

June 30, 2019



## City of Fort Pierce Retirement and Benefit System

Investment Measurement Service  
Quarterly Review

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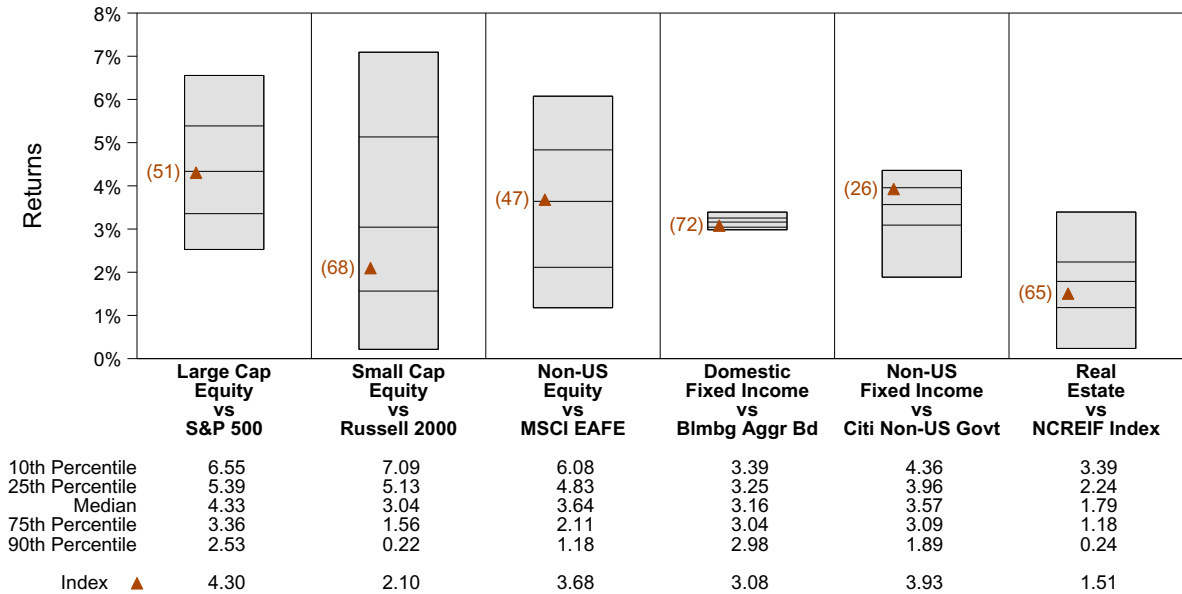
## Market Overview

### Active Management vs Index Returns

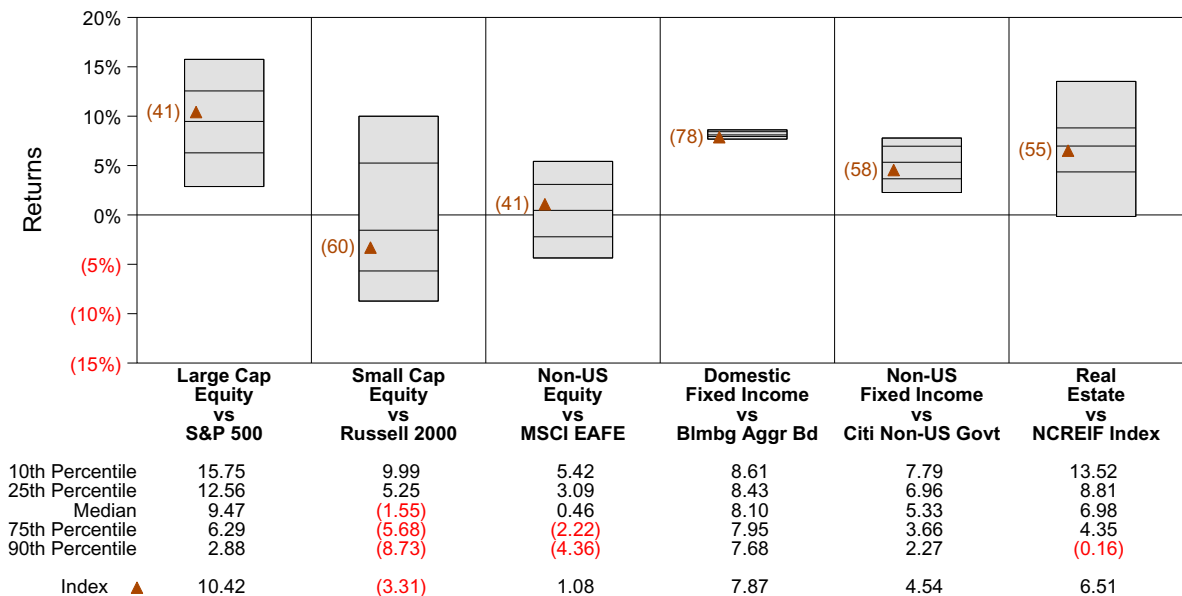
#### Market Overview

The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also shown for each asset class for comparison purposes. As an example, the first bar in the upper chart illustrates the range of returns for domestic equity managers over the last quarter. The triangle represents the S&P 500 return. The number next to the triangle represents the ranking of the S&P 500 in the Large Cap Equity manager database.

#### Range of Separate Account Manager Returns by Asset Class One Quarter Ended June 30, 2019



#### Range of Separate Account Manager Returns by Asset Class One Year Ended June 30, 2019

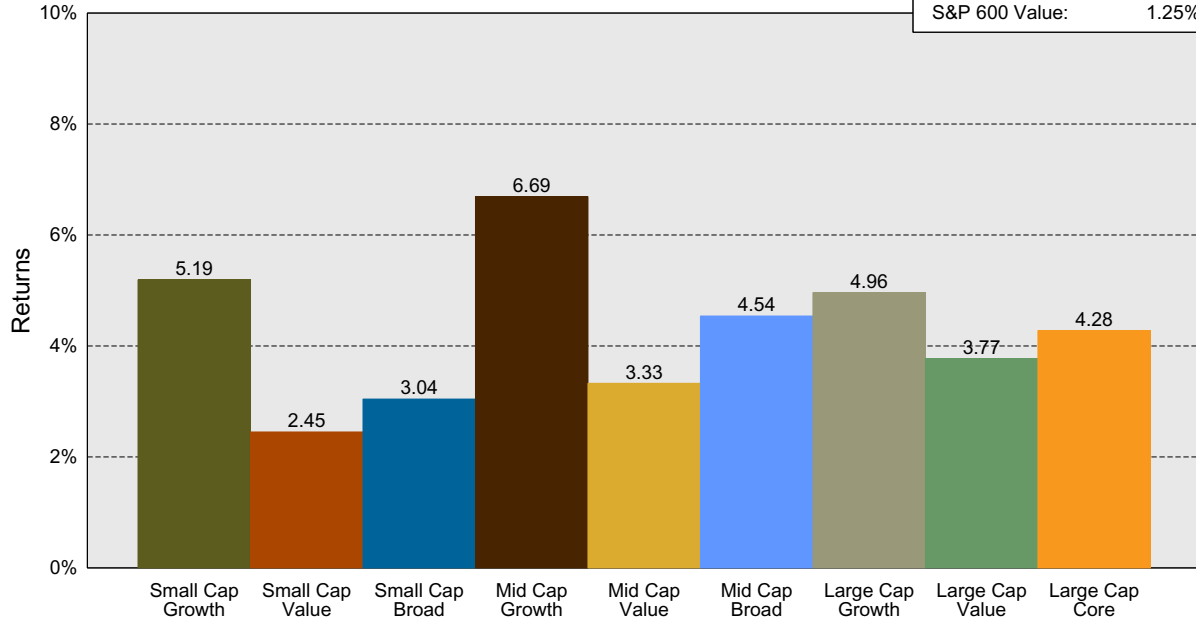


## Domestic Equity Active Management Overview

U.S. equity markets approached record levels as investors were heartened by the potential for imminent Fed rate cuts. The S&P 500 Index rose 4.3%, bringing its ytd return to 18.5%. With a forward P/E for the S&P 500 at 16.7x, equity multiples are slightly above their 25-year average of 16.2x. Financials (+8.0%) were the best performers while Energy (-2.8%) was the only sector with a negative return. Small cap stocks (R2000: 2.1%) underperformed large (R1000: 4.2%) and growth continued its trend of outperformance across the capitalization spectrum, albeit only modestly in Q2. In a reversal from Q1, quality factors such as operating margin and return on equity contributed to performance. Value factors (P/B, P/E trailing, and yield) were mixed while growth factors (EPS growth, sales growth) were positive.

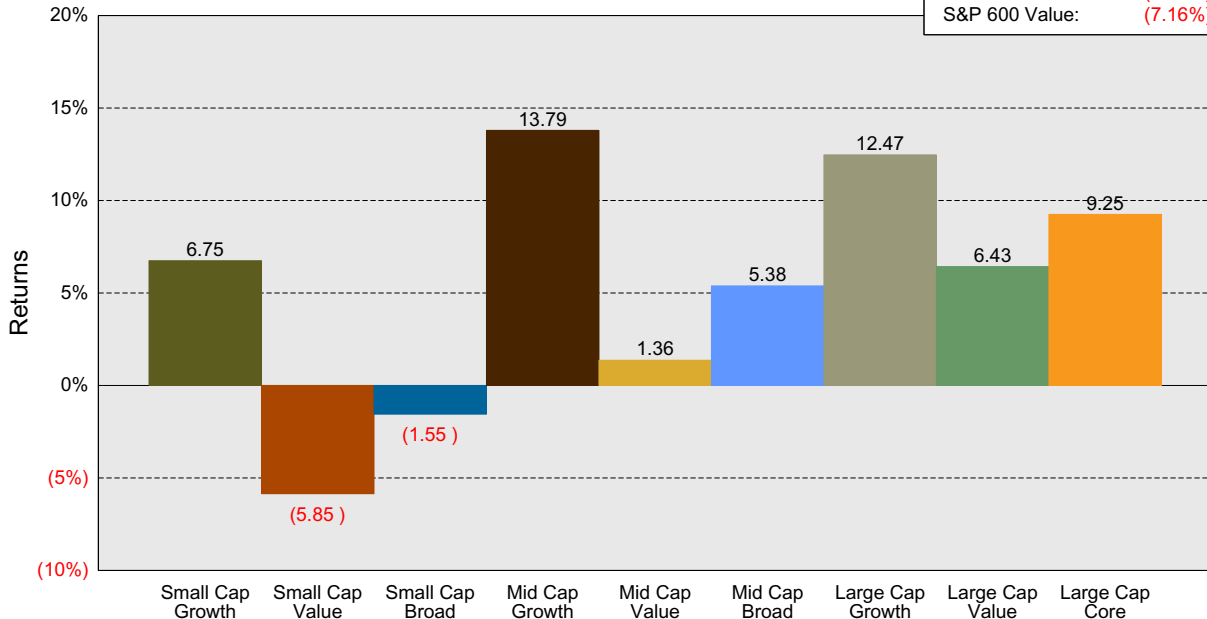
S&P 500:	4.30%
S&P 500 Growth:	4.56%
S&P 500 Value:	4.02%
S&P Mid Cap:	3.05%
S&P 600:	1.87%
S&P 600 Growth:	2.50%
S&P 600 Value:	1.25%

### Separate Account Style Group Median Returns for Quarter Ended June 30, 2019



S&P 500:	10.42%
S&P 500 Growth:	12.02%
S&P 500 Value:	8.67%
S&P Mid Cap:	1.36%
S&P 600:	(4.88%)
S&P 600 Growth:	(2.33%)
S&P 600 Value:	(7.16%)

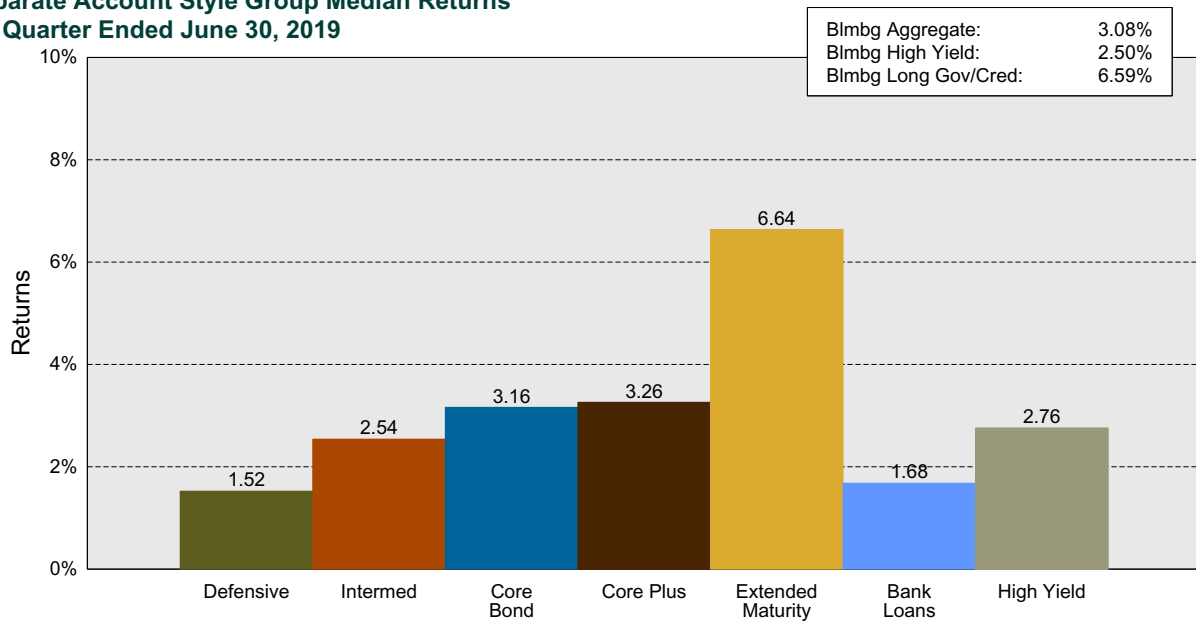
### Separate Account Style Group Median Returns for One Year Ended June 30, 2019



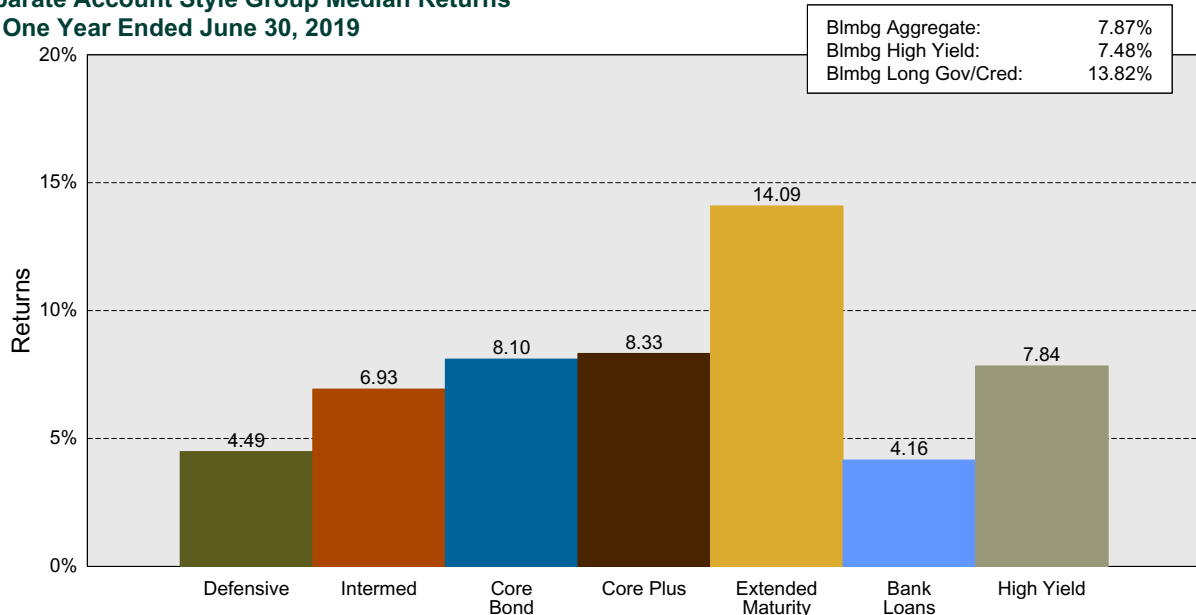
## Domestic Fixed Income Active Management Overview

In the U.S., the Bloomberg Barclays US Aggregate Bond Index rose 3.1% for the quarter. U.S. Treasury yields hit multi-year lows in June, and the 10-year closed the quarter at 2.0% (lowest since 11/2016). The curve remained inverted between the 90-day T-bill and the 10-year U.S. Treasury, but the more widely watched spread between the 2- and 10-year widened during the quarter to 25 bps. Investment grade corporate bonds performed best (Blmbg Barclays Corp: +4.5%) with US Treasuries following (+3.0%). Agency mortgages trailed (Blmbg Barclays MBS: +2.0%) as lower rates raised concerns around prepayment risk. TIPS (Blmbg Barclays TIPS: +2.9%) underperformed as inflation expectations fell; the 10-year breakeven spread was only 1.69% as of quarter-end versus 1.88% as of 3/31/2019. The high yield corporate bond market (Blmbg Barclays High Yield: +2.5%) underperformed investment grade but is up nearly 10% ytd. Leveraged loans (S&P LSTA: +1.7%) held their own in spite of negative press and falling rates. Municipal bonds (Blmbg Barclays Municipal Bond: +2.1%) underperformed U.S. Treasuries in Q2.

### Separate Account Style Group Median Returns for Quarter Ended June 30, 2019



### Separate Account Style Group Median Returns for One Year Ended June 30, 2019

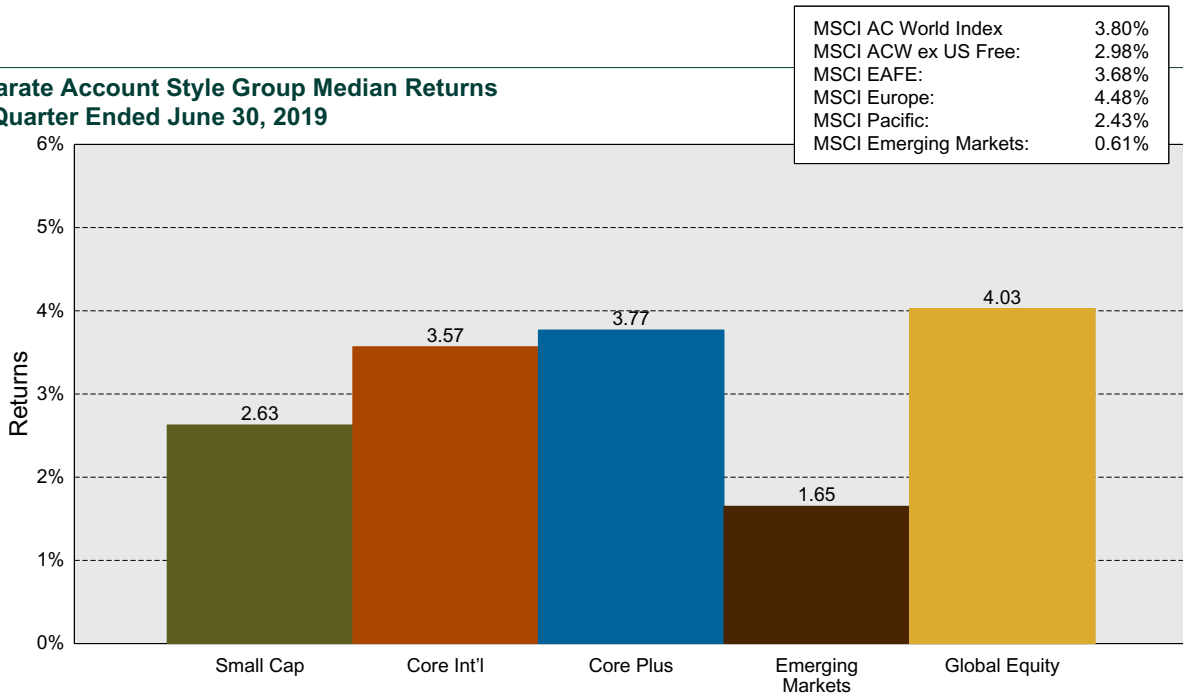


## International Equity Active Management Overview

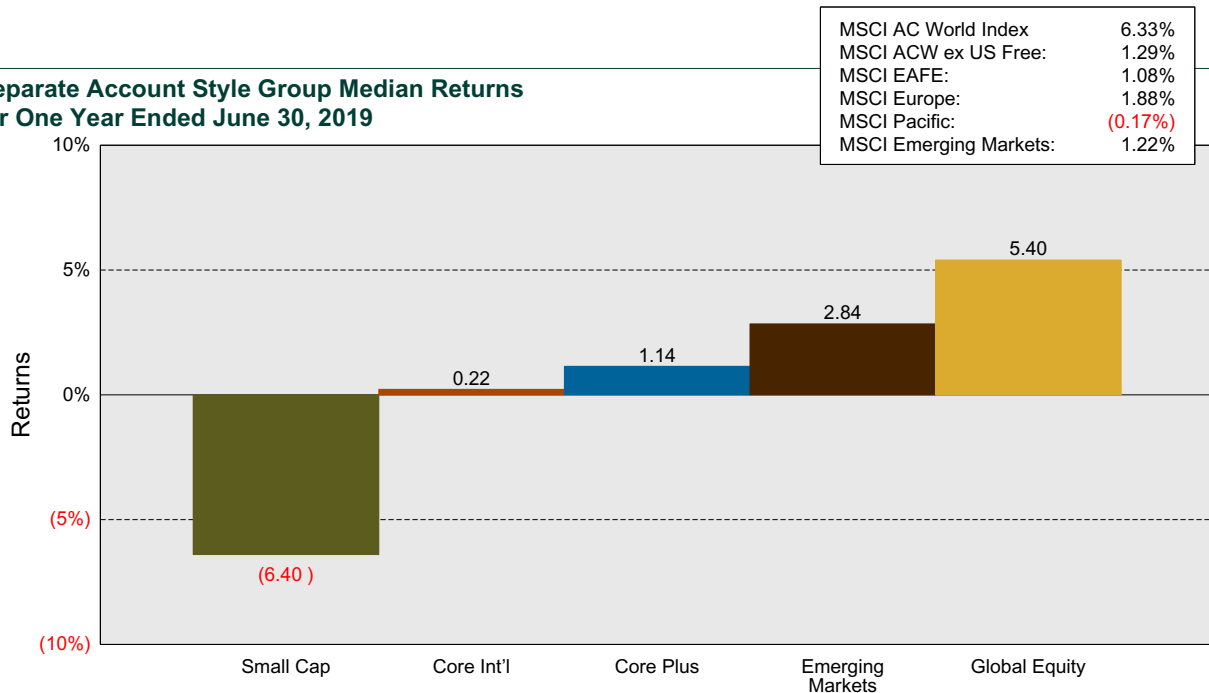
Developed markets were also buoyed by optimism for rate cuts. The MSCI ACWI ex-USA Index rose 3.0%, with Canada (+4.9%), Pacific ex-Japan (+5.2%) and Europe ex-UK (+5.8%) leading the way. Japan (+1.0%) and the UK (+0.9%), at the lower end of the group, were able to eke out small positive returns. The Canadian dollar, yen and euro appreciated versus the U.S. dollar while the British pound and Australian dollar lost ground. Industrials (+5.2%); Financials (+4.4%) and Technology (+4.0%) were the best performing sectors while Real Estate (-1.6%) and Energy (+0.5%) trailed.

Emerging markets (MSCI Emg Mkts:+0.6%) underperformed developed but returns across countries varied. Argentina (+31.7%) was the best performing country where political developments boosted sentiment, but Russia (+16.9%) was also a strong performer. China (-4.0%) finished in negative territory; but the market was able to recover after May's sharp pull-back thanks to the pause in tariff hikes following the G20 Osaka summit. Also worth mentioning is the performance of the two other BRICs; Brazil (+7.2%) and India (+0.5%).

**Separate Account Style Group Median Returns  
for Quarter Ended June 30, 2019**



**Separate Account Style Group Median Returns  
for One Year Ended June 30, 2019**

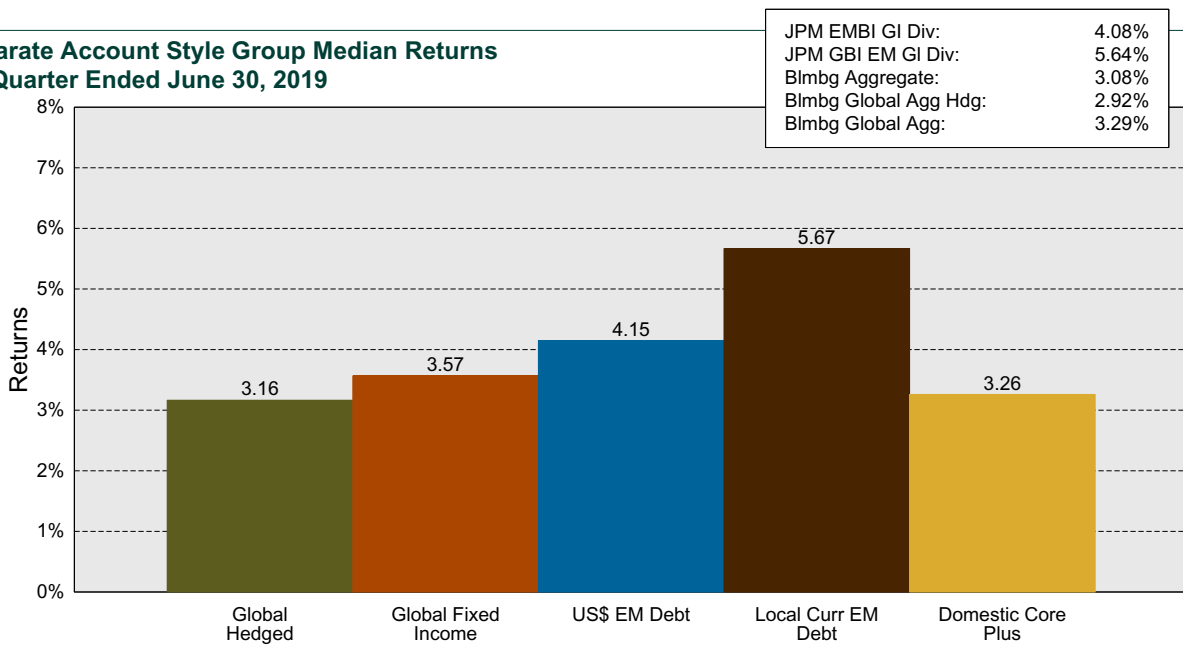


## Global Fixed Income Active Management Overview

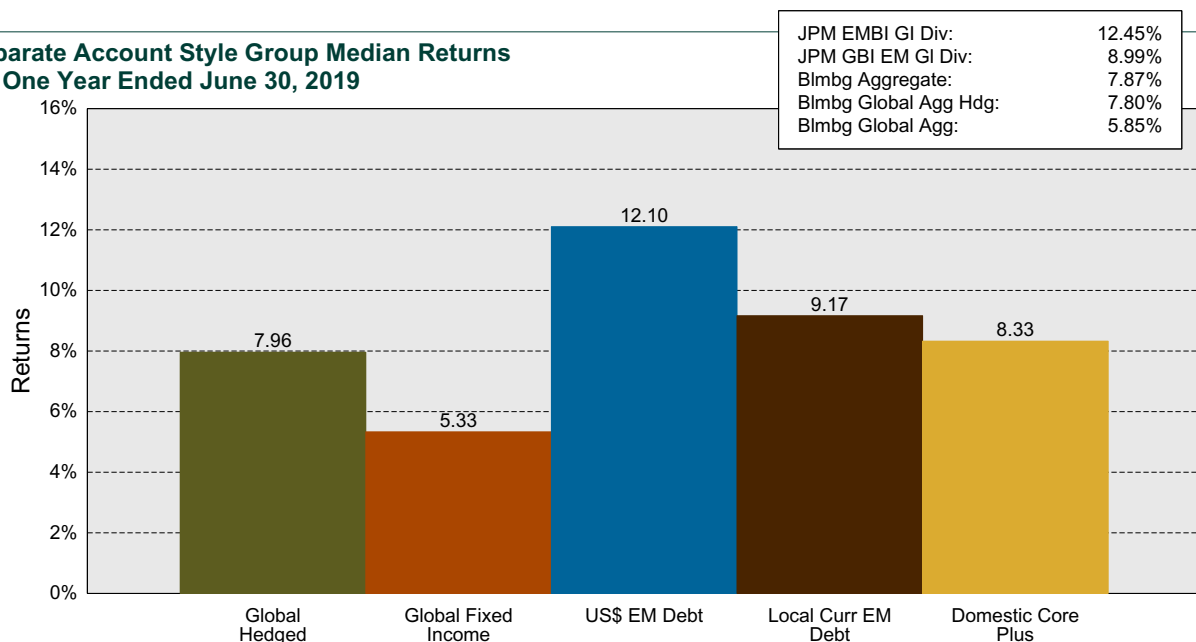
Overseas, yields across developed markets generally fell and reflected similar themes as in the U.S.; concerns over growth, especially manufacturing, mixed with low inflation and expectations for further stimulus measures. The Bloomberg Barclays Global Aggregate Index rose 3.3% for the quarter on an unhedged basis. Hedged into dollars, the Index gained 2.9%. In a reversal from Q1, the dollar lost ground vs. most currencies, with the pound being a notable exception. In Germany, the yield on the 10-year government bond hit an all-time low and closed the quarter at -0.33% and the 2-year ended the quarter at -0.76%. Negative yielding debt globally hit a new high of nearly \$13 trillion and is now roughly 25% of the Global Aggregate Index.

Emerging market debt performed well; the U.S. dollar-denominated JPM EMBI Global Diversified Index gained 4.1% as rates fell. Local currency emerging market debt, as measured by the JPM GBI-EM Global Diversified Index, rose 5.6% with most emerging markets currencies appreciating versus the U.S. dollar. Top performers included Russia: +10.4% and Turkey: +10.1%; Argentina was the worst performer at -5.0%, and one of the few countries to post a negative result.

**Separate Account Style Group Median Returns  
for Quarter Ended June 30, 2019**



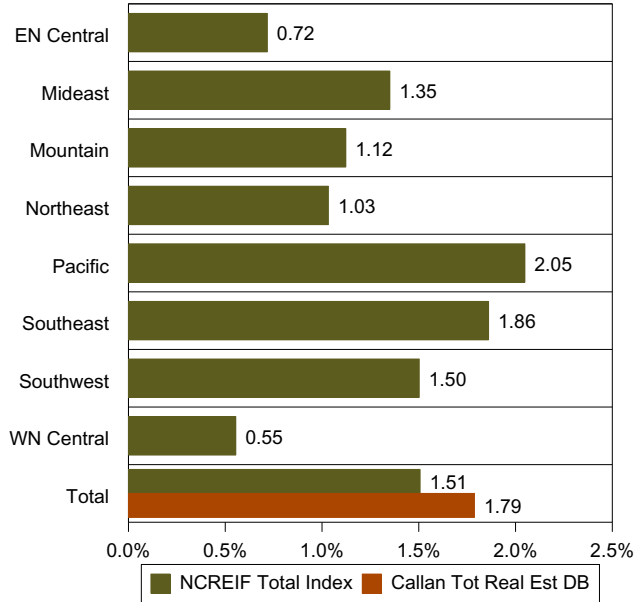
**Separate Account Style Group Median Returns  
for One Year Ended June 30, 2019**



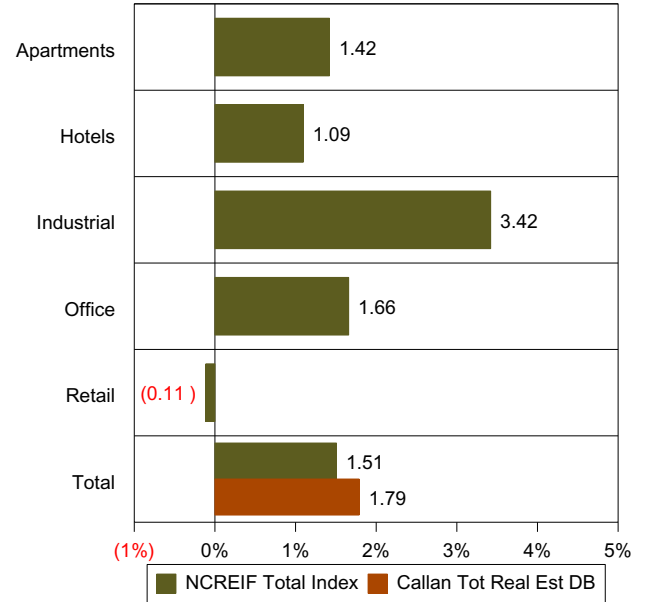
## Real Estate Market Overview

The NCREIF Property Index (NPI) gained 1.5% during the second quarter (1.1% from income and 0.4% from appreciation). This marked the 43rd consecutive quarter of positive returns for the index. Industrial (+3.4%) was the best-performing sector for the thirteenth consecutive quarter, with Office (+1.7%), Apartments (+1.4%), and Hotels (+1.1%) also posting positive returns. Retail was the trailing sector with (-0.11%). The West region was the strongest performer for the eleventh quarter in a row, up 1.9%, and the Midwest trailed with a 0.7% return. The Midwest also had a negative appreciation return of -0.5%. Transaction volume increased 53% to \$8.5 billion, up from \$5.5 billion in the first quarter. Transaction volume was 32% higher than second quarter 2018.

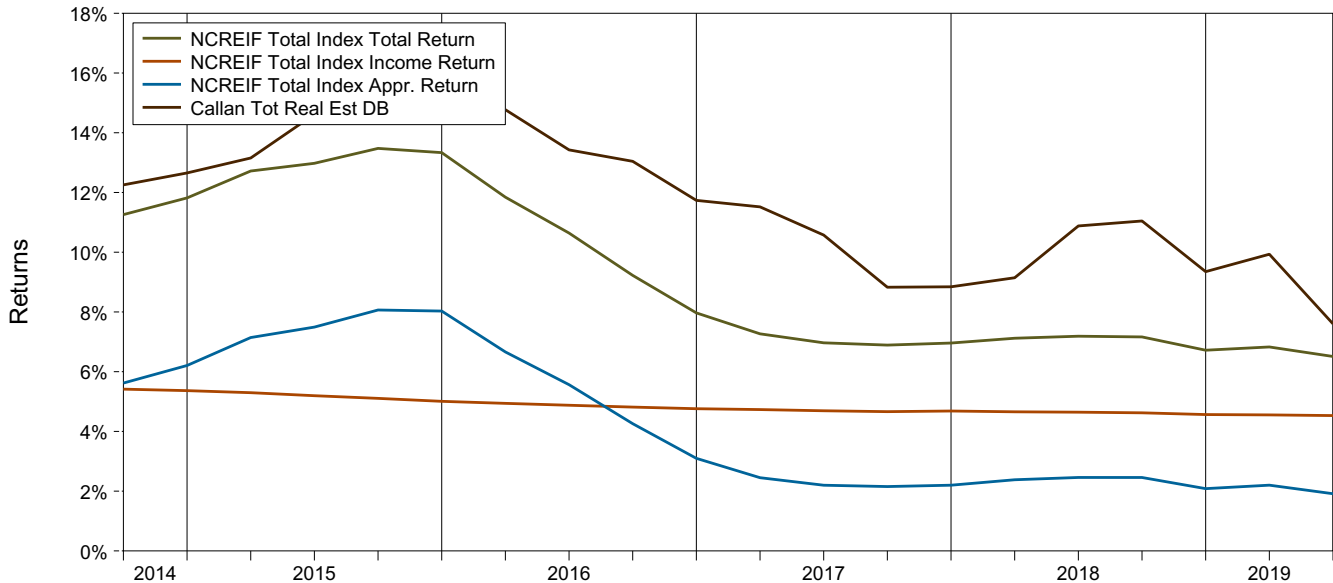
**NCREIF Total Index Returns by Geographic Area  
Quarter Ended June 30, 2019**



**NCREIF Total Index Returns by Property Type  
Quarter Ended June 30, 2019**



## Rolling 1 Year Returns





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## ASSET ALLOCATION AND PERFORMANCE

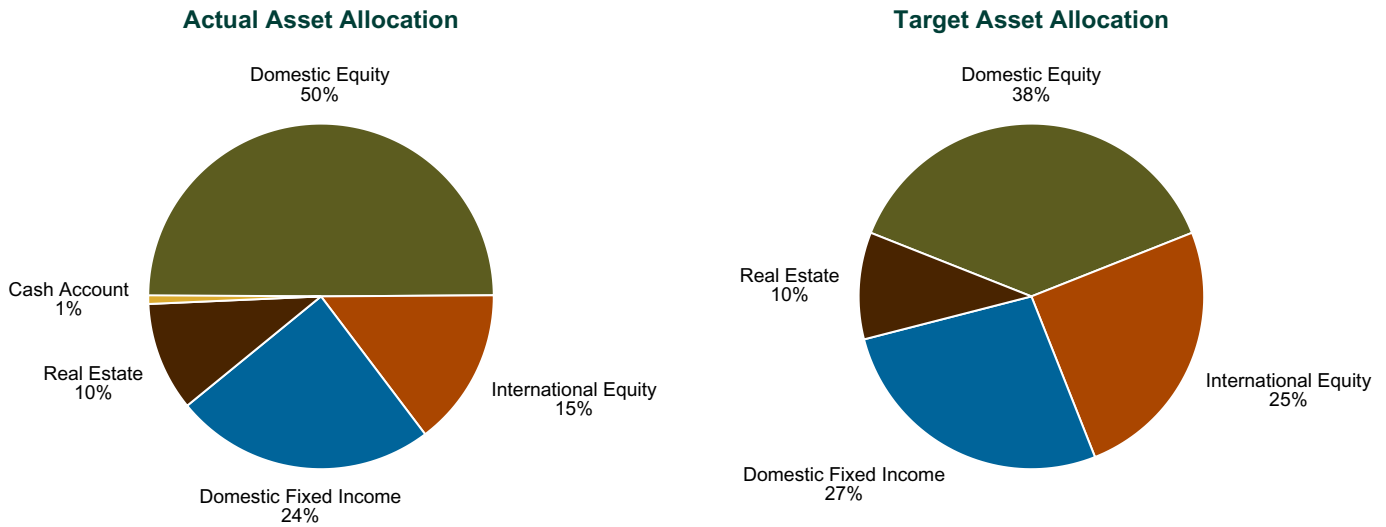
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### **Asset Allocation and Performance**

This section begins with an overview of the fund's asset allocation at the broad asset class level. This is followed by a top down performance attribution analysis which analyzes the fund's performance relative to the performance of the fund's policy target asset allocation. The fund's historical performance is then examined relative to funds with similar objectives. Performance of each asset class is then shown relative to the asset class performance of other funds. Finally, a summary is presented of the holdings of the fund's investment managers, and the returns of those managers over various recent periods.

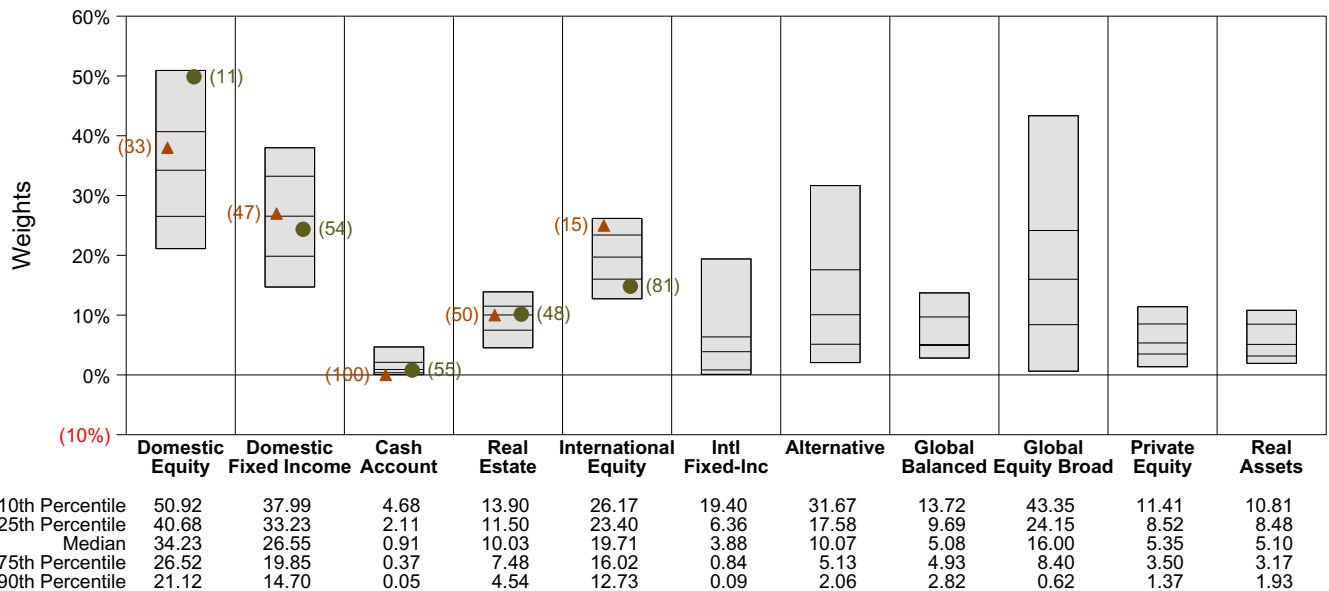
## Actual vs Target Asset Allocation As of June 30, 2019

The top left chart shows the Fund's asset allocation as of June 30, 2019. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Sponsor Database.



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	100,770	49.9%	38.0%	11.9%	23,968
International Equity	29,961	14.8%	25.0%	(10.2%)	(20,567)
Domestic Fixed Income	49,219	24.4%	27.0%	(2.6%)	(5,351)
Real Estate	20,539	10.2%	10.0%	0.2%	328
Cash Account	1,622	0.8%	0.0%	0.8%	1,622
<b>Total</b>	<b>202,111</b>	<b>100.0%</b>	<b>100.0%</b>		

### Asset Class Weights vs Callan Public Fund Sponsor Database



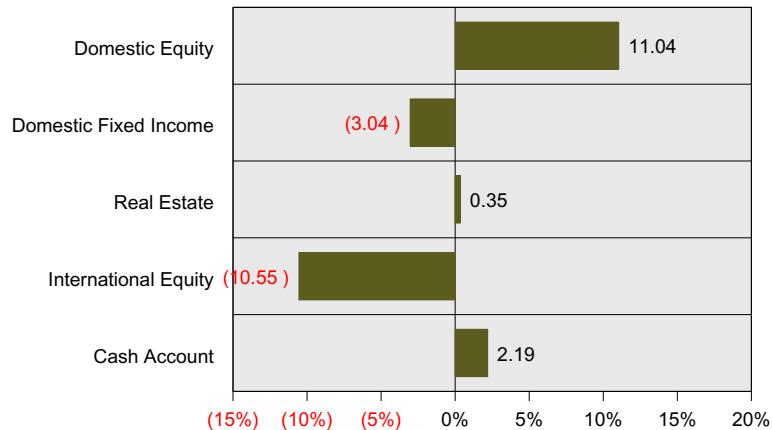
	Domestic Equity	Domestic Fixed Income	Cash Account	Real Estate	International Equity	Intl Fixed-Inc	Alternative	Global Balanced Equity Broad	Global Equity Broad	Private Equity	Real Assets
10th Percentile	50.92	37.99	4.68	13.90	26.17	19.40	31.67	13.72	43.35	11.41	10.81
25th Percentile	40.68	33.23	2.11	11.50	23.40	6.36	17.58	9.69	24.15	8.52	8.48
Median	34.23	26.55	0.91	10.03	19.71	3.88	10.07	5.08	16.00	5.35	5.10
75th Percentile	26.52	19.85	0.37	7.48	16.02	0.84	5.13	4.93	8.40	3.50	3.17
90th Percentile	21.12	14.70	0.05	4.54	12.73	0.09	2.06	2.82	0.62	1.37	1.93
<b>Fund</b>	● 49.86	24.35	0.80	10.16	14.82	-	-	-	-	-	-
<b>Target</b>	▲ 38.00	27.00	0.00	10.00	25.00	-	-	-	-	-	-
% Group Invested	98.56%	97.12%	78.42%	76.98%	96.40%	16.55%	40.56%	16.55%	12.23%	30.22%	24.46%

\* Current Quarter Target = 27.0% Blmbg Aggregate, 26.0% S&P 500 Index, 25.0% MSCI ACWI ex US, 10.0% NCREIF NFI-ODCE Eq Wt Net, 6.0% S&P Mid Cap 400 Index, 3.0% Russell 2000 Growth Index and 3.0% Russell 2000 Value Index.

