Investment Performance Review
Period Ending December 31, 2018

Town of Palm Beach OPEB Trust

Preliminary Results

As we start 2019, we first want to say "Thank you" for giving AndCo the opportunity to serve you. On behalf of our entire organization, we are extremely grateful for our client partnerships and we will continue working hard to maintain your trust and confidence. Our mission statement reads – "To represent the sole interest of our clients by redefining independence". We're happy to report we remain steadfast in this core belief and continue to build an organization and service model that is singularly focused and independent. This helps ensure all recommendations are truly in the best interest of our valued clients. We believe this approach will drive value for our client partnerships long into the future.

AndCo also remains committed to delivering high quality, customized services. As we start 2019, we are 89 employees strong advising approximately $90 billion in client assets - both record highs for AndCo. In 2018 we hired 7 new team members including one consultant, two research professionals, one additional compliance officer, one technology administrator and two team members within our client solutions group. All hires were made to better service our clients.

2019 will represent another year of reinvestment in the organization to better serve our clients and make AndCo stronger. For example, we have already hired a new Senior Research Analyst bringing our dedicated research team to 15 professionals. As 2019 progresses, we are targeting additional hires in research, software development, content creation and our client solutions group. We will also be partnering with an external firm this year to conduct an in-depth client assessment to help ensure we are meeting the evolving needs of our clients and exceeding their service expectations. There will be more information regarding this survey from the firm and your consultant over the coming months.

Finally, we just completed our annual Firmwide retreat. This retreat was a great opportunity for our firm to spend time together with colleagues and get a clear understanding of where the company is going, and more importantly, why we're headed in that direction. Since the inception of AndCo, the idea has been to make the firm a multigenerational organization owned and managed by its employees. As a result, since 2015, along with the strategic elements of our annual retreat, we also started the process of announcing new partners of the firm to foster this succession plan and today we have 8 partners controlling 100% of the company.

The evolution of our firm would not be possible without great partners like you. Our name reminds us who we work for every day: "Our Client" &Co. You will always be first in our service approach. As we continue to discuss updates with our firm, please know every decision is made by asking "How does this benefit our clients?" If it doesn't benefit you, we don't do it, it's that simple. We know our clients are facing many challenges and we want to be there to help get you through all environments. We are honored and humbled you have chosen AndCo as your partner. We don't take that relationship for granted and will continue to work tirelessly to exceed your expectations.

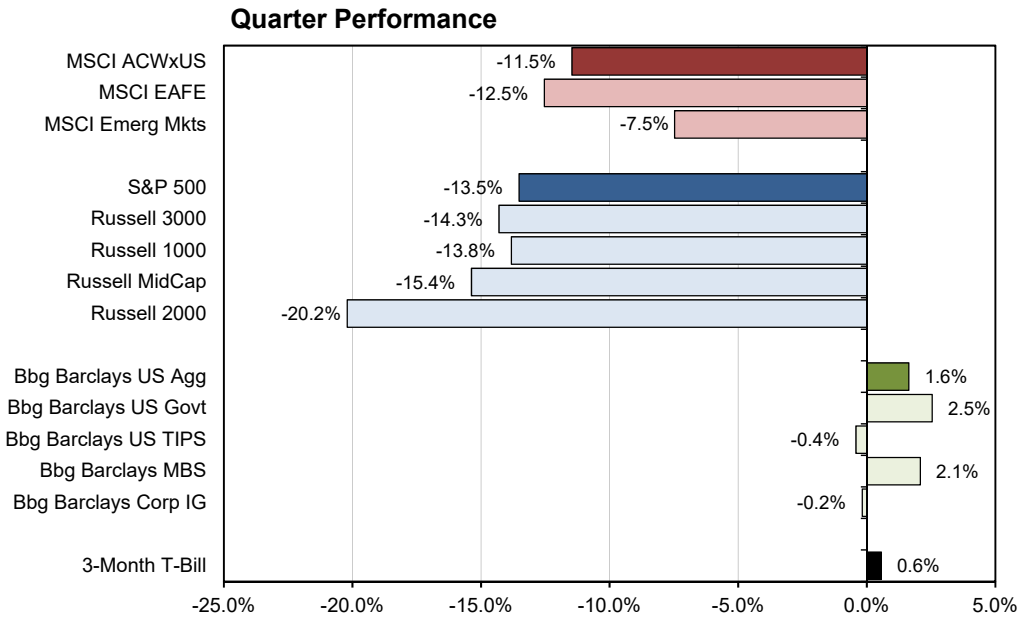
On behalf of AndCo, thank you for your valued partnership and the opportunity to serve you.

