

Investment Performance Review  
Period Ending June 30, 2019

## City of Eustis Firefighters' Pension Fund

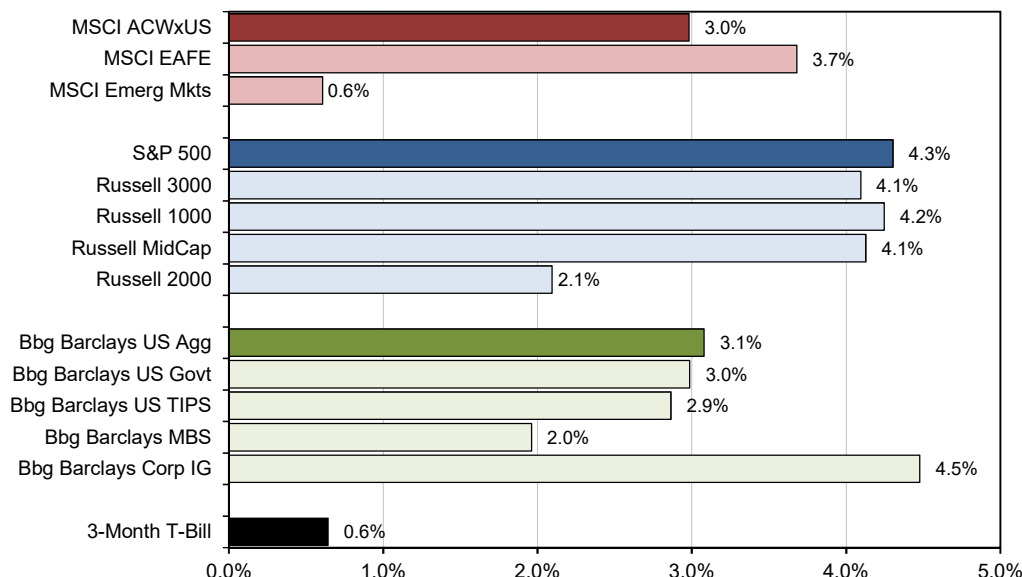
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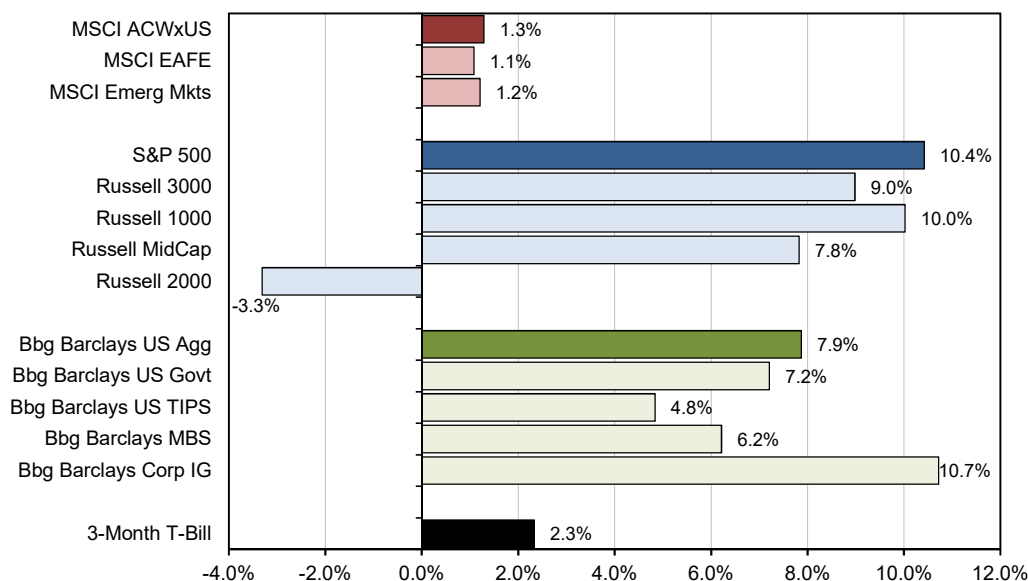
## **2nd Quarter 2019 Market Environment**

- Broad asset class returns were positive during the 2nd quarter of 2019 with both equity and fixed income indices extending their year-to-date gains. US stocks outperformed international stocks during a very volatile quarter. Equity indices rose to start the period as progress in global trade negotiations outweighed signs of weakness in macroeconomic data. However, trade discussions between the US and China fell apart in May prompting increased tariffs and sharp declines in equity markets. The softening in economic data, stubbornly low inflation and the threat of slower future growth caused by ongoing disruption in trade led the Federal Reserve (Fed) to communicate a shift toward a more accommodative policy stance. This change in central bank posture caused markets to rebound strongly, ending the quarter higher for the period. Fixed income returns were also positive during the quarter as the prospect of more accommodative monetary policy pushed interest rates lower, increasing bond prices. Within domestic equity markets, large cap stocks outperformed small cap equities during the quarter with the S&P 500 Index returning 4.3% versus a 2.1% return on the small cap Russell 2000 Index. US equity returns over the 1-year period were positive within large and mid cap stocks, returning 10.4% and 7.8% respectively, but small cap stocks posted a loss, falling -3.3%.
- Similar to US markets, international markets were volatile during the 2nd quarter as investors reacted to mixed economic data, heightened geopolitical uncertainty, particularly around the outlook for global trade and Brexit, and increased accommodation in central bank policy with the European Central Bank (ECB) and People's Bank of China (PBoC) pledging additional stimulus if needed. Developed markets outperformed emerging markets during the period with the MSCI EAFE Index returning 3.7% versus a 0.6% return on the MSCI Emerging Markets Index. Both developing and emerging markets posted modest gains over the 1-year period, returning 1.1% and 1.2% respectively.
- Fixed income returns were in line with equities during the 2nd quarter. The broad market Bloomberg Barclays Aggregate Index returned 3.1% as a more dovish stance from the Fed and other global central banks pushed interest rates lower across the US Treasury Yield Curve. The curve steepened but remained inverted with shorter-term maturities paying higher interest rates than those in the middle of the curve. Investment grade corporate issues were the best performing securities for the second quarter in a row, outperforming Treasury and securitized issues. The Bloomberg Barclays Corporate IG Index returned 4.5% for the period, as corporate credit had tailwinds due to greater interest rate sensitivity, higher yields and tightening credit spreads. Corporate issues also outperformed the other major fixed income sectors over the 1-year period, returning 10.7% versus a 7.9% return for the Bloomberg Barclays Aggregate Index.

### Quarter Performance

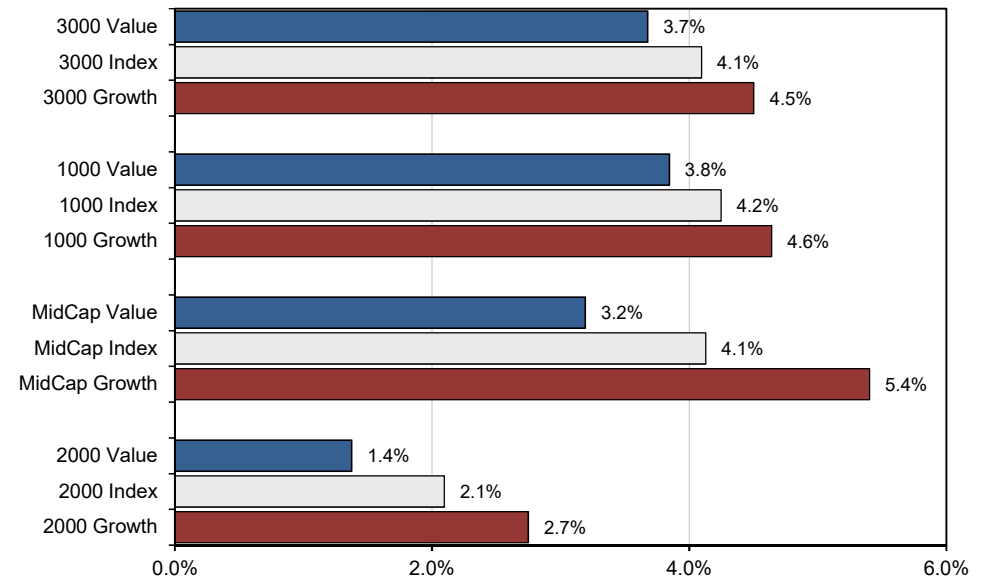


### 1-Year Performance

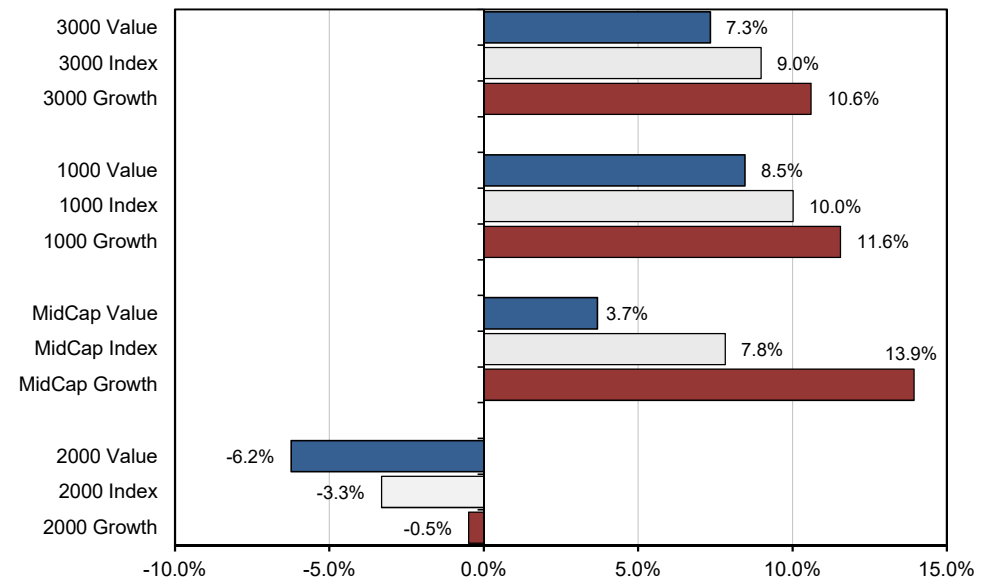


- US equity index returns were modestly positive across the style and capitalization spectrum for the 2nd quarter. Corporate earnings reported during the quarter surprised to the upside, but economic data released during the period showed signs of slowing growth. Developments around global trade were particularly prominent during the period, heavily influencing market sentiment. Positive developments in trade negotiations with China came to an abrupt halt in May leading the US to increase tariffs on \$200 billion of Chinese imports from 10% to 25% and announce that the US would consider tariffs on the remaining \$300 billion in goods imported from China. China retaliated by increasing the tariff range on \$60 billion of US goods from 5-10% to 5-25%. Additionally, the US instituted a ban on sales of technology equipment to Chinese telecommunications firm Huawei citing national security risks. China is expected to take similar action in retaliation although nothing has been announced. Trade talks are ready to resume and both sides have agreed to cease escalations following a meeting between President Trump and President Jinping at the G20 summit held at the end of the quarter. In addition, President Trump threatened a 5% tariff on all Mexican imports as a tact to reduce the level of illegal immigration at the US border with Mexico, and US waivers on sanctions for Iranian oil ended leading to increased tensions in the region that were further escalated after Iran downed a US drone. Despite these headwinds, markets rose following comments from an increasingly accommodative Fed as investors priced in greater odds of easy monetary policy going forward.
- During the quarter, higher market cap stocks outperformed lower market cap stocks across the style spectrum with the only exception being the outperformance of mid cap growth stocks relative to large cap growth stocks. The large cap Russell 1000 Index gained 4.2% during the period versus a 4.1% return for the Russell MidCap Index and a 2.1% gain on the small cap Russell 2000 Index as market participants may be moving toward the relative safety of large cap names as the economy continues to show growing signs of weakness. When viewed over the most recent 1-year period, large cap stocks outperformed relative to small cap stocks. The Russell 1000 returned 10.0% for the year while the Russell 2000 fell -3.3%.
- Growth indices outperformed value indices across the market cap spectrum during the 2nd quarter. Growth stocks have outperformed value in nine of the last ten quarters. The Russell MidCap Growth Index was the best performing style index for the period, returning 5.4% for the quarter with the small cap value index posting the lowest relative return, a gain of 1.4%. The trend of growth outperformance is also visible over the 1-year period as growth indices have benefitted from larger exposures to technology which has been a large driver of index performance over the last year, as well as a meaningful underweight to energy which has been a relative detractor.

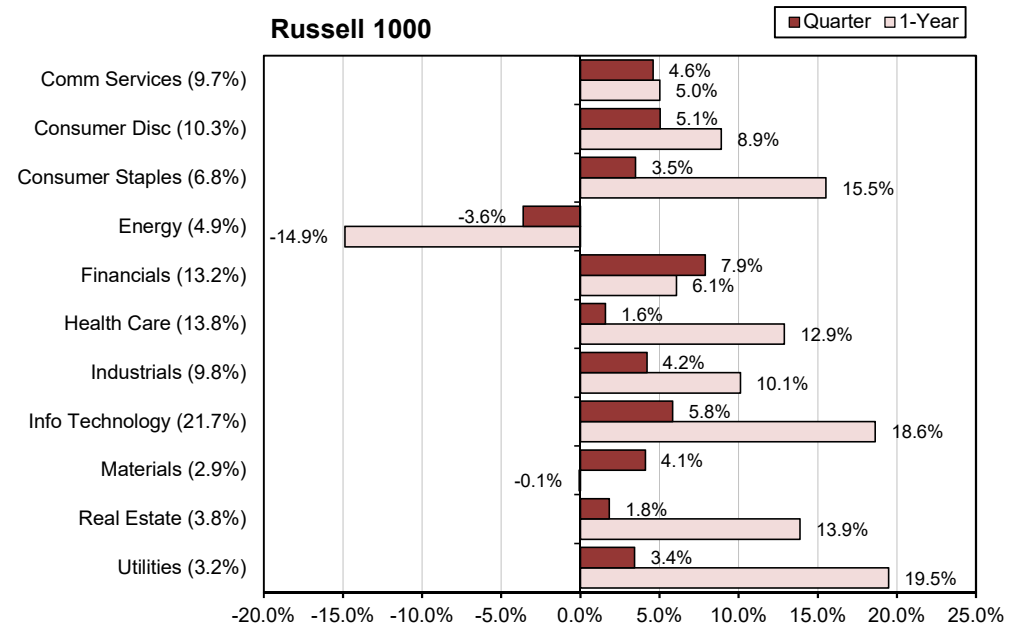
#### Quarter Performance - Russell Style Series



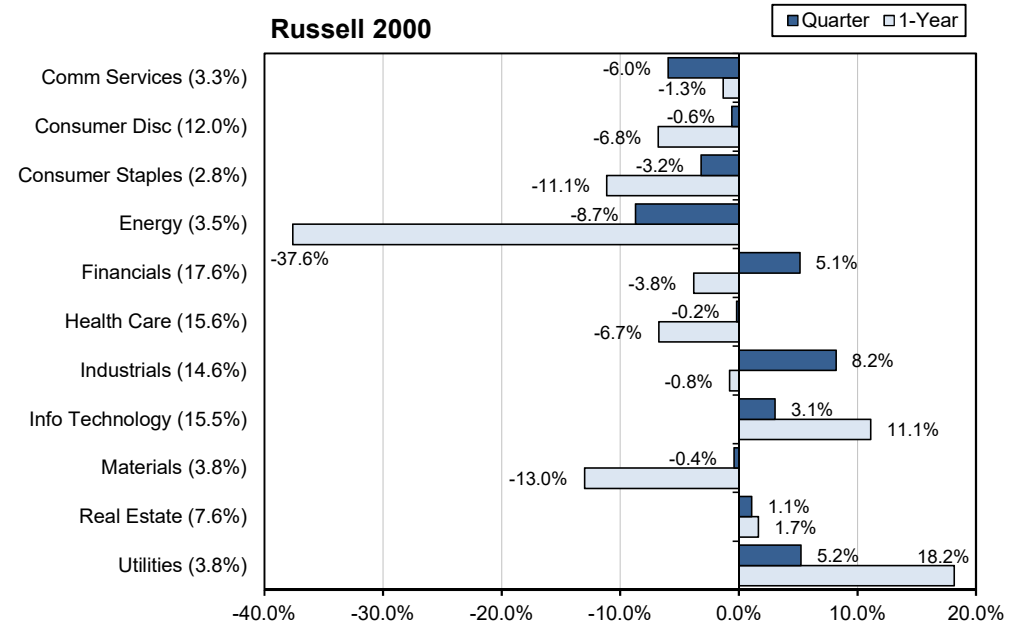
#### 1-Year Performance - Russell Style Series



- Sector performance was broadly positive across large cap sectors for the 2nd quarter. There were gains for ten out of eleven sectors within the Russell 1000 Index during the period with four sectors outpacing the return of the index. Cyclical sectors such as technology, industrials and consumer discretionary were some of the best performers through the quarter returning 5.8%, 4.2% and 5.1% respectively. Financials also outperformed, returning 7.9%, as investors weighed the benefits of continued economic expansion due to easing monetary policy against the effects of lower interest rates on bank earnings. More defensive higher yielding sectors such as consumer staples, real estate and utilities underperformed for the quarter returning 3.5%, 1.8% and 3.4% respectively. The energy sector was the only large cap sector to post a negative return during the quarter, falling -3.6%, as headwinds from weakening economic data and low oil and natural gas prices weighed on 1st quarter earnings. Health care stocks also lagged as continued discussions in Washington around the potential for increased regulation on drug pricing acted as a headwind. Returns over the 1-year period were positive with nine out of eleven sectors posting gains, six of which were over 10%. Defensive sectors such as utilities, REITs and consumer staples performed well returning 19.5%, 13.9% and 15.5% respectively. Technology returns were also strong gaining 18.6%. Energy and materials were the only sectors to post negative results over the 1-year period with energy falling -14.9% and materials returning -0.1%.



- Quarterly results for small cap sectors were generally worse than their large capitalization counterparts with only two of eleven sectors (industrials and utilities) outperforming their corresponding large cap equivalents. Five of eleven sectors produced gains during the period with four of eleven economic sectors outpacing the Russell 2000 Index return for the quarter. Similar to large caps, cyclical sectors performed well on hopes that any Fed policy easing would counteract the recent weakness in economic growth. The industrials sector performed particularly well returning 8.2%, financials posted a 5.1% gain and technology returned 3.1%. Utilities also outperformed returning 5.2%. The largest detractors over the period were energy and communication services which returned -8.7% and -6.0% respectively. Over the trailing 1-year period, returns were broadly negative. Utilities and technology were relative bright spots returning 18.2% and 11.1%. The energy sector was an outlier in terms of negative returns losing -37.6% during the period. There were also notable losses in materials and consumer staples with materials losing -13.0% and consumer staples falling -11.1%.



**The Market Environment**  
**Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000**  
As of June 30, 2019

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Microsoft Corp	3.71%	14.0%	37.5%	Information Technology
Apple Inc	3.44%	4.6%	8.6%	Information Technology
Amazon.com Inc	2.85%	6.3%	11.4%	Consumer Discretionary
Facebook Inc A	1.68%	15.8%	-0.7%	Communication Services
Berkshire Hathaway Inc B	1.51%	6.1%	14.2%	Financials
Johnson & Johnson	1.37%	0.3%	17.9%	Health Care
JPMorgan Chase & Co	1.35%	11.3%	10.3%	Financials
Alphabet Inc Class C	1.20%	-7.9%	-3.1%	Communication Services
Exxon Mobil Corp	1.19%	-4.1%	-3.3%	Energy
Alphabet Inc A	1.18%	-8.0%	-4.1%	Communication Services

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Adient PLC	0.01%	87.3%	-50.0%	Consumer Discretionary
Anadarko Petroleum Corp	0.13%	55.8%	-1.6%	Energy
Cypress Semiconductor Corp	0.03%	49.8%	46.9%	Information Technology
Okta Inc A	0.04%	49.3%	145.2%	Information Technology
Erie Indemnity Co Class A	0.02%	43.2%	122.5%	Financials
Heico Corp	0.02%	41.1%	83.9%	Industrials
Legg Mason Inc-LeggMason RETAIL	0.01%	39.9%	14.4%	Financials
Exact Sciences Corp	0.05%	36.3%	97.4%	Health Care
Caesars Entertainment Corp	0.02%	36.0%	10.5%	Consumer Discretionary
Ardagh Group SA	0.00%	35.9%	9.6%	Materials

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
2U Inc	0.01%	-46.9%	-55.0%	Information Technology
Alkermes PLC	0.01%	-38.2%	-45.2%	Health Care
Range Resources Corp	0.01%	-37.7%	-58.0%	Energy
Antero Resources Corp	0.00%	-37.4%	-74.1%	Energy
Chesapeake Energy Corp	0.01%	-37.1%	-62.8%	Energy
RPC Inc	0.00%	-36.5%	-48.8%	Energy
Realogy Holdings Corp	0.00%	-35.8%	-67.4%	Real Estate
The Chemours Co	0.02%	-34.7%	-44.2%	Materials
United Therapeutics Corp	0.01%	-33.5%	-31.0%	Health Care
Mylan NV	0.04%	-32.8%	-47.3%	Health Care

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Array BioPharma Inc	0.48%	90.0%	176.1%	Health Care
The Trade Desk Inc A	0.37%	15.1%	142.8%	Information Technology
Etsy Inc	0.36%	-8.7%	45.5%	Consumer Discretionary
Coupa Software Inc	0.35%	39.2%	103.4%	Information Technology
Five Below Inc	0.32%	-3.4%	22.8%	Consumer Discretionary
Planet Fitness Inc A	0.31%	5.4%	64.9%	Consumer Discretionary
HubSpot Inc	0.31%	2.6%	36.0%	Information Technology
Haemonetics Corp	0.30%	37.6%	34.2%	Health Care
Woodward Inc	0.30%	19.4%	48.0%	Industrials
Ciena Corp	0.29%	10.1%	55.1%	Information Technology