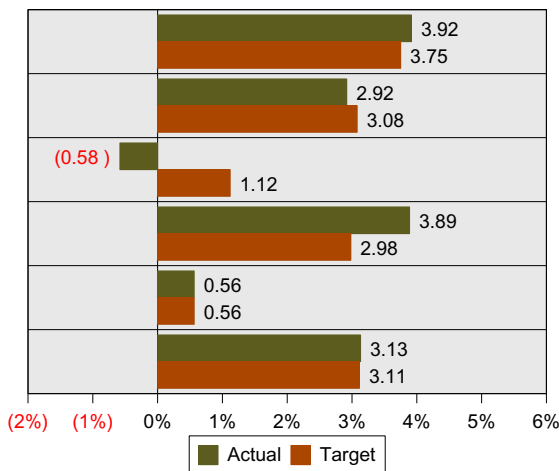
## Quarterly Total Fund Relative Attribution - June 30, 2019

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

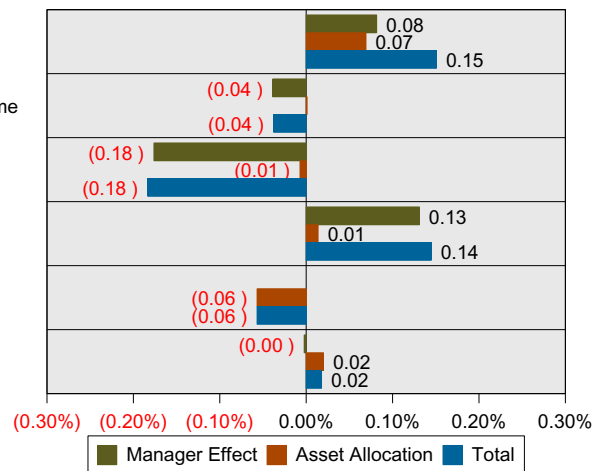
### Asset Class Under or Overweighting



### Actual vs Target Returns



### Relative Attribution by Asset Class



### Relative Attribution Effects for Quarter ended June 30, 2019

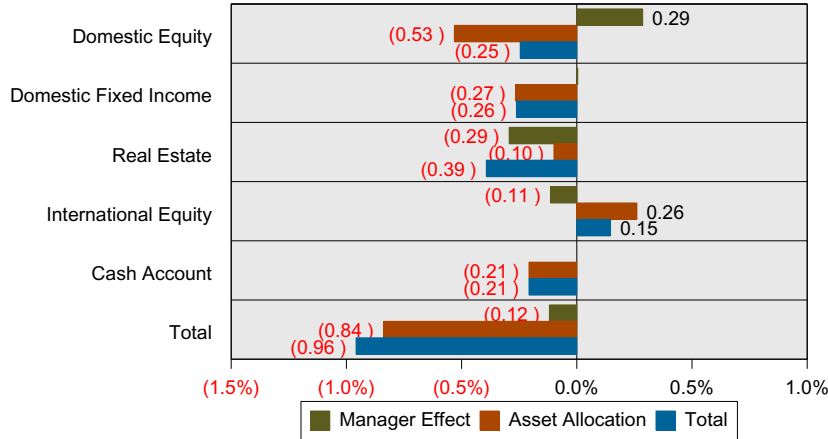
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	49%	38%	3.92%	3.75%	0.08%	0.07%	0.15%
Domestic Fixed Income	24%	27%	2.92%	3.08%	(0.04)%	0.00%	(0.04)%
Real Estate	10%	10%	(0.58)%	1.12%	(0.18)%	(0.01)%	(0.18)%
International Equity	14%	25%	3.89%	2.98%	0.13%	0.01%	0.14%
Cash Account	2%	0%	0.56%	0.56%	0.00%	(0.06)%	(0.06)%
<b>Total</b>			<b>3.13%</b>	<b>3.11%</b>	<b>(0.00%)</b>	<b>0.02%</b>	<b>0.02%</b>

\* Current Quarter Target = 27.0% Blmbg Aggregate, 26.0% S&P 500 Index, 25.0% MSCI ACWI ex US, 10.0% NCREIF NFI-ODCE Eq Wt Net, 6.0% S&P Mid Cap 400 Index, 3.0% Russell 2000 Growth Index and 3.0% Russell 2000 Value Index.

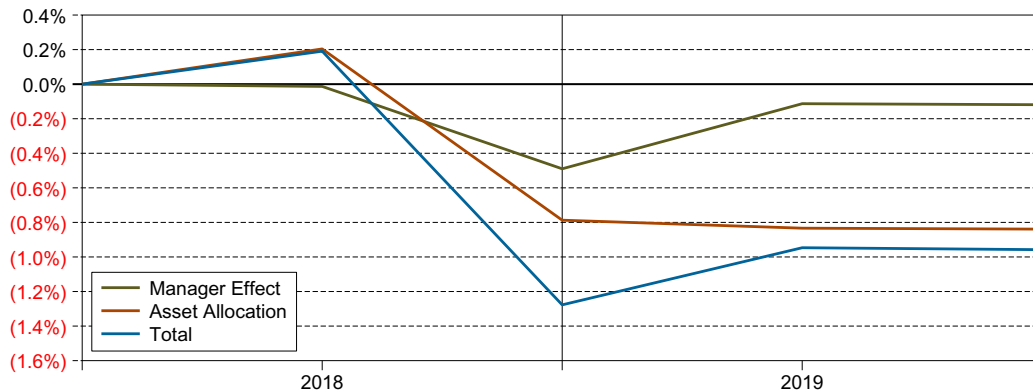
## Cumulative Total Fund Relative Attribution - June 30, 2019

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

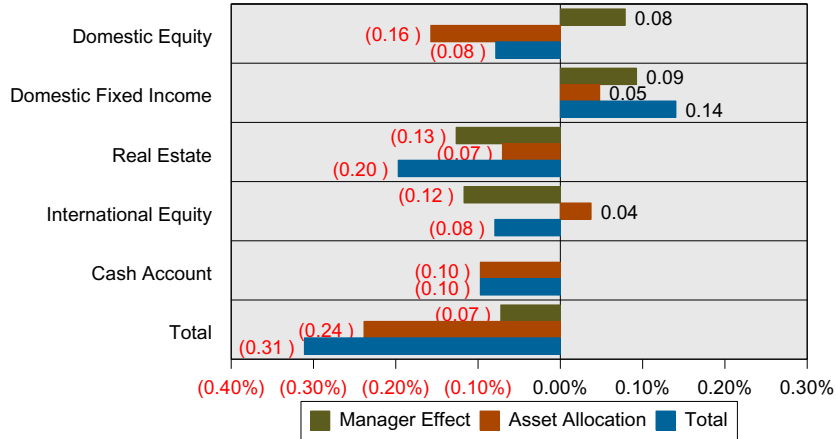
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	50%	40%	7.34%	6.75%	0.29%	(0.53%)	(0.25%)
Domestic Fixed Income	24%	27%	7.89%	7.87%	0.00%	(0.27%)	(0.26%)
Real Estate	11%	10%	3.20%	5.99%	(0.29%)	(0.10%)	(0.39%)
International Equity	15%	22%	0.50%	1.29%	(0.11%)	0.26%	0.15%
Cash Account	2%	0%	2.14%	2.14%	0.00%	(0.21%)	(0.21%)
<b>Total</b>			<b>5.72%</b>	<b>6.68%</b>	<b>0.12%</b>	<b>(0.84%)</b>	<b>(0.96%)</b>

\* Current Quarter Target = 27.0% Blmbg Aggregate, 26.0% S&P 500 Index, 25.0% MSCI ACWI ex US, 10.0% NCREIF NFI-ODCE Eq Wt Net, 6.0% S&P Mid Cap 400 Index, 3.0% Russell 2000 Growth Index and 3.0% Russell 2000 Value Index.

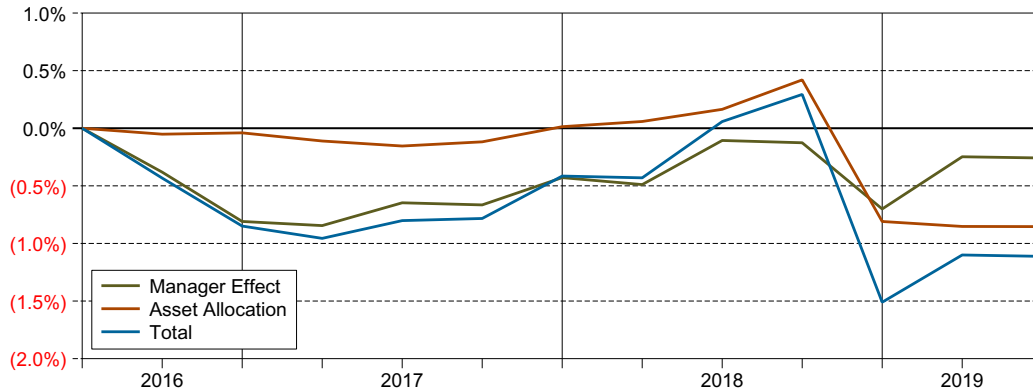
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### Three Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Three Year Annualized Relative Attribution Effects

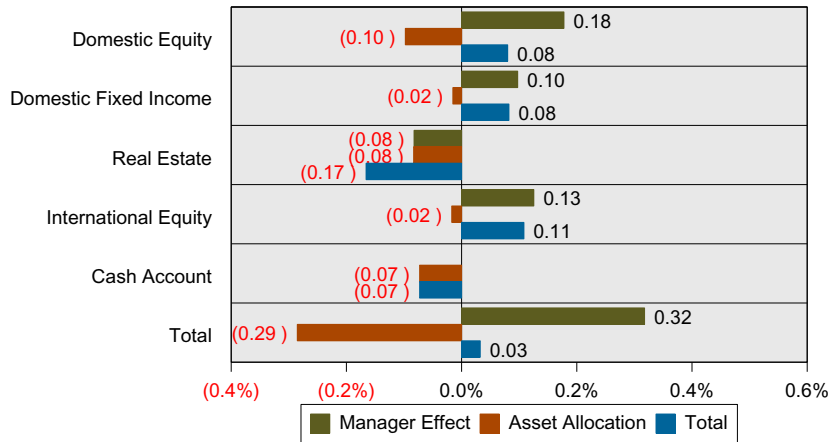
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	49%	46%	13.57%	13.42%	0.08%	(0.16%)	(0.08%)
Domestic Fixed Income	24%	27%	2.67%	2.31%	0.09%	0.05%	0.14%
Real Estate	11%	10%	5.79%	6.97%	(0.13%)	(0.07%)	(0.20%)
International Equity	15%	17%	8.53%	9.39%	(0.12%)	0.04%	(0.08%)
Cash Account	1%	0%	1.23%	1.23%	0.00%	(0.10%)	(0.10%)
<b>Total</b>			<b>9.02%</b>	<b>9.33%</b>	<b>+(0.07%)</b>	<b>+(0.24%)</b>	<b>(0.31%)</b>

\* Current Quarter Target = 27.0% Blmbg Aggregate, 26.0% S&P 500 Index, 25.0% MSCI ACWI ex US, 10.0% NCREIF NFI-ODCE Eq Wt Net, 6.0% S&P Mid Cap 400 Index, 3.0% Russell 2000 Growth Index and 3.0% Russell 2000 Value Index.

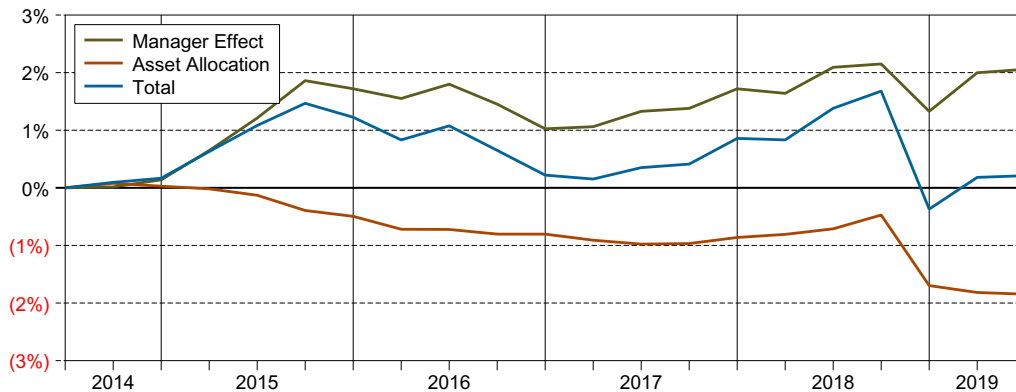
## Cumulative Total Fund Relative Attribution - June 30, 2019

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Five Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Five Year Annualized Relative Attribution Effects

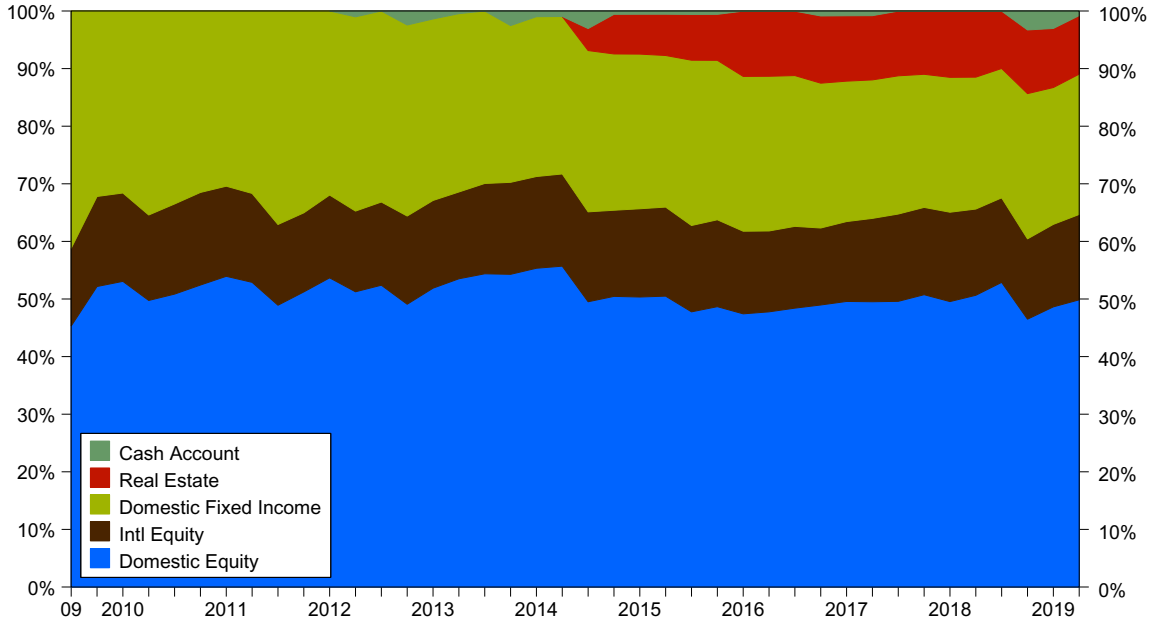
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	49%	47%	10.15%	9.78%	0.18%	(0.10%)	0.08%
Domestic Fixed Income	26%	27%	3.31%	2.95%	0.10%	(0.02%)	0.08%
Real Estate	10%	10%	8.13%	9.04%	(0.08%)	(0.08%)	(0.17%)
International Equity	15%	17%	2.92%	2.16%	0.13%	(0.02%)	0.11%
Cash Account	1%	0%	0.76%	0.76%	0.00%	(0.07%)	(0.07%)
<b>Total</b>			<b>6.85%</b>	<b>6.82%</b>	<b>+ 0.32%</b>	<b>+ (0.29%)</b>	<b>0.03%</b>

\* Current Quarter Target = 27.0% Blmbg Aggregate, 26.0% S&P 500 Index, 25.0% MSCI ACWI ex US, 10.0% NCREIF NFI-ODCE Eq Wt Net, 6.0% S&P Mid Cap 400 Index, 3.0% Russell 2000 Growth Index and 3.0% Russell 2000 Value Index.

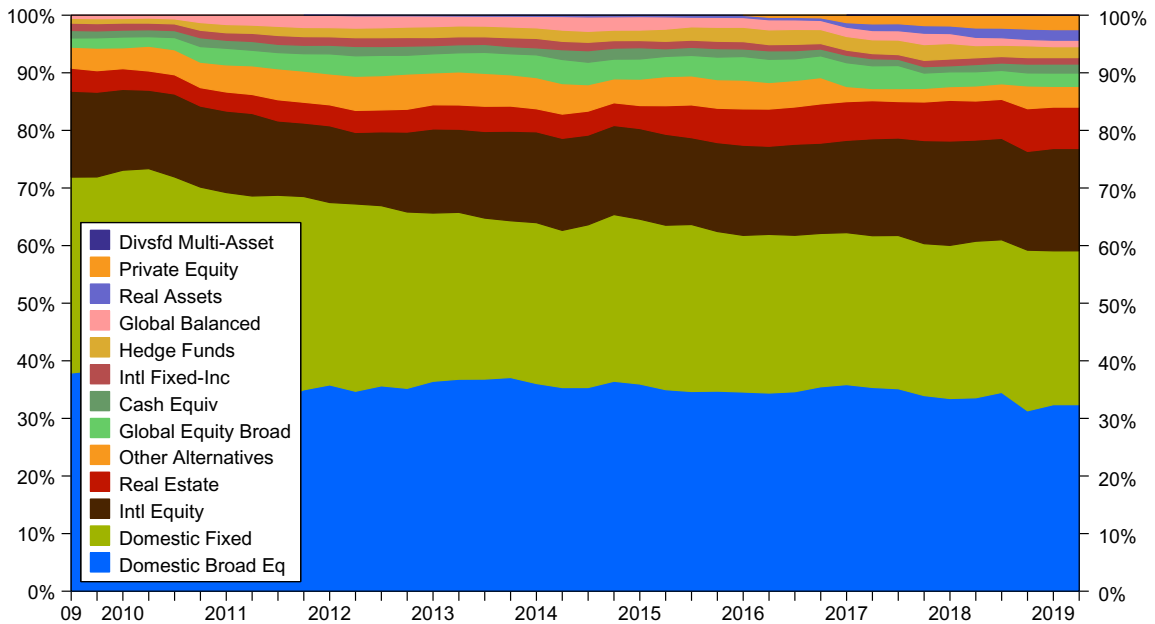
## Actual Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, and the historical asset allocation of the average fund in the Callan Public Fund Sponsor Database.

### Actual Historical Asset Allocation



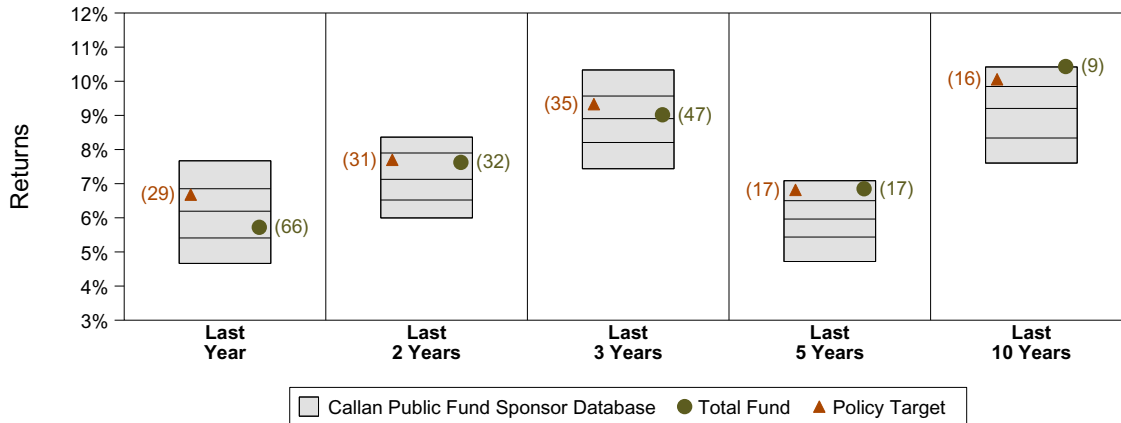
### Average Callan Public Fund Sponsor Database Historical Asset Allocation



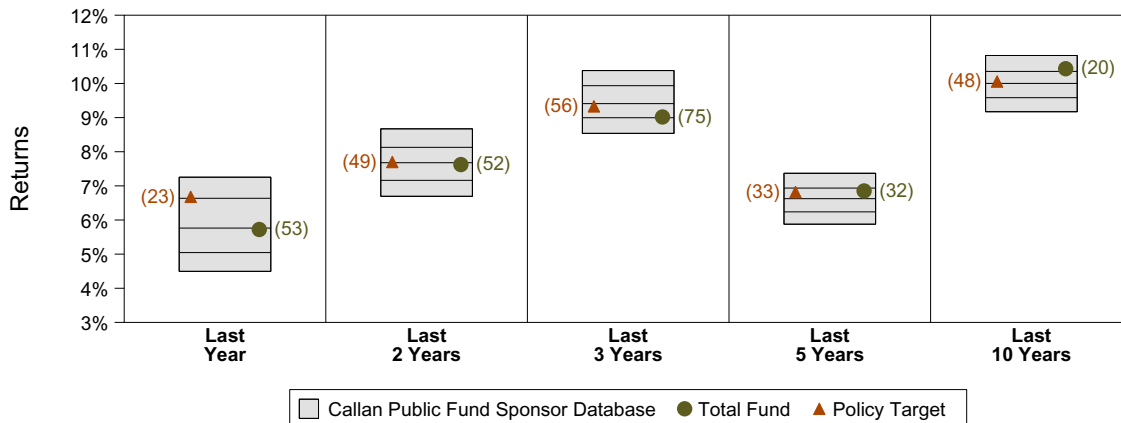
## Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Sponsor Database for periods ended June 30, 2019. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund. The final chart shows the history of the one year ranking of the Total Fund versus the Callan Public Fund Sponsor Database, both on an unadjusted and asset allocation adjusted basis.

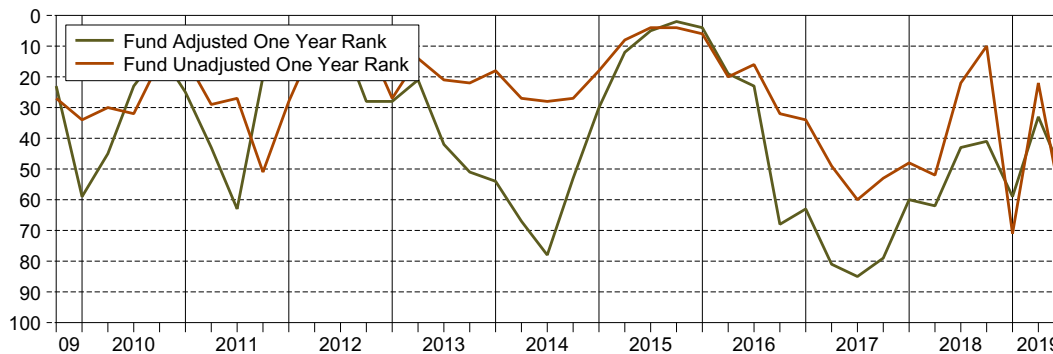
### Callan Public Fund Sponsor Database



### Asset Allocation Adjusted Ranking



### Rolling One Year Ranking vs Callan Public Fund Sponsor Database

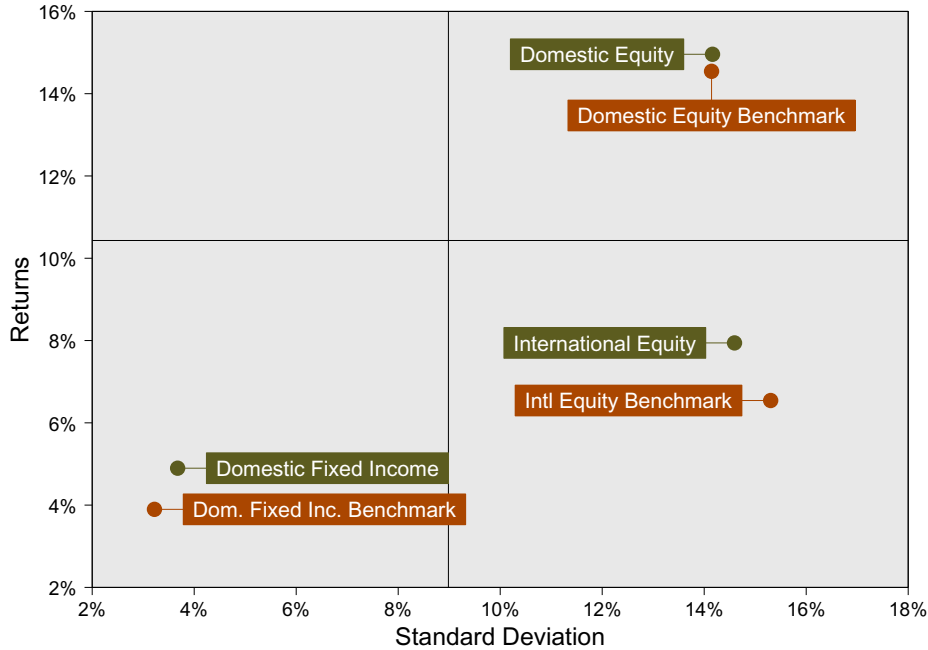


\* Current Quarter Target = 27.0% Blmbg Aggregate, 26.0% S&P 500 Index, 25.0% MSCI ACWI ex US, 10.0% NCREIF NFI-ODCE Eq Wt Net, 6.0% S&P Mid Cap 400 Index, 3.0% Russell 2000 Growth Index and 3.0% Russell 2000 Value Index.

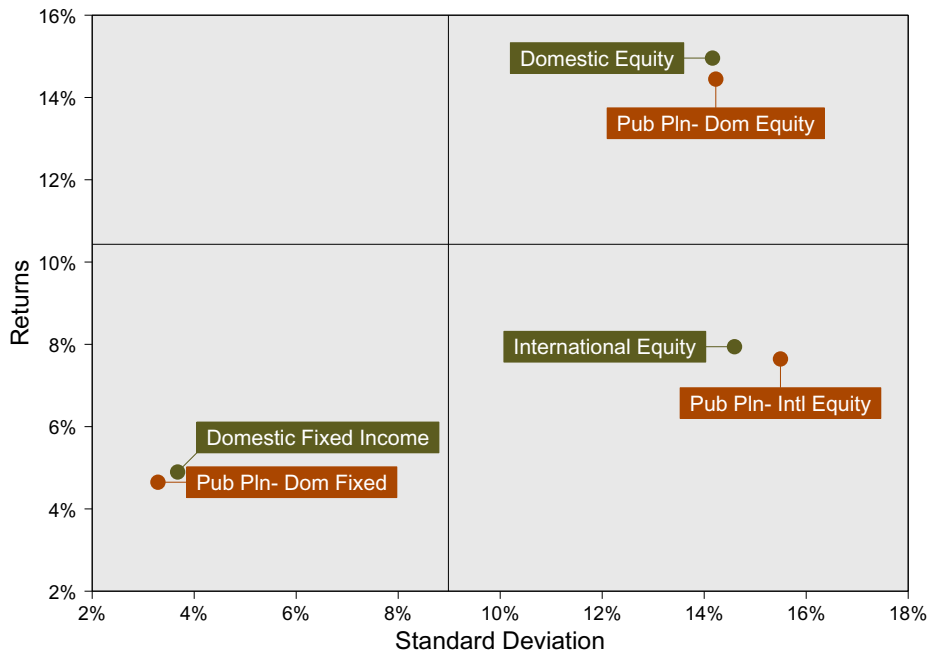
## Asset Class Risk and Return

The charts below show the ten year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

### Ten Year Annualized Risk vs Return Asset Classes vs Benchmark Indices



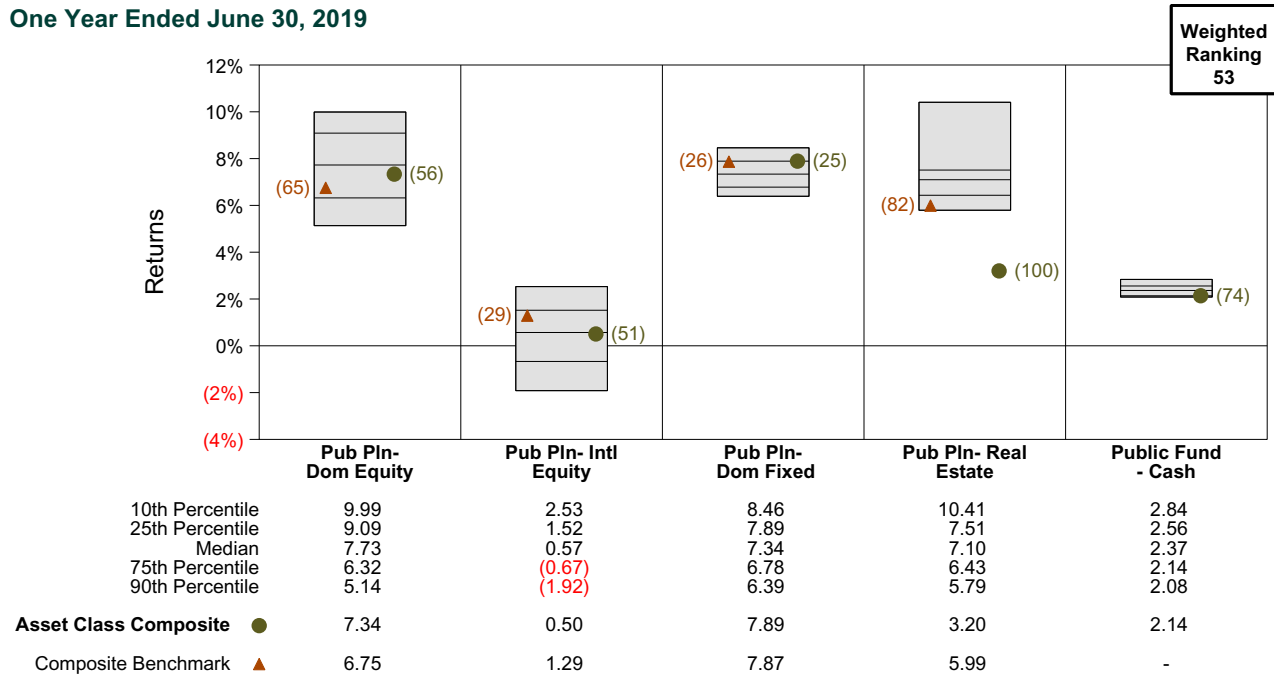
### Ten Year Annualized Risk vs Return Asset Classes vs Asset Class Median



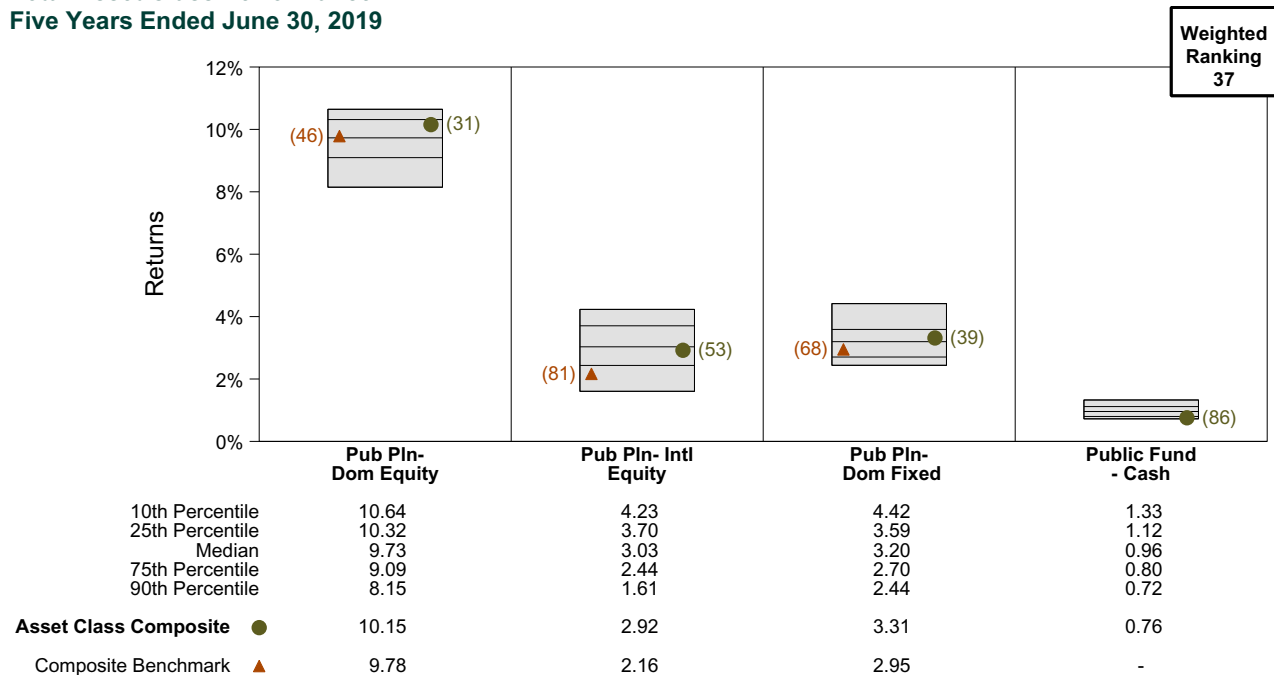
## Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.

### Total Asset Class Performance One Year Ended June 30, 2019



### Total Asset Class Performance Five Years Ended June 30, 2019

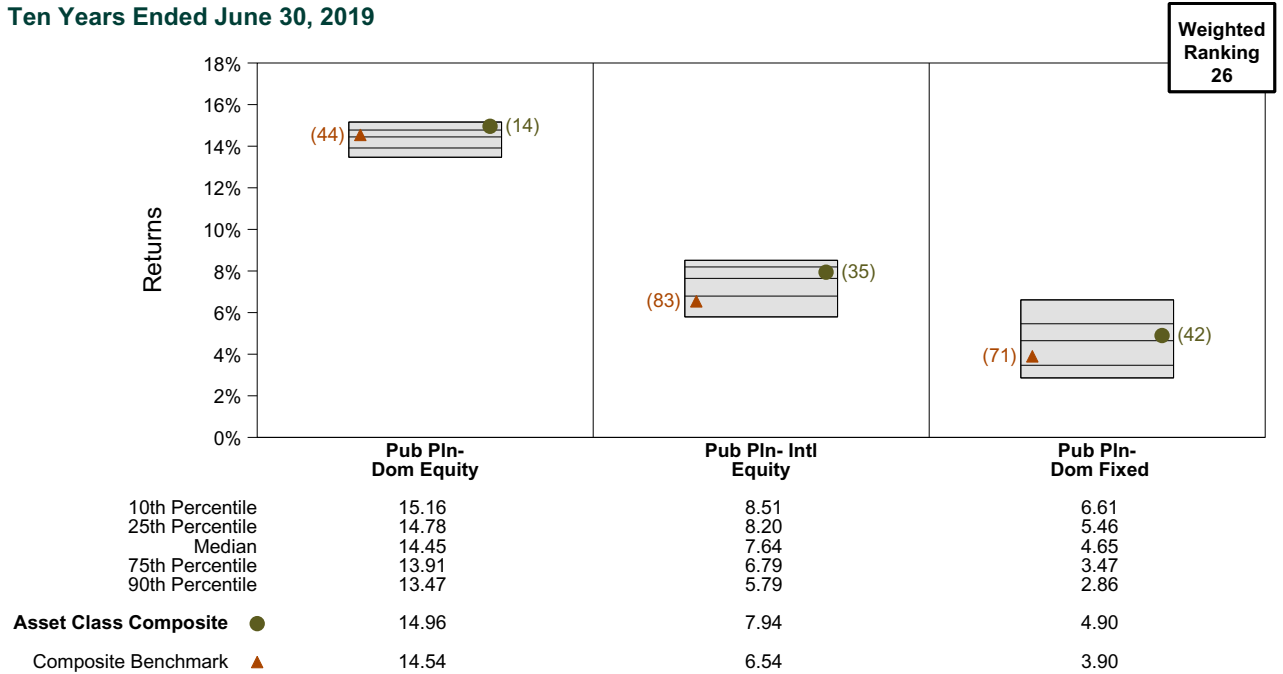


\* Current Quarter Target = 27.0% Blmbg Aggregate, 26.0% S&P 500 Index, 25.0% MSCI ACWI ex US, 10.0% NCREIF NFI-ODCE Eq Wt Net, 6.0% S&P Mid Cap 400 Index, 3.0% Russell 2000 Growth Index and 3.0% Russell 2000 Value Index.

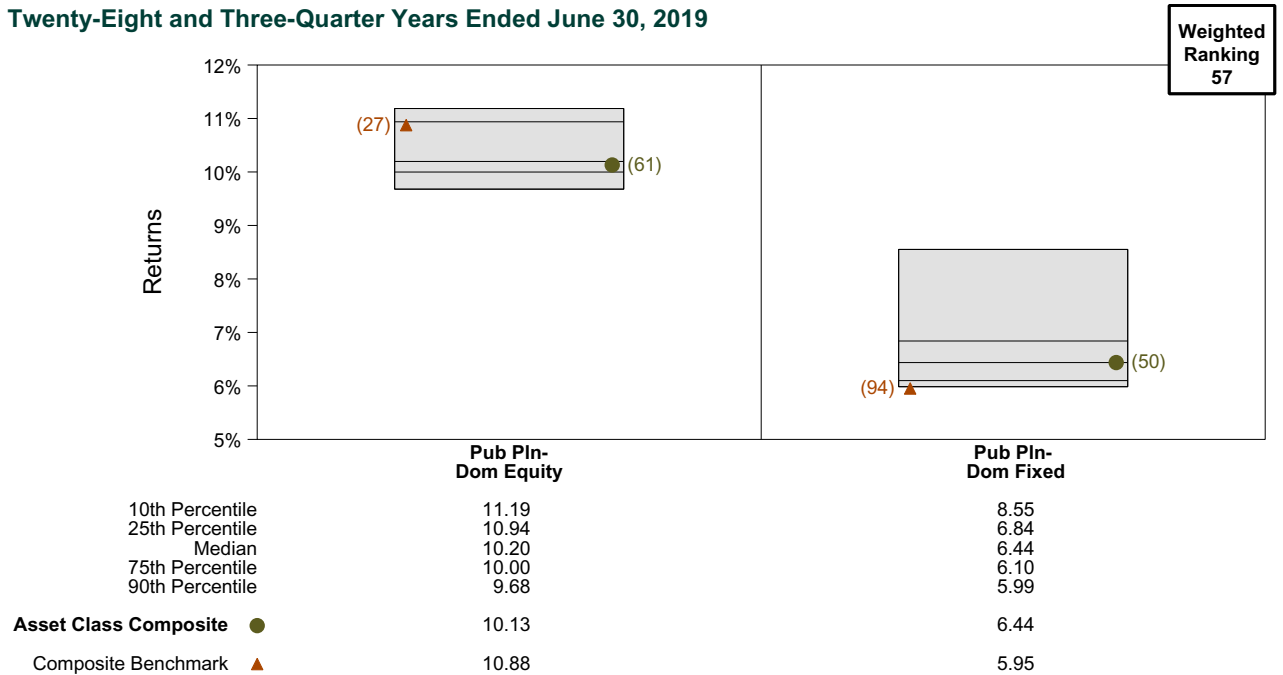
## Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.

### Total Asset Class Performance Ten Years Ended June 30, 2019



### Total Asset Class Performance Twenty-Eight and Three-Quarter Years Ended June 30, 2019



\* Current Quarter Target = 27.0% Blmbg Aggregate, 26.0% S&P 500 Index, 25.0% MSCI ACWI ex US, 10.0% NCREIF NFI-ODCE Eq Wt Net, 6.0% S&P Mid Cap 400 Index, 3.0% Russell 2000 Growth Index and 3.0% Russell 2000 Value Index.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2019, with the distribution as of March 31, 2019.

### Asset Distribution Across Investment Managers

	June 30, 2019					March 31, 2019		
	Market Value	Weight	(min)	Target	(max)	Market Value	Weight	Target
<b>Domestic Equity</b>	<b>\$100,769,624</b>	<b>49.86%</b>	<b>30.00%</b>	<b>38.00%</b>	<b>44.00%</b>	<b>\$97,980,944</b>	<b>48.63%</b>	<b>38.00%</b>
Emerald Advisers, Inc.	8,705,161	4.31%	2.00%	3.00%	4.00%	9,375,773	4.65%	3.00%
Ceredex Value Advisors	7,691,891	3.81%	2.00%	3.00%	4.00%	7,531,880	3.74%	3.00%
SSgA S&P 500 Index	68,549,888	33.92%	22.00%	26.00%	30.00%	65,722,297	32.62%	26.00%
SSgA S&P 400 Index	15,822,684	7.83%	4.00%	6.00%	6.00%	15,350,993	7.62%	6.00%
<b>International Equity</b>	<b>\$29,961,007</b>	<b>14.82%</b>	<b>21.00%</b>	<b>25.00%</b>	<b>29.00%</b>	<b>\$28,865,469</b>	<b>14.33%</b>	<b>25.00%</b>
Morgan Stanley Int'l Equity	14,087,317	6.97%	8.75%	10.00%	10.75%	13,724,330	6.81%	10.00%
Morgan Stanley Emerging Mkts.	1,270,070	0.63%	2.00%	2.50%	4.50%	1,240,319	0.62%	2.50%
William Blair & Company	14,603,621	7.23%	10.50%	12.50%	12.50%	13,900,821	6.90%	12.50%
<b>Domestic Fixed Income</b>	<b>\$49,218,842</b>	<b>24.35%</b>	<b>22.00%</b>	<b>27.00%</b>	<b>32.00%</b>	<b>\$47,858,622</b>	<b>23.75%</b>	<b>27.00%</b>
Richmond Capital Management	49,218,842	24.35%	22.00%	27.00%	32.00%	47,858,622	23.75%	27.00%
<b>Real Estate</b>	<b>\$20,539,132</b>	<b>10.16%</b>	<b>5.00%</b>	<b>10.00%</b>	<b>12.00%</b>	<b>\$20,659,338</b>	<b>10.25%</b>	<b>10.00%</b>
Heitman	20,539,132	10.16%	5.00%	10.00%	12.00%	20,659,338	10.25%	10.00%
<b>Cash Account</b>	<b>\$1,622,074</b>	<b>0.80%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>1.00%</b>	<b>\$6,106,270</b>	<b>3.03%</b>	<b>0.00%</b>
<b>Total Fund</b>	<b>\$202,110,679</b>	<b>100.0%</b>		<b>100.0%</b>		<b>\$201,470,643</b>	<b>100.0%</b>	<b>100.0%</b>

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2019, with the distribution as of March 31, 2019. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Distribution Across Investment Managers

	June 30, 2019					March 31, 2019		
	Market Value	Weight	Target	Net New Inv.	Inv. Return	Market Value	Weight	Target
<b>Domestic Equity</b>	<b>\$100,769,624</b>	<b>49.86%</b>	<b>38.00%</b>	<b>\$(1,045,256)</b>	<b>\$3,833,936</b>	<b>\$97,980,944</b>	<b>48.63%</b>	<b>38.00%</b>
Emerald Advisers, Inc.	8,705,161	4.31%	3.00%	(1,018,829)	348,216	9,375,773	4.65%	3.00%
Ceredex Value Advisors	7,691,891	3.81%	3.00%	(16,920)	176,931	7,531,880	3.74%	3.00%
SSgA S&P 500 Index	68,549,888	33.92%	26.00%	(6,467)	2,834,057	65,722,297	32.62%	26.00%
SSgA S&P 400 Index	15,822,684	7.83%	6.00%	(3,040)	474,731	15,350,993	7.62%	6.00%
<b>International Equity</b>	<b>\$29,961,007</b>	<b>14.82%</b>	<b>25.00%</b>	<b>\$(25,917)</b>	<b>\$1,121,456</b>	<b>\$28,865,469</b>	<b>14.33%</b>	<b>25.00%</b>
Morgan Stanley Int'l Equity	14,087,317	6.97%	10.00%	(25,917)	388,905	13,724,330	6.81%	10.00%
Morgan Stanley Emerging Mkts.	1,270,070	0.63%	2.50%	0	29,751	1,240,319	0.62%	2.50%
William Blair & Company	14,603,621	7.23%	12.50%	0	702,800	13,900,821	6.90%	12.50%
<b>Domestic Fixed Income</b>	<b>\$49,218,842</b>	<b>24.35%</b>	<b>27.00%</b>	<b>\$(35,445)</b>	<b>\$1,395,665</b>	<b>\$47,858,622</b>	<b>23.75%</b>	<b>27.00%</b>
Richmond Capital Management	49,218,842	24.35%	27.00%	(35,445)	1,395,665	47,858,622	23.75%	27.00%
<b>Real Estate</b>	<b>\$20,539,132</b>	<b>10.16%</b>	<b>10.00%</b>	<b>\$0</b>	<b>\$(120,206)</b>	<b>\$20,659,338</b>	<b>10.25%</b>	<b>10.00%</b>
Heitman	20,539,132	10.16%	10.00%	0	(120,206)	20,659,338	10.25%	10.00%
<b>Cash Account</b>	<b>\$1,622,074</b>	<b>0.80%</b>	<b>0.00%</b>	<b>\$(4,500,000)</b>	<b>\$15,804</b>	<b>\$6,106,270</b>	<b>3.03%</b>	<b>0.00%</b>
<b>Total Fund</b>	<b>\$202,110,679</b>	<b>100.0%</b>	<b>100.0%</b>	<b>\$(5,606,618)</b>	<b>\$6,246,654</b>	<b>\$201,470,643</b>	<b>100.0%</b>	<b>100.0%</b>

## Investment Manager Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods ended June 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns and Rankings for Periods Ended June 30, 2019

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years					
<b>Domestic Equity</b>	<b>3.92%</b>	<b>42</b>	<b>7.34%</b>	<b>56</b>	<b>13.57%</b>	<b>56</b>	<b>10.15%</b>	<b>31</b>	<b>13.82%</b>	<b>29</b>
Domestic Equity Benchmark	3.75%	68	6.75%	65	13.42%	64	9.78%	46	13.46%	51
Pub Pln- Dom Equity	3.84%		7.73%		13.81%		9.73%		13.48%	
Emerald Advisers, Inc.	3.79%	66	4.70%	67	18.48%	52	12.41%	28	16.40%	24
Russell 2000 Growth Index	2.75%	84	(0.49%)	86	14.69%	83	8.63%	84	12.87%	83
Callan Small Cap Growth	5.19%		6.75%		18.99%		11.41%		14.96%	
Ceredex Value Advisors	2.35%	52	(3.40%)	27	8.41%	70	6.75%	36	11.78%	49
Russell 2000 Index	2.10%	55	(3.31%)	26	12.30%	16	7.06%	30	11.63%	54
Russell 2000 Value Index	1.38%	71	(6.24%)	53	9.81%	51	5.39%	71	10.31%	88
Callan Small Cap Value	2.45%		(5.85%)		9.93%		6.40%		11.67%	
SSgA S&P 500 Index	4.31%	49	10.45%	39	14.23%	38	10.76%	29	14.03%	43
Standard & Poor's 500	4.30%	49	10.42%	39	14.19%	40	10.71%	30	13.98%	45
Callan Large Cap Core	4.28%		9.25%		13.81%		10.32%		13.91%	
SSgA S&P 400 Index	3.09%	69	1.39%	72	10.90%	63	8.02%	53	12.69%	61
S&P Mid Cap 400 Index	3.05%	70	1.36%	72	10.90%	63	8.02%	53	12.68%	61
Callan Mid Capitalization	4.54%		5.38%		12.49%		8.26%		13.12%	
<b>International Equity</b>	<b>3.89%</b>	<b>8</b>	<b>0.50%</b>	<b>51</b>	<b>8.53%</b>	<b>86</b>	<b>2.92%</b>	<b>53</b>	<b>7.27%</b>	<b>48</b>
International Equity Benchmark	2.98%	53	1.29%	29	9.39%	64	2.16%	81	6.36%	77
Pub Pln- Intl Equity	3.00%		0.57%		9.74%		3.03%		7.24%	
Morgan Stanley Int'l Equity	2.84%	65	0.95%	34	8.25%	63	2.74%	57	7.45%	76
MSCI EAFE Index	3.68%	40	1.08%	32	9.11%	41	2.25%	73	7.31%	87
Callan NonUS Dev Core Eq	3.57%		0.01%		8.72%		3.00%		8.23%	
Morgan Stanley Emerging Mkts.	2.40%	41	0.06%	60	7.08%	91	1.20%	80	3.36%	76
MSCI EM BM	0.61%	72	1.22%	53	10.66%	45	2.49%	58	4.15%	50
Callan Emerging Equity MF	1.78%		1.60%		9.81%		2.81%		4.14%	
William Blair & Company	5.06%	23	0.11%	46	8.90%	43	3.28%	32	7.49%	39
MSCI ACWI x US (Net)	2.98%	63	1.29%	35	9.39%	33	2.16%	50	6.36%	73
Callan Non US Equity MFs	3.34%		(0.22%)		8.51%		2.29%		7.00%	
<b>Domestic Fixed Income</b>	<b>2.92%</b>	<b>34</b>	<b>7.89%</b>	<b>25</b>	<b>2.67%</b>	<b>65</b>	<b>3.31%</b>	<b>39</b>	<b>3.13%</b>	<b>50</b>
Domestic Fixed Income Benchmark	3.08%	21	7.87%	26	2.31%	77	2.95%	68	2.62%	73
Blmbg Aggregate Index	3.08%	21	7.87%	26	2.31%	77	2.95%	68	2.62%	73
Pub Pln- Dom Fixed	2.78%		7.34%		3.07%		3.20%		3.13%	
Richmond Capital Management	2.92%	93	7.89%	78	2.67%	55	3.31%	41	3.13%	42
Blended Benchmark(2)	3.08%	72	7.87%	78	2.31%	91	2.95%	91	2.67%	97
Callan Core Bond FI	3.16%		8.10%		2.73%		3.27%		3.09%	
<b>Real Estate</b>	<b>(0.58%)</b>	<b>100</b>	<b>3.20%</b>	<b>100</b>	<b>5.79%</b>	<b>98</b>	-	-	-	-
Real Estate Benchmark	1.12%	74	5.99%	82	6.97%	77	-	-	-	-
Pub Pln- Real Estate	1.65%		7.10%		7.71%		9.32%		10.23%	
Heitman	(0.58%)	95	3.20%	95	5.79%	81	-	-	-	-
NFI-ODCE Equal Weight Net	1.12%	84	5.99%	78	6.97%	56	9.12%	52	9.68%	57
Callan OE Core Cmngld RE	1.69%		6.98%		7.15%		9.31%		9.79%	
<b>Total Fund</b>	<b>3.13%</b>	<b>61</b>	<b>5.72%</b>	<b>66</b>	<b>9.02%</b>	<b>47</b>	<b>6.85%</b>	<b>17</b>	<b>9.31%</b>	<b>14</b>
Total Fund Benchmark(1)	3.11%	63	6.68%	29	9.33%	35	6.82%	17	9.00%	21
CPI + 5%	2.00%	98	6.44%	39	7.01%	94	6.25%	41	6.44%	93
Callan Public Fund Spr DB	3.27%		6.19%		8.91%		5.96%		8.11%	

(1) The Total Fund Benchmark consists of 26% S&P 500 Index, 27% Blmbg Aggregate Index, 25% MSCI ACWI ex US (Net), 10% NFI-ODCE Equal Weight Net, 6% S&P MidCap 400, 3% Russell 2000 Growth and 3% Russell 2000 Value.