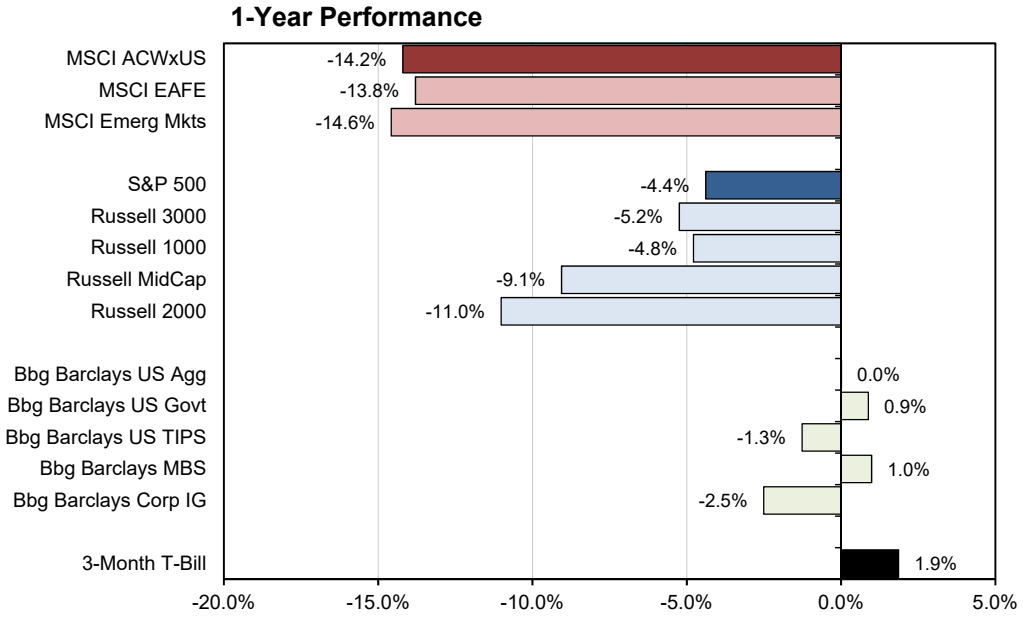
Mike Welker, CFA®
President/CEO

- Markets were volatile to end the 2018 calendar year. Both international and domestic equity markets had considerable losses during the 4th quarter while fixed income returns were muted, but outperformed relative to equities. Within equities, domestic stocks trailed international markets, reversing the 2018 trend of US market strength. Trade tensions between the US and China, midterm elections in US Congress, the effects of ongoing monetary policy tightening by the Federal Reserve (Fed), federal debt ceiling negotiations and the subsequent partial government shutdown outweighed generally positive corporate earnings and macroeconomic data reported during the quarter. The large cap S&P 500 Index returned -13.5% during the quarter while the small cap Russell 2000 Index fell by over 20% for the period. The drop in equity prices over the last three months was enough to take the returns for major US equity indices into negative territory for the 2018 calendar year. Returns over the 1-year period were -4.4% and -11.0% for the S&P 500 and Russell 2000 respectively.

- Similar to US equities, international equity index returns finished the quarter in negative territory with the MSCI ACWI ex US Index returning -11.5%. International markets faced headwinds from softening global macroeconomic data, tightening global monetary policy, uncertainty around Brexit negotiations, turmoil surrounding global trade relations, falling commodity prices and continued US Dollar (USD) strength. The developed market MSCI EAFE Index fell -12.5% during the 4th quarter, ending the year down -13.8%. Emerging markets performed well by comparison, only losing -7.5% during the quarter. Despite the 4th quarter outperformance, returns for emerging market equities trailed developed markets over the 1-year period with the MSCI Emerging Markets Index returning -14.6% versus a -13.8% return for the MSCI EAFE Index.

- Fixed income securities outperformed equities through both the 4th quarter and calendar year 2018 with the broad market Bloomberg Barclays Aggregate Index returning 1.6% and 0.0% respectively. Interest rates on the US Treasury Yield Curve continued their 2018 flattening trend as short-term rates increased to near-term highs while long- term rates fell during the quarter. Some of the increase in short-term rates can be attributed to the late December Fed interest rate hike. This marked the fourth Fed interest rate increase of 2018. This movement in rates did lead to some short-term rates being higher than those of longer dated maturities. More conservative fixed income sectors such as Treasuries and mortgage backed securities outperformed during the quarter and for the year as investors moved toward the relative safety these securities provide while widening credit spreads acted as a headwind to corporate issues.





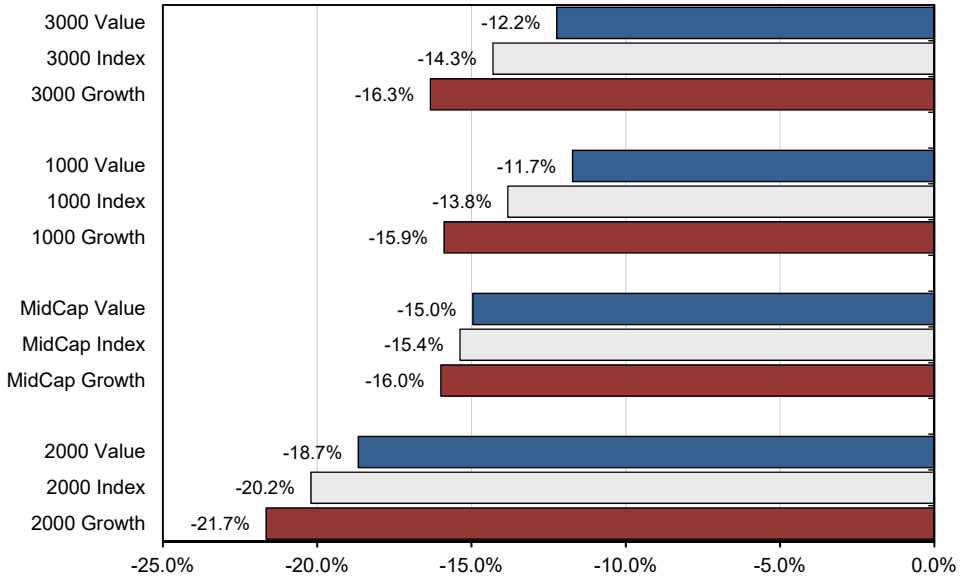
Source: Investment Metrics

- US equity index returns were strongly negative across the style and capitalization spectrum during the 4th quarter of 2018. Despite these negative results, there was positive data in GDP, unemployment, wage growth, retail sales, and corporate earnings during the period. These positive economic factors were offset by softening data in housing, consumer confidence and manufacturing, tightening monetary policy, negative guidance for future corporate earnings and signs of slowing global growth which all contributed to the heavy selling in equities. Investors also considered the effects of ongoing trade negotiations, especially between the US and China, and the results of the US congressional midterm elections which likely reduced the chances of any major policy changes or new fiscal stimulus measures. The effects of partisan politics was particularly evident at the end of the quarter as budget negotiations between Democrats and Republicans collapsed over disagreement around the inclusion of funds for a border wall with Mexico, leading to a partial government shutdown to end the year.

