Callan

June 30, 2019

Mendocino County Employees'
Retirement Association

Investment Measurement Service Quarterly Review

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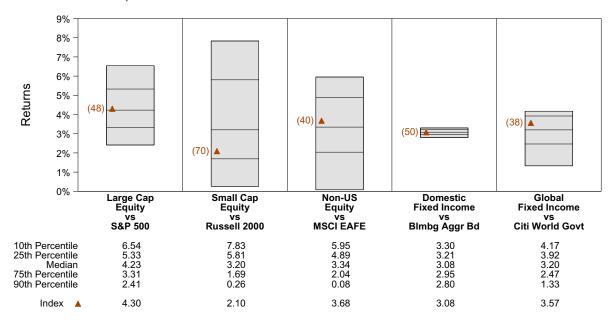
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Market Overview Active Management vs Index Returns

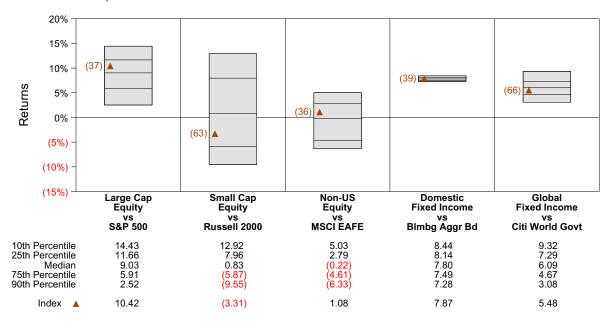
Market Overview

The charts below illustrate the range of returns across managers in Callan's Mutual Fund 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 Mutual Fund Returns by Asset Class One Quarter Ended June 30, 2019



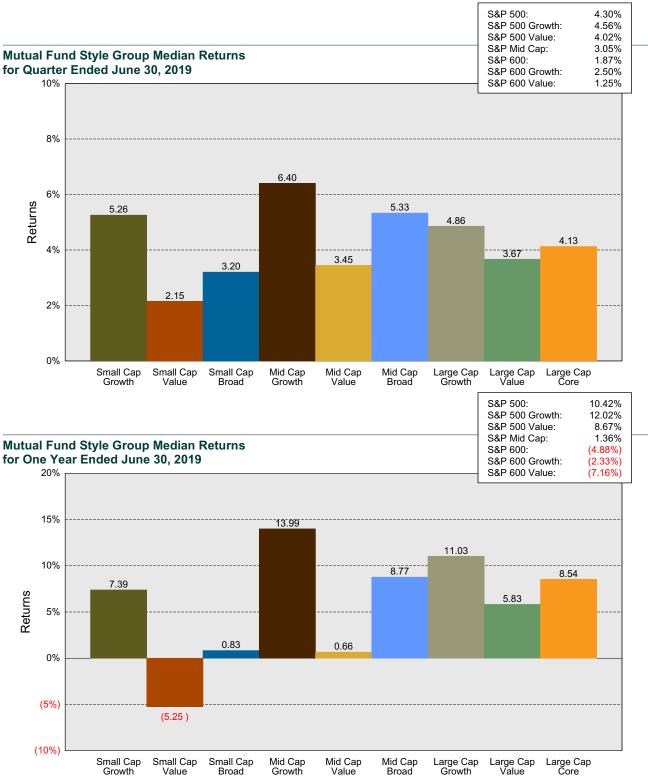
Range of Mutual Fund Returns by Asset Class One Year Ended June 30, 2019





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.

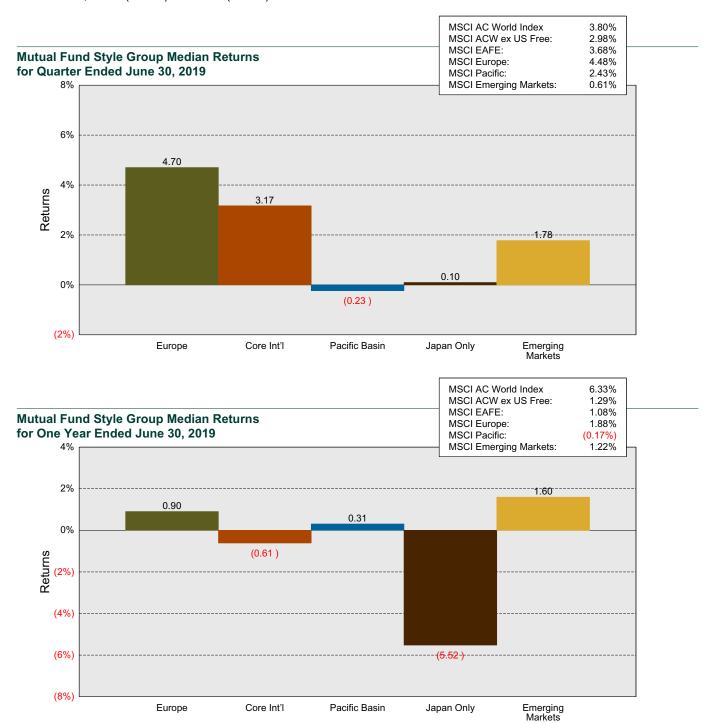




International Equity Active Management Overview

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.

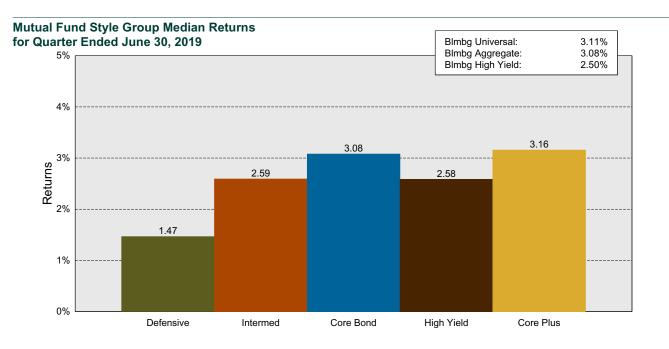
Emerging markets (MSCI Emg Mkts:+0.6%) underperformed developed but returns across countries varied. Argentina (+31.7%) was the best performing country where political developments boosted sentiment, but Russia (+16.9%) was also a strong performer. China (-4.0%) finished in negative territory; but the 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%).

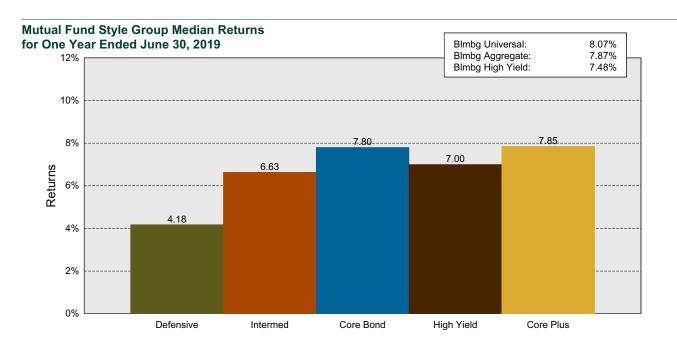




Domestic Fixed Income Active Management Overview

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.







ASSET ALLOCATION AND PERFORMANCE

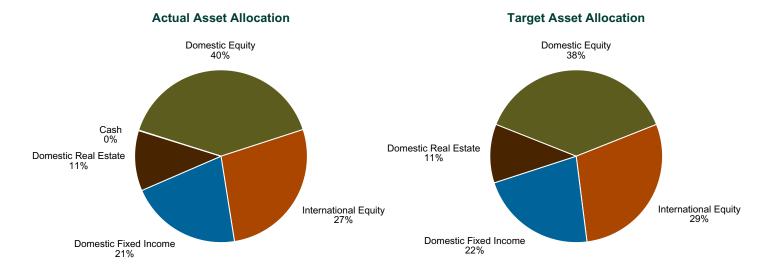
Asset Allocation and Performance

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.



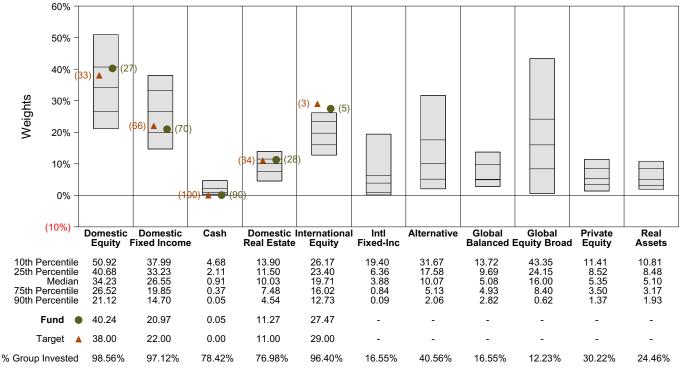
Actual vs Target Asset Allocation As of June 30, 2019

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.



	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Domestic Equity	214,241	40.2%	38.0%	2.2%	11,917
International Equity	146,238	27.5%	29.0%	(1.5%)	(8,166)
Domestic Fixed Income	111,669	21.0%	22.0%	(1.0%)	(5,466)
Domestic Real Estate	59,991	11.3%	11.0%	0.3%	1,424
Cash	291	0.1%	0.0%	0.1%	291
Total	532,429	100.0%	100.0%		

Asset Class Weights vs Callan Public Fund Sponsor Database



^{*} Current Quarter Target = 38.0% Russell 3000 Index, 29.0% MSCI ACWIxUS Gross, 22.0% Blmbg Aggregate and 11.0% NCREIF NFI-ODCE Eq Wt Net.



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, 2	2019		March 31, 2019			
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Domestic Equities	\$214,240,603	40.24%	\$(3,304,502)	\$7,511,389	\$210,033,715	40.44%	
Large Cap Equities	\$150,690,205	28.30%	\$(1,104,502)	\$5,166,275	\$146,628,432	28.23%	
Vanguard S&P 500 Index	37,847,213	7.11%	(400,000)	1,572,038	36,675,176	7.06%	
SSGA S&P Equal Weighted NL CTF	38,238,231	7.18%	(4,502)	1,433,433	36,809,300	7.09%	
Boston Partners	36,633,102	6.88%	0	1,040,571	35,592,531	6.85%	
Harbor Cap Appreciation	37,971,659	7.13%	(700,000)	1,120,233	37,551,426	7.23%	
Mid Cap Equities	\$33,304,116	6.26%	\$(600,000)	\$1,429,859	\$32,474,257	6.25%	
Fidelity Low Priced Stock	15,331,413	2.88%	Ô	214,558	15,116,855	2.91%	
Janus Enterprise	17,972,703	3.38%	(600,000)	1,215,301	17,357,403	3.34%	
Small Cap Equities	\$30,246,282	5.68%	\$(1,600,000)	\$915,256	\$30,931,026	5.95%	
Prudential Small Cap Value	12,392,575	2.33%	Ó	(274,713)	12,667,287	2.44%	
AB US Small Growth	17,853,707	3.35%	(1,600,000)	1,189,969	18,263,738	3.52%	
International Equities	\$146,238,126	27.47%	\$0	\$3,971,438	\$142,266,688	27.39%	
EuroPacific	27,006,170	5.07%	0	1,006,994	25,999,176	5.01%	
Harbor International	28,766,947	5.40%	0	803,505	27,963,442	5.38%	
Oakmark International	27,135,640	5.10%	0	1,001,315	26,134,324	5.03%	
Mondrian International	26,510,253	4.98%	0	348,697	26,161,556	5.04%	
T. Rowe Price Intl Small Cap	21,787,330	4.09%	0	641,516	21,145,814	4.07%	
Investec	15,031,787	2.82%	0	169,412	14,862,374	2.86%	
Domestic Fixed Income	\$111,668,789	20.97%	\$0	\$3,249,350	\$108,419,439	20.87%	
Dodge & Cox Income	56,045,124	10.53%	0	1,519,669	54,525,456	10.50%	
PIMCO	55,623,665	10.45%	0	1,729,681	53,893,983	10.38%	
Real Estate	\$59,991,416	11.27%	\$(17,341)	\$918,046	\$59,090,710	11.38%	
RREEF Private	30,787,441	5.78%	Ó	471,036	30,316,406	5.84%	
Barings Core Property Fund	28,053,974	5.27%	0	429,670	27,624,305	5.32%	
625 Kings Court	1,150,000	0.22%	(17,341)	17,341	1,150,000	0.22%	
Cash	\$290,566	0.05%	\$680,355	\$(0)	\$-389,789	(0.08%)	
Total Fund	\$532,429,500	100.0%	\$(2,641,488)	\$15,650,224	\$519,420,764	100.0%	



The table below details the rates of return 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 for Periods Ended June 30, 2019

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Equties	3.65%	6.66%	15.37%	9.81%	14.66%
Russell 3000 Index	4.10%	8.98%	14.02%	10.19%	14.67%
Large Cap Equities					
Vanguard S&P 500 Index	4.30%	10.39%	14.15%	10.68%	-
S&P 500 Index	4.30%	10.42%	14.19%	10.71%	14.70%
SSGA S&P Eq Weighted NL CTF	3.87%	8.14%	-	-	-
S&P 500 Eq Weighted	3.72%	8.18%	12.41%	9.14%	15.56%
Boston Partners	2.92%	4.48%	11.26%	6.86%	-
S&P 500 Index	4.30%	10.42%	14.19%	10.71%	14.70%
Russell 1000 Value Index	3.84%	8.46%	10.19%	7.46%	13.19%
Harbor Cap Appreciation (1)	3.05%	8.12%	20.28%	13.65%	15.93%
S&P 500 Index	4.30%	10.42%	14.19%	10.71%	14.70%
Russell 1000 Growth Index	4.64%	11.56%	18.07%	13.39%	16.28%
Mid Cap Equities					
Fidelity Low Priced Stock	1.42%	(0.93%)	9.34%	6.01%	12.84%
Russell MidCap Value Idx	3.19%	3.68%	8.95%	6.72%	14.56%
Janus Enterprise (2)	7.23%	16.92%	19.02%	14.48%	17.36%
Russell MidCap Growth Idx	5.40%	13.94%	16.49%	11.10%	16.02%
Small Cap Equities					
Prudential Small Cap Value (3)	(2.17%)	(13.06%)	6.48%	3.54%	-
US Small Cap Value Idx	0.86%	(4.69%)	8.89%	5.71%	13.19%
Russell 2000 Value Index	1.38%	(6.24%)	9.81%	5.39%	12.40%
AB US Small Growth (4)	7.13%	10.70%	24.66%	12.43%	18.76%
Russell 2000 Growth Index	2.75%	(0.49%)	14.69%	8.63%	14.41%

⁽⁴⁾ Switched to a mutual fund in September 2015.



⁽¹⁾ Switched share class in June 2016.

⁽²⁾ Switched share class in July 2016.

⁽³⁾ Switched share class in September 2015.

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Returns for Periods Ended June 30, 2019

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
International Equities	2.69%	(3.16%)	8.33%	1.09%	6.76%
MSCI ACWI ex-US Index	3.22%	1.80%	9.91%	2.65%	7.03%
EuroPacific	3.87%	1.91%	10.84%	4.45%	8.16%
Harbor International (1)	2.87%	(6.05%)	4.97%	(0.37%)	6.37%
Oakmark International (2)	3.83%	(6.81%)	11.07%	1.67%	9.13%
Mondrian International	1.13%	1.70%	6.57%	0.70%	-
MSCI EAFE Index	3.68%	1.08%	9.11%	2.25%	6.90%
MSCI ACWI ex-US Index	3.22%	1.80%	9.91%	2.65%	7.03%
T. Rowe Price Intl Small Cap	2.77%	(8.04%)	-	_	-
MSCI ACWI ex US Small Cap	1.21%	(5.94%)	7.76%	2.77%	8.48%
Investec	0.94%	0.10%	-	-	_
MSCI Emerging Markets Index	0.61%	1.22%	10.66%	2.49%	5.81%
Domestic Fixed Income	3.00%	7.61%	3.43%	3.14%	4.65%
Blmbg Aggregate Index	3.08%	7.87%	2.31%	2.95%	3.90%
Dodge & Cox Income	2.79%	7.58%	3.69%	3.27%	5.05%
PIMCO	3.21%	7.64%	3.17%	3.02%	4.69%
Blmbg Aggregate Index	3.08%	7.87%	2.31%	2.95%	3.90%
Real Estate	1.55%	6.39%	6.36%	8.68%	11.33%
Real Estate Custom Benchmark (3)	1.12%	5.99%	6.42%	8.86%	12.10%
RREEF Private	1.55%	6.48%	7.08%	9.43%	10.01%
Barings Core Property Fund	1.56%	6.24%	6.91%	8.53%	10.0176
NFI-ODCE Equal Weight Net	1.12%	5.99%	6.97%	9.12%	8.80%
625 Kings Court	1.51%	7.52%	13.75%	12.18%	9.22%
Total Fund	2.99%	3.94%	9.65%	5.85%	9.51%
Total Fund Benchmark*	3.29%	6.75%	9.46%	6.48%	9.66%
Total Fana Bonominant	0.20 /0	0.70	0. +0 /0	J. 70 /0	0.0070

⁽³⁾ Real Estate Custom Benchmark is 50% NAREIT Composite Index and 50% NFI-ODCE Equal Wt Net through 12/31/2011; 20% NAREIT Composite Index and 80% NFI-ODCE Equal Wt Net through 12/31/2016 and NFI-ODCE Equal Wt Net thereafter.



^{*} Current Quarter Target = 38.0% Russell 3000 Index, 29.0% MSCI ACWIxUS Gross, 22.0% Blmbg Aggregate and 11.0% NCREIF NFI-ODCE Eq Wt Net.

⁽¹⁾ Switched share class in June 2016.

⁽²⁾ Switched to CIT in November 2015.

The table below details the rates of return 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
Domestic Equties	18.65%	(6.04%)	23.74%	10.90%	(0.15%)
Russell 3000 Index	18.71%	(5.24%)	21.13%	12.74%	0.48%
Large Cap Equities					
Vanguard S&P 500 Index	18.54%	(4.42%)	21.79%	11.93%	1.37%
S&P 500 Index	18.54%	(4.38%)	21.83%	11.96%	1.38%
SSGA S&P Eq Weighted NL CTF	19.43%	(7.83%)	_	-	-
S&P 500 Eq Weighted	19.19%	(7.64%)	18.90%	14.80%	(2.20%)
Boston Partners	12.59%	(8.95%)	19.23%	13.76%	(4.99%)
S&P 500 Index	18.54%	(4.38%)	21.83%	11.96%	1.38%
Russell 1000 Value Index	16.24%	(8.27%)	13.66%	17.34%	(3.83%)
Harbor Cap Appreciation (1)	21.17%	(0.96%)	36.68%	(1.04%)	10.99%
S&P 500 Index	18.54%	(4.38%)	21.83%	11.96%	1.38%
Russell 1000 Growth Index	21.49%	(1.51%)	30.21%	7.08%	5.67%
Mid Cap Equities					
Fidelity Low Priced Stock	11.98%	(10.75%)	20.67%	8.79%	(0.56%)
Russell MidCap Value Idx	18.02%	(12.29%)	13.34%	20.00%	(4.78%)
Janus Enterprise (2)	26.39%	(0.81%)	26.65%	12.13%	3.49%
Russell MidCap Growth Idx	26.08%	(4.75%)	25.27%	7.33%	(0.20%)
Small Cap Equities					
Prudential Small Cap Value (3)	9.43%	(18.82%)	6.43%	33.99%	(7.00%)
US Small Cap Value Idx	13.86%	(12.94%)	9.22%	27.64%	(5.14%)
Russell 2000 Value Index	13.47%	(12.86%)	7.84%	31.74%	(7.47%)
AB US Small Growth (4)	30.58%	(0.60%)	35.03%	6.91%	(0.66%)
Russell 2000 Growth Index	20.36%	(9.31%)	22.17%	11.32%	(1.38%)

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	12/2018- 6/2019	2018	2017	2016	2015
International Equities	13.60%	(17.49%)	27.94%	2.84%	(4.62%)
MSCI ACWI ex-US Index	14.00%	(13.77%)	27.77%	5.01%	(5.25%)
EuroPacific	17.59%	(14.91%)	31.18%	1.01%	(0.48%)
Harbor International (1)	12.95%	(17.89%)	22.98%	0.27%	(3.82%)
Oakmark International (2)	13.20%	(23.51%)	30.47%	8.19%	(3.99%)
Mondrian International	10.39%	(12.71%)	22.29%	4.50%	(6.33%)
MSCI EAFE Index	14.03%	(13.79%)	25.03%	1.00%	(0.81%)
MSCI ACWI ex-US Index	14.00%	(13.77%)	27.77%	5.01%	(5.25%)
T. Rowe Price Intl Small Cap	15.09%	(18.49%)	-	-	-
MSCI ACWI ex US Small Cap	11.60%	(18.20%)	31.65%	3.91%	2.60%
Investec	12.33%	(15.80%)	-	-	-
MSCI Emerging Markets Index	10.59%	(14.57%)	37.28%	11.19%	(14.92%)
Domestic Fixed Income	6.33%	(0.28%)	4.74%	4.10%	0.07%
Blmbg Aggregate Index	6.11%	0.01%	3.54%	2.65%	0.55%
Dodge & Cox Income	6.59%	(0.31%)	4.36%	5.61%	(0.59%)
PIMCO	6.08%	(0.26%)	5.12%	2.59%	0.73%
Blmbg Aggregate Index	6.11%	0.01%	3.54%	2.65%	0.55%
Real Estate	3.30%	6.90%	6.88%	7.02%	12.14%
Real Estate Custom Benchmark (3)	2.62%	7.30%	6.92%	8.62%	11.81%
RREEF Private	3.19%	7.41%	6.43%	7.95%	15.63%
Barings Core Property Fund	3.42%	6.34%	6.59%	8.62%	12.99%
NFI-ODCE Equal Weight Net	2.62%	7.30%	6.92%	8.36%	14.18%
625 Kings Court	3.49%	7.51%	26.09%	10.01%	9.85%
Total Fund	12.66%	(6.92%)	18.89%	6.67%	0.01%
Total Fund Benchmark*	12.77%	(5.07%)	17.34%	7.78%	0.21%

⁽³⁾ Real Estate Custom Benchmark is 50% NAREIT Composite Index and 50% NFI-ODCE Equal Wt Net through 12/31/2011; 20% NAREIT Composite Index and 80% NFI-ODCE Equal Wt Net through 12/31/2016 and NFI-ODCE Equal Wt Net thereafter.



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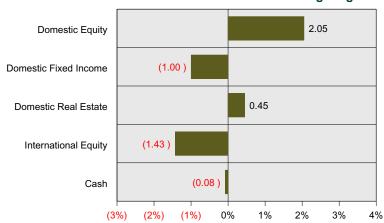
⁽¹⁾ Switched share class in June 2016.

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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.

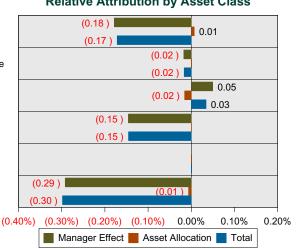
Asset Class Under or Overweighting



Actual vs Target Returns

4.10 3.00 3.08 1.55 2.69 3.22 2.99 3.29 0% 1% 2% 3% 4% 5% 6% Actual Target

Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended June 30, 2019

Domestic Equity

Domestic Fixed Income

Domestic Real Estate

International Equity

Cash

Total

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	40%	38%	3.65%	4.10%	(0.18%)	0.01%	(0.17%)
Domestic Fixed Income Domestic Real Estate	e 21% 11%	22% 11%	3.00% 1.55%	3.08% 1.12%	(<mark>0.02%)</mark> 0.05%	0.00% (0.02%)	(<mark>0.02%)</mark> 0.03%
International Equity	28%	29%	2.69% 0.00%	3.22% 0.00%	(<mark>0.15%)</mark> 0.00%	`0.00%´ 0.00%	(<mark>0.15%)</mark> 0.00%
Cash	(0%)	0%	0.00%	0.00%	0.00%	0.00%	0.00%
Total			2.99% =	3.29%	+ (0.29%) +	(0.01%)	(0.30%)

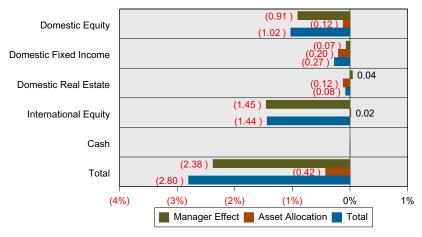
^{*} Current Quarter Target = 38.0% Russell 3000 Index, 29.0% MSCI ACWIXUS Gross, 22.0% Blmbg Aggregate and 11.0% NCREIF NFI-ODCE Eq Wt Net.



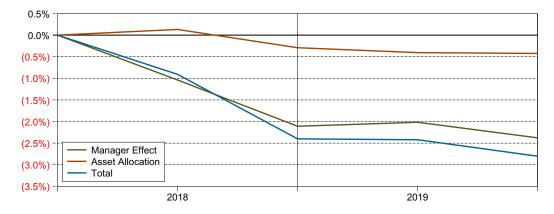
Cumulative Total Fund Relative Attribution - June 30, 2019

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 Domestic Equity	Effective Actual Weight 40%	Effective Target Weight 38%	Actual Return 6.66%	Target Return 8.98%	Manager Effect (0,91%)	Asset Allocation (0.12%)	Total Relative <u>Return</u> (1,02%)
Domestic Fixed Income Domestic Real Estate International Equity	e 21% 11% 28%	22% 11% 29%	7.61% 6.39% (3.16%)	7.87% 5.99% 1.80%	(0.07%) 0.04% (1.45%)	(0.20%) (0.12%) 0.02%	(0.27%) (0.08%) (1.44%)
Cash	0%	0%	0.00% 3.94% =	0.00% 6.75%	+ (2.38%) +	0.00%	(2.80%)

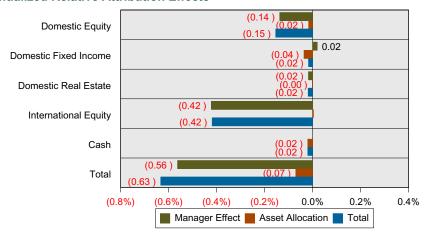
^{*} Current Quarter Target = 38.0% Russell 3000 Index, 29.0% MSCI ACWIXUS Gross, 22.0% Blmbg Aggregate and 11.0% NCREIF NFI-ODCE Eq Wt Net.



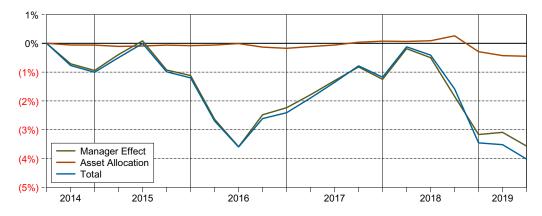
Cumulative Total Fund Relative Attribution - June 30, 2019

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 Domestic Equity Domestic Fixed Income Domestic Real Estate International Equity Cash	Effective Actual Weight 39% 24% 10% 27% 0%	Effective Target Weight 38% 25% 10% 27% 0%	Actual Return 9.81% 3.14% 8.68% 1.09% 0.00%	Target Return 10.19% 2.95% 8.86% 2.65% 0.00%	Manager Effect (0.14%) 0.02% (0.02%) (0.42%) 0.00%	Asset Allocation (0.02%) (0.04%) (0.00%) 0.00% (0.02%)	Total Relative Return (0.15%) (0.02%) (0.02%) (0.42%) (0.02%)
Total			5.85% =	6.48%	+ (0.56%) +	(0.07%)	(0.63%)

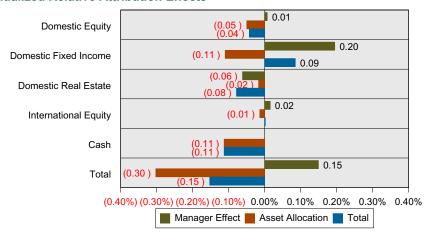
^{*} Current Quarter Target = 38.0% Russell 3000 Index, 29.0% MSCI ACWIXUS Gross, 22.0% Blmbg Aggregate and 11.0% NCREIF NFI-ODCE Eq Wt Net.



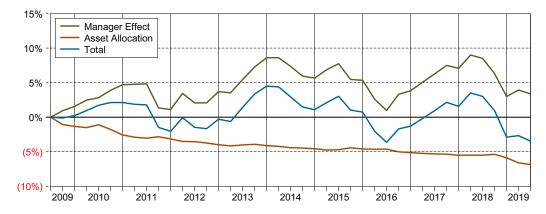
Cumulative Total Fund Relative Attribution - June 30, 2019

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.