(2) Blmbg Gov/Credit Bond Index through May 31, 2013 and Blmbg Aggregate thereafter.

## Investment Manager Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods ended June 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns and Rankings for Periods Ended June 30, 2019

	Last 10 Years		Last 15 Years		Last 20 Years		Last 28-3/4 Years	
<b>Domestic Equity</b>	<b>14.96%</b>	<b>14</b>	<b>9.38%</b>	<b>10</b>	<b>7.40%</b>	<b>12</b>	<b>10.13%</b>	<b>61</b>
Domestic Equity Benchmark	14.54%	44	8.85%	41	6.79%	52	10.88%	27
Pub Pln- Dom Equity	14.45%		8.77%		6.81%		10.20%	
Emerald Advisers, Inc.	18.00%	18	11.09%	49	-		-	
Russell 2000 Growth Index	14.41%	90	8.90%	90	6.49%	95	9.29%	95
Callan Small Cap Growth	16.73%		11.04%		9.98%		13.44%	
Ceredex Value Advisors	14.07%	54	10.44%	9	11.68%	27	-	
Russell 2000 Index	13.45%	69	8.15%	79	7.77%	97	10.68%	97
Russell 2000 Value Index	12.40%	91	7.28%	88	8.64%	92	11.63%	94
Callan Small Cap Value	14.18%		8.80%		10.74%		13.77%	
SSgA S&P 500 Index	14.75%	42	8.80%	72	5.95%	89	-	
Standard & Poor's 500	14.70%	43	8.75%	78	5.90%	90	10.47%	85
Callan Large Cap Core	14.41%		9.20%		6.83%		11.19%	
SSgA S&P 400 Index	14.66%	62	9.70%	68	9.56%	63	-	
S&P Mid Cap 400 Index	14.64%	62	9.67%	69	9.51%	64	13.00%	53
Callan Mid Capitalization	15.12%		10.07%		10.05%		13.24%	
<b>International Equity</b>	<b>7.94%</b>	<b>35</b>	<b>6.54%</b>	<b>47</b>	<b>6.00%</b>	<b>29</b>	<b>-</b>	
International Equity Benchmark	6.54%	83	5.85%	76	4.54%	82	6.15%	88
Pub Pln- Intl Equity	7.64%		6.52%		5.37%		7.26%	
Morgan Stanley Int'l Equity	7.55%	81	6.12%	69	6.78%	10	-	
MSCI EAFE Index	6.90%	93	5.35%	100	4.00%	99	5.83%	95
Callan NonUS Dev Core Eq	8.30%		6.50%		5.45%		6.72%	
Morgan Stanley Emerging Mkts.	5.31%	73	8.03%	70	6.95%	81	-	
MSCI EM BM	5.81%	60	8.70%	52	-		-	
Callan Emerging Equity MF	6.22%		8.75%		7.62%		-	
William Blair & Company	8.53%	25	6.64%	26	-		-	
MSCI ACWI x US (Net)	6.54%	66	5.85%	49	-		-	
Callan Non US Equity MFs	7.39%		5.75%		4.58%		6.55%	
<b>Domestic Fixed Income</b>	<b>4.90%</b>	<b>42</b>	<b>4.83%</b>	<b>46</b>	<b>5.48%</b>	<b>40</b>	<b>6.44%</b>	<b>50</b>
Domestic Fixed Income Benchmark	3.90%	71	4.27%	65	4.93%	79	5.95%	94
Blmbg Aggregate Index	3.90%	71	4.27%	65	4.93%	79	5.95%	94
Pub Pln- Dom Fixed	4.65%		4.74%		5.40%		6.44%	
Richmond Capital Management	4.90%	23	4.83%	41	5.48%	39	6.57%	29
Blended Benchmark(2)	4.05%	93	4.30%	92	4.99%	90	6.02%	93
Callan Core Bond FI	4.56%		4.78%		5.39%		6.42%	
<b>Total Fund</b>	<b>10.43%</b>	<b>9</b>	<b>7.79%</b>	<b>5</b>	<b>6.98%</b>	<b>6</b>	<b>8.86%</b>	<b>32</b>
Total Fund Benchmark(1)	10.06%	16	7.32%	22	6.37%	31	8.91%	26
CPI + 5%	6.70%	96	7.01%	37	7.17%	5	7.27%	94
Callan Public Fund Spr DB	9.20%		6.74%		6.13%		8.53%	

(1) The Total Fund Benchmark consists of 26% S&P 500 Index, 27% Blmbg Aggregate Index, 25% MSCI ACWI ex US (Net), 10% NFI-ODCE Equal Weight Net, 6% S&P MidCap 400, 3% Russell 2000 Growth and 3% Russell 2000 Value.

(2) Blmbg Gov/Credit Bond Index through May 31, 2013 and Blmbg Aggregate thereafter.

## Investment Manager Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	12/2018- 6/2019		2018		2017		2016		2015	
<b>Domestic Equity</b>	<b>18.77%</b>	<b>35</b>	<b>(6.60%)</b>	<b>68</b>	<b>20.70%</b>	<b>45</b>	<b>14.61%</b>	<b>19</b>	<b>0.82%</b>	<b>27</b>
Domestic Equity Benchmark	18.19%	65	(6.48%)	64	19.85%	66	14.77%	15	(0.05%)	58
Pub Pln- Dom Equity	18.51%		(5.84%)		20.51%		12.86%		0.19%	
Emerald Advisers, Inc.	26.03%	45	(10.81%)	92	29.11%	26	10.97%	37	4.66%	13
Russell 2000 Growth Index	20.36%	74	(9.31%)	85	22.17%	70	11.32%	36	(1.38%)	50
Callan Small Cap Growth	24.56%		(3.04%)		25.74%		8.62%		(1.29%)	
Ceredex Value Advisors	14.01%	69	(11.34%)	14	11.12%	35	30.95%	26	(4.47%)	57
Russell 2000 Index	16.98%	35	(11.01%)	13	14.65%	12	21.31%	92	(4.41%)	57
Russell 2000 Value Index	13.47%	73	(12.86%)	23	7.84%	65	31.74%	14	(7.47%)	83
Callan Small Cap Value	15.86%		(14.79%)		9.19%		27.86%		(3.73%)	
SSgA S&P 500 Index	18.54%	49	(4.36%)	32	21.86%	47	12.03%	21	1.46%	48
Standard & Poor's 500	18.54%	49	(4.38%)	32	21.83%	48	11.96%	21	1.38%	51
Callan Large Cap Core	18.51%		(5.35%)		21.65%		10.42%		1.40%	
SSgA S&P 400 Index	18.01%	69	(11.10%)	56	16.22%	70	20.73%	14	(2.15%)	65
S&P 400 Mid Cap Index	17.97%	69	(11.08%)	56	16.24%	70	20.74%	14	(2.18%)	65
Callan Mid Capitalization	20.49%		(10.55%)		19.58%		12.23%		(0.80%)	
<b>International Equity</b>	<b>16.69%</b>	<b>6</b>	<b>(15.33%)</b>	<b>72</b>	<b>28.22%</b>	<b>62</b>	<b>(1.46%)</b>	<b>95</b>	<b>0.15%</b>	<b>7</b>
International Equity Benchmark	13.60%	59	(14.20%)	52	27.19%	79	4.10%	41	(5.66%)	67
Pub Pln- Intl Equity	13.95%		(14.04%)		29.11%		4.10%		(3.83%)	
Morgan Stanley Int'l Equity	14.64%	47	(12.86%)	21	26.28%	50	(0.82%)	77	1.17%	50
MSCI EAFE Index	14.03%	57	(13.79%)	29	25.03%	62	1.00%	49	(0.81%)	76
Callan NonUS Dev Core Eq	14.59%		(15.26%)		26.32%		0.94%		1.15%	
Morgan Stanley Emerging Mkts.	9.85%	76	(17.32%)	55	34.97%	63	6.73%	86	(10.33%)	19
MSCI EM BM	10.59%	67	(14.57%)	23	37.28%	53	11.19%	59	(14.92%)	59
Callan Emerging Equity MF	13.29%		(16.91%)		37.69%		11.97%		(13.88%)	
William Blair & Company	19.40%	8	(17.50%)	74	29.53%	32	(2.40%)	77	0.09%	48
MSCI ACWI x US (Net)	13.60%	61	(14.20%)	33	27.19%	47	4.50%	15	(5.66%)	93
Callan Non US Equity MFs	14.41%		(15.04%)		26.90%		0.23%		0.02%	
<b>Domestic Fixed Income</b>	<b>6.00%</b>	<b>59</b>	<b>0.36%</b>	<b>40</b>	<b>3.82%</b>	<b>68</b>	<b>3.15%</b>	<b>69</b>	<b>1.17%</b>	<b>13</b>
Domestic Fixed Income Benchmark	6.11%	54	0.01%	57	3.54%	76	2.65%	76	0.55%	38
Blmbg Aggregate Index	6.11%	54	0.01%	57	3.54%	76	2.65%	76	0.55%	38
Pub Pln- Dom Fixed	6.17%		0.14%		4.49%		4.28%		0.33%	
Richmond Capital Management	6.00%	86	0.36%	24	3.82%	67	3.15%	49	1.17%	23
Blended Benchmark(2)	6.11%	81	0.01%	62	3.54%	87	2.65%	87	0.55%	71
Callan Core Bond FI	6.43%		0.11%		3.96%		3.14%		0.84%	
<b>Real Estate</b>	<b>0.70%</b>	<b>98</b>	<b>6.39%</b>	<b>80</b>	<b>5.88%</b>	<b>84</b>	<b>8.83%</b>	<b>48</b>	<b>14.68%</b>	<b>19</b>
Real Estate Benchmark	2.62%	77	7.30%	63	6.92%	68	8.36%	54	14.18%	24
Pub Pln- Real Estate	3.74%		7.98%		7.70%		8.50%		12.31%	
Heitman	0.70%	94	6.39%	83	5.88%	82	8.83%	44	14.68%	42
NFI-ODCE Equal Weight Net	2.62%	82	7.30%	47	6.92%	48	8.36%	56	14.18%	56
Callan OE Core Cmngld RE	3.27%		7.22%		6.84%		8.67%		14.40%	
<b>Total Fund</b>	<b>12.71%</b>	<b>19</b>	<b>(4.81%)</b>	<b>71</b>	<b>15.56%</b>	<b>48</b>	<b>8.21%</b>	<b>34</b>	<b>1.82%</b>	<b>6</b>
Total Fund Benchmark(1)	12.20%	28	(3.89%)	50	15.02%	55	9.29%	8	0.78%	27
CPI + 5%	4.45%	99	6.77%	1	7.18%	97	6.99%	72	5.39%	1
Callan Public Fund Spr DB	11.35%		(3.87%)		15.45%		7.74%		0.06%	

(1) The Total Fund Benchmark consists of 26% S&P 500 Index, 27% Blmbg Aggregate Index, 25% MSCI ACWI ex US (Net), 10% NFI-ODCE Equal Weight Net, 6% S&P MidCap 400, 3% Russell 2000 Growth and 3% Russell 2000 Value.

(2) Blmbg Gov/Credit Bond Index through May 31, 2013 and Blmbg Aggregate thereafter.

## Investment Manager Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	2014		2013		2012		2011		2010	
<b>Domestic Equity</b>	<b>11.57%</b>	<b>41</b>	<b>34.24%</b>	<b>53</b>	<b>16.71%</b>	<b>26</b>	<b>1.05%</b>	<b>35</b>	<b>19.21%</b>	<b>30</b>
Domestic Equity Benchmark	11.86%	27	33.54%	65	16.35%	41	0.65%	46	18.48%	43
Pub Pln- Dom Equity	11.32%		34.39%		16.08%		0.33%		17.92%	
Emerald Advisers, Inc.	7.68%	23	50.59%	34	18.54%	14	(0.87%)	44	29.83%	39
Russell 2000 Growth Index	5.60%	32	43.30%	74	14.59%	50	(2.91%)	61	29.09%	44
Callan Small Cap Growth	3.40%		46.83%		14.55%		(1.35%)		28.81%	
Ceredex Value Advisors	3.03%	86	35.87%	75	19.31%	40	(3.36%)	45	30.78%	29
Russell 2000 Index	4.89%	72	38.82%	50	16.35%	70	(4.18%)	55	26.85%	56
Russell 2000 Value Index	4.22%	82	34.52%	81	18.05%	50	(5.50%)	65	24.50%	76
Callan Small Cap Value	5.81%		38.72%		18.12%		(3.72%)		27.38%	
SSgA S&P 500 Index	13.72%	48	32.44%	77	16.06%	48	2.14%	35	15.14%	42
Standard & Poor's 500	13.69%	48	32.39%	77	16.00%	48	2.11%	36	15.06%	42
Callan Large Cap Core	13.63%		34.49%		15.89%		1.46%		14.20%	
SSgA S&P 400 Index	9.75%	51	33.67%	76	17.94%	37	(1.69%)	47	26.59%	38
S&P 400 Mid Cap Index	9.77%	51	33.50%	77	17.88%	37	(1.73%)	47	26.64%	38
Callan Mid Capitalization	9.88%		35.84%		16.26%		(1.92%)		25.49%	
<b>International Equity</b>	<b>(3.84%)</b>	<b>66</b>	<b>19.19%</b>	<b>40</b>	<b>22.38%</b>	<b>4</b>	<b>(11.38%)</b>	<b>20</b>	<b>14.23%</b>	<b>25</b>
International Equity Benchmark	(3.87%)	67	15.29%	69	16.83%	79	(13.71%)	57	11.15%	62
Pub Pln- Intl Equity	(3.17%)		17.91%		18.60%		(13.40%)		12.11%	
Morgan Stanley Int'l Equity	(5.13%)	59	21.72%	75	20.71%	36	(7.40%)	17	6.96%	87
MSCI EAFE Index	(4.90%)	57	22.78%	66	17.32%	68	(12.14%)	58	7.75%	81
Callan NonUS Dev Core Eq	(4.45%)		24.76%		18.70%		(11.49%)		9.98%	
Morgan Stanley Emerging Mkts.	(4.47%)	59	(0.80%)	36	20.19%	27	(18.41%)	36	18.49%	57
MSCI EM BM	(2.19%)	35	(2.60%)	58	18.23%	48	(18.42%)	37	18.88%	45
Callan Emerging Equity MF	(4.02%)		(2.19%)		17.78%		(19.02%)		18.55%	
William Blair & Company	(2.66%)	24	18.90%	74	24.11%	8	(13.66%)	56	20.10%	8
MSCI ACWI x US (Net)	(3.87%)	32	15.29%	87	16.83%	73	(13.71%)	56	11.15%	46
Callan Non US Equity MFs	(5.48%)		21.05%		18.98%		(13.51%)		10.56%	
<b>Domestic Fixed Income</b>	<b>6.48%</b>	<b>21</b>	<b>(1.44%)</b>	<b>62</b>	<b>5.85%</b>	<b>69</b>	<b>9.38%</b>	<b>11</b>	<b>8.60%</b>	<b>50</b>
Domestic Fixed Income Benchmark	5.97%	36	(2.02%)	77	4.21%	85	7.84%	34	6.54%	81
Blmbg Aggregate Index	5.97%	36	(2.02%)	77	4.21%	85	7.84%	34	6.54%	81
Pub Pln- Dom Fixed	5.56%		(1.02%)		7.21%		7.19%		8.60%	
Richmond Capital Management	6.48%	34	(1.44%)	48	5.85%	61	9.38%	1	8.60%	13
Blended Benchmark(2)	5.97%	70	(2.00%)	84	4.82%	89	8.74%	12	6.59%	91
Callan Core Bond FI	6.19%		(1.47%)		6.16%		7.87%		7.56%	
<b>Total Fund</b>	<b>7.45%</b>	<b>18</b>	<b>19.40%</b>	<b>18</b>	<b>13.67%</b>	<b>27</b>	<b>1.83%</b>	<b>28</b>	<b>14.87%</b>	<b>14</b>
Total Fund Benchmark(1)	7.41%	19	17.57%	33	12.30%	58	1.53%	34	13.73%	36
CPI + 5%	5.33%	67	6.46%	95	6.68%	96	8.21%	1	6.68%	97
Callan Public Fund Spr DB	6.03%		15.73%		12.66%		0.91%		12.99%	

(1) The Total Fund Benchmark consists of 26% S&P 500 Index, 27% Blmbg Aggregate Index, 25% MSCI ACWI ex US (Net), 10% NFI-ODCE Equal Weight Net, 6% S&P MidCap 400, 3% Russell 2000 Growth and 3% Russell 2000 Value.

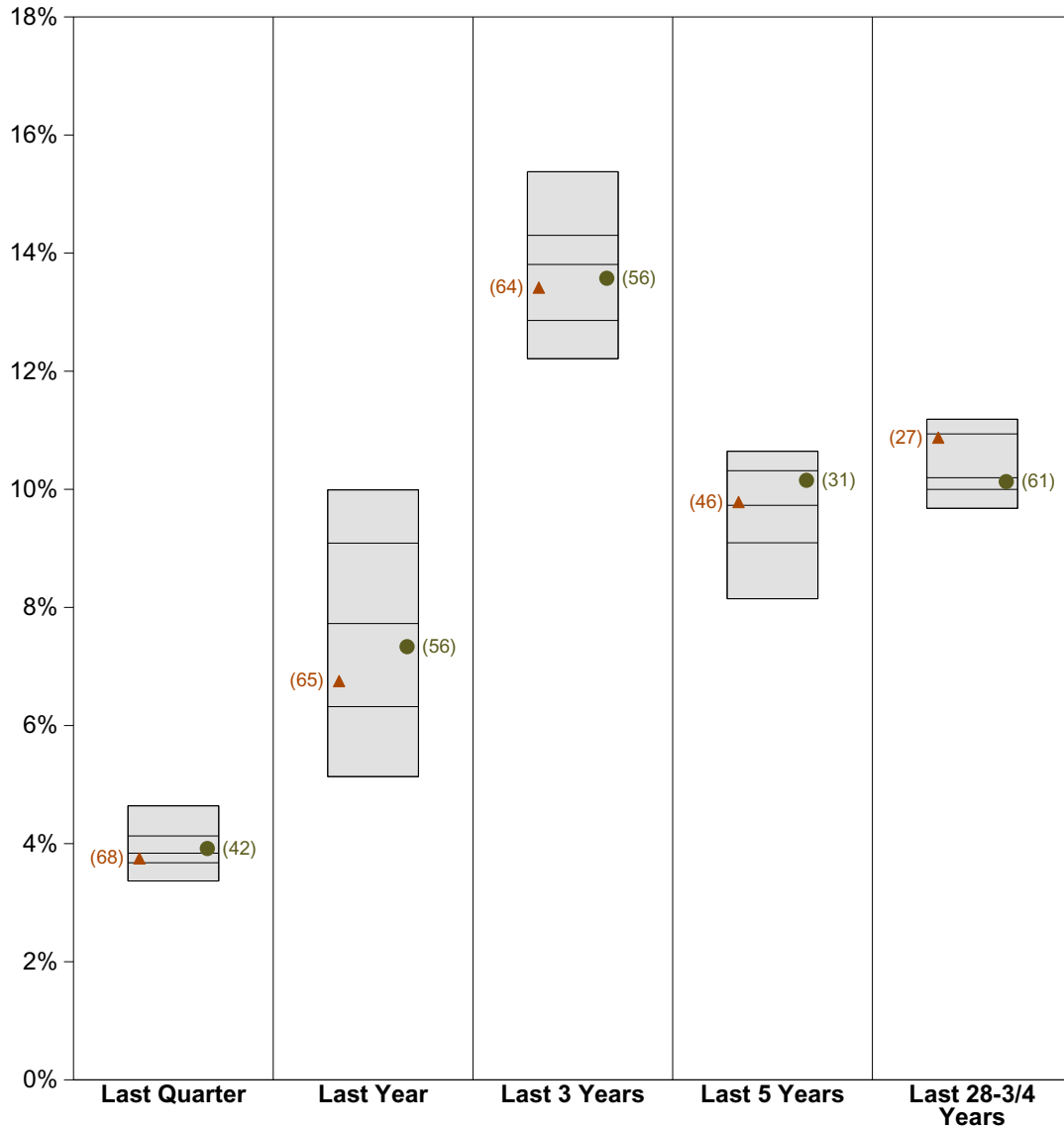
(2) Blmbg Gov/Credit Bond Index through May 31, 2013 and Blmbg Aggregate thereafter.



**City of Fort Pierce  
Performance vs Public Fund - Domestic Equity  
Periods Ended June 30, 2019**

**Return Ranking**

The chart below illustrates fund rankings over various periods versus the Public Fund - Domestic Equity. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the Public Fund - Domestic Equity. The numbers to the right of the bar represent the percentile rankings of the fund being analyzed. The table below the chart details the rates of return plotted in the graph above.

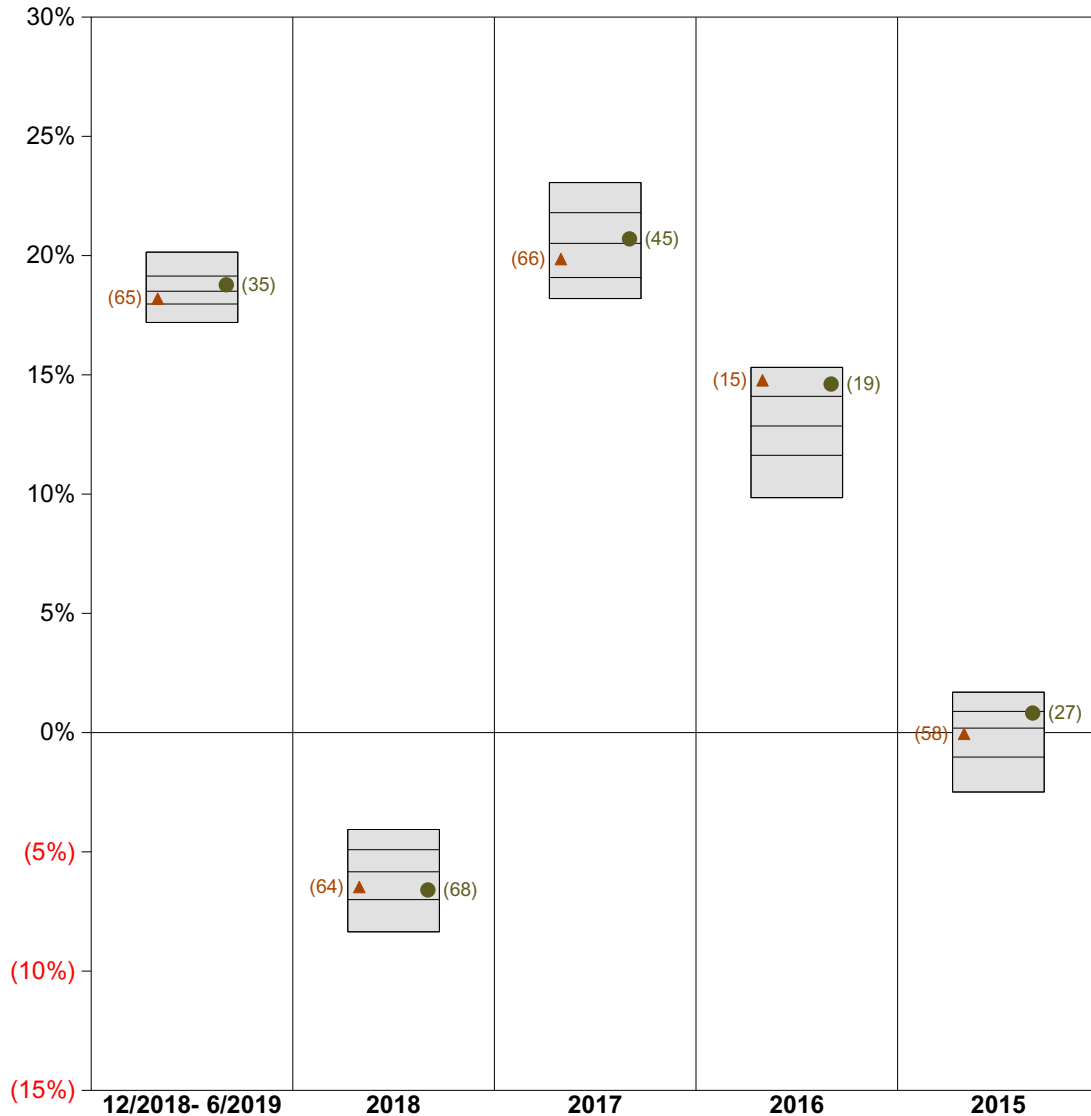


10th Percentile	4.64	9.99	15.38	10.64	11.19
25th Percentile	4.13	9.09	14.30	10.32	10.94
Median	3.84	7.73	13.81	9.73	10.20
75th Percentile	3.68	6.32	12.86	9.09	10.00
90th Percentile	3.37	5.14	12.21	8.15	9.68
<b>Equity Composite</b> ●	3.92	7.34	13.57	10.15	10.13
Domestic Equity Benchmark ▲	3.75	6.75	13.42	9.78	10.88

# City of Fort Pierce Performance vs Public Fund - Domestic Equity Recent Periods

## Return Ranking

The chart below illustrates fund rankings over various periods versus the Public Fund - Domestic Equity. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the Public Fund - Domestic Equity. The numbers to the right of the bar represent the percentile rankings of the fund being analyzed. The table below the chart details the rates of return plotted in the graph above.



	12/2018- 6/2019	2018	2017	2016	2015
10th Percentile	20.14	(4.06)	23.06	15.31	1.70
25th Percentile	19.14	(4.91)	21.80	14.10	0.89
Median	18.51	(5.84)	20.51	12.86	0.19
75th Percentile	17.97	(7.00)	19.08	11.63	(1.03)
90th Percentile	17.20	(8.35)	18.20	9.85	(2.49)
<b>Equity Composite</b> ●	18.77	(6.60)	20.70	14.61	0.82
Domestic Equity Benchmark ▲	18.19	(6.48)	19.85	14.77	(0.05)

# Emerald Advisers, Inc. Period Ended June 30, 2019

## Investment Philosophy

Emerald is dedicated to fundamental, bottom-up research designed to identify unrecognized, under-researched and undervalued growth companies.

## Quarterly Summary and Highlights

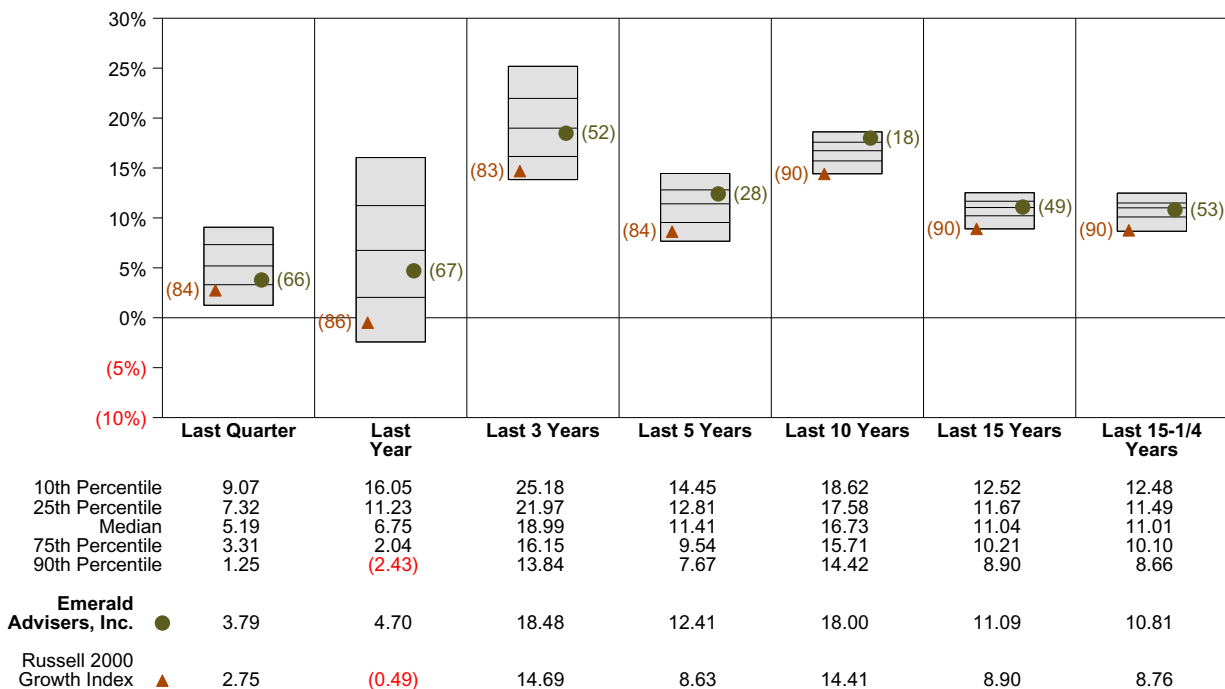
- Emerald Advisers, Inc.'s portfolio posted a 3.79% return for the quarter placing it in the 66 percentile of the Callan Small Cap Growth group for the quarter and in the 67 percentile for the last year.
- Emerald Advisers, Inc.'s portfolio outperformed the Russell 2000 Growth Index by 1.04% for the quarter and outperformed the Russell 2000 Growth Index for the year by 5.19%.

## Quarterly Asset Growth

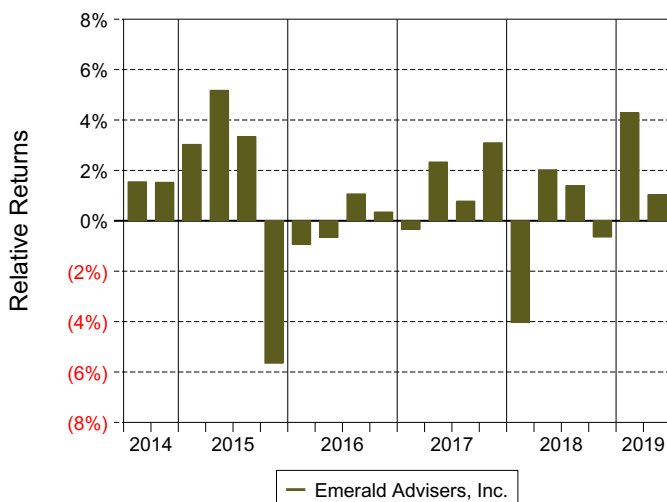
Beginning Market Value	\$9,375,773
Net New Investment	\$-1,018,829
Investment Gains/(Losses)	\$348,216
Ending Market Value	\$8,705,161

**Percent Cash: 1.4%**

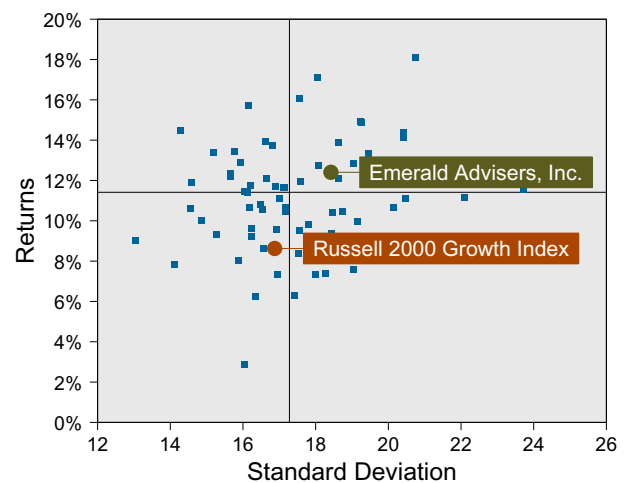
## Performance vs Callan Small Cap Growth (Gross)



## Relative Return vs Russell 2000 Growth Index



## Callan Small Cap Growth (Gross) Annualized Five Year Risk vs Return

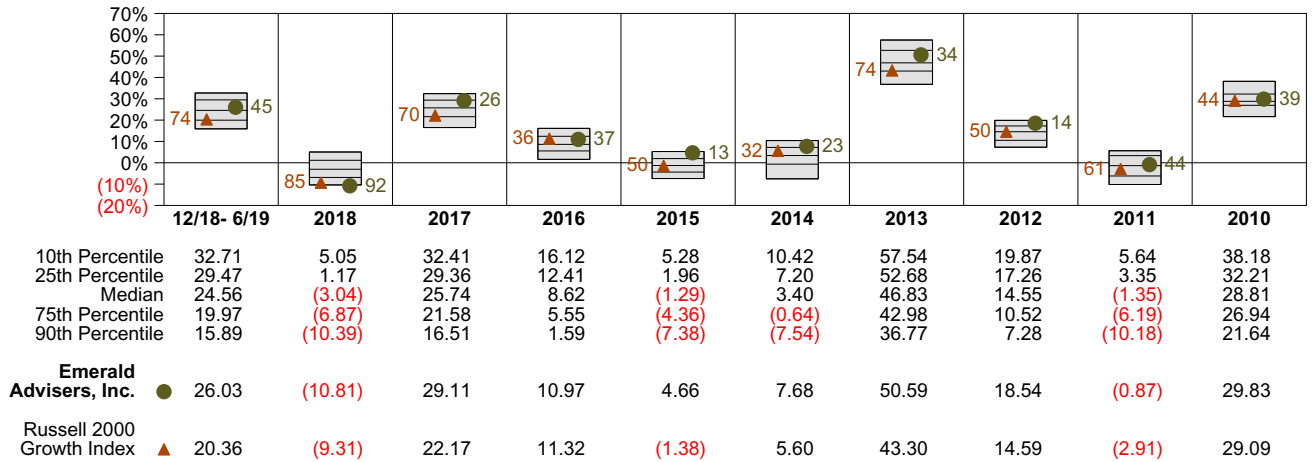


# Emerald Advisers, Inc. Return Analysis Summary

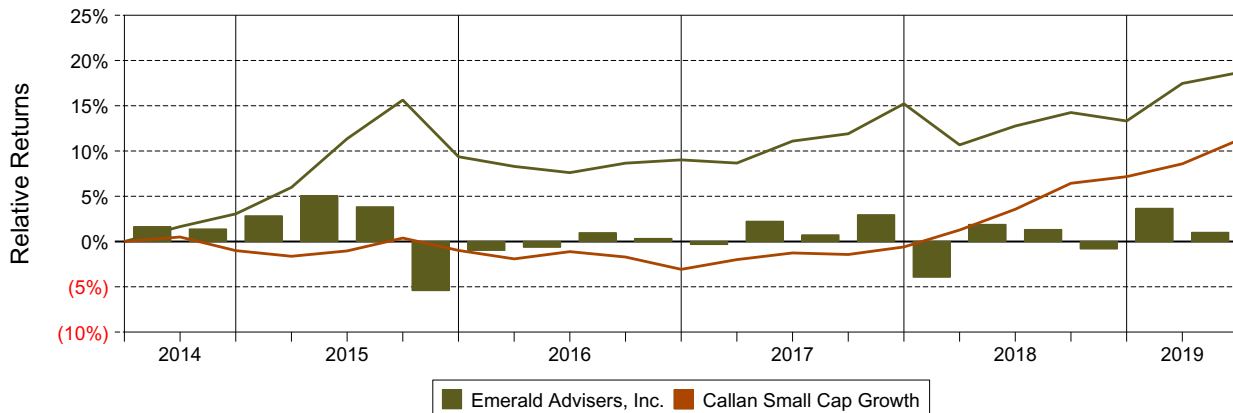
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

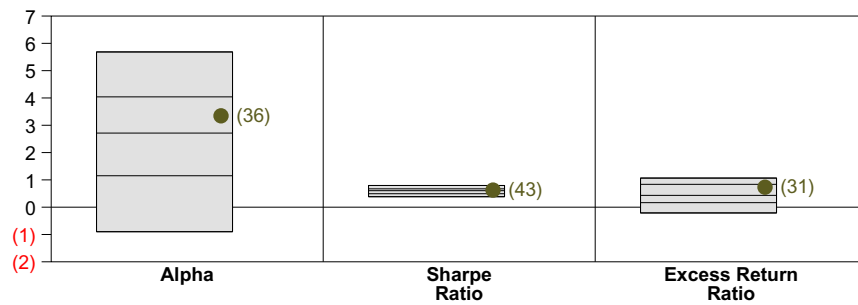
### Performance vs Callan Small Cap Growth (Gross)



### Cumulative and Quarterly Relative Return vs Russell 2000 Growth Index



### Risk Adjusted Return Measures vs Russell 2000 Growth Index Rankings Against Callan Small Cap Growth (Gross) Five Years Ended June 30, 2019



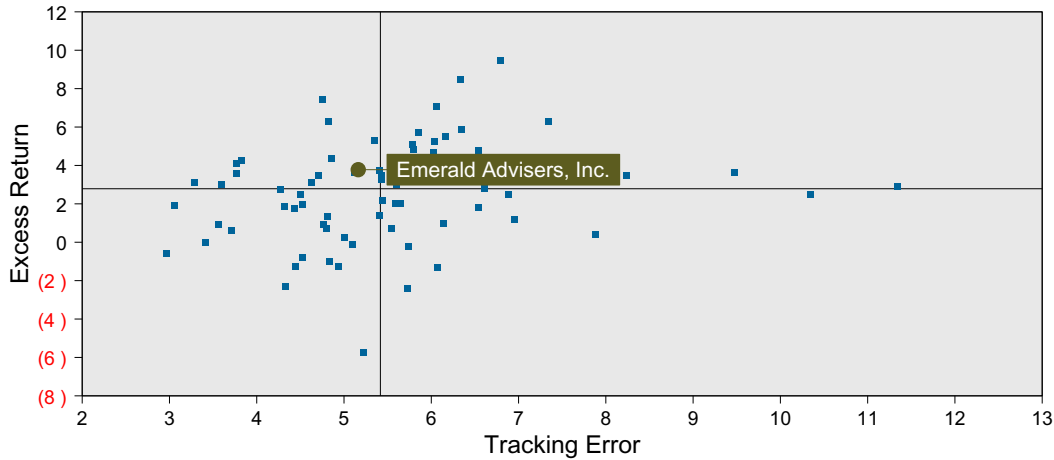
10th Percentile	5.69	0.79	1.07
25th Percentile	4.04	0.67	0.84
Median	2.71	0.60	0.43
75th Percentile	1.15	0.49	0.17
90th Percentile	(0.90)	0.38	(0.21)
<b>Emerald Advisers, Inc.</b>	● 3.35	0.63	0.73

# Emerald Advisers, Inc. Risk Analysis Summary

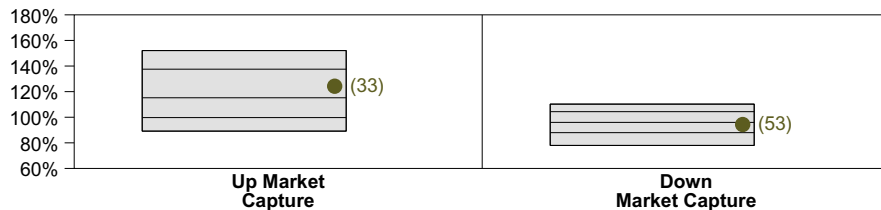
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Callan Small Cap Growth (Gross) Five Years Ended June 30, 2019

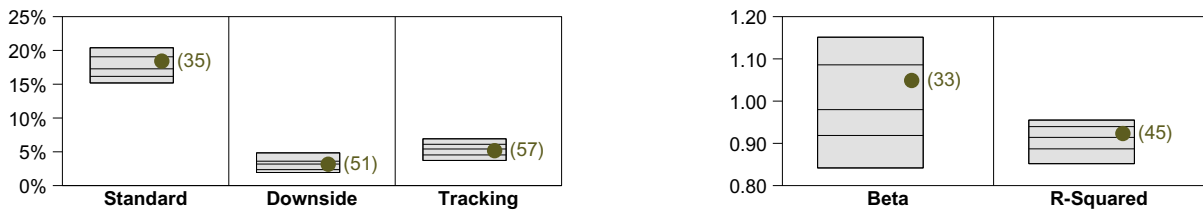


### Market Capture vs Russell 2000 Growth Index Rankings Against Callan Small Cap Growth (Gross) Five Years Ended June 30, 2019



	Up Market Capture	Down Market Capture
10th Percentile	152.09	110.24
25th Percentile	137.53	104.35
Median	115.20	95.98
75th Percentile	99.73	87.96
90th Percentile	89.15	77.98
<b>Emerald Advisers, Inc.</b>	<b>124.22</b>	<b>94.29</b>

### Risk Statistics Rankings vs Russell 2000 Growth Index Rankings Against Callan Small Cap Growth (Gross) Five Years Ended June 30, 2019



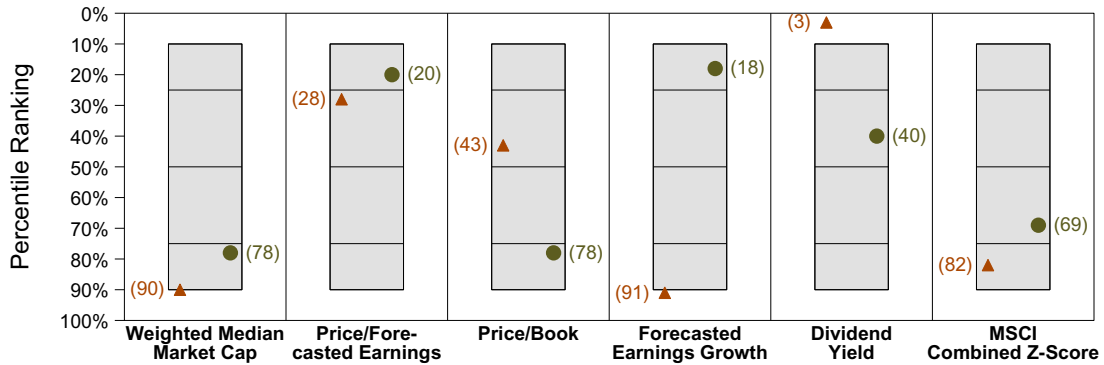
	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	20.40	4.85	6.93	1.15	0.96
25th Percentile	19.06	3.61	6.11	1.09	0.94
Median	17.28	3.19	5.42	0.98	0.91
75th Percentile	16.16	2.36	4.54	0.92	0.89
90th Percentile	15.19	1.94	3.72	0.84	0.85
<b>Emerald Advisers, Inc.</b>	<b>18.42</b>	<b>3.16</b>	<b>5.16</b>	<b>1.05</b>	<b>0.92</b>