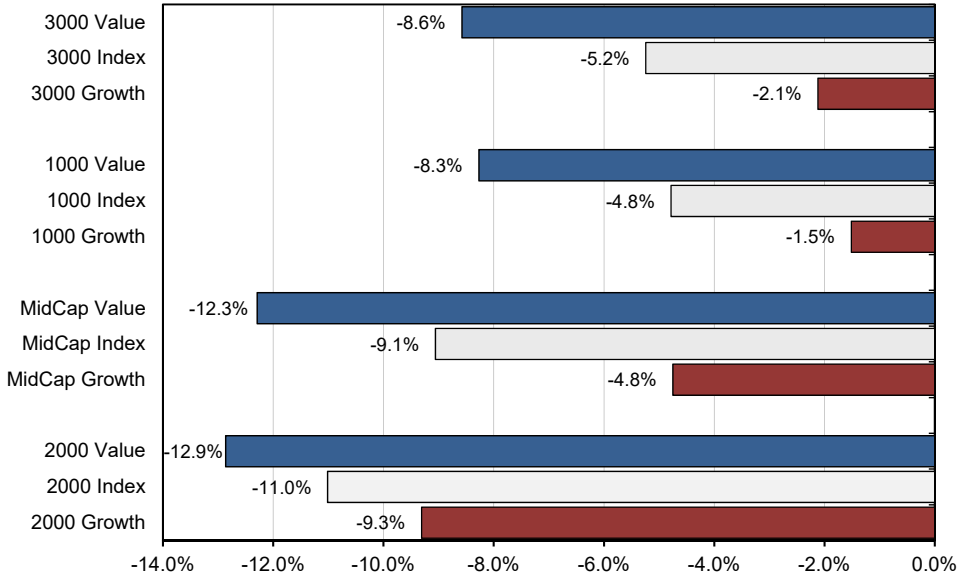
- During the quarter, large cap stocks outperformed mid and small cap equities across growth, value and core indices. The large cap Russell 1000 Index fell -13.8% during the 4th quarter versus a -20.2% drop for the Russell 2000 Index. Part of the reason for weakness in small cap names is the steady increase in interest rates that occurred over 2018 as small cap companies typically maintain a higher percentage of debt than their large cap peers. Small cap names are also typically more volatile than larger companies and they have historically underperformed during market downturns. Similar to the most recent quarter, large cap stocks outperformed relative to small caps through calendar year 2018. The Russell 1000 returned -4.8% for the 1-year periods compared to a -11.0% return for the Russell 2000.

- Value indices outperformed growth indices across the market cap spectrum during the 4th quarter, reversing a year-to-date trend of growth stock outperformance. The large cap Russell 1000 Value Index was the best performing style index for the period, returning -11.7% for the quarter, while the Russell 2000 Growth Index was the worst performer, returning -21.7%. Value benchmarks tend to outperform in down markets as they benefit from their relative safety and higher dividend yields. Despite the short-term underperformance, growth benchmarks continue to outperform over the 1-year period, however, many of the sector exposures that drove growth stock outperformance during the first three quarters of the year, such as technology and consumer discretionary, were relative detractors during the 4th quarter.