Ten Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Ten 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	39%	38%	14.66%	14.67%	0.01%	(0.05%)	(0.04%)
Domestic Fixed Income	e 27%	27%	4.65%	3.90%	0.20%	(0.11%)	`0.09%´
Domestic Real Estate	9%	10%	11.33%	12.10%	(0.06%)	(0.02%)	(0.08%)
International Equity	25%	25%	6.76%	6.46%	0.02%	(0.01%)	0.00%
Cash	1%	0%	0.04%	0.04%	0.00%	(0.11%)	_(0.11%)
Total			9.51% =	9.66%	+ 0.15% +	(0.30%)	(0.15%)

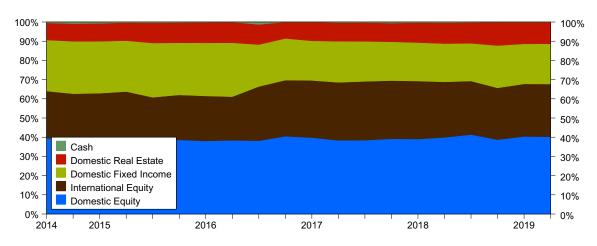
^{*} Current Quarter Target = 38.0% Russell 3000 Index, 29.0% MSCI ACWIXUS Gross, 22.0% Blmbg Aggregate and 11.0% NCREIF NFI-ODCE Eq Wt Net.



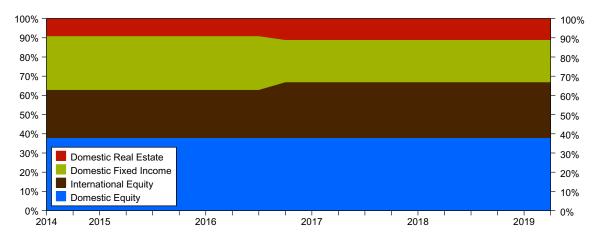
Actual vs Target Historical Asset Allocation

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, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Callan Public Fund Sponsor Database.

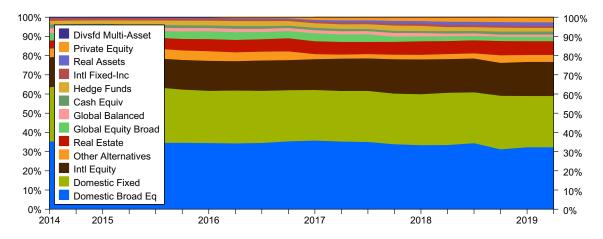
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average Callan Public Fund Sponsor Database Historical Asset Allocation



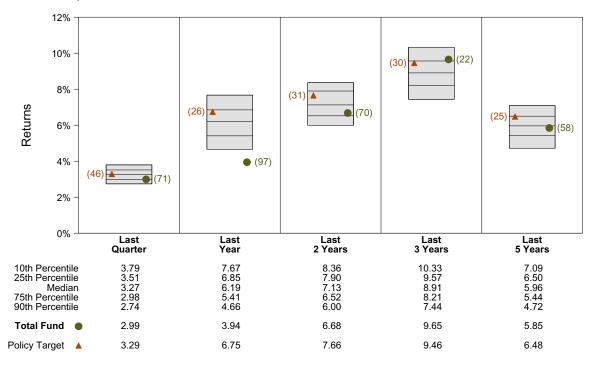
^{*} Current Quarter Target = 38.0% Russell 3000 Index, 29.0% MSCI ACWIXUS Gross, 22.0% Blmbg Aggregate and 11.0% NCREIF NFI-ODCE Eq Wt Net.



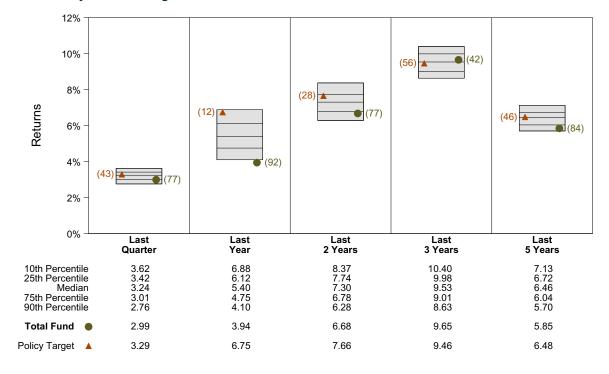
Total Fund Ranking

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.

Callan Public Fund Sponsor Database



Asset Allocation Adjusted Ranking



^{*} Current Quarter Target = 38.0% Russell 3000 Index, 29.0% MSCI ACWIXUS Gross, 22.0% Blmbg Aggregate and 11.0% NCREIF NFI-ODCE Eq Wt Net.



Total Fund Period Ended June 30, 2019

Investment Philosophy

The Public Fund Sponsor Database consists of public employee pension total funds including both Callan LLC client and surveyed non-client funds.

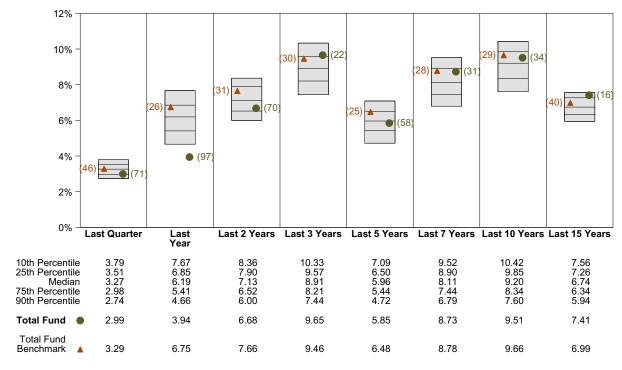
Quarterly Summary and Highlights

- Total Fund's portfolio posted a 2.99% return for the quarter placing it in the 71 percentile of the Callan Public Fund Sponsor Database group for the quarter and in the 97 percentile for the last year.
- Total Fund's portfolio underperformed the Total Fund Benchmark by 0.30% for the quarter and underperformed the Total Fund Benchmark for the year by 2.80%.

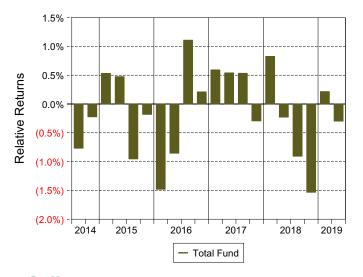
Quarterly Asset Growth

Beginning Market Value	\$519,420,764
Net New Investment	\$-2,641,488
Investment Gains/(Losses)	\$15,650,224
Ending Market Value	\$532 429 500

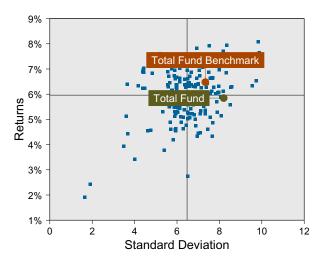
Performance vs Callan Public Fund Sponsor Database (Gross)



Relative Return vs Total Fund Benchmark



Callan Public Fund Sponsor Database (Gross) Annualized Five Year Risk vs Return



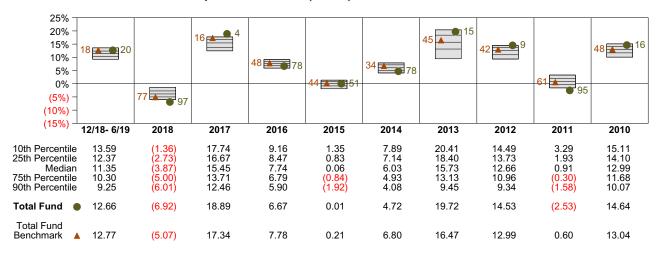


Total Fund Return Analysis Summary

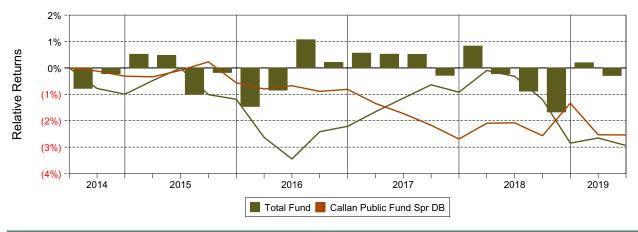
Return Analysis

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.

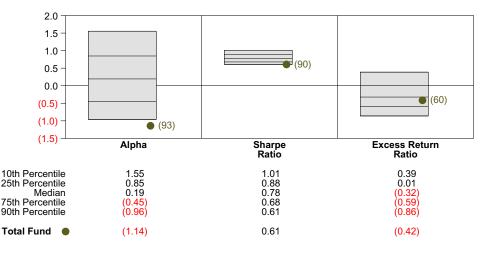
Performance vs Callan Public Fund Sponsor Database (Gross)



Cumulative and Quarterly Relative Return vs Total Fund Benchmark



Risk Adjusted Return Measures vs Total Fund Benchmark Rankings Against Callan Public Fund Sponsor Database (Gross) Five Years Ended June 30, 2019

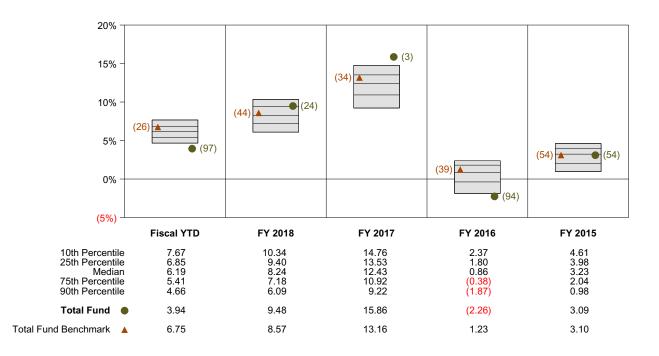


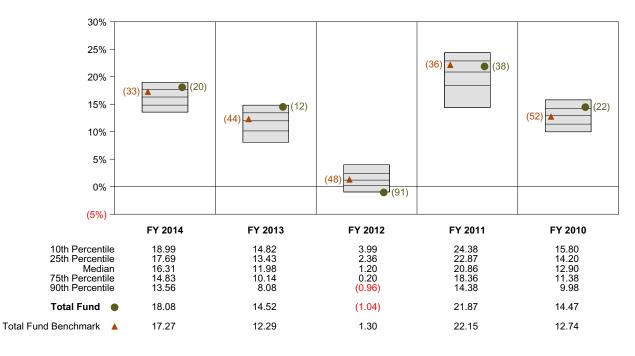


Mendocino County Employees' Retirement Association Performance vs Callan Public Fund Sponsor Database Periods Ended June 30, 2019

Return Ranking

The chart below illustrates fund rankings over various periods versus the Callan Public Fund Sponsor Database. The bars represent the range of returns from the 10th percentile to the 90th percentile for each period for all funds in the Callan Public Fund Sponsor Database. 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.





^{*} Current Quarter Target = 38.0% Russell 3000 Index, 29.0% MSCI ACWIXUS Gross, 22.0% Blmbg Aggregate and 11.0% NCREIF NFI-ODCE Eq Wt Net.



Domestic Equity Composite Period Ended June 30, 2019

Quarterly Summary and Highlights

- Domestic Equity Composite's portfolio posted a 3.65% return for the quarter placing it in the 78 percentile of the Public Fund - Domestic Equity group for the quarter and in the 65 percentile for the last year.
- Domestic Equity Composite's portfolio underperformed the Russell 3000 Index by 0.45% for the quarter and underperformed the Russell 3000 Index for the year by 2.33%.

Quarterly Asset Growth

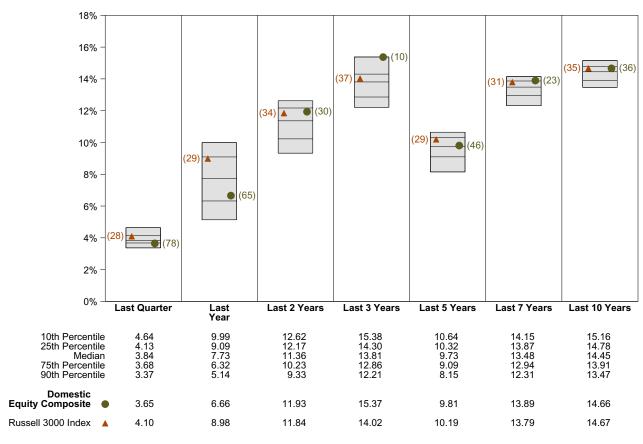
Beginning Market Value \$210,033,715

Net New Investment \$-3,304,502

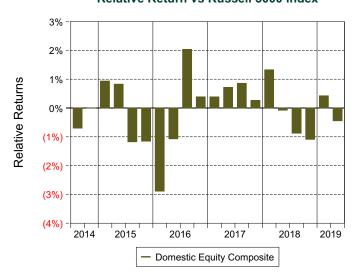
Investment Gains/(Losses) \$7,511,389

Ending Market Value \$214,240,603

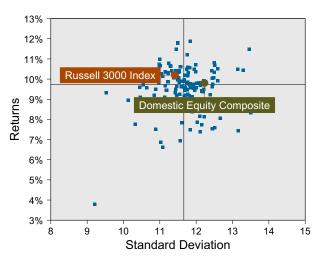
Performance vs Public Fund - Domestic Equity (Gross)



Relative Return vs Russell 3000 Index



Public Fund - Domestic Equity (Gross) Annualized Five Year Risk vs Return



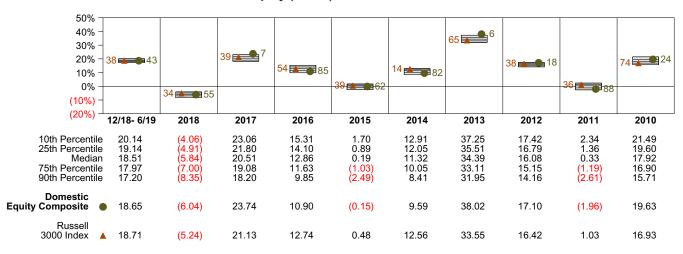


Domestic Equity Composite Return Analysis Summary

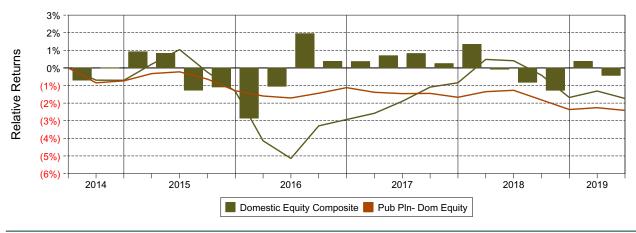
Return Analysis

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.

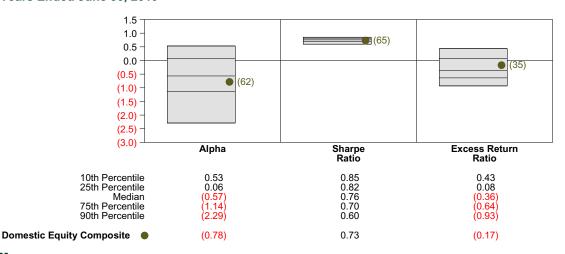
Performance vs Public Fund - Domestic Equity (Gross)



Cumulative and Quarterly Relative Return vs Russell 3000 Index



Risk Adjusted Return Measures vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended June 30, 2019



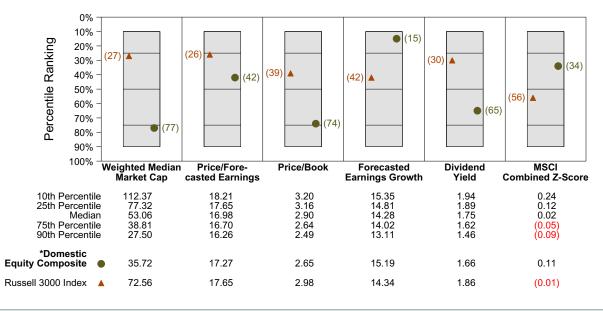


Domestic Equity Composite Equity Characteristics Analysis Summary

Portfolio Characteristics

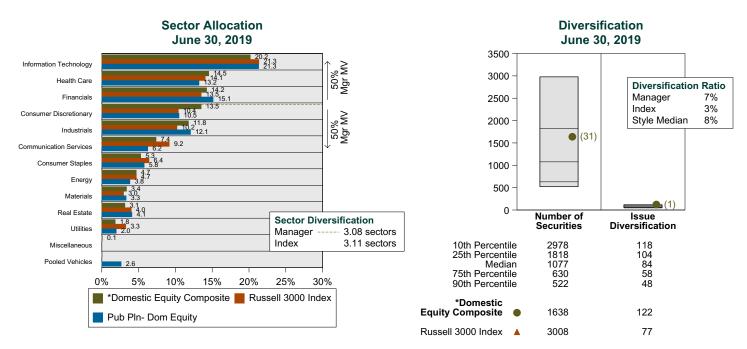
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Public Fund - Domestic 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. 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.



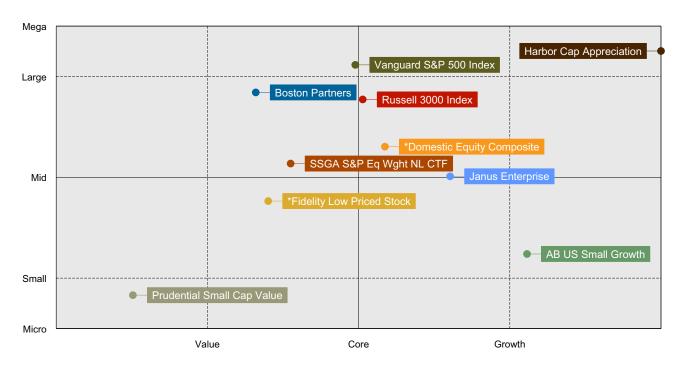
^{*6/30/19} portfolio characteristics generated using most recently available holdings (4/30/19) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



Holdings Based Style Analysis For One Quarter Ended June 30, 2019

This page analyzes and compares the investment styles of multiple portfolios using a detailed holdings-based style analysis methodology. The size component of style is measured by the weighted median market capitalization of the holdings. The value/core/growth style dimension is captured by the "Combined Z-Score" of the portfolio. This score is based on eight fundamental factors used in the MSCI stock style scoring system. The table below gives a more detailed breakdown of several relevant style metrics on the portfolios.

Style Map Holdings for One Quarter Ended June 30, 2019



	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities D	iversification
Vanguard S&P 500 Index	17.67%	112.30	(0.05)	(0.01)	0.03	506	48.78
SSGA S&P Eq Wght NL CTF	17.85%	22.52	(0.39)	(0.16)	0.23	505	239.67
Boston Partners	17.10%	78.04	(0.57)	(0.14)	0.43	83	21.07
Harbor Cap Appreciation	17.72%	138.28	1.57	0.75	(0.82)	59	14.47
*Fidelity Low Priced Stock	7.16%	9.49	(0.51)	(0.06)	0.44	805	24.69
Janus Enterprise	8.39%	12.57	0.44	0.10	(0.35)	82	25.28
Prudential Small Cap Value	5.78%	1.50	(1.22)	(0.21)	1.01	288	68.47
AB US Small Growth	8.33%	4.35	0.84	0.18	(0.66)	98	32.95
*Domestic Equity Composite	100.00%	35.72	0.11	0.09	(0.02)	1638	121.98
Russell 3000 Index	-	72.56	(0.01)	0.00	0.01	3008	76.90

^{*6/30/19} portfolio characteristics generated using most recently available holdings (4/30/19) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



Vanguard S&P 500 Index Period Ended June 30, 2019

Investment Philosophy

Vanguard's Institutional Index Fund is passively administered using a "full replication" approach. Under this method, the fund holds all of the 500 underlying securities in proportion to their weighting in the index. The fund remains fully invested in equities at all times and does not make judgement calls on the direction of the S&P 500 Index. Portfolio was funded September 2013. Historical returns are that of the manager's composite.

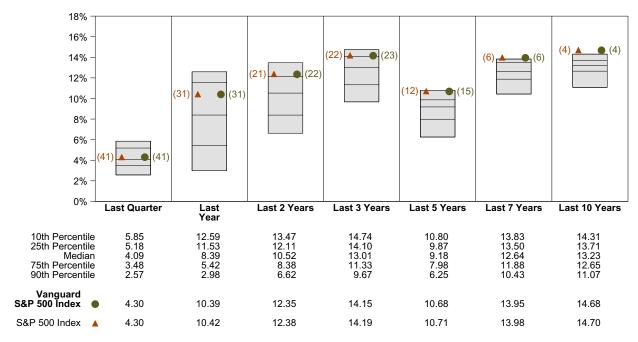
Quarterly Summary and Highlights

- Vanguard S&P 500 Index's portfolio posted a 4.30% return for the quarter placing it in the 41 percentile of the Callan Large Cap Core Mutual Funds group for the quarter and in the 31 percentile for the last year.
- Vanguard S&P 500 Index's portfolio underperformed the S&P 500 Index by 0.01% for the quarter and underperformed the S&P 500 Index for the year by 0.02%.

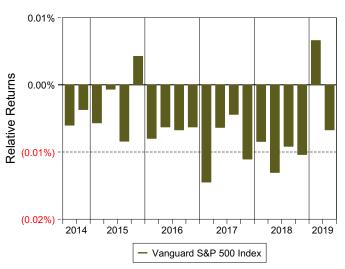
Quarterly	y Asset Growth	
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Beginning Market Value	\$36,675,176
Net New Investment	\$-400,000
Investment Gains/(Losses)	\$1,572,038
Ending Market Value	\$37,847,213

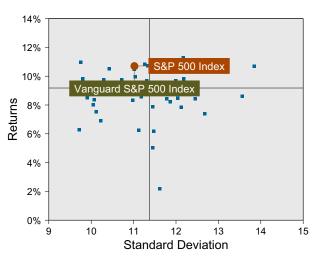
Performance vs Callan Large Cap Core Mutual Funds (Net)



Relative Return vs S&P 500 Index



Callan Large Cap Core Mutual Funds (Net) Annualized Five Year Risk vs Return



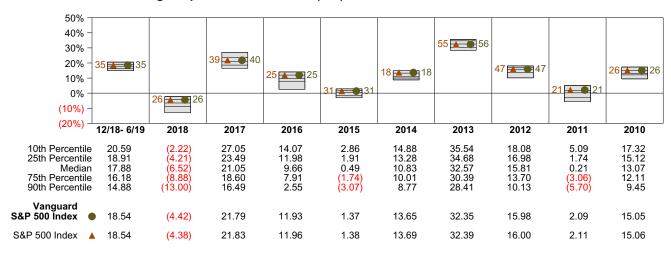


Vanguard S&P 500 Index Return Analysis Summary

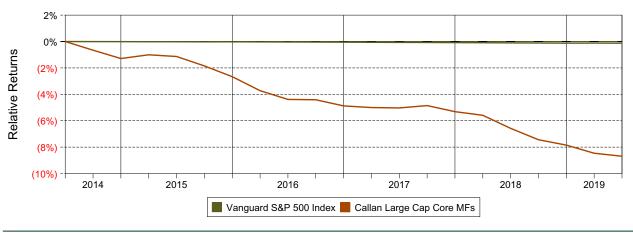
Return Analysis

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.

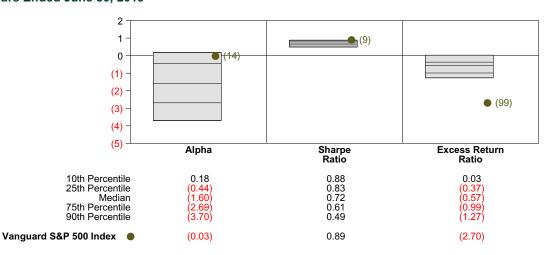
Performance vs Callan Large Cap Core Mutual Funds (Net)



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 Mutual Funds (Net) Five Years Ended June 30, 2019



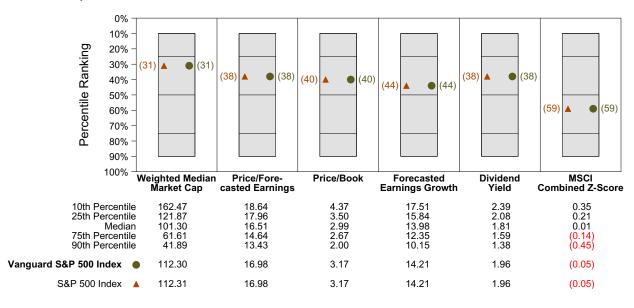


Vanguard S&P 500 Index Equity Characteristics Analysis Summary

Portfolio Characteristics

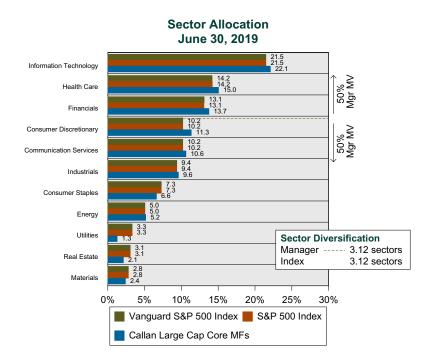
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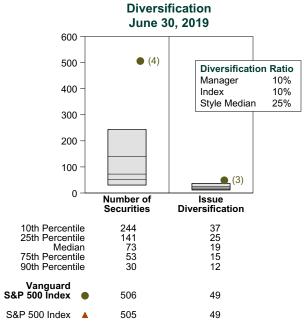
Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Cap Core Mutual Funds as of June 30, 2019



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. 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.







SSGA S&P Eq Weighted NL CTF Period Ended June 30, 2019

Investment Philosophy

SSGA believes that their passive investment strategy can provide market-like returns with minimal transaction costs. Portfolio was funded December 2017. Historical returns are that of the manager's composite.

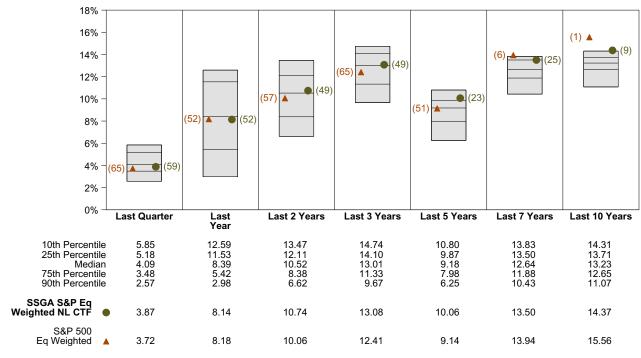
Quarterly Summary and Highlights

- SSGA S&P Eq Weighted NL CTF's portfolio posted a 3.87% return for the quarter placing it in the 59 percentile of the Callan Large Cap Core Mutual Funds group for the quarter and in the 52 percentile for the last year.
- SSGA S&P Eq Weighted NL CTF's portfolio outperformed the S&P 500 Eq Weighted by 0.15% for the quarter and underperformed the S&P 500 Eq Weighted for the year by 0.04%.

A	عداء مئه	A+	Craudh
Quai	teriv	ASSET	Growth

Beginning Market Value	\$36,809,300
Net New Investment	\$-4,502
Investment Gains/(Losses)	\$1,433,433
Ending Market Value	\$38,238,231

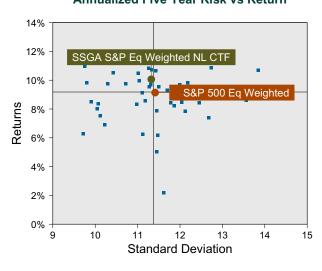
Performance vs Callan Large Cap Core Mutual Funds (Net)



Relative Return vs S&P 500 Eq Weighted



Callan Large Cap Core Mutual Funds (Net) Annualized Five Year Risk vs Return



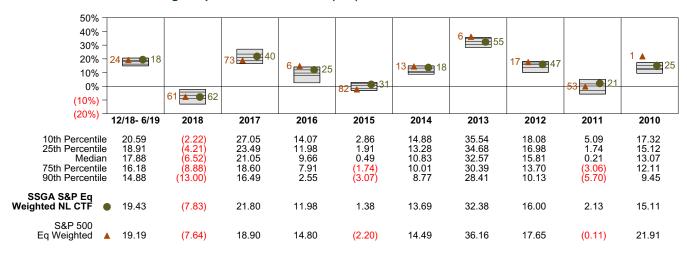


SSGA S&P Eq Weighted NL CTF Return Analysis Summary

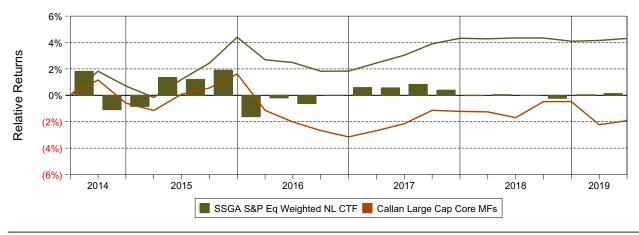
Return Analysis

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.