# Emerald Advisers, Inc. Equity Characteristics Analysis Summary

## Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Cap Growth as of June 30, 2019

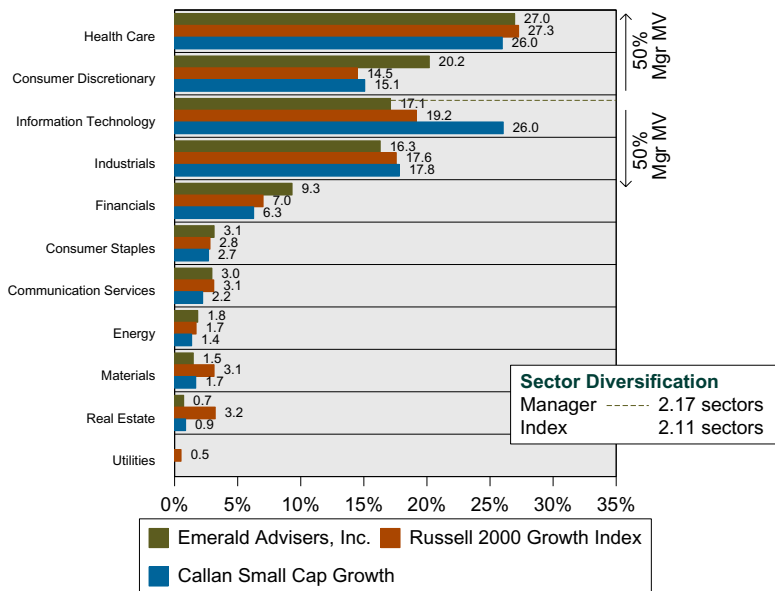


	Weighted Median Market Cap	Price/Forecasted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	3.99	70.29	5.84	25.34	0.65	1.06
25th Percentile	3.65	43.95	4.88	21.49	0.57	0.89
Median	3.20	32.58	3.96	19.36	0.41	0.75
75th Percentile	2.69	24.20	3.53	17.87	0.23	0.60
90th Percentile	2.19	20.57	2.91	16.12	0.11	0.46
<b>Emerald Advisers, Inc.</b> ●	2.60	45.53	3.47	22.84	0.48	0.62
Russell 2000 Growth Index ▲	2.27	41.51	4.07	15.33	0.74	0.55

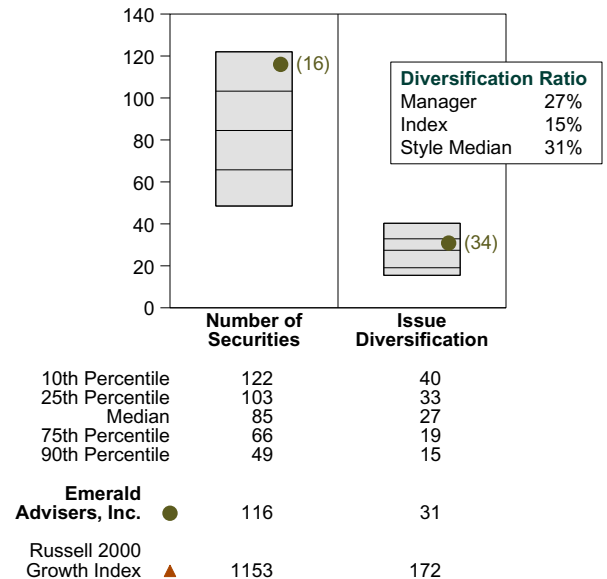
## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

### Sector Allocation June 30, 2019



### Diversification June 30, 2019



## Emerald Advisers, Inc. Top 10 Portfolio Holdings Characteristics as of June 30, 2019

### 10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Chegg Inc	Consumer Discretionary	\$234,473	2.7%	0.89%	4.57	56.92	0.00%	25.00%
Rapid7 Inc	Information Technology	\$183,931	2.1%	14.32%	2.79	262.91	0.00%	(0.46)%
Ciena Corp	Information Technology	\$178,628	2.0%	10.15%	6.38	17.89	0.00%	15.69%
Trex Co Inc	Industrials	\$178,533	2.0%	16.52%	4.19	27.31	0.00%	32.59%
Planet Fitness Inc Cl A	Consumer Discretionary	\$172,407	2.0%	5.36%	6.12	42.07	0.00%	24.80%
Kratos Defense & Sec Solutio	Industrials	\$165,495	1.9%	46.43%	2.42	51.90	0.00%	8.60%
Cadence Bancorporation Cl A	Financials	\$162,136	1.8%	13.14%	2.68	8.61	3.37%	78.48%
Five Below Inc	Consumer Discretionary	\$161,067	1.8%	(3.43)%	6.72	35.05	0.00%	21.34%
Trinet Group Inc	Industrials	\$160,550	1.8%	13.49%	4.75	18.81	0.00%	36.51%
Neogenomics Inc	Health Care	\$152,242	1.7%	7.26%	2.27	71.23	0.00%	20.00%

### 10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Arqule Inc	Health Care	\$59,399	0.7%	93.81%	1.32	(30.58)	0.00%	25.00%
USA Technologies Inc Com No Par	Information Technology	\$36,035	0.4%	79.04%	0.45	30.96	0.00%	-
Transmedics Group Inc	Health Care	\$22,003	0.3%	69.90%	0.61	(20.56)	0.00%	-
Personalis Inc	Health Care	\$12,760	0.1%	59.71%	0.81	(136.43)	0.00%	-
Kratos Defense & Sec Solutio	Industrials	\$165,495	1.9%	46.43%	2.42	51.90	0.00%	8.60%
Akorn Inc	Health Care	\$0	0.0%	46.31%	0.65	206.00	0.00%	(44.70)%
Ehealth Inc	Financials	\$76,629	0.9%	38.72%	1.95	46.09	0.00%	56.43%
Nv5 Hldgs Inc	Industrials	\$83,842	1.0%	37.13%	1.02	19.31	0.00%	42.03%
Haemonetics Corp Mass	Health Care	\$78,221	0.9%	37.03%	6.17	38.62	0.00%	12.00%
Cray Inc	Information Technology	\$101,674	1.2%	33.56%	1.44	(28.94)	0.00%	20.00%

### 10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Comscore Inc	Communication Services	\$0	0.0%	(74.52)%	0.31	(3.89)	0.00%	(57.21)%
Glu Mobile Inc	Communication Services	\$68,914	0.8%	(34.04)%	1.04	16.85	0.00%	1.49%
Assembly Biosciences Inc	Health Care	\$24,822	0.3%	(31.49)%	0.35	(2.71)	0.00%	-
Tillys Inc Cl A	Consumer Discretionary	\$17,450	0.2%	(31.45)%	0.17	9.78	0.00%	12.00%
Sailpoint Technlgies Hldgs I	Information Technology	\$42,825	0.5%	(30.22)%	1.78	92.78	0.00%	15.00%
Pure Storage Inc Cl A	Information Technology	\$30,082	0.3%	(29.92)%	3.86	44.65	0.00%	24.10%
Intercept Pharmaceuticals In	Health Care	\$42,172	0.5%	(26.96)%	2.57	(8.05)	0.00%	-
Livanova Plc	Health Care	\$41,017	0.5%	(26.22)%	3.48	22.27	0.00%	11.90%
Avrobio Inc	Health Care	\$33,496	0.4%	(26.22)%	0.39	(5.28)	0.00%	-
American Eagle Outfitters Ne	Consumer Discretionary	\$83,030	0.9%	(23.30)%	2.91	10.17	3.25%	6.71%

# Ceredex Value Advisors Period Ended June 30, 2019

## Investment Philosophy

Ceredex Value Advisors seeks to provide long-term capital appreciation and income by investing primarily in U.S. companies with market capitalization less than \$3 billion, and which managers believe are undervalued in the market place at the time of purchase.

## Quarterly Summary and Highlights

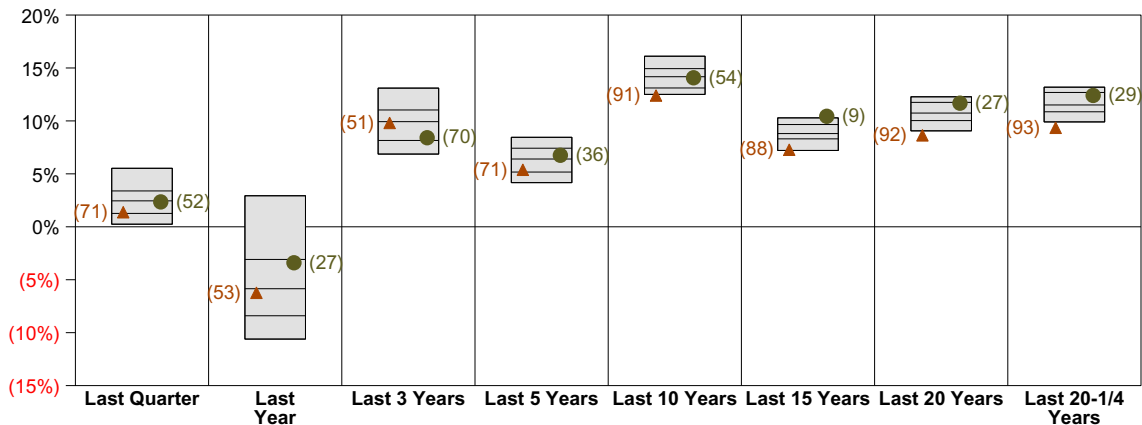
- Ceredex Value Advisors's portfolio posted a 2.35% return for the quarter placing it in the 52 percentile of the Callan Small Cap Value group for the quarter and in the 27 percentile for the last year.
- Ceredex Value Advisors's portfolio outperformed the Russell 2000 Value Index by 0.97% for the quarter and outperformed the Russell 2000 Value Index for the year by 2.84%.

## Quarterly Asset Growth

Beginning Market Value	\$7,531,880
Net New Investment	\$-16,920
Investment Gains/(Losses)	\$176,931
Ending Market Value	\$7,691,891

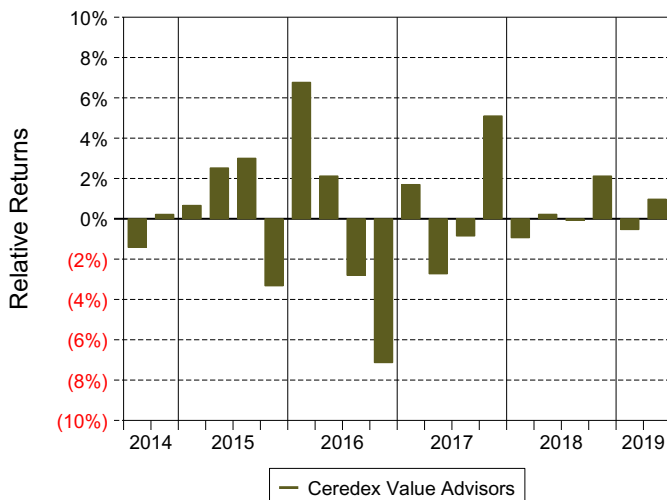
**Percent Cash: 3.0%**

## Performance vs Callan Small Cap Value (Gross)

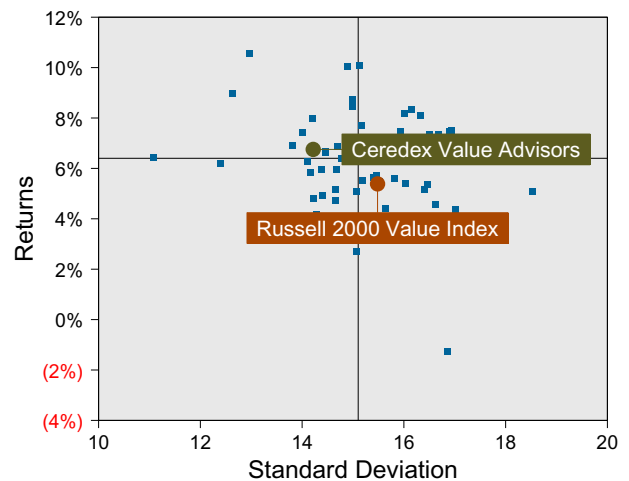


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years	Last 20 Years	Last 20-1/4 Years
10th Percentile	5.53	2.93	13.10	8.45	16.11	10.29	12.28	13.19
25th Percentile	3.39	(3.08)	11.03	7.42	14.94	9.66	11.75	12.69
Median	2.45	(5.85)	9.93	6.40	14.18	8.80	10.74	11.51
75th Percentile	1.26	(8.40)	8.15	5.17	13.11	8.31	10.03	10.86
90th Percentile	0.24	(10.61)	6.87	4.17	12.50	7.21	9.06	9.91
<b>Ceredex Value Advisors</b> ●	2.35	(3.40)	8.41	6.75	14.07	10.44	11.68	12.41
Russell 2000 Value Index ▲	1.38	(6.24)	9.81	5.39	12.40	7.28	8.64	9.35

## Relative Return vs Russell 2000 Value Index



## Callan Small Cap Value (Gross) Annualized Five Year Risk vs Return

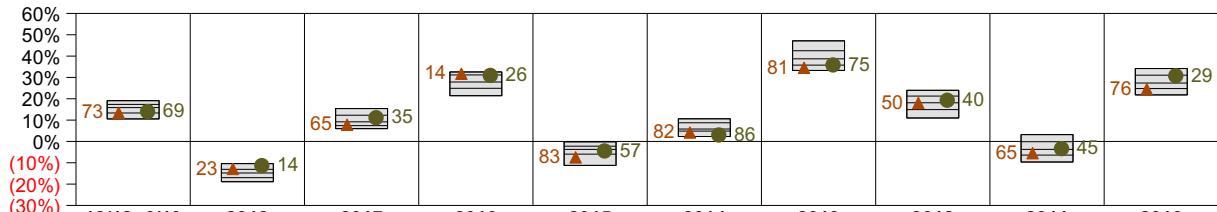


# Ceredex Value Advisors Return Analysis Summary

## Return Analysis

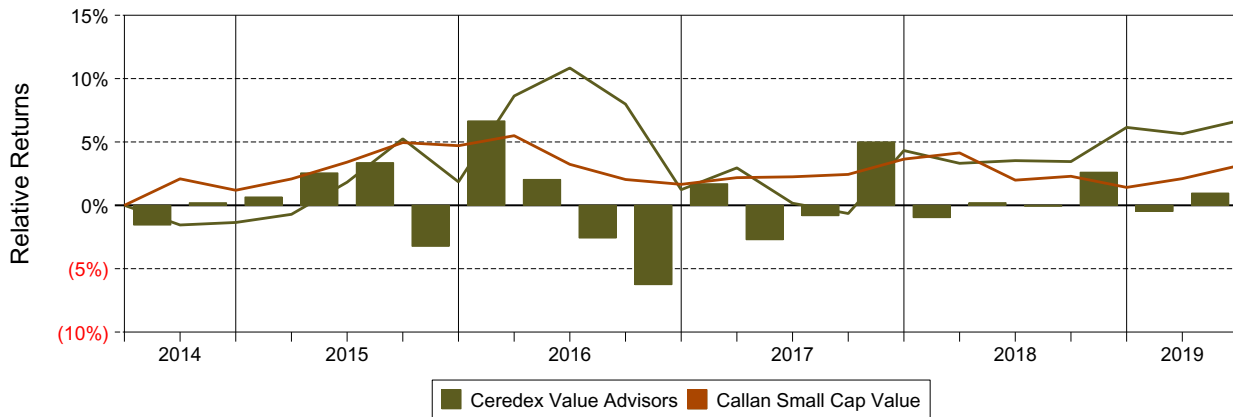
The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

### Performance vs Callan Small Cap Value (Gross)

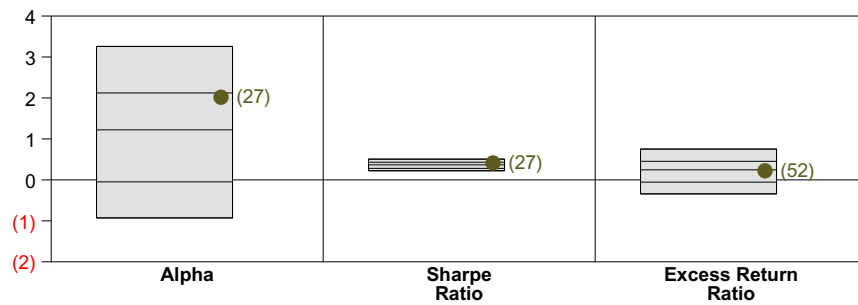


	12/18- 6/19	2018	2017	2016	2015	2014	2013	2012	2011	2010
10th Percentile	19.11	(10.39)	15.41	32.58	(0.16)	10.62	47.16	23.97	3.20	34.18
25th Percentile	17.37	(13.07)	12.28	31.17	(2.23)	8.75	42.51	21.27	(0.13)	31.06
Median	15.86	(14.79)	9.19	27.86	(3.73)	5.81	38.72	18.12	(3.72)	27.38
75th Percentile	13.34	(16.98)	7.41	24.91	(5.95)	4.85	35.78	14.93	(6.40)	24.79
90th Percentile	10.55	(18.88)	6.00	21.44	(11.23)	2.31	33.27	10.98	(9.65)	21.82
<b>Ceredex Value Advisors</b>	● 14.01	(11.34)	11.12	30.95	(4.47)	3.03	35.86	19.31	(3.36)	30.78
Russell 2000 Value Index	▲ 13.47	(12.86)	7.84	31.74	(7.47)	4.22	34.52	18.05	(5.50)	24.50

### Cumulative and Quarterly Relative Return vs Russell 2000 Value Index



### Risk Adjusted Return Measures vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Five Years Ended June 30, 2019



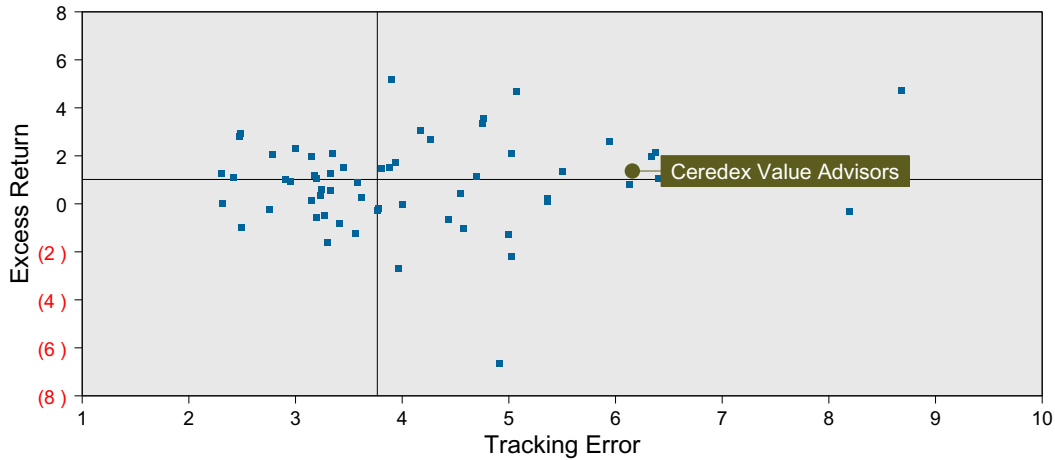
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	3.26	0.51	0.75
25th Percentile	2.12	0.43	0.45
Median	1.22	0.37	0.25
75th Percentile	(0.05)	0.28	(0.06)
90th Percentile	(0.93)	0.22	(0.34)
<b>Ceredex Value Advisors</b>	● 2.02	0.41	0.22

# Ceredex Value Advisors Risk Analysis Summary

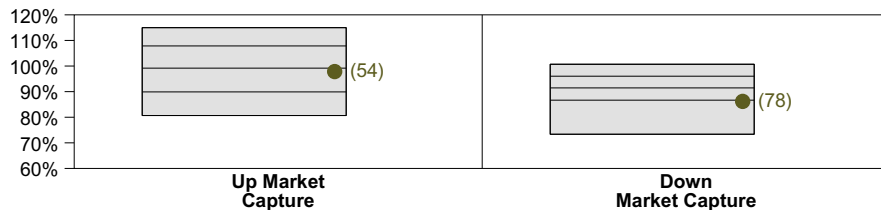
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Callan Small Cap Value (Gross) Five Years Ended June 30, 2019

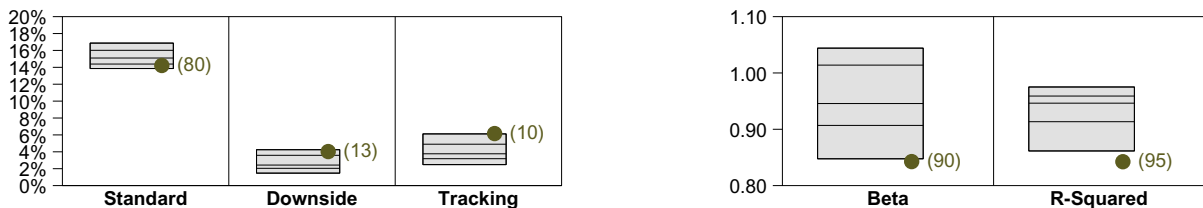


### Market Capture vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Five Years Ended June 30, 2019



	Up Market Capture	Down Market Capture
10th Percentile	114.99	100.69
25th Percentile	107.86	96.03
Median	99.17	91.46
75th Percentile	89.90	86.67
90th Percentile	80.67	73.35
<b>Ceredex Value Advisors</b>	<b>97.83</b>	<b>86.18</b>

### Risk Statistics Rankings vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Five Years Ended June 30, 2019



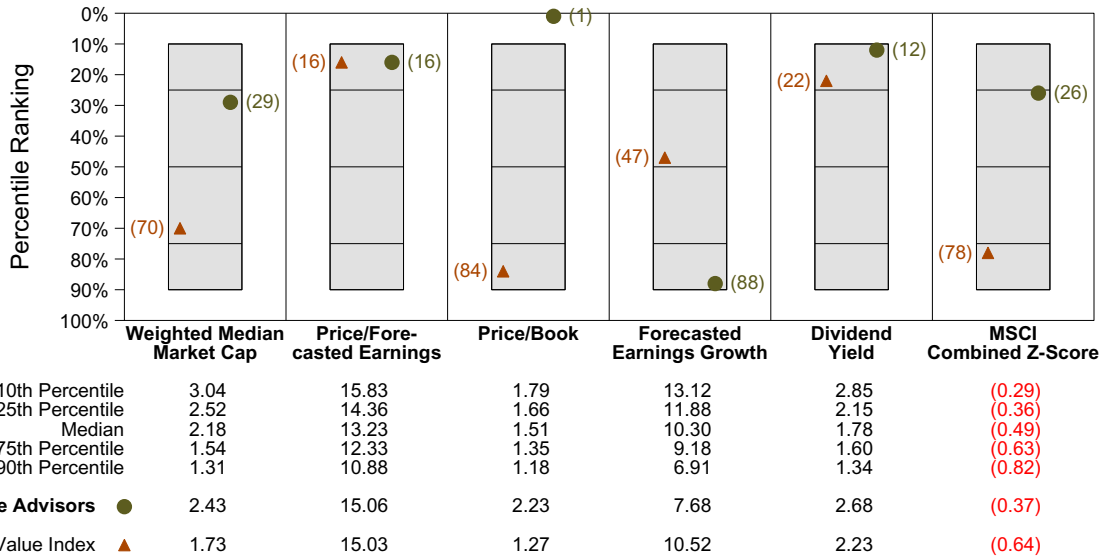
	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	16.87	4.25	6.12	1.04	0.98
25th Percentile	16.01	3.58	4.90	1.01	0.96
Median	15.10	2.43	3.77	0.95	0.95
75th Percentile	14.39	2.04	3.19	0.91	0.91
90th Percentile	13.86	1.47	2.48	0.85	0.86
<b>Ceredex Value Advisors</b>	<b>14.22</b>	<b>4.03</b>	<b>6.16</b>	<b>0.84</b>	<b>0.84</b>

# Ceredex Value Advisors Equity Characteristics Analysis Summary

## Portfolio Characteristics

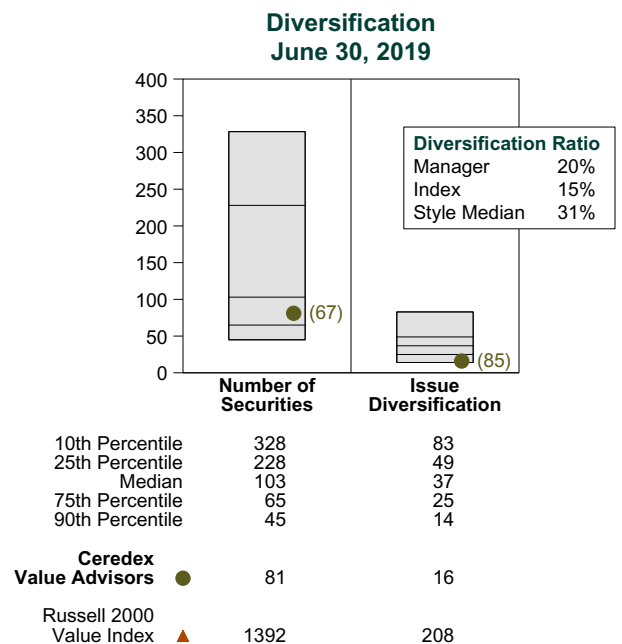
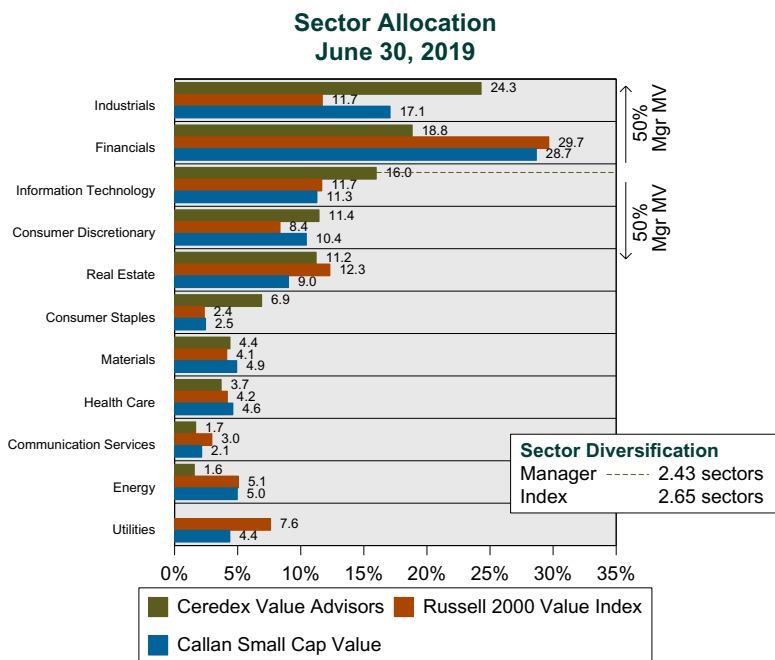
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Cap Value as of June 30, 2019



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



## Ceredex Value Advisors Top 10 Portfolio Holdings Characteristics as of June 30, 2019

### 10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Power Integrations Inc	Information Technology	\$416,936	5.4%	14.94%	2.35	29.56	0.85%	7.29%
Kemper Corp Del	Financials	\$362,418	4.7%	13.68%	5.72	14.63	1.16%	10.00%
Energizer Hldgs Inc New Com	Consumer Staples	\$274,344	3.6%	(13.36)%	2.70	11.94	3.11%	7.60%
Outfront Media Inc	Real Estate	\$273,374	3.6%	11.80%	3.65	19.78	5.58%	10.28%
Childrens PI Inc	Consumer Discretionary	\$267,064	3.5%	(0.86)%	1.51	13.46	2.35%	9.70%
Physicians Rlty Tr	Real Estate	\$254,624	3.3%	(6.14)%	3.23	64.12	5.28%	12.58%
B & G Foods Inc New	Consumer Staples	\$235,040	3.1%	(12.87)%	1.36	11.19	9.13%	4.10%
Cubic Corp	Industrials	\$225,680	2.9%	14.48%	2.01	16.84	0.42%	(30.30)%
Sabre Corp	Information Technology	\$222,000	2.9%	5.38%	6.10	20.05	2.52%	4.36%
Evercore Inc	Financials	\$203,711	2.7%	(2.00)%	3.64	10.75	2.62%	(4.50)%

### 10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Tetra Tech	Industrials	\$62,840	0.8%	32.29%	4.31	24.17	0.76%	15.00%
Lithia Mtrs Inc Cl A	Consumer Discretionary	\$178,170	2.3%	28.42%	2.65	10.57	1.01%	15.95%
Miller Herman Inc	Industrials	\$196,680	2.6%	27.84%	2.63	13.55	1.77%	9.83%
Cohen & Steers Inc	Financials	\$108,024	1.4%	22.56%	2.43	19.71	2.80%	6.85%
Knoll Inc	Industrials	\$135,582	1.8%	22.52%	1.14	10.81	2.96%	9.79%
Columbus Mckinnon Corp N Y	Industrials	\$12,591	0.2%	22.37%	0.98	13.23	0.57%	20.00%
Comtech Telecom.	Information Technology	\$75,897	1.0%	21.63%	0.68	23.42	1.42%	(8.88)%
Wabash National Corp	Industrials	\$86,231	1.1%	20.85%	0.90	10.23	1.97%	9.13%
Kelly Svcs Inc Cl A	Industrials	\$68,094	0.9%	19.12%	0.93	9.96	1.15%	42.33%
Apogee Enterprises	Industrials	\$130,320	1.7%	16.36%	1.16	13.45	1.61%	15.00%

### 10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Sm Energy Co Com	Energy	\$43,820	0.6%	(28.08)%	1.41	36.82	0.80%	307.09%
U S Silica Hldgs Inc	Energy	\$72,903	0.9%	(25.73)%	0.94	51.57	1.95%	0.41%
Movado Group Inc	Consumer Discretionary	\$32,400	0.4%	(24.94)%	0.44	9.42	2.96%	0.90%
Tupperware Brands Corp	Consumer Discretionary	\$5,709	0.1%	(24.60)%	0.93	4.67	5.68%	(2.78)%
American Eagle Outfitters Ne	Consumer Discretionary	\$150,410	2.0%	(23.06)%	2.91	10.17	3.25%	6.71%
Taubman Centers	Real Estate	\$20,415	0.3%	(21.95)%	2.50	40.47	6.61%	(30.93)%
Tanger Factory Outlet	Real Estate	\$153,995	2.0%	(21.13)%	1.53	14.87	8.76%	1.04%
Daktronics Inc	Information Technology	\$3,702	0.0%	(16.57)%	0.28	28.70	3.24%	23.53%
Scholastic Corp Common	Communication Services	\$29,916	0.4%	(16.09)%	1.12	37.35	1.81%	6.73%
Mks Instrument Inc	Information Technology	\$85,679	1.1%	(16.07)%	4.23	12.33	1.03%	4.78%

# SSgA S&P 500 Index Period Ended June 30, 2019

## Investment Philosophy

State Street's S&P 500 Index Fund seeks to replicate the total return of the S&P 500 Index.

## Quarterly Summary and Highlights

- SSgA S&P 500 Index's portfolio posted a 4.31% return for the quarter placing it in the 49 percentile of the Callan Large Cap Core group for the quarter and in the 39 percentile for the last year.
- SSgA S&P 500 Index's portfolio outperformed the S&P 500 Index by 0.01% for the quarter and outperformed the S&P 500 Index for the year by 0.04%.

## Quarterly Asset Growth

Beginning Market Value	\$65,722,297
Net New Investment	\$-6,467
Investment Gains/(Losses)	\$2,834,057
Ending Market Value	\$68,549,888

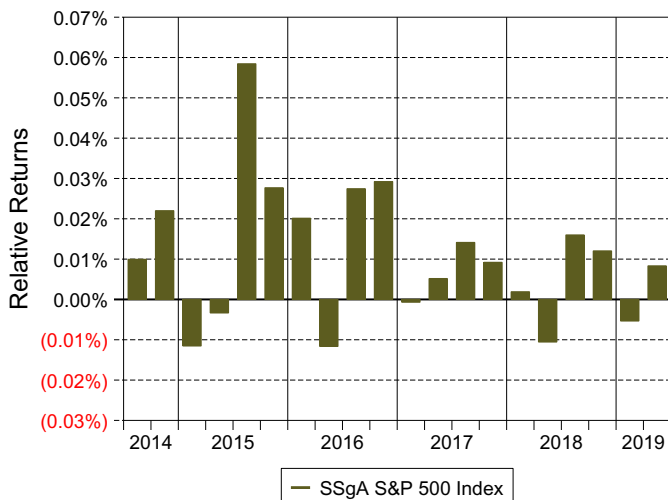
## Performance vs Callan Large Cap Core (Gross)



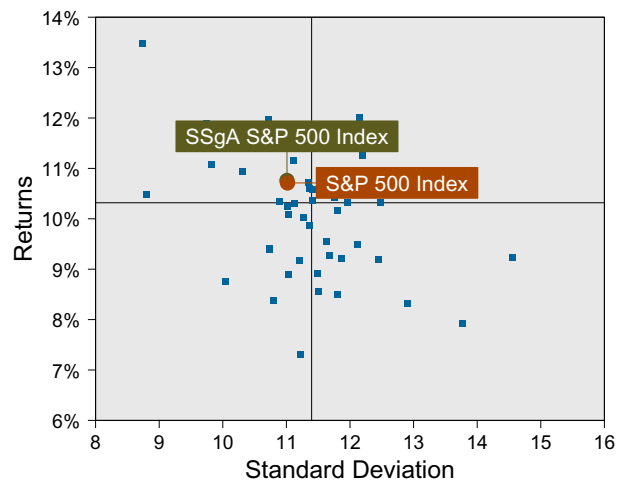
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years	Last 20 Years	Last 20-1/4 Years
10th Percentile	6.03	15.68	15.90	11.74	15.50	9.71	8.02	8.35
25th Percentile	5.13	11.82	15.18	10.91	15.00	9.51	7.39	7.72
Median	4.28	9.25	13.81	10.32	14.41	9.20	6.83	7.22
75th Percentile	3.74	6.38	12.89	9.23	13.95	8.79	6.29	6.61
90th Percentile	2.59	5.08	12.05	8.49	12.88	8.57	5.91	6.15

<b>SSgA S&amp;P 500 Index</b> ●	4.31	10.45	14.23	10.76	14.75	8.80	5.95	6.23
S&P 500 Index ▲	4.30	10.42	14.19	10.71	14.70	8.75	5.90	6.18

## Relative Return vs S&P 500 Index



## Callan Large Cap Core (Gross) Annualized Five Year Risk vs Return

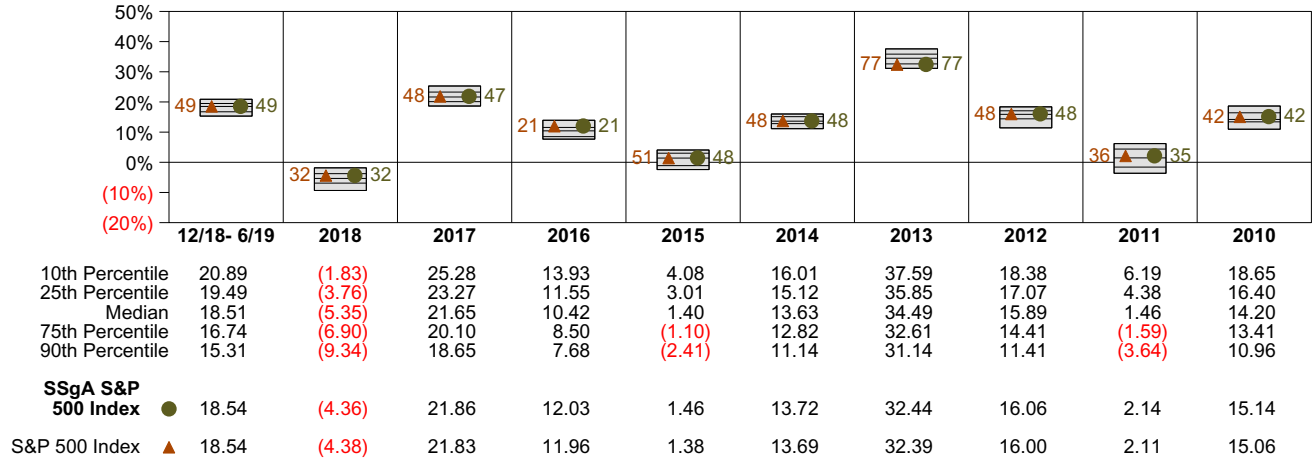


# SSgA S&P 500 Index Return Analysis Summary

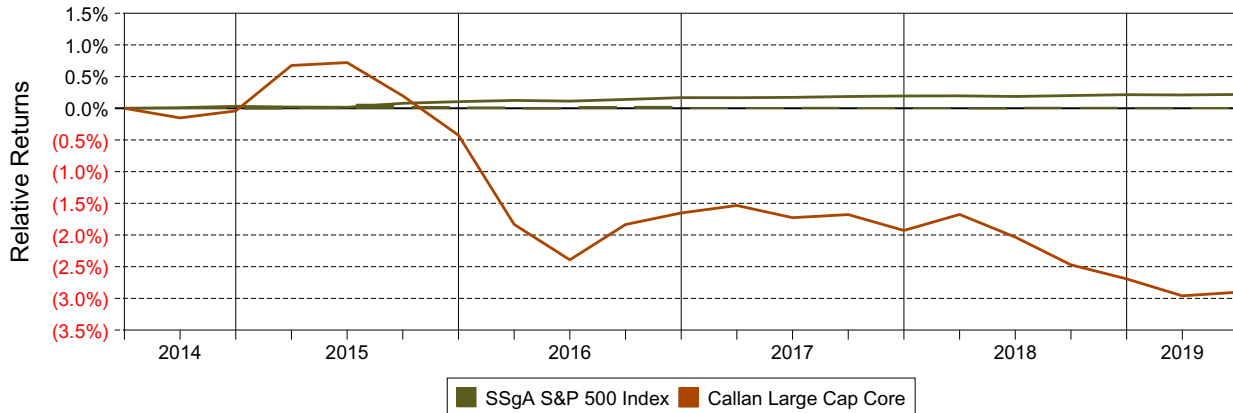
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

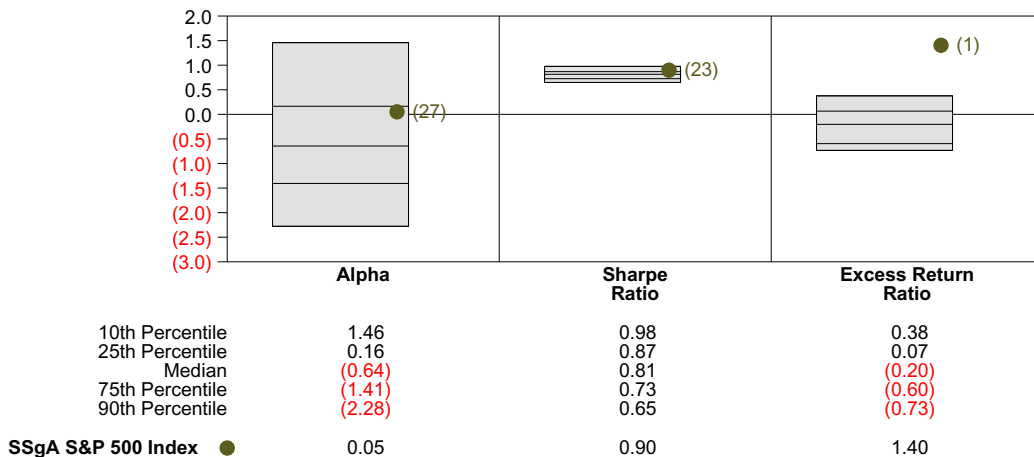
### Performance vs Callan Large Cap Core (Gross)



### Cumulative and Quarterly Relative Return vs S&P 500 Index



### Risk Adjusted Return Measures vs S&P 500 Index Rankings Against Callan Large Cap Core (Gross) Five Years Ended June 30, 2019

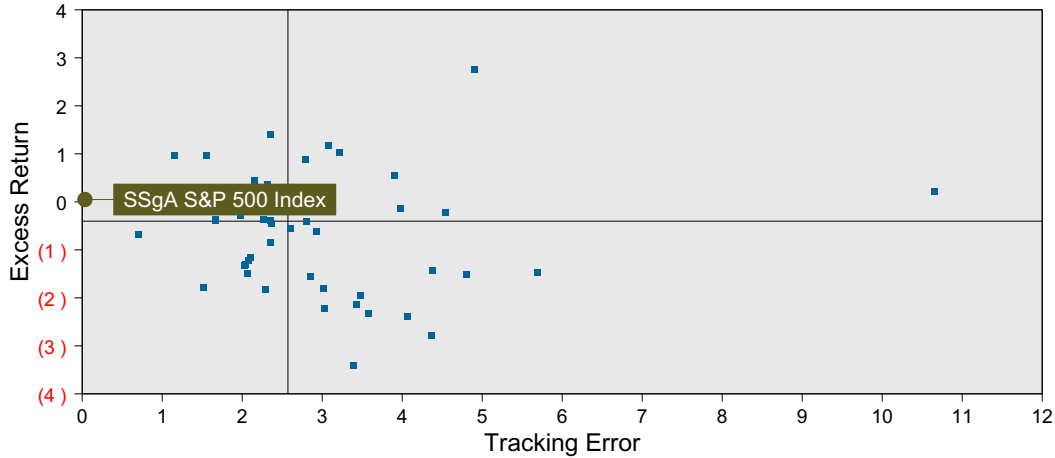


# SSgA S&P 500 Index Risk Analysis Summary

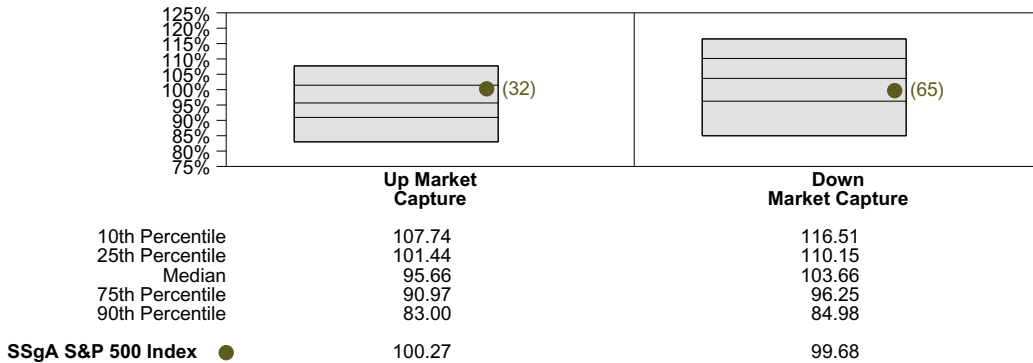
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

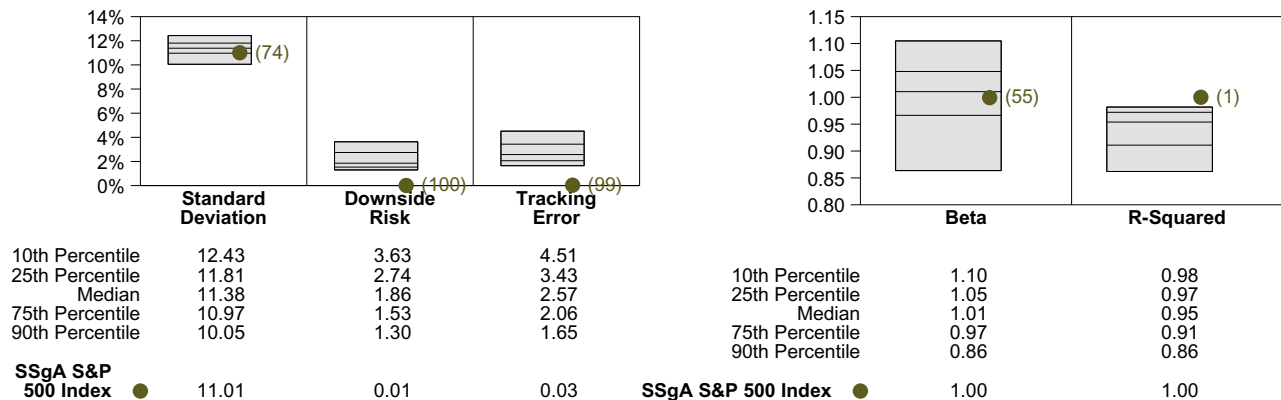
### Risk Analysis vs Callan Large Cap Core (Gross) Five Years Ended June 30, 2019



### Market Capture vs S&P 500 Index Rankings Against Callan Large Cap Core (Gross) Five Years Ended June 30, 2019



### Risk Statistics Rankings vs S&P 500 Index Rankings Against Callan Large Cap Core (Gross) Five Years Ended June 30, 2019