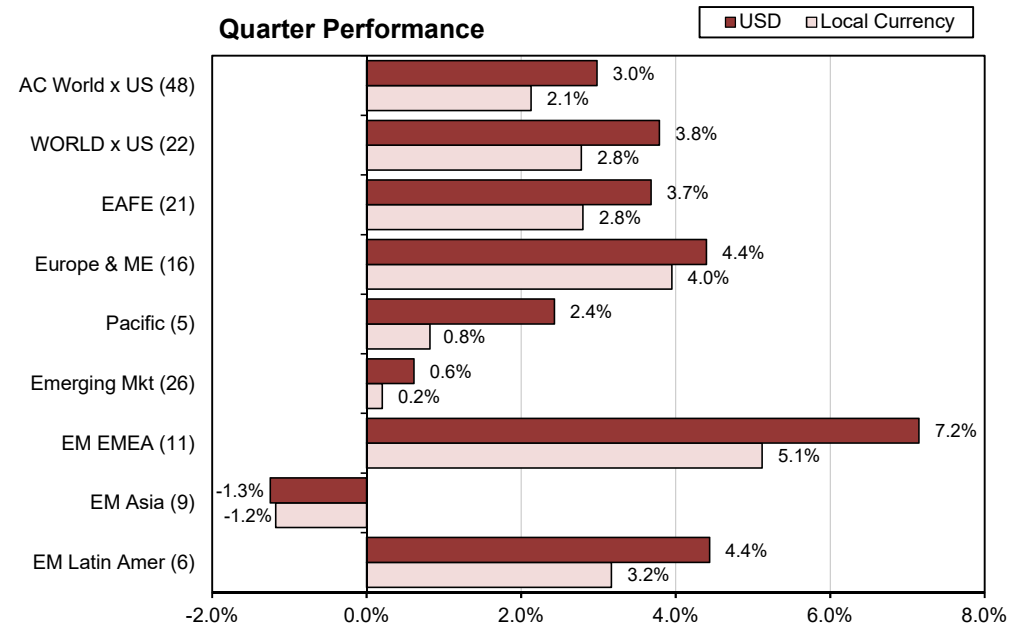
Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Iovance Biotherapeutics Inc	0.13%	157.8%	91.6%	Health Care
Arqule Inc	0.06%	129.9%	99.1%	Health Care
Adverum Biotechnologies Inc	0.03%	126.9%	124.3%	Health Care
Chimerix Inc	0.01%	105.7%	-9.2%	Health Care
Enphase Energy Inc	0.08%	97.5%	170.9%	Information Technology
Maxar Technologies Inc	0.02%	94.8%	-84.0%	Industrials
Array BioPharma Inc	0.48%	90.0%	176.1%	Health Care
Melinta Therapeutics Inc	0.00%	87.3%	-79.1%	Health Care
G1 Therapeutics Inc	0.03%	84.7%	-29.5%	Health Care
Foundation Building Materials Inc	0.01%	80.7%	15.6%	Industrials

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
FuelCell Energy Inc	0.00%	-94.0%	-98.9%	Industrials
Halcon Resources Corp	0.00%	-86.9%	-96.0%	Energy
Pioneer Energy Services Corp	0.00%	-85.7%	-95.7%	Energy
Eros International PLC	0.00%	-85.2%	-89.6%	Communication Services
Superior Energy Services Inc	0.01%	-72.2%	-86.7%	Energy
electroCore Inc	0.00%	-71.4%	-87.9%	Health Care
Ultra Petroleum Corp	0.00%	-70.5%	-92.2%	Energy
Nuvectra Corp	0.00%	-69.6%	-83.7%	Health Care
Dean Foods Co	0.00%	-69.5%	-91.1%	Consumer Staples
Kirkland's Inc	0.00%	-67.9%	-80.6%	Consumer Discretionary

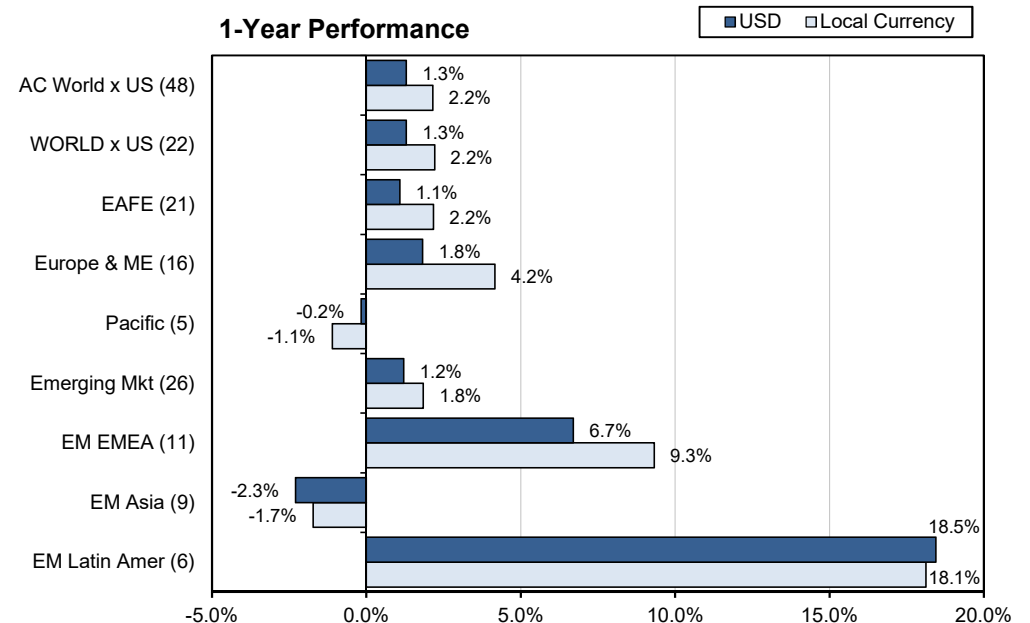


- Broad international equity returns were positive for the quarter in both local currency and USD terms. The MSCI ACWI ex US Index gained 2.1% in local currency terms and 3.0% in US dollar (USD) terms during the 2nd quarter. Similar to US markets, international equity investors balanced difficulties around global trade with central bank shifts toward more accommodative policies as a response to slowing global growth. Notably the ECB President Mario Draghi stated that further monetary policy action may need to be taken if inflation remains below target and the PBoC launched stimulus measures designed to encourage growth following the deterioration of trade negotiations with the US. Returns in USD largely outperformed those in local currency during the quarter as the USD depreciated against most major developed currencies following dovish Fed comments in June. However, the recent USD strength can still be seen over the 1-year period with USD returns trailing most local currency returns. Returns for the MSCI ACWI ex US Index were 2.2% in local currency terms and 1.3% in USD terms for the trailing year.
- Results for developed market international indices were positive in both local currency and USD terms during the 2nd quarter, with the MSCI EAFE Index returning 2.8% and 3.7% respectively. Outside of central bank policy and trade, there was notable news out of the UK with Prime Minister Theresa May resigning from her post after her Brexit withdrawal plan failed to gain parliamentary approval and a new vote for the office is currently underway. UK markets were pressured by continued uncertainty around Brexit with the UK having until October to strike an agreement with the European Union (EU) or withdraw with no agreement in place. Despite the growing uncertainty, the Bank of England (BoE) left monetary policy unchanged. Japan also underperformed as the yen appreciated due to its perceived safe haven status and trade headwinds were expected to affect its export driven economy. The MSCI EAFE Index returned 2.2% and 1.1% for the last twelve months in local currency and USD terms respectively.
- Emerging markets underperformed relative to developed markets for the 2nd quarter, slightly appreciating in both local currency and USD terms. The MSCI Emerging Markets Index gained 0.2% and 0.6% respectively. As expected, geopolitical tensions around trade put pressure on emerging market stocks, with Chinese equities underperforming relative to most countries. Latin American stocks performed well with Brazil and Argentina posting strong returns as commodity prices appreciated from recent lows at the end of 2018 and interest rates fell. Russian equities also performed well, benefiting from increasing commodity prices, but also had a tailwind from a decrease in the likelihood of future US sanctions. One year returns for the MSCI Emerging Market Index were 1.8% in local currency terms and 1.2% in USD terms.

### Quarter Performance



### 1-Year Performance





**The Market Environment**  
**US Dollar International Index Attribution & Country Detail**  
As of June 30, 2019

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.4%	4.0%	4.3%
Consumer Discretionary	11.1%	5.9%	-2.6%
Consumer Staples	11.7%	1.9%	4.8%
Energy	5.6%	0.4%	-5.5%
Financials	18.9%	4.3%	-2.9%
Health Care	11.2%	2.0%	7.5%
Industrials	14.8%	5.9%	2.4%
Information Technology	6.7%	6.6%	2.7%
Materials	7.4%	3.9%	0.2%
Real Estate	3.6%	-2.2%	2.3%
Utilities	3.6%	1.5%	9.8%
<b>Total</b>	<b>100.0%</b>	<b>3.7%</b>	<b>1.1%</b>

MSCI - ACWIxUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	6.9%	1.0%	5.6%
Consumer Discretionary	11.3%	3.8%	-3.6%
Consumer Staples	9.8%	2.2%	4.6%
Energy	7.2%	0.5%	-1.4%
Financials	21.9%	4.4%	2.0%
Health Care	8.3%	1.2%	4.2%
Industrials	11.9%	5.2%	2.9%
Information Technology	8.5%	4.0%	-0.7%
Materials	7.6%	2.9%	-0.5%
Real Estate	3.3%	-1.6%	4.3%
Utilities	3.3%	2.2%	10.1%
<b>Total</b>	<b>100.0%</b>	<b>3.0%</b>	<b>1.3%</b>

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	11.7%	-2.4%	4.5%
Consumer Discretionary	13.5%	-1.2%	-7.6%
Consumer Staples	6.6%	3.3%	0.9%
Energy	7.9%	1.2%	16.3%
Financials	25.2%	4.0%	11.9%
Health Care	2.6%	-6.6%	-24.7%
Industrials	5.3%	0.0%	4.1%
Information Technology	13.9%	-0.1%	-6.1%
Materials	7.6%	-1.2%	-1.9%
Real Estate	3.0%	-0.2%	10.1%
Utilities	2.7%	2.9%	9.0%
<b>Total</b>	<b>100.0%</b>	<b>0.6%</b>	<b>1.2%</b>

Country	MSCI-EAFE Weight	MSCI-ACWIxUS Weight	Quarter Return	1- Year Return
Japan	23.7%	15.8%	1.0%	-4.2%
United Kingdom	16.8%	11.2%	0.9%	-2.1%
France	11.4%	7.6%	6.5%	3.0%
Switzerland	9.3%	6.2%	8.4%	19.8%
Germany	8.8%	5.9%	7.1%	-3.8%
Australia	7.1%	4.8%	7.3%	6.6%
Hong Kong	4.0%	2.7%	1.0%	10.4%
Netherlands	3.6%	2.4%	5.8%	5.3%
Spain	3.0%	2.0%	2.6%	-2.1%
Sweden	2.7%	1.8%	4.9%	3.4%
Italy	2.3%	1.6%	2.9%	-0.7%
Denmark	1.7%	1.1%	1.6%	5.8%
Singapore	1.4%	0.9%	7.0%	8.3%
Finland	1.0%	0.7%	0.2%	-4.7%
Belgium	1.0%	0.7%	1.2%	-9.1%
Norway	0.7%	0.5%	2.4%	-4.3%
Israel	0.6%	0.4%	-3.6%	-4.5%
Ireland	0.5%	0.4%	4.7%	-9.2%
New Zealand	0.3%	0.2%	3.9%	16.0%
Austria	0.2%	0.2%	0.8%	-13.1%
Portugal	0.2%	0.1%	1.6%	-4.6%
<b>Total EAFE Countries</b>	<b>100.0%</b>	<b>66.8%</b>	<b>3.7%</b>	<b>1.1%</b>
Canada		6.8%	4.9%	3.3%
<b>Total Developed Countries</b>		<b>73.6%</b>	<b>3.8%</b>	<b>1.3%</b>
China		8.3%	-4.0%	-6.7%
Korea		3.3%	-1.0%	-9.1%
Taiwan		2.9%	0.9%	1.1%
India		2.4%	0.5%	7.9%
Brazil		2.0%	7.2%	39.4%
South Africa		1.6%	6.6%	-0.8%
Russia		1.1%	16.9%	27.1%
Thailand		0.8%	9.3%	19.8%
Saudi Arabia		0.8%	0.6%	11.0%
Mexico		0.7%	1.1%	-7.4%
Indonesia		0.6%	3.2%	20.3%
Malaysia		0.6%	1.2%	-0.8%
Philippines		0.3%	4.4%	19.7%
Poland		0.3%	3.5%	10.5%
Qatar		0.3%	0.6%	18.8%
Chile		0.2%	-5.6%	-12.1%
United Arab Emirates		0.2%	-2.7%	3.0%
Turkey		0.1%	2.8%	-17.1%
Colombia		0.1%	-2.4%	-3.7%
Peru		0.1%	-1.9%	3.5%
Argentina		0.1%	31.7%	15.8%
Greece		0.1%	16.2%	-9.2%
Hungary		0.1%	-4.1%	12.7%
Czech Republic		0.0%	2.6%	1.1%
Egypt		0.0%	7.8%	5.4%
Pakistan		0.0%	-20.8%	-36.7%
<b>Total Emerging Countries</b>		<b>26.4%</b>	<b>0.6%</b>	<b>1.2%</b>
<b>Total ACWIxUS Countries</b>		<b>100.0%</b>	<b>3.0%</b>	<b>1.3%</b>

Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)

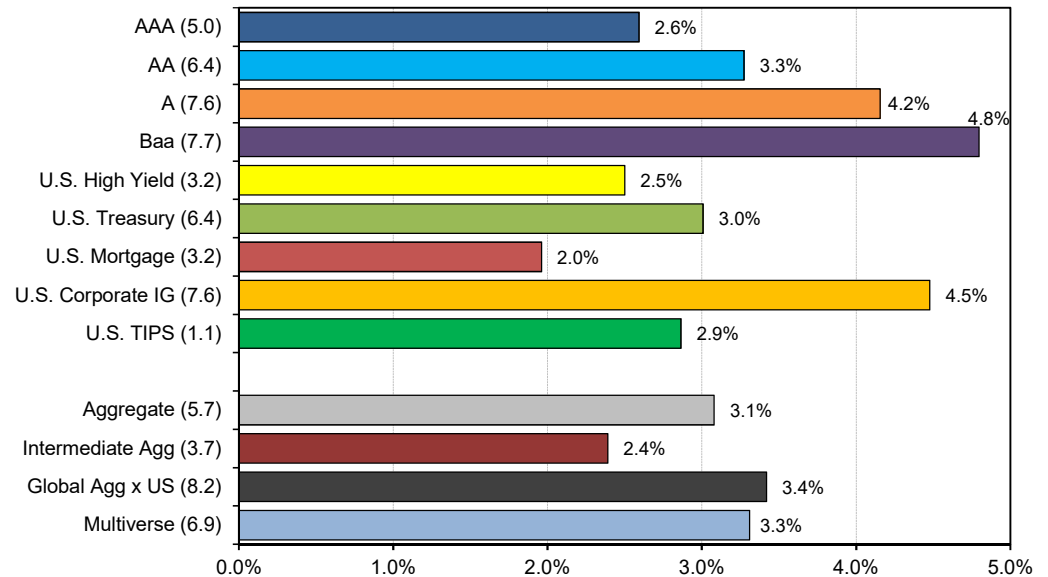
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.



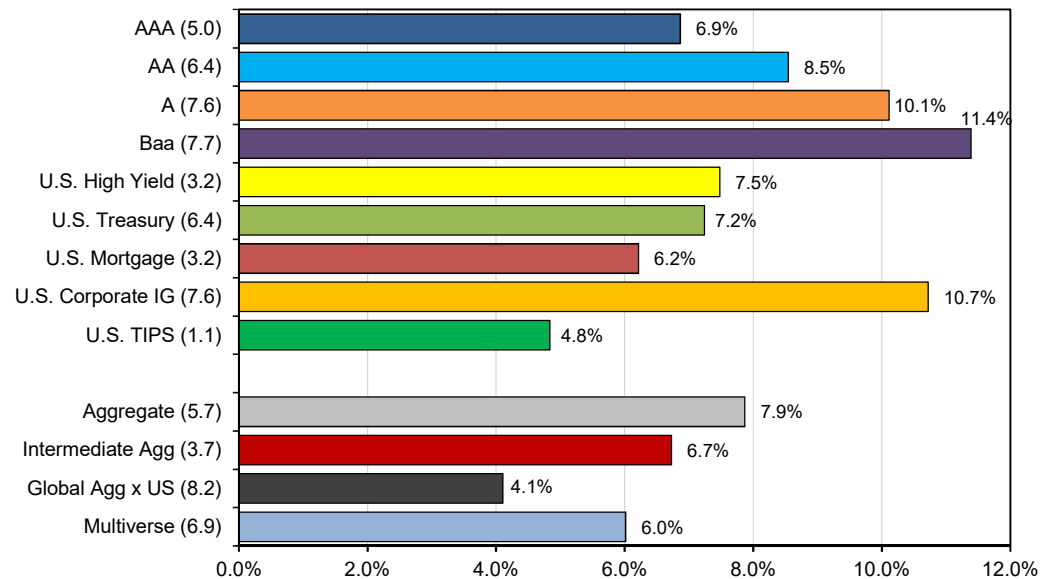


- Broad fixed income benchmarks built on their early 2019 gains during the 2nd quarter. During the 1st quarter, the Federal Open Market Committee (FOMC) reacted to a difficult end to 2018 by issuing guidance that the FOMC is no longer projecting any further interest rate increases through 2019. Federal Reserve Chair Jerome Powell also stated that the Fed would begin tapering the roll off from the planned balance sheet reduction program in May with a plan to halt the program entirely in September. The stoppage of the balance sheet reduction program represents an easing of monetary policy. The Fed took an increasingly dovish stance during the 2nd quarter reacting to softening economic data, tepid inflation and increased risks around global trade. While the committee left interest rates unchanged, the minutes from the June FOMC meeting indicate that the committee felt “downside risks to the outlook for economic activity had risen materially” during the quarter with several participants noting that a “near-term cut in the target range for the Federal Funds Rate could help cushion the effects of possible future adverse shocks to the economy”. These comments led market participants to forecast greater odds of an interest rate cut this year, pushing markets higher. Interest rates fell across all maturities on the US Treasury Yield Curve with the greatest declines occurring in the mid- and long-term issues. The curve remains inverted with short-term maturities paying higher interest rates than issues in the mid- to long-end of the curve. The bellwether Bloomberg Barclays US Aggregate Index posted positive returns for both the 1st quarter and the 1-year period, returning 3.1% and 7.9% respectively.
- Within investment grade credit, lower quality issues outperformed higher quality issues as investors gravitated toward higher risk securities during the quarter. Lower quality issues also benefitted from their higher durations. On an absolute basis, without negating the duration differences in the sub-indices, Baa rated credit was the best performing investment grade credit quality segment returning 4.8% for the quarter, while AAA was the worst performing, returning 2.6%. High yield issues returned 2.5% for the quarter as these issues did not commensurately benefit from the drop in interest rates due to their lower durations. Returns over the 1-year period generally show lower quality securities outperforming higher quality issues.
- Investment grade corporates outperformed the more defensive Treasury and mortgage backed sectors of the Bloomberg Barclays US Aggregate Index’s three broad sectors during the 2nd quarter. Investment grade corporate credit returned 4.5%, as falling interest rates benefitted these securities to a greater degree and credit spreads have continued to tighten since the end of 2018. When viewed over the 1-year period, corporate credit outperformed both Treasuries and mortgage backed securities. Corporate issues returned 10.7% versus a 6.2% return for mortgages and 7.2% gain on Treasury securities.