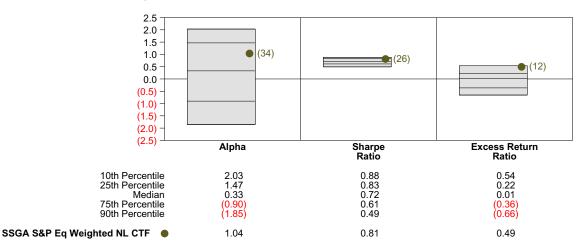
Performance vs Callan Large Cap Core Mutual Funds (Net)



Cumulative and Quarterly Relative Return vs S&P 500 Eq Weighted



Risk Adjusted Return Measures vs S&P 500 Eq Weighted Rankings Against Callan Large Cap Core Mutual Funds (Net) Five Years Ended June 30, 2019



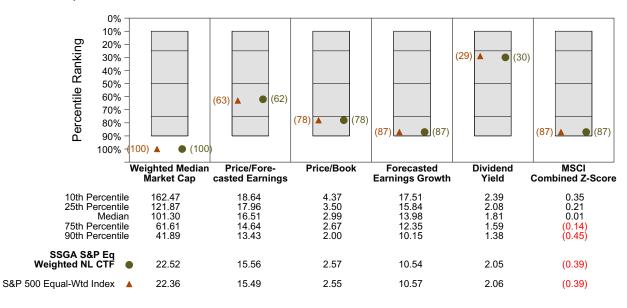


SSGA S&P Eq Weighted NL CTF Equity Characteristics Analysis Summary

Portfolio Characteristics

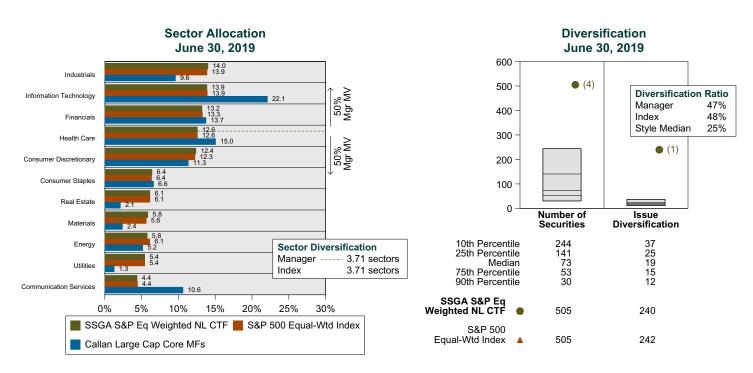
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Cap Core 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. 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.





Boston Partners Period Ended June 30, 2019

Investment Philosophy

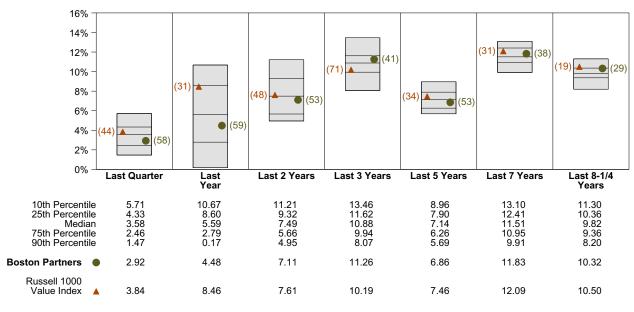
Boston Partners' investment philosophy is grounded in certain "fundamental truths" to investing, namely that low valuation stocks outperform high valuation stocks, companies with strong fundamentals, e.g. high and sustainable returns on invested capital, outperform companies with weak fundamentals, and stocks with positive business momentum, e.g. rising earnings estimates, outperform stocks with negative business momentum. The firm seeks to construct well-diversified portfolios that consistently possess these three characteristics, attempting to limit downside risk, preserve capital, and maximize the power of compounding. Boston Partner's management fee is 50 bps on all assets.

Quarterly Summary and Highlights

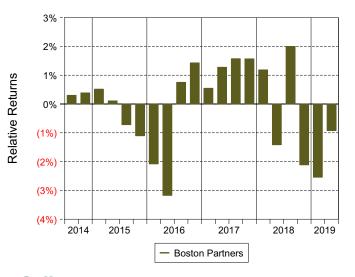
- Boston Partners's portfolio posted a 2.92% return for the quarter placing it in the 58 percentile of the Callan Large Cap Value Mutual Funds group for the quarter and in the 59 percentile for the last year.
- Boston Partners's portfolio underperformed the Russell 1000 Value Index by 0.92% for the quarter and underperformed the Russell 1000 Value Index for the year by 3.98%.

Beginning Market Value	\$35,592,531
Net New Investment	\$0
Investment Gains/(Losses)	\$1,040,571
Ending Market Value	\$36,633,102

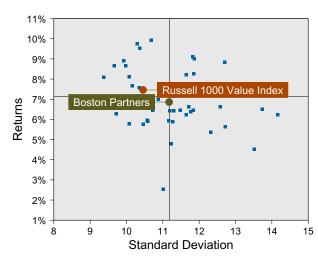
Performance vs Callan Large Cap Value Mutual Funds (Net)



Relative Return vs Russell 1000 Value Index



Callan Large Cap Value Mutual Funds (Net) Annualized Five Year Risk vs Return



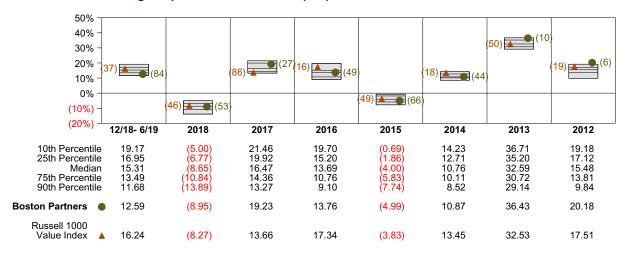


Boston Partners Return Analysis Summary

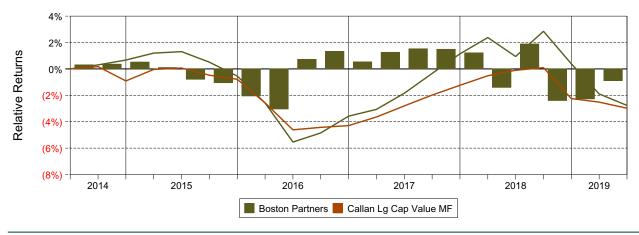
Return Analysis

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 Value Mutual Funds (Net)



Cumulative and Quarterly Relative Return vs Russell 1000 Value Index



Risk Adjusted Return Measures vs Russell 1000 Value Index Rankings Against Callan Large Cap Value Mutual Funds (Net) Five Years Ended June 30, 2019



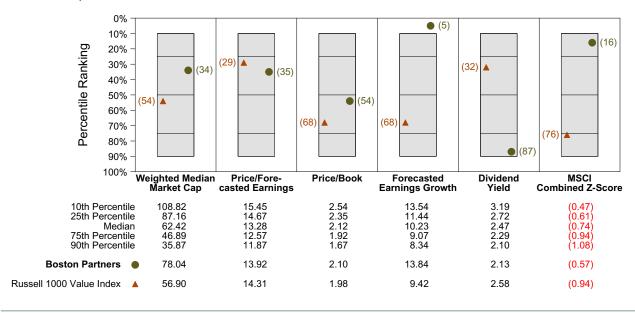


Boston Partners Equity Characteristics Analysis Summary

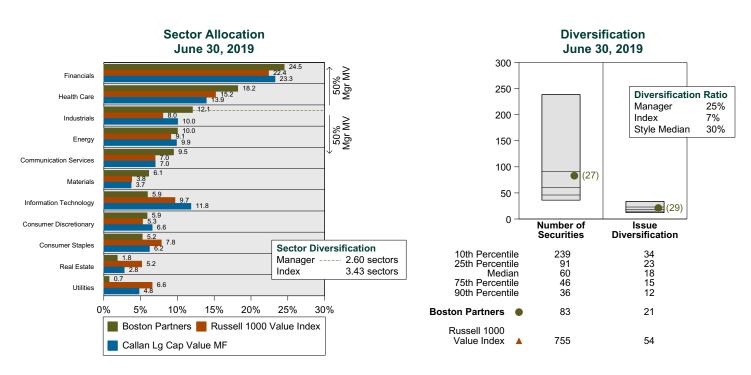
Portfolio Characteristics

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 Value Mutual Funds as of June 30, 2019



Sector Weights





Harbor Cap Appreciation Period Ended June 30, 2019

Investment Philosophy

The Harbor Capital Appreciation Fund is subadvised by Jennison Associates, LLC. Key elements of Jennison's investment philosophy include a bottom-up stock selection approach and internal fundamental research. These elements are critical to successful stock selection. Jennison believes that carefully selected, reasonably priced growth stocks should generate investment results superior to the stock market over an intermediate to long-term period.

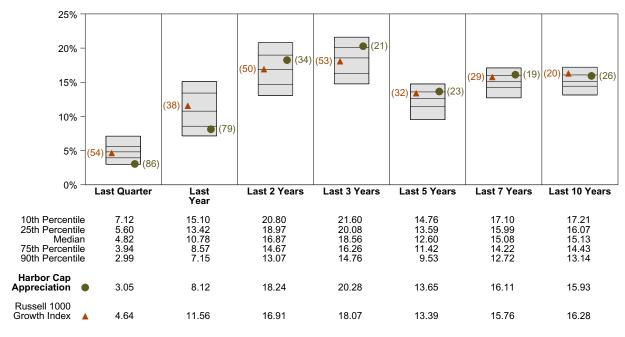
Quarterly Summary and Highlights

- Harbor Cap Appreciation's portfolio posted a 3.05% return for the quarter placing it in the 86 percentile of the Callan Large Cap Growth Mutual Funds group for the quarter and in the 79 percentile for the last year.
- Harbor Cap Appreciation's portfolio underperformed the Russell 1000 Growth Index by 1.59% for the quarter and underperformed the Russell 1000 Growth Index for the year by 3.44%.

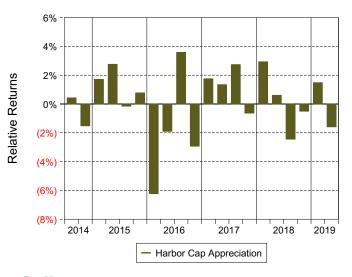
Quarterly Asset Growth

Beginning Market Value	\$37,551,426
Net New Investment	\$-700,000
Investment Gains/(Losses)	\$1,120,233
Ending Market Value	\$37 971 659

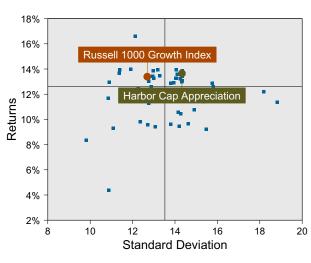
Performance vs Callan Large Cap Growth Mutual Funds (Net)



Relative Return vs Russell 1000 Growth Index



Callan Large Cap Growth Mutual Funds (Net) Annualized Five Year Risk vs Return



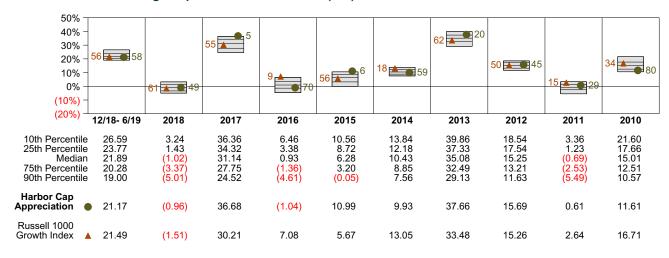


Harbor Cap Appreciation Return Analysis Summary

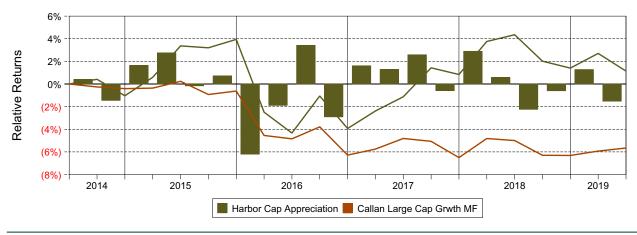
Return Analysis

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.

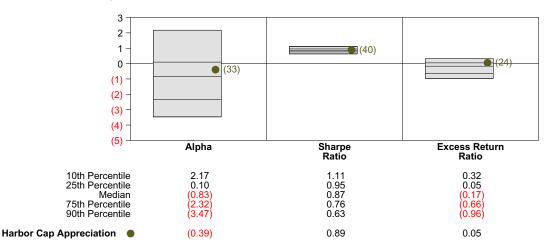
Performance vs Callan Large Cap Growth Mutual Funds (Net)



Cumulative and Quarterly Relative Return vs Russell 1000 Growth Index



Risk Adjusted Return Measures vs Russell 1000 Growth Index Rankings Against Callan Large Cap Growth Mutual Funds (Net) Five Years Ended June 30, 2019



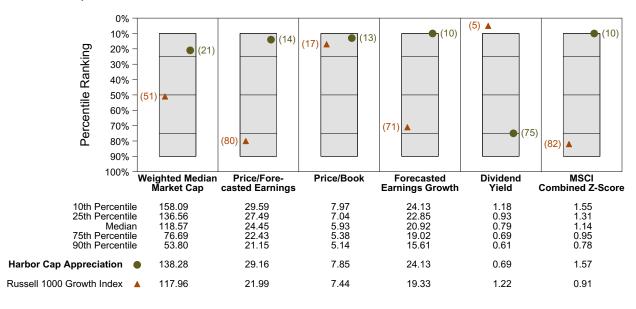


Harbor Cap Appreciation Equity Characteristics Analysis Summary

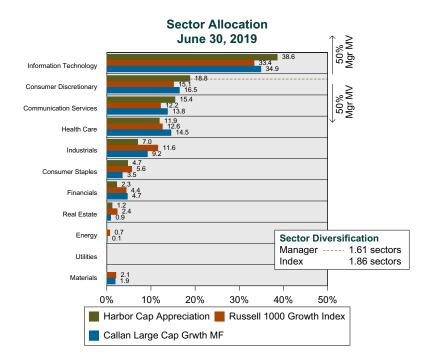
Portfolio Characteristics

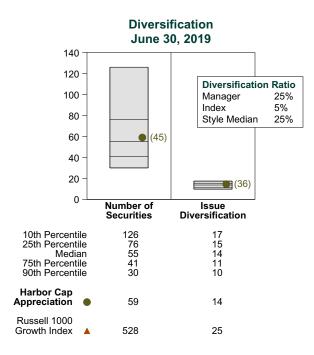
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Cap Growth Mutual Funds as of June 30, 2019



Sector Weights







Fidelity Low Priced Stock Period Ended June 30, 2019

Investment Philosophy

The Low Priced Stock team believes that many low priced, non-glamour, small companies are mispriced, providing opportunities, and seeks capital appreciation by investing mostly in common and preferred domestic stocks, but also international equities, convertible securities, and other fixed income securities.

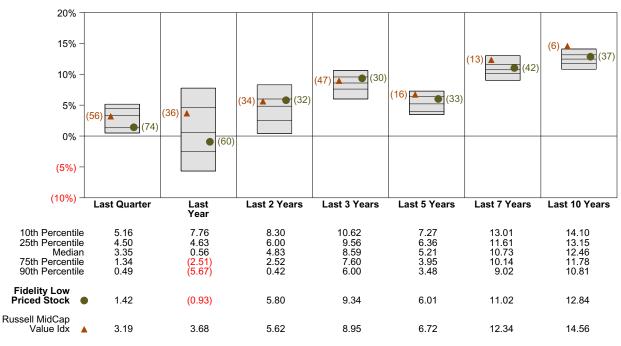
Quarterly Summary and Highlights

- Fidelity Low Priced Stock's portfolio posted a 1.42% return for the quarter placing it in the 74 percentile of the Callan Mid Cap Value Mutual Funds group for the quarter and in the 60 percentile for the last year.
- Fidelity Low Priced Stock's portfolio underperformed the Russell MidCap Value Idx by 1.77% for the quarter and underperformed the Russell MidCap Value Idx for the year by 4.61%.

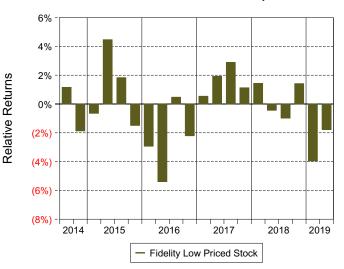
Quarterly Asset Growth

Beginning Market Value	\$15,116,855
Net New Investment	\$0
Investment Gains/(Losses)	\$214,558
Ending Market Value	\$15,331,413

Performance vs Callan Mid Cap Value Mutual Funds (Net)



Relative Return vs Russell MidCap Value Idx



Callan Mid Cap Value Mutual Funds (Net) Annualized Five Year Risk vs Return



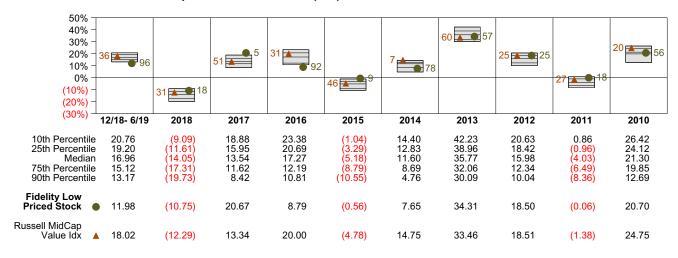


Fidelity Low Priced Stock Return Analysis Summary

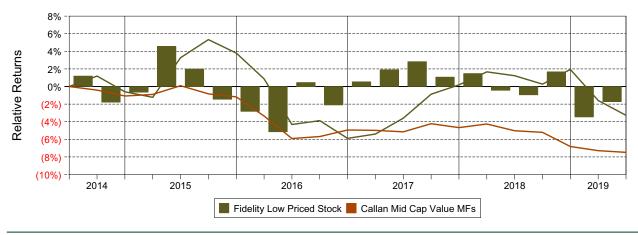
Return Analysis

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.

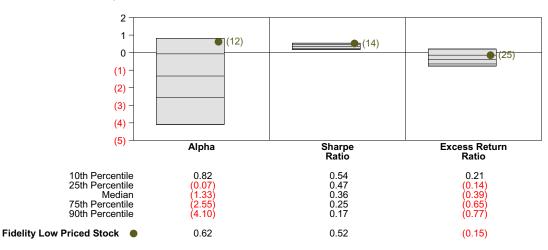
Performance vs Callan Mid Cap Value Mutual Funds (Net)



Cumulative and Quarterly Relative Return vs Russell MidCap Value Idx



Risk Adjusted Return Measures vs Russell MidCap Value Idx Rankings Against Callan Mid Cap Value Mutual Funds (Net) Five Years Ended June 30, 2019



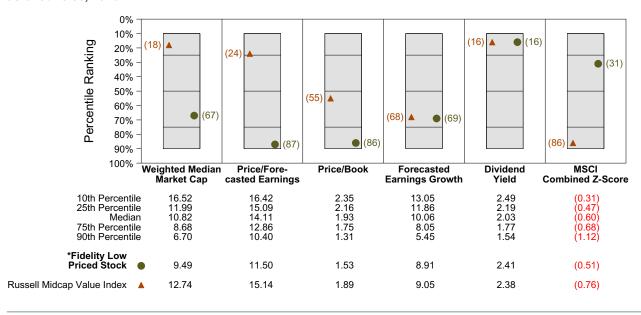


Fidelity Low Priced Stock Equity Characteristics Analysis Summary

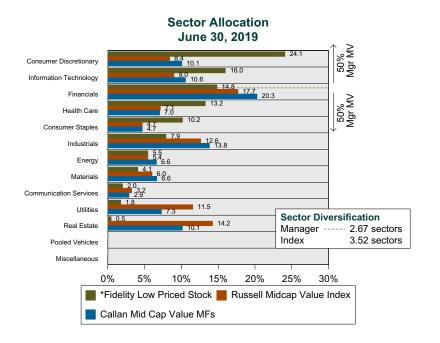
Portfolio Characteristics

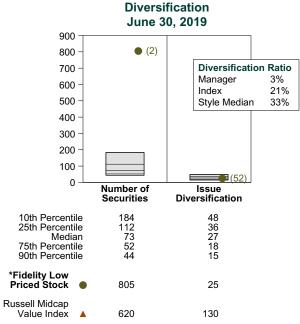
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Mid Cap Value Mutual Funds as of June 30, 2019



Sector Weights





^{*6/30/19} portfolio characteristics generated using most recently available holdings (4/30/19) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



Janus Enterprise Period Ended June 30, 2019

Investment Philosophy

Janus believes that investing in companies with sustainable growth and high return on invested capital can drive consistent returns with moderate risk. The team seeks to identify mid cap companies with high quality management teams that wisely allocate capital to drive growth over time. Switched from Class T Shares to Class I Shares in December 2009 and Class N Shares in July 2016.

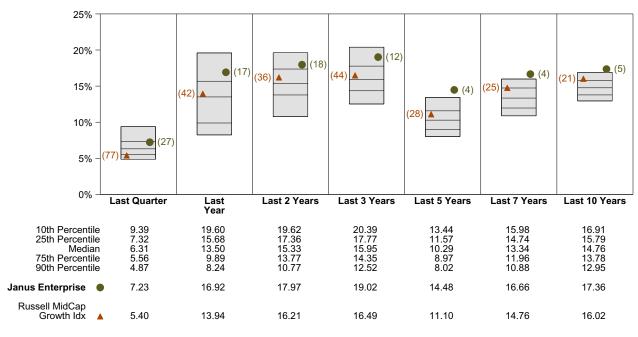
Quarterly Summary and Highlights

- Janus Enterprise's portfolio posted a 7.23% return for the quarter placing it in the 27 percentile of the Callan Mid Cap Growth Mutual Funds group for the quarter and in the 17 percentile for the last year.
- Janus Enterprise's portfolio outperformed the Russell MidCap Growth Idx by 1.82% for the quarter and outperformed the Russell MidCap Growth Idx for the year by 2.98%.

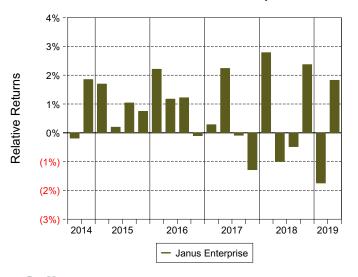
Quarterly	/ Asset	Growth
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Beginning Market Value	\$17,357,403
Net New Investment	\$-600,000
Investment Gains/(Losses)	\$1,215,301
Ending Market Value	\$17,972,703

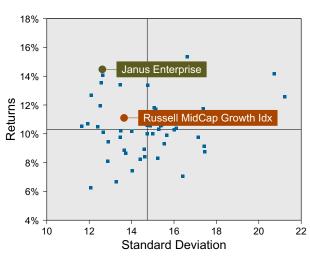
Performance vs Callan Mid Cap Growth Mutual Funds (Net)



Relative Return vs Russell MidCap Growth Idx



Callan Mid Cap Growth Mutual Funds (Net) Annualized Five Year Risk vs Return



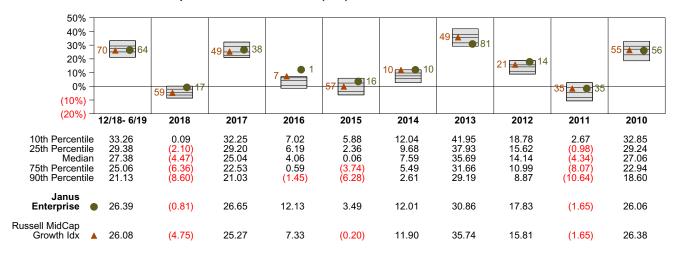


Janus Enterprise Return Analysis Summary

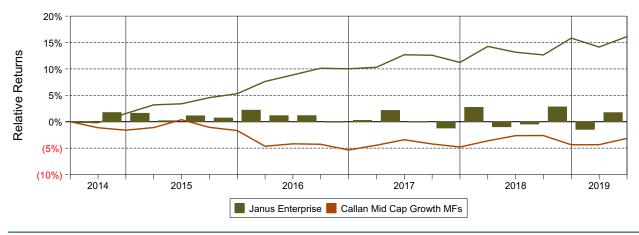
Return Analysis

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 Cap Growth Mutual Funds (Net)



Cumulative and Quarterly Relative Return vs Russell MidCap Growth Idx



Risk Adjusted Return Measures vs Russell MidCap Growth Idx Rankings Against Callan Mid Cap Growth Mutual Funds (Net) Five Years Ended June 30, 2019



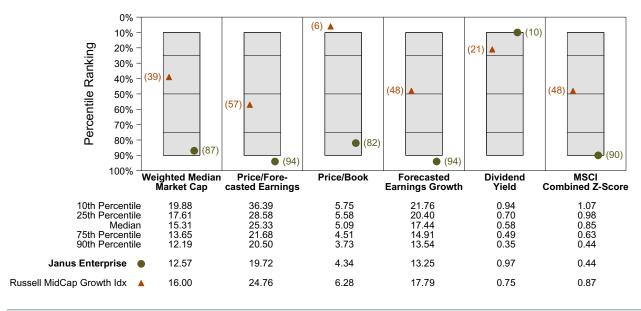


Janus Enterprise Equity Characteristics Analysis Summary

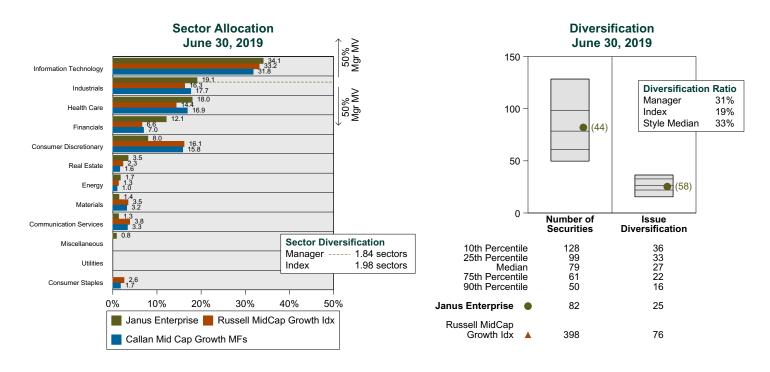
Portfolio Characteristics

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 Cap Growth Mutual Funds as of June 30, 2019



Sector Weights





Prudential Small Cap Value Period Ended June 30, 2019

Investment Philosophy

QMA believes a systematic approach that focuses on stocks with low valuations and confirming signals of attractiveness can outperform a small cap value benchmark. Its research shows that adapting to changing market conditions by dynamically shifting the weight on specific factors, while simultaneously maintaining a focus on value stocks, leads to better performance than using static factor exposures. Switched share class in Septemeber 2015.

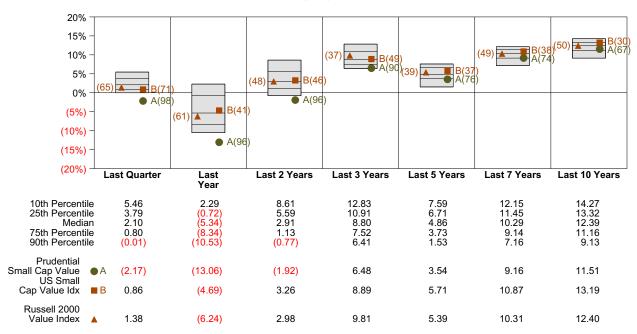
Quarterly Summary and Highlights

- Prudential Small Cap Value's portfolio posted a (2.17)% return for the quarter placing it in the 98 percentile of the Callan Small Cap Value Mutual Funds group for the quarter and in the 96 percentile for the last year.
- Prudential Small Cap Value's portfolio underperformed the Russell 2000 Value Index by 3.54% for the quarter and underperformed the Russell 2000 Value Index for the year by 6.82%.

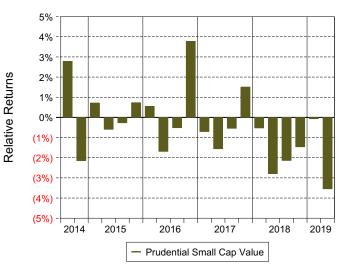
Quarterly Asset Growth

Beginning Market Value	\$12,667,287
Net New Investment	\$0
Investment Gains/(Losses)	\$-274,713
Ending Market Value	\$12,392,575

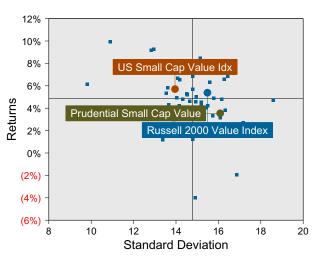
Performance vs Callan Small Cap Value Mutual Funds (Net)



Relative Return vs Russell 2000 Value Index



Callan Small Cap Value Mutual Funds (Net) Annualized Five Year Risk vs Return



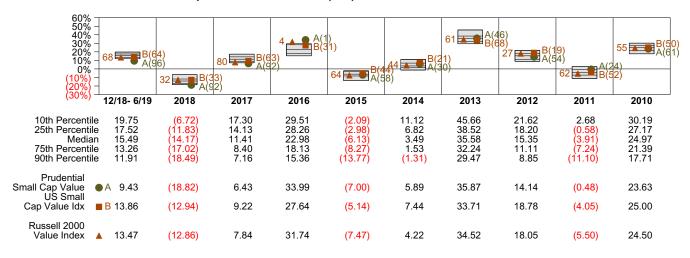


Prudential Small Cap Value Return Analysis Summary

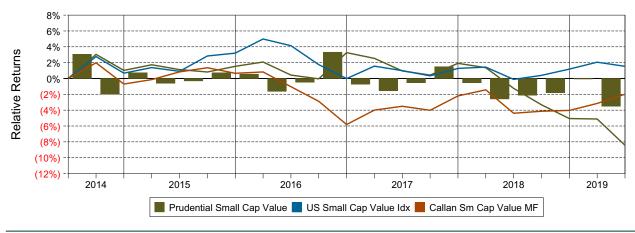
Return Analysis

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.