Quarter Performance - Russell Style Series



1-Year Performance - Russell Style Series



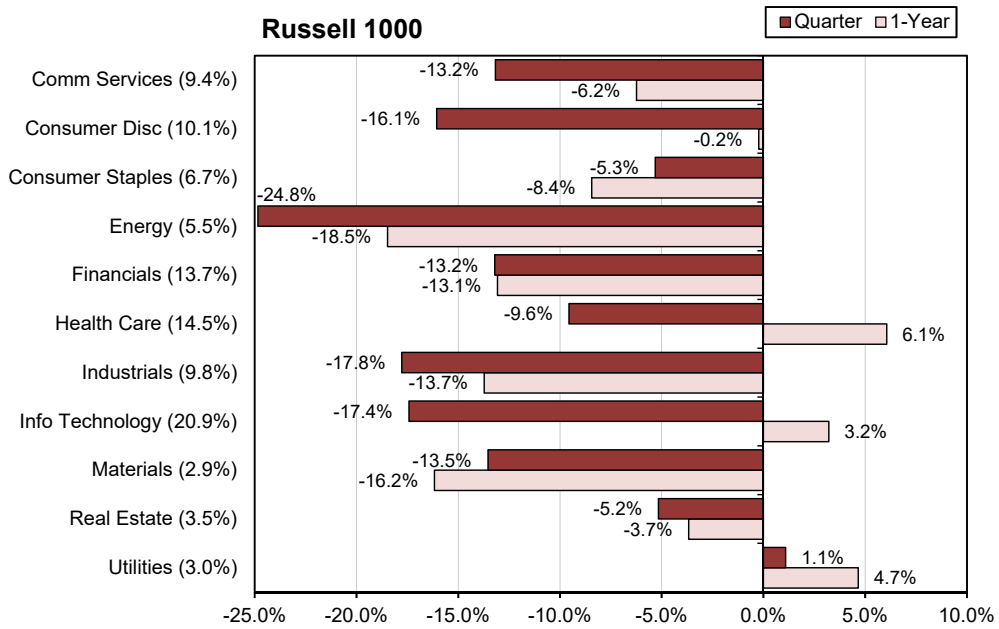
Source: Investment Metrics

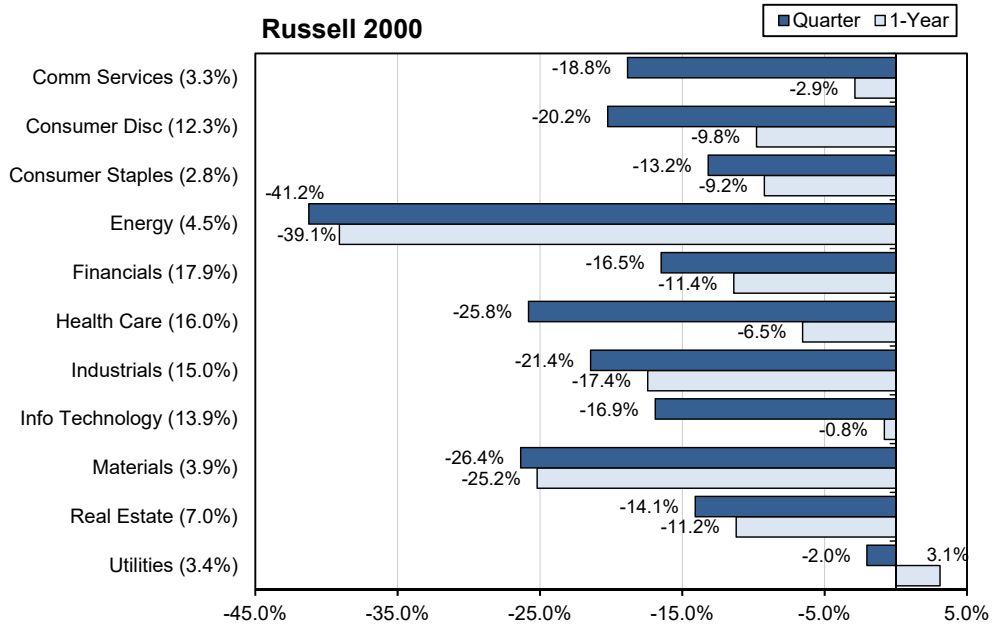
- Both S&P Dow Jones Indices and MSCI made changes to the Global Industry Classification Standard (GICS) sector configurations of their indices, creating a new GICS sector classification called Communication Services which replaced the Telecommunications sector on September 28, 2018. The Communication Services sector is comprised of companies in the Telecommunications sector, as well as certain companies formerly classified as Consumer Discretionary and Information Technology. As a result, the sector, went from a weighting of about 2% of the Russell 1000 Index to almost 10% post reclassification. Notable names now classified under Communication Services include Netflix, Alphabet, Facebook and Disney. This is just the second change to the GICS classifications since 1999.

- Sector performance was broadly negative across large cap sectors for the 4th quarter. All sectors within the Russell 1000 Index with the exception of the utilities sector posted negative returns for the period with seven sectors outpacing the return on the index. Cyclical sectors such as energy, industrials and technology were the worst performers through the quarter returning -24.8%, -17.8% and -17.4% respectively. Energy companies were hurt by a steep decline in oil prices during the quarter while technology and industrial companies fell on negative guidance for future earnings. More defensive, higher dividend paying sectors such as utilities, REITs and consumer staples were the strongest performing sectors with returns of 1.1%, -5.2% and -5.3% respectively. Only three sectors (health care, utilities, technology) posted positive results over the 1-year period with the remaining sectors losing ground during the calendar year.

- Quarterly results for small cap sectors were generally lower relative to their large capitalization counterparts. All eleven sectors had negative returns during the period with six of eleven economic sectors outpacing the Russell 2000 Index return for the quarter. Energy, materials and healthcare posted the worst returns for the period returning -41.2%, -26.4% and -25.8% respectively. Similar to large caps, defensive sectors performed well with utilities, consumer staples and real estate detracting the least returning -2.0%, -13.2% and -14.1% respectively. Over the trailing 1-year period, only utilities posted a gain returning 3.1%. Energy stocks were the worst performers in 2018, falling a considerable -41.2%.

- Using S&P 500 sector valuations as a proxy for the market, forward P/E ratios for three of the eleven GICS sectors were higher than their long-term averages at quarter-end. Using these historical P/E measures, the utilities, consumer discretionary and real estate sectors appear the most extended. In contrast the financials, technology and energy sectors were trading at a discount to their long-term average P/E ratios.





Source: Morningstar Direct
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.

Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000

As of December 31, 2018

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Microsoft Corp	3.27%	-11.2%	20.3%	Information Technology
Apple Inc	3.24%	-29.9%	-5.4%	Information Technology
Amazon.com Inc	2.59%	-25.0%	28.4%	Consumer Discretionary
Berkshire Hathaway Inc B	1.68%	-4.6%	3.0%	Financials
Johnson & Johnson	1.47%	-6.0%	-5.1%	Health Care
JPMorgan Chase & Co	1.39%	-12.9%	-6.6%	Financials
Alphabet Inc Class C	1.34%	-13.2%	-1.0%	Communication Services
Alphabet Inc A	1.32%	-13.4%	-0.8%	Communication Services
Facebook Inc A	1.32%	-20.3%	-25.7%	Communication Services
Exxon Mobil Corp	1.23%	-19.0%	-15.1%	Energy

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Integrated Device Technology Inc	0.35%	3.0%	62.9%	Information Technology
Etsy Inc	0.32%	-7.4%	132.6%	Consumer Discretionary
Five Below Inc	0.31%	-21.3%	54.3%	Consumer Discretionary
Haemonetics Corp	0.29%	-12.7%	72.3%	Health Care
Ciena Corp	0.27%	8.5%	62.0%	Information Technology
Planet Fitness Inc A	0.26%	-0.8%	54.8%	Consumer Discretionary
Idacorp Inc	0.26%	-5.6%	4.6%	Utilities
HubSpot Inc	0.26%	-16.7%	42.2%	Information Technology
LivaNova PLC	0.25%	-26.2%	14.5%	Health Care
Cree Inc	0.24%	13.0%	15.2%	Information Technology

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Tesaro Inc	0.01%	90.3%	-10.4%	Health Care
Red Hat Inc	0.13%	28.9%	46.2%	Information Technology
Virtu Financial Inc A	0.00%	27.1%	45.9%	Financials
Tesla Inc	0.19%	25.7%	6.9%	Consumer Discretionary
SCANA Corp	0.03%	23.2%	23.1%	Utilities
Tribune Media Co A	0.02%	18.9%	9.7%	Communication Services
MarketAxess Holdings Inc	0.03%	18.6%	5.6%	Financials
ARRIS International PLC	0.02%	17.6%	19.0%	Information Technology
United States Cellular Corp	0.00%	16.1%	38.1%	Communication Services
Newmont Mining Corp	0.08%	15.2%	-6.2%	Materials