#### Quarter Performance

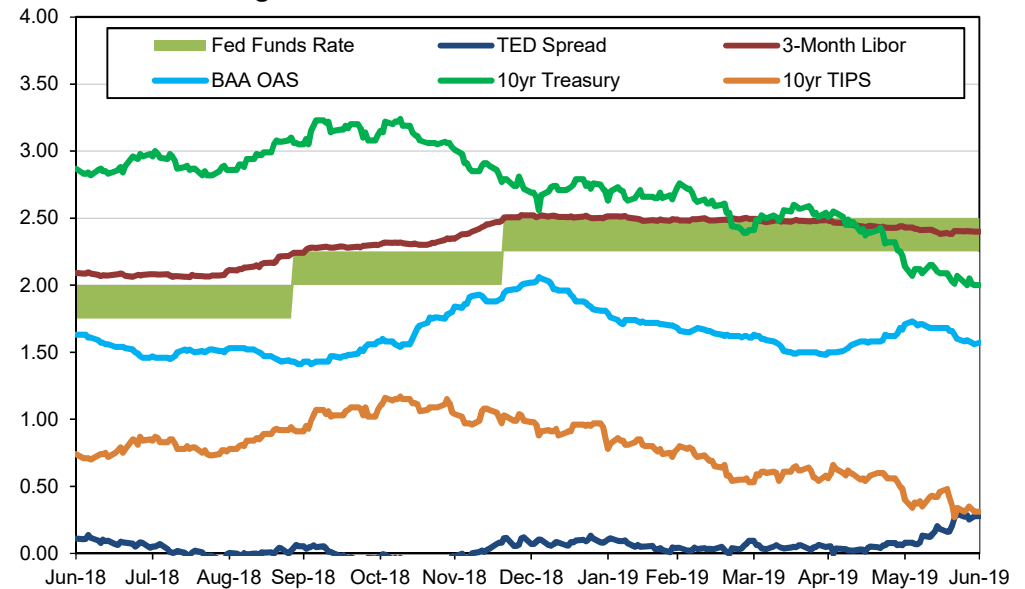


#### 1-Year Performance

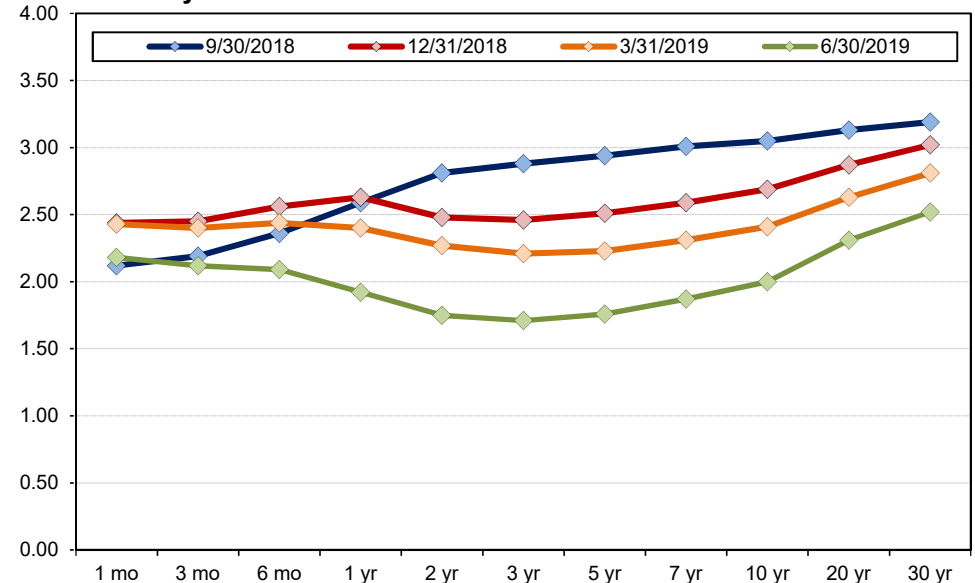


- Global fixed income returns were in line with their domestic counterparts, slightly outperforming during the 2nd quarter. These indices have lower, or in some cases (Germany, Japan), negative yields, but have higher durations. The returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. The USD depreciated against most other developed currencies, acting as a tailwind to global bond indices. The return on global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, was 3.4%. Global bonds still trail over the 1-year period with the Global Aggregate ex US Index returning 4.1% versus a 7.9% return on the domestically focused Barclays Aggregate Index. As global growth has shown signs of stalling, several international central banks have started to step back from more restrictive postures. The ECB and the PBoC have moved toward an easing of monetary policy and implemented various stimulus programs designed to support their respective economies. The Bank of England and the Bank of Japan made no major policy changes during the quarter as they continue to review macroeconomic data within their respective countries.
- Much of the index performance detailed in the bar graphs on the previous page is visible on a time series basis by reviewing the line graphs to the right. The '1-Year Trailing Market Rates' chart illustrates that the 10-year Treasury yield (green line) fell from recent high's greater than 3.0%, to 2.0% to end the quarter. The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-Treasury issues. This line illustrates an abrupt increase in credit spreads during the 4th quarter of 2018 as investors moved to higher quality assets during the quarter's risk-off environment. Subsequently, spreads dropped steadily until they rose again in May and then later declined in June. This spread tightening is equivalent to an interest rate decrease on corporate bonds, which produces an additional tailwind for corporate bond index returns. These credit spreads have tightened by about 6 basis points over the last three months. The green band across the graph illustrates the gradual increase in the Federal Funds Rate due to the tightening of US monetary policy during 2018. There have been no changes to the Federal Funds Rate in 2019.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four calendar quarters. The downward shift in interest rates as well as a general steepening of the yield curve are clearly visible over the last quarter. As mentioned, the yield curve continues to invert as yields on shorter-term maturities fell less than interest rates in the middle- to long-end of the curve.

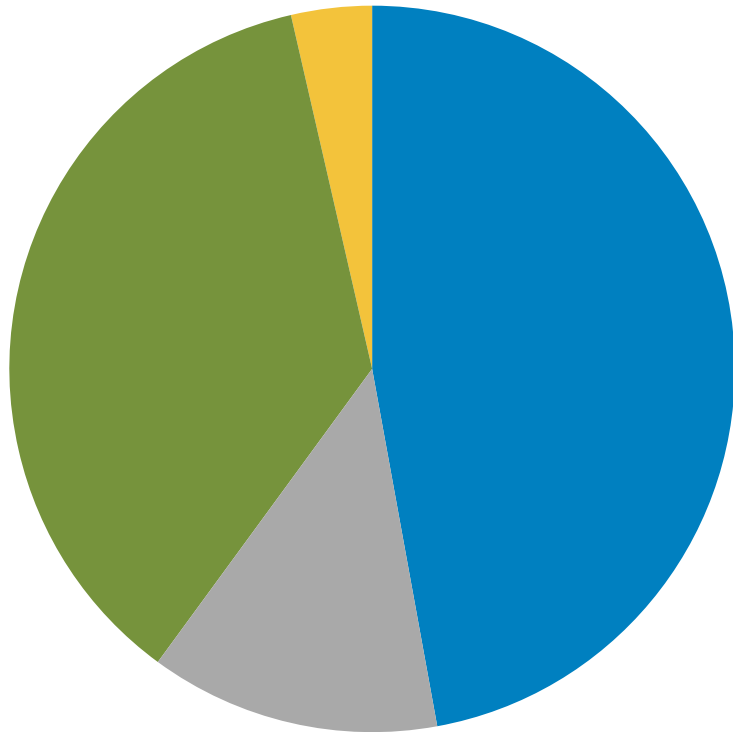
**1-Year Trailing Market Rates**



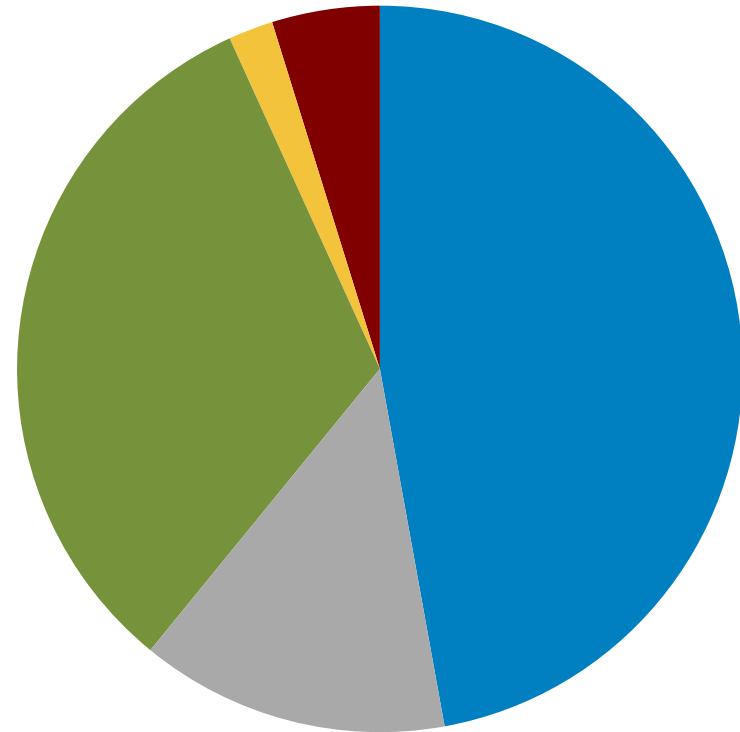
**Treasury Yield Curve**



Asset Allocation By Segment as of  
March 31, 2019 : \$9,927,342

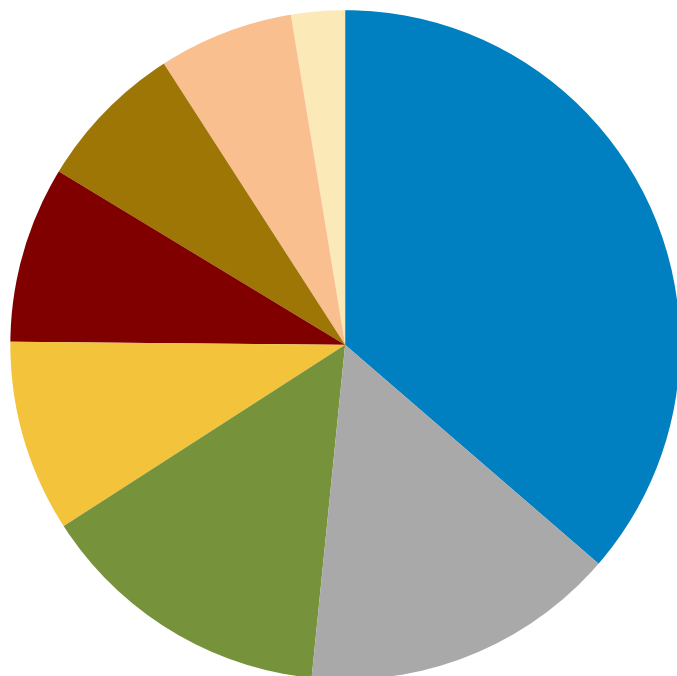


Asset Allocation By Segment as of  
June 30, 2019 : \$10,438,104

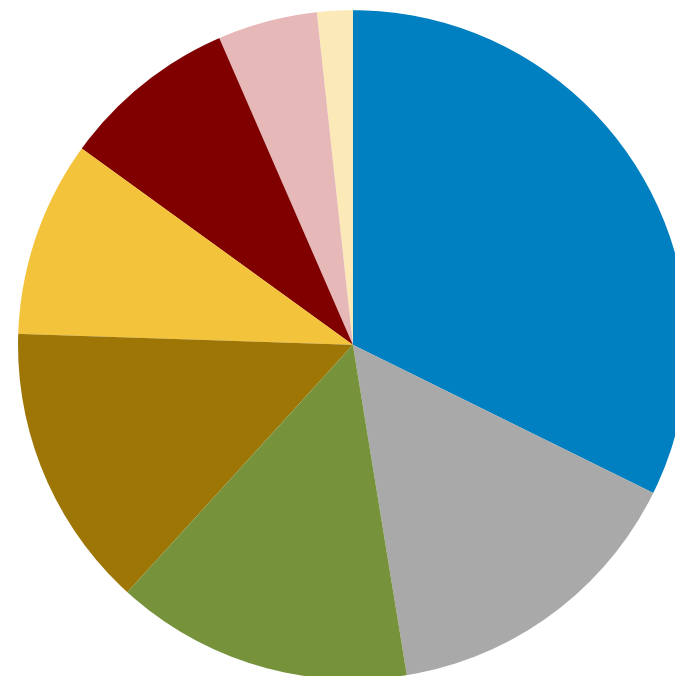


Allocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	4,678,757	47.1	Domestic Equity	4,920,819	47.1
International Equity	1,283,302	12.9	International Equity	1,436,626	13.8
Fixed Income	3,608,069	36.3	Fixed Income	3,371,199	32.3
Cash Equivalent	357,215	3.6	Cash Equivalent	207,913	2.0
Global Other	-	0.0	Global Other	501,547	4.8

Asset Allocation By Manager as of  
March 31, 2019 : \$9,927,342

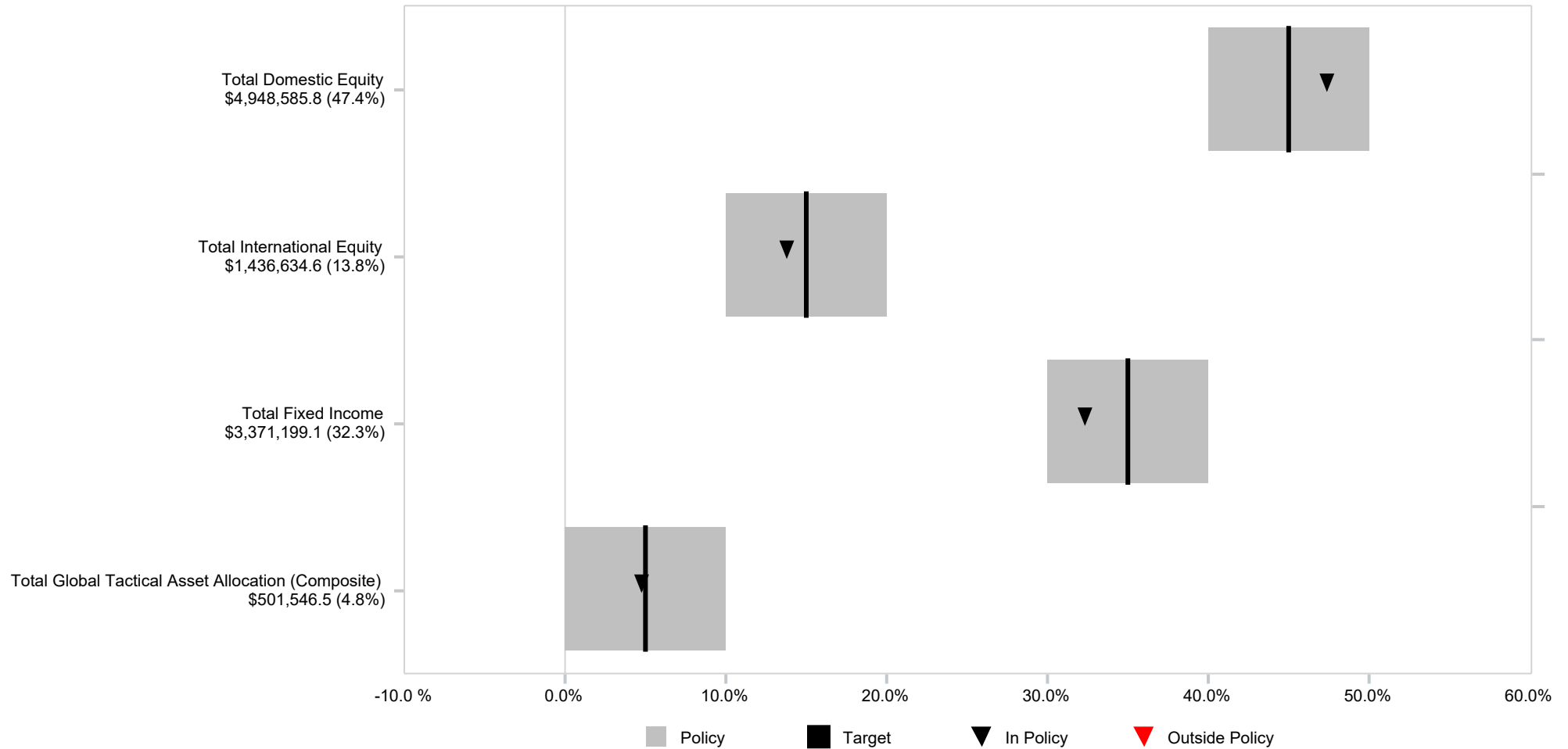


Asset Allocation By Manager as of  
June 30, 2019 : \$10,438,104



Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ Baird Aggregate Bond Fund (BAGIX)	3,608,069	36.3	■ Baird Aggregate Bond Fund (BAGIX)	3,371,199	32.3
■ Vanguard Index 500 Admiral (VFIAX)	1,514,472	15.3	■ Vanguard Index 500 Admiral (VFIAX)	1,579,570	15.1
■ Dana Large Cap Value	1,418,838	14.3	■ Dana Large Cap Value	1,496,008	14.3
■ Wells Fargo Growth (SGRNX)	919,043	9.3	■ American Funds EuroPacific Gr R6 (REGX)	1,436,626	13.8
■ Vanguard Growth Index Fund (VIGAX)	846,055	8.5	■ Wells Fargo Growth (SGRNX)	986,795	9.5
■ American Funds EuroPacific Gr R6 (REGX)	716,626	7.2	■ Vanguard Growth Index Fund (VIGAX)	886,213	8.5
■ Highland Capital International	646,757	6.5	■ Blackrock Multi-Asset Income -K (BKMIX)	501,547	4.8
■ Receipt & Disbursement	257,481	2.6	■ Receipt & Disbursement	180,138	1.7
■ Blackrock Multi-Asset Income -K (BKMIX)	-	0.0	■ Highland Capital International	8	0.0

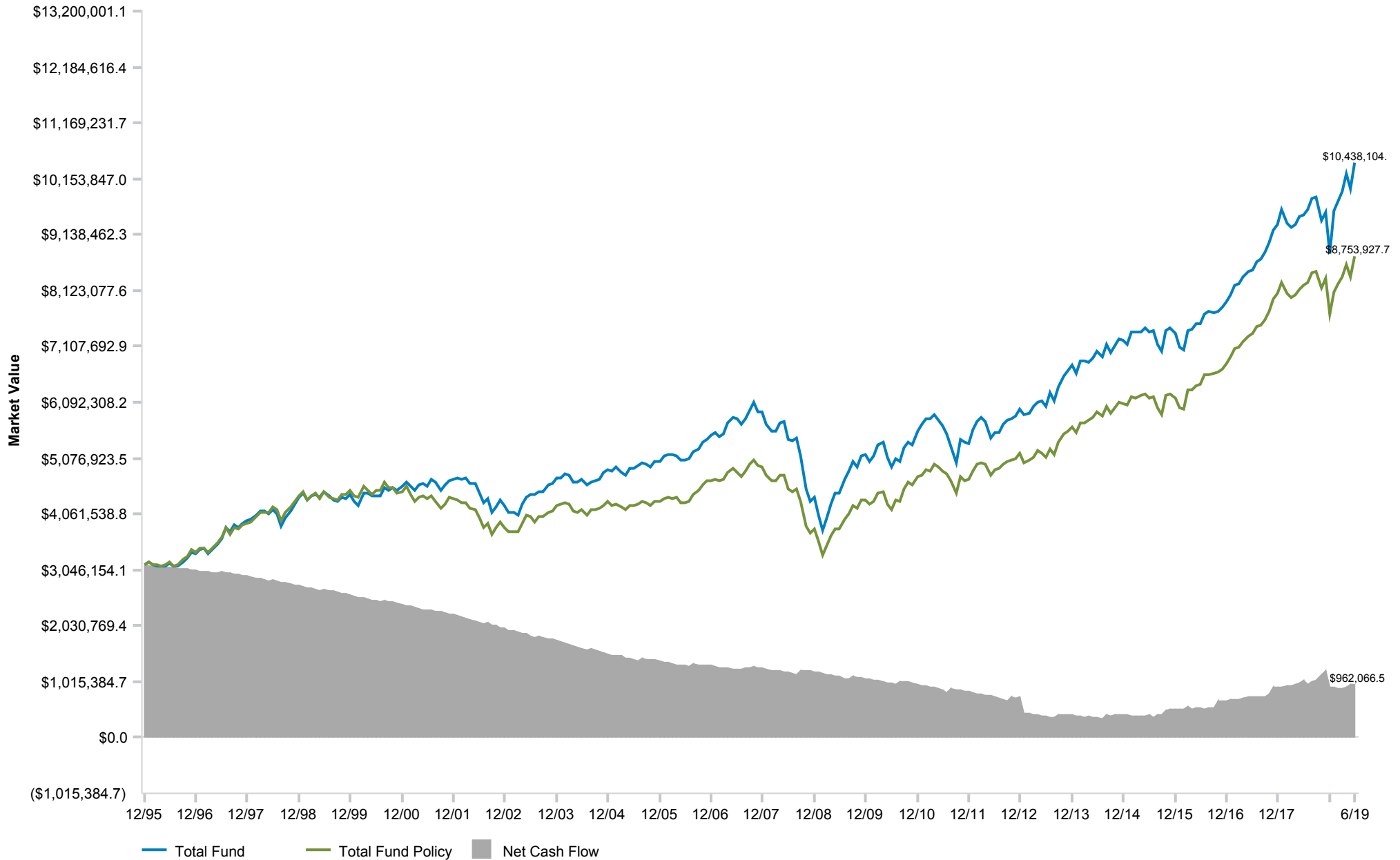
**Executive Summary**



**Asset Allocation Compliance**

	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Min. Rebal. (\$000)	Max. Rebal. (\$000)	Target Rebal. (\$000)
Total Fund	10,438,104	100.0	N/A	N/A	100.0	-	-	-
Total Domestic Equity	4,948,586	47.4	40.0	50.0	45.0	-773,344	270,466	-251,439
Total International Equity	1,436,635	13.8	10.0	20.0	15.0	-392,824	650,986	129,081
Total Fixed Income	3,371,199	32.3	30.0	40.0	35.0	-239,768	804,043	282,137
Total Global Tactical Asset Allocation (Composite)	501,547	4.8	0.0	10.0	5.0	-501,547	542,264	20,359

**Schedule of Investable Assets**



**Schedule of Investable Assets**  
**Total Fund**  
Since Inception Ending June 30, 2019

Schedule of Investable Assets									
Periods Ending	Beginning Market Value \$	Contributions \$	Withdrawals \$	Gain/Loss \$	Ending Market Value \$	%Return	Unit Value	Income \$	Income % of Beginning MV
Inception	3,146,449	29,277,204	31,461,587	9,476,038	10,438,104	424.83	524.8	4,547,336	144.5





**Financial Reconciliation**  
**Total Fund**  
1 Quarter Ending June 30, 2019

**Financial Reconciliation Quarter to Date**

	Market Value 04/01/2019	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 06/30/2019
<b>Total Domestic Equity</b>	<b>4,698,409</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-2,306</b>	<b>-583</b>	<b>20,648</b>	<b>232,419</b>	<b>4,948,586</b>
Dana Large Cap Value	1,418,838	-	-	-	-2,306	-583	10,394	69,665	1,496,008
Wells Fargo Growth (SGRNX)	919,043	-	-	-	-	-	-	67,751	986,795
Vanguard Growth Index Fund (VIGAX)	846,055	-	-	-	-	-	2,209	37,948	886,213
Vanguard Index 500 Admiral (VFIAX)	1,514,472	-	-	-	-	-	8,044	57,054	1,579,570
<b>Total International Equity</b>	<b>1,363,383</b>	<b>-2,480</b>	<b>151</b>	<b>-</b>	<b>-</b>	<b>-583</b>	<b>6,133</b>	<b>70,031</b>	<b>1,436,635</b>
Highland Capital International	646,757	-661,322	151	-	-	-583	3,955	11,051	8
American Funds EuroPacific Gr R6 (RERGX)	716,626	658,842	-	-	-	-	2,178	58,980	1,436,626
<b>Total Fixed Income</b>	<b>3,608,069</b>	<b>-350,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>26,889</b>	<b>86,242</b>	<b>3,371,199</b>
Baird Aggregate Bond Fund (BAGIX)	3,608,069	-350,000	-	-	-	-	26,889	86,242	3,371,199
<b>Receipt &amp; Disbursement</b>	<b>257,481</b>	<b>-147,520</b>	<b>209,821</b>	<b>-129,615</b>	<b>-</b>	<b>-11,433</b>	<b>1,405</b>	<b>-</b>	<b>180,138</b>
<b>Total Fund</b>	<b>9,927,342</b>	<b>-</b>	<b>209,971</b>	<b>-129,615</b>	<b>-2,306</b>	<b>-12,600</b>	<b>55,233</b>	<b>390,077</b>	<b>10,438,104</b>