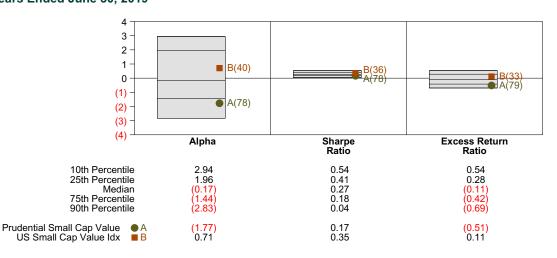
Performance vs Callan Small Cap Value Mutual Funds (Net)



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 Mutual Funds (Net) Five Years Ended June 30, 2019



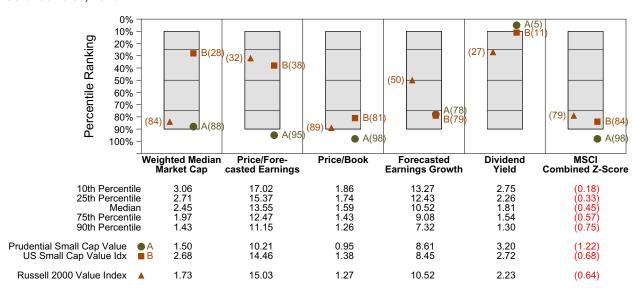


Prudential Small Cap Value Equity Characteristics Analysis Summary

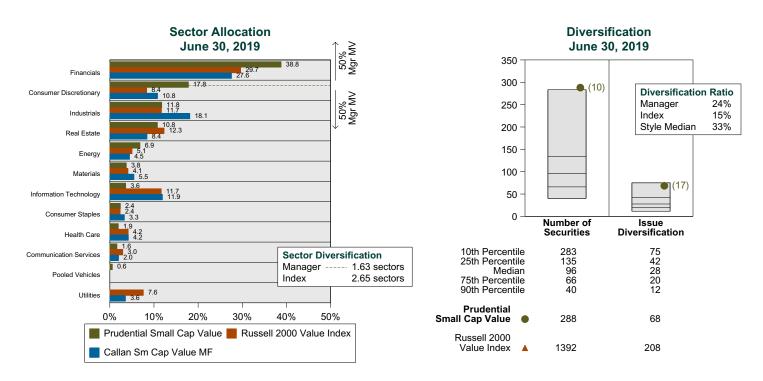
Portfolio Characteristics

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 Mutual Funds as of June 30, 2019



Sector Weights





AB US Small Growth Period Ended June 30, 2019

Investment Philosophy

AB's small cap growth investment process emphasizes in-house fundamental research and direct management contact in order to identify rapidly growing companies with accelerating earnings power and reasonable valuations.

Quarterly Summary and Highlights

- AB US Small Growth's portfolio posted a 7.13% return for the quarter placing it in the 26 percentile of the Callan Small Cap Growth Mutual Funds group for the quarter and in the 27 percentile for the last year.
- AB US Small Growth's portfolio outperformed the Russell 2000 Growth Index by 4.38% for the quarter and outperformed the Russell 2000 Growth Index for the year by 11.19%.

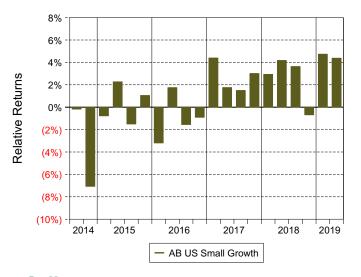
Quarterly Asset Growth

Beginning Market Value	\$18,263,738
Net New Investment	\$-1,600,000
Investment Gains/(Losses)	\$1,189,969
Ending Market Value	\$17,853,707

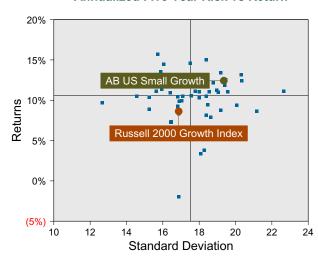
Performance vs Callan Small Cap Growth Mutual Funds (Net)



Relative Return vs Russell 2000 Growth Index



Callan Small Cap Growth Mutual Funds (Net) Annualized Five Year Risk vs Return



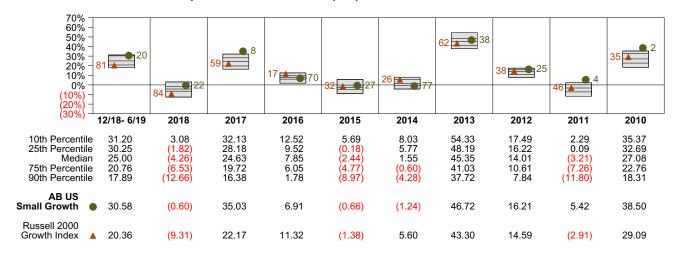


AB US Small Growth Return Analysis Summary

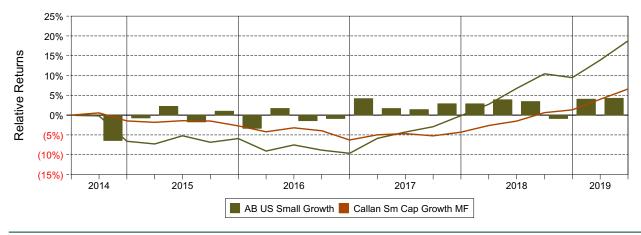
Return Analysis

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.

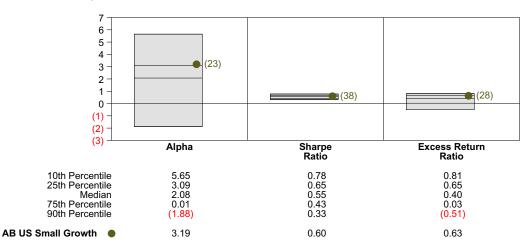
Performance vs Callan Small Cap Growth Mutual Funds (Net)



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 Mutual Funds (Net) Five Years Ended June 30, 2019



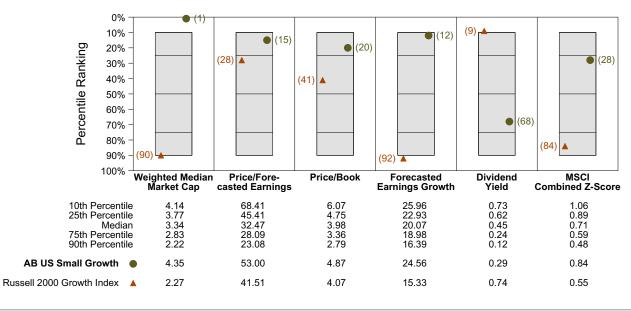


AB US Small Growth Equity Characteristics Analysis Summary

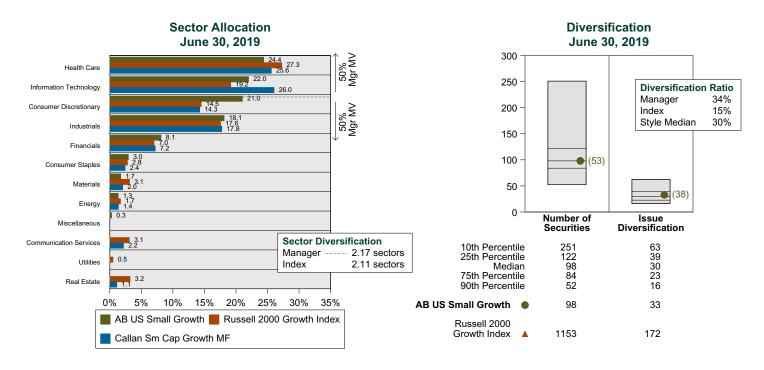
Portfolio Characteristics

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 Mutual Funds as of June 30, 2019



Sector Weights





International Equity Composite Period Ended June 30, 2019

Quarterly Summary and Highlights

- International Equity Composite's portfolio posted a 2.69% return for the quarter placing it in the 67 percentile of the Public Fund - International Equity group for the quarter and in the 96 percentile for the last year.
- International Equity Composite's portfolio underperformed the MSCI ACWIxUS Gross by 0.53% for the quarter and underperformed the MSCI ACWIxUS Gross for the year by 4.97%.

Quarterly Asset Growth

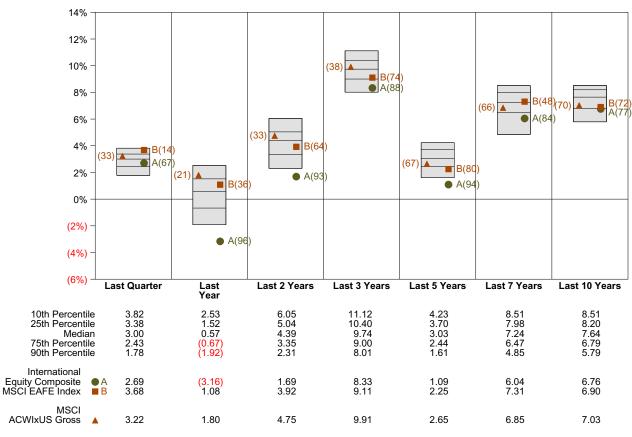
Beginning Market Value \$142,266,688

Net New Investment \$0

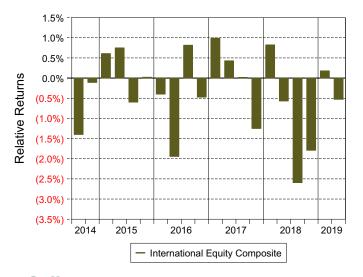
Investment Gains/(Losses) \$3,971,438

Ending Market Value \$146,238,126

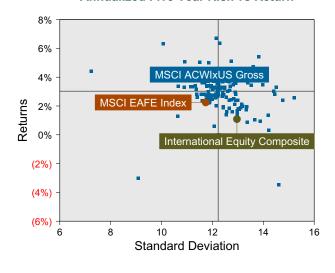
Performance vs Public Fund - International Equity (Gross)



Relative Return vs MSCI ACWIxUS Gross



Public Fund - International Equity (Gross) Annualized Five Year Risk vs Return



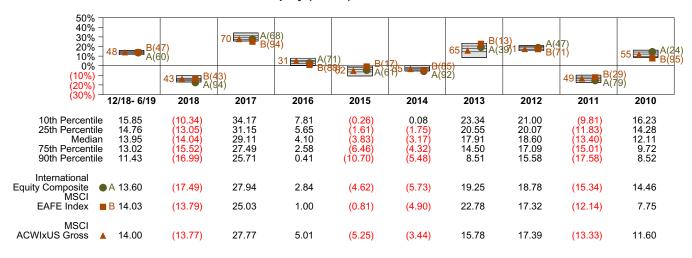


International Equity Composite Return Analysis Summary

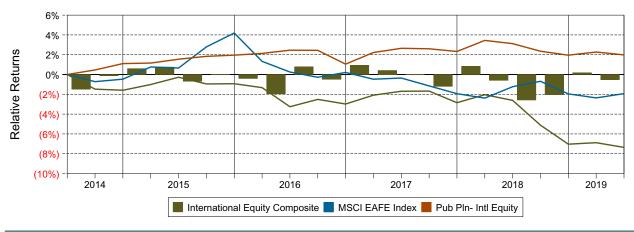
Return Analysis

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.

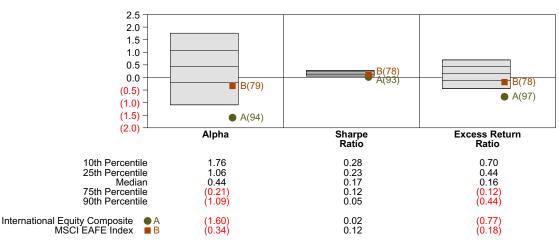
Performance vs Public Fund - International Equity (Gross)



Cumulative and Quarterly Relative Return vs MSCI ACWIxUS Gross



Risk Adjusted Return Measures vs MSCI ACWIxUS Gross Rankings Against Public Fund - International Equity (Gross) Five Years Ended June 30, 2019



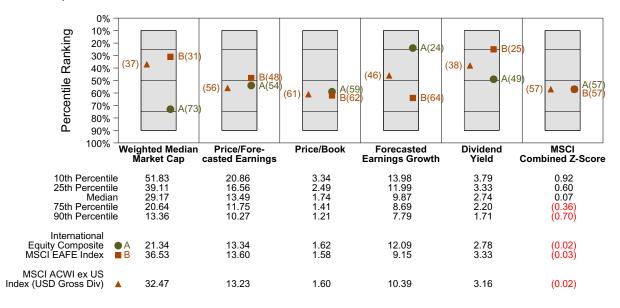


International Equity Composite Equity Characteristics Analysis Summary

Portfolio Characteristics

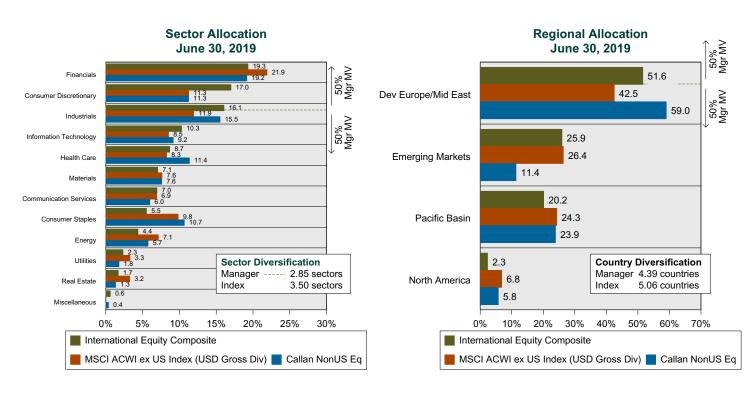
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Non-US Equity 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.

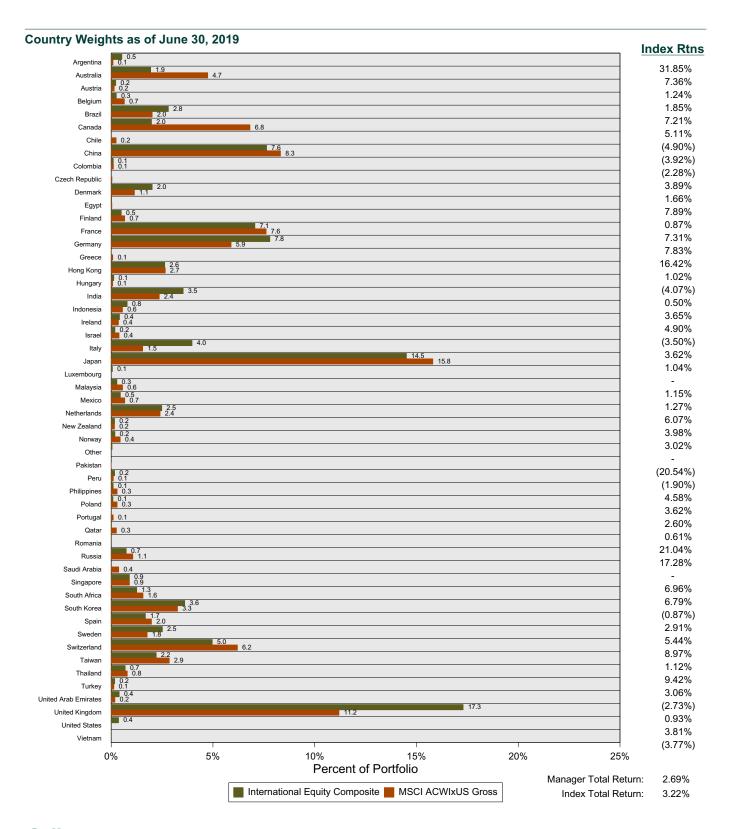




Country Allocation International Equity Composite VS MSCI ACWI ex US Index (USD Gross Div)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of June 30, 2019. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

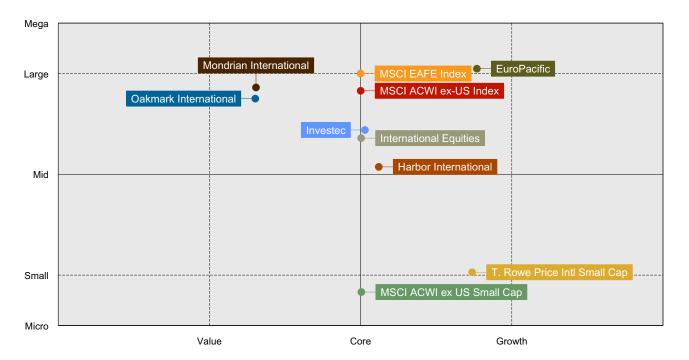




International Holdings Based Style Analysis For One Quarter Ended June 30, 2019

This page analyzes and compares the investment styles of multiple portfolios using a detailed holdings-based style analysis methodology. The size component of style is measured by the weighted median market capitalization of the holdings. The value/core/growth style dimension is captured by the "Combined Z-Score" of the portfolio. This score is based on eight fundamental factors used in the MSCI stock style scoring system. The table below gives a more detailed breakdown of several relevant style metrics on the portfolios.

Style Map Holdings for One Quarter Ended June 30, 2019



	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities I	Diversification
EuroPacific	18.47%	43.79	0.68	0.26	(0.42)	309	39.90
Harbor International	19.67%	14.58	0.08	(0.01)	(0.09)	381	69.54
Oakmark International	18.56%	30.63	(0.70)	(0.17)	0.53	56	14.80
Mondrian International	18.13%	33.26	(0.70)	(0.25)	0.45	109	25.17
T. Rowe Price Intl Small Cap	14.90%	2.44	0.65	0.24	(0.42)	215	61.08
Investec	10.28%	23.26	0.00	0.03	0.03	85	21.00
International Equities	100.00%	21.34	(0.02)	0.01	0.03	941	111.71
MSCI ACWI ex US Small Cap	-	1.78	(0.02)	(0.01)	0.01	4187	719.00
MSCI EAFE Index	-	36.53	(0.03)	(0.02)	0.00	922	109.17
MSCI ACWI ex-US Index	-	32.47	(0.02)	(0.02)	0.01	2190	177.30



EuroPacific Period Ended June 30, 2019

Investment Philosophy

Capital Group has a research-driven approach to non-U.S. investing. Their bottom-up fundamental approach is blended with macroeconomic and political judgments on the outlook of economies, industries, currencies, and markets. The fund uses a "multiple manager" approach where individual portfolio managers, each with different styles, manage separate sleeves of the strategy independently. Sleeves are combined to form the fund. Individual managers are selected so that the aggregate fund adheres to its stated objective of capital appreciation. Switched from Class R-5 Shares to Class R-6 Shares in December 2009.

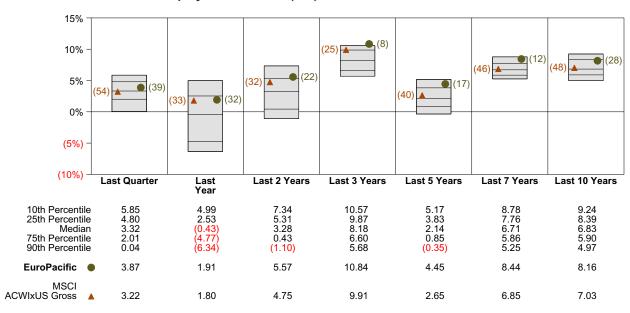
Quarterly Summary and Highlights

- EuroPacific's portfolio posted a 3.87% return for the quarter placing it in the 39 percentile of the Callan Non US Equity Mutual Funds group for the quarter and in the 32 percentile for the last year.
- EuroPacific's portfolio outperformed the MSCI ACWIxUS Gross by 0.65% for the quarter and outperformed the MSCI ACWIxUS Gross for the year by 0.11%.

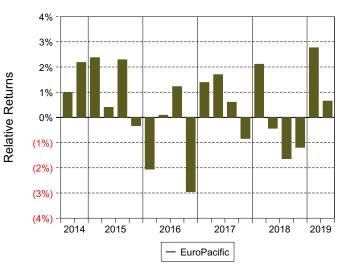
Quarterly	/ Asset	Growth
	, ,	

Beginning Market Value	\$25,999,176
Net New Investment	\$0
Investment Gains/(Losses)	\$1,006,994
Ending Market Value	\$27,006,170

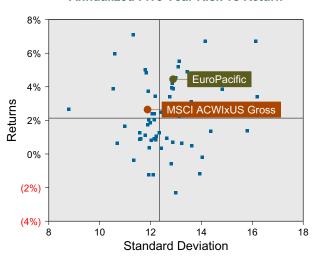
Performance vs Callan Non US Equity Mutual Funds (Net)



Relative Return vs MSCI ACWIxUS Gross



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



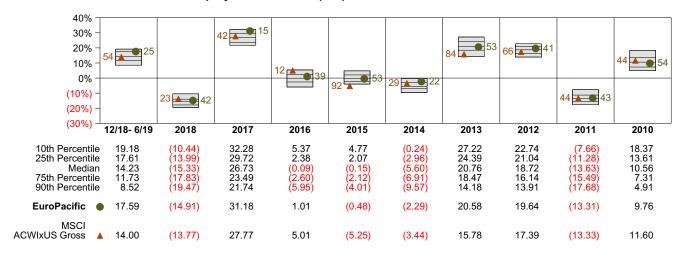


EuroPacific Return Analysis Summary

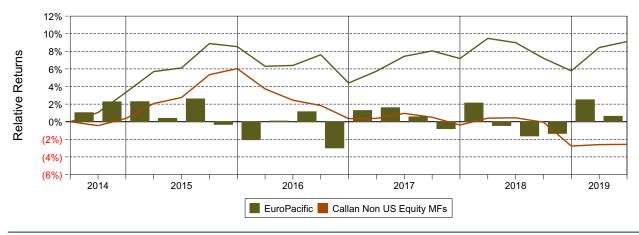
Return Analysis

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.

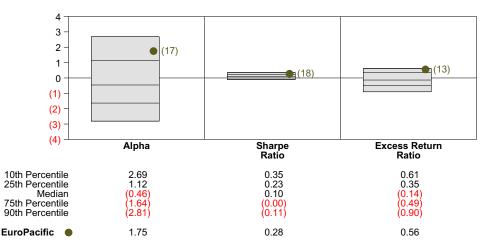
Performance vs Callan Non US Equity Mutual Funds (Net)



Cumulative and Quarterly Relative Return vs MSCI ACWIxUS Gross



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





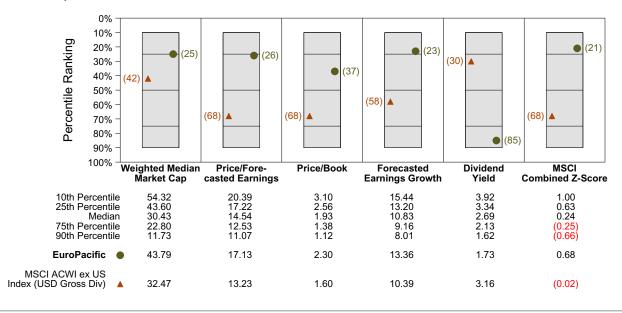
EuroPacific

Equity Characteristics Analysis Summary

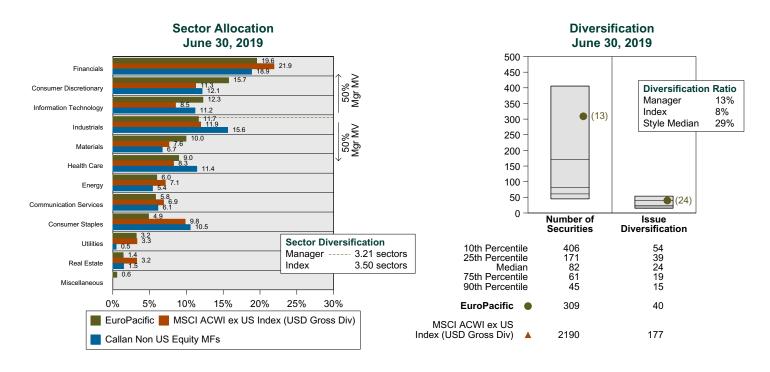
Portfolio Characteristics

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

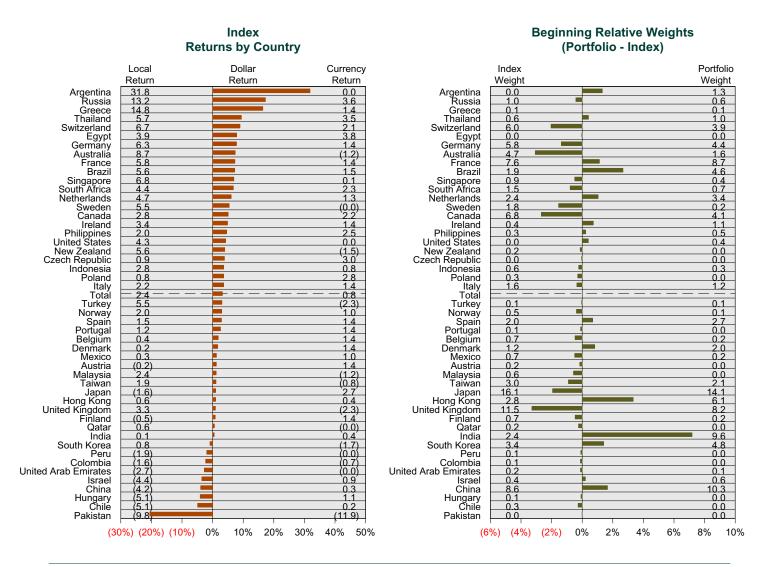


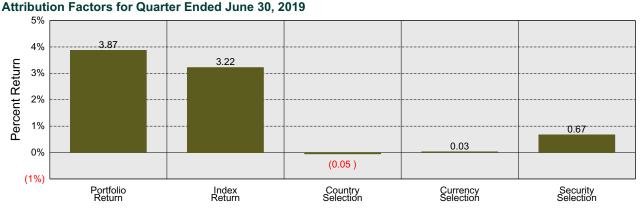


EuroPacific vs MSCI ACWIxUS Gross Attribution for Quarter Ended June 30, 2019

International Attribution

The first chart below illustrates the return for each country in the index sorted from high to low. The total return for the index is highlighted with a dotted line. The second chart (countries presented in the same order) illustrates the manager's country allocation decisions relative to the index. To the extent that the manager over-weighted a country that had a higher return than the total return for the index (above the dotted line) it contributes positively to the manager's country (or currency) selection effect. The last chart details the manager return, the index return, and the attribution factors for the quarter.







Harbor International Period Ended June 30, 2019

Investment Philosophy

The Harbor International Fund is sub-advised by Marathon-London. At the heart of Marathon's investment philosophy is the "capital cycle" approach to investment. This is based on the idea that the prospect of high returns will attract excessive capital (and hence competition), and vice versa. In addition, the assessment of how management responds to the forces of the capital cycle - particularly whether they curtail investment when returns have been poor - and how they are incentivized are critical to the investment outcome. Given the contrarian and long-term nature of the capital cycle, the investment philosophy results in strong views versus the market and long holding periods (5 years plus). The attractiveness of an individual security, therefore, should be evaluated within this timeframe.

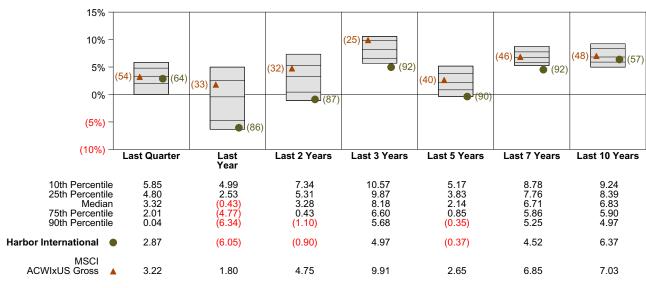
Quarterly Summary and Highlights

- Harbor International's portfolio posted a 2.87% return for the quarter placing it in the 64 percentile of the Callan Non US Equity Mutual Funds group for the quarter and in the 86 percentile for the last year.
- Harbor International's portfolio underperformed the MSCI ACWIxUS Gross by 0.35% for the quarter and underperformed the MSCI ACWIxUS Gross for the year by 7.86%.

