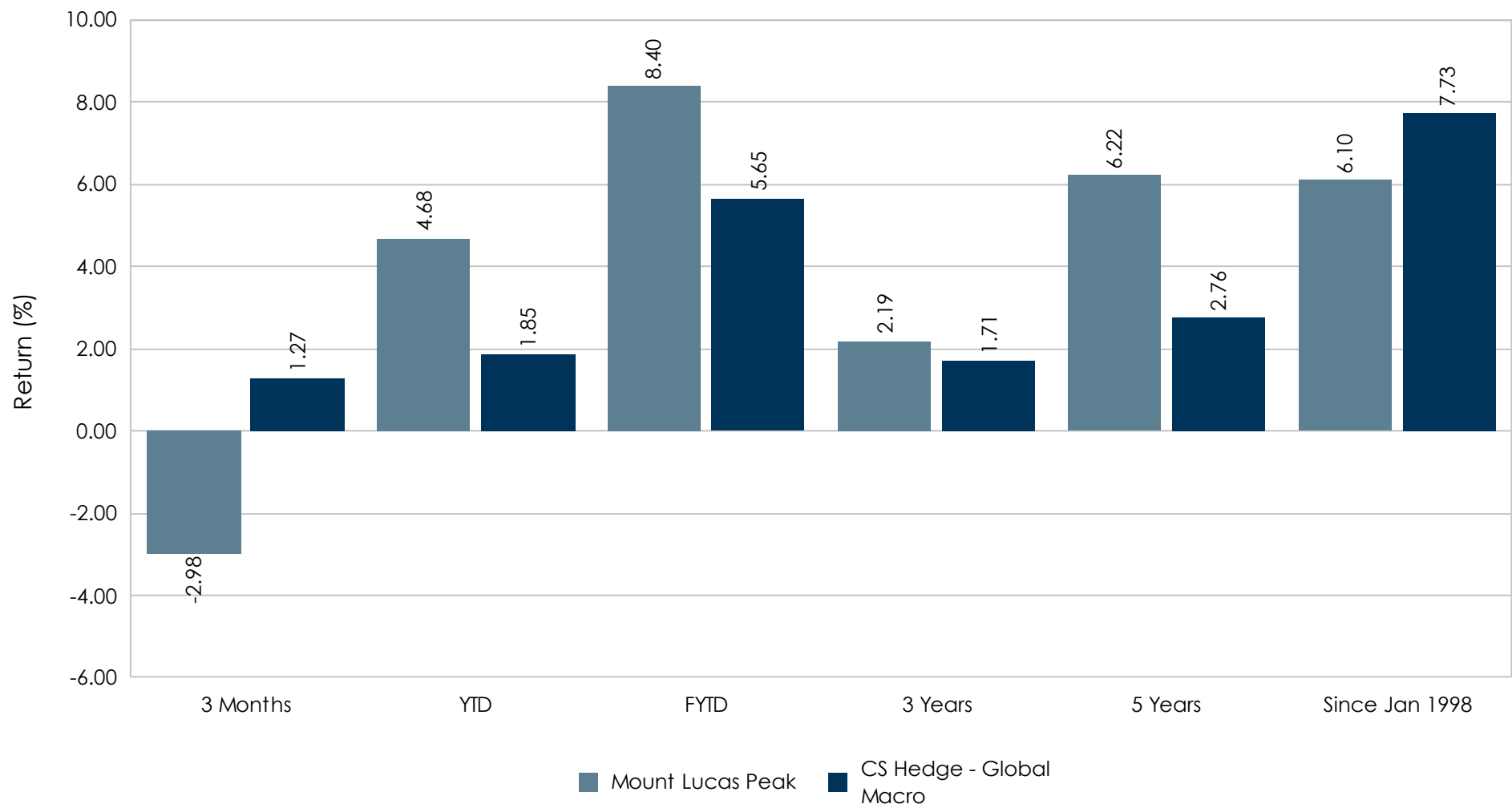
Mount Lucas Peak Partners

For the Periods Ending June 30, 2018

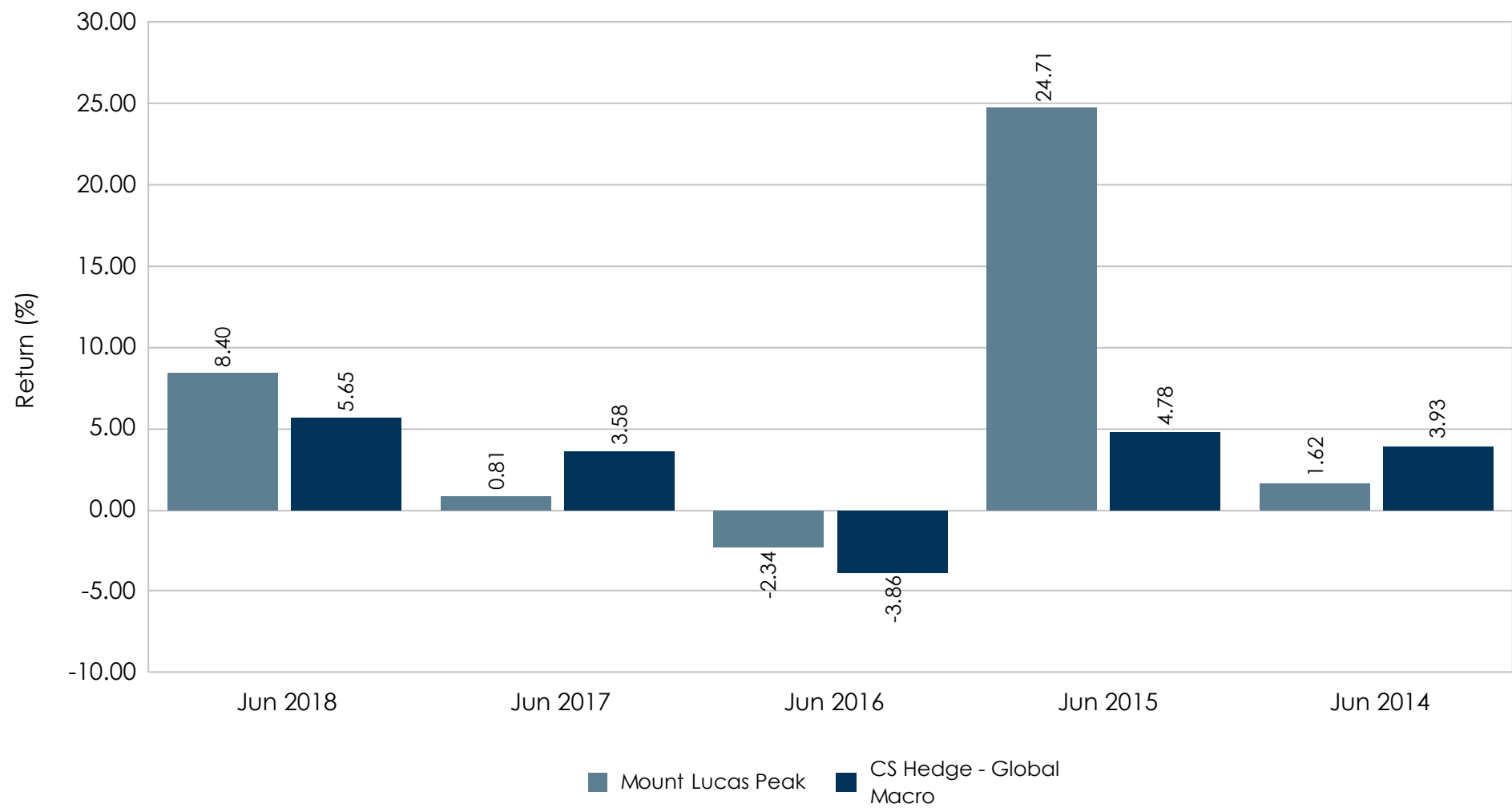
Account Description	Performance Goals
<ul style="list-style-type: none">■ Strategy Commodities■ Vehicle Non-Mutual Commingled■ Benchmark CS Hedge - Global Macro■ Performance Inception Date January 1998■ Fees 100 bps and an annual incentive fee	<ul style="list-style-type: none">■ Outperform the CS Hedge - Global Macro.