**Financial Reconciliation**  
**Total Fund**  
October 1, 2018 To June 30, 2019

<b>Financial Reconciliation Fiscal Year to Date</b>									
	<b>Market Value 10/01/2018</b>	<b>Net Transfers</b>	<b>Contributions</b>	<b>Distributions</b>	<b>Management Fees</b>	<b>Other Expenses</b>	<b>Income</b>	<b>Apprec./ Deprec.</b>	<b>Market Value 06/30/2019</b>
<b>Total Domestic Equity</b>	<b>4,807,559</b>	<b>2,776</b>	<b>-</b>	<b>-</b>	<b>-6,745</b>	<b>-929</b>	<b>185,393</b>	<b>-39,468</b>	<b>4,948,586</b>
Highland Capital Core Value Equity	620	2,776	-	-	-	-2	-	-3,395	-
Dana Large Cap Value	1,471,125	-	-	-	-6,745	-927	29,636	2,920	1,496,008
Wells Fargo Growth (SGRNX)	929,773	-	-	-	-	-	124,708	-67,687	986,795
Vanguard Growth Index Fund (VIGAX)	864,861	-	-	-	-	-	7,283	14,069	886,213
Vanguard Index 500 Admiral (VFIAX)	1,541,180	-	-	-	-	-	23,766	14,624	1,579,570
<b>Total International Equity</b>	<b>1,413,718</b>	<b>9,479</b>	<b>151</b>	<b>-</b>	<b>-398</b>	<b>-1,468</b>	<b>31,749</b>	<b>-16,596</b>	<b>1,436,635</b>
Highland Capital International	689,462	-649,363	151	-	-398	-1,468	10,830	-49,205	8
American Funds EuroPacific Gr R6 (RERGX)	724,256	658,842	-	-	-	-	20,919	32,609	1,436,626
<b>Total Fixed Income</b>	<b>3,343,281</b>	<b>-250,154</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>70,395</b>	<b>207,678</b>	<b>3,371,199</b>
Baird Aggregate Bond Fund (BAGIX)	3,343,281	-250,154	-	-	-	-	70,395	207,678	3,371,199
<b>Receipt &amp; Disbursement</b>	<b>245,273</b>	<b>-262,101</b>	<b>631,303</b>	<b>-646,428</b>	<b>-</b>	<b>-48,272</b>	<b>3,936</b>	<b>256,427</b>	<b>180,138</b>
<b>Total Fund</b>	<b>9,809,831</b>	<b>-</b>	<b>631,454</b>	<b>-646,428</b>	<b>-7,143</b>	<b>-50,669</b>	<b>291,632</b>	<b>409,428</b>	<b>10,438,104</b>



## Comparative Performance Trailing Returns

	QTR	FYTD	1 YR	3 YR	5 YR	Inception	Inception Date
<b>Total Fund (Gross)</b>	<b>4.48 (1)</b>	<b>7.48 (1)</b>	<b>11.07 (1)</b>	<b>9.75 (17)</b>	<b>6.69 (14)</b>	<b>7.31 (51)</b>	<b>01/01/1996</b>
Total Fund Policy	3.69 (10)	4.45 (18)	7.91 (11)	8.83 (55)	6.33 (32)	6.99 (73)	
Difference	0.79	3.03	3.16	0.92	0.36	0.32	
All Public Plans-Total Fund Median	3.23	3.40	6.31	8.91	5.93	7.33	
<b>Total Fund (Net)</b>	<b>4.46</b>	<b>7.40</b>	<b>10.96</b>	<b>9.56</b>	<b>6.44</b>	<b>6.79</b>	<b>01/01/1996</b>
Total Fund Policy	3.69	4.45	7.91	8.83	6.33	6.99	
Difference	0.77	2.95	3.05	0.73	0.11	-0.20	
<b>Total Equity</b>	<b>5.43</b>	<b>2.59</b>	<b>8.00</b>	<b>12.74</b>	<b>7.91</b>	<b>8.93</b>	<b>01/01/1996</b>
Total Equity Policy	3.88	1.58	7.21	13.04	8.32	8.15	
Difference	1.55	1.01	0.79	-0.30	-0.41	0.78	
<b>Total Domestic Equity</b>	<b>5.39</b>	<b>3.06</b>	<b>10.12</b>	<b>13.69</b>	<b>9.24</b>	<b>10.25</b>	<b>05/01/2011</b>
Total Domestic Equity Policy	4.10	1.74	8.98	14.02	10.19	12.00	
Difference	1.29	1.32	1.14	-0.33	-0.95	-1.75	
<b>Dana Large Cap Value</b>	<b>5.65 (10)</b>	<b>2.25 (31)</b>	<b>7.39 (39)</b>	<b>9.76 (79)</b>	<b>6.18 (81)</b>	<b>9.75 (68)</b>	<b>07/01/2013</b>
Russell 1000 Value Index	3.84 (51)	2.61 (27)	8.46 (31)	10.19 (71)	7.46 (58)	10.03 (63)	
Difference	1.81	-0.36	-1.07	-0.43	-1.28	-0.28	
IM U.S. Large Cap Value Equity (SA+CF) Median	3.89	0.63	6.45	11.42	7.79	10.43	
<b>Wells Fargo Growth (SGRNX)</b>	<b>7.37 (10)</b>	<b>6.13 (25)</b>	<b>14.34 (25)</b>	<b>21.19 (11)</b>	<b>13.28 (16)</b>	<b>13.38 (22)</b>	<b>06/01/2011</b>
Russell 3000 Growth Index	4.50 (56)	1.58 (57)	10.60 (48)	17.81 (35)	13.02 (18)	13.80 (17)	
Difference	2.87	4.55	3.74	3.38	0.26	-0.42	
IM U.S. Multi-Cap Growth Equity (MF) Median	4.87	2.65	10.33	16.30	11.00	12.00	
<b>Vanguard Growth Index Fund (VIGAX)</b>	<b>4.75 (52)</b>	<b>2.47 (55)</b>	<b>10.44 (53)</b>	<b>16.56 (70)</b>	<b>N/A</b>	<b>15.82 (67)</b>	<b>06/01/2016</b>
CRSP U.S. Large Cap Growth TR Index	4.76 (51)	2.49 (55)	10.46 (53)	16.59 (69)	12.03 (62)	15.86 (66)	
Difference	-0.01	-0.02	-0.02	-0.03	N/A	-0.04	
IM U.S. Large Cap Growth Equity (MF) Median	4.77	2.83	10.56	17.71	12.53	16.70	
<b>Vanguard Index 500 Admiral (VFIAX)</b>	<b>4.30 (45)</b>	<b>2.49 (39)</b>	<b>10.38 (34)</b>	<b>N/A</b>	<b>N/A</b>	<b>11.18 (29)</b>	<b>04/01/2018</b>
S&P 500 Index	4.30 (45)	2.51 (39)	10.42 (34)	14.19 (26)	10.71 (14)	11.21 (29)	
Difference	0.00	-0.02	-0.04	N/A	N/A	-0.03	
IM U.S. Large Cap Core Equity (MF) Median	4.17	1.65	9.26	13.11	9.33	9.64	

Returns for periods greater than one year are annualized. Returns are expressed as percentages.



# Comparative Performance

## Total Fund

As of June 30, 2019

	QTR	FYTD	1 YR	3 YR	5 YR	Inception	Inception Date
<b>Total International Equity</b>	<b>5.59</b>	<b>1.00</b>	<b>1.25</b>	<b>9.65</b>	<b>3.48</b>	<b>4.72</b>	<b>05/01/2011</b>
Total International Equity Policy	3.22	0.99	1.80	9.91	2.65	4.37	
Difference	2.37	0.01	-0.55	-0.26	0.83	0.35	
American Funds EuroPacific Gr R6 (RERGX)	3.87 (71)	2.78 (39)	1.91 (53)	10.84 (21)	4.45 (26)	4.93 (27)	05/01/2014
MSCI AC World ex USA	3.22 (85)	0.99 (62)	1.80 (56)	9.91 (42)	2.65 (62)	3.30 (56)	
Difference	0.65	1.79	0.11	0.93	1.80	1.63	
IM International Large Cap Growth Equity (MF) Median	4.36	1.95	2.14	9.61	3.08	3.54	
<b>Total Fixed Income</b>	<b>3.15</b>	<b>8.07</b>	<b>8.15</b>	<b>2.74</b>	<b>2.86</b>	<b>4.87</b>	<b>01/01/1996</b>
Total Fixed Income Policy	3.08	7.85	7.87	2.31	2.95	5.01	
Difference	0.07	0.22	0.28	0.43	-0.09	-0.14	
Baird Aggregate Bond Fund (BAGIX)	3.16 (31)	8.08 (12)	8.16 (14)	2.75 (26)	N/A	2.97 (14)	04/01/2015
Blmbg. Barc. U.S. Aggregate Index	3.08 (41)	7.85 (24)	7.87 (28)	2.31 (54)	2.95 (26)	2.62 (37)	
Difference	0.08	0.23	0.29	0.44	N/A	0.35	
IM U.S. Broad Market Core Fixed Income (MF) Median	3.04	7.48	7.56	2.39	2.67	2.48	

Returns for periods greater than one year are annualized. Returns are expressed as percentages.



## Comparative Performance Fiscal Year to Date

	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010	Oct-2008 To Sep-2009
<b>Total Fund (Gross)</b>	<b>7.89 (35)</b>	<b>10.97 (67)</b>	<b>8.38 (78)</b>	<b>0.24 (26)</b>	<b>10.05 (48)</b>	<b>15.29 (8)</b>	<b>19.44 (19)</b>	<b>-2.77 (99)</b>	<b>7.58 (93)</b>	<b>0.27 (68)</b>
Total Fund Policy	7.54 (41)	11.19 (63)	10.43 (31)	-0.74 (50)	10.52 (41)	12.25 (48)	17.66 (51)	1.27 (40)	9.79 (53)	0.97 (59)
Difference	0.35	-0.22	-2.05	0.98	-0.47	3.04	1.78	-4.04	-2.21	-0.70
All Public Plans-Total Fund Median	7.10	11.84	9.74	-0.78	9.93	12.08	17.67	0.69	9.90	1.44
<b>Total Fund (Net)</b>	<b>7.72</b>	<b>10.71</b>	<b>8.15</b>	<b>-0.07</b>	<b>9.48</b>	<b>14.90</b>	<b>18.93</b>	<b>-3.23</b>	<b>7.05</b>	<b>-0.24</b>
Total Fund Policy	7.54	11.19	10.43	-0.74	10.52	12.25	17.66	1.27	9.79	0.97
Difference	0.18	-0.48	-2.28	0.67	-1.04	2.65	1.27	-4.50	-2.74	-1.21
<b>Total Equity</b>	<b>13.62</b>	<b>18.10</b>	<b>10.30</b>	<b>-2.10</b>	<b>12.73</b>	<b>24.53</b>	<b>27.57</b>	<b>-5.79</b>	<b>7.29</b>	<b>-5.55</b>
Total Equity Policy	13.62	19.14	13.68	-3.37	14.93	22.36	25.69	-1.42	9.58	-6.91
Difference	0.00	-1.04	-3.38	1.27	-2.20	2.17	1.88	-4.37	-2.29	1.36
<b>Total Domestic Equity</b>	<b>17.21</b>	<b>17.70</b>	<b>11.20</b>	<b>-0.53</b>	<b>14.35</b>	<b>24.48</b>	<b>28.95</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Total Domestic Equity Policy	17.58	18.71	14.96	-0.49	17.76	21.60	29.59	N/A	N/A	N/A
Difference	-0.37	-1.01	-3.76	-0.04	-3.41	2.88	-0.64	N/A	N/A	N/A
Dana Large Cap Value	9.17 (80)	16.63 (63)	9.79 (82)	-3.65 (57)	19.81 (31)	N/A	N/A	N/A	N/A	N/A
Russell 1000 Value Index	9.45 (77)	15.12 (75)	16.19 (26)	-4.42 (64)	18.89 (43)	22.30 (60)	30.92 (26)	-1.89 (62)	8.90 (55)	-10.62 (84)
Difference	-0.28	1.51	-6.40	0.77	0.92	N/A	N/A	N/A	N/A	N/A
IM U.S. Large Cap Value Equity (SA+CF) Median	11.72	17.89	13.22	-3.29	18.40	23.76	28.16	-0.98	9.32	-5.89
Wells Fargo Growth (SGRNX)	30.23 (14)	21.35 (39)	10.38 (43)	1.32 (50)	7.11 (92)	21.15 (59)	31.97 (9)	N/A	N/A	N/A
Russell 3000 Growth Index	25.89 (30)	21.87 (33)	13.64 (13)	3.21 (32)	17.87 (22)	20.30 (68)	29.35 (26)	3.39 (23)	12.81 (43)	-2.19 (48)
Difference	4.34	-0.52	-3.26	-1.89	-10.76	0.85	2.62	N/A	N/A	N/A
IM U.S. Multi-Cap Growth Equity (MF) Median	22.73	20.15	9.61	1.30	14.52	23.10	26.82	-1.07	11.99	-2.74
Vanguard Growth Index Fund (VIGAX)	22.67 (73)	19.81 (57)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CRSP U.S. Large Cap Growth TR Index	22.70 (72)	19.86 (56)	13.56 (20)	2.00 (63)	19.38 (21)	17.81 (67)	30.07 (27)	1.02 (44)	11.32 (39)	-4.02 (66)
Difference	-0.03	-0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Large Cap Growth Equity (MF) Median	25.08	20.13	10.96	2.85	16.89	19.35	27.38	0.51	10.19	-2.52
Vanguard Index 500 Admiral (VFIAX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P 500 Index	17.91 (28)	18.61 (46)	15.43 (17)	-0.61 (30)	19.73 (18)	19.34 (60)	30.20 (23)	1.14 (24)	10.16 (24)	-6.91 (62)
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Large Cap Core Equity (MF) Median	16.08	18.36	12.98	-1.62	17.38	19.98	27.93	-1.13	8.32	-5.57
Highland Capital Core Value Equity	N/A	15.84 (81)	14.02 (41)	-0.29 (58)	15.22 (87)	25.50 (11)	27.97 (61)	N/A	N/A	N/A
S&P 500 Index	17.91 (40)	18.61 (53)	15.43 (22)	-0.61 (63)	19.73 (45)	19.34 (65)	30.20 (44)	1.14 (51)	10.16 (41)	-6.91 (64)
Difference	N/A	-2.77	-1.41	0.32	-4.51	6.16	-2.23	N/A	N/A	N/A
IM U.S. Large Cap Core Equity (SA+CF) Median	17.31	18.74	13.26	0.09	19.21	20.66	29.63	1.16	9.53	-5.79

Returns for periods greater than one year are annualized. Returns are expressed as percentages.



# Comparative Performance

## Total Fund

As of June 30, 2019

	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010	Oct-2008 To Sep-2009
<b>Total International Equity</b>	<b>2.87</b>	<b>19.30</b>	<b>7.36</b>	<b>-7.56</b>	<b>5.39</b>	<b>24.71</b>	<b>19.57</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Total International Equity Policy	2.25	20.15	9.80	-11.78	6.73	24.29	14.33	N/A	N/A	N/A
Difference	0.62	-0.85	-2.44	4.22	-1.34	0.42	5.24	N/A	N/A	N/A
Highland Capital International	4.38 (28)	17.89 (74)	6.09 (72)	-10.11 (83)	5.27 (56)	24.71 (35)	19.57 (19)	N/A	N/A	N/A
MSCI EAFE Index	3.25 (37)	19.65 (59)	7.06 (60)	-8.27 (62)	4.70 (64)	24.29 (37)	14.33 (84)	-8.94 (46)	3.71 (86)	3.80 (48)
Difference	1.13	-1.76	-0.97	-1.84	0.57	0.42	5.24	N/A	N/A	N/A
IM International Large Cap Core Equity (SA+CF) Median	2.46	20.20	7.86	-7.08	6.04	22.60	17.31	-9.42	6.30	3.32
American Funds EuroPacific Gr R6 (RERGX)	1.47 (57)	20.63 (9)	8.52 (40)	-4.93 (36)	N/A	N/A	N/A	N/A	N/A	N/A
MSCI AC World ex USA	2.25 (47)	20.15 (20)	9.80 (28)	-11.78 (87)	5.22 (30)	16.98 (60)	15.04 (74)	-10.42 (47)	8.00 (48)	6.43 (18)
Difference	-0.78	0.48	-1.28	6.85	N/A	N/A	N/A	N/A	N/A	N/A
IM International Large Cap Growth Equity (MF) Median	2.00	17.83	7.87	-5.67	4.38	18.00	17.66	-10.78	7.40	1.85
<b>Total Fixed Income</b>	<b>-1.24</b>	<b>0.85</b>	<b>5.78</b>	<b>0.98</b>	<b>3.51</b>	<b>-2.53</b>	<b>6.54</b>	<b>4.25</b>	<b>8.50</b>	<b>11.32</b>
Total Fixed Income Policy	-1.22	0.07	5.19	2.94	3.96	-1.68	5.16	5.26	7.72	11.46
Difference	-0.02	0.78	0.59	-1.96	-0.45	-0.85	1.38	-1.01	0.78	-0.14
ICC Fixed Income	N/A	N/A	N/A	N/A	3.51 (95)	-2.53 (98)	6.54 (55)	4.26 (90)	8.50 (75)	11.32 (70)
Blmbg. Barc. U.S. Aggregate Index	-1.22 (89)	0.07 (87)	5.19 (81)	2.94 (60)	3.96 (81)	-1.68 (80)	5.16 (91)	5.26 (49)	8.16 (86)	10.56 (82)
Difference	N/A	N/A	N/A	N/A	-0.45	-0.85	1.38	-1.00	0.34	0.76
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-0.74	0.62	5.67	3.02	4.51	-1.22	6.62	5.26	9.26	12.30
Baird Aggregate Bond Fund (BAGIX)	-1.24 (43)	0.87 (32)	5.78 (28)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. U.S. Aggregate Index	-1.22 (41)	0.07 (64)	5.19 (52)	2.94 (9)	3.96 (59)	-1.68 (53)	5.16 (81)	5.26 (14)	8.16 (76)	10.56 (59)
Difference	-0.02	0.80	0.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Broad Market Core Fixed Income (MF) Median	-1.35	0.48	5.21	1.98	4.19	-1.62	6.79	4.30	9.34	11.36

Returns for periods greater than one year are annualized. Returns are expressed as percentages.



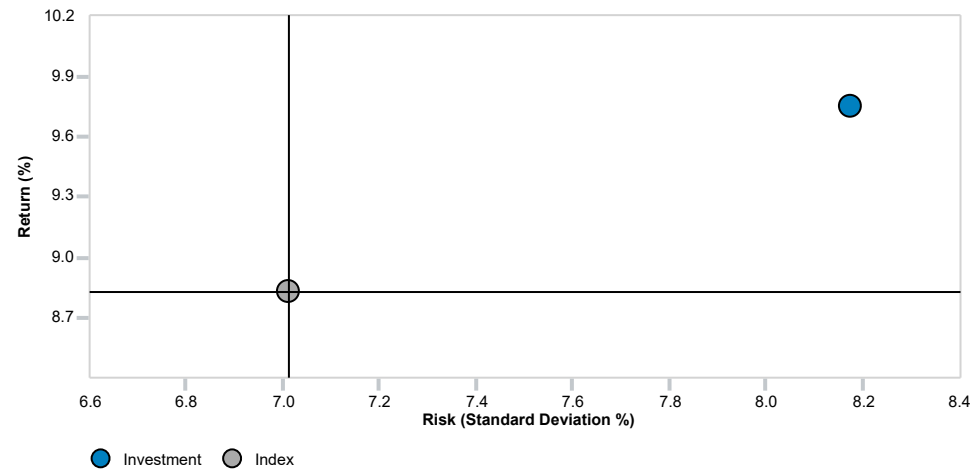
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.75	8.18	1.02	108.45	10	105.05	2
Index	8.83	7.01	1.05	100.00	10	100.00	2

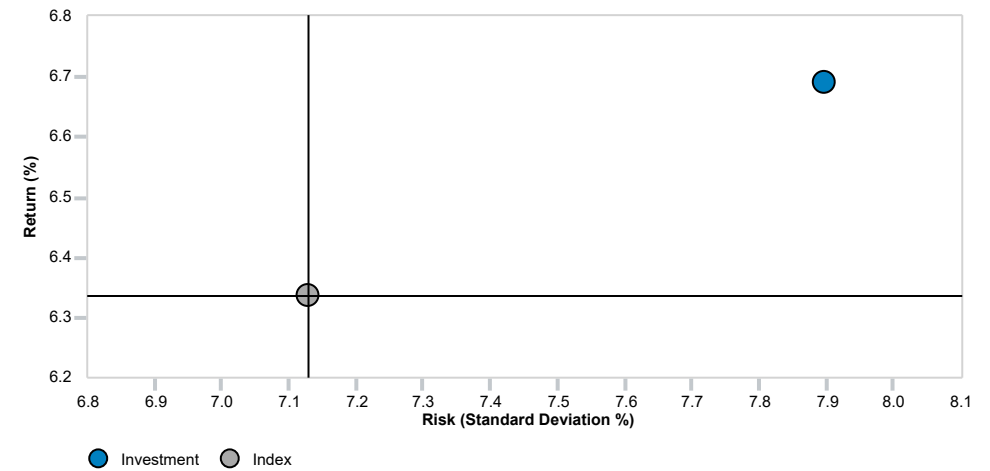
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.69	7.90	0.76	104.87	15	103.69	5
Index	6.33	7.13	0.78	100.00	15	100.00	5