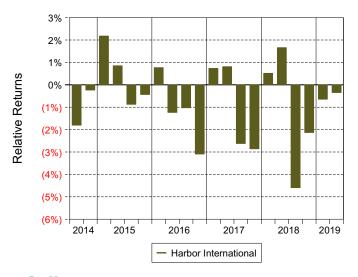
Quarterly Asset Growth

Beginning Market Value	\$27,963,442
Net New Investment	\$0
Investment Gains/(Losses)	\$803,505
Ending Market Value	\$28,766,947

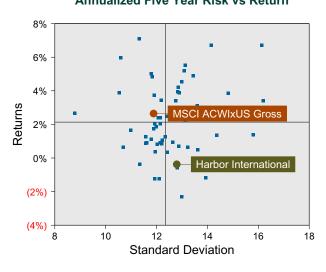
Performance vs Callan Non US Equity Mutual Funds (Net)



Relative Return vs MSCI ACWIxUS Gross



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



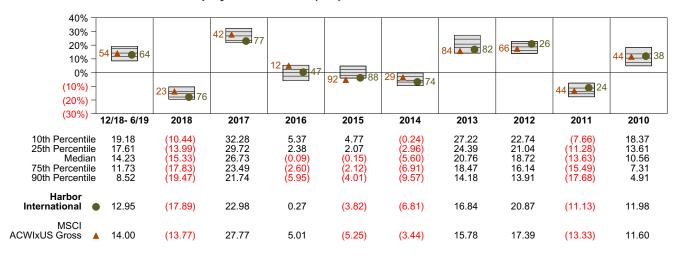


Harbor International Return Analysis Summary

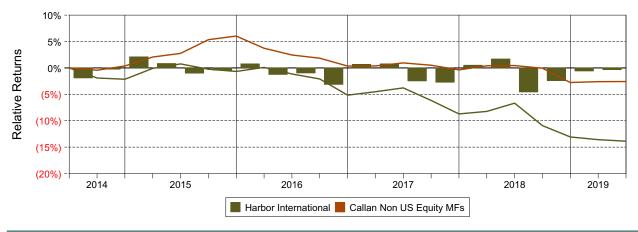
Return Analysis

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.

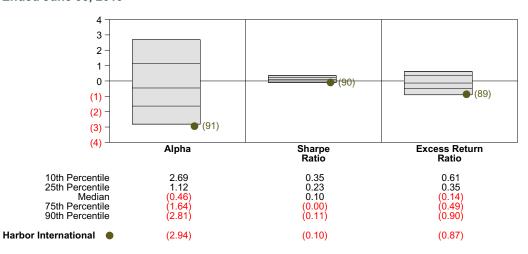
Performance vs Callan Non US Equity Mutual Funds (Net)



Cumulative and Quarterly Relative Return vs MSCI ACWIxUS Gross



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



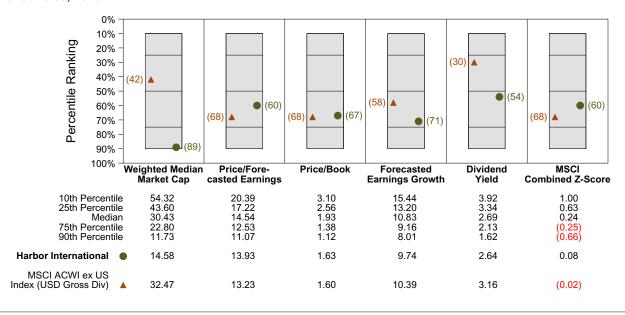


Harbor International Equity Characteristics Analysis Summary

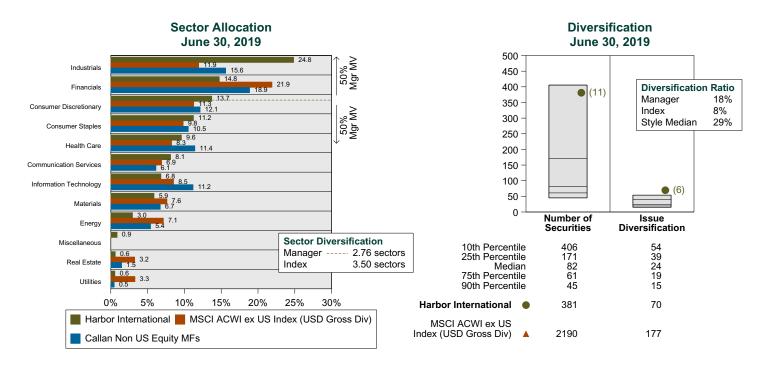
Portfolio Characteristics

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

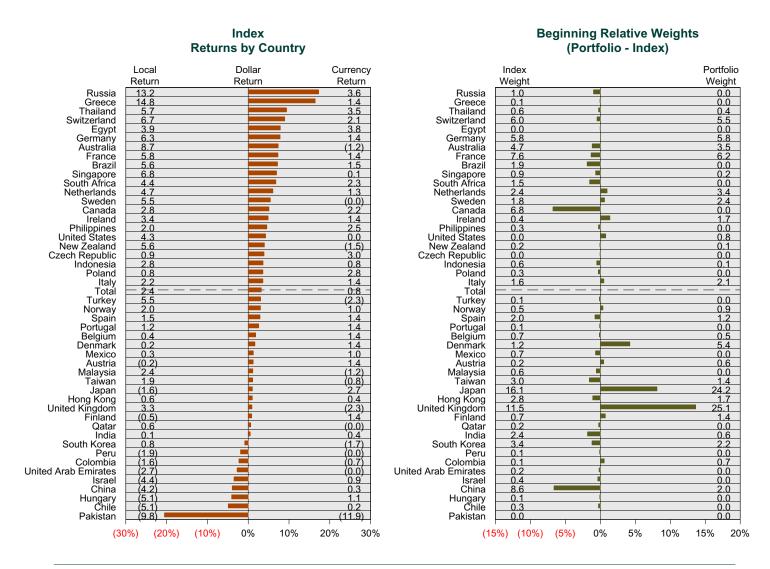


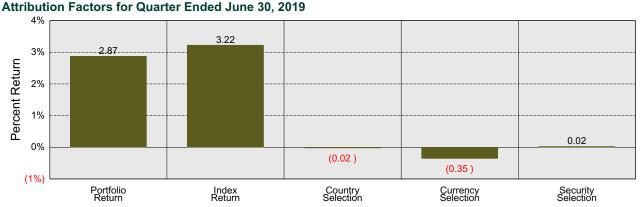


Harbor International vs MSCI ACWIxUS Gross Attribution for Quarter Ended June 30, 2019

International Attribution

The first chart below illustrates the return for each country in the index sorted from high to low. The total return for the index is highlighted with a dotted line. The second chart (countries presented in the same order) illustrates the manager's country allocation decisions relative to the index. To the extent that the manager over-weighted a country that had a higher return than the total return for the index (above the dotted line) it contributes positively to the manager's country (or currency) selection effect. The last chart details the manager return, the index return, and the attribution factors for the quarter.







Oakmark International Period Ended June 30, 2019

Investment Philosophy

Harris Associates are value investors. They seek to invest in companies that trade at a substantial discount to their underlying business values and run by managers who think and act as owners. They believe that purchasing a quality business at a discount to its underlying value minimizes risk while providing substantial profit potential. Over time, they believe the price of a stock will rise to reflect the company's underlying business value; in practice, their investment time horizon is generally three to five years. They are concentrated investors, building focused portfolios that provide diversification but are concentrated enough so that their best ideas can make a meaningful impact on investment performance. They believe they can add value through their stock selection capabilities and low correlation to international indices and peers. Harris believes their greatest competitive advantage is their long-term investment horizon, exploiting the mispricing of securities caused by what they believe is the short-term focus of many market participants. *This fund was converted into a CIT in November 2015.

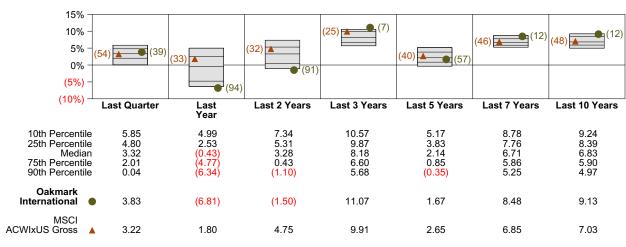
Quarterly Summary and Highlights

- Oakmark International's portfolio posted a 3.83% return for the quarter placing it in the 39 percentile of the Callan Non US Equity Mutual Funds group for the quarter and in the 94 percentile for the last year.
- Oakmark International's portfolio outperformed the MSCI ACWIxUS Gross by 0.61% for the quarter and underperformed the MSCI ACWIxUS Gross for the year by 8.61%.

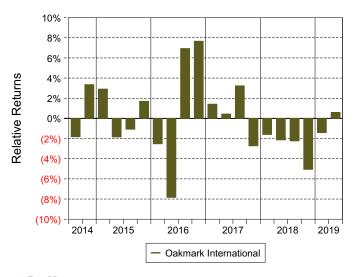
Quarterly Asset Growth

Beginning Market Value	\$26,134,324
Net New Investment	\$0
Investment Gains/(Losses)	\$1,001,315
Ending Market Value	\$27,135,640

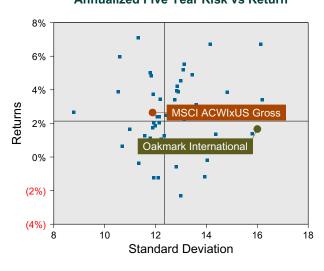
Performance vs Callan Non US Equity Mutual Funds (Net)



Relative Return vs MSCI ACWIxUS Gross



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



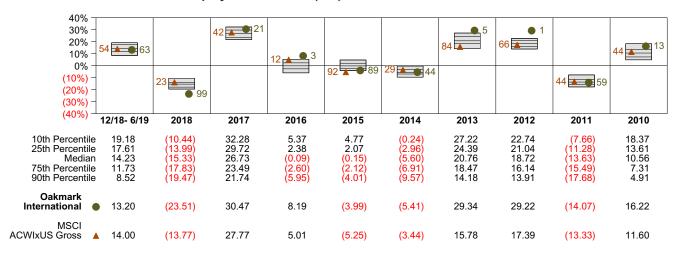


Oakmark International Return Analysis Summary

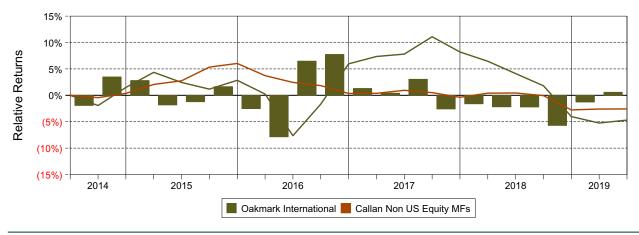
Return Analysis

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.

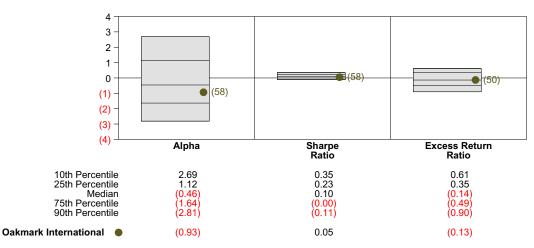
Performance vs Callan Non US Equity Mutual Funds (Net)



Cumulative and Quarterly Relative Return vs MSCI ACWIxUS Gross



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



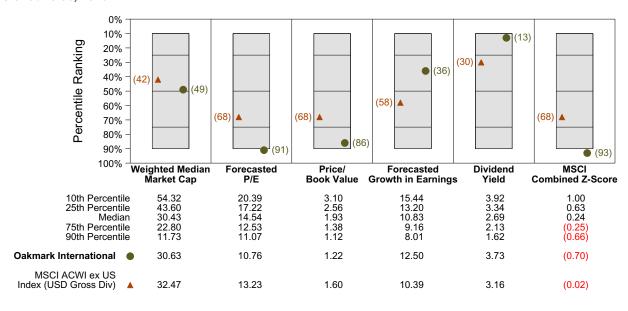


Oakmark International Equity Characteristics Analysis Summary

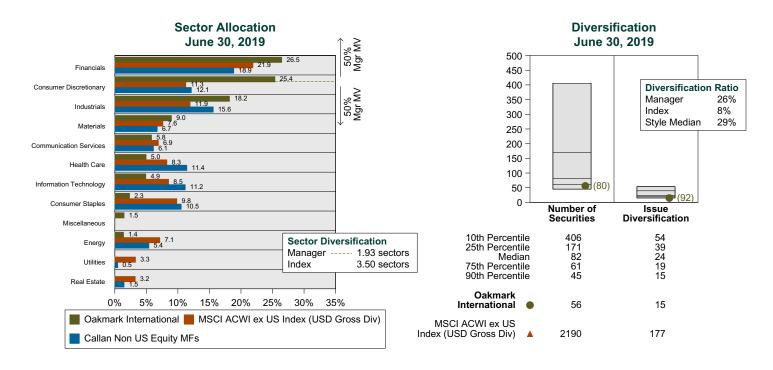
Portfolio Characteristics

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

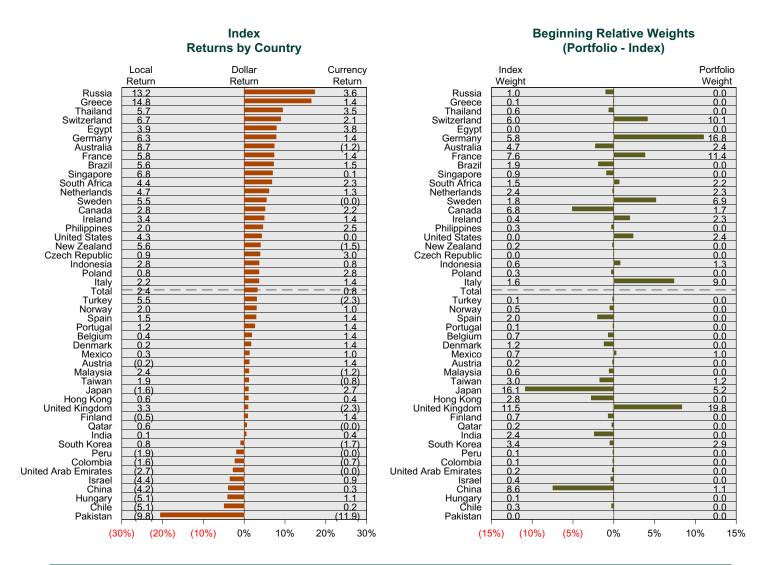


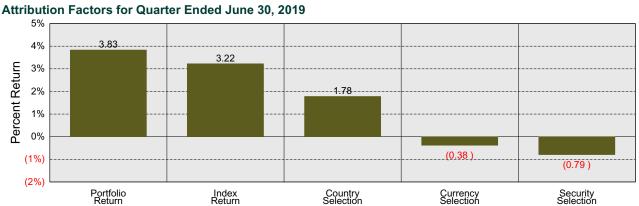


Oakmark International vs MSCI ACWIxUS Gross Attribution for Quarter Ended June 30, 2019

International Attribution

The first chart below illustrates the return for each country in the index sorted from high to low. The total return for the index is highlighted with a dotted line. The second chart (countries presented in the same order) illustrates the manager's country allocation decisions relative to the index. To the extent that the manager over-weighted a country that had a higher return than the total return for the index (above the dotted line) it contributes positively to the manager's country (or currency) selection effect. The last chart details the manager return, the index return, and the attribution factors for the quarter.







Mondrian International Period Ended June 30, 2019

Investment Philosophy

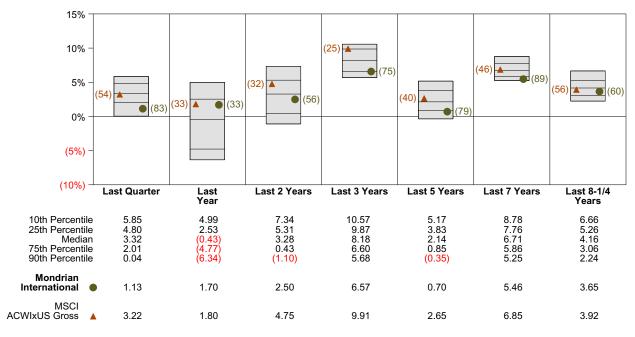
Mondrian's value driven investment philosophy is based on the belief that investments need to be evaluated in terms of their fundamental long-term value. In the management of international equity assets, they invest in securities where rigorous dividend discount analysis identifies value in terms of the long term flow of income. Mondrian's management fee is 80 bps on all assets.

Quarterly Summary and Highlights

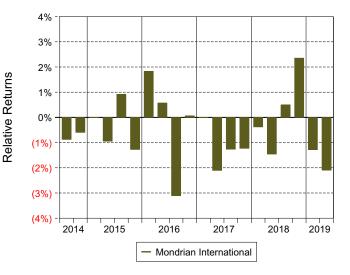
- Mondrian International's portfolio posted a 1.13% return for the quarter placing it in the 83 percentile of the Callan Non US Equity Mutual Funds group for the quarter and in the 33 percentile for the last year.
- Mondrian International's portfolio underperformed the MSCI ACWIxUS Gross by 2.09% for the quarter and underperformed the MSCI ACWIxUS Gross for the year by 0.10%.

Beginning Market Value	\$26,161,556
Net New Investment	\$0
Investment Gains/(Losses)	\$348,697
Ending Market Value	\$26,510,253

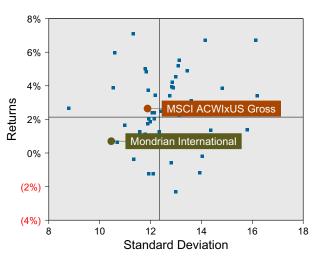
Performance vs Callan Non US Equity Mutual Funds (Net)



Relative Return vs MSCI ACWIxUS Gross



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



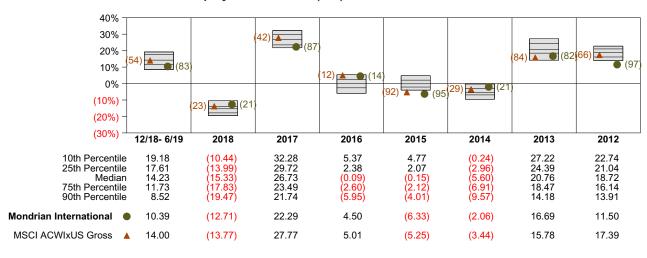


Mondrian International Return Analysis Summary

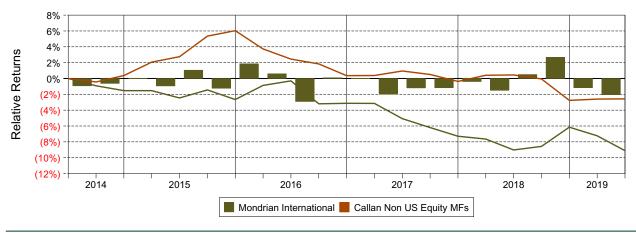
Return Analysis

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.

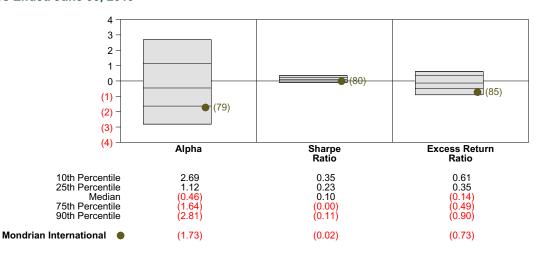
Performance vs Callan Non US Equity Mutual Funds (Net)



Cumulative and Quarterly Relative Return vs MSCI ACWIxUS Gross



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



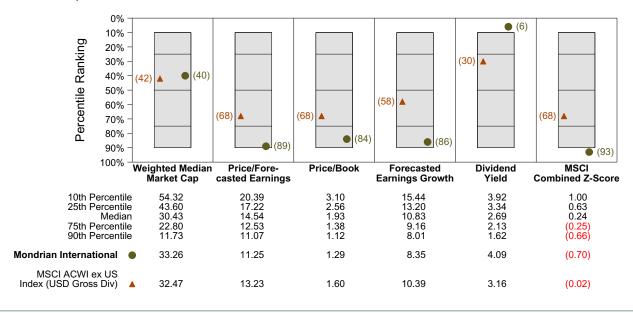


Mondrian International Equity Characteristics Analysis Summary

Portfolio Characteristics

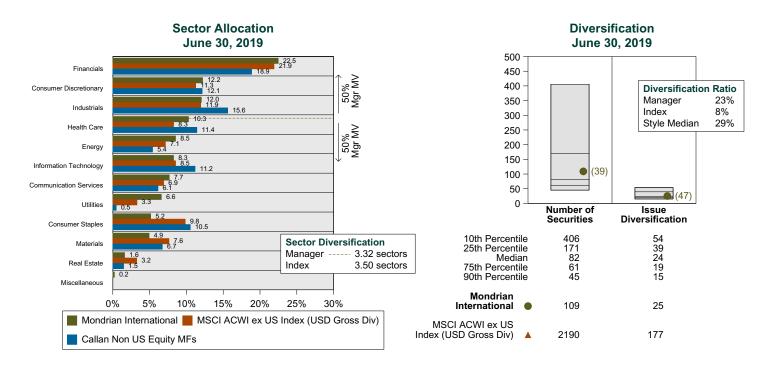
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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. 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.

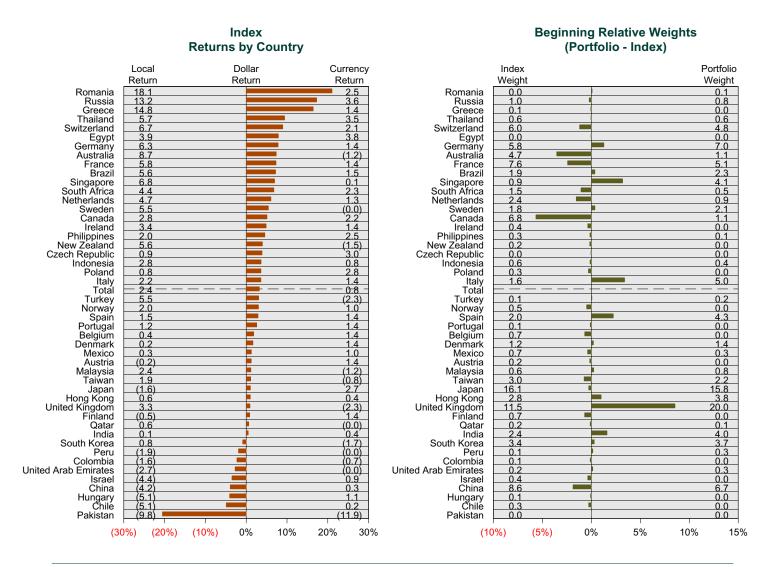


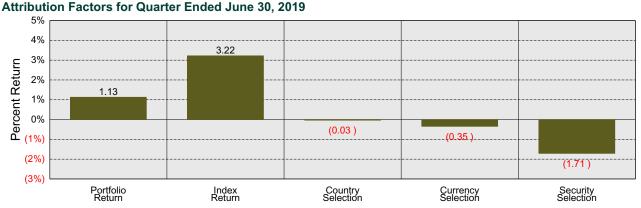


Mondrian International vs MSCI ACWIxUS Gross Attribution for Quarter Ended June 30, 2019

International Attribution

The first chart below illustrates the return for each country in the index sorted from high to low. The total return for the index is highlighted with a dotted line. The second chart (countries presented in the same order) illustrates the manager's country allocation decisions relative to the index. To the extent that the manager over-weighted a country that had a higher return than the total return for the index (above the dotted line) it contributes positively to the manager's country (or currency) selection effect. The last chart details the manager return, the index return, and the attribution factors for the quarter.







T. Rowe Price Intl Small Cap Period Ended June 30, 2019

Investment Philosophy

Central to T. Rowe's investment philosophy is the belief that the market for international small-cap equities has significant pricing inefficiencies. These inefficiencies stem from the fact that global investors tend to be underexposed to international small-cap equities and that these equities are under researched given the sheer size and scope of the opportunity set. Further, they believe that a disciplined decision-making process nourished by superior research information is the best way to take advantage of market inefficiencies. The team's approach emphasizes reasonably priced growth stocks that they believe can grow their earnings faster than the overall market, which should result in a portfolio of stocks that outperforms the broad market over time. Portfolio was funded September 2017. Historical returns are that of the manager's composite.

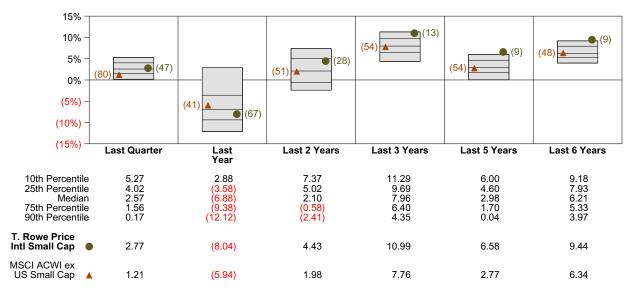
Quarterly Summary and Highlights

- T. Rowe Price Intl Small Cap's portfolio posted a 2.77% return for the quarter placing it in the 47 percentile of the Callan International Small Cap Mut Funds group for the quarter and in the 67 percentile for the last year.
- T. Rowe Price Intl Small Cap's portfolio outperformed the MSCI ACWI ex US Small Cap by 1.55% for the quarter and underperformed the MSCI ACWI ex US Small Cap for the year by 2.09%.

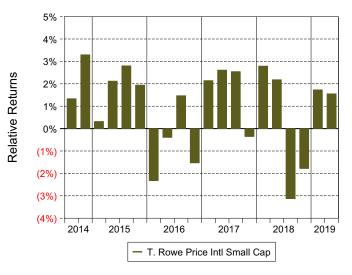
Quarterly Asset Growth

Beginning Market Value	\$21,145,814		
Net New Investment	\$0		
Investment Gains/(Losses)	\$641,516		
Ending Market Value	\$21,787,330		

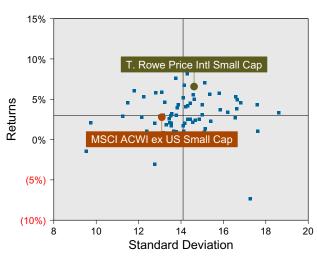
Performance vs Callan International Small Cap Mut Funds (Net)



Relative Returns vs MSCI ACWI ex US Small Cap



Callan International Small Cap Mut Funds (Net) Annualized Five Year Risk vs Return



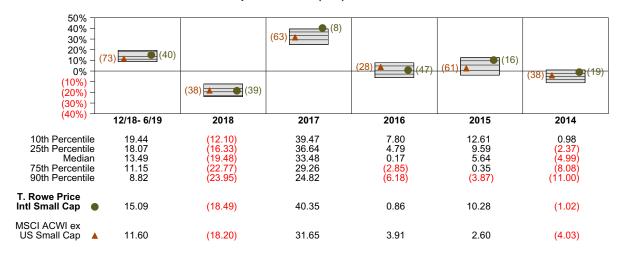


T. Rowe Price Intl Small Cap Return Analysis Summary

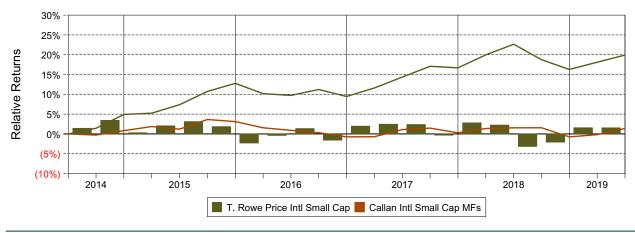
Return Analysis

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.