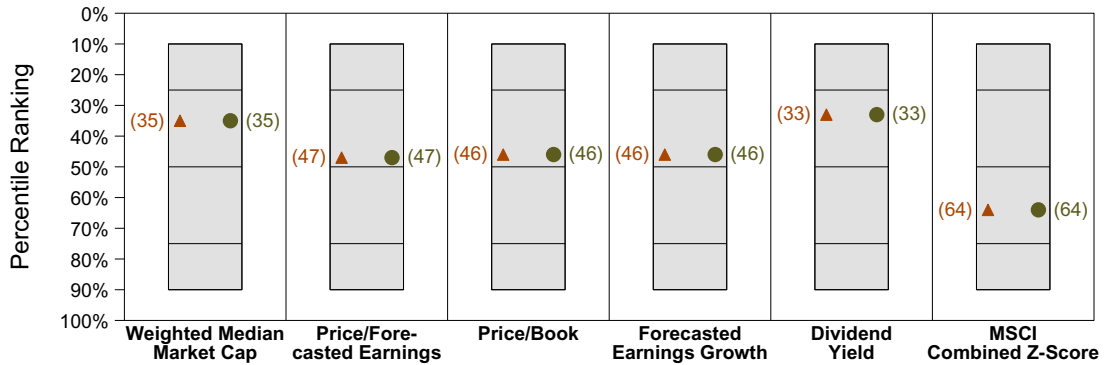


# SSgA S&P 500 Index Equity Characteristics Analysis Summary

## Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Cap Core as of June 30, 2019

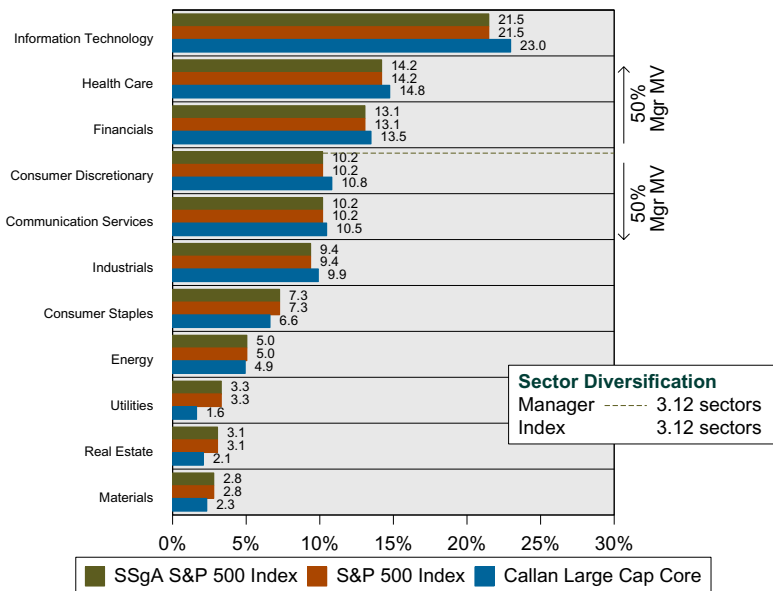


	Weighted Median Market Cap	Price/Forecasted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	194.02	19.13	3.67	19.09	2.17	0.35
25th Percentile	116.65	18.19	3.49	16.46	2.02	0.20
Median	100.75	16.77	3.08	13.96	1.74	0.04
75th Percentile	76.68	15.53	2.78	12.73	1.53	(0.17)
90th Percentile	45.21	13.80	2.54	10.96	1.24	(0.33)
<b>SSgA S&amp;P 500 Index</b>	● 112.31	16.98	3.17	14.21	1.96	(0.05)
<b>S&amp;P 500 Index</b>	▲ 112.31	16.98	3.17	14.21	1.96	(0.05)

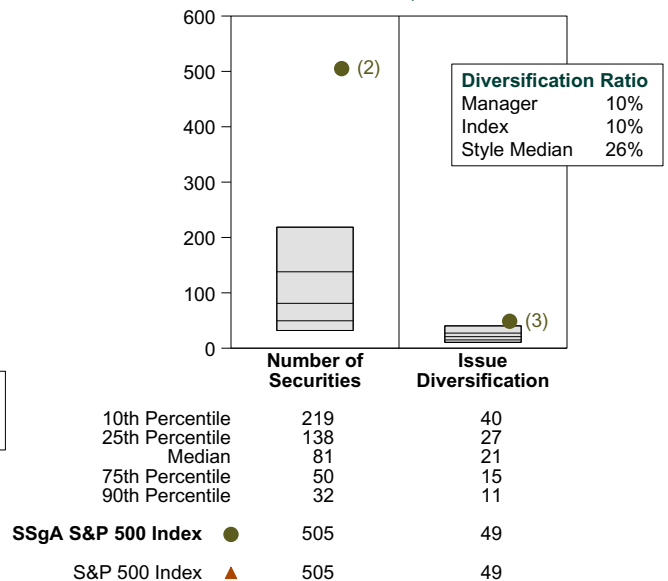
## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

### Sector Allocation June 30, 2019



### Diversification June 30, 2019



## SSgA S&P 500 Index Top 10 Portfolio Holdings Characteristics as of June 30, 2019

### 10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Microsoft Corp	Information Technology	\$2,882,790	4.2%	14.00%	1026.51	26.21	1.37%	14.90%
Apple Inc	Information Technology	\$2,429,528	3.5%	4.60%	910.64	16.07	1.56%	12.00%
Amazon.Com	Consumer Discretionary	\$2,199,286	3.2%	6.34%	932.29	57.77	0.00%	94.00%
Facebook Inc Cl A	Communication Services	\$1,302,200	1.9%	15.78%	463.69	23.45	0.00%	14.30%
Berkshire Hathaway Inc Del Cl B New	Financials	\$1,160,072	1.7%	6.11%	291.67	19.99	0.00%	23.30%
Johnson & Johnson	Health Care	\$1,038,513	1.5%	0.32%	369.80	15.69	2.73%	6.30%
JPMorgan Chase & Co	Financials	\$1,018,517	1.5%	11.28%	362.68	10.83	2.86%	5.76%
Alphabet Inc Cl C	Communication Services	\$930,315	1.4%	(7.88)%	376.44	21.78	0.00%	15.76%
Alphabet Inc Cl A	Communication Services	\$910,545	1.3%	(7.99)%	324.23	21.87	0.00%	15.76%
Exxon Mobil Corp	Energy	\$910,544	1.3%	(4.08)%	324.38	16.46	4.54%	10.00%

### 10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Anadarko Petroleum Corp	Energy	\$99,498	0.1%	55.81%	35.43	28.30	1.70%	31.60%
Arconic Inc	Industrials	\$28,952	0.0%	35.24%	11.58	13.24	0.31%	11.20%
Total Sys Svcs Inc	Information Technology	\$58,648	0.1%	35.14%	22.70	24.60	0.41%	11.35%
Qualcomm Inc	Information Technology	\$259,710	0.4%	34.62%	92.48	15.91	3.26%	27.05%
Cerner Corp	Health Care	\$66,988	0.1%	28.45%	23.85	25.14	0.98%	13.10%
Disney Walt Co Com Disney	Communication Services	\$684,590	1.0%	25.77%	251.31	21.48	1.26%	2.80%
Hasbro Inc	Consumer Discretionary	\$34,363	0.1%	25.13%	13.30	22.06	2.57%	11.20%
American Intl Group Inc	Financials	\$130,140	0.2%	24.48%	46.34	10.62	2.40%	49.51%
Carmax	Consumer Discretionary	\$40,526	0.1%	24.40%	14.36	16.15	0.00%	12.19%
Broadridge Finl Solutions In	Information Technology	\$41,644	0.1%	23.59%	14.83	24.80	1.52%	10.00%

### 10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Mylan N V Shs Euro	Health Care	\$27,562	0.0%	(32.82)%	9.81	4.31	0.00%	5.10%
Gap	Consumer Discretionary	\$10,682	0.0%	(30.71)%	6.79	8.49	5.40%	3.92%
Foot Locker Inc	Consumer Discretionary	\$13,222	0.0%	(30.41)%	4.60	8.06	3.63%	11.04%
Kohls Corp	Consumer Discretionary	\$21,636	0.0%	(29.89)%	7.70	8.82	5.64%	10.21%
Nordstrom	Consumer Discretionary	\$9,409	0.0%	(27.36)%	4.93	9.31	4.65%	8.87%
Capri Holdings Limited Shs	Consumer Discretionary	\$14,700	0.0%	(24.20)%	5.23	6.88	0.00%	6.62%
Regeneron Pharmaceutical	Health Care	\$69,126	0.1%	(23.77)%	33.72	13.67	0.00%	5.00%
Covetrus Inc	Health Care	\$6,599	0.0%	(23.20)%	2.73	30.05	0.00%	17.65%
Occidental Petroleum	Energy	\$105,623	0.2%	(22.81)%	37.60	13.82	6.21%	3.64%
Pvh Corp	Consumer Discretionary	\$19,910	0.0%	(22.37)%	7.09	8.90	0.16%	11.45%

# SSgA S&P 400 Index Period Ended June 30, 2019

## Investment Philosophy

The objective of State Street's S&P MidCap 400 Index is to seek an investment return that approximates as closely as practicable, before expenses, the performance of its benchmark index over the long term.

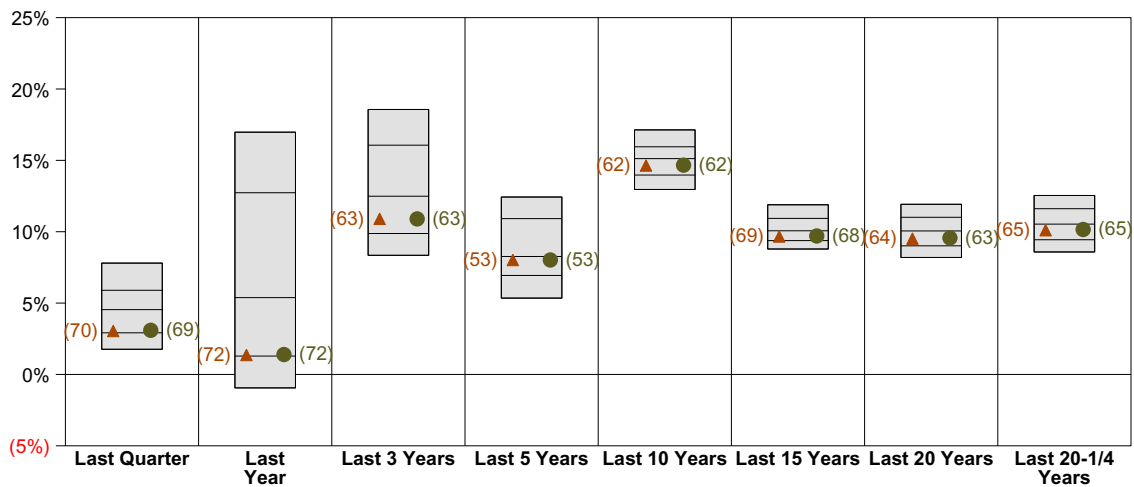
## Quarterly Summary and Highlights

- SSgA S&P 400 Index's portfolio posted a 3.09% return for the quarter placing it in the 69 percentile of the Callan Mid Capitalization group for the quarter and in the 72 percentile for the last year.
- SSgA S&P 400 Index's portfolio outperformed the S&P Mid Cap 400 Index by 0.05% for the quarter and outperformed the S&P Mid Cap 400 Index for the year by 0.03%.

## Quarterly Asset Growth

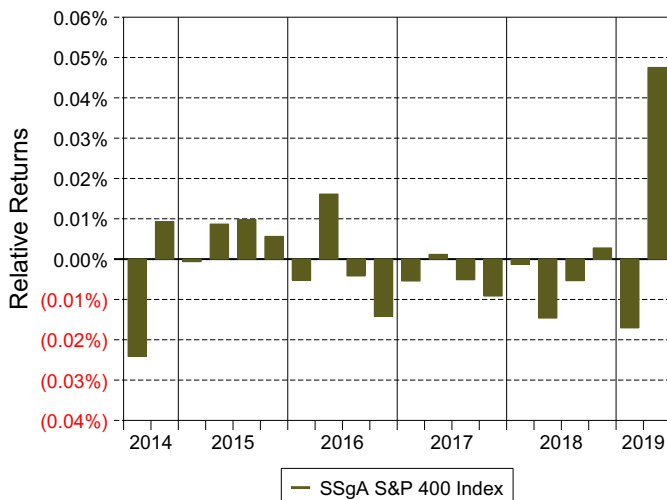
Beginning Market Value	\$15,350,993
Net New Investment	\$-3,040
Investment Gains/(Losses)	\$474,731
Ending Market Value	\$15,822,684

## Performance vs Callan Mid Capitalization (Gross)

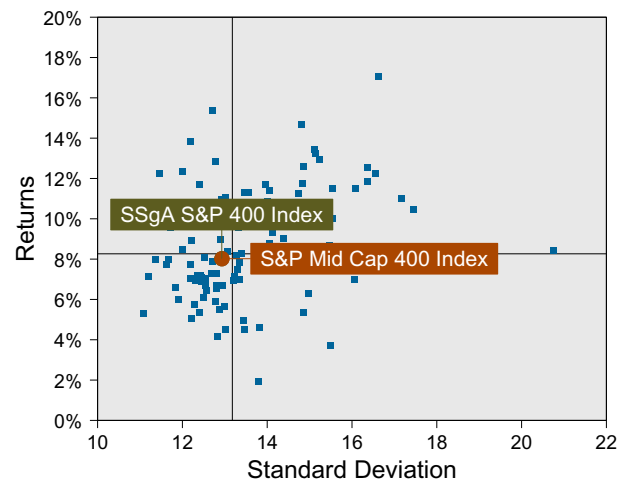


10th Percentile	7.80	16.97	18.56	12.43	17.14	11.89	11.92	12.54
25th Percentile	5.90	12.73	16.06	10.92	15.95	10.94	11.01	11.61
Median	4.54	5.38	12.49	8.26	15.12	10.07	10.05	10.53
75th Percentile	2.92	1.29	9.88	6.94	13.97	9.38	9.01	9.44
90th Percentile	1.76	(0.94)	8.35	5.35	12.96	8.79	8.20	8.58
<b>SSgA S&amp;P 400 Index</b> ●	3.09	1.39	10.90	8.02	14.66	9.70	9.56	10.16
S&P Mid Cap 400 Index ▲	3.05	1.36	10.90	8.02	14.64	9.67	9.51	10.11

## Relative Return vs S&P Mid Cap 400 Index



## Callan Mid Capitalization (Gross) Annualized Five Year Risk vs Return

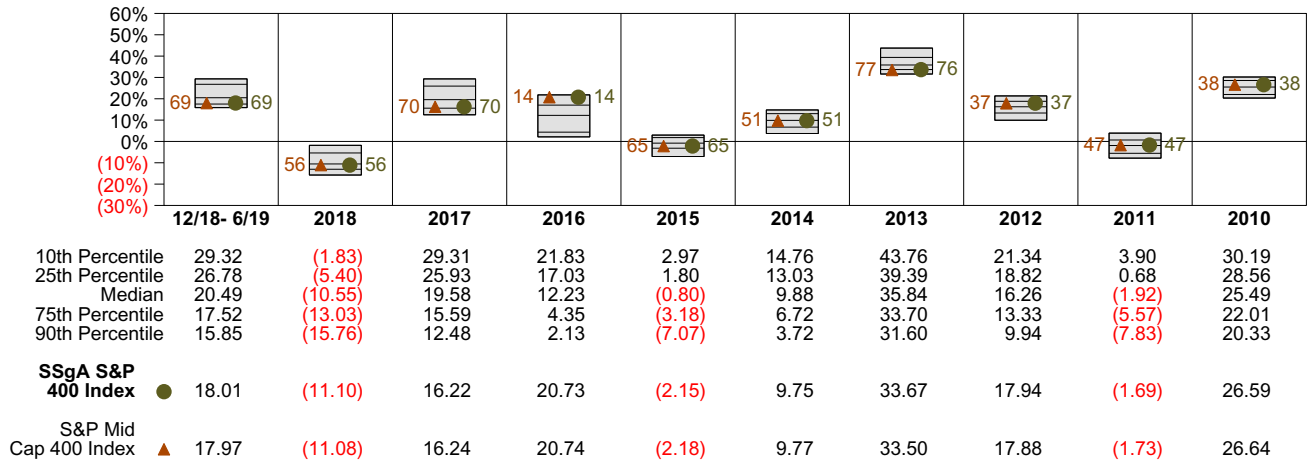


# SSgA S&P 400 Index Return Analysis Summary

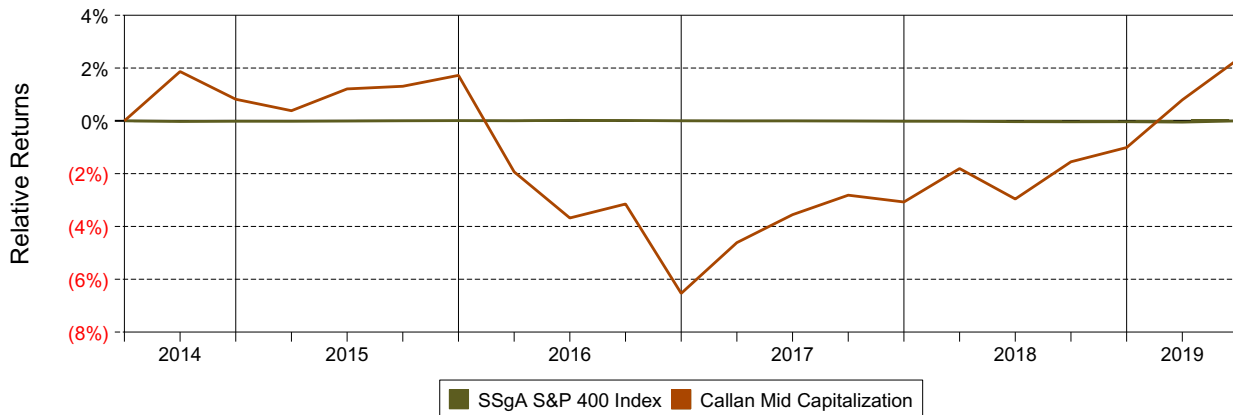
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

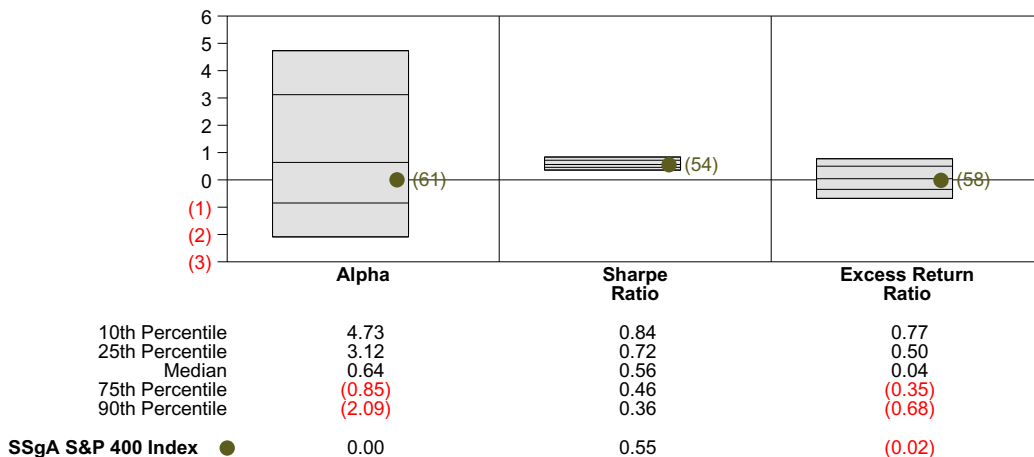
### Performance vs Callan Mid Capitalization (Gross)



### Cumulative and Quarterly Relative Return vs S&P Mid Cap 400 Index



### Risk Adjusted Return Measures vs S&P Mid Cap 400 Index Rankings Against Callan Mid Capitalization (Gross) Five Years Ended June 30, 2019

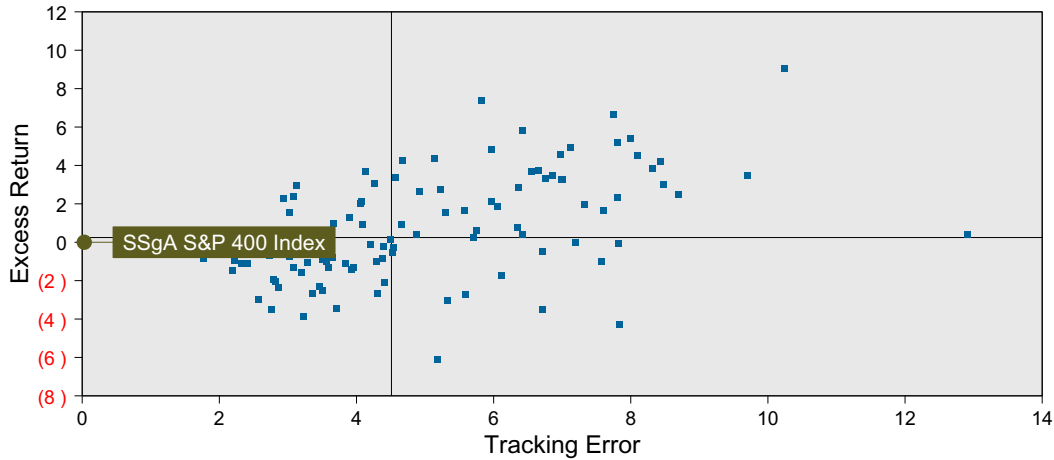


# SSgA S&P 400 Index Risk Analysis Summary

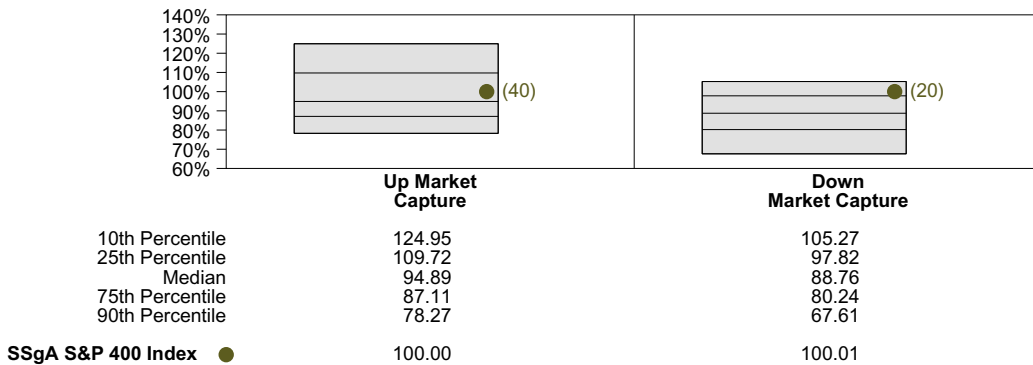
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

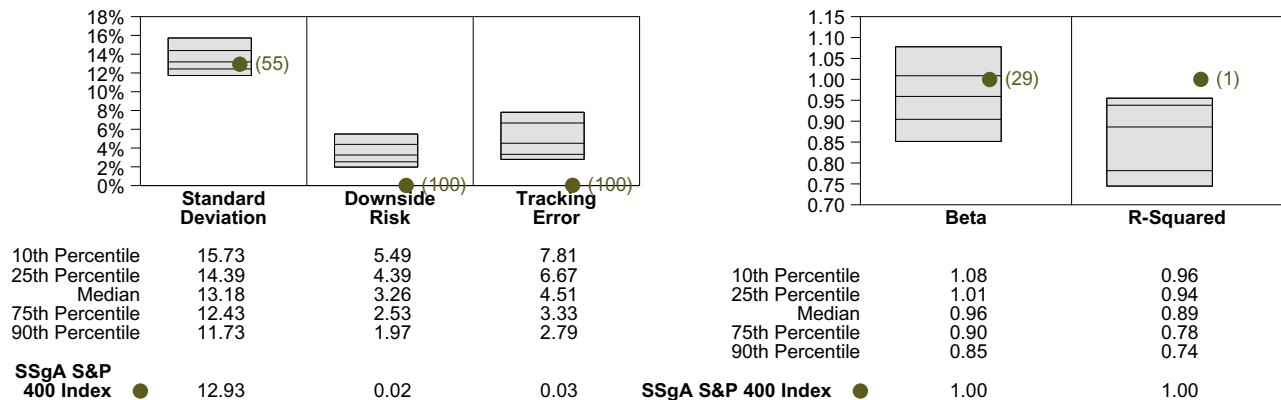
### Risk Analysis vs Callan Mid Capitalization (Gross) Five Years Ended June 30, 2019



### Market Capture vs S&P 400 Mid Cap Index Rankings Against Callan Mid Capitalization (Gross) Five Years Ended June 30, 2019



### Risk Statistics Rankings vs S&P 400 Mid Cap Index Rankings Against Callan Mid Capitalization (Gross) Five Years Ended June 30, 2019

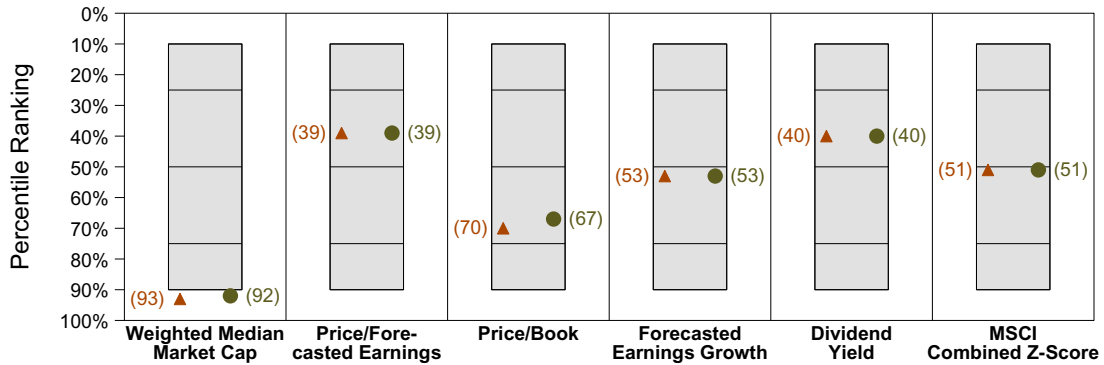


# SSgA S&P 400 Index Equity Characteristics Analysis Summary

## Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Mid Capitalization as of June 30, 2019

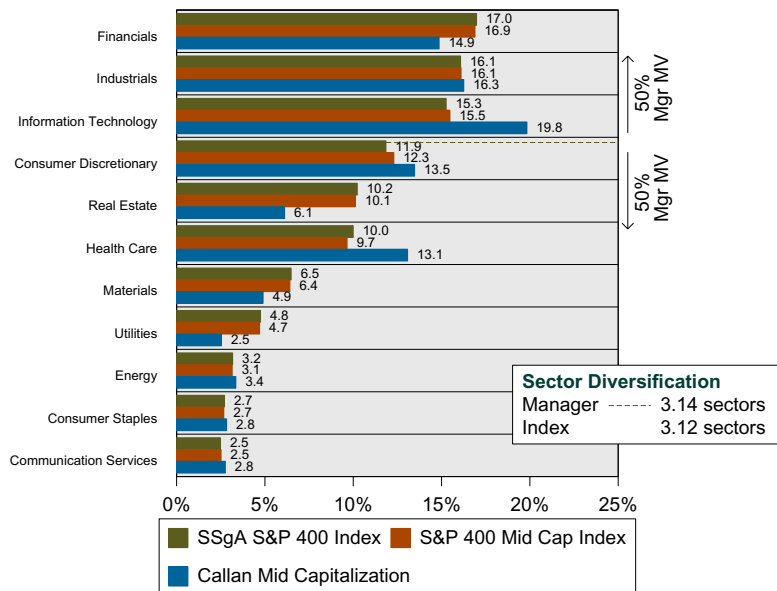


	Weighted Median Market Cap	Price/Forecasted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	16.97	27.35	5.41	18.37	2.20	0.96
25th Percentile	14.85	23.04	4.47	15.42	1.96	0.75
Median	11.51	15.74	2.44	12.30	1.46	(0.09)
75th Percentile	9.04	14.05	2.02	10.17	0.66	(0.50)
90th Percentile	6.74	12.85	1.77	7.48	0.49	(0.68)
<b>SSgA S&amp;P 400 Index</b> ●	5.27	16.98	2.15	12.08	1.67	(0.11)
S&P 400 Mid Cap Index ▲	5.25	16.83	2.14	12.10	1.67	(0.11)

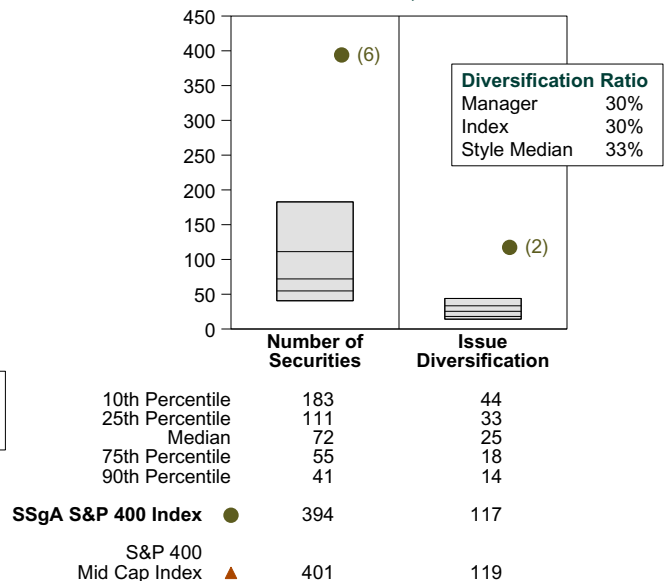
## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

### Sector Allocation June 30, 2019



### Diversification June 30, 2019



## SSgA S&P 400 Index Top 10 Portfolio Holdings Characteristics as of June 30, 2019

### 10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Ilex Corp	Industrials	\$118,375	0.7%	13.81%	13.03	28.70	1.16%	13.00%
Steris Plc Shs Usd	Health Care	\$114,319	0.7%	16.57%	12.59	26.92	0.91%	12.92%
Marketaxess Hldgs Inc	Financials	\$110,156	0.7%	30.85%	12.12	58.34	0.63%	13.27%
Leidos Hldgs Inc	Information Technology	\$104,657	0.7%	25.10%	11.52	16.40	1.60%	10.40%
Dominos Pizza Inc	Consumer Discretionary	\$104,068	0.7%	8.07%	11.44	27.38	0.93%	14.48%
Nvr Inc	Consumer Discretionary	\$103,331	0.7%	21.80%	12.10	16.88	0.00%	16.80%
Trimble Navigation Ltd	Information Technology	\$103,104	0.7%	11.66%	11.35	20.67	0.00%	8.70%
Zebra Technologies A	Information Technology	\$102,782	0.6%	(0.02)%	11.31	15.99	0.00%	28.08%
Factset Resh Sys Inc	Financials	\$99,514	0.6%	15.72%	10.96	27.60	1.01%	10.00%
Camden Ppty Tr	Real Estate	\$91,678	0.6%	3.64%	10.09	54.91	3.07%	0.53%

### 10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Adient Plc	Consumer Discretionary	\$19,405	0.1%	87.27%	2.27	8.86	0.00%	(8.34)%
Sothebys	Consumer Discretionary	\$17,529	0.1%	53.99%	2.71	20.16	0.00%	4.94%
Cypress Semiconductor Corp	Information Technology	\$74,276	0.5%	49.80%	8.12	19.16	1.98%	27.71%
Legg Mason Inc	Financials	\$30,126	0.2%	39.86%	3.32	11.89	4.18%	(0.04)%
Haemonetics Corp Mass	Health Care	\$55,877	0.4%	37.56%	6.17	38.62	0.00%	12.00%
Caesars Entmt Corp	Consumer Discretionary	\$63,183	0.4%	36.02%	7.95	(38.75)	0.00%	-
Catalent Inc	Health Care	\$71,703	0.5%	33.56%	7.90	27.27	0.00%	13.50%
Kbr Inc	Information Technology	\$32,344	0.2%	31.08%	3.53	13.97	1.28%	10.15%
Marketaxess Hldgs Inc	Financials	\$110,156	0.7%	30.85%	12.12	58.34	0.63%	13.27%
Mcdermott Intl Inc	Energy	\$16,060	0.1%	29.84%	1.75	5.06	0.00%	51.50%

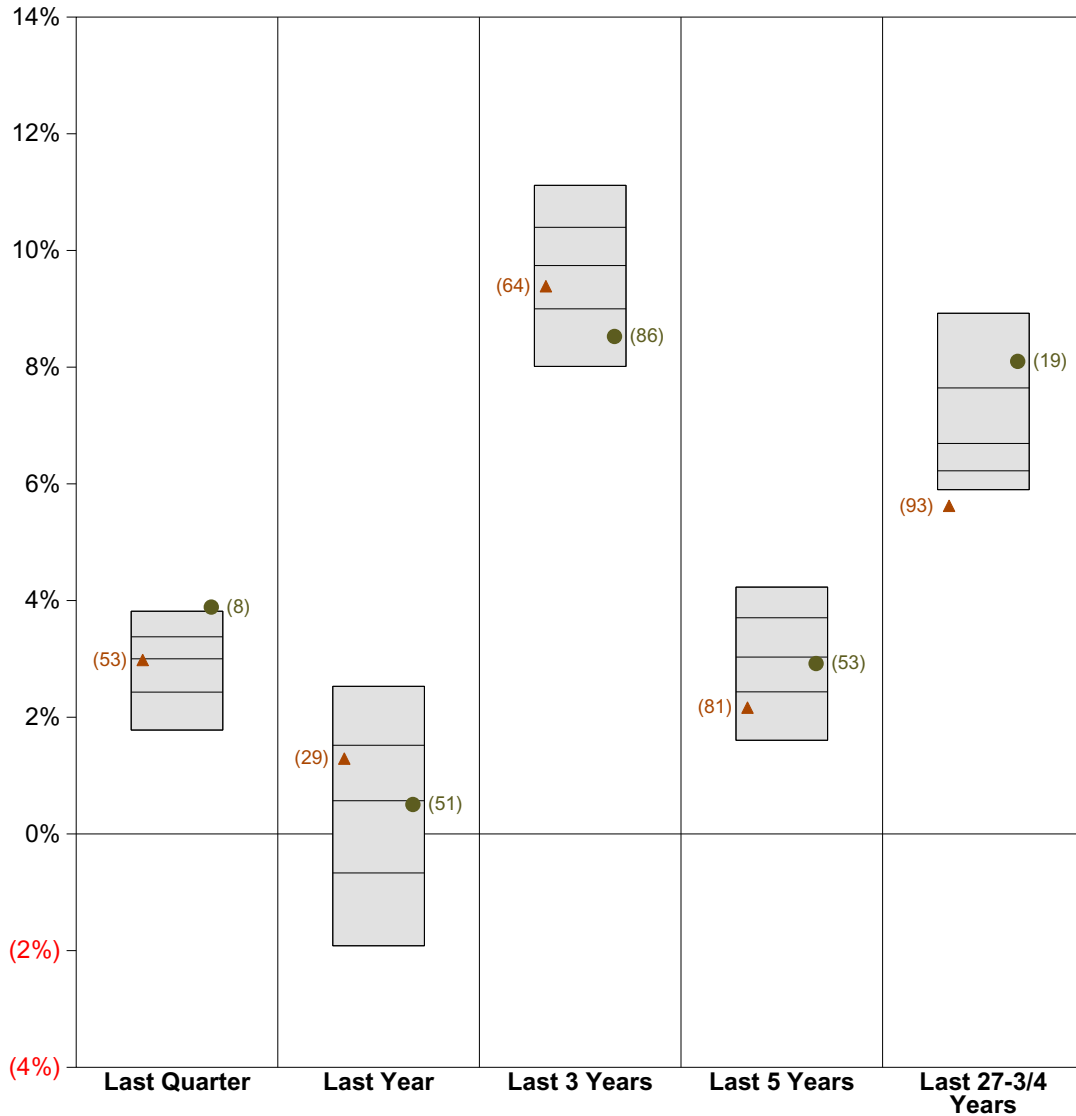
### 10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Mallinckrodt	Health Care	\$7,031	0.0%	(57.77)%	0.77	1.13	0.00%	6.29%
EnSCO Rowan Plc Shs Class A	Energy	\$15,441	0.1%	(45.74)%	1.68	(2.25)	1.88%	(57.15)%
Edgewell Personal Care Co	Consumer Staples	\$13,402	0.1%	(38.60)%	1.46	8.07	0.00%	0.70%
Range Resources Corp	Energy	\$13,326	0.1%	(37.72)%	1.75	10.28	1.15%	12.19%
Chesapeake Energy Corp	Energy	\$18,727	0.1%	(37.10)%	3.19	39.80	0.00%	(43.61)%
Chemours Co Com	Materials	\$35,658	0.2%	(34.73)%	3.94	5.21	4.17%	90.93%
United Therapeutics Corp	Health Care	\$31,376	0.2%	(33.49)%	3.42	32.00	0.00%	5.45%
Signet Jewelers	Consumer Discretionary	\$8,493	0.1%	(33.10)%	0.93	6.03	8.28%	(13.70)%
Southwestern Energy Co	Energy	\$15,732	0.1%	(32.62)%	1.71	4.48	0.00%	(11.25)%
Cnx Res Corp	Energy	\$12,847	0.1%	(32.13)%	1.43	10.22	0.00%	10.94%

**City of Fort Pierce  
Performance vs Public Fund - International Equity  
Periods Ended June 30, 2019**

**Return Ranking**

The chart below illustrates fund rankings over various periods versus the Public Fund - International Equity. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the Public Fund - International Equity. The numbers to the right of the bar represent the percentile rankings of the fund being analyzed. The table below the chart details the rates of return plotted in the graph above.

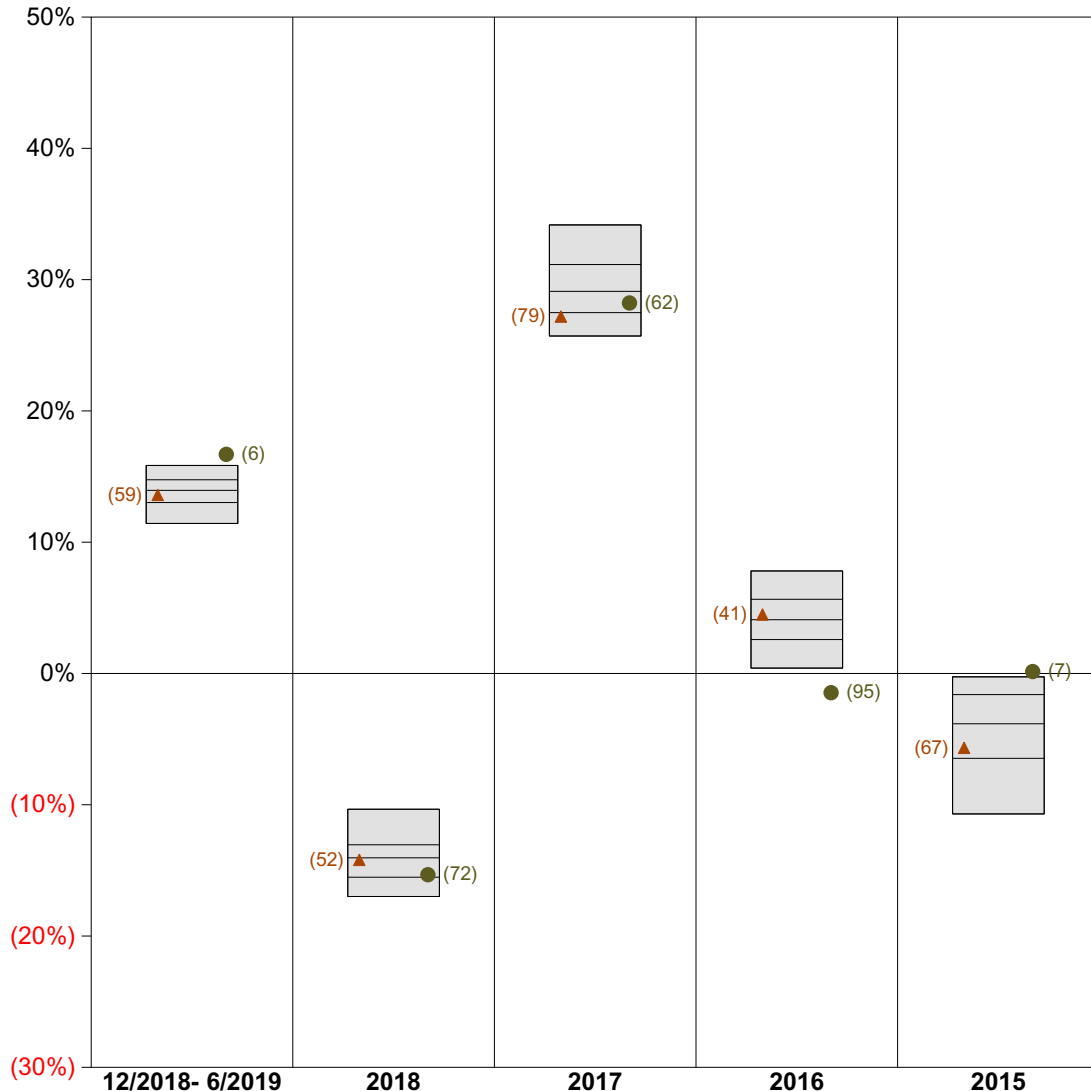


10th Percentile	3.82	2.53	11.12	4.23	8.92
25th Percentile	3.38	1.52	10.40	3.70	7.64
Median	3.00	0.57	9.74	3.03	6.69
75th Percentile	2.43	(0.67)	9.00	2.44	6.22
90th Percentile	1.78	(1.92)	8.01	1.61	5.90
<b>Int'l Equity Composite</b> ●	3.89	0.50	8.53	2.92	8.10
<b>Intl Equity Benchmark</b> ▲	2.98	1.29	9.39	2.16	5.62

# City of Fort Pierce Performance vs Public Fund - International Equity Recent Periods

## Return Ranking

The chart below illustrates fund rankings over various periods versus the Public Fund - International Equity. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the Public Fund - International Equity. The numbers to the right of the bar represent the percentile rankings of the fund being analyzed. The table below the chart details the rates of return plotted in the graph above.



	12/2018- 6/2019	2018	2017	2016	2015
10th Percentile	15.85	(10.34)	34.17	7.81	(0.26)
25th Percentile	14.76	(13.05)	31.15	5.65	(1.61)
Median	13.95	(14.04)	29.11	4.10	(3.83)
75th Percentile	13.02	(15.52)	27.49	2.58	(6.46)
90th Percentile	11.43	(16.99)	25.71	0.41	(10.70)
<b>Int'l Equity Composite</b> ●	16.69	(15.33)	28.22	(1.46)	0.15
Intl Equity Benchmark ▲	13.60	(14.20)	27.19	4.50	(5.66)

# Morgan Stanley Int'l Equity Period Ended June 30, 2019

## Investment Philosophy

The International Equity team uses a value-driven, bottom-up approach to maximize return potential, combined with sufficient diversification to minimize investment risk.

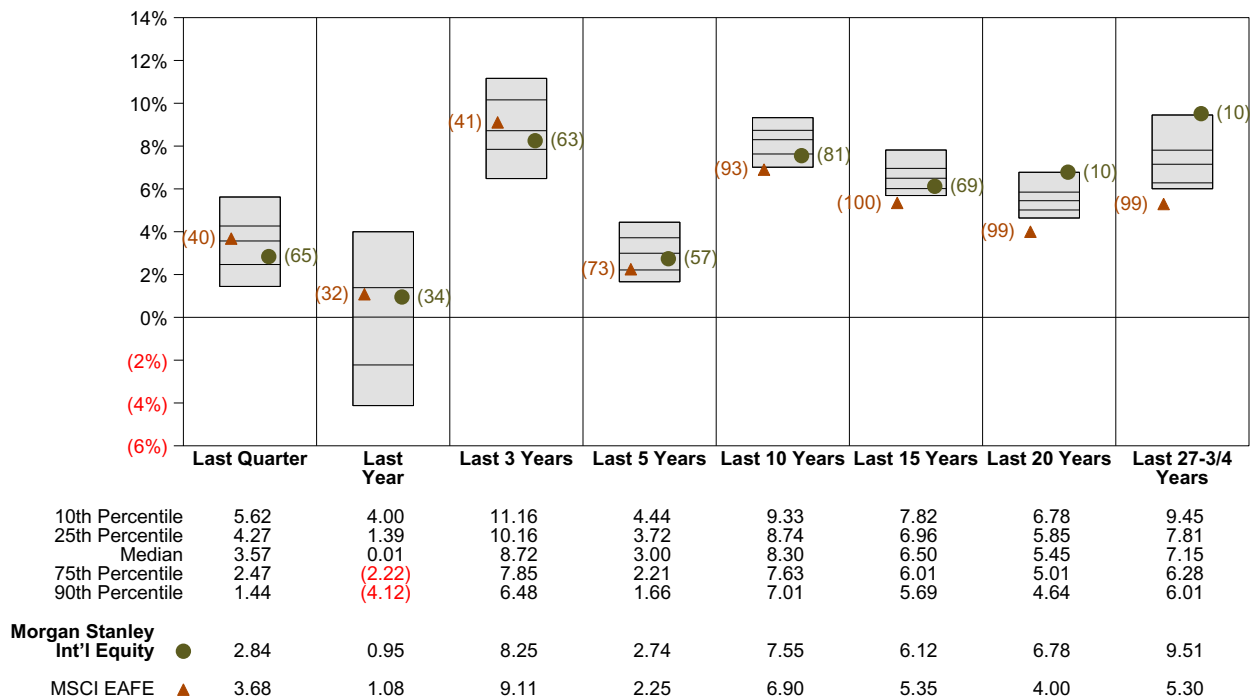
## Quarterly Summary and Highlights

- Morgan Stanley Int'l Equity's portfolio posted a 2.84% return for the quarter placing it in the 65 percentile of the Callan Non-US Developed Core Equity group for the quarter and in the 34 percentile for the last year.
- Morgan Stanley Int'l Equity's portfolio underperformed the MSCI EAFE by 0.84% for the quarter and underperformed the MSCI EAFE for the year by 0.13%.