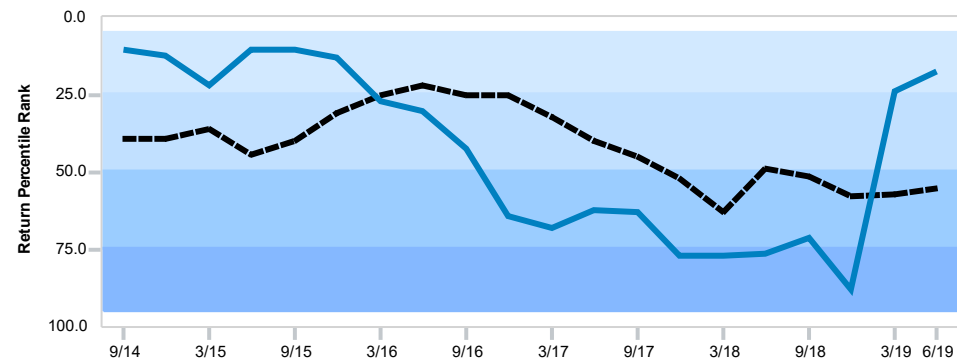
### Risk and Return 3 Years



### Risk and Return 5 Years

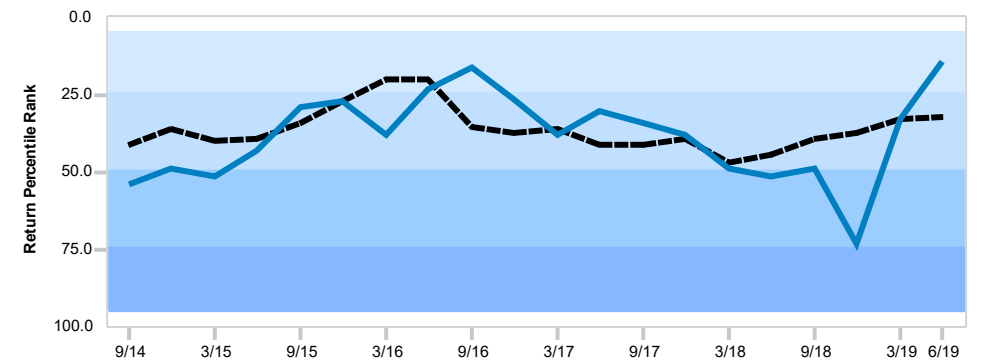


### 3 Year Rolling Percentile Rank All Public Plans-Total Fund



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	8 (40%)	3 (15%)	5 (25%)	4 (20%)
Index	20	4 (20%)	10 (50%)	6 (30%)	0 (0%)

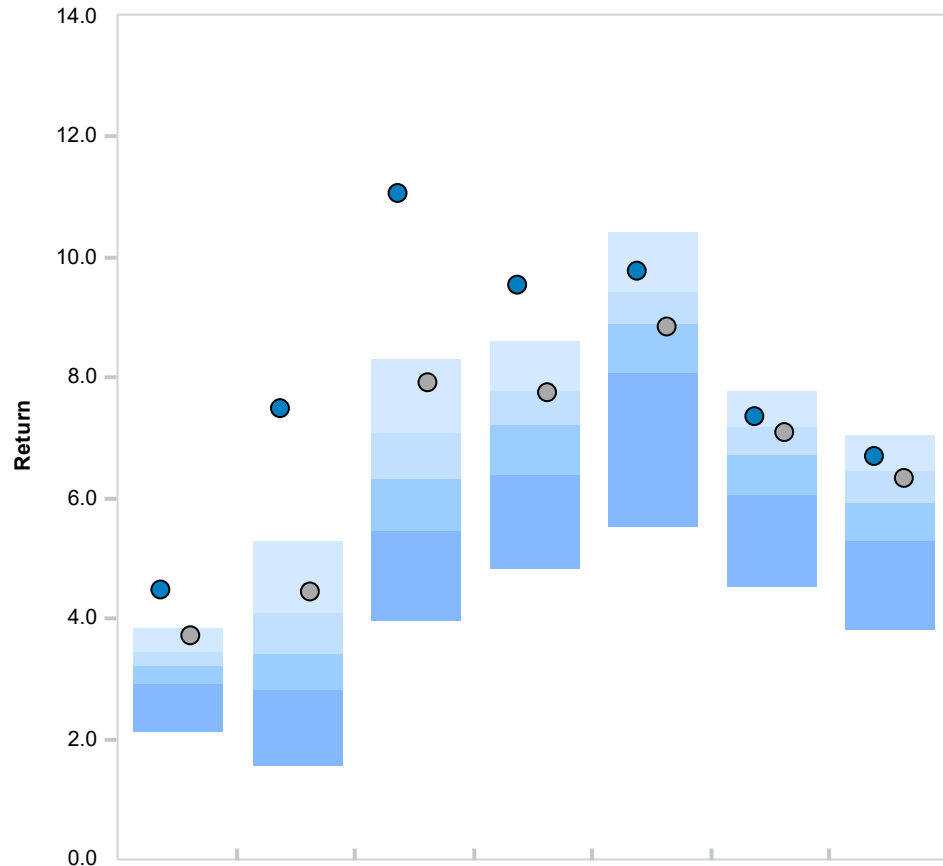
### 5 Year Rolling Percentile Rank All Public Plans-Total Fund



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	3 (15%)	13 (65%)	4 (20%)	0 (0%)
Index	20	2 (10%)	18 (90%)	0 (0%)	0 (0%)

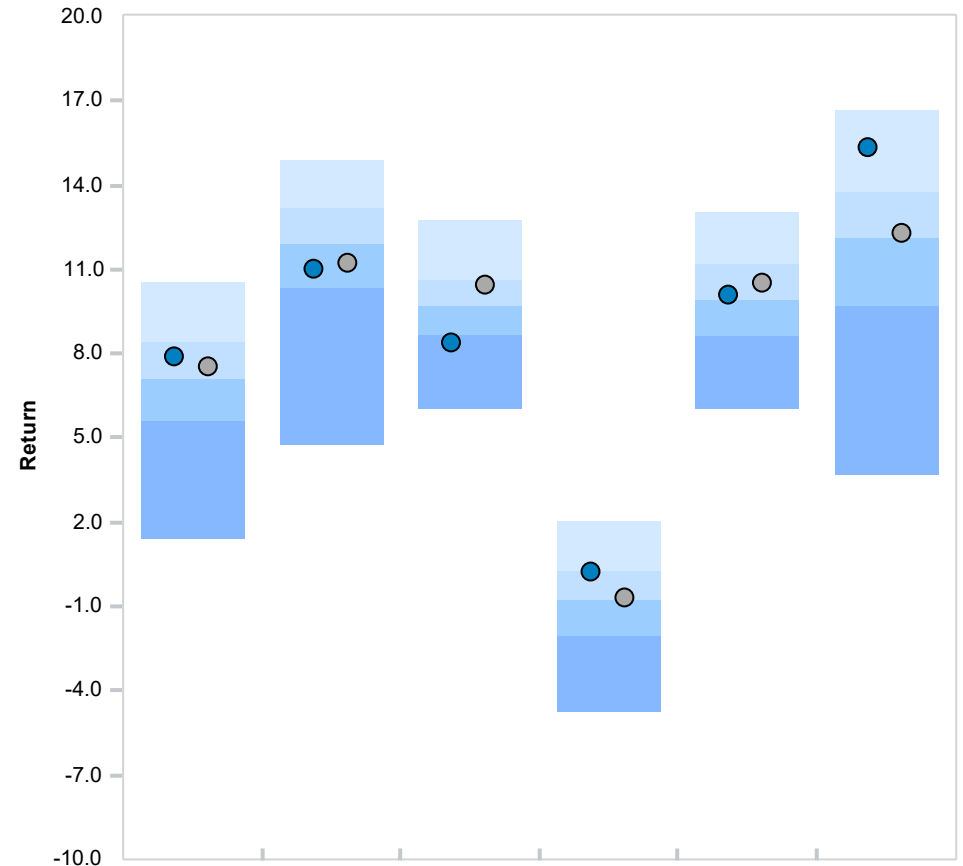


Peer Group Analysis - All Public Plans-Total Fund



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
Investment	4.48 (1)	7.48 (1)	11.07 (1)	9.53 (2)	9.75 (17)	7.35 (19)	6.69 (14)
Index	3.69 (10)	4.45 (18)	7.91 (11)	7.73 (28)	8.83 (55)	7.09 (30)	6.33 (32)
Median	3.23	3.40	6.31	7.21	8.91	6.73	5.93

Peer Group Analysis - All Public Plans-Total Fund



	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013
Investment	7.89 (35)	10.97 (67)	8.38 (78)	0.24 (26)	10.05 (48)	15.29 (10)
Index	7.54 (41)	11.19 (63)	10.43 (31)	-0.74 (48)	10.52 (40)	12.25 (49)
Median	7.10	11.89	9.74	-0.81	9.93	12.15

Comparative Performance

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Investment	12.78 (1)	-8.79 (80)	3.34 (17)	1.29 (39)	-0.66 (72)	3.76 (40)
Index	9.02 (30)	-7.60 (51)	3.31 (18)	1.32 (37)	-0.97 (83)	3.75 (42)
Median	8.38	-7.55	2.58	1.03	-0.32	3.61

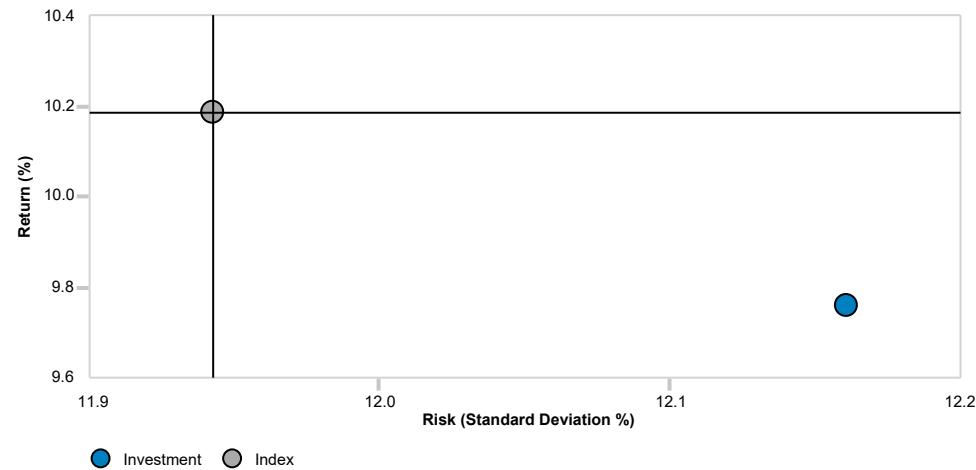
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.76	12.16	0.72	97.93	10	99.33	2
Index	10.19	11.94	0.76	100.00	10	100.00	2

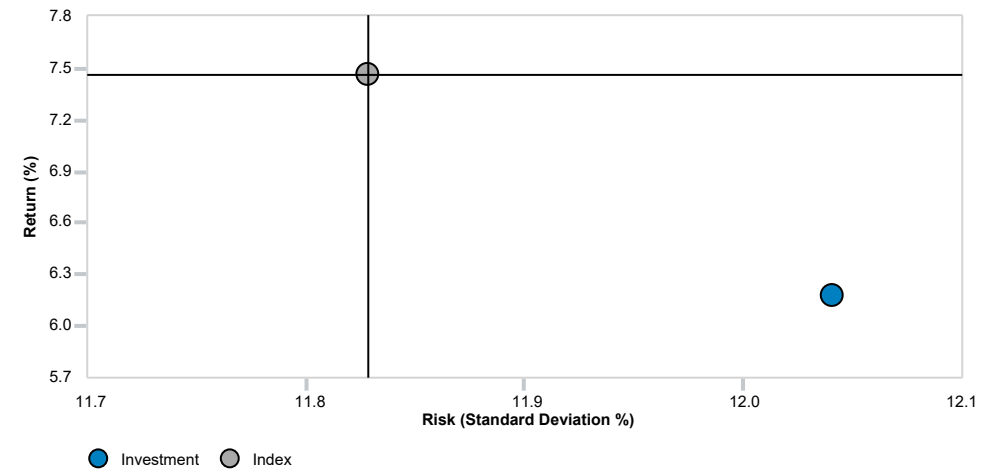
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.18	12.04	0.49	95.40	15	102.27	5
Index	7.46	11.83	0.60	100.00	15	100.00	5

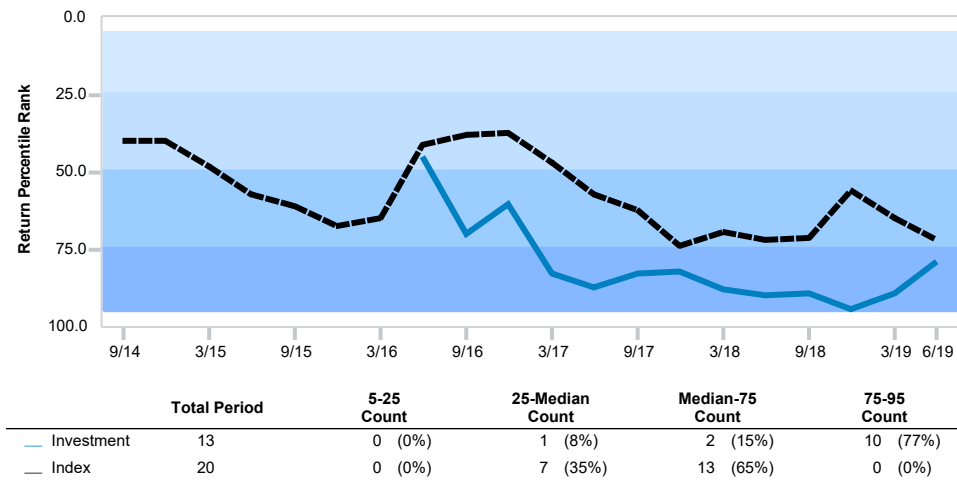
### Risk and Return 3 Years



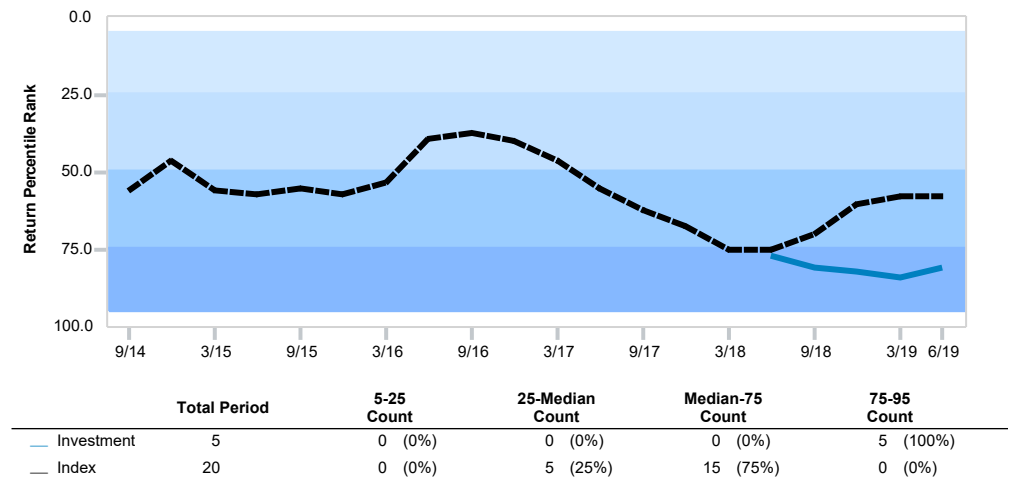
### Risk and Return 5 Years



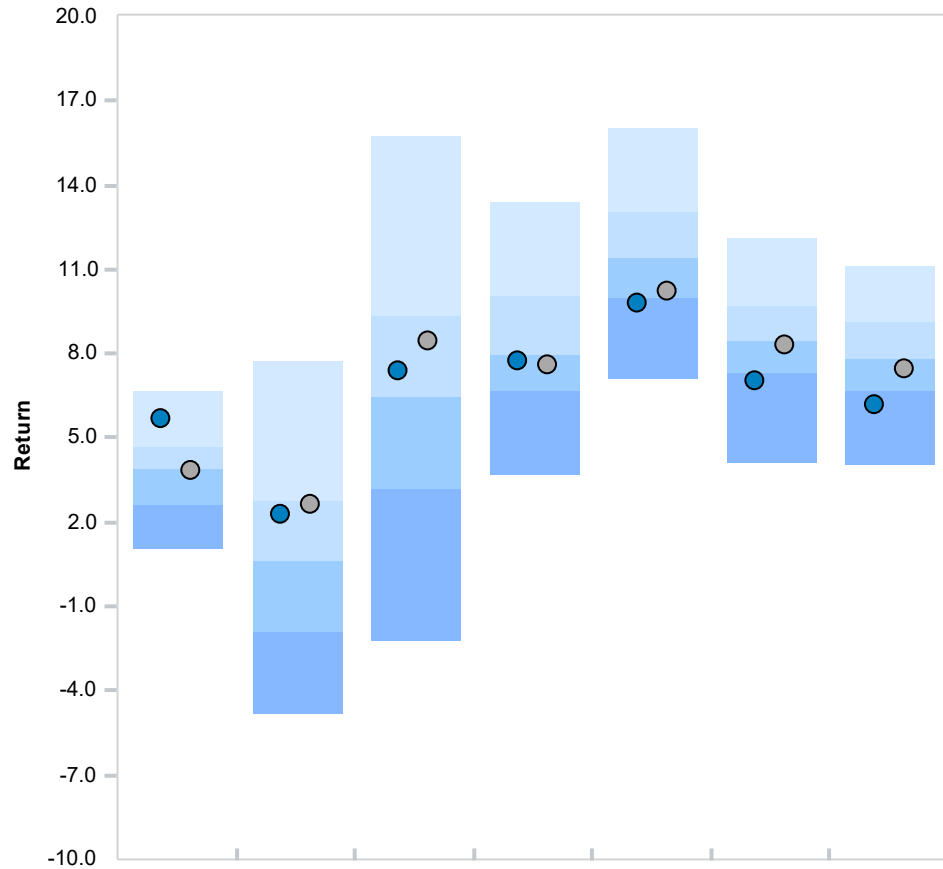
### 3 Year Rolling Percentile Rank IM U.S. Large Cap Value Equity (SA+CF)



### 5 Year Rolling Percentile Rank IM U.S. Large Cap Value Equity (SA+CF)



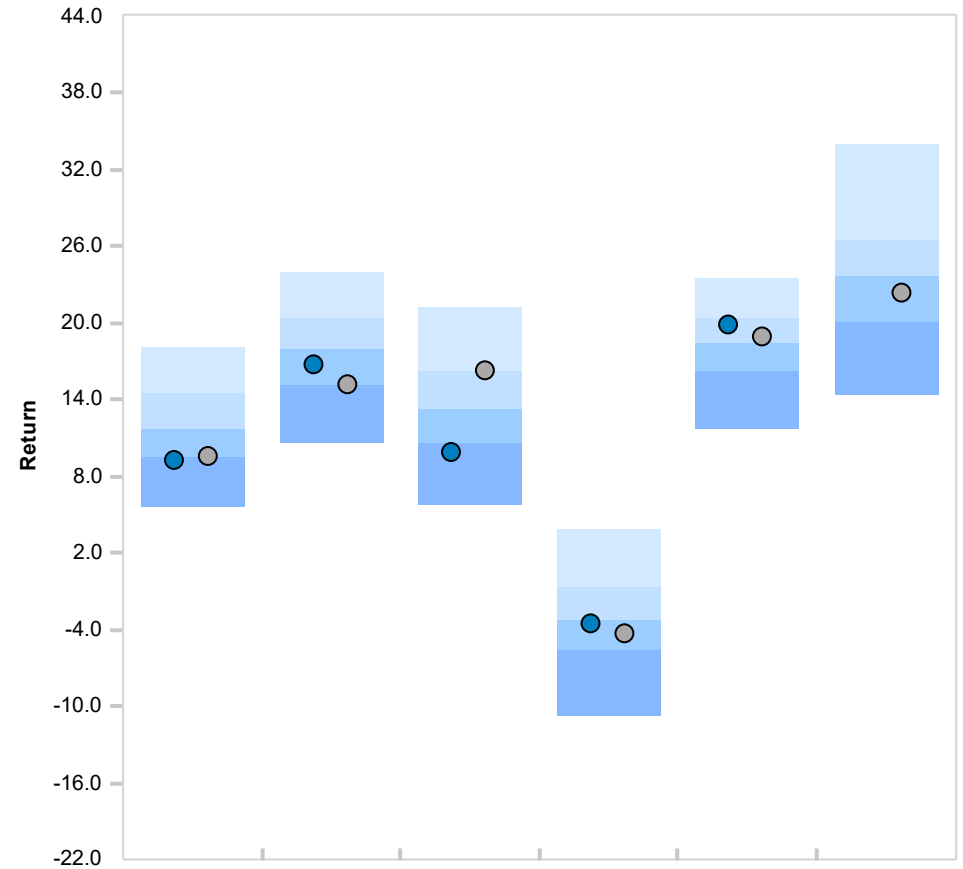
**Peer Group Analysis - IM U.S. Large Cap Value Equity (SA+CF)**