Mount Lucas Peak Partners
For the Periods Ending June 30, 2018



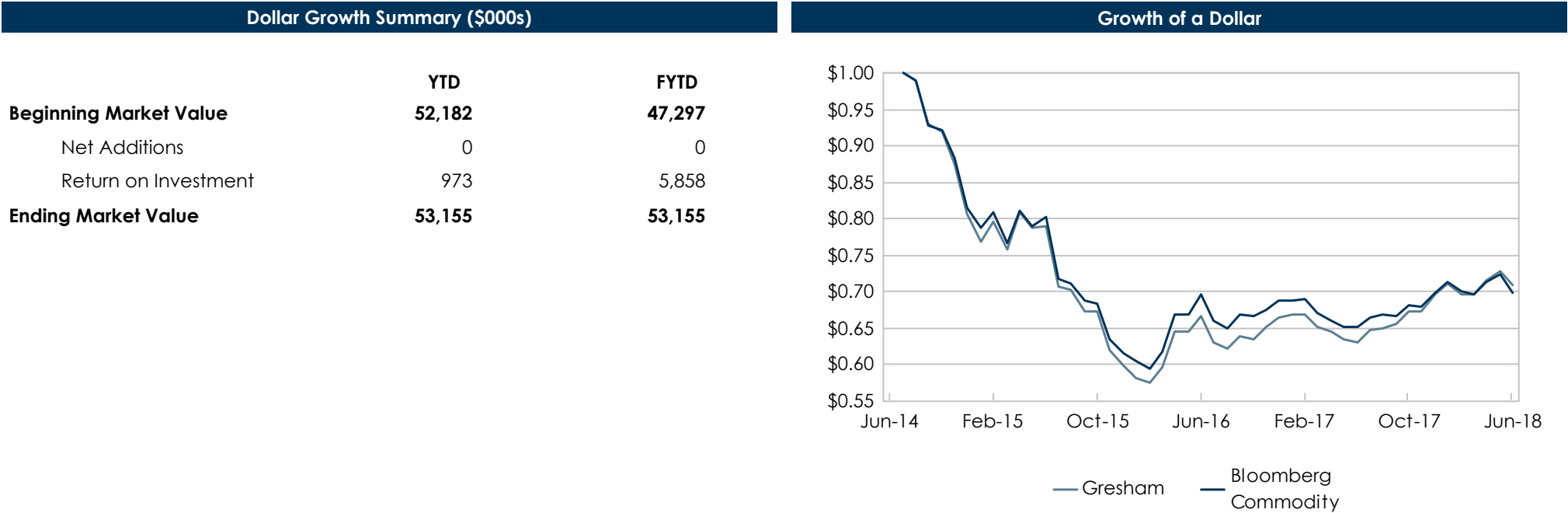
Mount Lucas Peak Partners
For the One Year Periods Ending June



Gresham Tap Fund

For the Periods Ending June 30, 2018

Account Description	Performance Goals
<ul style="list-style-type: none">▪ Strategy Commodities▪ Vehicle Non-Mutual Commingled▪ Benchmark Bloomberg Commodity▪ Performance Inception Date August 2014▪ Fees 75 bps	<ul style="list-style-type: none">▪ Outperform the Bloomberg Commodity over a complete market cycle.