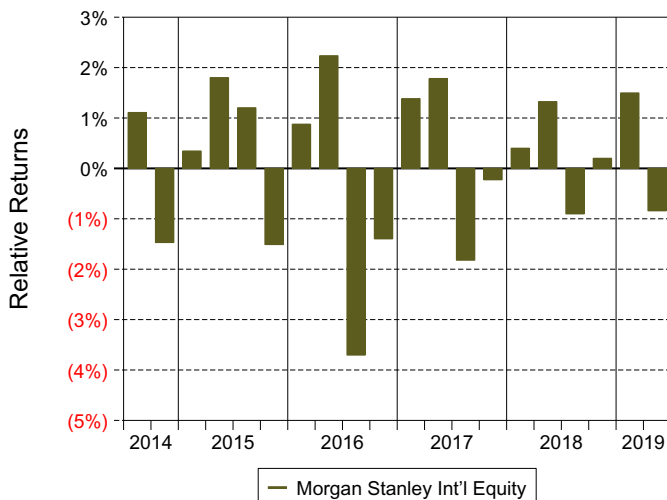
## Quarterly Asset Growth

Beginning Market Value	\$13,724,330
Net New Investment	\$-25,917
Investment Gains/(Losses)	\$388,905
Ending Market Value	\$14,087,317

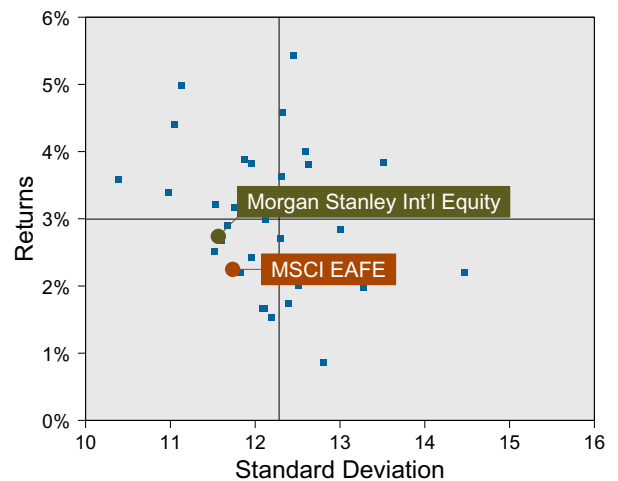
## Performance vs Callan Non-US Developed Core Equity (Gross)



## Relative Return vs MSCI EAFE



## Callan Non-US Developed Core Equity (Gross) Annualized Five Year Risk vs Return

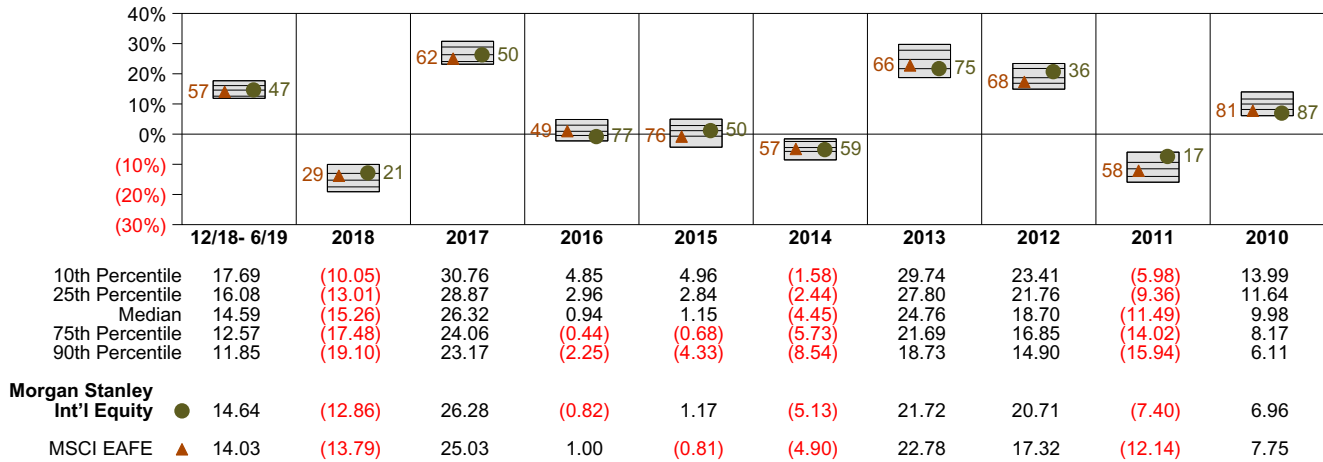


# Morgan Stanley Int'l Equity Return Analysis Summary

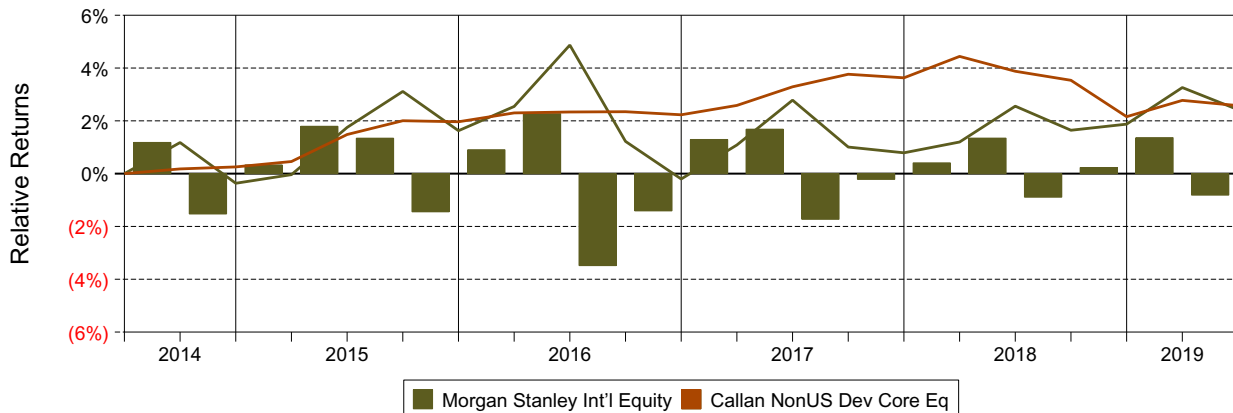
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

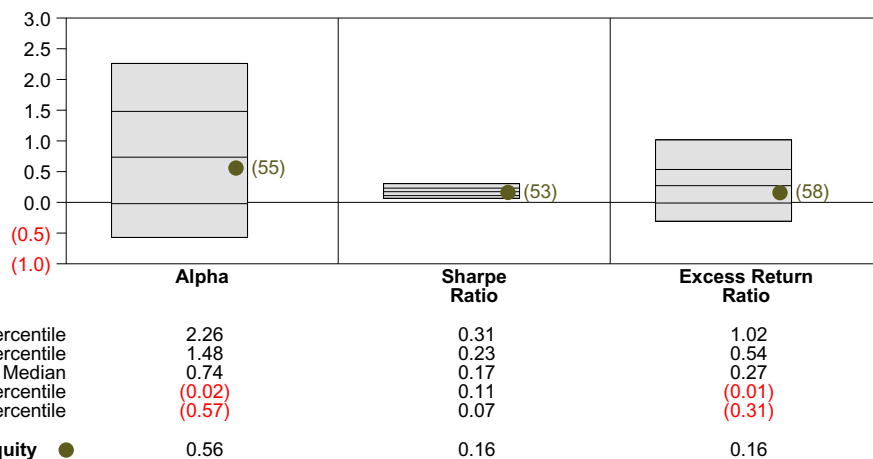
### Performance vs Callan Non-US Developed Core Equity (Gross)



### Cumulative and Quarterly Relative Return vs MSCI EAFE



### Risk Adjusted Return Measures vs MSCI EAFE Rankings Against Callan Non-US Developed Core Equity (Gross) Five Years Ended June 30, 2019

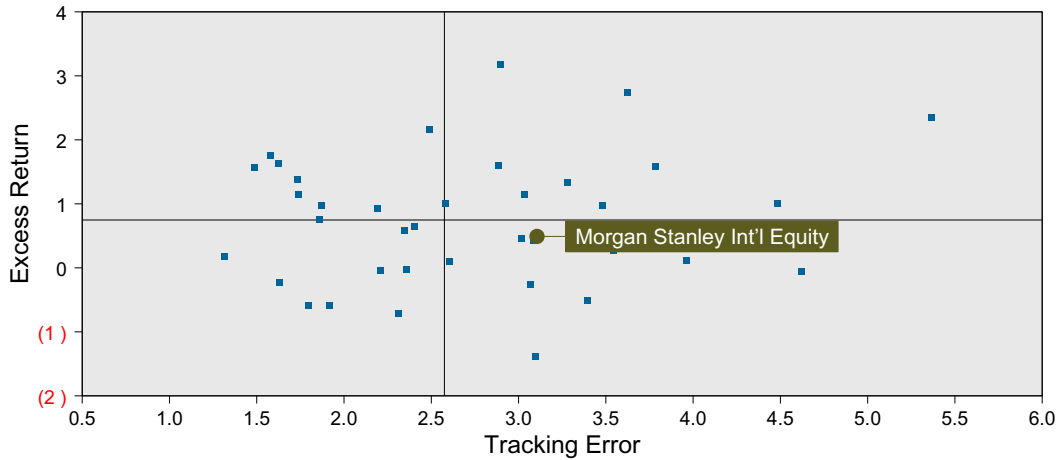


# Morgan Stanley Int'l Equity Risk Analysis Summary

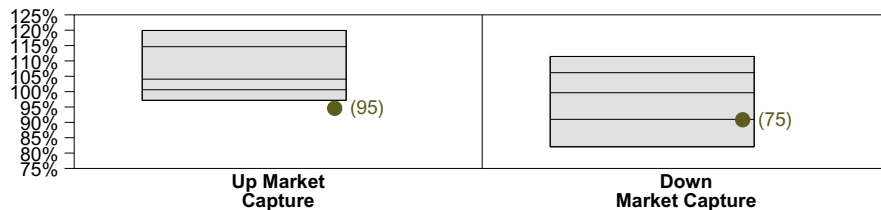
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Callan Non-US Developed Core Equity (Gross) Five Years Ended June 30, 2019



### Market Capture vs MSCI EAFE Index (USD Net Div) Rankings Against Callan Non-US Developed Core Equity (Gross) Five Years Ended June 30, 2019



	Up Market Capture	Down Market Capture
10th Percentile	119.91	111.45
25th Percentile	114.64	106.17
Median	104.06	99.64
75th Percentile	100.62	90.98
90th Percentile	97.17	82.04

Morgan Stanley Int'l Equity ● 94.57 90.85

### Risk Statistics Rankings vs MSCI EAFE Index (USD Net Div) Rankings Against Callan Non-US Developed Core Equity (Gross) Five Years Ended June 30, 2019



	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	13.52	2.61	4.06	1.12	0.99
25th Percentile	12.64	2.14	3.33	1.06	0.98
Median	12.28	1.64	2.57	1.02	0.96
75th Percentile	11.78	1.18	1.86	0.97	0.93
90th Percentile	11.10	0.77	1.61	0.92	0.91

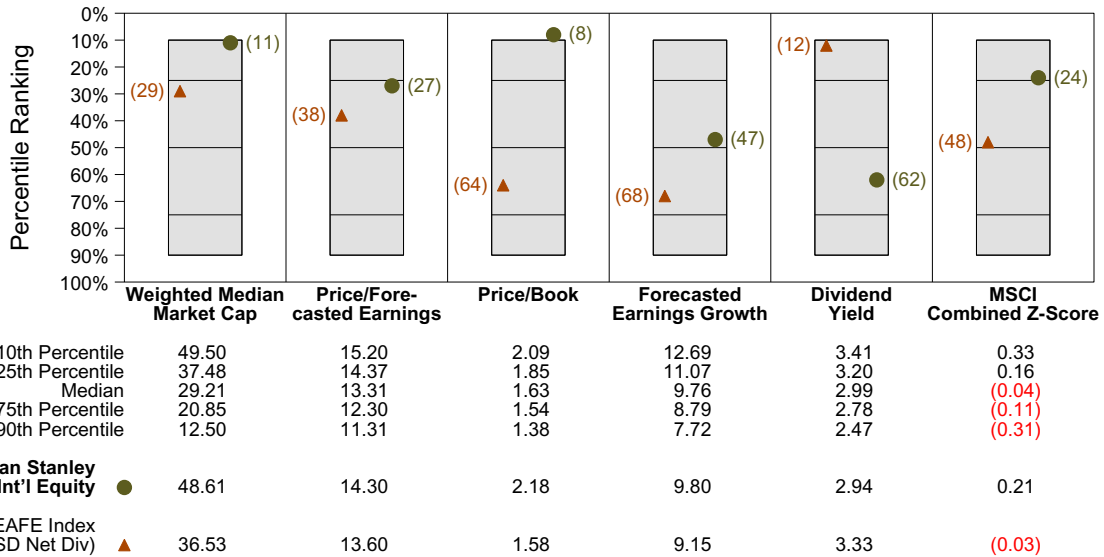
Morgan Stanley Int'l Equity ● 11.57 2.24 3.11 0.95 0.93

# Morgan Stanley Int'l Equity Equity Characteristics Analysis Summary

## Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

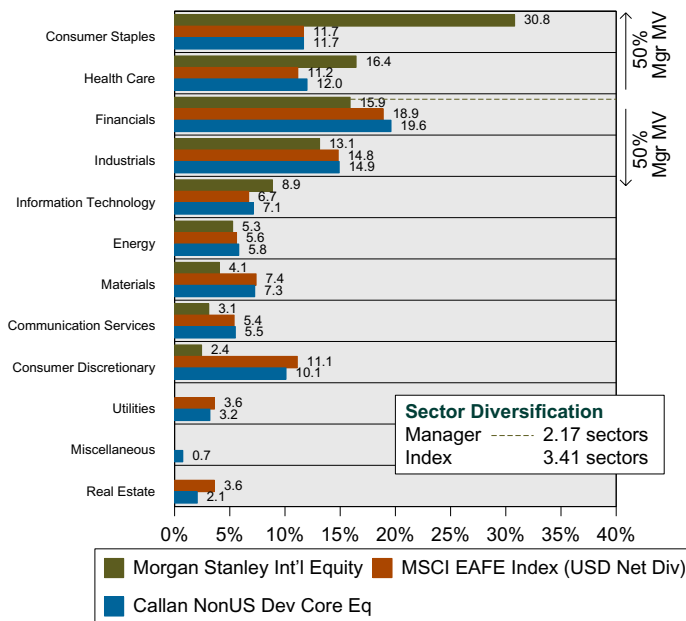
## Portfolio Characteristics Percentile Rankings Rankings Against Callan Non-US Developed Core Equity as of June 30, 2019



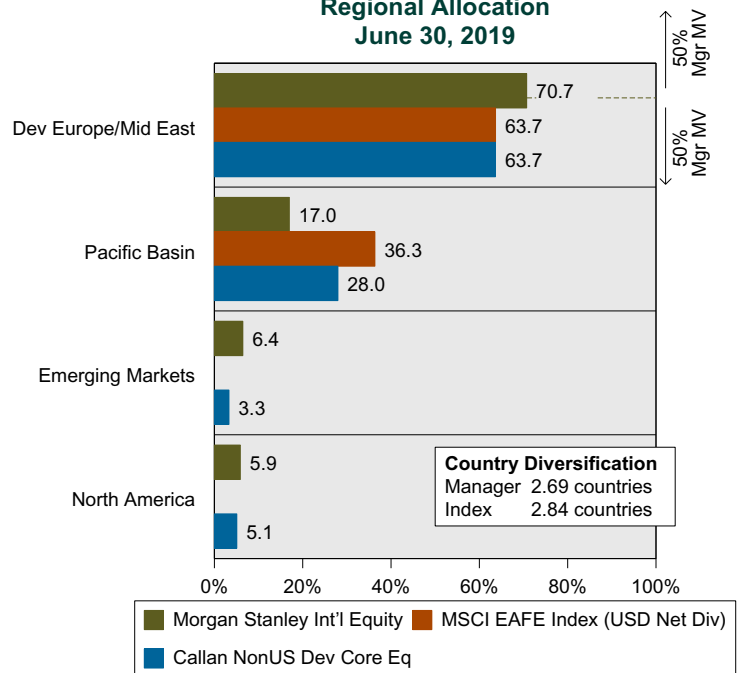
## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.

### Sector Allocation June 30, 2019



### Regional Allocation June 30, 2019



## Morgan Stanley Int'l Equity Top 10 Portfolio Holdings Characteristics as of June 30, 2019

### 10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Reckitt Benckiser Group Plc	Consumer Staples	\$603,696	4.3%	(3.26)%	56.06	17.40	2.75%	5.30%
Sap Se Shs	Information Technology	\$516,462	3.7%	20.27%	168.53	23.77	1.25%	12.71%
Relx Plc Shs	Industrials	\$453,230	3.2%	15.60%	47.34	20.25	2.20%	7.88%
Glaxosmithkline Plc Ord	Health Care	\$434,176	3.1%	(2.38)%	100.09	13.86	5.07%	4.70%
Pernod Ricard Act Ord	Consumer Staples	\$431,270	3.1%	2.72%	48.98	23.05	1.56%	10.85%
Aia Group Ltd Com Par Usd 1	Financials	\$431,158	3.1%	9.69%	130.36	19.09	1.30%	24.74%
Kirin Hldgs Company Ltd Shs	Consumer Staples	\$414,175	2.9%	(8.45)%	19.71	17.45	2.19%	4.20%
Henkel Ag & Co KgaA Inhaber Vorzugsa	Consumer Staples	\$413,195	2.9%	(1.91)%	17.49	15.03	2.15%	3.67%
Heineken Nv	Consumer Staples	\$408,545	2.9%	6.92%	64.38	21.04	1.63%	8.28%
Safran Sa	Industrials	\$408,461	2.9%	8.50%	60.03	21.16	1.41%	13.70%

### 10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Banco Comercial Portugues Sa Ord	Financials	\$13,760	0.1%	20.67%	4.68	8.15	0.74%	28.77%
Sap Se Shs	Information Technology	\$516,462	3.7%	20.27%	168.53	23.77	1.25%	12.71%
Ashtead Group Plc Shs	Industrials	\$100,064	0.7%	18.84%	13.36	10.82	1.77%	17.38%
Hoya Corp Shs	Health Care	\$38,816	0.3%	16.72%	29.22	23.82	1.09%	12.06%
Relx Plc Shs	Industrials	\$453,230	3.2%	15.60%	47.34	20.25	2.20%	7.88%
Barrick Gold Corp	Materials	\$330,661	2.3%	15.42%	27.63	37.19	1.01%	11.20%
Man Group Plc Shs	Financials	\$149,507	1.1%	15.28%	3.05	11.19	5.79%	20.47%
Heidelbergcement Ag Shs	Materials	\$145,980	1.0%	15.22%	15.95	10.47	2.97%	8.21%
Experian Group Ord Gbp0	Industrials	\$130,141	0.9%	13.22%	27.64	27.83	1.52%	9.72%
Ferguson Plc New Shs	Industrials	\$78,088	0.6%	13.03%	16.49	13.77	2.79%	6.60%

### 10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Imperial Brands Plc Shs	Consumer Staples	\$275,263	2.0%	(30.23)%	22.49	6.56	10.32%	3.69%
British American Tobacco	Consumer Staples	\$354,678	2.5%	(14.39)%	80.25	8.46	7.17%	6.34%
Bt Group Plc Shs	Communication Services	\$122,716	0.9%	(13.93)%	24.81	7.96	7.84%	(0.70)%
Mintz Group Ltd Shs	Consumer Discretionary	\$59,422	0.4%	(11.58)%	3.10	9.90	3.14%	13.20%
Lion Corp	Consumer Staples	\$116,573	0.8%	(11.06)%	5.57	26.61	1.00%	49.96%
Danske Bank A/S Shs	Financials	\$59,011	0.4%	(9.89)%	13.65	6.26	8.19%	(2.95)%
China Petroleum & Chemical Co Ord CI	Energy	\$202,336	1.4%	(8.93)%	76.10	10.26	7.68%	4.89%
Lg Household & Health	Consumer Staples	\$239,394	1.7%	(8.89)%	17.76	25.28	0.70%	13.87%
Cameco Corp	Energy	\$80,682	0.6%	(8.87)%	4.25	108.48	0.57%	(4.43)%
Bankinter	Financials	\$29,596	0.2%	(8.69)%	6.20	9.73	4.85%	4.80%

# Morgan Stanley Emerging Mkts. Period Ended June 30, 2019

## Investment Philosophy

Morgan Stanley's fund objective is long-term capital appreciation. The fund invests at least 80% of its net assets in growth-oriented equity securities of issuers located in emerging market countries.

## Quarterly Summary and Highlights

- Morgan Stanley Emerging Mkts.'s portfolio posted a 2.40% return for the quarter placing it in the 41 percentile of the Callan Emerging Markets Equity Mut Funds group for the quarter and in the 60 percentile for the last year.
- Morgan Stanley Emerging Mkts.'s portfolio outperformed the MSCI EM BM by 1.79% for the quarter and underperformed the MSCI EM BM for the year by 1.16%.

## Quarterly Asset Growth

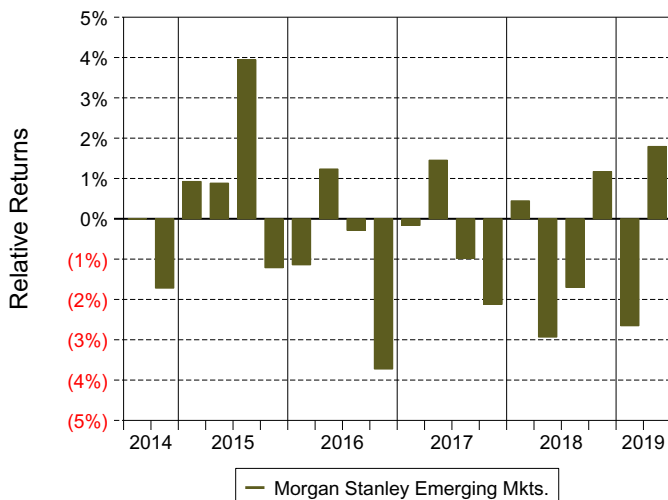
Beginning Market Value	\$1,240,319
Net New Investment	\$0
Investment Gains/(Losses)	\$29,751
Ending Market Value	\$1,270,070

## Performance vs Callan Emerging Markets Equity Mut Funds (Institutional Net)

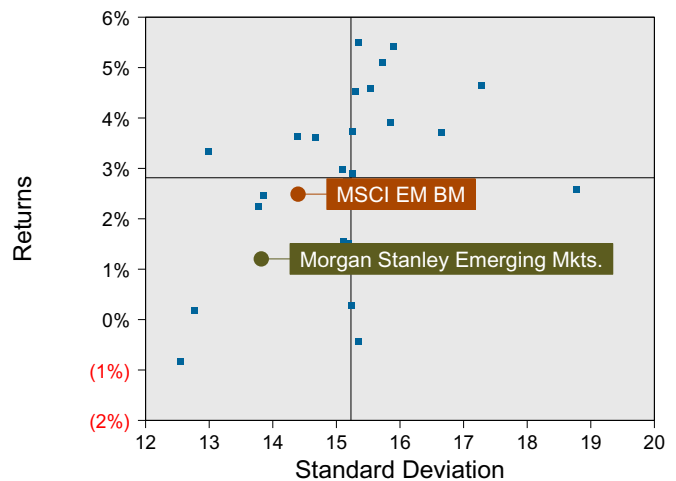


10th Percentile	3.68	8.21	12.69	5.14	7.60	9.78	10.81
25th Percentile	3.00	4.72	11.88	3.87	7.28	9.41	10.05
Median	1.78	1.60	9.81	2.81	6.22	8.75	9.11
75th Percentile	0.59	(1.10)	8.08	1.25	5.21	7.76	8.19
90th Percentile	(0.14)	(2.14)	7.11	0.13	4.51	6.75	7.61
<b>Morgan Stanley Emerging Mkts.</b>	● 2.40	0.06	7.08	1.20	5.31	8.03	8.24
<b>MSCI EM BM</b>	▲ 0.61	1.22	10.66	2.49	5.81	8.70	9.00

## Relative Return vs MSCI EM BM



## Callan Emerging Markets Equity Mut Funds (Institutional Net) Annualized Five Year Risk vs Return

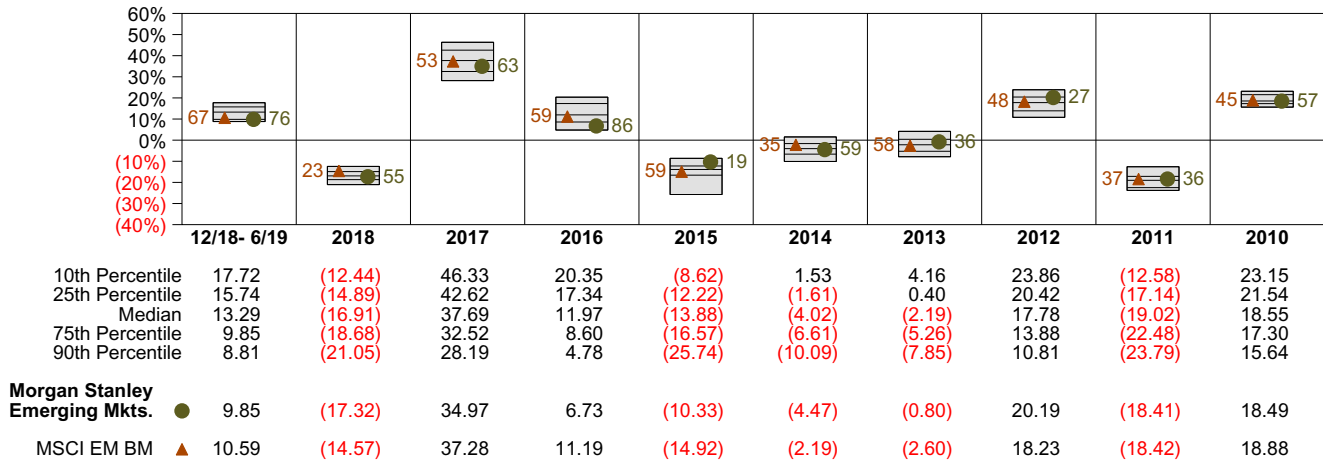


# Morgan Stanley Emerging Mkts. Return Analysis Summary

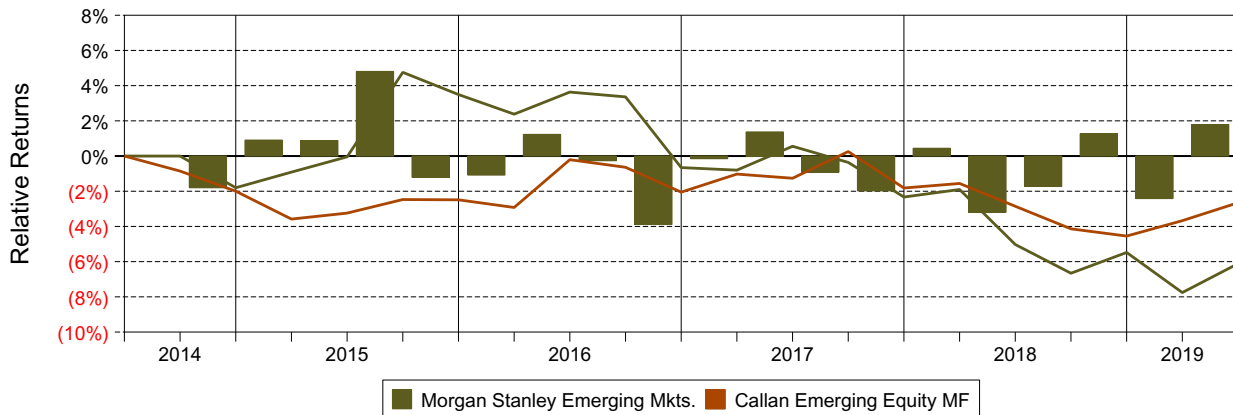
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

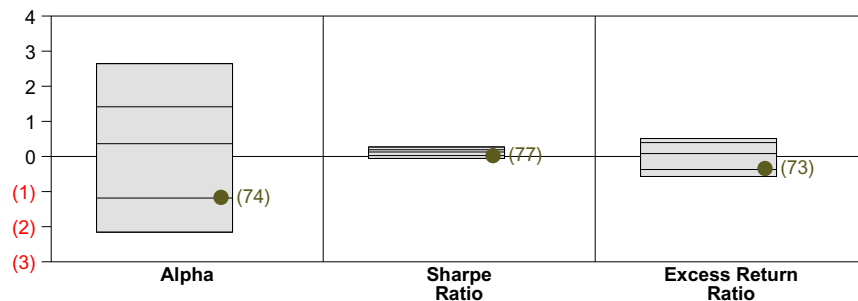
### Performance vs Callan Emerging Markets Equity Mut Funds (Institutional Net)



### Cumulative and Quarterly Relative Return vs MSCI EM BM



### Risk Adjusted Return Measures vs MSCI EM BM Rankings Against Callan Emerging Markets Equity Mut Funds (Institutional Net) Five Years Ended June 30, 2019



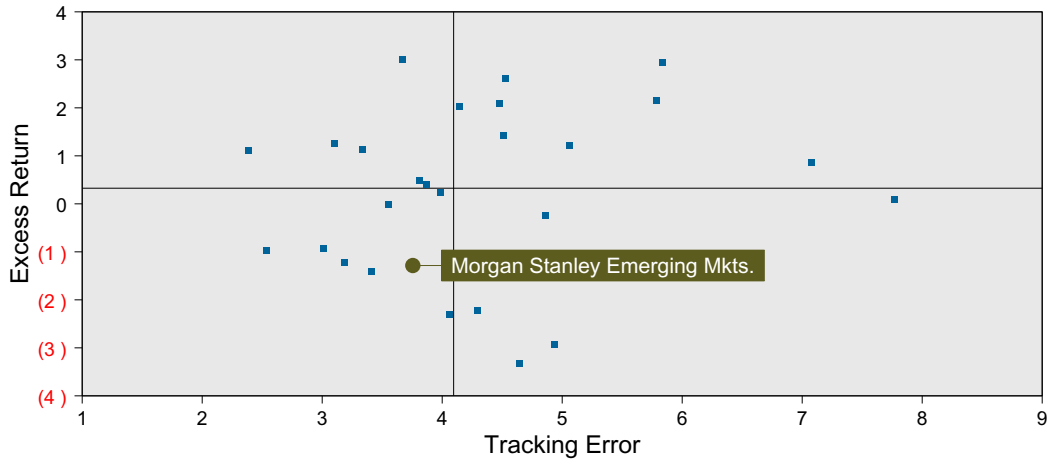
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	2.65	0.27	0.51
25th Percentile	1.42	0.19	0.40
Median	0.36	0.13	0.08
75th Percentile	(1.18)	0.03	(0.37)
90th Percentile	(2.16)	(0.06)	(0.57)
<b>Morgan Stanley Emerging Mkts.</b>	● (1.16)	0.02	(0.34)

# Morgan Stanley Emerging Mkts. Risk Analysis Summary

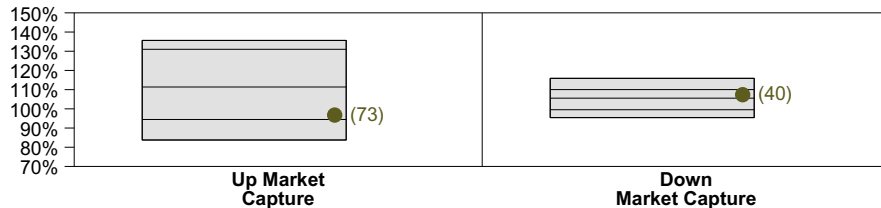
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Callan Emerging Markets Equity Mut Funds (Institutional Net) Five Years Ended June 30, 2019

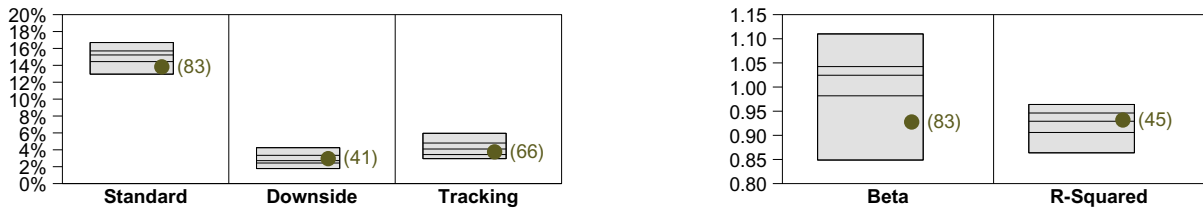


### Market Capture vs MSCI EM BM Rankings Against Callan Emerging Markets Equity Mut Funds (Institutional Net) Five Years Ended June 30, 2019



	Up Market Capture	Down Market Capture
10th Percentile	135.64	115.88
25th Percentile	131.01	110.03
Median	111.38	105.55
75th Percentile	94.45	99.54
90th Percentile	83.76	95.44
<b>Morgan Stanley Emerging Mkts.</b>	<b>96.75</b>	<b>107.36</b>

### Risk Statistics Rankings vs MSCI EM BM Rankings Against Callan Emerging Markets Equity Mut Funds (Institutional Net) Five Years Ended June 30, 2019



	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	16.70	4.25	5.95	1.11	0.96
25th Percentile	15.70	3.35	4.80	1.04	0.95
Median	15.23	2.72	4.10	1.02	0.93
75th Percentile	14.44	2.44	3.44	0.98	0.91
90th Percentile	12.96	1.78	2.95	0.85	0.86

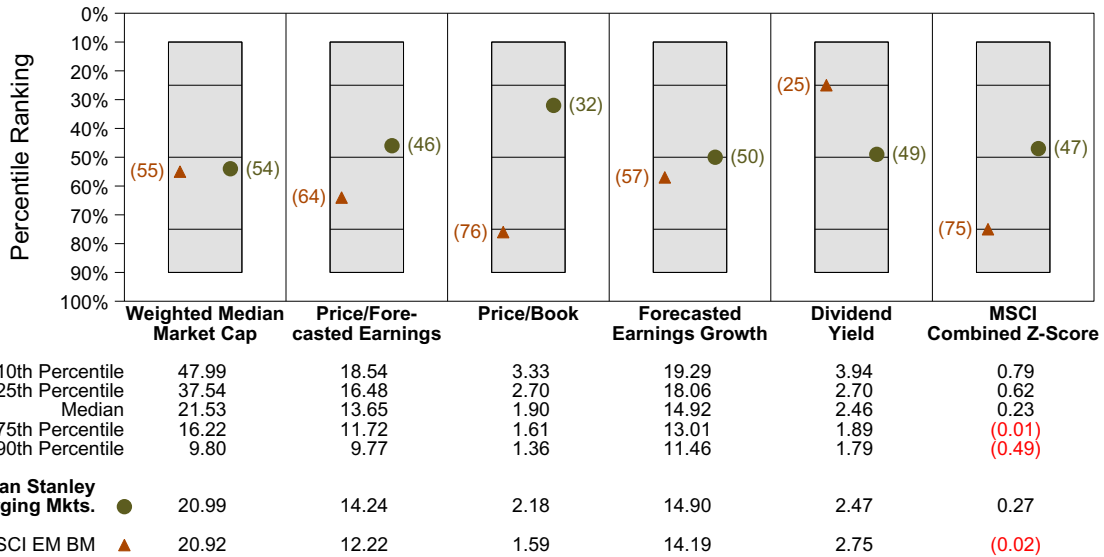
<b>Morgan Stanley Emerging Mkts.</b>	<b>13.82</b>	<b>2.96</b>	<b>3.76</b>	<b>0.93</b>	<b>0.93</b>
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# Morgan Stanley Emerging Mkts. Equity Characteristics Analysis Summary

## Portfolio Characteristics

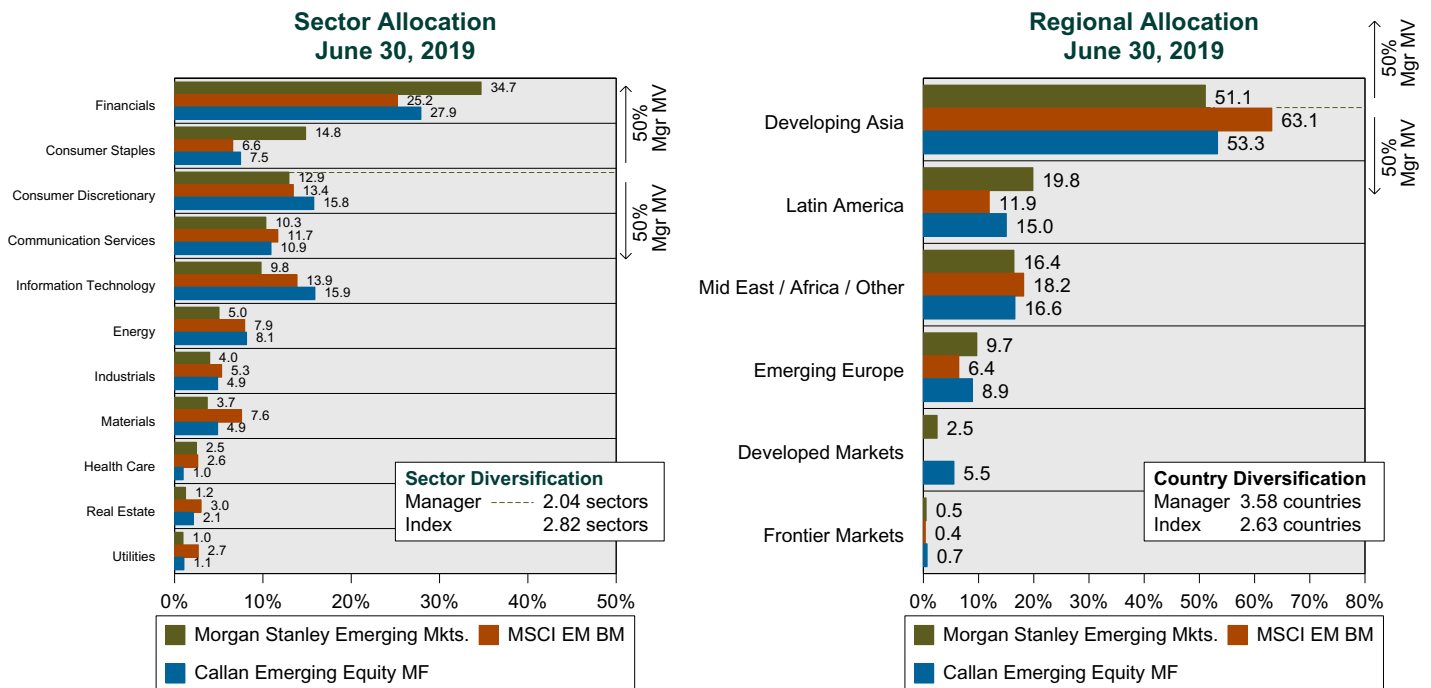
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Markets Equity Mut Funds as of June 30, 2019



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.



## Morgan Stanley Emerging Mkts. Top 10 Portfolio Holdings Characteristics as of June 30, 2019

### 10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Tencent Holdings Limited Shs Par Hkd	Communication Services	\$60,314	4.7%	4.7%	429.71	27.81	0.28%	24.76%
Taiwan Semicond Manufac Co L Shs	Information Technology	\$56,070	4.4%	(1.58)%	199.53	17.32	3.35%	6.17%
Alibaba Group Hldg Ltd Sponsored Ads	Consumer Discretionary	\$37,819	3.0%	(0.19)%	441.17	23.19	0.00%	20.90%
China Construction Bank Shs H	Financials	\$34,244	2.7%	(7.13)%	207.11	5.42	5.31%	3.70%
Bank of China Ltd Shs	Financials	\$24,214	1.9%	0.48%	35.32	4.54	6.51%	5.72%
Samsung Electronics Co Ltd Ord	Information Technology	\$23,886	1.9%	(1.01)%	243.00	12.47	3.01%	(8.06)%
Pt Bank Central Asia Tbk Shs	Financials	\$22,961	1.8%	4.30%	51.79	23.56	1.13%	13.58%
Itau Unibanco Holding Sa Pfd Shs	Financials	\$20,028	1.6%	9.74%	45.85	11.34	5.38%	10.50%
Grupo Financiero Banorte S A Ord O S	Financials	\$19,754	1.6%	7.12%	16.71	8.49	4.98%	11.77%
Compania De Minas Buenaventu Sponsor	Materials	\$18,899	1.5%	7.53%	4.49	(51.19)	0.74%	-

### 10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Grupo Financiero Galicia S A Sp ADR	Financials	\$5,967	0.5%	40.83%	4.10	9.18	0.92%	32.80%
Adidas Ag Namen -Akt	Consumer Discretionary	\$12,375	1.0%	28.14%	61.78	26.00	1.24%	15.59%
Sberbank Russia Sponsored ADR	Financials	\$16,356	1.3%	23.78%	82.46	8.57	6.42%	36.35%
Lojas Renner Sa Com Npv	Consumer Discretionary	\$12,160	1.0%	21.16%	9.77	27.46	1.15%	21.85%
Bolsa De Mercadorias	Financials	\$14,070	1.1%	19.03%	20.13	23.37	2.16%	11.99%
Malaysia Airports Holdings B Shs	Industrials	\$4,915	0.4%	17.87%	3.42	24.87	1.64%	55.76%
Shree Cement	Materials	\$13,832	1.1%	17.31%	11.01	40.58	0.27%	28.35%
Yihai Intl.Hldg.	Consumer Staples	\$840	0.1%	17.13%	5.43	43.61	0.43%	41.82%
Ayala Land Inc Ali Shs	Real Estate	\$3,394	0.3%	15.95%	14.61	20.24	1.01%	14.91%
New Clicks Hdg.	Consumer Staples	\$8,385	0.7%	14.62%	3.82	28.83	1.93%	12.00%

### 10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Baidu Inc Spon ADR Rep A	Communication Services	\$6,640	0.5%	(28.81)%	32.63	18.94	0.00%	15.48%
L&t Finance Holdings	Financials	\$5,163	0.4%	(24.35)%	3.34	8.74	0.87%	17.55%
Universal Scien.Indl.'a'	Information Technology	\$4,393	0.3%	(22.42)%	3.82	15.91	1.36%	20.22%
Indusind Bank	Financials	\$12,096	1.0%	(20.47)%	12.33	15.35	0.53%	29.02%
Largan Precision Co Ltd Shs	Information Technology	\$3,266	0.3%	(16.84)%	16.65	16.49	1.88%	14.50%
Pinduoduo Inc Sponsored Ads	Consumer Discretionary	\$2,586	0.2%	(16.81)%	13.28	176.32	0.00%	-
Sinopharm Group Co-H	Health Care	\$3,221	0.3%	(15.51)%	4.20	10.29	2.51%	11.30%
E-Mart Co Ltd	Consumer Staples	\$2,772	0.2%	(14.29)%	3.38	10.68	1.43%	(3.19)%
Petrochina Company Limited Shs H	Energy	\$7,951	0.6%	(12.90)%	11.64	11.27	4.87%	7.46%
Cspc Pharmaceutical Group Lt Shs	Health Care	\$6,503	0.5%	(12.05)%	10.06	15.97	1.43%	18.00%

# William Blair & Company Period Ended June 30, 2019

## Investment Philosophy

William Blair & Company focuses on companies with above-average growth prospects where growth can be sustained through leading or franchise positions in terms of proprietary products, marketing dominance, or cost/asset base advantage.

## Quarterly Summary and Highlights

- William Blair & Company's portfolio posted a 5.06% return for the quarter placing it in the 23 percentile of the Callan Non US Equity Mutual Funds group for the quarter and in the 46 percentile for the last year.
- William Blair & Company's portfolio outperformed the MSCI ACWI ex US by 2.07% for the quarter and underperformed the MSCI ACWI ex US for the year by 1.18%.