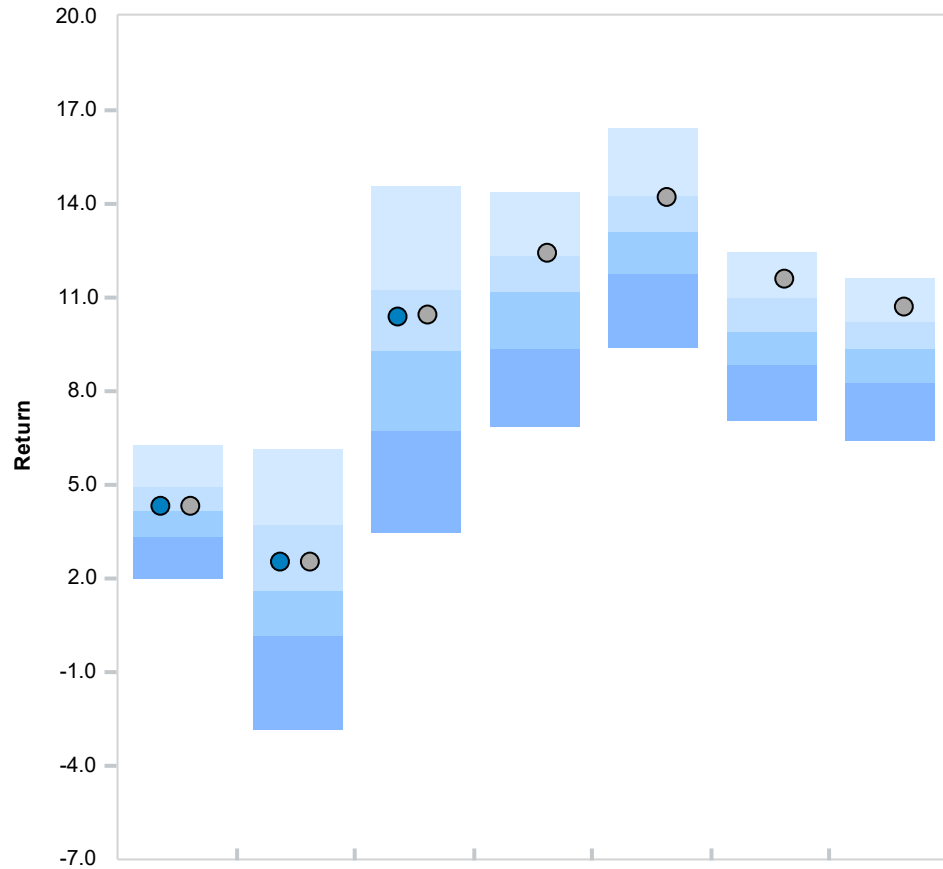
**Comparative Performance**

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Investment	12.68 (28)	-14.11 (61)	5.03 (66)	1.05 (68)	-2.97 (78)	6.00 (59)
Index	11.93 (46)	-11.72 (30)	5.70 (50)	1.18 (66)	-2.83 (74)	5.33 (76)
Median	11.75	-13.51	5.70	1.73	-1.98	6.31

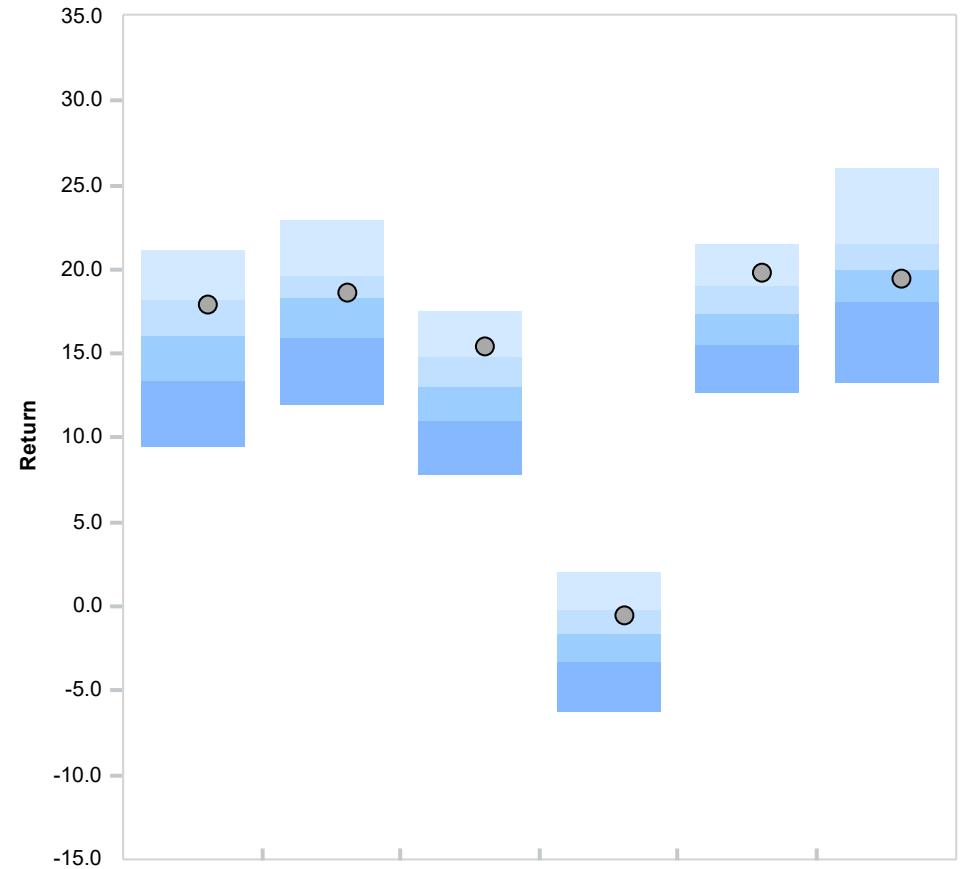
**Peer Group Analysis - IM U.S. Large Cap Value Equity (SA+CF)**



**Peer Group Analysis - IM U.S. Large Cap Core Equity (MF)**



**Peer Group Analysis - IM U.S. Large Cap Core Equity (MF)**



**Comparative Performance**

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Investment	13.65 (32)	-13.53 (45)	7.70 (32)	3.42 (27)	N/A	N/A
Index	13.65 (32)	-13.52 (45)	7.71 (31)	3.43 (26)	-0.76 (45)	6.64 (39)
Median	13.12	-13.77	7.26	2.81	-1.01	6.44

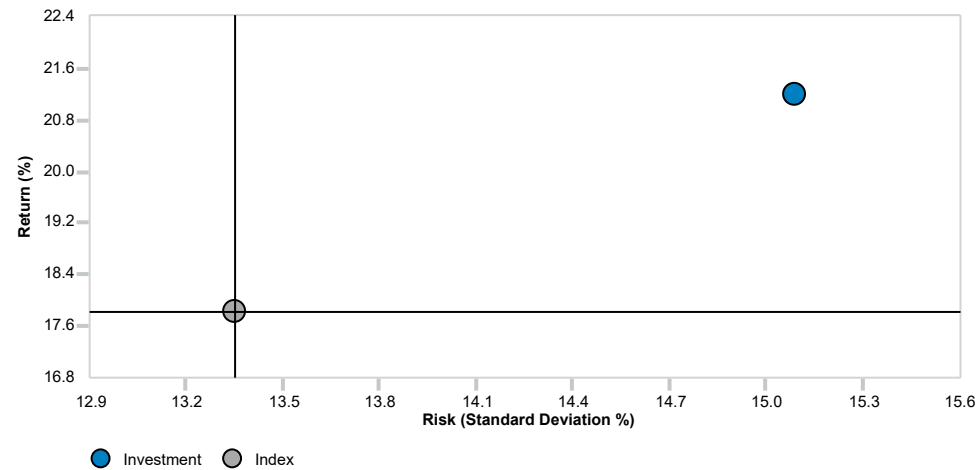
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	21.19	15.09	1.27	108.48	10	93.43	2
Index	17.81	13.35	1.20	100.00	11	100.00	1

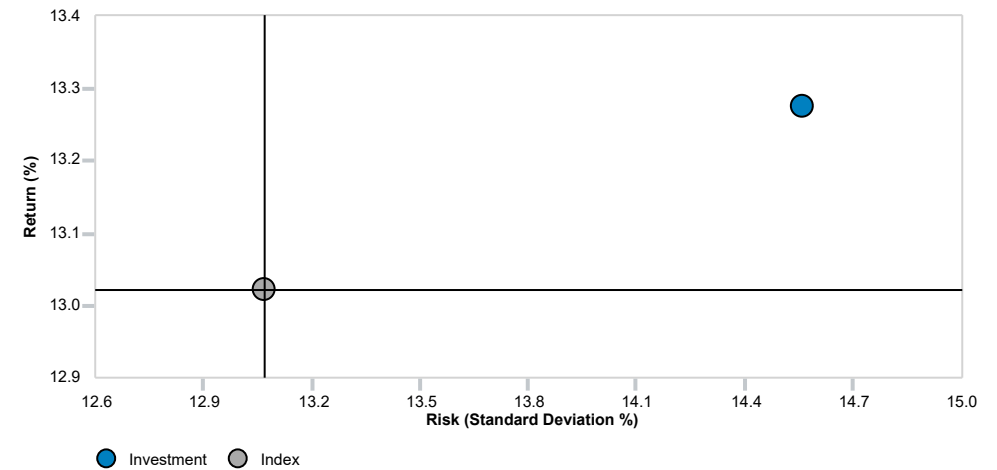
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	13.28	14.56	0.88	102.09	15	100.70	5
Index	13.02	13.07	0.94	100.00	18	100.00	2

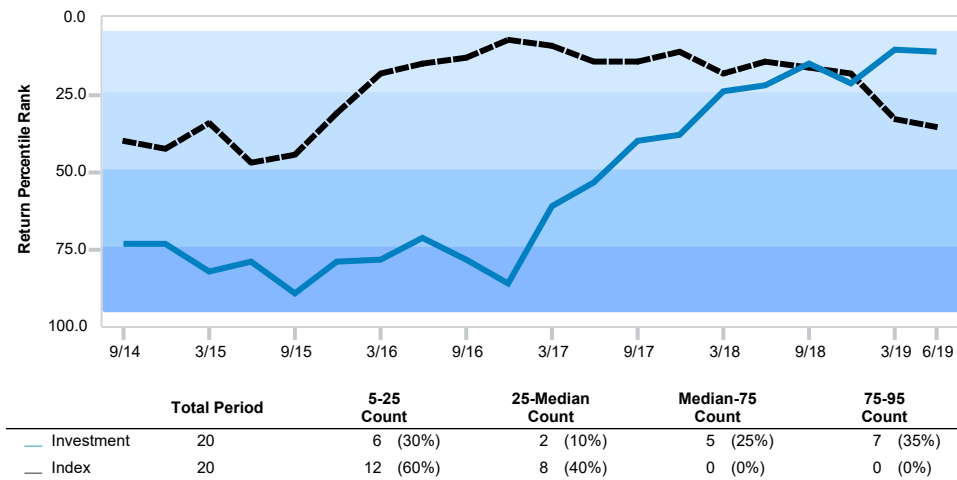
### Risk and Return 3 Years



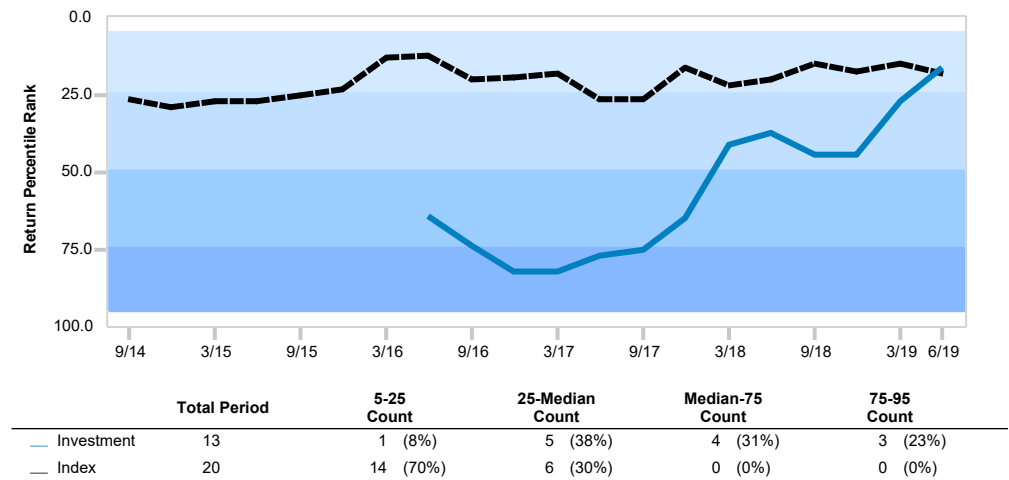
### Risk and Return 5 Years



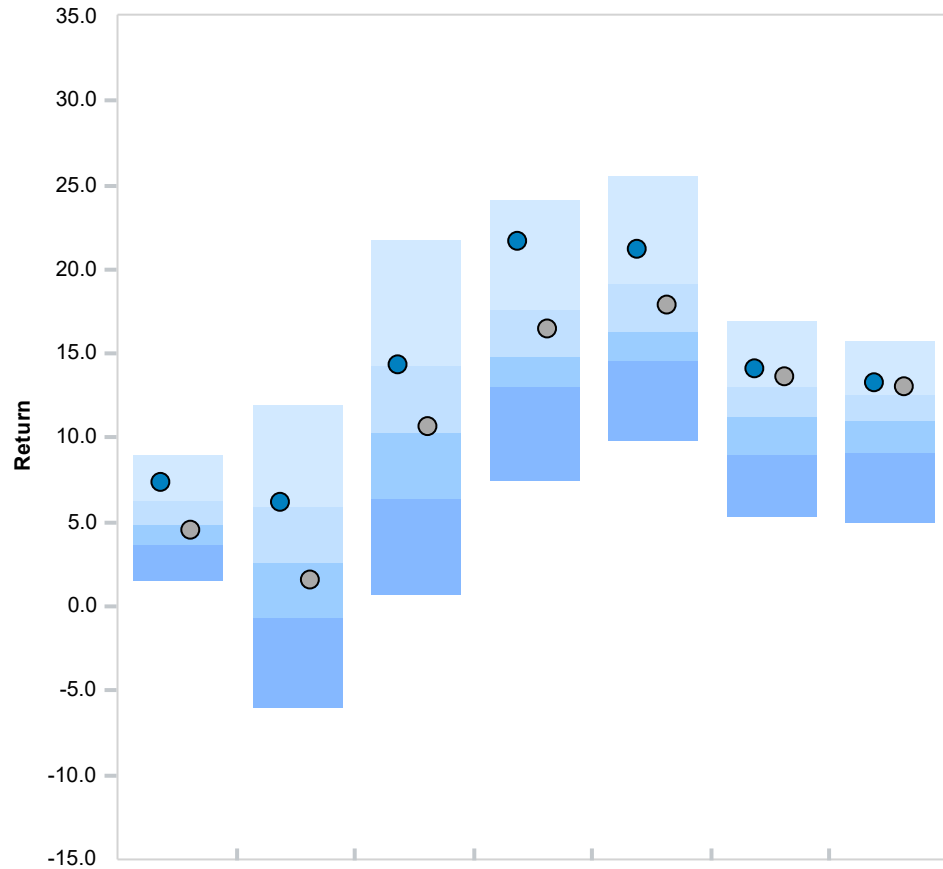
### 3 Year Rolling Percentile Rank IM U.S. Multi-Cap Growth Equity (MF)



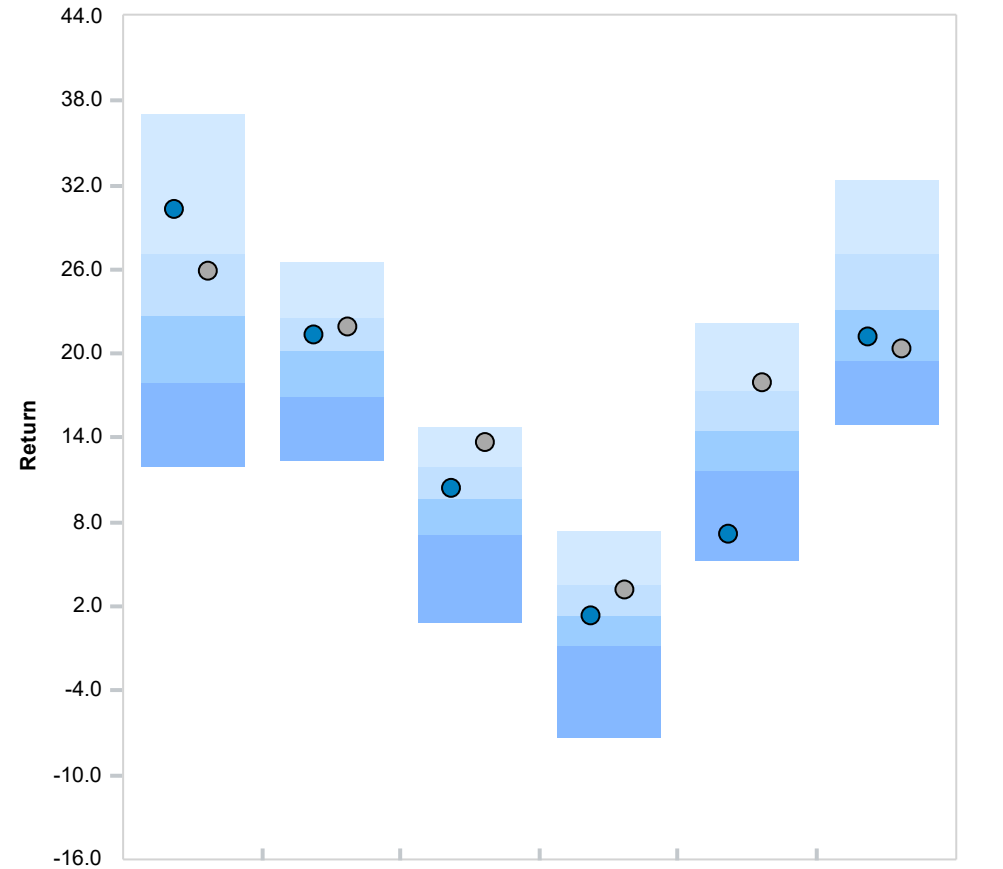
### 5 Year Rolling Percentile Rank IM U.S. Multi-Cap Growth Equity (MF)



**Peer Group Analysis - IM U.S. Multi-Cap Growth Equity (MF)**



**Peer Group Analysis - IM U.S. Multi-Cap Growth Equity (MF)**



**Comparative Performance**

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Investment	19.82 (16)	-17.50 (74)	7.73 (46)	6.05 (30)	6.68 (7)	6.84 (36)
Index	16.18 (57)	-16.33 (51)	8.88 (24)	5.87 (33)	1.48 (68)	7.61 (18)
Median	16.75	-16.31	7.60	4.63	2.37	6.07

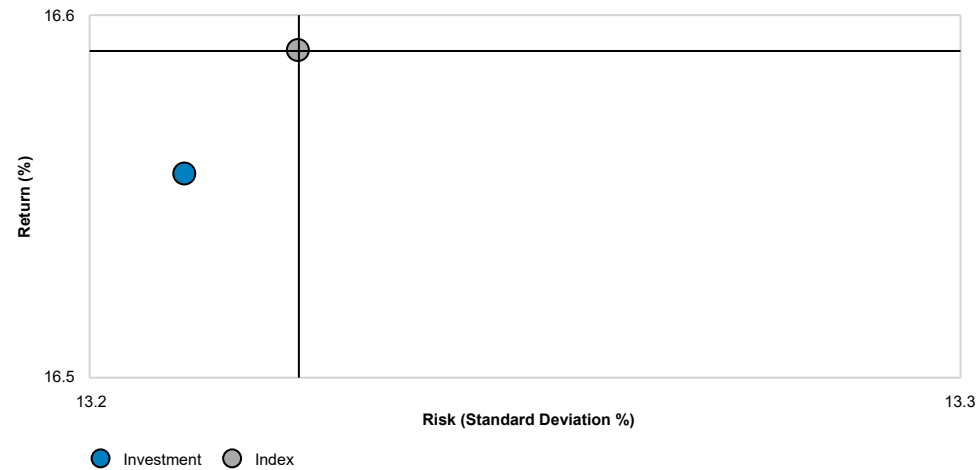
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	16.56	13.21	1.13	99.88	10	99.98	2
Index	16.59	13.22	1.13	100.00	10	100.00	2

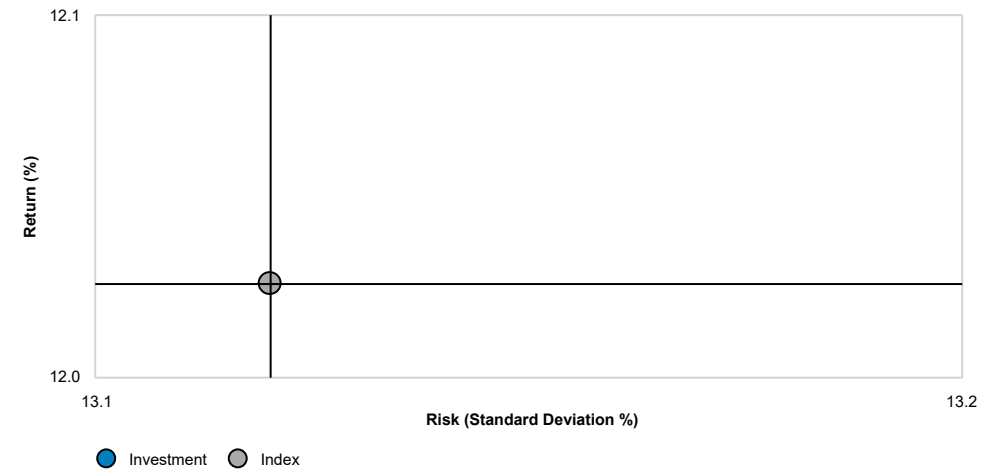
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	12.03	13.12	0.87	100.00	16	100.00	4

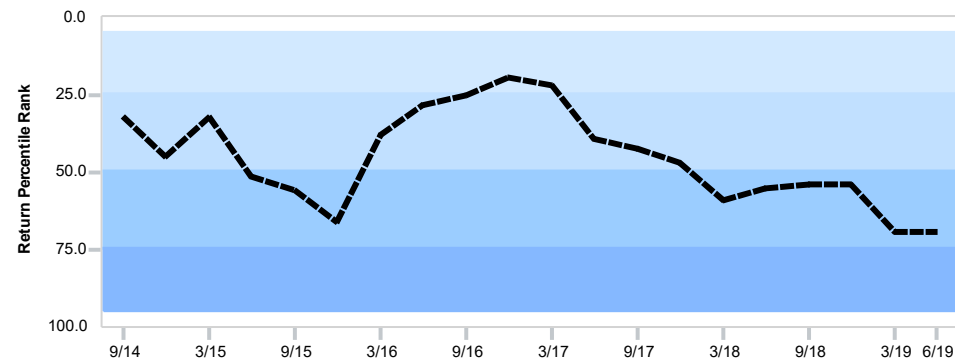
### Risk and Return 3 Years



### Risk and Return 5 Years

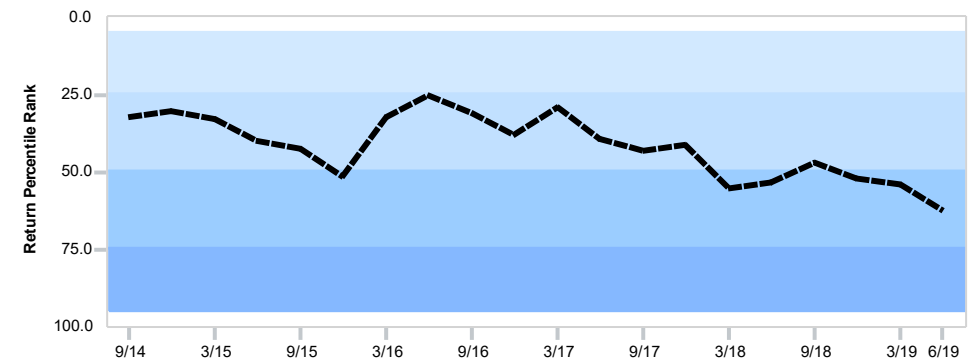


### 3 Year Rolling Percentile Rank IM U.S. Large Cap Growth Equity (MF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	1	0 (0%)	0 (0%)	1 (100%)	0 (0%)
Index	20	3 (15%)	8 (40%)	9 (45%)	0 (0%)