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Electro Scientific Industries Inc	0.05%	71.7%	39.8%	Information Technology
Fluent Inc	0.01%	67.4%	3.4%	Communication Services
Mitek Systems Inc	0.02%	53.3%	20.8%	Information Technology
Arsanis Inc	0.00%	43.2%	-81.8%	Health Care
Inovalon Holdings Inc	0.05%	41.1%	-5.5%	Health Care
K12 Inc	0.05%	40.1%	55.9%	Consumer Discretionary
Investment Technology Group Inc	0.05%	39.9%	59.0%	Financials
Eidos Therapeutics Inc	0.01%	37.9%	N/A	Health Care
Belmond Ltd Class A	0.13%	37.2%	104.3%	Consumer Discretionary
Pacific Biosciences of California Inc	0.06%	36.8%	180.3%	Health Care

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Weatherford International PLC	0.00%	-79.4%	-86.6%	Energy
Nabors Industries Ltd	0.00%	-66.8%	-69.3%	Energy
Extraction Oil & Gas Inc	0.00%	-62.0%	-70.0%	Energy
Adient PLC	0.01%	-61.4%	-80.4%	Consumer Discretionary
Whiting Petroleum Corp	0.01%	-57.2%	-14.3%	Energy
Kosmos Energy Ltd	0.00%	-56.5%	-40.6%	Energy
Chesapeake Energy Corp	0.01%	-53.2%	-47.0%	Energy
Conduent Inc	0.01%	-52.8%	-34.2%	Information Technology
NVIDIA Corp	0.33%	-52.4%	-30.8%	Information Technology
SM Energy Co	0.01%	-50.8%	-29.6%	Energy

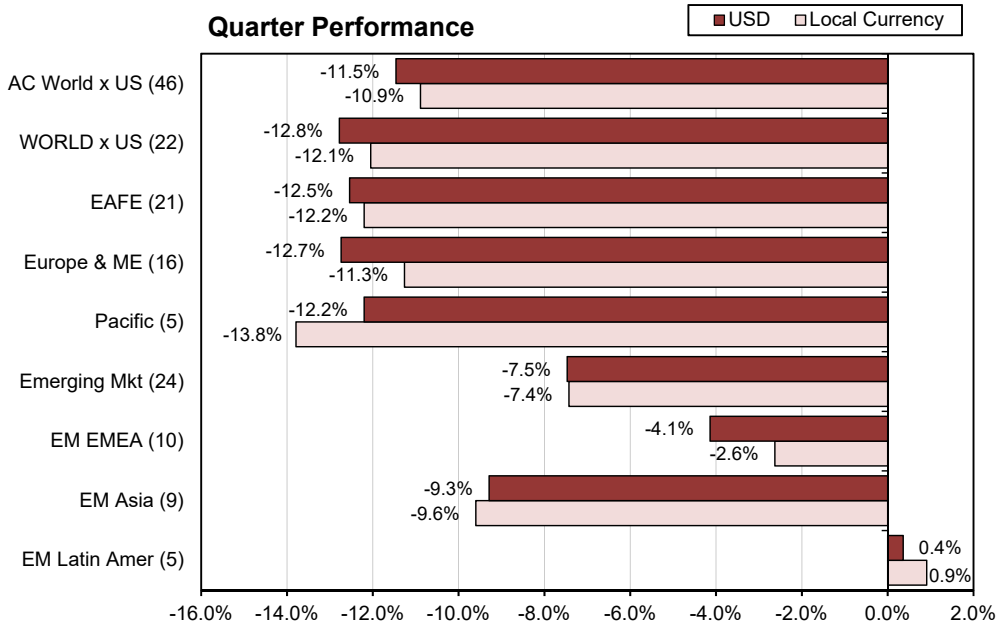
Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Synergy Pharmaceuticals Inc	0.00%	-93.3%	-94.9%	Health Care
Sanchez Energy Corp	0.00%	-88.3%	-94.9%	Energy
Sienna Biopharmaceuticals Inc	0.00%	-84.3%	-87.2%	Health Care
Cloud Peak Energy Inc	0.00%	-84.1%	-91.8%	Energy
Selecta Biosciences Inc	0.00%	-82.9%	-72.9%	Health Care
Clearside Biomedical Inc	0.00%	-82.6%	-84.7%	Health Care
Key Energy Services Inc	0.00%	-81.9%	-82.4%	Energy
AAC Holdings Inc	0.00%	-81.7%	-84.4%	Health Care
PHI Inc Non-Voting Shares	0.00%	-80.2%	-84.0%	Energy
Bristow Group Inc	0.00%	-80.0%	-82.0%	Energy