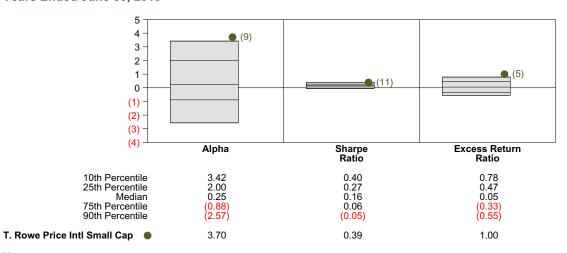
Performance vs Callan International Small Cap Mut Funds (Net)



Cumulative and Quarterly Relative Return vs MSCI ACWI ex US Small Cap



Risk Adjusted Return Measures vs MSCI ACWI ex US Small Cap Rankings Against Callan International Small Cap Mut Funds (Net) Five Years Ended June 30, 2019



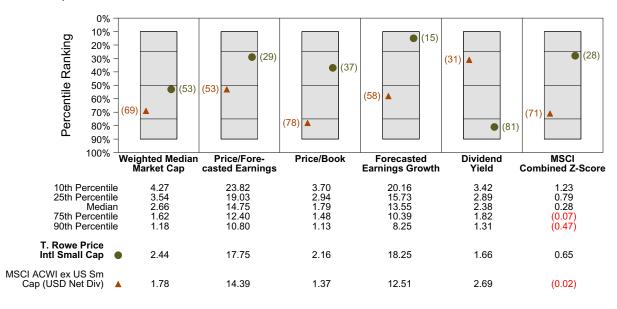


T. Rowe Price Intl Small Cap Equity Characteristics Analysis Summary

Portfolio Characteristics

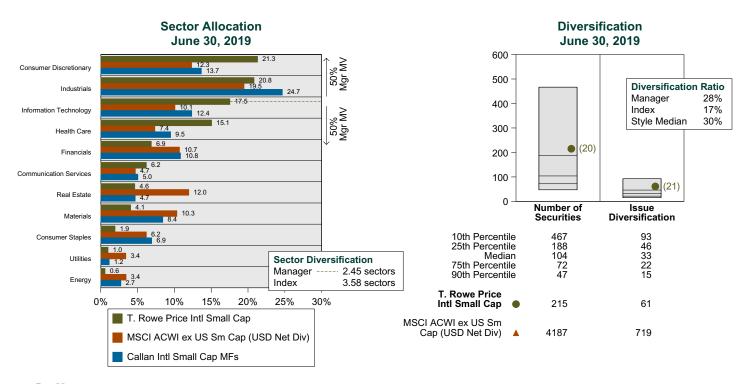
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan International Small Cap 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. 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.

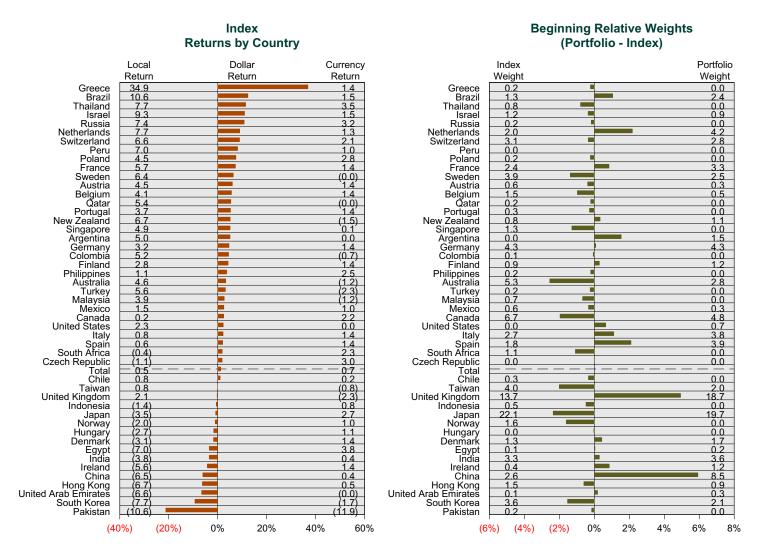


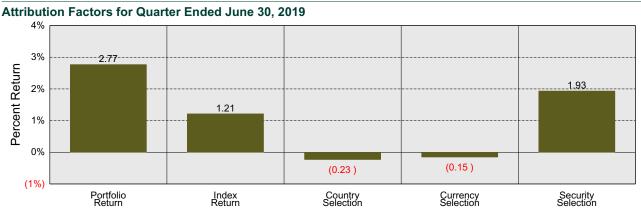


T. Rowe Price Intl Small Cap vs MSCI ACWI ex US Small Cap Attribution for Quarter Ended June 30, 2019

International Attribution

The first chart below illustrates the return for each country in the index sorted from high to low. The total return for the index is highlighted with a dotted line. The second chart (countries presented in the same order) illustrates the manager's country allocation decisions relative to the index. To the extent that the manager over-weighted a country that had a higher return than the total return for the index (above the dotted line) it contributes positively to the manager's country (or currency) selection effect. The last chart details the manager return, the index return, and the attribution factors for the quarter.







Investec Period Ended June 30, 2019

Investment Philosophy

Investec's 4Factor Equity team believes that share prices are driven by four key attributes over time and investing in companies that display these characteristics will drive long-term performance. They look to invest in high quality, attractively valued companies, which are improving operating performance and receiving increasing investor attention. These four factors (i.e., Strategy, Value, Earnings, and Technicals) are confirmed as performance drivers by academic research, empirical testing and intuitive reasoning. They believe that each factor can be a source of outperformance but in combination they are intended to produce more stable returns over the market cycle. Investec's management fee is 80 bps on all assets. The portfolio was funded June 2017. Historical returns are that of the manager's composite.

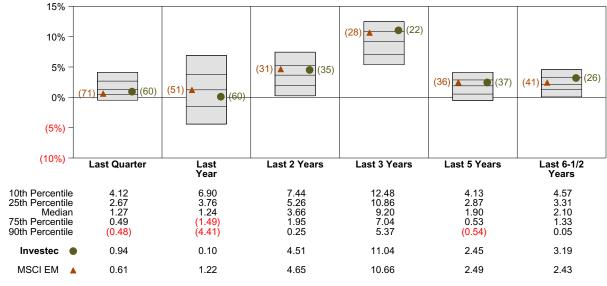
Quarterly Summary and Highlights

- Investec's portfolio posted a 0.94% return for the quarter placing it in the 60 percentile of the Morningstar Diversified Emg Mkts Fds group for the quarter and in the 60 percentile for the last year.
- Investec's portfolio outperformed the MSCI EM by 0.33% for the quarter and underperformed the MSCI EM for the year by 1.12%.

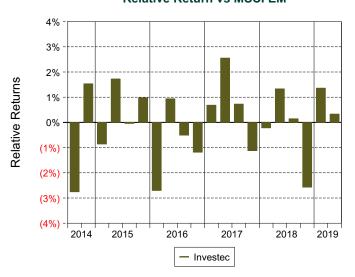
Quarterly Asset Growth

Beginning Market Value	\$14,862,374
Net New Investment	\$0
Investment Gains/(Losses)	\$169,412
Ending Market Value	\$15,031,787

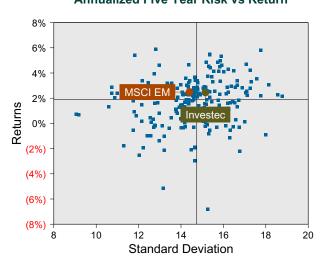
Performance vs Morningstar Diversified Emg Mkts Fds (Net)



Relative Return vs MSCI EM



Morningstar Diversified Emg Mkts Fds (Net) Annualized Five Year Risk vs Return



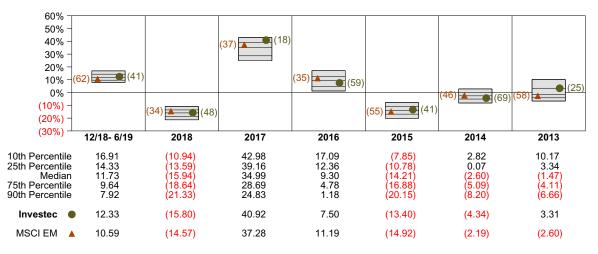


Investec Return Analysis Summary

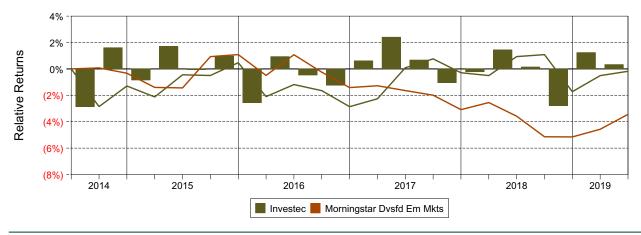
Return Analysis

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.

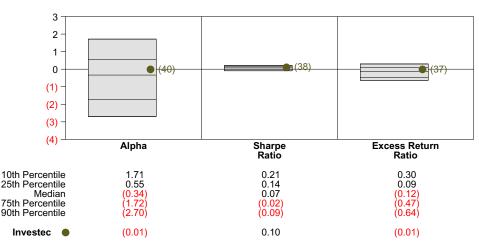
Performance vs Morningstar Diversified Emg Mkts Fds (Net)



Cumulative and Quarterly Relative Return vs MSCI EM



Risk Adjusted Return Measures vs MSCI EM Rankings Against Morningstar Diversified Emg Mkts Fds (Net) Five Years Ended June 30, 2019





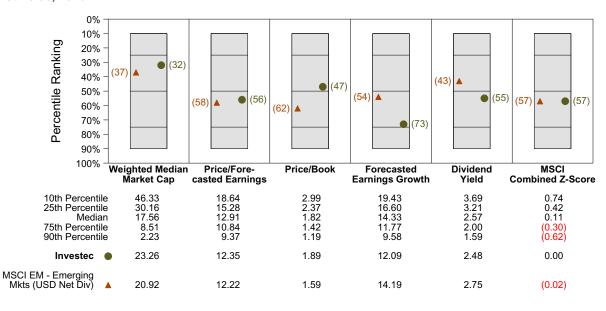
Investec

Equity Characteristics Analysis Summary

Portfolio Characteristics

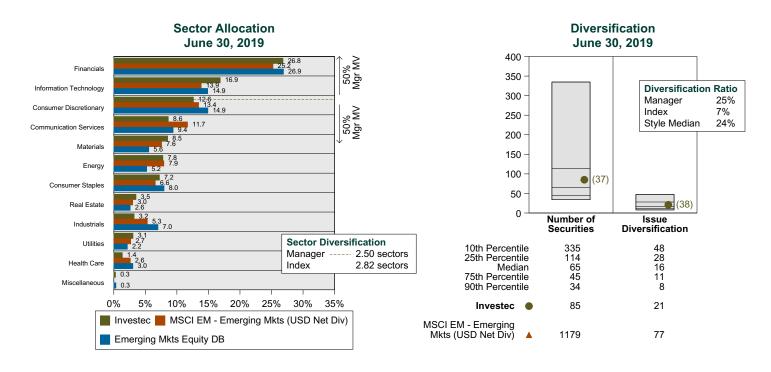
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Emerging Markets Equity DB 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.

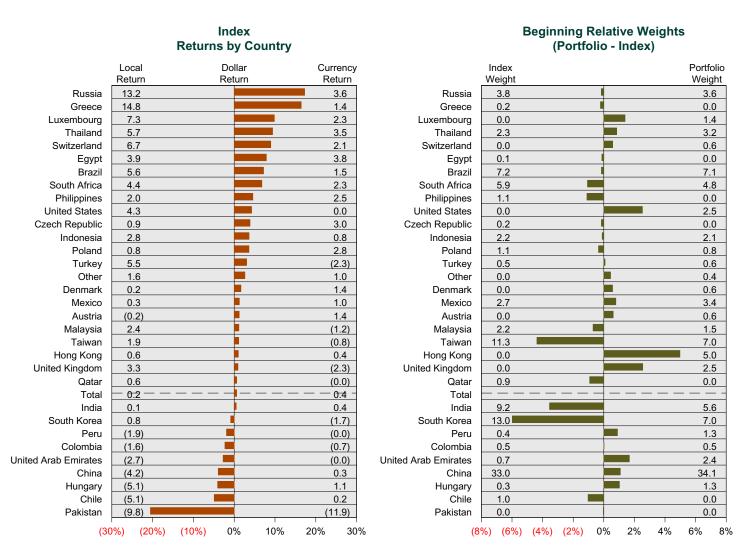


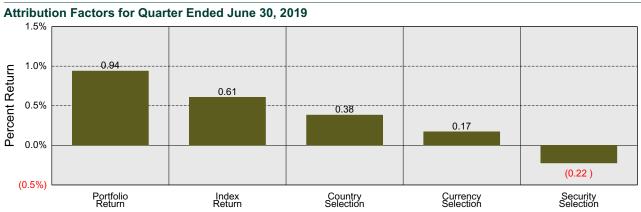


Investec vs MSCI EM Attribution for Quarter Ended June 30, 2019

International Attribution

The first chart below illustrates the return for each country in the index sorted from high to low. The total return for the index is highlighted with a dotted line. The second chart (countries presented in the same order) illustrates the manager's country allocation decisions relative to the index. To the extent that the manager over-weighted a country that had a higher return than the total return for the index (above the dotted line) it contributes positively to the manager's country (or currency) selection effect. The last chart details the manager return, the index return, and the attribution factors for the quarter.







Domestic Fixed Income Composite Period Ended June 30, 2019

Quarterly Summary and Highlights

- Domestic Fixed Income Composite's portfolio posted a 3.00% return for the quarter placing it in the 29 percentile of the Public Fund - Domestic Fixed group for the quarter and in the 36 percentile for the last year.
- Domestic Fixed Income Composite's portfolio underperformed the Blmbg Aggregate by 0.08% for the quarter and underperformed the Blmbg Aggregate for the year by 0.26%.

Quarterly Asset Growth

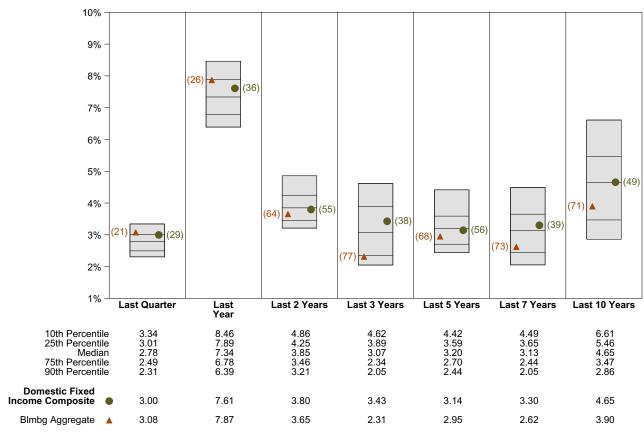
Beginning Market Value \$108,419,439

Net New Investment \$0

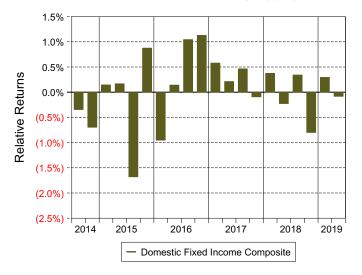
Investment Gains/(Losses) \$3,249,350

Ending Market Value \$111,668,789

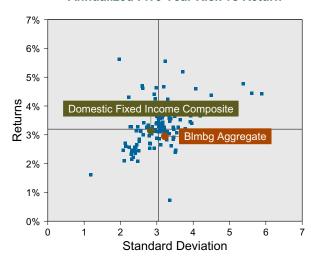
Performance vs Public Fund - Domestic Fixed (Gross)



Relative Return vs Blmbg Aggregate



Public Fund - Domestic Fixed (Gross) Annualized Five Year Risk vs Return



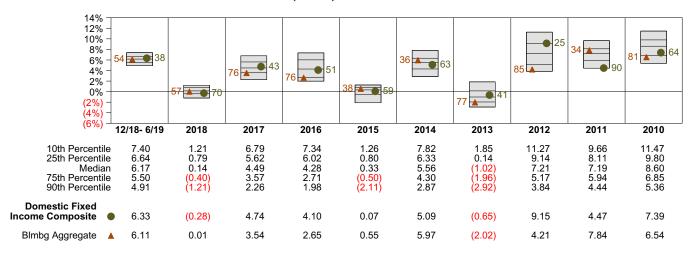


Domestic Fixed Income Composite Return Analysis Summary

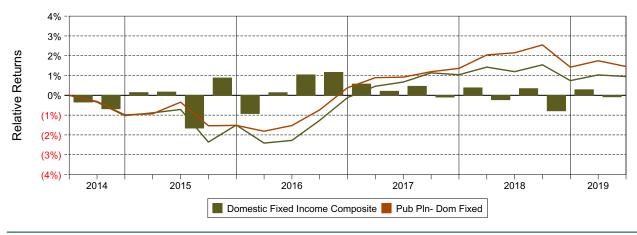
Return Analysis

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.

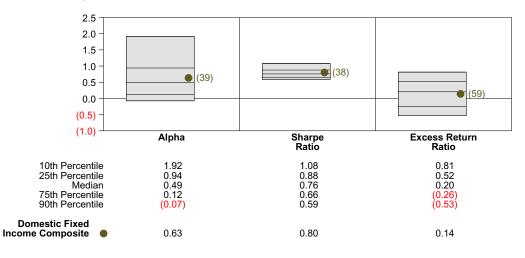
Performance vs Public Fund - Domestic Fixed (Gross)



Cumulative and Quarterly Relative Return vs Blmbg Aggregate



Risk Adjusted Return Measures vs Blmbg Aggregate Rankings Against Public Fund - Domestic Fixed (Gross) Five Years Ended June 30, 2019



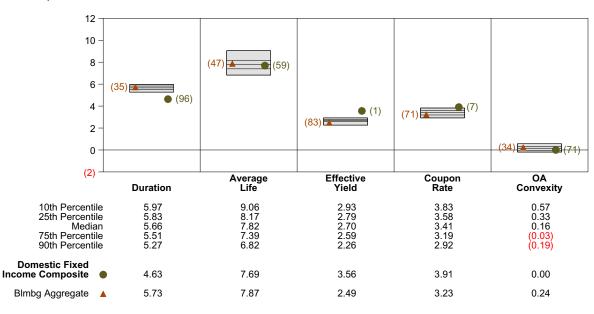


Domestic Fixed Income Composite Bond Characteristics Analysis Summary

Portfolio Characteristics

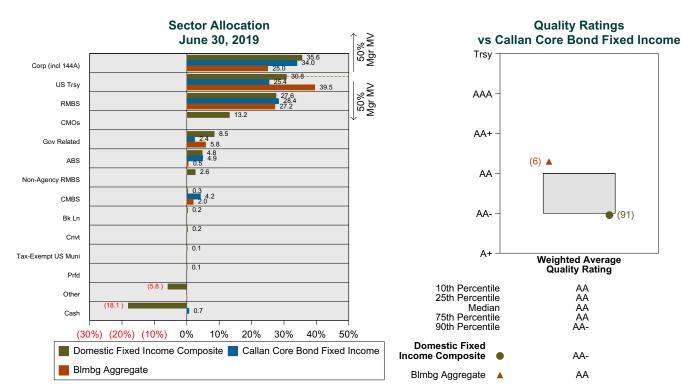
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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.





Dodge & Cox Income Period Ended June 30, 2019

Investment Philosophy

Dodge & Cox's Fixed Income philosophy is to construct and manage a high-quality and diversified portfolio of securities that is selected through bottom-up, fundamental analysis. They believe that by combining fundamental research with a long-term investment horizon, it is possible to uncover and act upon inefficiencies in the valuation of market sectors and individual securities. In their efforts to seek attractive returns, the team: 1) emphasizes market sector and individual security selection; 2) strives to build portfolios which have a higher yield than the composite yield of the broad bond market; and 3) analyzes portfolio and individual security risk. Their credit research focuses on analysis of the fundamental factors that impact an individual issuer's or market sector's credit risk. They also consider economic trends and special circumstances which may affect an industry or a specific issue or issuer.

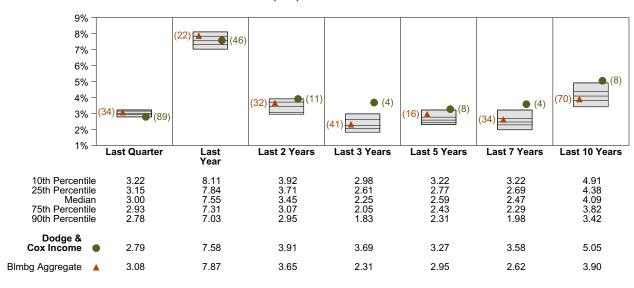
Quarterly Summary and Highlights

- Dodge & Cox Income's portfolio posted a 2.79% return for the quarter placing it in the 89 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 46 percentile for the last year.
- Dodge & Cox Income's portfolio underperformed the Blmbg Aggregate by 0.29% for the quarter and underperformed the Blmbg Aggregate for the year by 0.29%.

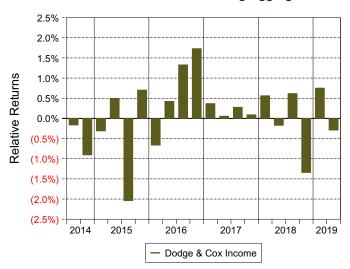
Quarterly	Asset	Growth
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Beginning Market Value	\$54,525,456
Net New Investment	\$0
Investment Gains/(Losses)	\$1,519,669
Ending Market Value	\$56,045,124

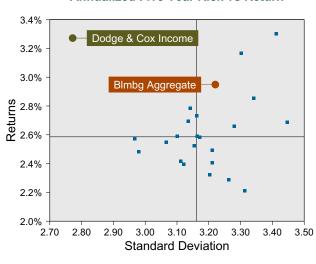
Performance vs Callan Core Bond Mutual Funds (Net)



Relative Return vs Blmbg Aggregate



Callan Core Bond Mutual Funds (Net) Annualized Five Year Risk vs Return



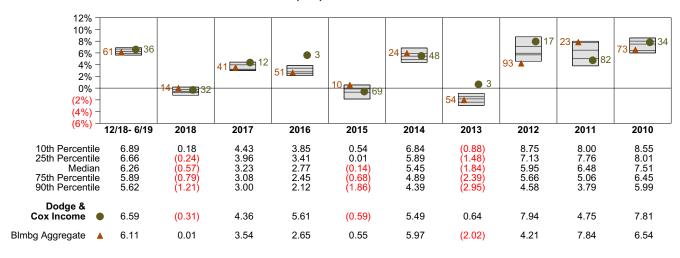


Dodge & Cox Income Return Analysis Summary

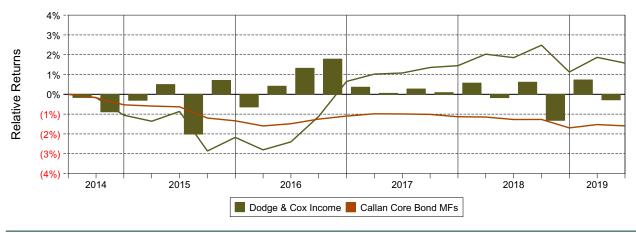
Return Analysis

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.

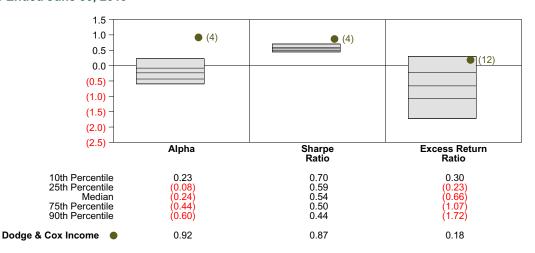
Performance vs Callan Core Bond Mutual Funds (Net)



Cumulative and Quarterly Relative Return vs Blmbg Aggregate



Risk Adjusted Return Measures vs Blmbg Aggregate Rankings Against Callan Core Bond Mutual Funds (Net) Five Years Ended June 30, 2019



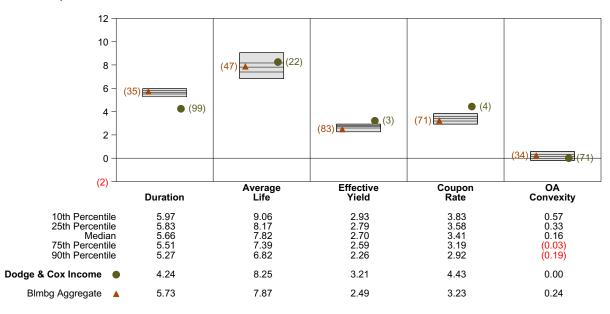


Dodge & Cox Income Bond Characteristics Analysis Summary

Portfolio Characteristics

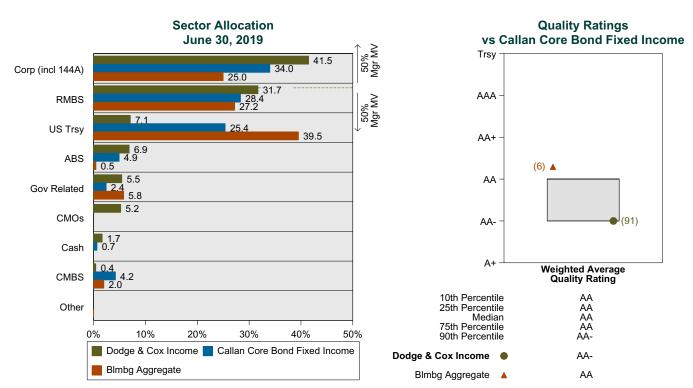
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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.





PIMCO Period Ended June 30, 2019

Investment Philosophy

PIMCO emphasizes adding value by rotating through the major sectors of the domestic and international bond markets. They also seek to enhance returns through duration management.

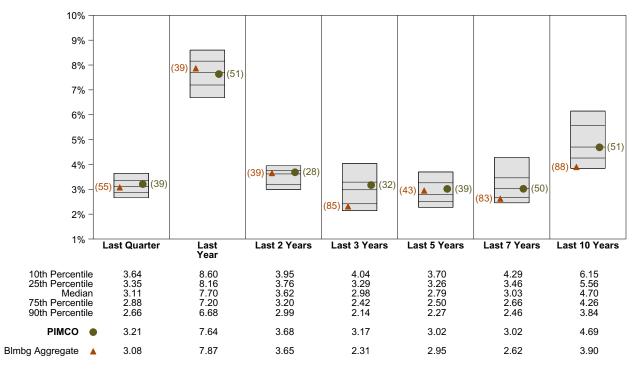
Quarterly Summary and Highlights

- PIMCO's portfolio posted a 3.21% return for the quarter placing it in the 39 percentile of the Callan Core Plus Mutual Funds group for the quarter and in the 51 percentile for the last year.
- PIMCO's portfolio outperformed the Blmbg Aggregate by 0.13% for the quarter and underperformed the Blmbg Aggregate for the year by 0.23%.

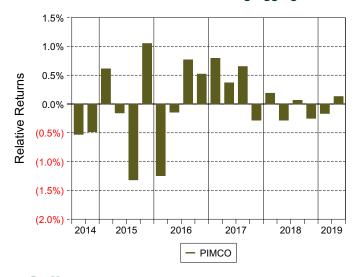
Quarterly	Asset	Growth
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Beginning Market Value	\$53,893,983
Net New Investment	\$0
Investment Gains/(Losses)	\$1,729,681
Ending Market Value	\$55 623 665

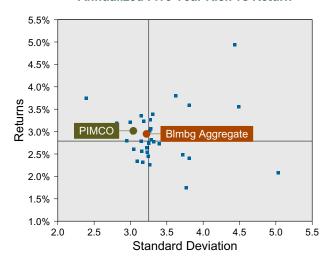
Performance vs Callan Core Plus Mutual Funds (Net)



Relative Return vs Blmbg Aggregate



Callan Core Plus Mutual Funds (Net) Annualized Five Year Risk vs Return



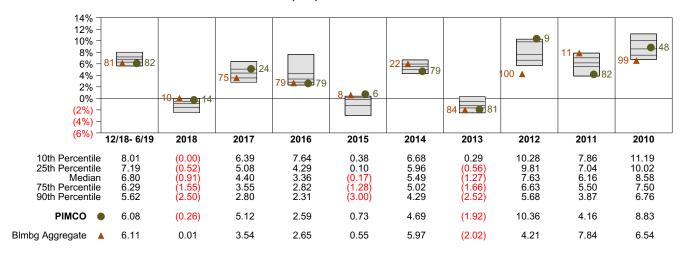


PIMCO Return Analysis Summary

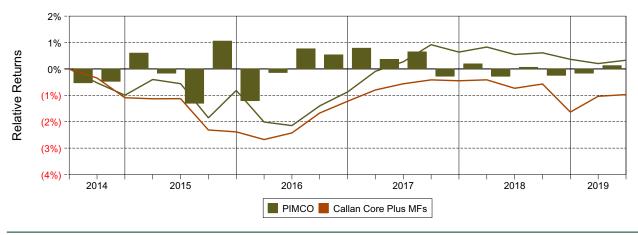
Return Analysis

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.