## Quarterly Asset Growth

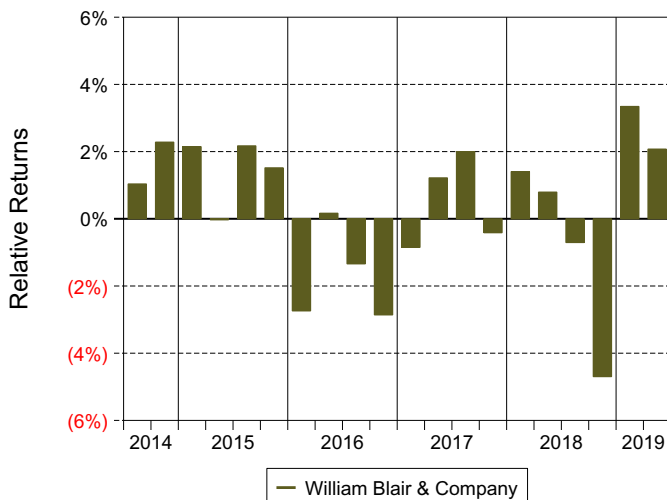
Beginning Market Value	\$13,900,821
Net New Investment	\$0
Investment Gains/(Losses)	\$702,800
Ending Market Value	\$14,603,621

## Performance vs Callan Non US Equity Mutual Funds (Institutional Net)

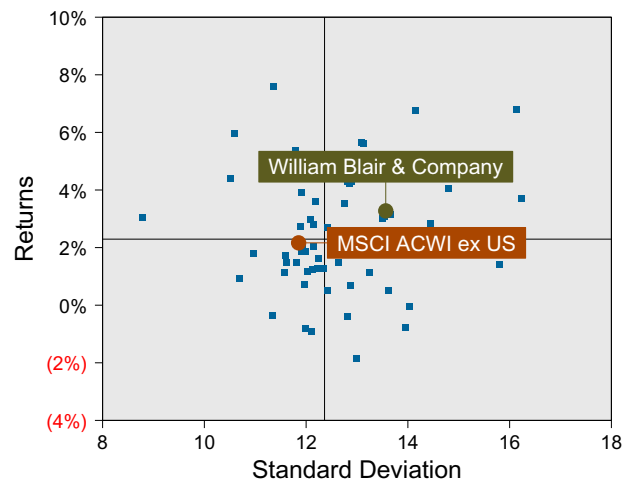


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years	Last 15-1/2 Years
10th Percentile	5.95	5.03	10.81	5.58	9.37	7.89	7.99
25th Percentile	4.89	2.79	9.99	4.03	8.58	6.93	6.97
Median	3.34	(0.22)	8.51	2.29	7.39	5.75	5.85
75th Percentile	2.04	(4.61)	6.68	1.19	6.28	4.74	5.01
90th Percentile	0.08	(6.33)	6.16	(0.34)	5.43	4.10	4.13
<b>William Blair &amp; Company</b>	● 5.06	0.11	8.90	3.28	8.53	6.64	6.62
<b>MSCI ACWI ex US</b>	▲ 2.98	1.29	9.39	2.16	6.54	5.85	5.91

## Relative Return vs MSCI ACWI ex US



## Callan Non US Equity Mutual Funds (Institutional Net) Annualized Five Year Risk vs Return

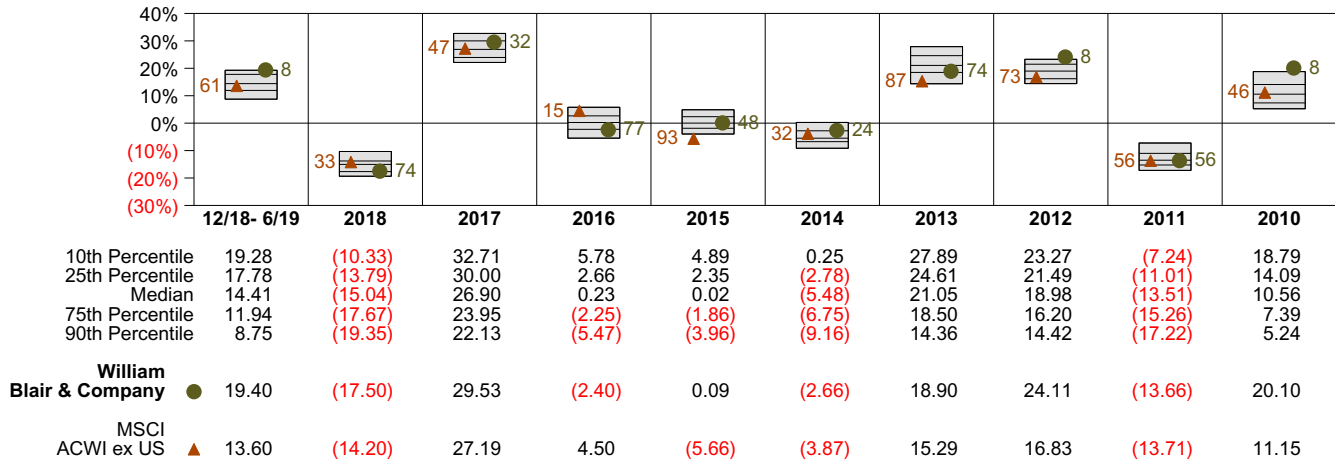


# William Blair & Company Return Analysis Summary

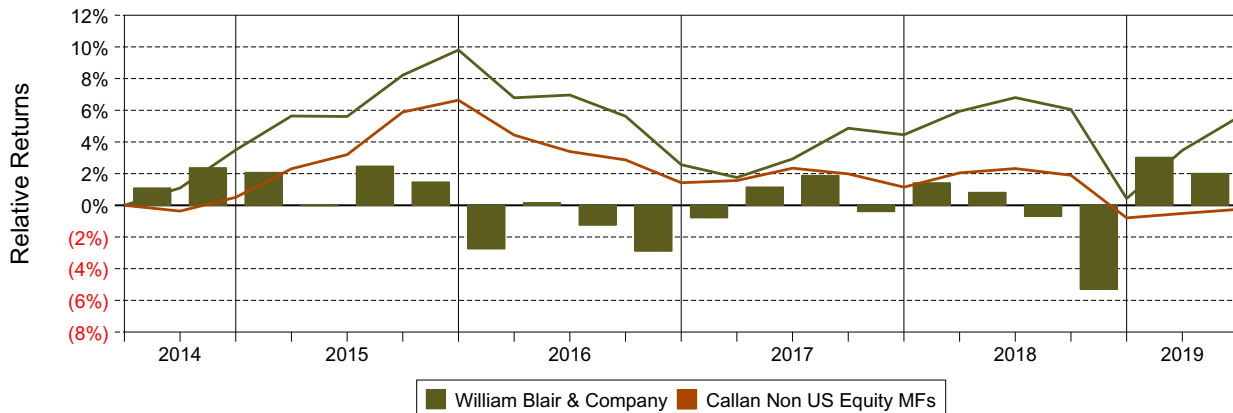
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

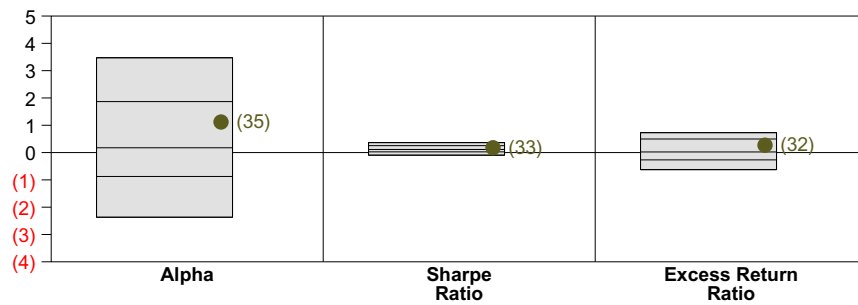
### Performance vs Callan Non US Equity Mutual Funds (Institutional Net)



### Cumulative and Quarterly Relative Return vs MSCI ACWI ex US



### Risk Adjusted Return Measures vs MSCI ACWI ex US Rankings Against Callan Non US Equity Mutual Funds (Institutional Net) Five Years Ended June 30, 2019

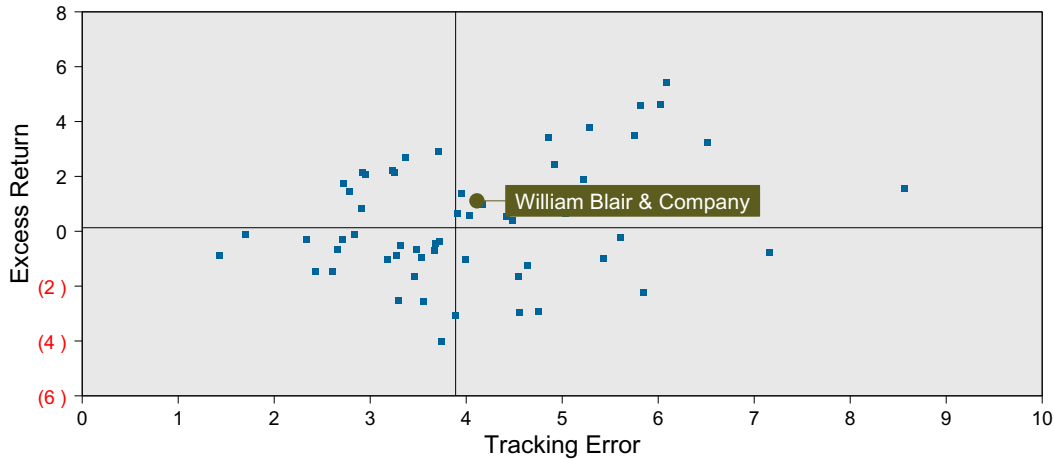


# William Blair & Company Risk Analysis Summary

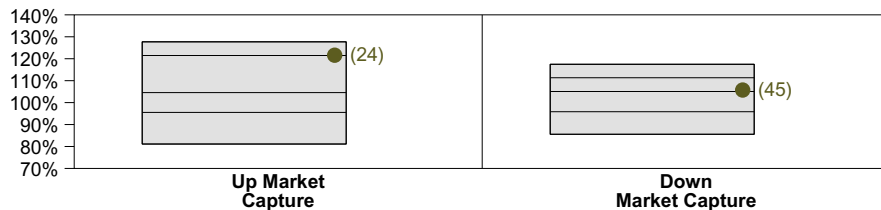
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Callan Non US Equity Mutual Funds (Institutional Net) Five Years Ended June 30, 2019

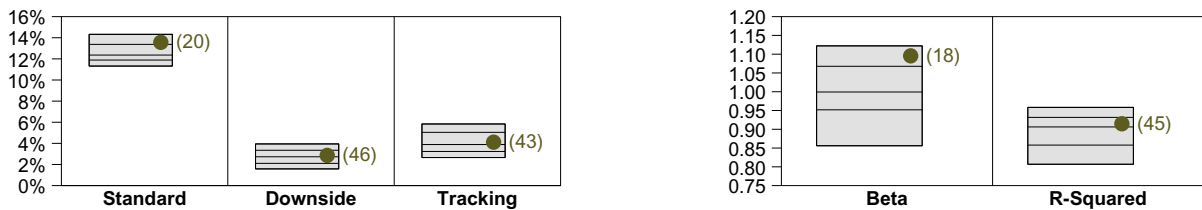


### Market Capture vs MSCI ACWI ex US Index (USD Net Div) Rankings Against Callan Non US Equity Mutual Funds (Institutional Net) Five Years Ended June 30, 2019



	Up Market Capture	Down Market Capture
10th Percentile	127.70	117.47
25th Percentile	121.47	111.33
Median	104.57	105.06
75th Percentile	95.54	95.84
90th Percentile	81.11	85.57
<b>William Blair &amp; Company</b>	<b>121.61</b>	<b>105.73</b>

### Risk Statistics Rankings vs MSCI ACWI ex US Index (USD Net Div) Rankings Against Callan Non US Equity Mutual Funds (Institutional Net) Five Years Ended June 30, 2019



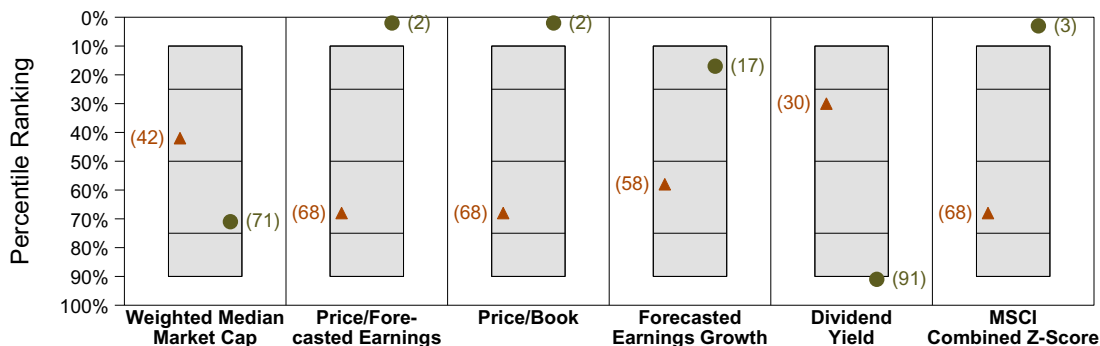
	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	14.32	3.95	5.84	1.12	0.96
25th Percentile	13.37	3.34	5.04	1.07	0.93
Median	12.36	2.73	3.89	1.00	0.91
75th Percentile	11.89	2.11	3.23	0.95	0.86
90th Percentile	11.32	1.58	2.66	0.86	0.81
<b>William Blair &amp; Company</b>	<b>13.57</b>	<b>2.86</b>	<b>4.11</b>	<b>1.10</b>	<b>0.91</b>

# William Blair & Company Equity Characteristics Analysis Summary

## Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

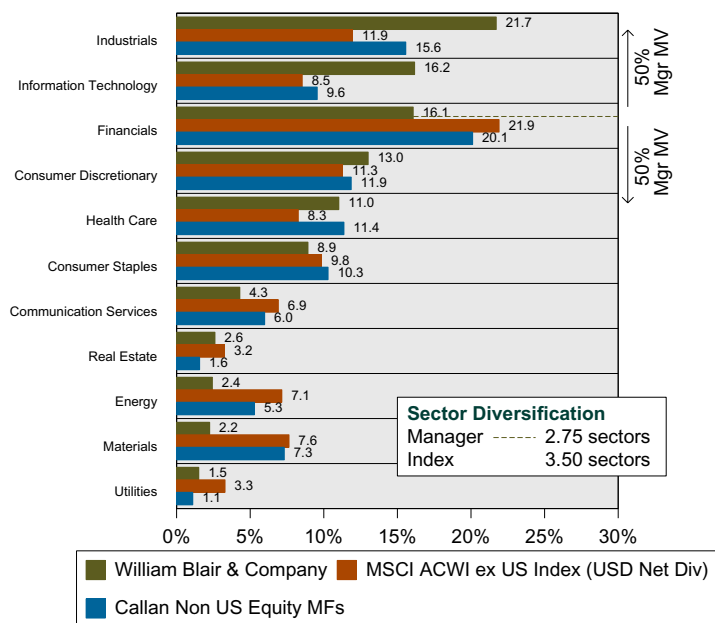
## Portfolio Characteristics Percentile Rankings Rankings Against Callan Non US Equity Mutual Funds as of June 30, 2019



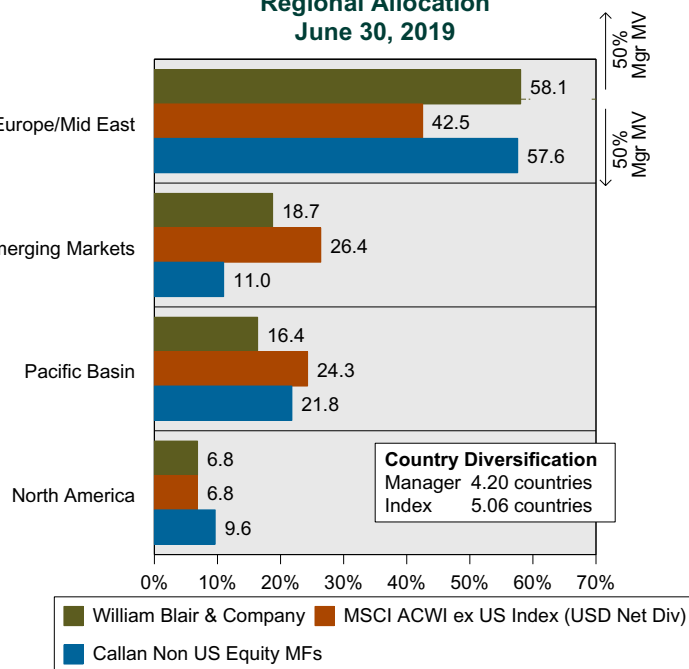
## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.

### Sector Allocation June 30, 2019



### Regional Allocation June 30, 2019



## William Blair & Company Top 10 Portfolio Holdings Characteristics as of June 30, 2019

### 10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Tencent Holdings Limited Shs Par Hkd	Communication Services	\$305,665	2.1%	(1.58)%	429.71	27.81	0.28%	24.76%
Aia Group Ltd Com Par Usd 1	Financials	\$292,413	2.0%	9.69%	130.36	19.09	1.30%	24.74%
Alibaba Group Hldg Ltd Sponsored Ads	Consumer Discretionary	\$278,990	1.9%	(7.13)%	441.17	23.19	0.00%	20.90%
Compass Group Plc Ord	Consumer Discretionary	\$239,768	1.6%	2.85%	38.10	21.48	2.04%	6.85%
Airbus Se Shs	Industrials	\$239,244	1.6%	9.17%	110.23	18.83	1.32%	20.90%
Novartis	Health Care	\$232,965	1.6%	7.61%	231.22	17.32	3.20%	6.44%
Keyence Corp Ord	Information Technology	\$231,737	1.6%	(1.49)%	74.64	32.33	0.30%	11.09%
Lonza Group Ag Zuerich Namen Akt	Health Care	\$227,584	1.6%	9.93%	25.16	24.95	0.83%	9.75%
Sap Se Shs	Information Technology	\$220,161	1.5%	20.27%	168.53	23.77	1.25%	12.71%
Ping An Insurance H	Financials	\$218,153	1.5%	12.49%	89.42	10.48	2.14%	17.30%

### 10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Li Ning Company Limited Shs	Consumer Discretionary	\$62,275	0.4%	51.25%	5.44	32.75	0.56%	35.60%
Nolato Ab Shs B	Industrials	\$21,110	0.1%	50.82%	1.44	22.23	2.47%	16.02%
Globant S A	Information Technology	\$28,354	0.2%	41.53%	3.63	41.31	0.00%	18.79%
Lifco B	Industrials	\$14,257	0.1%	37.11%	4.70	24.21	0.89%	23.11%
Intermediate Capital Group P Ord	Financials	\$47,939	0.3%	29.99%	5.10	15.72	3.26%	3.80%
Evolution Gaming Group	Consumer Discretionary	\$31,249	0.2%	27.11%	3.56	24.22	1.36%	18.20%
Abcam Plc, Cambridge Shs	Health Care	\$22,915	0.2%	26.84%	3.86	42.64	0.82%	14.98%
Localiza Rent A Car Sa Shs	Industrials	\$32,493	0.2%	26.23%	7.72	27.41	0.86%	22.75%
Spirax Sarco Engineering Plc Shs New	Industrials	\$66,747	0.5%	25.86%	8.61	33.74	1.09%	5.38%
Belimo Hldg Ag Wetzikon Zh Namen -Ak	Industrials	\$19,587	0.1%	25.61%	3.78	36.25	1.67%	10.80%

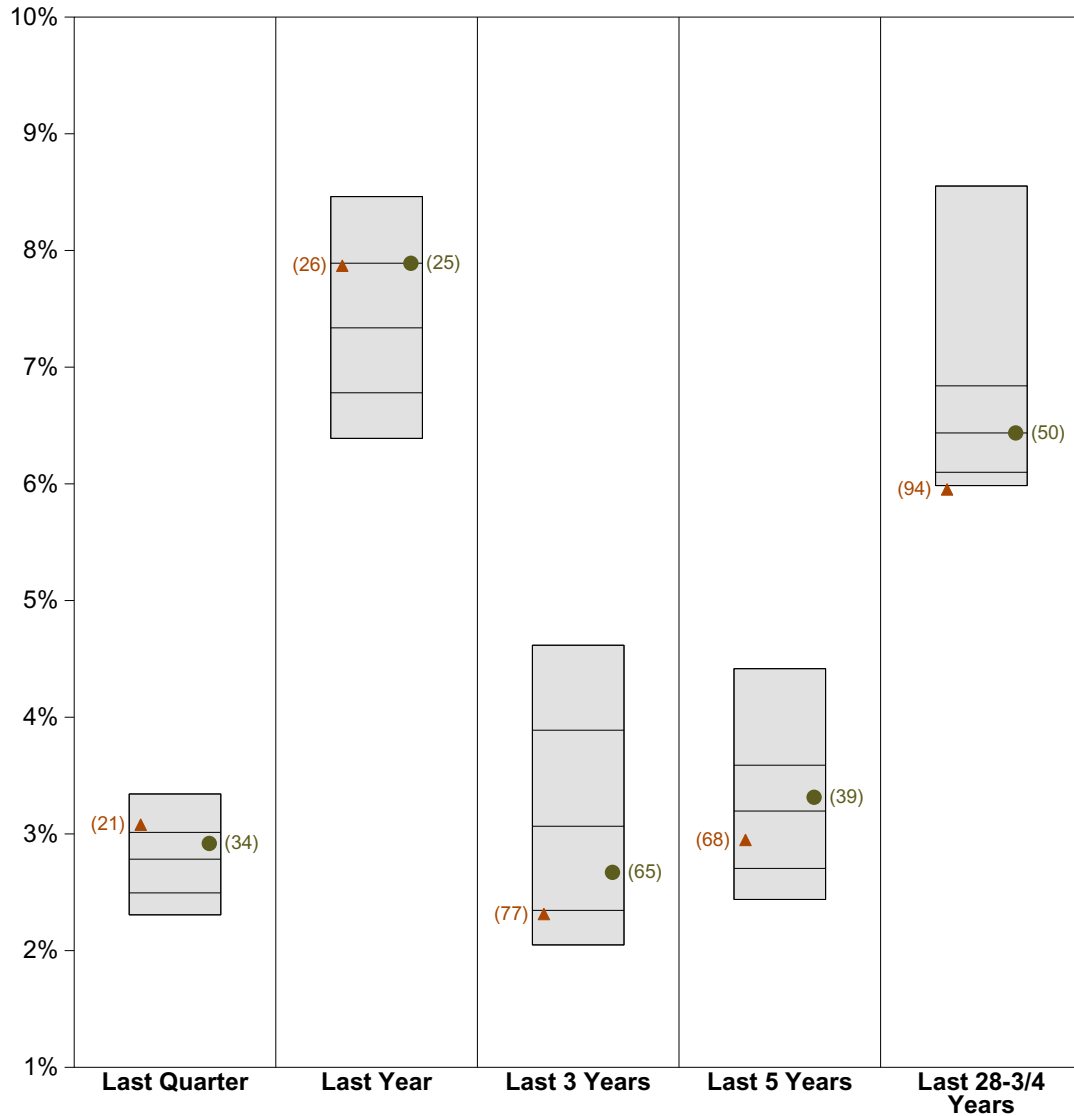
### 10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Ambu A / S Shs -B -	Health Care	\$5,160	0.0%	(38.74)%	3.53	49.63	0.38%	27.58%
Fevertree Drinks	Consumer Staples	\$25,694	0.2%	(24.76)%	3.43	36.11	0.63%	22.29%
Swedish Orphan Biovitrum Ab Shs	Health Care	\$32,654	0.2%	(18.02)%	5.74	15.89	0.00%	16.00%
Gmo Payment Gateway Inc Toky Shs	Information Technology	\$30,370	0.2%	(17.69)%	5.11	79.98	0.47%	33.60%
Tencent Music Entmt Group Spon Ads	Communication Services	\$22,148	0.2%	(17.18)%	4.60	31.04	0.00%	45.22%
Yakult Honsha Co Ltd Shs	Consumer Staples	\$66,418	0.5%	(15.75)%	10.08	26.51	0.69%	(1.09)%
Shimadzu Corp Shs	Information Technology	\$36,429	0.2%	(15.14)%	7.26	21.68	1.06%	14.16%
Vitrolife	Health Care	\$17,832	0.1%	(14.14)%	2.12	49.52	0.47%	28.23%
Huazhu Group Ltd Sponsored Ads	Consumer Discretionary	\$27,506	0.2%	(13.98)%	10.67	32.92	0.94%	31.76%
Nihon M & A Center Inc Shs	Industrials	\$33,897	0.2%	(12.35)%	3.93	40.44	0.89%	14.32%

**City of Fort Pierce  
Performance vs Public Fund - Domestic Fixed  
Periods Ended June 30, 2019**

**Return Ranking**

The chart below illustrates fund rankings over various periods versus the Public Fund - Domestic Fixed. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the Public Fund - Domestic Fixed. The numbers to the right of the bar represent the percentile rankings of the fund being analyzed. The table below the chart details the rates of return plotted in the graph above.

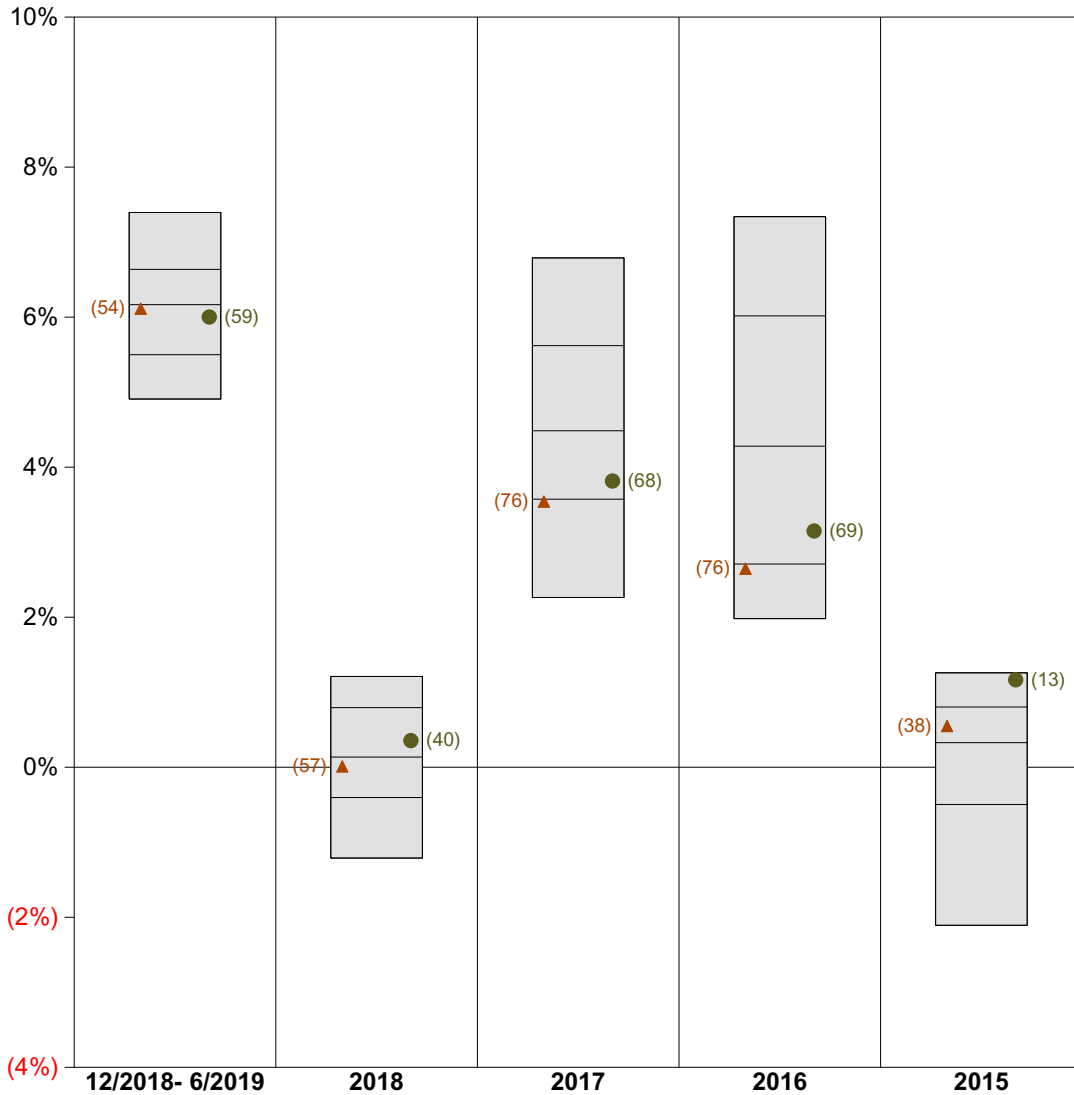


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 28-3/4 Years
10th Percentile	3.34	8.46	4.62	4.42	8.55
25th Percentile	3.01	7.89	3.89	3.59	6.84
Median	2.78	7.34	3.07	3.20	6.44
75th Percentile	2.49	6.78	2.34	2.70	6.10
90th Percentile	2.31	6.39	2.05	2.44	5.99
<b>Domestic Fixed Income</b> ●	2.92	7.89	2.67	3.31	6.44
Domestic FI Benchmark ▲	3.08	7.87	2.31	2.95	5.95

# City of Fort Pierce Performance vs Public Fund - Domestic Fixed Recent Periods

## Return Ranking

The chart below illustrates fund rankings over various periods versus the Public Fund - Domestic Fixed. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the Public Fund - Domestic Fixed. The numbers to the right of the bar represent the percentile rankings of the fund being analyzed. The table below the chart details the rates of return plotted in the graph above.



	12/2018- 6/2019	2018	2017	2016	2015
10th Percentile	7.40	1.21	6.79	7.34	1.26
25th Percentile	6.64	0.79	5.62	6.02	0.80
Median	6.17	0.14	4.49	4.28	0.33
75th Percentile	5.50	(0.40)	3.57	2.71	(0.50)
90th Percentile	4.91	(1.21)	2.26	1.98	(2.11)
<b>Domestic Fixed Income</b> ●	6.00	0.36	3.82	3.15	1.17
Domestic FI Benchmark ▲	6.11	0.01	3.54	2.65	0.55

# Richmond Capital Management Period Ended June 30, 2019

## Investment Philosophy

Richmond's investment philosophy is that superior returns can be achieved, over time, by focusing on value. They acknowledge that it is not always possible to predict short term movement in the financial markets. However, they believe that it is possible, through careful analysis and security selection, to choose securities which will provide superior returns over market cycles. Their search for value as always overlaid by a focus on yield (income). They believe that bond portfolios which are composed of undervalued securities and additional yield have a strong bias to provide superior returns over time. \* **Blmbg Gov/Credit Bond Index through May 31, 2013 and Blmbg Aggregate Index thereafter.**

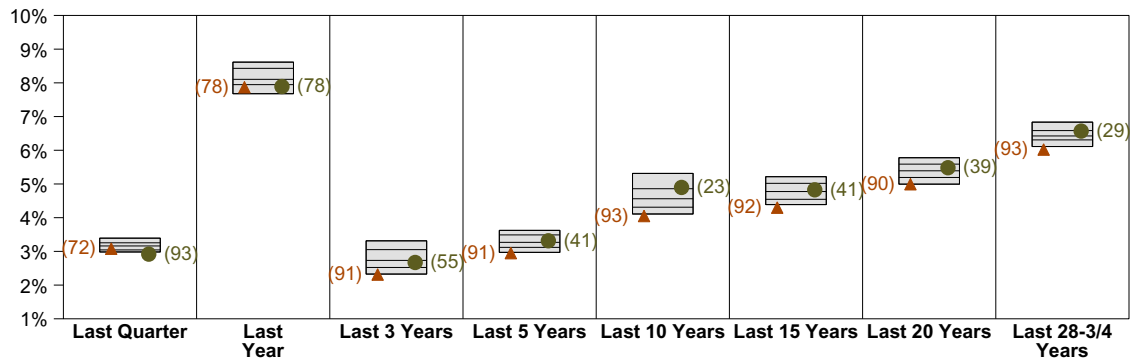
## Quarterly Summary and Highlights

- Richmond Capital Management's portfolio posted a 2.92% return for the quarter placing it in the 93 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 78 percentile for the last year.
- Richmond Capital Management's portfolio underperformed the Blended Benchmark\* by 0.16% for the quarter and outperformed the Blended Benchmark\* for the year by 0.02%.

## Quarterly Asset Growth

Beginning Market Value	\$47,858,622
Net New Investment	\$-35,445
Investment Gains/(Losses)	\$1,395,665
Ending Market Value	\$49,218,842

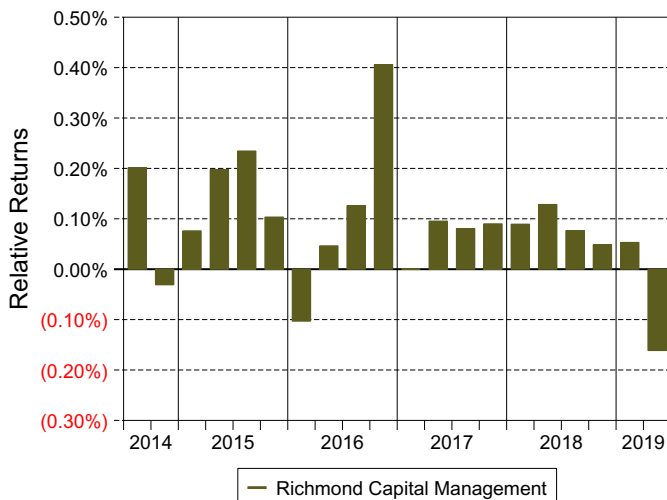
## Performance vs Callan Core Bond Fixed Income (Gross)



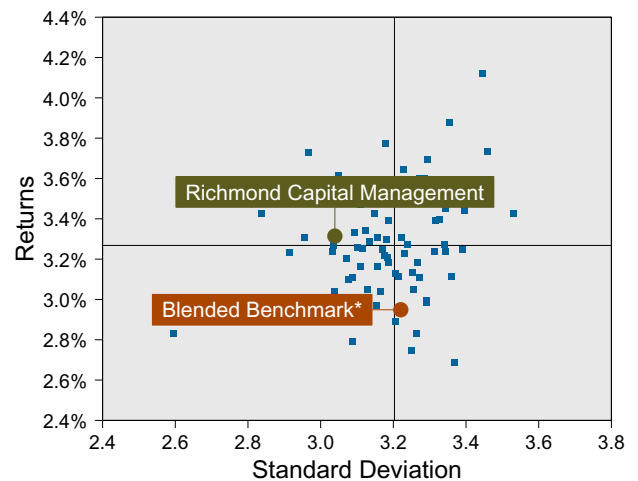
10th Percentile	3.39	8.61	3.31	3.62	5.31	5.22	5.78	6.83
25th Percentile	3.25	8.43	3.05	3.49	4.86	5.02	5.59	6.58
Median	3.16	8.10	2.73	3.27	4.56	4.78	5.39	6.42
75th Percentile	3.04	7.95	2.52	3.12	4.31	4.55	5.19	6.31
90th Percentile	2.98	7.68	2.33	2.97	4.11	4.39	4.99	6.11

<b>Richmond Capital Management</b> ●	2.92	7.89	2.67	3.31	4.90	4.83	5.48	6.57
Blended Benchmark* ▲	3.08	7.87	2.31	2.95	4.05	4.30	4.99	6.02

## Relative Return vs Blended Benchmark\*



## Callan Core Bond Fixed Income (Gross) Annualized Five Year Risk vs Return

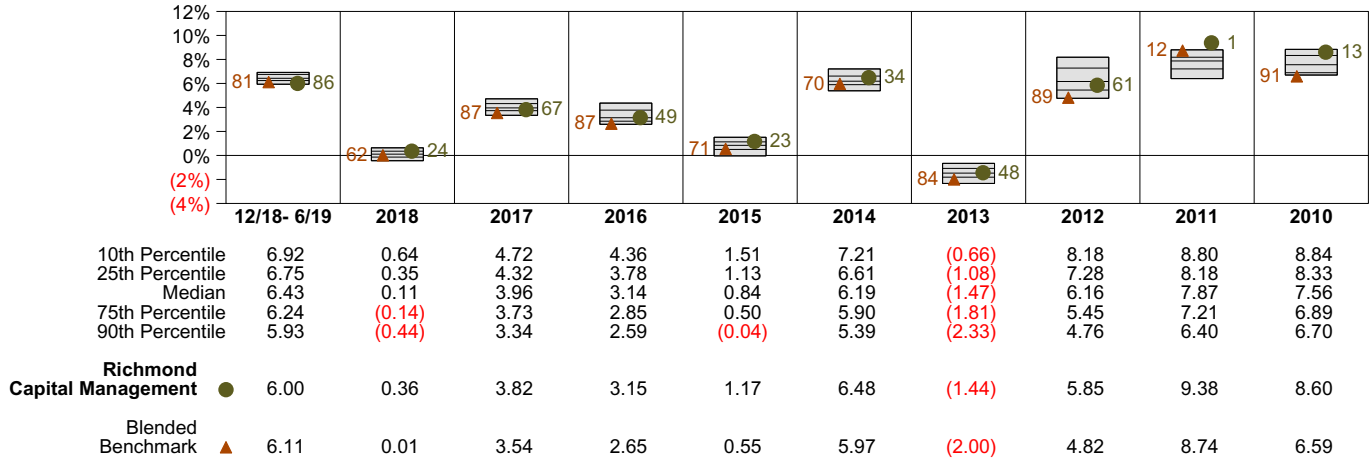


# Richmond Capital Management Return Analysis Summary

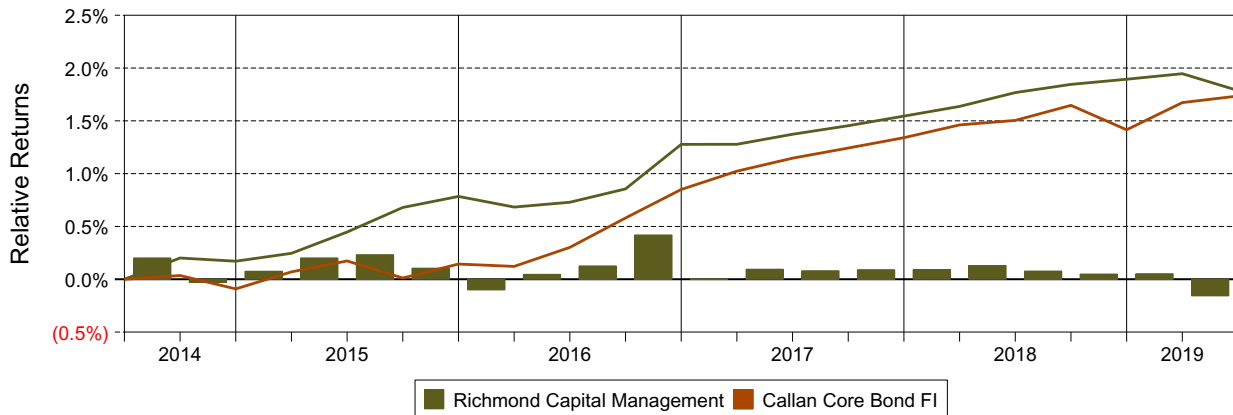
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

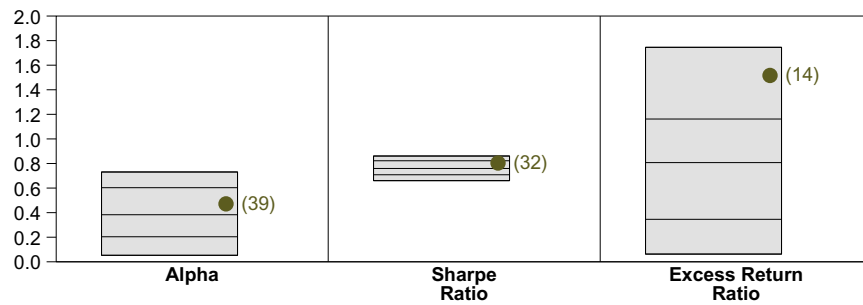
### Performance vs Callan Core Bond Fixed Income (Gross)



### Cumulative and Quarterly Relative Return vs Blended Benchmark



### Risk Adjusted Return Measures vs Blended Benchmark Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended June 30, 2019



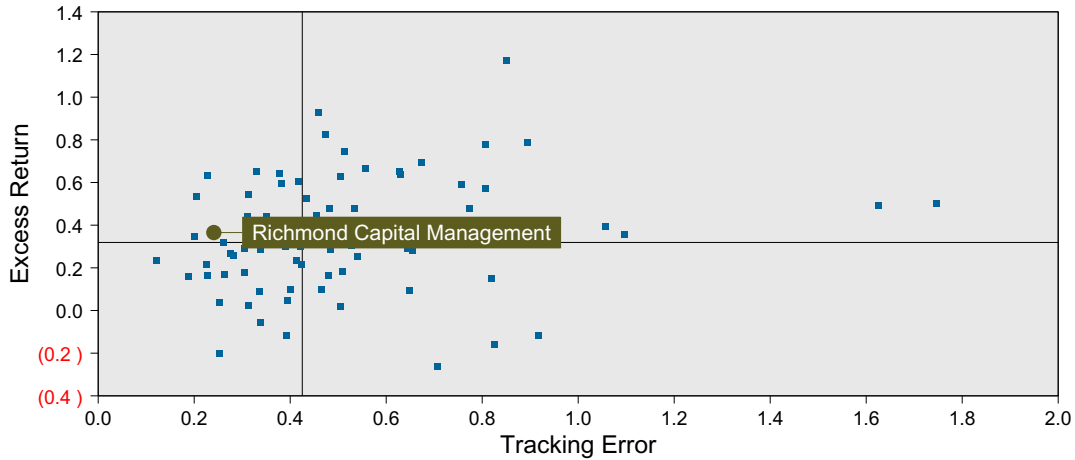
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	0.73	0.86	1.75
25th Percentile	0.60	0.82	1.16
Median	0.38	0.76	0.81
75th Percentile	0.20	0.71	0.35
90th Percentile	0.05	0.66	0.06
<b>Richmond Capital Management</b>	<b>0.47</b>	<b>0.80</b>	<b>1.52</b>

# Richmond Capital Management Risk Analysis Summary

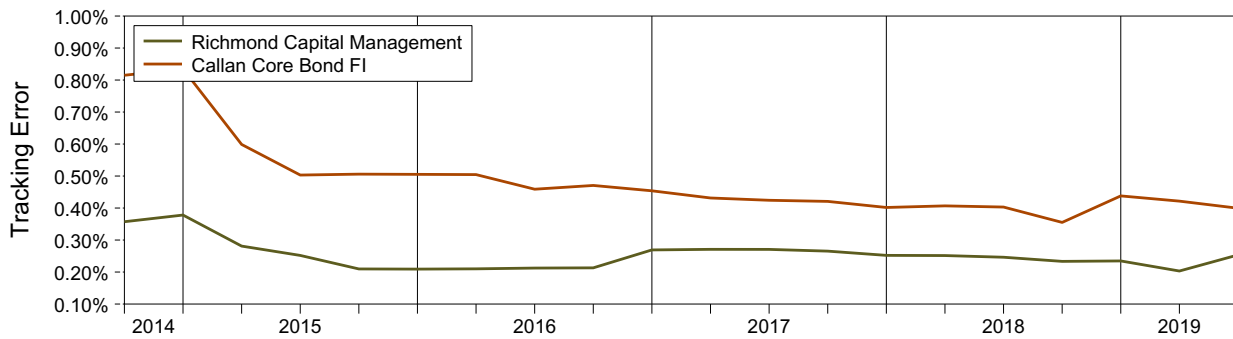
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

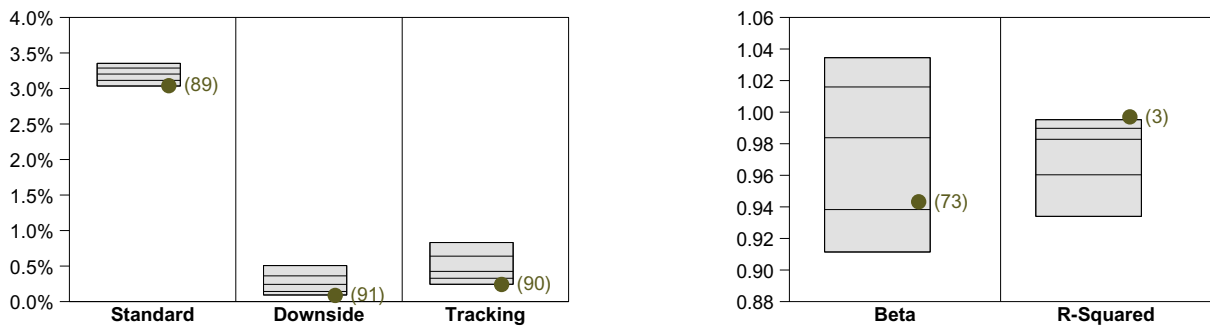
### Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended June 30, 2019



### Rolling 12 Quarter Tracking Error vs Blended Benchmark



### Risk Statistics Rankings vs Blended Benchmark Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended June 30, 2019



10th Percentile  
25th Percentile  
Median  
75th Percentile  
90th Percentile

3.35  
3.29  
3.20  
3.11  
3.03

0.51  
0.36  
0.24  
0.14  
0.09

0.83  
0.64  
0.43  
0.33  
0.24

10th Percentile  
25th Percentile  
Median  
75th Percentile  
90th Percentile

1.03  
1.02  
0.98  
0.94  
0.91

1.00  
0.99  
0.98  
0.96  
0.93

**Richmond Capital Management** ●

3.04

0.09

0.24

**Richmond Capital Management** ●

0.94

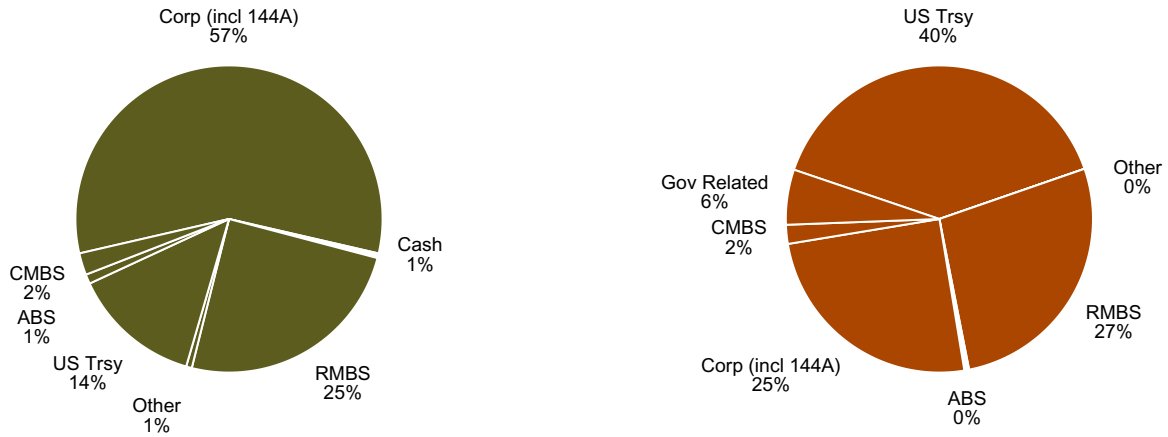
1.00

# Richmond Capital Management Portfolio Characteristics Summary As of June 30, 2019

## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

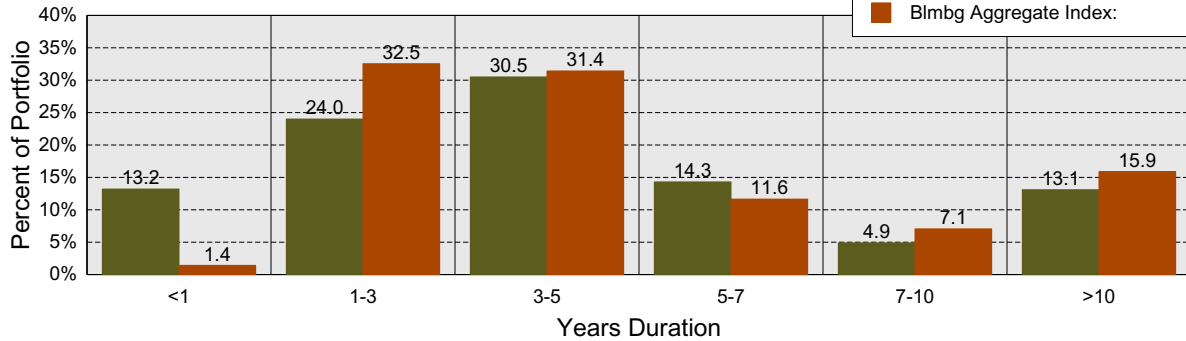
### Sector Allocation



### Richmond Capital Management

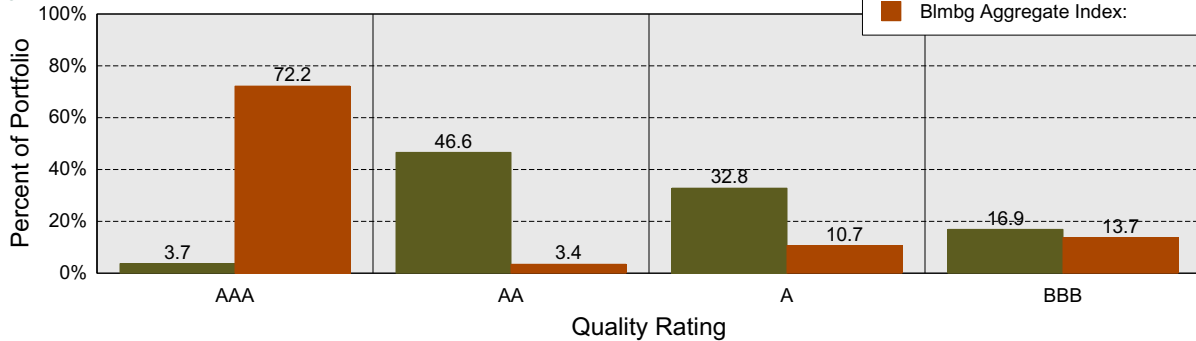
### Blmbg Aggregate Index

#### Duration Distribution



Weighted Average:		Duration
Richmond Capital Management:		5.16
Blmbg Aggregate Index:		5.73