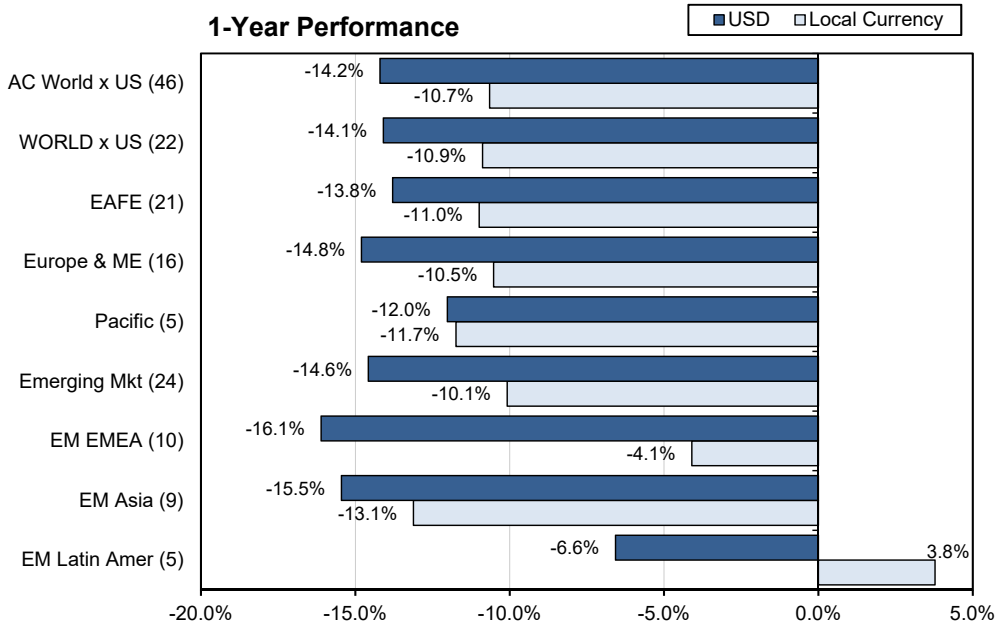
Source: Morningstar Direct

- Broad international equity returns were negative for the quarter in both local currency and USD terms. Geopolitical concerns, weakening economic data and the tightening of global monetary policy drove most of the negative performance. The USD also continued to strengthen against most currencies for the period which provided a headwind for USD based investors. The MSCI ACWI ex US Index fell -10.9% in local currency terms and -11.5% in USD terms during the 4th quarter. Returns for international indices were also broadly negative over the 1-year period in both local currency and USD terms with the MSCI ACWI ex US returning -10.7% and -14.2% respectively.

- Fourth quarter results for developed market international indices were negative in both local currency and USD terms with the MSCI EAFE Index returning -12.2% and -12.5% respectively. Returns were dampened for US investors as the USD continued to appreciate against most currencies, pushing returns lower. Global economic reporting during the quarter fueled concerns that global growth was beginning to slow. Japanese economic data faced headwinds from several natural disasters and data out of Europe was generally disappointing. Investors also weighed the effects of several significant political events in Europe including riots in France, ongoing budget negotiations between Italy and the EU and uncertainty around Brexit. Concerns over a "no deal" Brexit grew during the quarter as the draft withdrawal agreement presented by UK Prime Minister Theresa May was poorly received leading to a wave of cabinet resignations, a delay in the parliamentary vote and a "no confidence" vote which she ultimately won. The MSCI EAFE Index returned -11.0% and -13.8% for the last twelve months in local currency and USD terms respectively.

- Emerging markets outperformed relative to developed markets for the 4th quarter, but still declined in both local currency and USD terms with the MSCI Emerging Markets Index returning -7.4% and -7.5% respectively. Returns in emerging markets were hurt by the continued uncertainty surrounding trade relations between the US and China as both countries agreed to a 90-day hold on any new tariffs to allow for continued negotiations. Chinese economic data also appeared to be slowing during the quarter prompting the announcement of additional monetary and fiscal stimulus. The election of President Andres Manuel Lopez Obrador hurt returns in Mexico as investors feared the potential ramifications of his nationalist campaign promises. In contrast, Brazil was one of the few bright spots during the quarter as market participants looked favorably on the election of President Jair Bolsonaro in anticipation of market friendly economic reforms, including reforms associated with the countries bloated state pension system which has weighed heavily on the country's debt load. One year returns for the MSCI Emerging Market Index were -10.1% in local currency terms and -14.6% in USD terms.





Source: MSCI Global Index Monitor (Returns are Net)

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.6%	-7.7%	-12.1%
Consumer Discretionary	11.2%	-14.2%	-16.1%
Consumer Staples	11.6%	-8.4%	-10.8%
Energy	5.9%	-17.5%	-7.2%
Financials	19.5%	-13.7%	-20.1%
Health Care	11.2%	-10.3%	-4.3%
Industrials	14.3%	-14.6%	-15.7%
Information Technology	6.0%	-16.7%	-15.6%
Materials	7.4%	-15.2%	-17.5%
Real Estate	3.7%	-5.4%	-9.9%
Utilities	3.8%	-0.1%	1.1%
Total	**100.0%**	**-12.5%**	**-13.8%**

MSCI - ACWIxUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	7.6%	-5.5%	-11.9%
Consumer Discretionary	10.6%	-14.1%	-20.2%
Consumer Staples	9.9%	-7.4%	-11.2%
Energy	7.3%	-16.3%	-8.1%
Financials	22.2%	-10.7%	-16.8%
Health Care	8.4%	-11.2%	-6.2%
Industrials	11.7%	-13.7%	-15.1%
Information Technology	8.0%	-14.6%	-17.6%
Materials	7.7%	-13.4%	-15.9%
Real Estate	3.4%	-3.8%	-11.6%
Utilities	3.4%	0.5%	-0.9%
Total	**100.0%**	**-11.5%**	**-14.2%**

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	14.1%	-3.7%	-14.9%
Consumer Discretionary	10.4%	-13.5%	-32.5%
Consumer Staples	6.7%	-4.6%	-13.7%
Energy	8.0%	-10.6%	4.7%
Financials	24.8%	-0.9%	-8.7%
Health Care	2.8%	-16.2%	-20.9%
Industrials	5.5%	-3.8%	-12.6%
Information Technology	14.2%	-12.7%	-19.3%
Materials	7.7%	-10.8%	-11.6%
Real Estate	3.0%	1.4%	-17.2%
Utilities	2.7%	3.6%	-3.8%
Total	**100.0%**	**-7.5%**	**-14.6%**