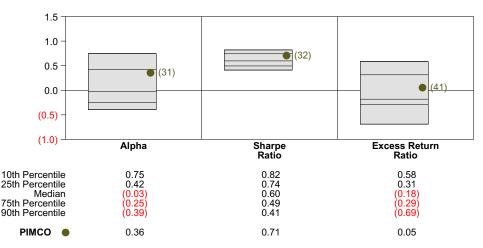
Performance vs Callan Core Plus Mutual Funds (Net)



Cumulative and Quarterly Relative Return vs Blmbg Aggregate



Risk Adjusted Return Measures vs Blmbg Aggregate Rankings Against Callan Core Plus Mutual Funds (Net) Five Years Ended June 30, 2019





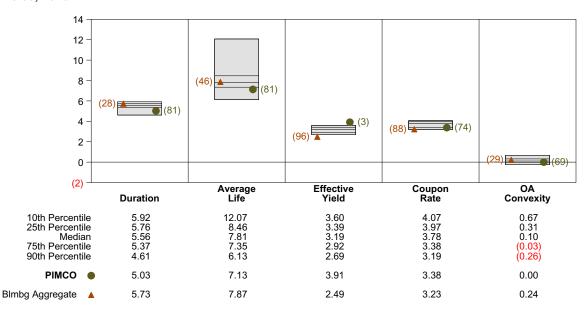
PIMCO

Bond Characteristics Analysis Summary

Portfolio Characteristics

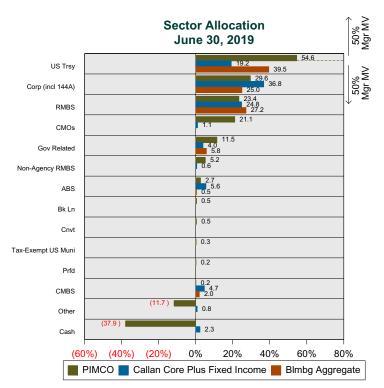
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

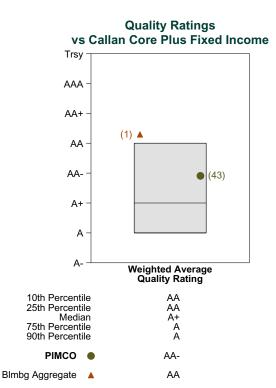
Fixed Income Portfolio Characteristics Rankings Against Callan Core Plus Fixed Income as of June 30, 2019



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.







Real Estate Composite Period Ended June 30, 2019

Quarterly Summary and Highlights

- Real Estate Composite's portfolio posted a 1.55% return for the quarter placing it in the 62 percentile of the Callan Open End Core Cmmingled Real Est group for the quarter and in the 71 percentile for the last year.
- Real Estate Composite's portfolio outperformed the Real Estate Custom Benchmark by 0.43% for the quarter and outperformed the Real Estate Custom Benchmark for the year by 0.40%.

Quarterly Asset Growth

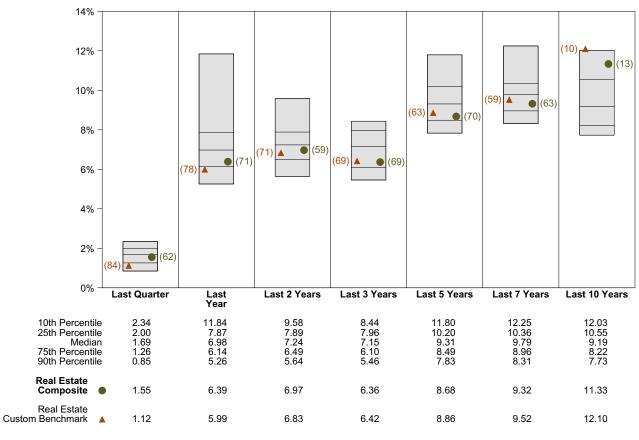
Beginning Market Value \$59,090,710

Net New Investment \$-17,341

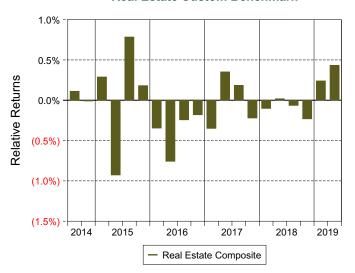
Investment Gains/(Losses) \$918,046

Ending Market Value \$59,991,416

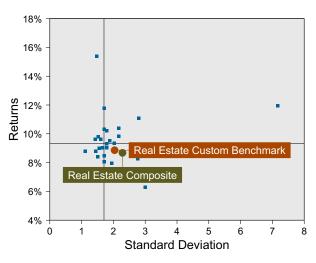
Performance vs Callan Open End Core Cmmingled Real Est (Net)



Relative Returns vs Real Estate Custom Benchmark



Callan Open End Core Cmmingled Real Est (Net) Annualized Five Year Risk vs Return





RREEF Private Period Ended June 30, 2019

Investment Philosophy

RREEF America II acquires 100 percent equity interests in small- to medium-sized (\$10 million to \$70 million) apartment, industrial, retail and office properties in targeted metropolitan areas within the continental United States. The fund capitalizes on RREEF's national research capabilities and market presence to identify superior investment opportunities in major metropolitan areas across the United States.

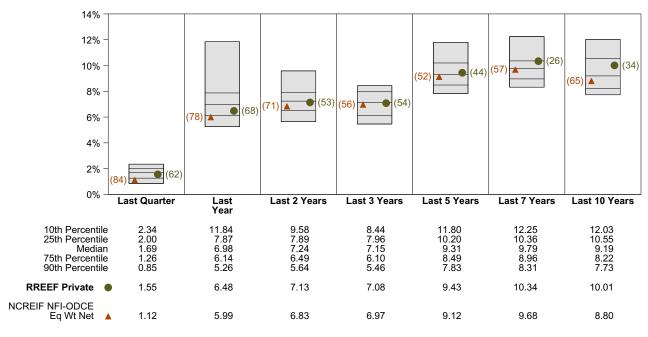
Quarterly Summary and Highlights

- RREEF Private's portfolio posted a 1.55% return for the quarter placing it in the 62 percentile of the Callan Open End Core Cmmingled Real Est group for the quarter and in the 68 percentile for the last year.
- RREEF Private's portfolio outperformed the NCREIF NFI-ODCE Eq Wt Net by 0.43% for the quarter and outperformed the NCREIF NFI-ODCE Eq Wt Net for the year by 0.48%.

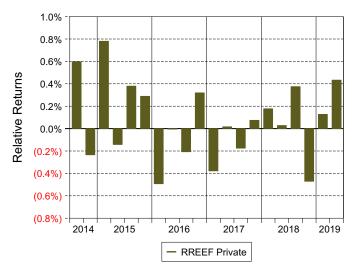
Quarterly	/ Asset	Growth
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Beginning Market Value	\$30,316,406
Net New Investment	\$0
Investment Gains/(Losses)	\$471,036
Ending Market Value	\$30,787,441

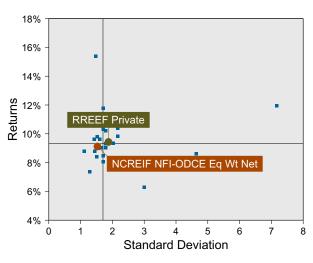
Performance vs Callan Open End Core Cmmingled Real Est (Net)



Relative Returns vs NCREIF NFI-ODCE Eq Wt Net



Callan Open End Core Cmmingled Real Est (Net) Annualized Five Year Risk vs Return





Barings Core Property Fund Period Ended June 30, 2019

Investment Philosophy

Barings believes that the investment strategy for the Core Property Fund is unique with the goal of achieving returns in excess of the benchmark index, the NFI-ODCE Index, with a level of risk associated with a core fund. The construct of the Fund relies heavily on input from Barings Research, which provided the fundamentals for the investment strategy. Strategic targets and fund exposure which differentiate the Fund from its competitors with respect to both its geographic and property type weightings, and we believe will result in performance in excess of industry benchmarks over the long-term.

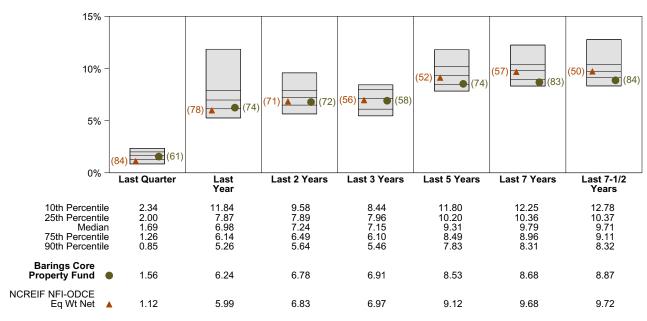
Quarterly Summary and Highlights

- Barings Core Property Fund's portfolio posted a 1.56% return for the quarter placing it in the 61 percentile of the Callan Open End Core Cmmingled Real Est group for the quarter and in the 74 percentile for the last year.
- Barings Core Property Fund's portfolio outperformed the NCREIF NFI-ODCE Eq Wt Net by 0.44% for the quarter and outperformed the NCREIF NFI-ODCE Eq Wt Net for the year by 0.25%.

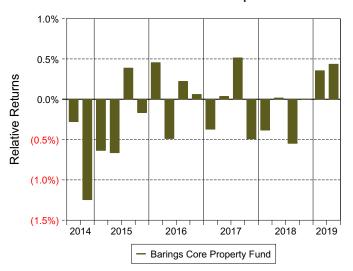
Quarterly Asset Growth

Beginning Market Value	\$27,624,305
Net New Investment	\$0
Investment Gains/(Losses)	\$429,670
Ending Market Value	\$28,053,974

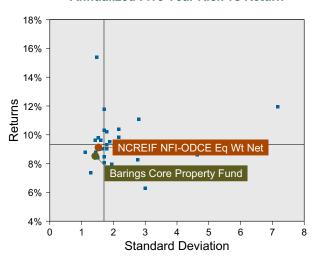
Performance vs Callan Open End Core Cmmingled Real Est (Net)



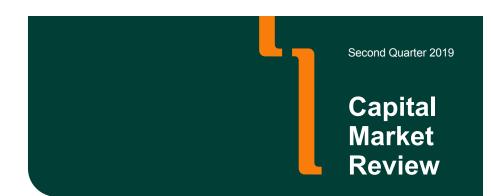
Relative Returns vs NCREIF NFI-ODCE Eq Wt Net



Callan Open End Core Cmmingled Real Est (Net) Annualized Five Year Risk vs Return









The Fed: 'A Mid-Cycle Adjustment to Policy'

ECONOMY

The economic news for the U.S. during the second quarter was largely good, and better than the headlines would lead us to believe. Yet the Fed proceeded with a widely anticipated (and clearly signaled) interest rate cut in July, describing it as "a mid-cycle adjustment to policy."

Big Focus on Fed, Possible Correction

INSTITUTIONAL INVESTORS

Institutional investors, as measured by the Callan PAGE Total Fund Sponsor Database Group, gained 3.3% in the second quarter. That compares to the 4.0% increase generated by a benchmark composed of 60% S&P 500/40% Bloomberg Barclays US Aggregate.

U.S. Stocks Hit Highs; Global Gains Muted

EQUITY

U.S. equities neared record highs in the sectord highs in the sectord highs in the sectord actions of easing from the Fed. Global equity markets were largely positive although investor sentiment was fairly muted as both U.S./China tariff fatigue and Brexit uncertainty continued.

Rally for Treasuries Lifts Sovereign Bonds

FIXED INCOME

The Federal Reserve's dovish statements and announced policy objective to "sustain the expansion" caused risk assets and U.S. Treasury yields to rally. Non-U.S. developed market sovereign bonds rose in tandem with the rally in Treasuries.

Real Estate Gains; Real Assets Fall

REAL ESTATE/REAL ASSETS

The NCREIF Property Index gained 1.5% during the second quarter. The NCREIF Open-End Diversified Core Equity Index rose 0.8%. U.S. REITs and global REITs both gained, but lagged broad equity indices. The Bloomberg Commodity Index fell 1.2%.

Value Is in the Eye of the Beholder

PRIVATE EQUITY

Fundraising, company purchase prices, and IPOs increased in the second quarter. But private M&A investment and exit measures were flat to markedly down. Private equity returns remained positive, despite the fourth quarter public equity sell-off.

Continuing Rally Aids Most Strategies

HEDGE FUNDS/MACs

Risk-on sentiment supported virtually all hedge fund strategies. The continuing rally also lifted long-biased MACs, but risk premia languished again. Hedge funds are well positioned defensively for a downturn. But without a sustained pick-up in volatility, they are likely to lag.

Returns, Inflows Both Rebound for DC Index

DEFINED CONTRIBUTION

The Callan DC Index™ rebounded in the first quarter, gaining 9.6%, and the Age 45 Target Date Fund did even better. After two quarters of negative flows, balances saw sizable growth. And TDFs retook their spot as the top destination for inflows.

Broad Market Quarterly Returns

U.S. Equity
Russell 3000

Non-U.S. Equity
MSCI ACWI ex USA



U.S. Fixed IncomeBloomberg Barclays Agg



Non-U.S. Fixed Income Bloomberg Barclays Gbl ex US



Sources: Bloomberg Barclays, FTSE Russell, MSCI

The Fed Speaks: 'A Mid-Cycle Adjustment to Policy'

ECONOMY | Jay Kloepfer

The U.S. economy continued its now-record expansion in the second quarter with a 2.1% gain in GDP, slower than the robust 3.1% in the first quarter but well ahead of expectations. Consumer spending rose 4.3% in the quarter, supported by solid gains in the job market and disposable income growth of 5% in each of the first two quarters of 2019. Offsetting the gains in consumption were hits to GDP from exports, non-residential business investment, residential investment, and a drawdown in inventories. The economic news for the U.S. during the quarter was largely good, and better than the headlines would lead us to believe. Yet the Fed proceeded with a widely anticipated (and clearly signaled) interest rate cut in July, lowering the Federal Funds rate target by 25 basis points.

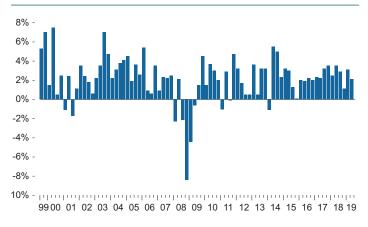
How did we get to a situation where the expansion continues but the Fed acts to cut rates? In classic Fed-speak, the announced reasoning is "a mid-cycle adjustment to policy." To be fair, while the job market and overall GDP data are coming in solid for the U.S., the global economy is clearly showing signs of slowing, and the uncertainty stemming from trade tensions is top of mind. Chairman Jerome Powell noted three reasons for the rate cut: (1) to insure against downside risks from slowing global growth and trade tensions; (2) to mitigate the effects those factors are already having on the U.S. outlook, even if they haven't shown up in the data; and (3) to enable a faster return to the Federal Reserve's symmetric 2% inflation target.

It is important to note that the Fed made clear this July rate cut is not likely to be the first in a series. After initial confusion, the markets simply interpreted this Fed comment as fewer rate cuts this year than were previously priced into bond yields.

Key to the Fed's perceived latitude to lower rates is the persistent surprise of low inflation. After breaking through the Fed's 2% target in 2018, inflation has once again subsided. Headline CPI rose 1.6% in June (year-over-year), dragged down by a 3.4% decline in energy costs. In fact, core CPI (less food and energy) rose 2.1% over the past 12 months, pushed up by the

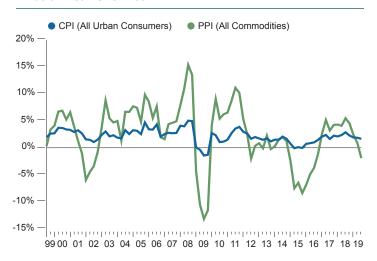
Quarterly Real GDP Growth

(20 Years)



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

rising cost of shelter, apparel, and used vehicles. While annual wage gains have moved above 3% for the first time since the Global Financial Crisis (GFC), wage pressures have yet to show up in headline inflation. The impact of tariffs on consumer prices has not affected the broad CPI data, as the tariffs to date have been narrowly targeted.

Foreshadowing the expected slowdown in the U.S. economy is the Purchasing Managers' Index (PMI), a forward-looking measure of business expectations for manufacturing demand and

production. The mid-year 2019 reading of the PMI hit 50.6, very close to the line dividing expansion from contraction (50), and the lowest reading since 2009. Producers cite the twin worries of slowing global growth and trade tensions; the 5% drop in exports and the softening of business spending in the second quarter data certainly support these concerns. Other concerns about a material slowdown to GDP growth include the waning impact on domestic spending that has come from rising stock prices and fiscal stimulus since the GFC. Further concerns include the effects of potential new tariffs, and the slowdown in inventory accumulation. The U.S. economy is also approaching capacity constraints as the expansion reaches into record territory. Unemployment has hit a generational low of 3.6%; at some point firms' difficulties in finding new and replacement staff will weigh on overall workforce growth.

The nine interest rate hikes enacted by the Fed through 2018 raised the cost of borrowing for both businesses and consumers, and while the reversal of Fed policy since January halted the trajectory of rates, the impact of the increases since 2016 is still working its way through the economy. Higher mortgage rates slowed housing markets, pulling existing home sales down by more than 10% over the course of 2018. Rates for 30-year mortgages have fallen by more than 110 bps since November 2018, and home sales have bounced back since the start of the year, but the recovery has been uneven, concentrated in the South and the West. Investment in new homes, as measured by permits, began slipping in 2018 and is still down more than 10% (year over year) through June. New residential construction, restricted in many locations by supply and cost factors, has lagged the pace set in typical expansions since the GFC.

The Long-Term View

	2019	Periods	ended	Dec 3	1 2018
Index	2019 2nd Qtr	Year			25 Yrs
U.S. Equity					
Russell 3000	4.1	-5.2	7.9	13.2	9.0
S&P 500	4.3	-4.4	8.5	13.1	9.1
Russell 2000	2.1	-11.0	4.4	12.0	8.3
Non-U.S. Equity					
MSCI EAFE	3.7	-13.8	0.5	6.3	4.6
MSCI ACWI ex USA	3.0	-14.2	0.7	6.6	
MSCI Emerging Markets	0.6	-14.6	1.6	8.0	
MSCI ACWI ex USA Small Cap	1.2	-18.2	2.0	10.0	
Fixed Income					
Bloomberg Barclays Agg	3.1	0.0	2.5	3.5	5.1
90-Day T-Bill	0.6	1.9	0.6	0.4	2.5
Bloomberg Barclays Long G/C	6.6	-4.7	5.4	5.9	6.8
Bloomberg Barclays Gl Agg ex US	3.4	-2.1	0.0	1.7	4.4
Real Estate					
NCREIF Property	1.5	6.7	9.3	7.5	9.3
FTSE Nareit Equity	1.2	-4.6	7.9	12.1	9.8
Alternatives					
CS Hedge Fund	2.3	-3.2	1.7	5.1	7.3
Cambridge PE*	4.9	10.6	11.9	13.8	15.2
Bloomberg Commodity	-1.2	-11.2	-8.8	-3.8	2.0
Gold Spot Price	8.9	-2.1	1.3	3.8	4.9
Inflation – CPI-U	0.8	1.9	1.5	1.8	2.2

^{*}Data for most recent period lags by a quarter. Data as of March 31, 2019. Sources: Bloomberg, Bloomberg Barclays, Bureau of Economic Analysis, Credit Suisse, FTSE Russell, MSCI, NCREIF, Standard & Poor's, Refinitiv/Cambridge

Recent Quarterly Economic Indicators

	2Q19	1Q19	4Q18	3Q18	2Q18	1Q18	4Q17	3Q17
Employment Cost–Total Compensation Growth	2.7%	2.8%	2.9%	2.8%	2.8%	2.7%	2.6%	2.5%
Nonfarm Business–Productivity Growth	1.8%*	3.4%	1.3%	1.9%	2.9%	0.7%	-0.3%	2.3%
GDP Growth	2.1%	3.1%	1.1%	2.9%	3.5%	2.5%	3.5%	3.2%
Manufacturing Capacity Utilization	75.7%	76.4%	77.0%	76.9%	76.4%	76.1%	75.8%	74.9%
Consumer Sentiment Index (1966=100)	98.4	94.5	98.2	98.1	98.3	98.9	98.4	95.1

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan

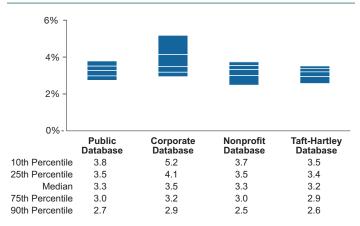
^{*} Estimated figure provided by IHS Markit

Big Focus on Possible Correction, Future Action by Fed

INSTITUTIONAL INVESTORS

- Institutional investors, as measured by the Callan Total Fund Sponsor Database Group, gained 3.3% in the second quarter, with corporate plans faring best (+3.5%). Those results compare to the 4.0% gain of a quarterly rebalanced benchmark composed of 60% S&P 500/40% Bloomberg Barclays US Aggregate.
- Over the last 15 years, corporate plans (+6.9%) have fared the best, followed by nonprofits, public plans, and Taft-Hartley plans. Over that same period, the 60-40 index has seen a gain of 7.2%, annualized. Larger institutional investors have tended to do better than smaller ones over that time period, with the exception of Taft-Hartley plans; investors with more than \$1 billion in assets gained 7.0% over the 15-year period, followed by 6.7% for medium investors (\$100 million-\$1 billion), and 6.6% for small plans (under \$100 million).
- For institutional investors, strategic allocation decisions are focused on the anticipation of a market correction, volatility, and their desires to seek additional diversification opportunities. As a result, investors are re-evaluating the purpose and implementation of asset classes including real assets, hedge funds and liquid alternatives, fixed income, and equity.

Quarterly Returns, Callan Database Groups



Source: Callan

Increasingly, investors are focused on the disparity of performance between growth and value. As value continues to underperform, investors are wondering if "value is dead." They are also questioning whether there is any hope for active management. Will its promise to protect in a downturn be fulfilled?

Callan Database Median and Index Returns* for Periods ended June 30, 2019

Database Group	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Public Database	3.27	6.19	8.91	5.96	9.20	6.74
Corporate Database	3.48	7.26	8.21	5.96	9.24	6.85
Nonprofit Database	3.32	5.78	9.11	5.62	9.06	6.76
Taft-Hartley Database	3.20	6.34	9.03	6.54	9.42	6.67
All Institutional Investors	3.32	6.31	8.85	5.97	9.24	6.75
Large (>\$1 billion)	3.24	6.35	9.03	6.17	9.39	7.04
Medium (\$100mm - \$1bn)	3.31	6.43	8.84	6.04	9.28	6.71
Small (<\$100 million)	3.34	6.20	8.76	5.73	9.03	6.59

^{*}Returns less than one year are not annualized.

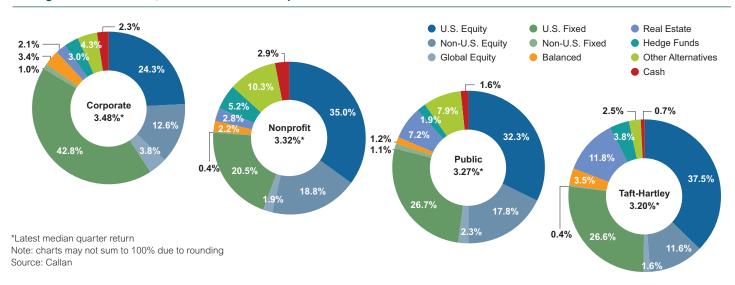
Source: Callan. Callan's database includes the following groups: public defined benefit, corporate defined benefit, nonprofits, and Taft-Hartley plans. Approximately 10% to 15% of the database constituents are Callan's clients. All database group returns presented gross of fees. Past performance is no guarantee of future results. Reference to or inclusion in this report of any product, service, or entity should not be construed as a recommendation, approval, affiliation, or endorsement of such product, service, or entity by Callan.

INSTITUTIONAL INVESTORS (Continued)

- Plans continue to retain a strong tilt toward growth assets (at least 70% and as high as 90%). Many investors said they employ such a tilt to meet funding requirements. This has coincided with a refined definition of growth to include high yield, convertibles, low-volatility equity, hedge funds, MACs, and option-based strategies.
- Callan has consulted on a surge in asset-liability studies, with substantial changes to many policy portfolios. The focus is on de-risking (less equity) and risk mitigation (diversification and implementation), but dissatisfaction remains with hedge funds, risk premia, and absolute return products.
- In the current capital market environment, investors are focused on how long the expansion will continue. They are also examining how the reversal in Fed policy changes the landscape. Equity markets cheered, but doesn't accommodation imply leaner times ahead? And while LDI pays off when rates fall, lower rates can wreak havoc with liabilitydriven investing glidepaths.

- In discussions of asset class structures, investors are examining the role of fixed income in a total return portfolio: Is pursuit of return a goal?
- The relentless cost pressure is driving passive implementation in all asset classes, particularly equity.
- Public plans are focused on the return from private markets, but they face mounting pressure to control costs. One approach is the "bar-belled" pursuit of active in private markets and alternatives, and all passive in equity, more passive in fixed, and cheaper liquid alternatives with "passive" exposures to betas and factors.
- Liquidity needs are top of mind for public plans looking to increase private investments in pursuit of a growth engine aside from public equity.
- Corporate plans moving down de-risking glidepaths continue to reconsider their equity structures, moving to passive to control costs and attain broad beta exposure in the declining growth allocation.

Average Asset Allocation, Callan Database Groups



Equity

U.S. Equities

Markets continued to march upward, and U.S. equities neared record highs. Growth outpaced value, as the dovish stance of the Fed was a headwind for valuation-sensitive stocks. Small cap stocks lagged large caps, possibly from economic weakness.

Large Cap ► S&P 500: +4.3% | Russell 1000: +4.2%

- U.S. equity showed strong gains as market participants anticipated another round of monetary easing from the Fed.
- Financials (+8.0%) was the best-performing sector; Energy (-2.8%) was the only sector to experience negative returns over the quarter.
- Trade rhetoric weighed on U.S. stocks in May followed by a June rebound.
- Given the increase in risk appetite, cyclicals outperformed while defensive sectors such as Utilities underperformed.

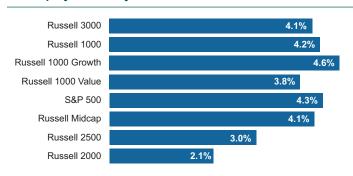
Small Cap ► Russell 2000: +2.1%

- Market conditions (e.g., more dovish Fed, strong U.S. dollar, trade tensions) should have benefited small cap companies, but did not.
- A slowing economy may explain weakness for small caps.
 Large caps tend to have stronger balance sheets and are more capable of weathering downturns.

Growth vs. Value ► Russell 1000 Growth: +4.6% | Russell 1000 Value: +3.8%

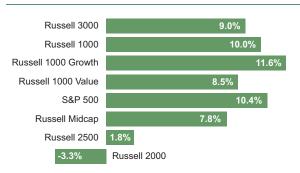
 Value factors (P/B, P/E trailing, yield) were mixed; growth factors (EPS growth, sales growth) were positive.

U.S. Equity: Quarterly Returns



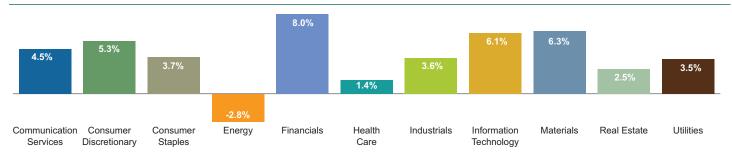
Sources: FTSE Russell and Standard & Poor's

U.S. Equity: One-Year Returns



Sources: FTSE Russell and Standard & Poor's

Quarterly Performance of Industry Sectors



Source: Standard & Poor's

Non-U.S./Global Equities

Global equity markets were largely positive in the second quarter although investor sentiment was fairly muted as both U.S./China tariff fatigue and Brexit uncertainty continued. Some non-U.S. markets benefited from a weakening U.S. dollar relative to local currencies. Global equities were boosted by dovish central bank commentary that led to lower interest rates around the globe.

Developed ► MSCI EAFE: +3.7% | MSCI ACWI ex USA: +3.0% | MSCI Europe: +4.5% | MSCI Japan: +1.0%

- Developed markets rallied as central banks around the world expressed more accommodative paths with interest rates and quantitative easing.
- U.K. equities finished the quarter slightly up (+0.9%) as Brexit uncertainty continues. Prime Minister Theresa May announced her resignation during the quarter.
- Relative to other non-U.S. developed markets, Europe had a strong quarter fueled by robust returns from Germany, France, and Switzerland (30% combined weight), which benefited from declining bond yields.
- EAFE sector performance was positive across the board with the exception of real estate. Cyclicals drove the majority of returns as these are highly correlated with U.S. cyclicals, which benefited from declining interest rates.
- Factor performance in non-U.S. developed markets favored growth over value, large caps over small caps, and cyclicals over defensives.

Emerging Markets ► *MSCI Emerging Markets Index:* +0.6%

- Emerging market returns were lackluster although, regionally, returns were bar-belled as many Asian countries were held back by trade concerns while EM ex-Asia tended to perform well. Russia (+16.9%) performed strongly with the help of the ruble appreciating by 4.2% relative to the U.S. dollar. Brazil (+7.2%) was also a top contributor due to the initial success of keeping pension reforms on track. China (-4.0%) faltered on tariff concerns.
- Argentina (+31.7%) was the top country performer, aided by the announcement of its inclusion in the MSCI Emerging Markets Index at the end of May (eight stocks in total).

The MSCI EM Value Index outperformed the MSCI EM **Growth Index** as many growth-oriented sector and country returns were impacted by trade disputes.