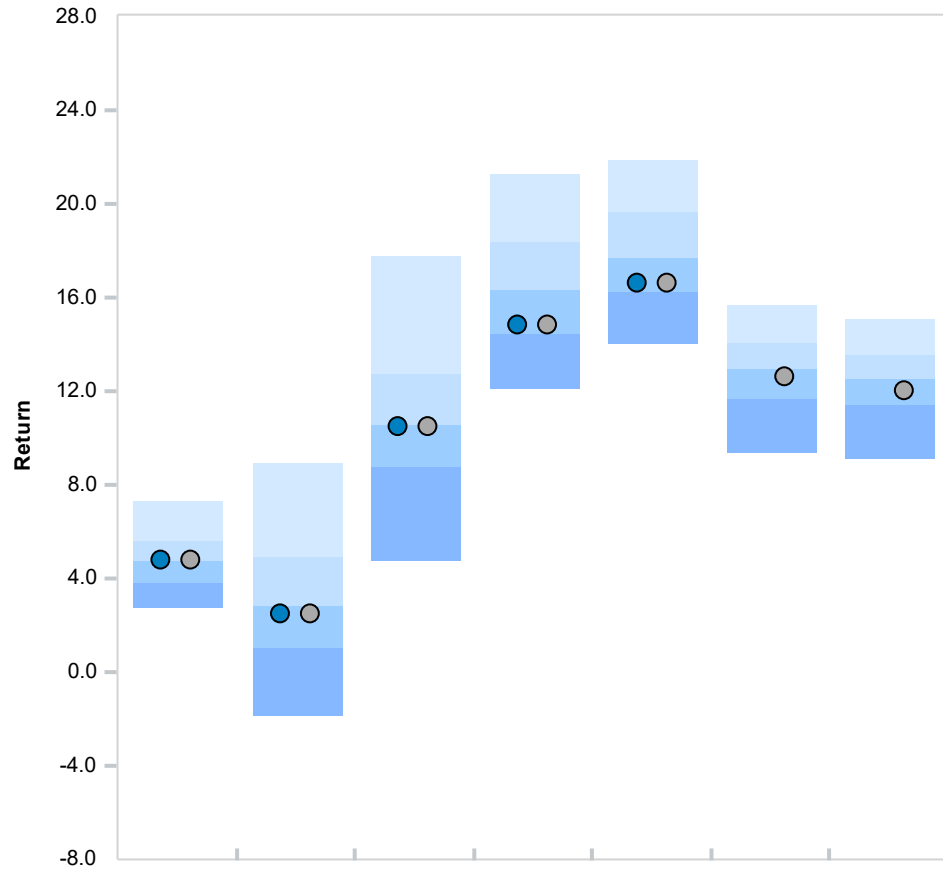
### 5 Year Rolling Percentile Rank IM U.S. Large Cap Growth Equity (MF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	1 (5%)	13 (65%)	6 (30%)	0 (0%)



**Peer Group Analysis - IM U.S. Large Cap Growth Equity (MF)**

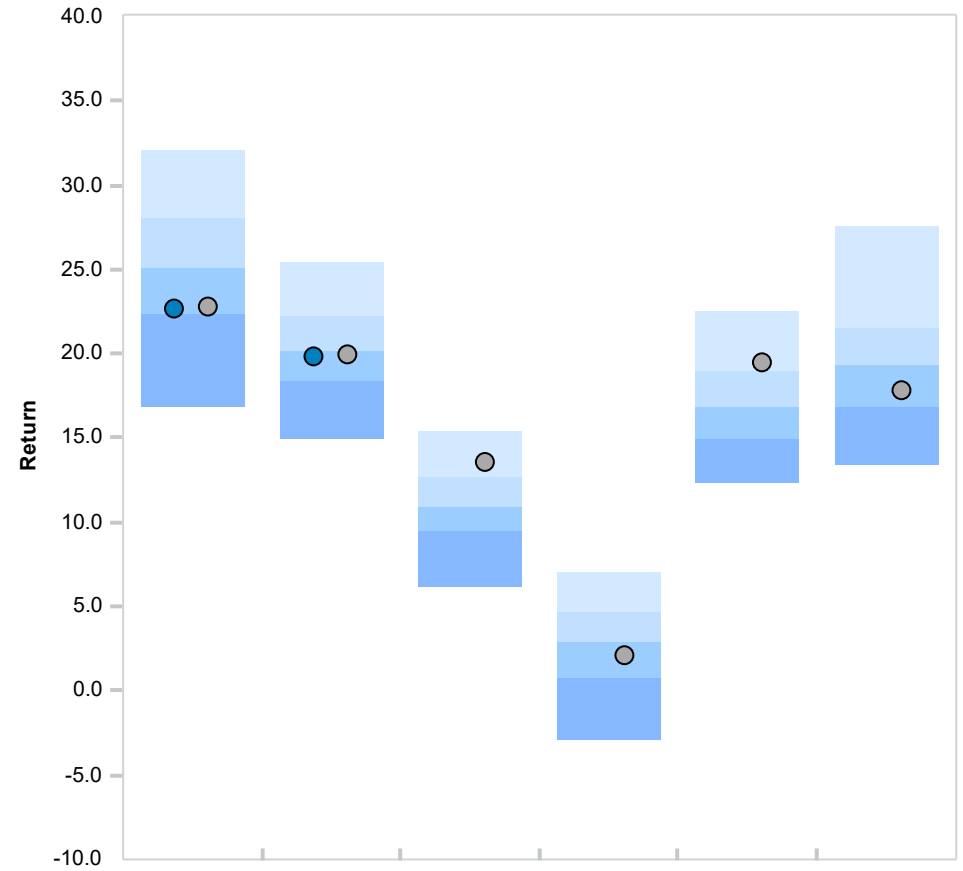


	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
Investment	4.75 (52)	2.47 (55)	10.44 (53)	14.80 (72)	16.56 (70)	N/A	N/A
Index	4.76 (51)	2.49 (55)	10.46 (53)	14.83 (70)	16.59 (69)	12.63 (56)	12.03 (62)
Median	4.77	2.83	10.56	16.37	17.71	12.94	12.53

**Comparative Performance**

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Investment	16.88 (34)	-16.30 (65)	7.78 (50)	5.91 (46)	1.17 (85)	6.22 (64)
Index	16.92 (32)	-16.32 (65)	7.78 (50)	5.90 (46)	1.20 (84)	6.22 (64)
Median	16.26	-15.76	7.78	5.77	2.82	6.66

**Peer Group Analysis - IM U.S. Large Cap Growth Equity (MF)**



	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013
Investment	22.67 (73)	19.81 (57)	N/A	N/A	N/A	N/A
Index	22.70 (72)	19.86 (56)	13.56 (20)	2.00 (63)	19.38 (21)	17.81 (67)
Median	25.08	20.13	10.96	2.85	16.89	19.35

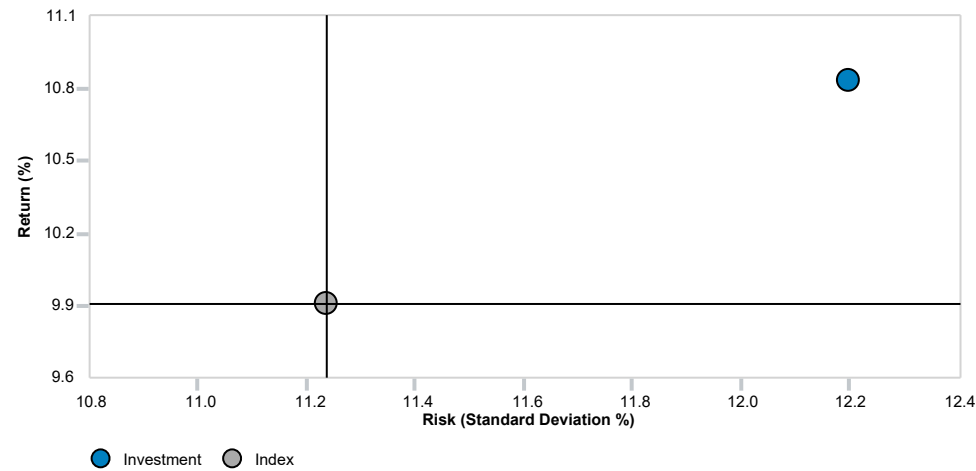
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	10.84	12.20	0.79	105.39	8	101.74	4
Index	9.91	11.24	0.78	100.00	8	100.00	4

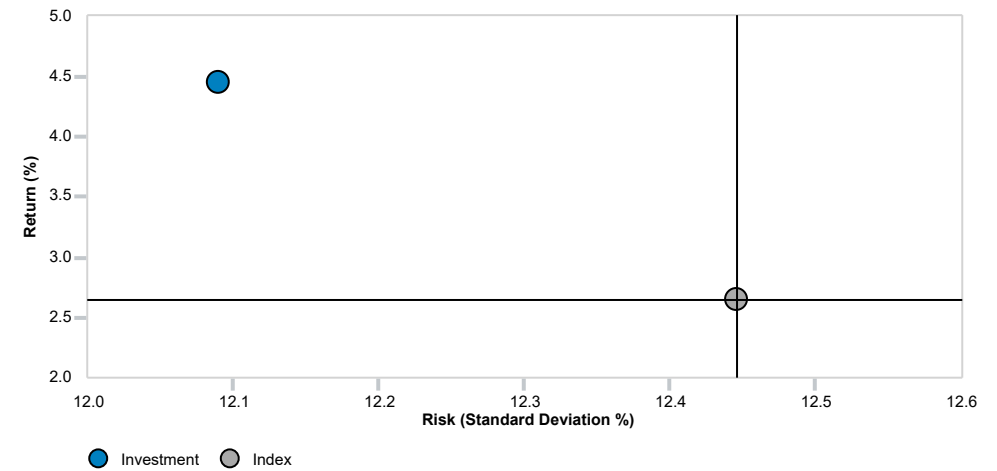
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	4.45	12.09	0.35	97.62	11	86.12	9
Index	2.65	12.45	0.20	100.00	11	100.00	9

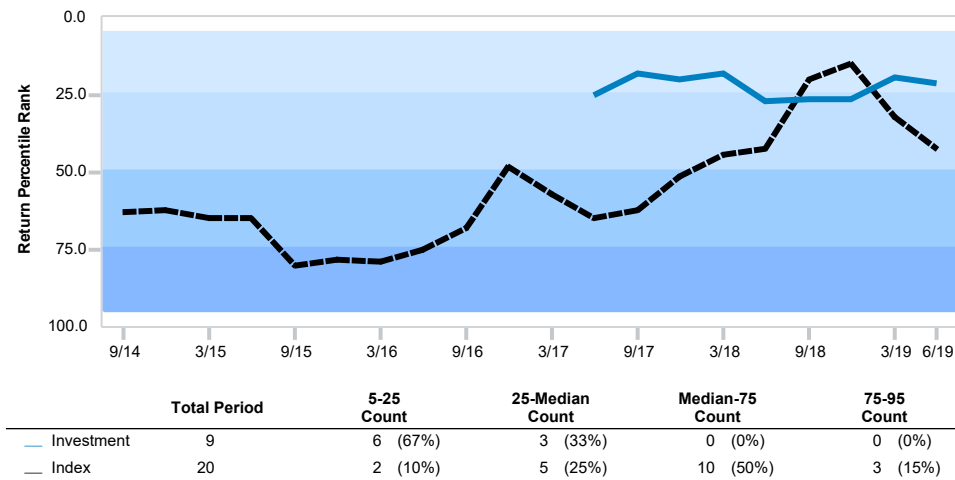
### Risk and Return 3 Years



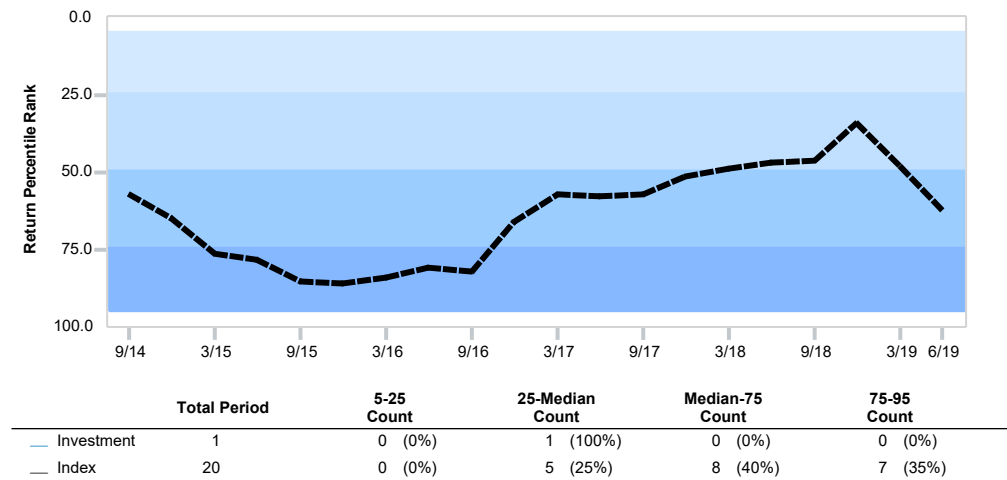
### Risk and Return 5 Years



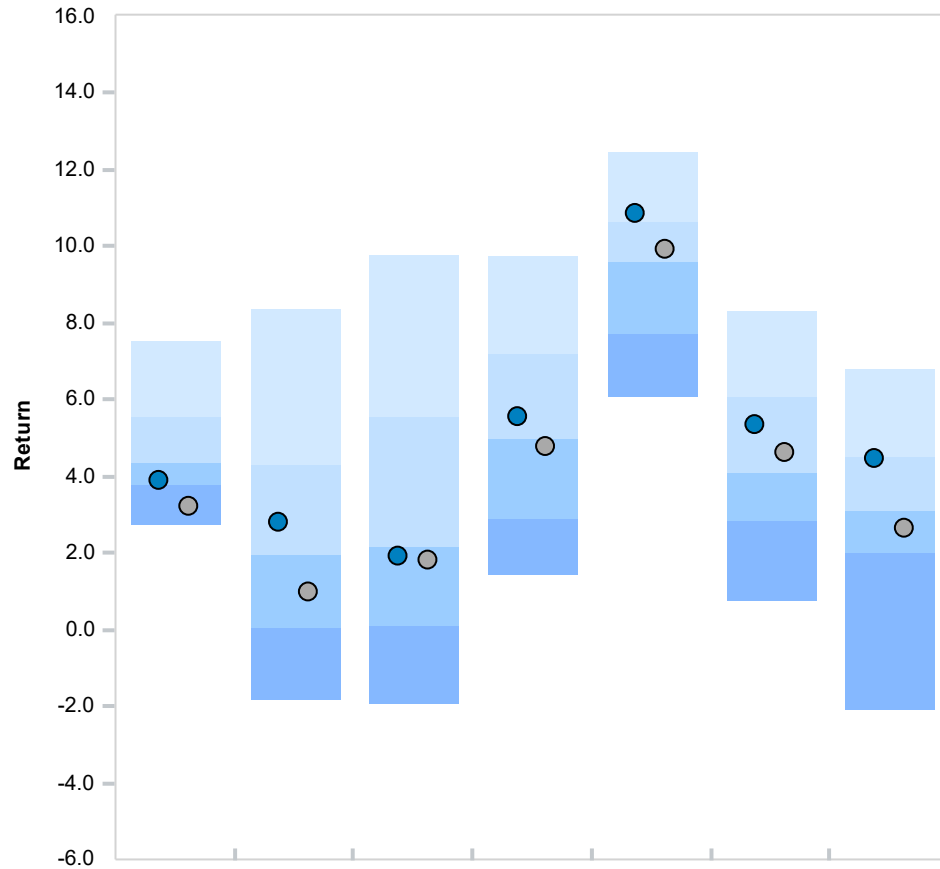
### 3 Year Rolling Percentile Rank IM International Large Cap Growth Equity (MF)



### 5 Year Rolling Percentile Rank IM International Large Cap Growth Equity (MF)

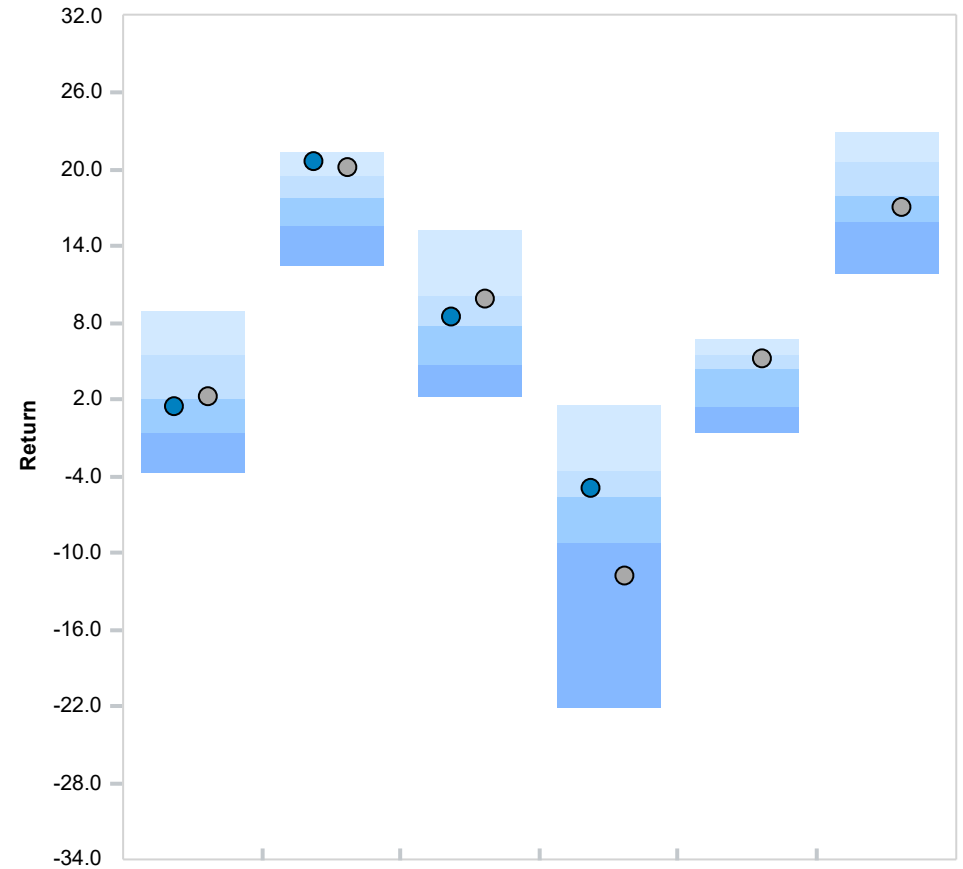


**Peer Group Analysis - IM International Large Cap Growth Equity (MF)**



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	3.87 (71)	2.78 (39)	1.91 (53)	5.56 (39)	10.84 (21)	5.34 (29)	4.45 (26)
● Index	3.22 (85)	0.99 (62)	1.80 (56)	4.75 (54)	9.91 (42)	4.61 (41)	2.65 (62)
Median	4.36	1.95	2.14	4.97	9.61	4.12	3.08

**Peer Group Analysis - IM International Large Cap Growth Equity (MF)**



	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013
● Investment	1.47 (57)	20.63 (9)	8.52 (40)	-4.93 (36)	N/A	N/A
● Index	2.25 (47)	20.15 (20)	9.80 (28)	-11.78 (87)	5.22 (30)	16.98 (60)
Median	2.00	17.83	7.87	-5.67	4.38	18.00

**Comparative Performance**

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Investment	13.20 (27)	-12.59 (44)	-0.84 (82)	-2.82 (58)	1.03 (19)	4.23 (42)
Index	10.44 (92)	-11.41 (27)	0.80 (39)	-2.39 (49)	-1.08 (62)	5.06 (12)
Median	12.38	-12.68	0.24	-2.51	-0.68	4.10

### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	2.75	2.97	0.49	104.27	9	92.79	3
Index	2.31	2.99	0.34	100.00	9	100.00	3

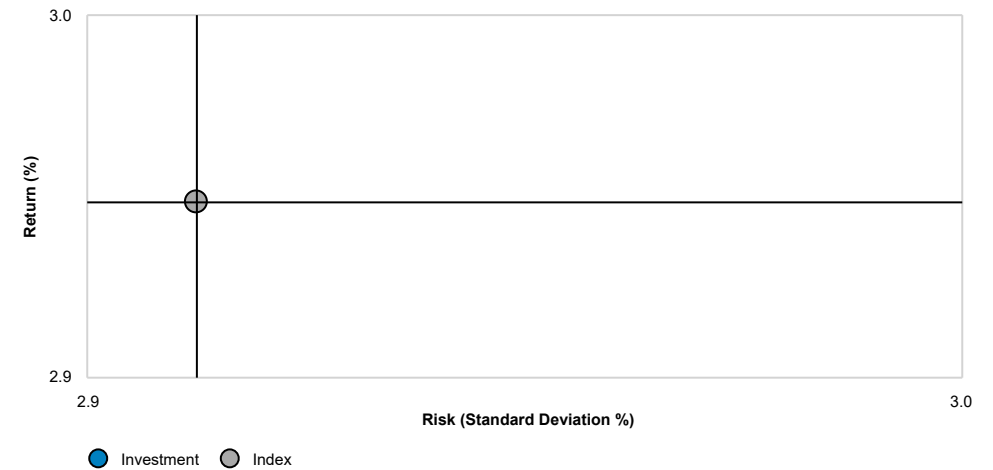
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	2.95	2.91	0.73	100.00	15	100.00	5