Gresham TAP Fund
Attribution Analysis and Bloomberg Commodity Comparison

For the Periods Ending June 30, 2018

	Portfolio Weights (%)		QTD ROI (%)		ROI DIFF		YTD ROI (%)		ROI DIFF	
	TAP	Bloomberg	TAP	Bloomberg	Abs	Est. Wgt'd	TAP	Bloomberg	Abs	Est. Wgt'd
Total Gross Return	100.00	100.00	1.69	-0.07	--	1.76	1.48	-0.86	--	2.34
AGRICULTURE	14.61	22.14	-11.54	-10.97	-0.57	0.76	-4.35	-4.65	0.29	0.35
Corn	3.65	6.19	-10.86	-11.42	0.56	0.33	-3.49	-4.07	0.58	0.11
Soybean	4.63	5.33	-17.49	-18.40	0.92	0.18	-10.62	-12.31	1.70	0.18
Wheat (CBOT)	2.02	3.74	3.67	4.21	-0.54	-0.07	6.72	7.14	-0.43	-0.10
Wheat (KC)	0.71	1.44	-2.14	-2.07	-0.06	0.02	3.72	3.82	-0.10	-0.01
Wheat (MGE)	0.18	--	-9.85	--	-9.85	-0.02	-16.90	--	-16.90	-0.04
Soybean Meal	2.52	3.07	-14.15	-15.85	1.70	0.16	3.64	1.18	2.46	0.00
Soybean Oil	0.91	2.39	-9.54	-9.69	0.15	0.15	-13.60	-13.99	0.38	0.22
ENERGY	39.98	34.01	11.10	10.21	0.89	0.92	15.53	11.72	3.81	1.93
Crude Oil	11.85	8.51	12.40	12.70	-0.30	0.34	21.94	22.17	-0.23	0.58
Brent Crude	11.04	8.87	16.65	16.18	0.47	0.43	22.42	21.98	0.45	0.56
Heating Oil	2.44	3.92	10.00	10.00	0.00	-0.11	11.70	9.23	2.48	-0.04
Gas Oil	3.67	--	11.12	--	11.12	0.37	14.45	--	14.45	0.51
Natural Gas	6.69	8.35	2.76	3.76	-1.00	-0.14	-0.09	-3.69	3.60	0.26
Unleaded Gas (RBOB)	4.29	4.36	7.99	7.20	0.80	0.02	9.56	7.72	1.84	0.06
INDUSTRIAL METALS	19.36	16.62	-0.01	0.51	-0.52	-0.12	-7.19	-6.12	-1.07	-0.29
Aluminum	5.93	4.30	6.37	8.23	-1.86	-0.07	-6.57	-5.15	-1.41	-0.14
Copper (LME)	6.24	--	-1.77	--	-1.77	-0.11	-9.41	--	-9.41	-0.57
Copper (NY)	2.21	6.48	-3.17	-3.14	-0.03	0.14	-11.72	-11.77	0.05	0.59
Nickel	1.93	3.24	11.62	11.53	0.09	-0.14	15.76	15.76	0.00	-0.21
Zinc	2.09	2.60	-12.78	-12.52	-0.25	0.06	-13.77	-13.58	-0.19	0.06
Lead	0.97	--	0.59	--	0.59	0.01	-3.24	--	-3.24	-0.02
LIVESTOCK	7.46	5.99	4.27	4.97	-0.70	-0.22	-5.53	-5.93	0.40	-0.21
Live Cattle	4.32	3.80	5.72	6.37	-0.66	-0.18	-4.62	-5.07	0.45	-0.19
Lean Hogs	1.71	2.19	-2.91	2.52	-5.43	0.06	-11.73	-6.83	-2.90	-0.04
Feeder Cattle	1.42	--	8.46	--	8.46	-0.10	0.91	--	0.91	0.01
PRECIOUS METALS	12.29	14.56	-4.53	-4.90	0.37	0.14	-5.63	-5.77	0.14	0.13
Gold	8.73	11.17	-5.94	-5.93	0.00	0.12	-5.40	-5.41	0.01	0.12
Silver	2.36	3.39	-1.41	-1.32	-0.09	0.01	-6.94	-6.83	-0.11	0.06
Platinum	0.59	--	-0.09	--	-0.09	0.00	-1.16	--	-1.16	0.00
Palladium	0.60	--	1.09	--	1.09	0.01	-9.49	--	-9.49	-0.05
FOODS & FIBERS	6.41	6.67	-2.17	-2.33	0.15	0.02	-6.56	-12.54	5.98	0.45
Cotton	1.62	1.54	5.05	5.64	-0.59	-0.01	8.55	7.96	0.59	0.00
Sugar	1.89	2.83	-3.38	-3.54	0.16	0.03	-20.60	-21.08	0.49	0.21
White Sugar	0.21	--	0.00	--	0.00	0.00	-8.41	--	-8.41	-0.02
Coffee	1.61	2.30	-5.84	-5.99	0.15	0.05	-13.49	-13.47	-0.02	0.10
Coffee (Robusta)	0.34	--	-3.48	--	-3.48	-0.01	-1.58	--	-1.58	0.00
Cocoa	0.74	--	-4.66	--	-4.66	-0.04	26.74	--	26.74	0.16

Data provided by manager.

-A composite weighted return is shown for Wheat, Crude Oil, Heating Oil and Copper. Wheat (KC), Brent Crude, Gas Oil, Copper (NY) and Cocoa were added to TAP's portfolio in the middle of January 2008. Wheat (MGE) was added to TAP's portfolio in the middle of January 2010.