Non-U.S. Small Cap ► MSCI World ex USA Small Cap: +1.8% | MSCI EM Small Cap: +1.0%

Non-U.S. small caps lagged large caps as investors preferred lower earnings risk and higher earnings momentum. Emerging market small caps lagged large caps as investors searched for a combination of lower volatility and higher growth that was absent in smaller companies as tariff uncertainty persisted.

Non-U.S. Equity: Quarterly Returns (U.S. Dollar)



Non-U.S. Equity: One-Year Returns

(U.S. Dollar)



Source: MSCI

Fixed Income

U.S. Fixed Income

U.S. economic data continued to be mixed as a strong labor market and rising personal income offset waning business confidence and declining industrial production. The Federal Reserve's dovish statements and announced policy objective to "sustain the expansion" caused risk assets and U.S. Treasury yields to rally. Uncertainty surrounding trade policy and muted inflation data provided the Fed with additional cover for its rationale to potentially cut rates later this year.

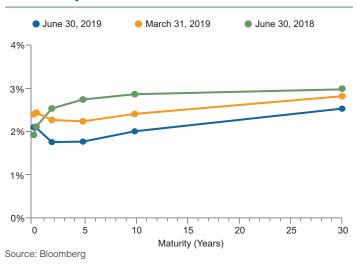
Core Fixed Income ► Bloomberg Barclays US Agg: +3.1%

- U.S. Treasuries gained 3.0% as the U.S. Treasury yield curve shifted lower across maturities, most dramatically at the 2-year key rate, as traders priced in expectations for the Fed to pre-emptively ease in order to boost domestic economic growth.
- The overall shape of the yield curve did not materially change during the quarter. The yield differential between the 10-year and 2-year key rates remained positive and widened 11 basis points during the quarter to close at 25 bps. However, the front-end of the curve remained inverted, with the 5-year offering roughly the same yield as the 2-year key rate.
- Nominal Treasuries outperformed TIPS as inflation expectations fell; the 10-year breakeven spread was only 1.69% as of guarter-end versus 1.88% at the end of the first guarter.

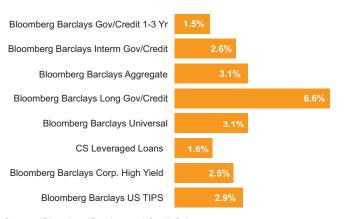
Investment-Grade Corporates ► Bloomberg Barclays Corporate (Inv. Grade): +4.5%

- Credit spreads rallied on the back of dovish Fed policy.
- Gross new corporate supply this quarter was \$290.5 billion, which was 14% lower than a year ago. Year-to-date supply was 18% lower than in the first half of 2018. New issuance favored the 6-12 year maturities relative to last year.
- AAA-rated corporates (+5.0%) were the best performers in absolute return terms. BBB-rated lagged AAA by 18 bps, but posted a positive excess return over the index (+1.4%).

U.S. Treasury Yield Curves

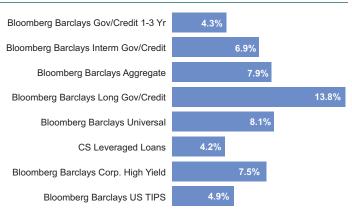


U.S. Fixed Income: Quarterly Returns



Sources: Bloomberg Barclays and Credit Suisse

U.S. Fixed Income: One-Year Returns



Sources: Bloomberg Barclays and Credit Suisse

FIXED INCOME (Continued)

High Yield ► Bloomberg Barclays Corporate HY: +2.5%

- High yield corporates posted positive results for the quarter, but lagged investment grade corporates on both absolute and excess returns. High yield gained 9.9% for the first half of 2019.
- Interest rate-sensitive BB-rated issues posted the highest return (+3.1%) while CCC-rated issues rose 0.3%.

Leveraged Loans ► CS Leveraged Loans: +1.6%

- Bank loans participated in the risk-on rally, but lagged both longer duration IG and HY corporates as interest rates declined.
- Retail outflows remain unabated as the Fed's dovish tone dampened enthusiasm for floating rate assets. New CLO issuance running ahead of expectations has also put technical pressure on the sector as investors absorbed the new float.
- Bank loans have less sensitivity to interest rates, but may have a similar spread duration profile to that of high yield bonds.

Non-U.S. Fixed Income

Global Fixed Income Bloomberg Barclays Global Aggregate: +3.3%

 Other developed market sovereign bonds rose in tandem with the rally in Treasuries and have pushed European sovereigns further into negative yields. The U.S. dollar depreciated modestly versus the euro and yen, but gained versus the U.K. pound.

Emerging Market Debt (\$US) ► JPM EMBI Global Diversified: +4.1% | (Local currency) ► JPM GBI-EM Global Diversified: +5.6%

- Most emerging market currencies appreciated against the U.S. dollar.
- Top performers included Russia (+10.4%) and Turkey (+10.1%), while Argentina was the worst performer (-5.0%), and one of the few countries to post a negative result this quarter.

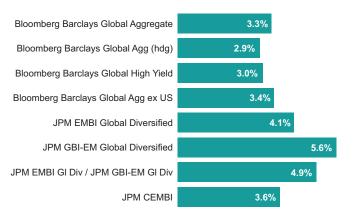
Change in 10-Year Global Government Bond Yields

1Q19 to 2Q19



Source: Bloomberg Barclays

Non-U.S. Fixed Income: Quarterly Returns



Sources: Bloomberg Barclays and JPMorgan Chase

Non-U.S. Fixed Income: One-Year Returns



Sources: Bloomberg Barclays and JPMorgan Chase

Real Estate Gains; Real Assets Mostly Fall

REAL ESTATE/REAL ASSETS | Munir Iman and Kristin Bradbury

Income Produces Bulk of Returns

- U.S. core real estate returns continue to be driven by income, with limited appreciation this late in the cycle.
- The NCREIF Property Index (NPI), a measure of U.S. institutional real estate assets, gained 1.5% during the second quarter. The income return was 1.1%, while appreciation contributed 0.4%.
- Industrial led property sector performance with a return of 3.4%. Retail finished last, falling 0.1%.
- Regionally, the West led with a 1.9% return, while the Midwest was the worst performer at 0.7%.
- The NCREIF Open-End Diversified Core Equity Index (value-weighted, net of fees), representing equity ownership positions in U.S. core real estate, generated a 0.8% total return during the second quarter, with income providing 0.8% and appreciation 0.0%.
- Defensive posturing is becoming more prevalent.

U.S. Real Estate Fundamentals Remain Healthy

- Steady returns continued, driven by above inflation-level rent growth in many metro areas.
- Within the NPI, the vacancy rate for U.S. offices was 9.8% in the second quarter, the lowest in over 12 years.
- Net operating income has been growing annually and is expected to be the primary return driver.

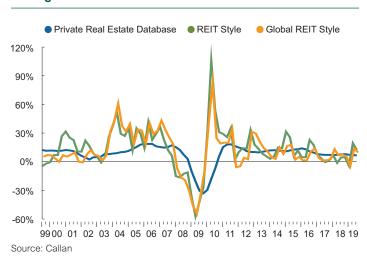
Pricing remains expensive in the U.S.

- Transaction volumes increased and remain robust.
- Cap rates fell slightly; market remains near full valuations

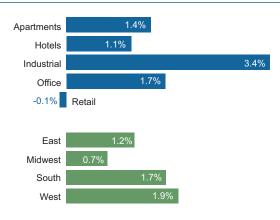
REITs underperformed global equities

- U.S. REITs advanced 1.2% in the second quarter, underperforming the S&P 500 Index, which rose 4.3%.
- Global REITs fell 0.1% in the second quarter compared to a 3.4% gain for global equities (MSCI ACWI IMI).
- Both U.S. and non-U.S. REITs are trading at NAV.
- Large cap REITs, especially those with lower debt levels, modestly underperformed.

Rolling One-Year Returns



Sector Quarterly Returns by Property Type and Region



Source: NCREIF

Non-U.S. Real Estate

Asia

- The growth of the middle class in Asia is steady and the demand for institutional quality real estate is commensurate.
- The number of open-end core funds focused on the Asia Pacific market has increased over recent years and includes both sector-diversified and sector-specific (e.g., logistics) funds, supporting the development of the institutional real estate market in the region. In the first half of the year, India had the first successful IPO for a REIT, which substantiates the institutionalization of the asset class in that country.

REAL ESTATE/REAL ASSETS (Continued)

Europe

- Political uncertainty continues to weigh on overall growth throughout Europe, but real estate fundamentals remain strong in key gateway markets given the continued lack of new supply. Cap rates for prime real estate remain low, as real estate continues to be an attractive asset class as a result of low interest rates throughout the region.
- Institutional interest and investment in multifamily properties keeps expanding, as housing prices continue to grow faster than incomes in major markets across Europe, and demand is supported by continued urbanization and migration to major cities in Europe.

Real Assets

- The **Bloomberg Commodity Index** fell 1.2% in the guarter.
- Both the Precious Metals and Agriculture commodity sectors were positive performers, driven by strong individual returns for gold as well as corn, wheat, and coffee.
- Meanwhile, the Livestock, Energy, and Industrial Metals commodity sectors all posted negative quarterly results.
- Oil pulled back but was roughly flat for the quarter, ending at \$58/barrel (West Texas intermediate).
- Natural gas within the Bloomberg Energy Sub-Index declined a precipitous 16.2%.
- MLPs (Alerian MLP Index: +0.1%) were flat.

NCREIF Capitalization Rates by Property Type



Source: NCREIF. Capitalization rates (net operating income / current market value (or sale price)) are appraisal-based.

NCREIF Transaction and Appraisal Capitalization Rates



Source: NCREIF

Note: Transaction capitalization rate is equal weighted.

Callan Database Median and Index Returns* for Periods ended June 30, 2019

Private Real Assets	Quarter	Year to Date	Year	3 Years	5 Years	10 Years	15 Years
Real Estate ODCE Style	1.55	3.12	6.53	7.15	9.51	9.07	6.79
NFI-ODCE (value wt net)	0.77	1.98	5.46	6.61	8.76	8.87	7.01
NCREIF Property	1.51	3.34	6.51	6.89	8.83	9.25	8.70
NCREIF Farmland	0.70	1.40	5.63	6.24	7.98	11.05	14.22
NCREIF Timberland	0.11	0.22	2.23	3.05	4.47	3.90	7.04
Public Real Estate							
Global Real Estate Style	1.20	16.17	9.66	6.17	6.54	12.22	8.56
FTSE EPRA Nareit Developed	-0.07	14.51	7.68	4.46	4.85	10.57	
Global ex-U.S. Real Estate Style	0.35	13.95	7.84	8.97	5.45	9.97	8.10
FTSE EPRA Nareit Dev ex US	-0.58	12.89	6.09	6.79	3.47	8.26	
U.S. REIT Style	2.06	19.28	12.11	5.17	8.60	16.15	9.90
EPRA Nareit Equity REITs	1.24	17.78	11.21	4.20	7.92	15.46	9.05

*Returns less than one year are not annualized.

Sources: Callan, FTSE Russell, NCREIF

Value Is in the Eye of the Beholder

PRIVATE EQUITY | Gary Robertson

Fundraising, company purchase prices, and IPOs increased in the second quarter. However, private M&A investment and exit measures were flat to markedly down. Average buyout company prices and leverage levels hit a record in 2019, tempering transaction activity. Private equity returns remained positive, despite the fourth quarter public equity sell-off.

- Fundraising

 Based on preliminary data, final closes for private equity partnerships in the second quarter totaled \$143 billion of commitments in 203 partnerships. (Unless otherwise noted, all data in this commentary come from PitchBook.) The dollar volumes rose 8% and the number of funds rose 25% from the first quarter. For the first half, 2019 is running \$99 billion or 21% behind a year ago. We expect that the second half of 2019 will be larger than the first half, as some large fundraises are slated to start in the fourth quarter, and sought-after general partners are closing new funds quickly.
- **Buyouts** ► New buyout transactions continued declining in the quarter. Funds closed 1,424 investments with \$97 billion in disclosed deal value, representing a 12% decline in count and a 9% dip in dollar value from the first guarter. Average buyout prices leaped to 11.2x EBITDA in 2019 versus 10.6x in 2018, providing a headwind for investment volume.
- VC Investments ► New rounds of financing in venture capital companies totaled 4,656, with \$55 billion of announced value. The number of investments was down

Funds Closed January 1 to June 30, 2019

Strategy	No. of Funds	Amt (\$mm)	Share
Venture Capital	159	30,984	11%
Growth Equity	95	142,750	52%
Buyouts	37	26,682	10%
Mezzanine Debt	25	41,150	15%
Distressed	6	9,840	4%
Energy	6	12,266	4%
Secondary and Other	23	8,690	3%
Fund-of-funds	14	4,371	2%
Totals	365	276,733	100%

Source: PitchBook (Figures may not total due to rounding.)

15% but announced value rose 10%. Venture prices generally rose during the quarter, particularly for larger laterstage investments.

- **Exits** ► There were 336 private M&A exits of private equitybacked companies, with disclosed values totaling \$80 billion. The private sale count fell 28% but the announced dollar volume rose 4%. There were 35 private equity-backed IPOs in the second quarter raising an aggregate \$15 billion, up 250% and 650%, respectively, from the first quarter.
- Venture-backed M&A exits totaled 290 transactions with disclosed value of \$20 billion. The number of sales declined 14% from the first guarter, and announced value fell 62%. There were 54 VC-backed IPOs in the second quarter with a combined float of \$54 billion; the count jumped 116% and the issuance ballooned 340% as unicorns such as Uber, Slack, and Pinterest made their public debuts.

Private Equity Performance Database (%) (Pooled Horizon IRRs through March 31, 2019*)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	5.71	19.54	13.70	14.32	14.38	11.37	15.71
Growth Equity	6.14	16.87	16.41	13.05	15.05	13.23	13.76
All Buyouts	4.52	10.65	15.56	12.25	15.63	13.78	12.23
Mezzanine	2.25	7.56	11.67	10.30	11.09	10.47	8.83
Distressed	2.28	4.65	9.89	6.31	16.26	9.70	10.24
All Private Equity	4.13	4.60	10.73	7.71	13.11	10.60	10.66
S&P 500	4.86	12.66	14.66	12.08	15.15	12.79	12.55

Note: Private equity returns are net of fees. Sources: Refinitiv/Cambridge and Standard & Poor's *Most recent data available at time of publication

Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of Capital Market Review and other Callan publications.

Continuing Rally Boosts Most Strategies

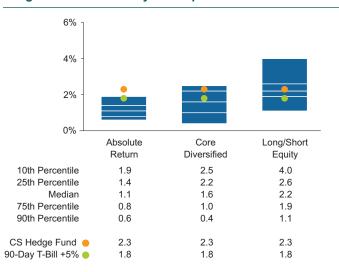
HEDGE FUNDS/MACs | Jim McKee

Top-Down Jumps Ahead; Bottom-Up Plods Forward

- Risk-on sentiment in equities and rates supported virtually all hedge fund strategies.
- Global Macro (+4.6%) and Managed Futures (+4.7%) led, supported by continuing trends/bets in the rates markets.
- Most relative value strategies slogged forward; Equity Market Neutral (-0.3%) slipped, indicating challenges with stock-specific risk factors.
- Long/Short Equity (+1.3%) lagged equities; Event-Driven Multi-Strategy (+2.9%) performed better with soft catalystdriven stocks continuing to rebound from the fourth guarter sell-off.
- Risk Arb (+0.7%) and Distressed (+1.5%) edged ahead with their process-driven or hard-catalyst trades.
- Hedge fund portfolios with more exposure to macro or long-biased strategies beat absolute return, particularly those trading equity fundamentals without beta exposure.

The median manager in the Callan Hedge Fund-of-Funds Database Group, net of fees, gained 1.9% in the second quarter. Within that broad grouping, the Long/Short Equity FOF Style Group (+2.2%) saw the biggest increase, followed by Core Diversified (+1.6%) and Absolute Return (+1.1%).

Hedge Fund-of-Funds Style Group Returns



Sources: Callan, Credit Suisse, and Federal Reserve

Callan Database Median and Index Returns* for Periods ended June 30, 2019

Hedge Fund Universe	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Callan Fund-of-Funds Database	1.85	5.06	2.69	5.14	4.59	4.59
Callan Absolute Return FOF Style	1.13	4.42	2.84	5.00	4.00	4.00
Callan Core Diversified FOF Style	1.56	4.52	2.16	4.95	4.61	4.61
Callan Long/Short Equity FOF Style	2.17	6.76	3.46	5.52	5.47	5.47
Credit Suisse Hedge Fund	2.35	4.34	2.36	5.03	5.01	5.01
CS Convertible Arbitrage	1.25	3.99	2.18	5.68	3.81	3.81
CS Distressed	1.52	5.23	1.22	5.82	5.63	5.63
CS Emerging Markets	1.41	6.19	4.08	5.73	6.57	6.57
CS Equity Market Neutral	-0.25	1.39	0.31	1.73	-0.26	-0.26
CS Event-Driven Multi	2.86	4.82	-0.09	4.19	5.20	5.20
CS Fixed Income Arb	1.21	5.19	3.36	6.55	3.78	3.78
CS Global Macro	4.55	4.81	3.01	5.23	6.26	6.26
CS Long/Short Equity	1.25	5.46	3.39	5.66	5.80	5.80
CS Managed Futures	4.73	-1.65	2.50	1.57	3.23	3.23
CS Multi-Strategy	2.11	4.87	4.45	6.93	5.95	5.95
CS Risk Arbitrage	0.70	3.89	2.04	3.03	3.74	3.74
HFRI Asset Wtd Composite	2.12	5.15	3.00	5.15		
90-Day T-Bill + 5%	1.84	6.38	5.87	5.49	6.38	6.38

*Gross of fees. Sources: Bloomberg Barclays, Callan, Credit Suisse, Hedge Fund Research, Societe Generale, and Standard & Poor's

Continuing Rally Lifts Long-Biased MACs; Risk Premia **Languished Again**

- HFR Risk Parity Index targeting 12% volatility gained 4.9%, propelled by rising stock and bond markets, amplified by portfolio leverage.
- Across these risk premia represented by HFR's Risk Premia indexes, Rates Momentum (+18.6%) benefited from global yields continuing their slide. Negative effects from other risk premia, especially in equities and commodities, dragged down overall performance.
- The Callan Multi-Asset Class (MAC) Database Group increased 2.3% in the guarter. Within that group, the Risk Parity MAC Style Group rose 4.6%, followed by Long Biased (+2.6%) and Absolute Return (+1.8%). Risk Premia fell 1.3%.

Volatility Settles Down Again with Risk-On Sentiment

- Markets are discounting continued growth with lower expected rates priced into valuations.
- If hard economic data does not confirm the market's buoyant sentiment, hedge funds are well positioned defensively for a downturn.
- Without a sustained pick-up in volatility, hedge funds are likely to lag.

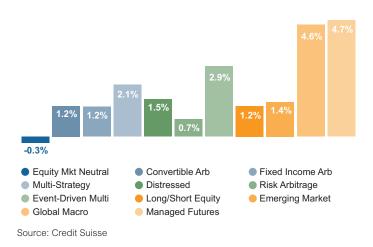
Flat Yield Curve Continues to Level Playing Field

- While both long and short rates settled to lower levels, today's positive short-term rates are still providing support to hedge funds on cash holdings and short interest rebates.
- If the Fed lowers rates aggressively from here due to weakening economic growth, fixed income and diversifying strategies of "hedged" funds will likely benefit at the expense of equities suffering from lowered earnings expectations.

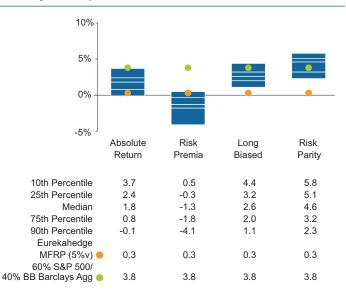
Economic Divergence Creates More Opportunity

Global macro tensions can lead to more fundamental and technical imbalances for hedge funds to trade.

Credit Suisse Hedge Fund Strategy Returns



MAC Style Group Returns



Sources: Bloomberg Barclays, Callan, Euredahedge, Standard & Poor's

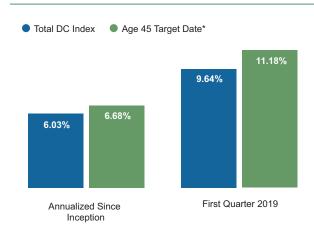
Returns, Inflows Both Rebound for DC Index

DEFINED CONTRIBUTION | Patrick Wisdom

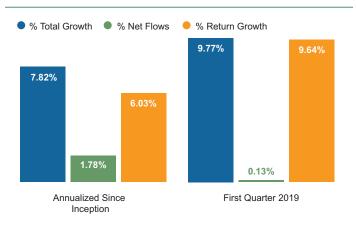
- After a rough finish to 2018, the Callan DC Index™ rebounded in the first quarter of 2019, gaining 9.6%. The Age 45 Target Date Fund posted even stronger results, gaining 11.2%, largely attributable to the Age 45 TDF's higher equity allocation (78% vs. 69%).
- After two quarters of negative flows, strong investment results and cash flows led to sizeable growth in balances in the first quarter, a reversal from two consecutive quarters of negative flows. The 9.8% total gain in market value for the quarter marked the highest since the first quarter of 2012 (9.9%).
- After an aberration in the fourth quarter, target date funds saw the largest inflows in the first quarter. Moreover, stable value experienced relatively large outflows after having the largest inflows the previous quarter. Despite strong equity gains in the first quarter, both U.S. and non-U.S. equity saw large outflows. At the same time, U.S. fixed and money market funds experienced relatively large inflows, perhaps indicating a shift toward safer securities within the core lineup.
- First guarter turnover (i.e., net transfer activity levels within DC plans) increased slightly to 0.48% from the previous quarter's 0.41%.
- After equities rebounded in the first quarter, the share of equity rose to 69.5% from 68.8% the previous quarter.
- Target date funds ended the quarter with 30% of assets, down from 33% the previous guarter. Among asset classes that increased, U.S. large cap (25%) and U.S./global balanced (7%) were up roughly 1 percentage point.
- Stable value's prevalence within DC plans rose for the sixth consecutive quarter and is now at 76%. Additionally, more plans are now offering emerging market equity (18%) as an option compared to the previous quarter.

The Callan DC Index is an equally weighted index tracking the cash flows and performance of nearly 90 plans, representing more than one million DC participants and over \$150 billion in assets. The Index is updated quarterly and is available on Callan's website, as is the quarterly DC Observer newsletter.

Investment Performance



Growth Sources



Net Cash Flow Analysis (First Quarter 2019)

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	73.22%
U.S. Fixed Income	21.27%
U.S./Global Balanced	-16.65%
U.S. Large Cap	-24.86%
Total Turnover**	0.48%

Data provided here is the most recent available at time of publication. Source: Callan DC Index

Note: DC Index inception date is January 2006.

- * The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.
- ** Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.



2nd Quarter 2019

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 to see all of our publications, and www.callan.com/blog to view our blog "Perspectives." For more information contact Barb Gerraty at 415-274-3093 / 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



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 latestage venture capital are growth-oriented but differ sig-

nificantly in the types of companies they invest in, the structure of their investments, the way in which they create value, and the tradeoffs 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.

<u>Opening Doors of Opportunity</u> | This paper reviews the types of co-investment opportunities offered by hedge funds and funds-offunds (FOFs).

Quarterly Periodicals

<u>Private Equity Trends</u> | 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.

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

<u>Capital Market Review</u> | 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/

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.

For more information about events, please contact Barb Gerraty: 415-274-3093 / 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

525 Attendee

Education: By the Numbers

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

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 1000 Growth measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 1000 Value measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

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 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.

Russell 3000 Index is a composite of 3,000 of the largest U.S. companies by market capitalization. The smallest company's market capitalization is roughly \$20 million and the largest is \$72.5 billion. The index is capitalization-weighted.

Russell Mid Cap Growth measures the performance of those Russell Mid Cap Companies with higher price-to-book ratios and higher forecasted growth values. The stocks are also members of the Russell 1000 Growth Index.

Russell MidCap Value Index The Russell MidCap Value index contains those Russell MidCap securities with a less than average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratio, higher dividend yields and lower forecasted growth values than the Growth universe.

Standard & Poor's 500 Equal-Weighted Index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industires. The stocks are weighted equally within the index.

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.



Fixed Income Market Indicators

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.



International Equity Market Indicators

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.



Real Estate Market Indicators

NCREIF Open Ended Diversified Core Equity The NFI-ODCE is an equally-weighted, net of fee, time-weighted return index with an inception date of December 31, 1977. Equally-weighting the funds shows what the results would be if all funds were treated equally, regardless of size. Open-end Funds are generally defined as infinite-life vehicles consisting of multiple investors who have the ability to enter or exit the fund on a periodic basis, subject to contribution and/or redemption requests, thereby providing a degree of potential investment liquidity. The term Diversified Core Equity style typically reflects lower risk investment strategies utilizing low leverage and generally represented by equity ownership positions in stable U.S. operating properties.



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 Equity - Mutual funds whose portfolio holdings and characteristics are similar to that of the broader market as represented by the Standard & Poor's 500 Index, with the objective of adding value over and above the index, typically from sector or issue selection. The core portfolio exhibits similar risk characteristics to the broad market as measured by low residual risk with Beta and R-Squared close to 1.00.

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.

Large Cap Growth - Mutual Funds that invest mainly in large companies that are expected to have above average prospects for long-term growth in earnings and profitability. Future growth prospects take precedence over valuation levels in the stock selection process. Invests in companies with P/E ratios, Price-to-Book values, Return-on-Assets values, Growth-in-Earnings values above the broader market. The companies typically have zero dividends or dividend yields below the broader market. Invests in securities which exhibit greater volatility than the broader market as measured by the securities' Beta and Standard Deviation.

Large Cap Value - Mutual funds that invest in predominantly large capitalization companies believed to be currently undervalued in the general market. The companies are expected to have a near-term earnings rebound and eventual realization of expected value. Valuation issues take precedence over near-term earnings prospects in the stock selection process. Invests in companies with P/E rations and Price-to-Book values below the broader market. Usually exhibits lower risk than the broader market as measured by the Beta and Standard Deviation.

Non-U.S. Equity A broad array of active managers who employ various strategies to invest assets in a well-diversified portfolio of non-U.S. equity securities. This group consists of all Core, Core Plus, Growth, and Value international products, as well as products using various mixtures of these strategies. Region-specific, index, emerging market, or small cap products are excluded.

Non-U.S. Equity Style Mutual Funds - Mutual funds that invest their assets only in non-U.S. equity securities but exclude regional and index funds.

Small Capitalization (Growth) - Mutual funds that invest in small capitalization companies that are expected to have above average prospects for long-term growth in earnings and profitability. Future growth prospects take precedence over valuation levels in the stock selection process. Invests in companies with P/E ratios, Price-to-Book values, and Growth-in-Earnings values above the broader market as well as the small capitalization market segment. The companies typically have zero dividends or dividend yields below the broader market. The securities exhibit greater volatility than the broader market as well as the small capitalization market segment as measured by the risk statistics beta and standard deviation.



Callan Databases

Small Capitalization (Value) - Mutual funds that invest in small capitalization companies that are believed to be currently undervalued in the general market. Valuation issues take precedence over near-term earnings prospects in the stock selection process. The companies are expected to have a near-term earnings rebound and eventual realization of expected value. Invests in companies with P/E ratios, Return-on-Equity values, and Price-to-Book values below the broader market as well as the small capitalization market segment. The companies typically have dividend yields in the high range for the small capitalization market. Invests in securities with risk/reward profiles in the lower risk range of the small capitalization market.

Fixed Income Funds

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

Core Bond - Mutual Funds that construct portfolios to approximate the investment results of the Bloomberg Barclays Capital Government/Credit Bond Index or the Bloomberg Barclays Capital Aggregate Bond Index with a modest amount of variability in duration around the index. The objective is to achieve value added from sector and/or issue selection.

Core Bond - Managers who construct portfolios to approximate the investment results of the Bloomberg Barclays Capital Government/Credit Bond Index or the Bloomberg Barclays Capital Aggregate Bond Index with a modest amount of variability in duration around the index. The objective is to achieve value added from sector and/or issue selection.

Core Plus Bond - Active managers whose objective is to add value by tactically allocating significant portions of their portfolios among non-benchmark sectors (e.g. high yield corporate, non-US\$ bonds, etc.) while maintaining majority exposure similar to the broad market.

Real Estate Funds

Real estate funds consist of open or closed-end commingled funds. The returns are net of fees and represent the overall performance of commingled institutional capital invested in real estate properties.

Real Estate Open-End Commingled Funds - The Open-End Funds Database consists of all open-end commingled real estate funds.

Other Funds

Public - Total - consists of return and asset allocation information for public pension funds at the city, county and state level. The database is made up of Callan clients and non-clients.



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

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

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

OFI Global Asset Management

P/E Investments

Osterweis Capital Management, LLC