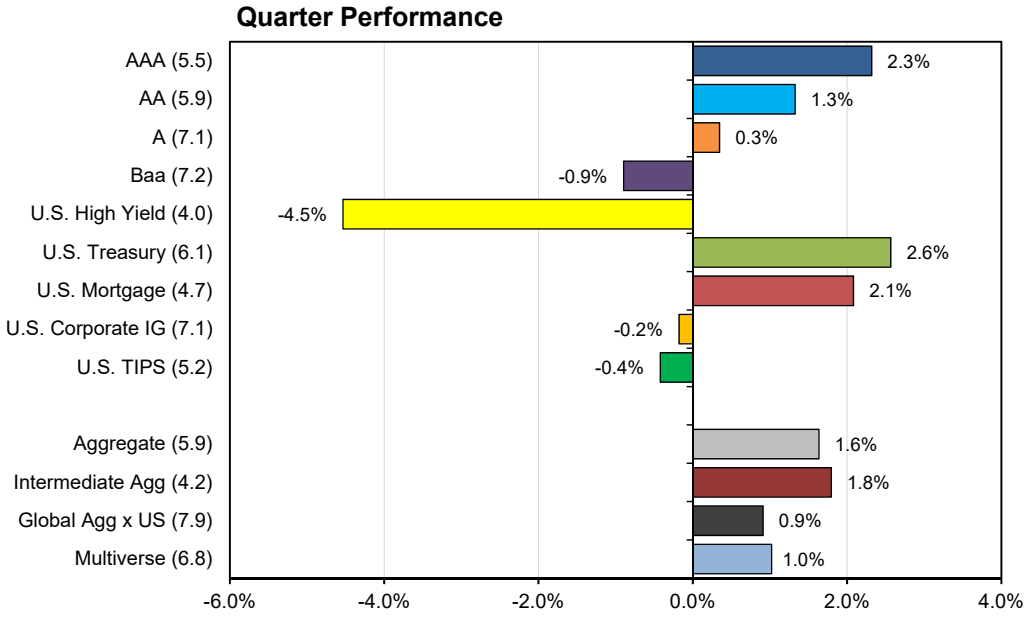
Country	MSCI-EAFE Weight	MSCI-ACWIxUS Weight	Quarter Return	1- Year Return
Japan	24.6%	16.6%	-14.2%	-12.9%
United Kingdom	16.9%	11.4%	-11.8%	-14.2%
France	11.1%	7.5%	-15.1%	-12.8%
Germany	8.8%	6.0%	-15.5%	-22.2%
Switzerland	8.7%	5.8%	-8.9%	-9.1%
Australia	6.9%	4.7%	-10.0%	-12.0%
Hong Kong	3.9%	2.6%	-4.5%	-7.8%
Netherlands	3.4%	2.3%	-11.0%	-13.1%
Spain	3.1%	2.1%	-8.7%	-16.2%
Sweden	2.7%	1.8%	-14.2%	-13.7%
Italy	2.3%	1.5%	-11.8%	-17.8%
Denmark	1.8%	1.2%	-9.8%	-15.4%
Singapore	1.4%	0.9%	-6.7%	-9.4%
Finland	1.0%	0.7%	-14.7%	-3.4%
Belgium	1.0%	0.6%	-18.5%	-26.9%
Norway	0.7%	0.5%	-18.1%	-8.6%
Ireland	0.5%	0.4%	-17.7%	-25.3%
Israel	0.5%	0.4%	-14.4%	-5.5%
Austria	0.2%	0.2%	-20.7%	-27.4%
New Zealand	0.2%	0.2%	-6.6%	-4.0%
Portugal	0.2%	0.1%	-14.3%	-11.1%
Total EAFE Countries	**100.0%**	**67.5%**	**-12.5%**	**-13.8%**
Canada		6.5%	-15.3%	-17.2%
Total Developed Countries		**74.0%**	**-12.8%**	**-14.1%**
China		7.9%	-10.7%	-18.9%
Korea		3.6%	-13.1%	-20.9%
Taiwan		3.0%	-13.7%	-8.9%
India		2.4%	2.5%	-7.3%
Brazil		2.0%	13.4%	-0.5%
South Africa		1.6%	-3.8%	-24.8%
Russia		1.0%	-9.0%	-0.7%
Mexico		0.7%	-18.8%	-15.5%
Malaysia		0.6%	-5.8%	-6.0%
Thailand		0.6%	-10.2%	-5.5%
Indonesia		0.6%	9.7%	-9.2%
Poland		0.3%	-3.0%	-12.9%
Philippines		0.3%	5.3%	-16.5%
Qatar		0.3%	8.4%	29.8%
Chile		0.3%	-8.7%	-19.7%
United Arab Emirates		0.2%	-5.5%	-7.7%
Turkey		0.2%	4.8%	-41.4%
Colombia		0.1%	-19.0%	-11.5%
Peru		0.1%	-2.9%	1.6%
Hungary		0.1%	5.9%	-6.1%
Greece		0.1%	-16.0%	-36.8%
Czech Republic		0.0%	-8.7%	-4.5%
Egypt		0.0%	-9.4%	-14.0%
Pakistan		0.0%	-22.4%	-34.8%
Total Emerging Countries		**26.0%**	**-7.5%**	**-14.6%**
Total ACWIxUS Countries		**100.0%**	**-11.5%**	**-14.2%**

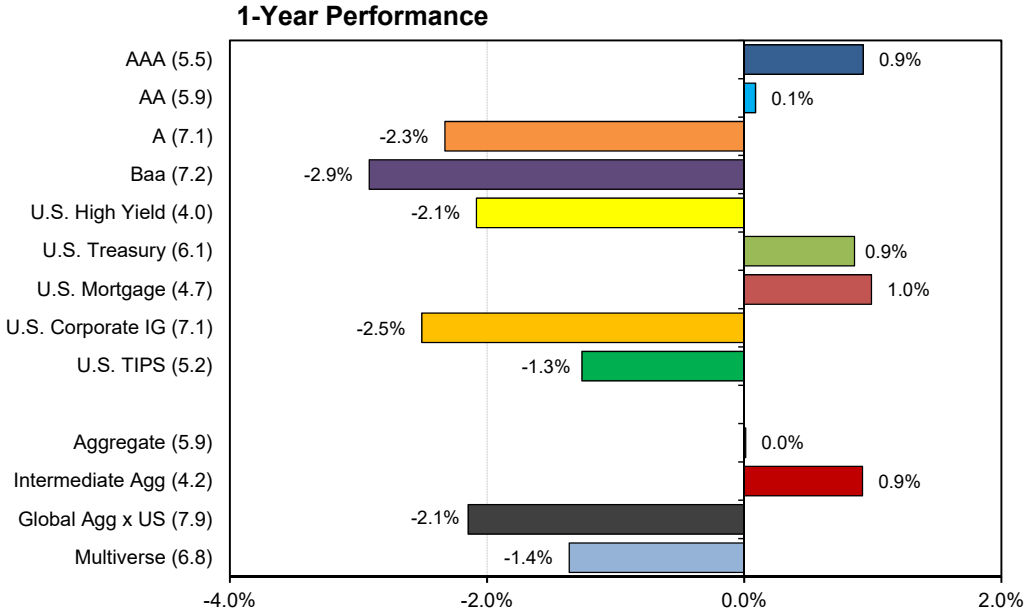
Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.