#### Quality Distribution



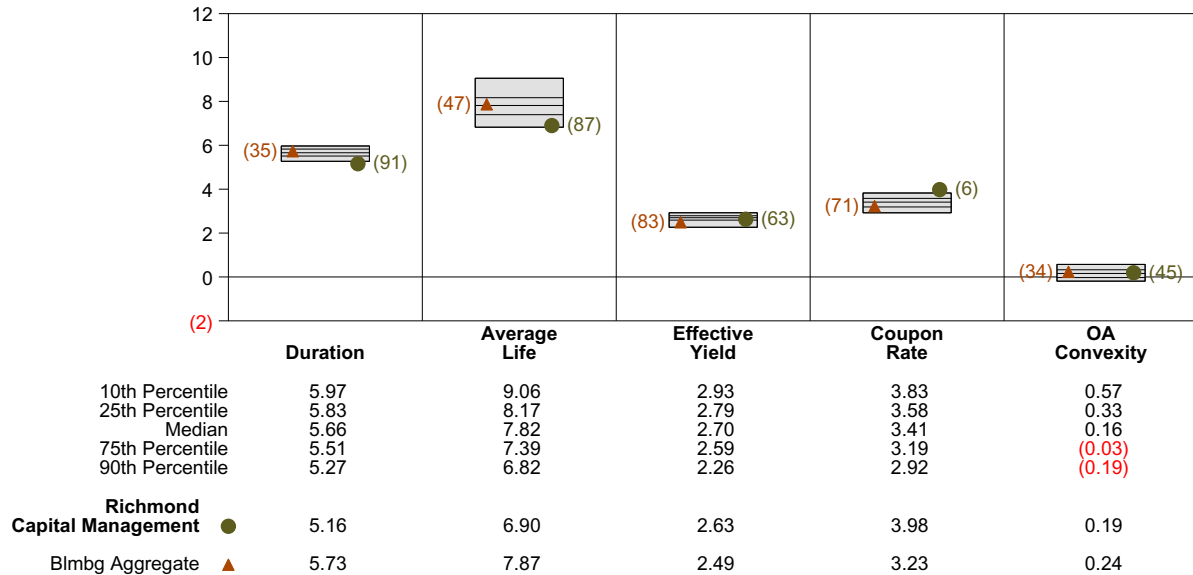
Weighted Average:		Quality
Richmond Capital Management:		AA-
Blmbg Aggregate Index:		AA

# Richmond Capital Management Bond Characteristics Analysis Summary

## Portfolio Characteristics

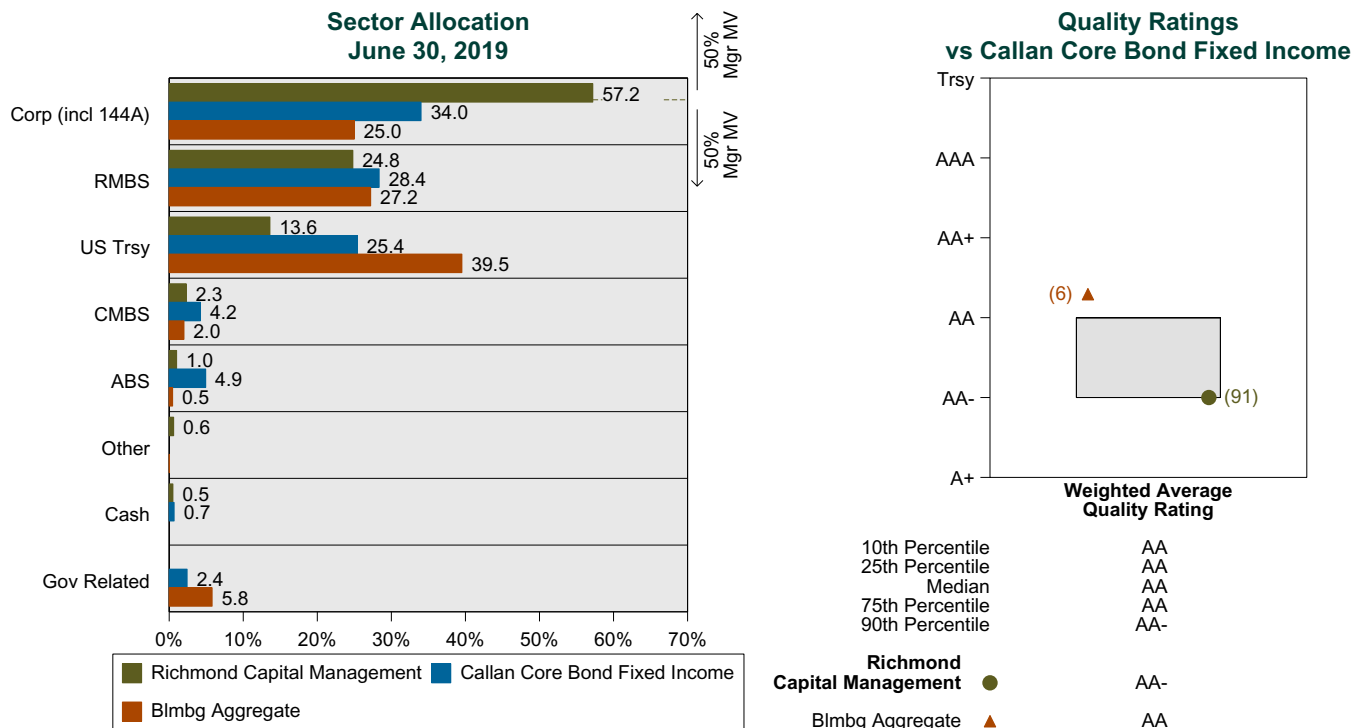
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income as of June 30, 2019



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



# Heitman

## Period Ended June 30, 2019

### Investment Philosophy

Heitman America Real Estate Trust, L.P. is a Delaware limited partnership, organized as a perpetual-life, core open-ended commingled fund to invest in real estate assets. The Fund seeks to deliver to its investors a combination of current income return and moderate appreciation. In acquiring individual assets for HART, Heitman adheres to the following principles: Buy in major markets and build a portfolio that is diversified by property type, economic exposure and geography. Buy assets with strong site attributes, such as proximity to amenities, complementary land uses and transportation networks. Buy well-constructed assets with features that will continue to appeal to tenants over long periods of time.

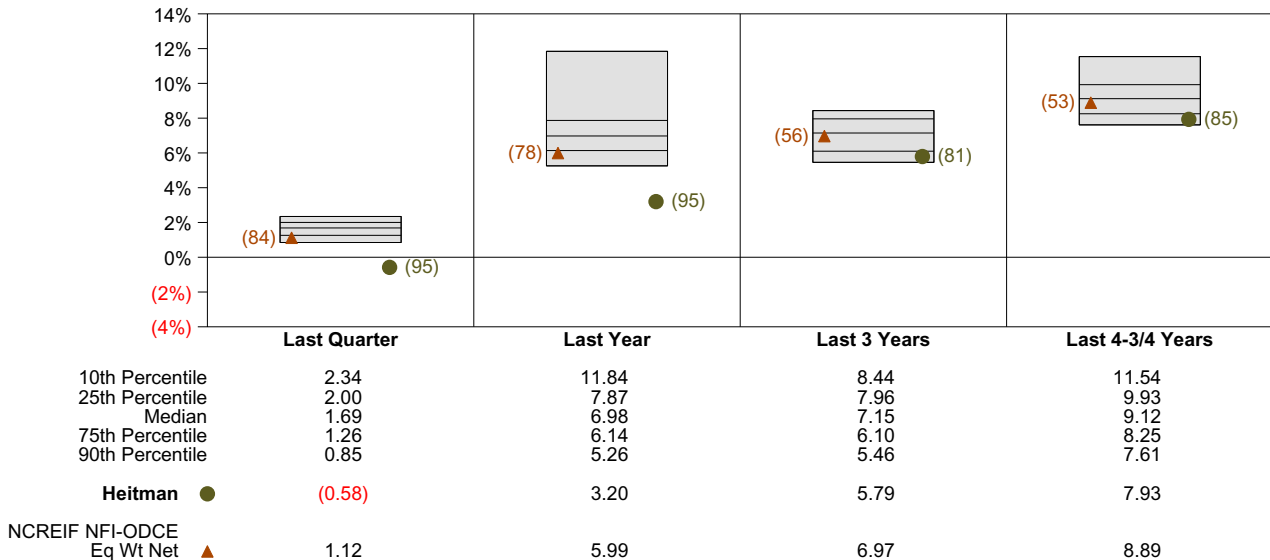
### Quarterly Summary and Highlights

- Heitman's portfolio posted a (0.58)% return for the quarter placing it in the 95 percentile of the Callan Open End Core Cmmingled Real Est group for the quarter and in the 95 percentile for the last year.
- Heitman's portfolio underperformed the NCREIF NFI-ODCE Eq Wt Net by 1.70% for the quarter and underperformed the NCREIF NFI-ODCE Eq Wt Net for the year by 2.79%.

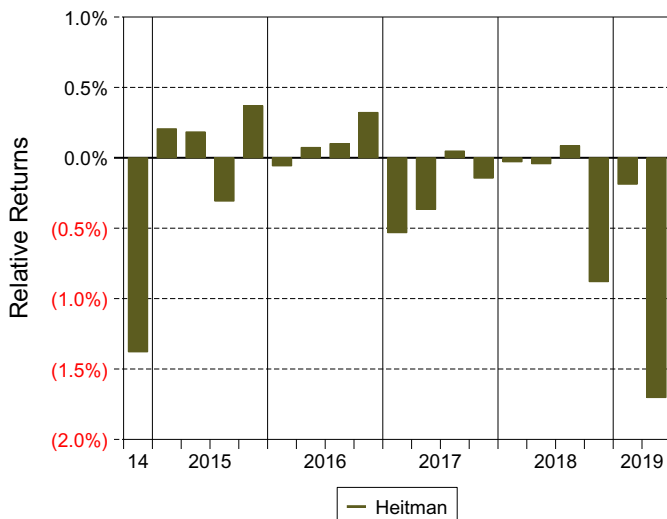
### Quarterly Asset Growth

Beginning Market Value	\$20,659,338
Net New Investment	\$0
Investment Gains/(Losses)	\$-120,206
Ending Market Value	\$20,539,132

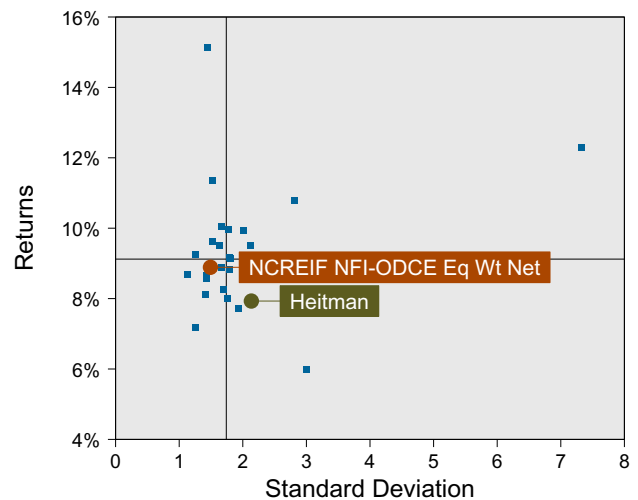
### Performance vs Callan Open End Core Cmmingled Real Est (Net)



### Relative Returns vs NCREIF NFI-ODCE Eq Wt Net



### Callan Open End Core Cmmingled Real Est (Net) Annualized Four and Three-Quarter Year Risk vs Return

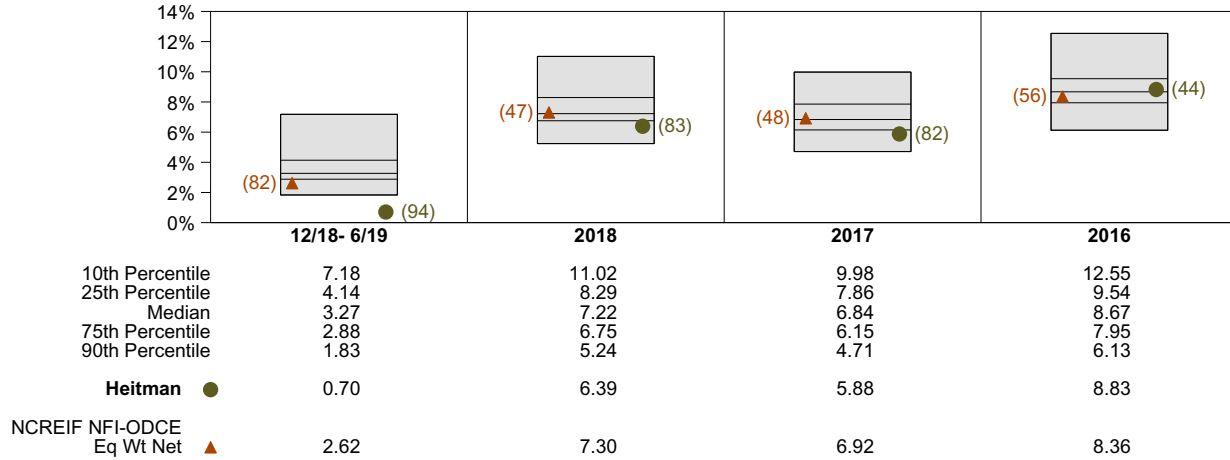


# Heitman Return Analysis Summary

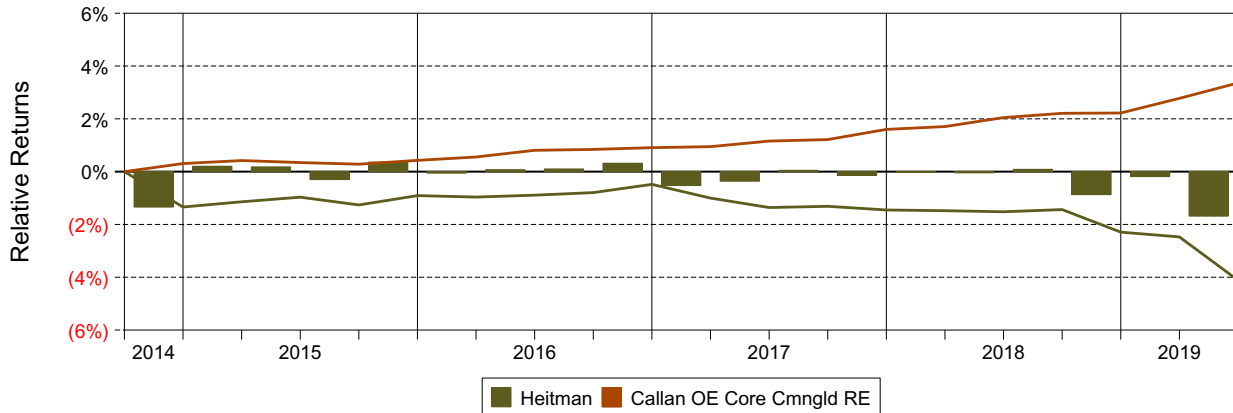
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

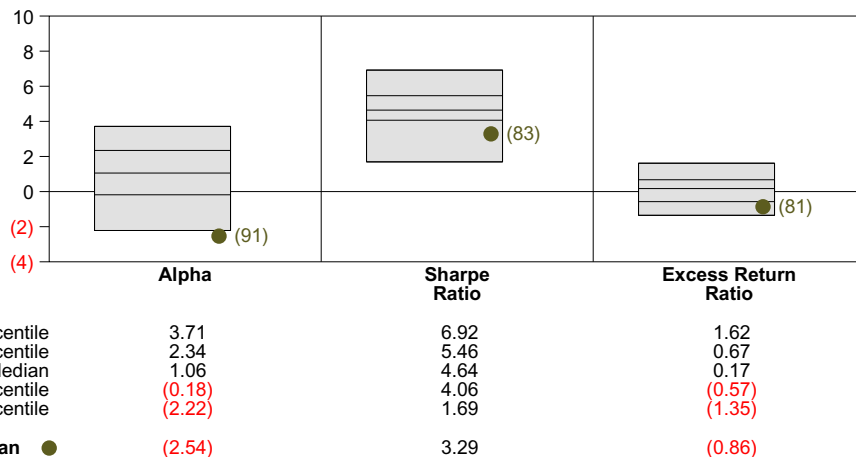
### Performance vs Callan Open End Core Cmmingled Real Est (Net)



### Cumulative and Quarterly Relative Return vs NCREIF NFI-ODCE Eq Wt Net



### Risk Adjusted Return Measures vs NCREIF NFI-ODCE Eq Wt Net Rankings Against Callan Open End Core Cmmingled Real Est (Net) Four and Three-Quarter Years Ended June 30, 2019

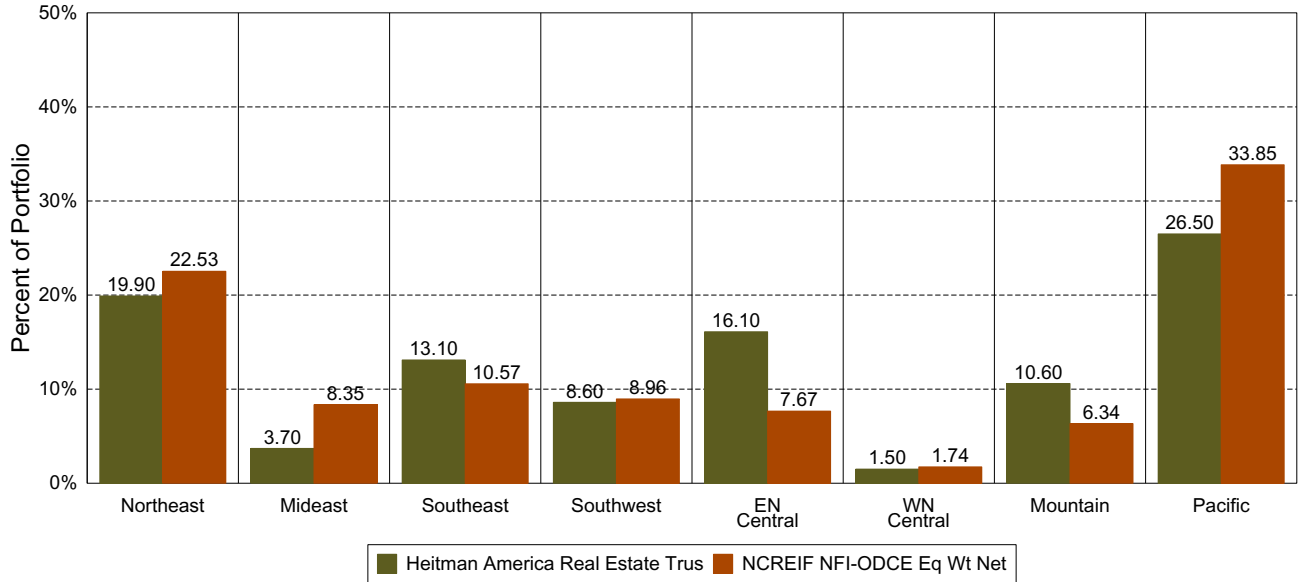


# Heitman America Real Estate Trust Diversification Analysis as of June 30, 2019

## Diversification Analysis

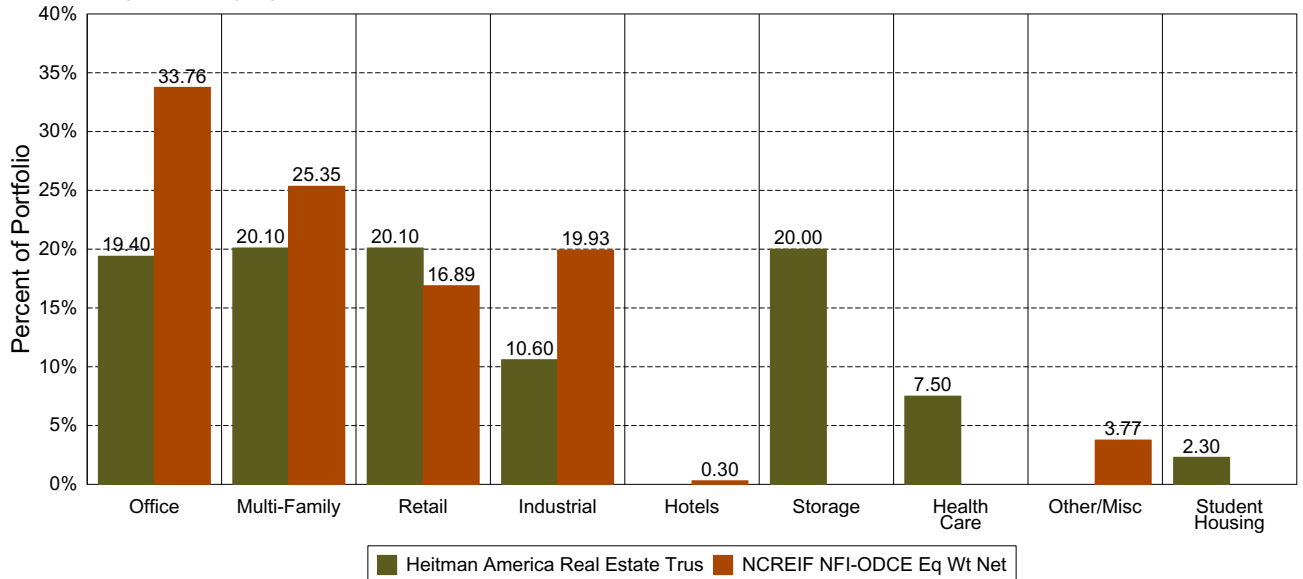
The following charts provide information on the diversification of the portfolio with regards to both Geographic Region and Property Type. Similar information is provided on the relevant market index for comparison.

### Diversification by Geographic Region as of June 30, 2019



Heitman America Real Estate Trust	19.90%	3.70%	13.10%	8.60%	16.10%	1.50%	10.60%	26.50%
NCREIF NFI-ODCE Eq Wt Net	22.53%	8.35%	10.57%	8.96%	7.67%	1.74%	6.34%	33.85%

### Diversification by Property Type as of June 30, 2019



Heitman America Real Estate Trust	19.40%	20.10%	20.10%	10.60%	0.00%	20.00%	7.50%	0.00%	2.30%
NCREIF NFI-ODCE Eq Wt Net	33.76%	25.35%	16.89%	19.93%	0.30%	0.00%	0.00%	3.77%	0.00%



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## Equity Market Indicators

The market indicators included in this report are regarded as measures of equity or fixed income performance results. The returns shown reflect both income and capital appreciation.

**Russell 2000 Growth** contains those Russell 2000 securities with a greater than average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earning ratios, lower dividend yields and higher forecasted growth values than the Value universe.

**Russell 2000 Index** is composed of the 2000 smallest stocks in the Russell 3000 Index, representing approximately 11% of the U.S. equity market capitalization.

**Russell 2000 Value** contains those Russell 2000 securities with a less than average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earning ratios, higher dividend yields and lower forecasted growth values than the Growth universe.

**Standard & Poor's 500 Index** is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries. The index is capitalization-weighted, with each stock weighted by its proportion of the total market value of all 500 issues. Thus, larger companies have a greater effect on the index.

**Standard & Poor's MidCap Index** is a composite of 400 medium-capitalization, domestic common stocks. Stocks in this index are not included in the Standard & Poor's 500 Index. The index is capitalization-weighted.

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## International Equity Market Indicators

The market indicators included in this report are regarded as measures of equity or fixed income performance results. The returns shown reflect both income and capital appreciation.

**MSCI ACWI ex US Index** The MSCI ACWI ex US(All Country World Index) Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets, excluding the US. As of May 27, 2010 the MSCI ACWI consisted of 45 country indices comprising 24 developed and 21 emerging market country indices. The developed market country indices included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom. The emerging market country indices included are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

**Morgan Stanley Capital International (MSCI) EAFE Index** is composed of approximately 1000 equity securities representing the stock exchanges of Europe, Australia, New Zealand and the Far East. The index is capitalization-weighted and is expressed in terms of U.S. dollars.

**Morgan Stanley Capital Intl (MSCI) Emerging Markets Free Index** is composed of about 549 equity securities representing the stock exchanges of 13 countries in Central Asia and the Far East, Latin America, Europe, and the Middle East. Only 20% of Korea's market capitalization is included in this index. The index is market capitalization-weighted and is expressed in terms of U.S. dollars.

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## Fixed Income Market Indicators

The market indicators included in this report are regarded as measures of equity or fixed income performance results. The returns shown reflect both income and capital appreciation.

**90-Day U.S. Treasury Bills** provide a measure of riskless return. The rate of return is the average interest rate available on the beginning of each month for a Treasury Bill maturing in ninety days.

**Bloomberg Barclays Aggregate Bond Index** is a combination of the Mortgage Backed Securities Index and the intermediate and long-term components of the Government/Credit Bond Index.

**Bloomberg Barclays Capital Govt/Credit Bond Index** is a composite of all publicly issued, fixed rate, non-convertible, domestic bonds. The issues are rated at least BBB, have a minimum outstanding principal of \$100 million for U.S. Government issues or \$50 million for other bonds, and have a maturity of at least one year. The index is capitalization-weighted.

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## International Fixed Income Market Indicators

The market indicators included in this report are regarded as measures of equity or fixed income performance results. The returns shown reflect both income and capital appreciation.

**CitiGroup Non-U.S. Dollar World Government Bond Index** is composed of the CitiGroup World Government Bond Index excluding U.S. bonds. The index includes all fixed-rate government bonds in 10 countries having remaining maturities of one year or longer with amounts outstanding of at least the equivalent of US\$ 100 million. The index is capitalization-weighted and is expressed in terms of U.S. dollars.

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## General Price Level Market Indicators

The market indicators included in this report are regarded as measures of equity or fixed income performance results. The returns shown reflect both income and capital appreciation.

**Consumer Price Index** is a measure of the average change in prices for a fixed market basket of goods and services. This market basket is based on the spending patterns of urban wage earners and clerical workers, who represent 40 percent of the total civilian population.

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## Callan Databases

In order to provide comparative investment results for use in evaluating a fund's performance, Callan gathers rate of return data from investment managers. These data are then grouped by type of assets managed and by the type of investment manager. Except for mutual funds, the results are for tax-exempt fund assets. The databases, excluding mutual funds, represent investment managers who handle over 80% of all tax-exempt fund assets.

### Equity Funds

Equity funds concentrate their investments in common stocks and convertible securities. The funds included maintain well-diversified portfolios.

**Core International Equity Style** Managers whose portfolio holdings and characteristics are similar to that of the broader developed market as represented by the MSCI EAFE Index, with the objective of adding value over and above the index, typically from country, sector, or issue selection. The Core portfolio is broadly diversified and exhibits similar risk characteristics to the developed market as measured by low residual risk with Beta and R-Squared values close to 1.00 and combined growth and value z-score values close to 0. Exposure to emerging markets and smaller capitalization stocks is limited.

**Domestic Equity Database** - The Domestic Equity Database is a broad collection of actively managed separate account domestic equity products.

**International Emerging Markets Equity** - The International Emerging Market Equity Database consists of all separate account international equity products that concentrate on newly emerging second and third world countries in the regions of the Far East, Africa, Europe, and Central and South America.

### Fixed Income Funds

Fixed Income funds concentrate their investments in bonds, preferred stocks, and money market securities. The funds included maintain well-diversified portfolios.

**Domestic Fixed-Income Database** - The Domestic Fixed-Income Database is a broad collection of separate account domestic fixed-income products.

**International Non-U.S. Dollar Fixed-Income** - The International Non-U.S. Dollar Fixed-Income Database consists of all separate account international fixed-income funds that do not generally invest in U.S. fixed-income securities.

### Balanced Funds

Balanced funds diversify their investments among common stocks, bonds, preferred stocks and money market securities. The funds included maintain well-diversified equity and fixed income portfolios.

**Domestic Balanced Database** - The Domestic Balanced Database consists of all separate account domestic balanced funds.

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## Common Stock Portfolio Characteristics

All Portfolio Characteristics are derived by first calculating the characteristics for each security, and then calculating the weighted average of these values for the portfolio.

**Dividend Yield** - The total amount of dividends paid out for a stock over the preceding twelve months divided by the closing price of a share of the common stock.

**Five Year Beta** - Beta measures the sensitivity of rates of return on a fund to general market movements. As such, the Beta for a portfolio is a reflection of the risk of the securities in the portfolio as compared to the broader market. This value is a composite of the individual Beta values within a portfolio. The Beta computation is based on the weighted average of the five year historical Betas of each security in a portfolio.

**Growth in Dividends** - This value represents a weighted average five year annual growth rate of dividends per common stock share. The rates of growth in dividends for trailing twelve month periods are calculated using the dividend-per-share values for each time period. The five-year growth in dividends figure is calculated for each security in a portfolio. From these individual values, a weighted average value is calculated for the portfolio. The number of shares in each time period is adjusted to reflect any splits, mergers, or other capital changes. In this case, dividends are ex-dividends, meaning that the dividend has been declared and a buyer of the stock after the ex-dividend date does not receive the dividend.

**Growth in Earnings** - This value represents a weighted average five year annual growth rate of earnings per common stock share. The rates of growth in earnings for trailing twelve month periods are calculated using the earnings-per-share values for each time period. The five-year growth in earnings figure is calculated for each security in a portfolio. From these individual values, a weighted average value is calculated for the portfolio. The number of shares in each time period is adjusted to reflect any splits, mergers, or other capital changes. In this case, the earnings per share is fully diluted and excludes extraordinary items and discontinued operations. Fully diluted earnings per share are earnings that are reduced, or diluted, by assuming the conversion of all securities that are convertible into equities.

**Issue Diversification** - A measure of portfolio concentration in individual issues (securities). This number represents how many different securities (names) comprise the most concentrated half of the portfolio assets (half of the assets are in how many names?). This measure is useful in evaluating the concentration/diversification of portfolios made up of many issues but concentrated in a small subset of those issues (e.g. 100 stocks with 50% of assets in 10 stocks, Issue Diversification = 10).

**Number of Securities** - This is a simple portfolio diversification measure representing the number of unique non-cash securities (names) currently held in the portfolio. This measure does not address potential concentration of assets within these securities (see Issue Concentration).

**Price/Book Value** - The Price to Book Value is a measure of value for a company. It is equal to the market value of all the shares of common stock divided by the book value of the company. The book value is the sum of capital surplus, common stock, and retained earnings.

**Price/Earnings Ratio** - The Price to Earnings Ratio (P/E) is a measure of value for a company. It is equal to the price of a share of common stock divided by the earnings per share for a twelve-month period.

**Return on Assets** - Return on Assets is a measure of a company's profitability, specifically relating profits to the total investments required to achieve the profits. It is equal to income divided by total assets. Income is after all expenses, including income taxes and minority interest, but before provision for dividends, extraordinary items, and discontinued operations. Total assets includes the sum of all current, non-current, and intangible assets.

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## Common Stock Portfolio Characteristics

**Return on Equity** - Return on Equity is a measure of a company's profitability, specifically relating profits to the equity investment employed to achieve the profits. Return on Equity focuses on the returns accruing to the residual owners of a company, the equityholders. It is equal to income divided by total common equity. Income is after all expenses, including income taxes and minority interest, but before provision for dividends, extraordinary items, and discontinued operations. Common equity includes common stock outstanding, capital surplus, and retained earnings.

**Total Debt/Assets** - The Debt to Assets ratio is a measure of the level of total debt of a company as a portion of the assets of the company. It is equal to short-term and long-term debt divided by total assets. Total assets include the sum of all current, non-current, and intangible assets.

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## Fixed Income Portfolio Characteristics

All Portfolio Characteristics are derived by first calculating the characteristics for each security, and then calculating the market value weighted average of these values for the portfolio.

**Allocation by Sector** - Sector allocation is one of the tools which managers often use to add value without impacting the duration of the portfolio. The sector weights exhibit can be used to contrast a portfolio's weights with those of the index to identify any significant sector bets.

**Average Coupon** - The average coupon is the market value weighted average coupon of all securities in the portfolio. The total portfolio coupon payments per year are divided by the total portfolio par value.

**Average Moody's Rating for Total Portfolio** - A measure of the credit quality as determined by the individual security ratings. The ratings for each security, from Moody's Investor Service, are compiled into a composite rating for the whole portfolio. Quality symbols range from Aaa+ (highest investment quality - lowest credit risk) to C (lowest investment quality - highest credit risk).

**Average Option Adjusted (Effective) Convexity** - Convexity is a measure of the portfolio's exposure to interest rate risk. It is a measure of how much the duration of the portfolio will change given a change in interest rates. Generally, securities with negative convexities are considered to be risky in that changes in interest rates will result in disadvantageous changes in duration. When a security's duration changes it indicates that the stream of expected future cash-flows has changed, generally having a significant impact on the value of the security. The option adjusted convexity for each security in the portfolio is calculated using models developed by Lehman Brothers and Salomon Brothers which determine the expected stream of cash-flows for the security based on various interest rate scenarios. Expected cash-flows take into account any put or call options embedded in the security, any expected sinking-fund paydowns or any expected mortgage principal prepayments.

**Average Option Adjusted (Effective) Duration** - Duration is one measure of the portfolio's exposure to interest rate risk. Generally, the higher a portfolio's duration, the more that its value will change in response to interest rate changes. The option adjusted duration for each security in the portfolio is calculated using models developed by Lehman Brothers and Salomon Brothers which determine the expected stream of cash-flows for the security based on various interest rate scenarios. Expected cash-flows take into account any put or call options embedded in the security, any expected sinking-fund paydowns or any expected mortgage principal prepayments.

**Average Price** - The average price is equal to the portfolio market value divided by the number of securities in the portfolio. Portfolios with an average price above par will tend to generate more current income than those with an average price below par.

**Average Years to Expected Maturity** - This is a measure of the market-value-weighted average of the years to expected maturity across all of the securities in the portfolio. Expected years to maturity takes into account any put or call options embedded in the security, any expected sinking-fund paydowns or any expected mortgage principal prepayments.

**Average Years to Stated Maturity** - The average years to stated maturity is the market value weighted average time to stated maturity for all securities in the portfolio. This measure does not take into account imbedded options, sinking fund paydowns, or prepayments.

**Current Yield** - The current yield is the current annual income generated by the total portfolio market value. It is equal to the total portfolio coupon payments per year divided by the current total portfolio market value.

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## Fixed Income Portfolio Characteristics

**Duration Dispersion** - Duration dispersion is the market-value weighted standard deviation of the portfolio's individual security durations around the total portfolio duration. The higher the dispersion, the more variable the security durations relative to the total portfolio duration ("barbellness"), and the smaller the dispersion, the more concentrated the holdings' durations around the overall portfolio's ("bulletness"). The purpose of this statistic is to gauge the "bulletness" or "barbellness" of a portfolio relative to its total duration and to that of its benchmark index.

**Effective Yield** - The effective yield is the actual total annualized return that would be realized if all securities in the portfolio were held to their expected maturities. Effective yield is calculated as the internal rate of return, using the current market value and all expected future interest and principal cash flows. This measure incorporates sinking fund paydowns, expected mortgage principal prepayments, and the exercise of any "in-the-money" imbedded put or call options.

**Weighted Average Life** - The weighted average life of a security is the weighted average time to payment of all remaining principal. It is calculated by multiplying each expected future principal payment amount by the time left to the payment. This amount is then divided by the total amount of principal remaining. Weighted average life is commonly used as a measure of the investment life for pass-through security types for comparison to non-pass-through securities.



## Research and Educational Programs

The Callan Institute provides research to update clients on the latest industry trends and carefully structured educational programs to enhance the knowledge of industry professionals. Visit [www.callan.com/library](http://www.callan.com/library) to see all of our publications, and [www.callan.com/blog](http://www.callan.com/blog) to view our blog "Perspectives." For more information contact Barb Gerraty at 415-274-3093 / [institute@callan.com](mailto:institute@callan.com).

### New Research from Callan's Experts

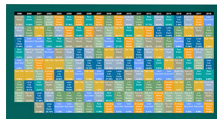
**The OCIO Model: How Do We Measure Success?** | This paper outlines the key issues for evaluating the success of outsourced chief investment officer (OCIO) services.

**Perspectives on Investing: The Evolution of Strategic Allocations** | In this video, Callan experts discuss the key challenges of evaluating non-U.S. equity investments.

**Opportunities & Challenges: Investing in Private Equity Partnerships** | In this video, Callan experts discuss investing directly in private equity partnerships.

**Building a Pool of Transition Managers: Both an Art and a Science** | Transition management is the restructuring of institutional portfolios from single or multiple investment managers/asset classes to a new allocation over a short-term horizon. This paper offers guidance on building a pool of transition managers.

**Callan's Periodic Table Explained** | The popular Callan Periodic Table of Investment Returns turned 20 this year. This animated feature discusses the benefits and some of the history of the table.



**The Cobbler's Shoes: How Asset Managers Run Their Own 401(k) Plans** | Can investment manager-sponsored DC plans provide insights on plan design and implementation? To help answer this question, Callan examined the 401(k) plans of investment



managers. The industry scored high on retirement savings metrics. But in contrast to the industry consensus, asset managers generally embraced complexity over simplicity in their investment designs.

### **How to Distinguish Between Growth Equity and Late-Stage VC**



Both growth equity and late-stage venture capital are growth-oriented but differ significantly in the types of companies they invest in, the structure of their investments, the way in which they create value, and the trade-offs between risk and return.

**Nurturing Strong Cultures at Professional Firms** | In this paper, Callan Executive Chairman Ron Peyton offers advice for building effective and transparent corporate cultures.

**Opening Doors of Opportunity** | This paper reviews the types of co-investment opportunities offered by hedge funds and funds-of-funds (FOFs).

### **Quarterly Periodicals**

**Private Equity Trends** | A newsletter on private equity activity, covering both the fundraising cycle and performance over time.

**Market Pulse Flipbook** | A market reference guide covering trends in the U.S. economy, developments for fund sponsors, and the latest data for U.S. and non-U.S. equities and fixed income, alternatives, and defined contribution plans.

**Active vs. Passive Charts** | This series of charts compares active managers alongside relevant benchmarks over the long term.

**Capital Market Review** | A newsletter providing analysis and a broad overview of the economy and public and private market activity each quarter across a wide range of asset classes.

## Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: [www.callan.com/library/](http://www.callan.com/library/)

Please mark your calendar and look forward to upcoming invitations.

### October Regional Workshops

October 22, 2019 – Denver

October 24, 2019 – Chicago

### 2020 National Conference

January 27-29, 2020 – San Francisco

Please also keep your eye out for upcoming Webinars in 2019! We will be sending invitations for these and also will have registration links on our website at [www.callan.com/events](http://www.callan.com/events).

**For more information about events, please contact Barb Gerraty: 415-274-3093 / [gerraty@callan.com](mailto:gerraty@callan.com)**

## The Center for Investment Training Educational Sessions

The Center for Investment Training, better known as the “Callan College,” provides a foundation of knowledge for industry professionals who are involved in the investment decision-making process. It was founded in 1994 to provide clients and non-clients alike with basic- to intermediate-level instruction. Our next sessions are:

### Introduction to Investments

San Francisco, July 23-24, 2019

Atlanta, October 8-9, 2019

Chicago, October 22-23, 2019

This program familiarizes fund sponsor trustees, staff, and asset management advisers with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals who have less than two years of experience with asset-management oversight and/or support responsibilities. Tuition for the Introductory “Callan College” session is \$2,350 per person. Tuition includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

### “Callan College” on Alternative Investments

Chicago, October 29-30, 2019

The “Callan College” on Alternative Investments will cover: private equity, private credit, hedge funds, real estate, and real assets. Tuition for the “Callan College” on Alternative Investments session is \$2,500 per person. Tuition includes instruction, all materials, and breakfast and lunch on each day.

**Learn more at [www.callan.com/events/callan-college-intro](http://www.callan.com/events/callan-college-intro)**

## Education: By the Numbers

**525**

Attendees (on average) of the Institute's annual National Conference

**50+**

Unique pieces of research the Institute generates each year

**3,700**

Total attendees of the “Callan College” since 1994

**1980**

Year the Callan Institute was founded



“Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialogue to raise the bar across the industry.”

Greg Allen, CEO and Chief Research Officer



## List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g. attending and educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance Department.

Manager Name
Aberdeen Standard Investments
Acadian Asset Management LLC
AEGON USA Investment Management
Alcentra
AllianceBernstein
Allianz Global Investors
Allianz Life Insurance Company of North America
American Century Investments
Amundi Pioneer Asset Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Atlanta Capital Management Co., LLC
Aviva Investors Americas
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
BlackRock
BMO Global Asset Management
BNP Paribas Asset Management
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
BrightSphere Investment Group
Brown Brothers Harriman & Company
Cambiar Investors, LLC
Capital Group
Carillon Tower Advisers
CastleArk Management, LLC
Causeway Capital Management
Chartwell Investment Partners

Manager Name
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Threadneedle Investments
Columbus Circle Investors
Credit Suisse Asset Management
DePrince, Race & Zollo, Inc.
Diamond Hill Capital Management, Inc.
Dimensional Fund Advisors LP
Doubleline
Duff & Phelps Investment Management Co.
DWS
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Investors
Fidelity Institutional Asset Management
Fiera Capital Corporation
Financial Engines
First Hawaiian Bank Wealth Management Division
First State Investments
Fisher Investments
Franklin Templeton
Fred Alger Management, Inc.
GAM (USA) Inc.
Glenmeade Investment Management, LP
GlobeFlex Capital, L.P.
Goldman Sachs
Green Square Capital LLC
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Investment Management Co.
Heitman LLC

Manager Name
Hotchkis & Wiley Capital Management, LLC
HSBC Global Asset Management
Income Research + Management, Inc.
Insight Investment Management Limited
Intech Investment Management, LLC
Intercontinental Real Estate Corporation
Invesco
Investec Asset Management
Ivy Investments
J.P. Morgan
Janus
Jennison Associates LLC
Jobs Peak Advisors
KeyCorp
Lazard Asset Management
Legal & General Investment Management America
Lincoln National Corporation
Logan Circle Partners, L.P.
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
MacKay Shields LLC
Macquarie Investment Management (MIM)
Manulife Asset Management
Marathon Asset Management, L.P.
McKinley Capital Management, LLC
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
Mountain Lake Investment Management LLC
Mountain Pacific Advisors, LLC
MUFG Union Bank, N.A.
Natixis Investment Managers
Neuberger Berman
Newton Investment Management
Nikko Asset Management Co., Ltd.
Northern Trust Asset Management
Nuveen
OFI Global Asset Management
Osterweis Capital Management, LLC
P/E Investments

Manager Name
Pacific Investment Management Company
Pathway Capital Management
Peregrine Capital Management, Inc.
Perkins Investment Management
PGIM Fixed Income
PineBridge Investments
PNC Capital Advisors, LLC
Principal Global Investors
Putnam Investments, LLC
QMA LLC
RBC Global Asset Management
Regions Financial Corporation
Robeco Institutional Asset Management, US Inc.
Rockefeller Capital Management
Rothschild & Co. Asset Management US
Russell Investments
Schroder Investment Management North America Inc.
Smith Graham & Co. Investment Advisors, L.P.
Smith Group Asset Management
South Texas Money Management, Ltd.
State Street Global Advisors
Stone Harbor Investment Partners, L.P.
Sun Life Investment Management
T. Rowe Price Associates, Inc.
The Boston Company Asset Management
The TCW Group, Inc.
Thompson, Siegel & Walmsley LLC
Thornburg Investment Management, Inc.
Tri-Star Trust Bank
UBS Asset Management
VanEck
Versus Capital Group
Victory Capital Management Inc.
Virtus Investment Partners, Inc.
Vontobel Asset Management, Inc.
Voya
WCM Investment Management
WEDGE Capital Management
Wellington Management Company, LLP
Wells Fargo Asset Management
Western Asset Management Company LLC
Westfield Capital Management Company, LP
William Blair & Company LLC