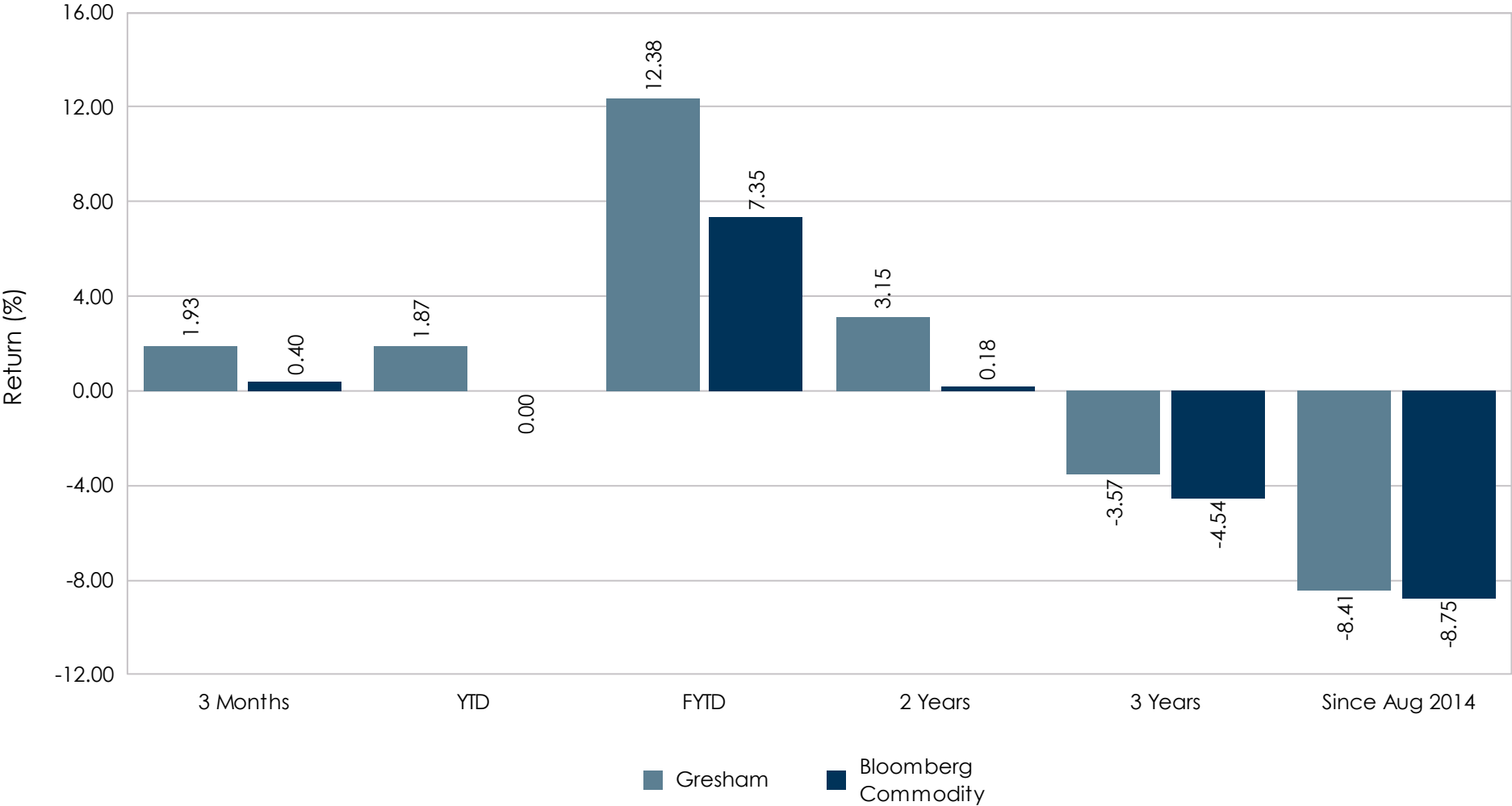
-MTD ROI % and YTD ROI% columns show TAP and Bloomberg individual commodity returns.

-'Abs' is the absolute difference in ROI between TAP and Bloomberg for each commodity. 'Est. Wgt'd' is the portfolio effect (TAP's return x TAP's period avg. wgt. - Bloomberg's return x Bloomberg's period avg. wgt.). 'Average Weights' is calculated using month-end weights.

-All returns are estimates. Total Gross Return is gross of fees and includes cash returns. All indicated TAP returns are net of commissions and gross of management fees.

Gresham Tap Fund

For the Periods Ending June 30, 2018



Appendix

Definitions of Statistical Measures

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

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

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

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

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

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

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

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

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

Quality Rating Scale

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

Historical Benchmark Composition

Total Fund Policy

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

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