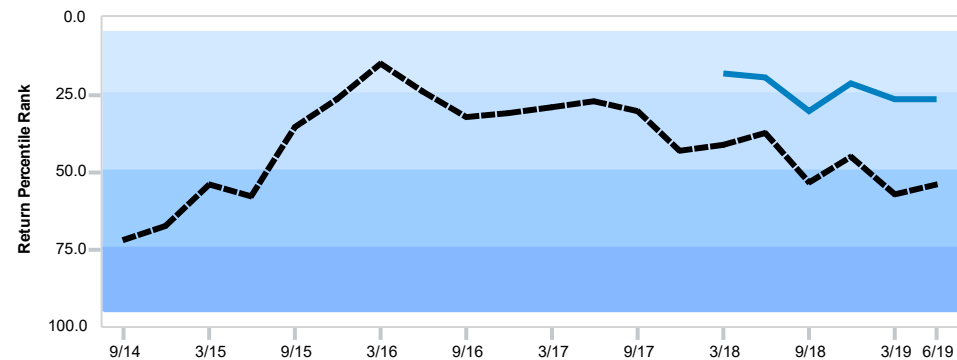
### Risk and Return 3 Years



### Risk and Return 5 Years

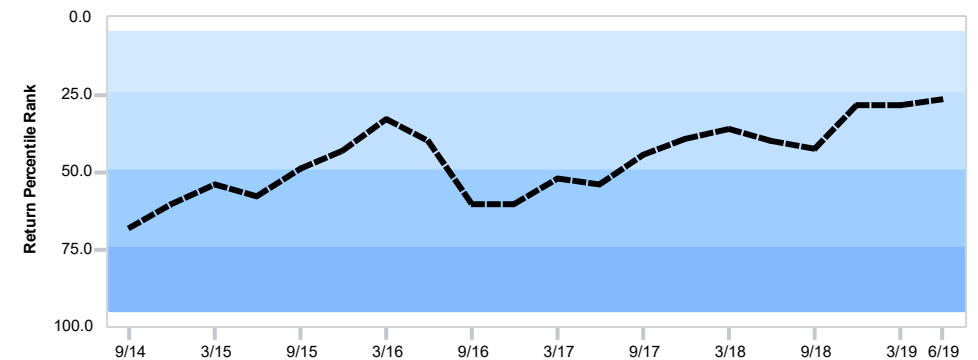


### 3 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (MF)



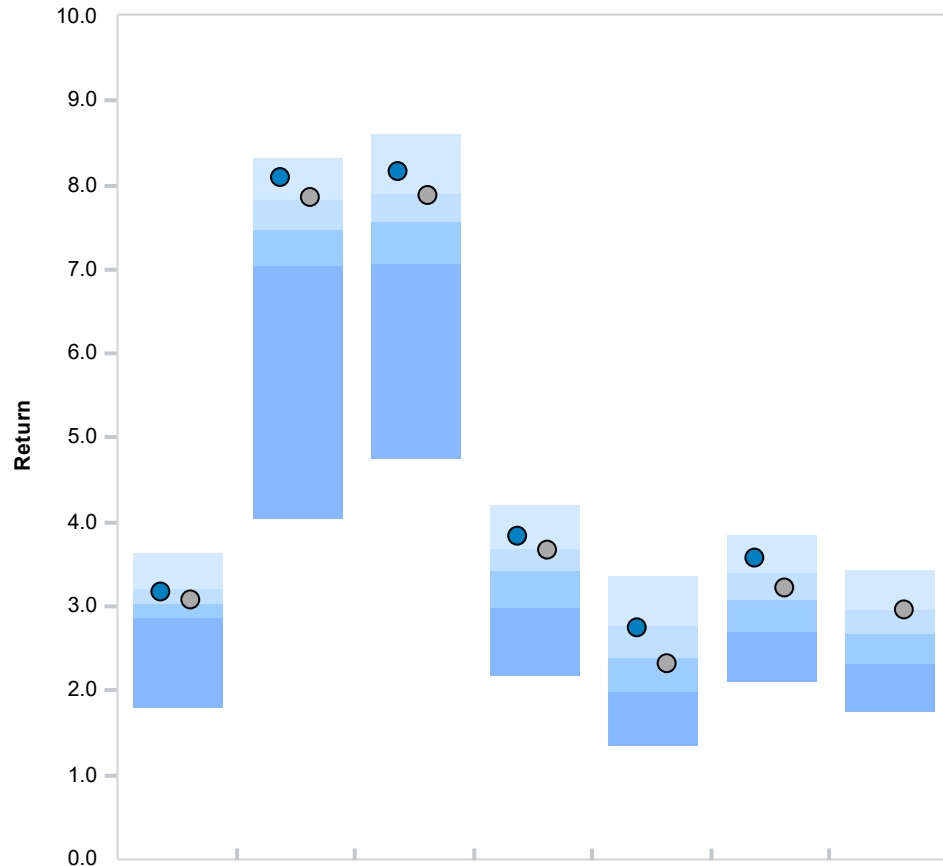
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	6	3 (50%)	3 (50%)	0 (0%)	0 (0%)
Index	20	2 (10%)	11 (55%)	7 (35%)	0 (0%)

### 5 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (MF)

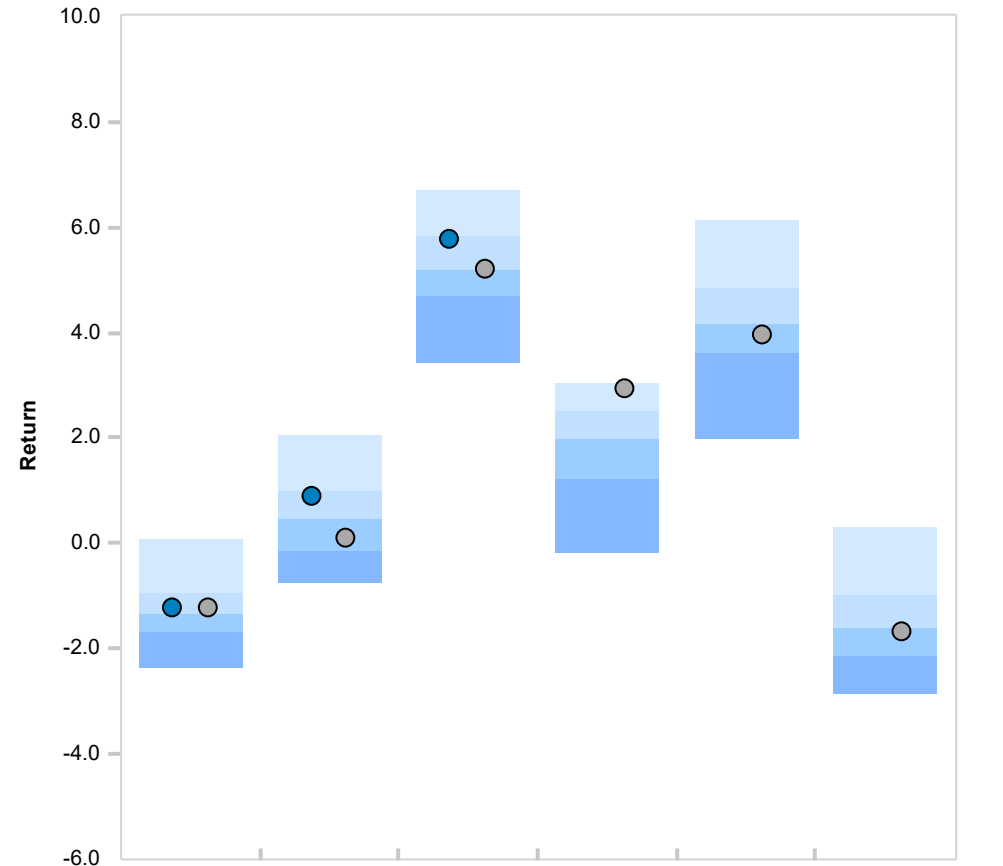


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	0 (0%)	12 (60%)	8 (40%)	0 (0%)

**Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (MF)**



**Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (MF)**



**Comparative Performance**

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Investment	3.32 (43)	1.40 (26)	0.07 (54)	-0.24 (48)	-1.52 (58)	0.45 (28)
Index	2.94 (72)	1.64 (11)	0.02 (65)	-0.16 (30)	-1.46 (47)	0.39 (39)
Median	3.23	0.99	0.09	-0.25	-1.48	0.34

**Comparative Performance**  
**Manager Composite Performance Comparison**  
As of June 30, 2019

Comparative Performance Trailing Returns												
	1 YR		3 YR		5 YR		7 YR		10 YR		15 YR	
Dana Large Cap Value	7.12	(41)	9.59	(83)	6.10	(81)	11.28	(80)	12.45	(80)	8.20	(68)
Russell 1000 Value Index	8.46	(31)	10.19	(71)	7.46	(58)	12.09	(61)	13.19	(59)	7.84	(78)
Difference	-1.34		-0.60		-1.36		-0.81		-0.74		0.36	
IM U.S. Large Cap Value Equity (SA+CF) Median	6.45		11.42		7.79		12.53		13.44		8.58	
Wells Fargo Growth (SGRNX)	14.34	(25)	21.19	(11)	13.27	(16)	14.72	(41)	17.88	(6)	12.39	(3)
Russell 3000 Growth Index	10.60	(48)	17.81	(35)	13.02	(18)	15.54	(24)	16.13	(23)	9.83	(37)
Difference	3.74		3.38		0.25		-0.82		1.75		2.56	
IM U.S. Multi-Cap Growth Equity (MF) Median	10.33		16.30		11.00		14.22		14.76		9.30	
Vanguard Gro Idx;Adm (VIGAX)	10.44	(53)	16.56	(70)	11.98	(64)	14.84	(56)	15.68	(32)	9.60	(35)
CRSP U.S. Large Cap Growth TR Index	10.46	(53)	16.59	(69)	12.03	(62)	14.74	(58)	15.18	(48)	9.56	(37)
Difference	-0.02		-0.03		-0.05		0.10		0.50		0.04	
IM U.S. Large Cap Growth Equity (MF) Median	10.56		17.71		12.53		14.98		15.09		9.26	
Vanguard 500 Idx;Adm (VFIAX)	10.38	(34)	14.15	(27)	10.68	(15)	13.94	(17)	14.67	(13)	8.73	(23)
S&P 500 Index	10.42	(34)	14.19	(26)	10.71	(14)	13.98	(16)	14.70	(12)	8.75	(23)
Difference	-0.04		-0.04		-0.03		-0.04		-0.03		-0.02	
IM U.S. Large Cap Core Equity (MF) Median	9.26		13.11		9.33		12.89		13.36		8.09	
American Funds EuPc;R6 (RERGX)	1.91	(53)	10.84	(21)	4.45	(26)	8.44	(11)	8.15	(25)	N/A	
MSCI EAFE Growth Index	4.67	(30)	10.12	(40)	4.79	(22)	8.90	(7)	8.63	(19)	6.56	(41)
Difference	-2.76		0.72		-0.34		-0.46		-0.48		N/A	
IM International Large Cap Growth Equity (MF) Median	2.14		9.61		3.08		6.92		7.39		6.32	
Baird Aggregate Bd;Inst (BAGIX)	8.16	(14)	2.75	(26)	3.29	(9)	3.39	(8)	5.06	(16)	4.67	(13)
Blmbg. Barc. U.S. Aggregate Index	7.87	(28)	2.31	(54)	2.95	(26)	2.62	(50)	3.90	(69)	4.27	(37)
Difference	0.29		0.44		0.34		0.77		1.16		0.40	
IM U.S. Broad Market Core Fixed Income (MF) Median	7.56		2.39		2.67		2.62		4.26		4.11	

Returns for periods greater than one year are annualized.



**Comparative Performance**  
**Manager Composite Performance Comparison**  
As of June 30, 2019

**Comparative Performance Fiscal Year Returns**

	Oct-2017 To Sep-2018		Oct-2016 To Sep-2017		Oct-2015 To Sep-2016		Oct-2014 To Sep-2015		Oct-2013 To Sep-2014		Oct-2012 To Sep-2013		Oct-2011 To Sep-2012		Oct-2010 To Sep-2011		Oct-2009 To Sep-2010		Oct-2008 To Sep-2009	
Dana Large Cap Value	9.18	(80)	16.46	(65)	9.79	(82)	-3.45	(53)	19.97	(30)	19.43	(79)	32.51	(12)	-1.59	(56)	10.18	(42)	-13.50	(94)
Russell 1000 Value Index	9.45	(77)	15.12	(75)	16.19	(26)	-4.42	(64)	18.89	(43)	22.30	(60)	30.92	(26)	-1.89	(62)	8.90	(55)	-10.62	(84)
Difference	-0.27		1.34		-6.40		0.97		1.08		-2.87		1.59		0.30		1.28		-2.88	
IM U.S. Large Cap Value Equity (SA+CF) Median	11.72		17.89		13.22		-3.29		18.40		23.76		28.16		-0.98		9.32		-5.89	
Wells Fargo Growth (SGRNX)	30.23	(14)	21.35	(39)	10.38	(43)	1.32	(50)	7.11	(92)	21.12	(60)	31.94	(9)	11.91	(1)	23.74	(3)	3.25	(16)
Russell 3000 Growth Index	25.89	(30)	21.87	(33)	13.64	(13)	3.21	(32)	17.87	(22)	20.30	(68)	29.35	(26)	3.39	(23)	12.81	(43)	-2.19	(48)
Difference	4.34		-0.52		-3.26		-1.89		-10.76		0.82		2.59		8.52		10.93		5.44	
IM U.S. Multi-Cap Growth Equity (MF) Median	22.73		20.15		9.61		1.30		14.52		23.10		26.82		-1.07		11.99		-2.74	
Vanguard Gro Idx;Adm (VIGAX)	22.67	(73)	19.81	(57)	13.51	(20)	1.93	(64)	19.31	(21)	18.64	(60)	31.27	(15)	2.90	(24)	12.80	(24)	-3.70	(62)
CRSP U.S. Large Cap Growth TR Index	22.70	(72)	19.86	(56)	13.56	(20)	2.00	(63)	19.38	(21)	17.81	(67)	30.07	(27)	1.02	(44)	11.32	(39)	-4.02	(66)
Difference	-0.03		-0.05		-0.05		-0.07		-0.07		0.83		1.20		1.88		1.48		0.32	
IM U.S. Large Cap Growth Equity (MF) Median	25.08		20.13		10.96		2.85		16.89		19.35		27.38		0.51		10.19		-2.52	
Vanguard 500 Idx;Adm (VFIAX)	17.87	(28)	18.57	(47)	15.39	(17)	-0.64	(30)	19.68	(18)	19.30	(61)	30.16	(23)	1.12	(24)	10.17	(24)	-6.79	(60)
S&P 500 Index	17.91	(28)	18.61	(46)	15.43	(17)	-0.61	(30)	19.73	(18)	19.34	(60)	30.20	(23)	1.14	(24)	10.16	(24)	-6.91	(62)
Difference	-0.04		-0.04		-0.04		-0.03		-0.05		-0.04		-0.04		-0.02		0.01		0.12	
IM U.S. Large Cap Core Equity (MF) Median	16.08		18.36		12.98		-1.62		17.38		19.98		27.93		-1.13		8.32		-5.57	
American Funds EuPc;R6 (RERGX)	1.47	(57)	20.63	(9)	8.52	(40)	-4.93	(36)	6.98	(2)	18.28	(46)	18.44	(35)	-12.34	(61)	7.40	(50)	N/A	
MSCI EAFE Growth Index	6.27	(22)	16.11	(69)	9.90	(27)	-4.30	(31)	3.22	(63)	23.67	(3)	15.22	(74)	-8.49	(24)	8.78	(41)	-0.36	(62)
Difference	-4.80		4.52		-1.38		-0.63		3.76		-5.39		3.22		-3.85		-1.38		N/A	
IM International Large Cap Growth Equity (MF) Median	2.00		17.83		7.87		-5.67		4.38		18.00		17.66		-10.78		7.40		1.85	
Baird Aggregate Bd;Inst (BAGIX)	-1.24	(43)	0.87	(32)	5.78	(28)	2.99	(7)	5.17	(17)	-0.55	(14)	8.58	(12)	5.03	(22)	10.72	(26)	10.07	(68)
Blmbg. Barc. U.S. Aggregate Index	-1.22	(41)	0.07	(64)	5.19	(52)	2.94	(9)	3.96	(59)	-1.68	(53)	5.16	(81)	5.26	(14)	8.16	(76)	10.56	(59)
Difference	-0.02		0.80		0.59		0.05		1.21		1.13		3.42		-0.23		2.56		-0.49	
IM U.S. Broad Market Core Fixed Income (MF) Median	-1.35		0.48		5.21		1.98		4.19		-1.62		6.79		4.30		9.34		11.36	

Returns for periods greater than one year are annualized.





**Eustis Firefighters' Retirement Plan**  
**Fee Analysis**  
As of June 30, 2019

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Dana Large Cap Value	0.65	1,496,008	9,724	0.65 % of Assets
Wells Fargo Growth (SGRNX)	0.75	986,795	7,401	0.75 % of Assets
Vanguard Growth Index Fund (VIGAX)	0.08	886,213	709	0.08 % of Assets
Vanguard Index 500 Admiral (VFIAX)	0.04	1,579,570	632	0.04 % of Assets
<b>Total Domestic Equity</b>	<b>0.37</b>	<b>4,948,586</b>	<b>18,466</b>	
Highland Capital International	0.49	8	-	0.50 % of Assets
American Funds EuroPacific Gr R6 (RERGX)	0.50	1,436,626	7,183	0.50 % of Assets
<b>Total International Equity</b>	<b>0.50</b>	<b>1,436,635</b>	<b>7,183</b>	
Baird Aggregate Bond Fund (BAGIX)	0.30	3,371,199	10,114	0.30 % of Assets
<b>Total Fixed Income</b>	<b>0.30</b>	<b>3,371,199</b>	<b>10,114</b>	
Receipt & Disbursement		180,138	-	
<b>Total Fund</b>	<b>0.37</b>	<b>10,438,104</b>	<b>38,371</b>	

<b>Total Fund Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1996</b>	
S&P 500 Index	40.00
Blmbg. Barc. U.S. Gov't/Credit	60.00
<b>Oct-2001</b>	
Blmbg. Barc. U.S. Gov't/Credit	50.00
S&P 500 Index	50.00
<b>Jan-2006</b>	
S&P 500 Index	60.00
Blmbg. Barc. U.S. Gov't/Credit	40.00
<b>Jan-2010</b>	
MSCI EAFE Index	15.00
Blmbg. Barc. U.S. Aggregate Index	40.00
Russell 3000 Index	45.00
<b>Feb-2014</b>	
MSCI AC World ex USA	15.00
Blmbg. Barc. U.S. Aggregate Index	40.00
Russell 3000 Index	45.00

<b>Total Fixed Income Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1973</b>	
Blmbg. Barc. U.S. Gov't/Credit	100.00
<b>Jan-2010</b>	
Blmbg. Barc. U.S. Aggregate Index	100.00

<b>Total Equity Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1996</b>	
S&P 500 Index	100.00
<b>Jan-2010</b>	
S&P 500 Index	75.00
MSCI EAFE Index	25.00
<b>Dec-2011</b>	
Russell 3000 Index	75.00
MSCI EAFE Index	25.00
<b>Feb-2014</b>	
Russell 3000 Index	75.00
MSCI AC World ex USA	25.00

<b>Total Domestic Equity Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Apr-2011</b>	
S&P 500 Index	100.00
<b>Dec-2011</b>	
Russell 3000 Index	100.00

<b>Total International Equity Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Apr-2011</b>	
MSCI EAFE Index	100.00
<b>Feb-2014</b>	
MSCI AC World ex USA	100.00

Total Fund Compliance:	Yes	No	N/A

Equity Compliance:	Yes	No	N/A

Fixed Income Compliance:	Yes	No	N/A

Manager Compliance:	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A



Manager Compliance:															
	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A



**Disclosures**

**Disclosures as they pertain to breakout of balanced account:**

- Previous to 4/30/2011, ICC's account was balanced with segment level returns that did not include their respective cash returns, upon breakout, each strategy will now include their respective cash returns.
- Due to the balanced account total equity was run as one strategy, upon breakout, each equity strategy will be run separately, with their respective cash balances, but due to the balanced nature, each equity strategy inception date will be 5/1/2011. Total equity's historical performance and inception date will be able to be brought forward.

The fixed strategy historical returns will be able to be brought forward along with its inception date.

<b>Active Return</b>	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
<b>Alpha</b>	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.
<b>Beta</b>	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
<b>Consistency</b>	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.
<b>Distributed to Paid In (DPI)</b>	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.
<b>Down Market Capture</b>	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
<b>Downside Risk</b>	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.
<b>Excess Return</b>	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
<b>Excess Risk</b>	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
<b>Information Ratio</b>	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.
<b>Public Market Equivalent (PME)</b>	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.
<b>R-Squared</b>	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.
<b>Return</b>	- Compounded rate of return for the period.
<b>Sharpe Ratio</b>	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.
<b>Standard Deviation</b>	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.
<b>Total Value to Paid In (TVPI)</b>	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life
<b>Tracking Error</b>	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
<b>Treynor Ratio</b>	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.
<b>Up Market Capture</b>	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.

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AndCo uses time-weighted calculations which are founded on standards recommended by the CFA Institute. The calculations and values shown are based on information that is received from custodians. AndCo analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides AndCo with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides AndCo with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause AndCo to believe that the information presented is significantly misstated.

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The strategies listed may not be suitable for all investors. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Past performance is not an indication of future performance. Any information contained in this report is for informational purposes only and should not be construed to be an offer to buy or sell any securities, investment consulting, or investment management services.

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