- Broad fixed income benchmarks had mixed results during the 4th quarter. Interest rates rose across short-term maturities, but fell on those on the middle and long end of the US Treasury Yield Curve. The Federal Open Market Committee (FOMC), decided to increase short-term interest rates by 25 basis points at their December meeting citing the strength of the US economy which caused an increase in short-term interest rates, but equity market volatility led market participants toward less volatile assets, pushing rates lower on maturities greater than 1-year. This was the fourth rate hike of 2018. The current Fed Funds Rate target range sits at 2.25%-2.50%. This caused continued flattening in the yield curve with some moderate inversion, which happens when short-term maturities have greater yields than long-term securities, in the middle of curve. The difference in yields between the 2-year and 10-year Treasury now sits at just 0.21%. Historically, an inverted yield curve has signaled a greater probability of a recession. The Fed is also continuing the reduction of the size of its balance sheet by slowing its pace of reinvestment as the securities it holds mature. However, the Fed did lower its guidance for future rate increases in 2019 following a reduction in expectations for GDP and inflation. The Fed is now projecting just two additional interest rate increases in 2019. The Bloomberg Barclays US Aggregate Index was positive during the quarter, posting a 1.6% return, but was flat, returning 0.0% over the 1-year period.

- Within investment grade credit, higher quality issues outperformed lower quality issues as investors preferred more conservative securities. On an absolute basis, without negating the duration differences in the sub-indices, AAA rated credit was the best performing investment grade credit quality segment returning 2.3% for the quarter, while Baa was the worst performing, falling -0.9%. High yield debt trailed investment grade credit as spreads widened the most for these issues, returning -4.5%. Returns are mixed for the investment grade quality segments when viewed over the 1-year period with higher quality issues outperforming lower quality securities. High yield performed well relative to lower quality investment grade debt due to the relatively strong returns experienced during the first three quarters of 2018.

- During the 4th quarter, the more defensive Treasury and mortgage backed sectors of the Bloomberg Barclays US Aggregate Index's three broad sectors were the best performers returning 2.6% and 2.1% respectively. Investment grade corporate credit underperformed, returning -0.2%, as credit spreads widened considerably during the period. This trend carried through to the 1-year period as both Treasuries and mortgage backed securities outperformed both investment grade and high yield corporate debt. Calendar year 2018 performance for the Treasury, mortgage backed and investment grade corporate issues was 0.9%, 1.0% and -2.5% respectively. US TIPS returned -0.4% and -1.3% for the 4th quarter and 1-year period.





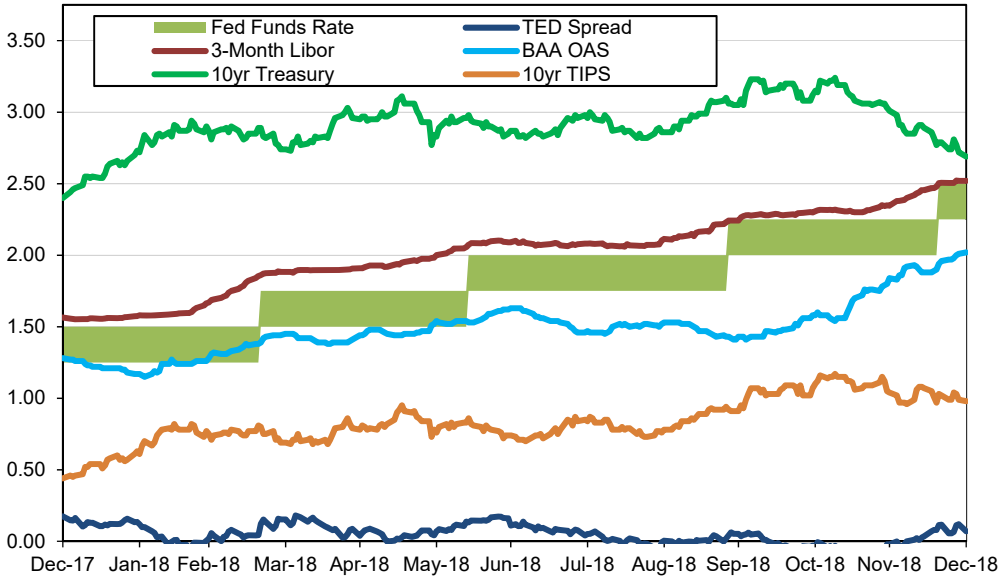
Source: Bloomberg

- Global fixed income indices continue to struggle relative to their domestic counterparts, underperforming during the 4th quarter. These indices have lower yields and the returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. During the 4th quarter the USD strengthened against most other currencies, negatively impacting the returns on global bond indices. The return on global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, was 0.9% and -2.1% for the quarter and 1-year period respectively. As the global economy continues to recover, several international central banks have started to move toward less accommodative postures. Notably, the ECB, began to slow its monthly bond purchase program in September, reducing new purchases to 15 billion euro per month from 30 billion euro per month and ended the program entirely at year end. However, they have indicated a continuation of reinvestment in maturing securities and would likely not raise interest rates from current levels until summer 2019. 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.

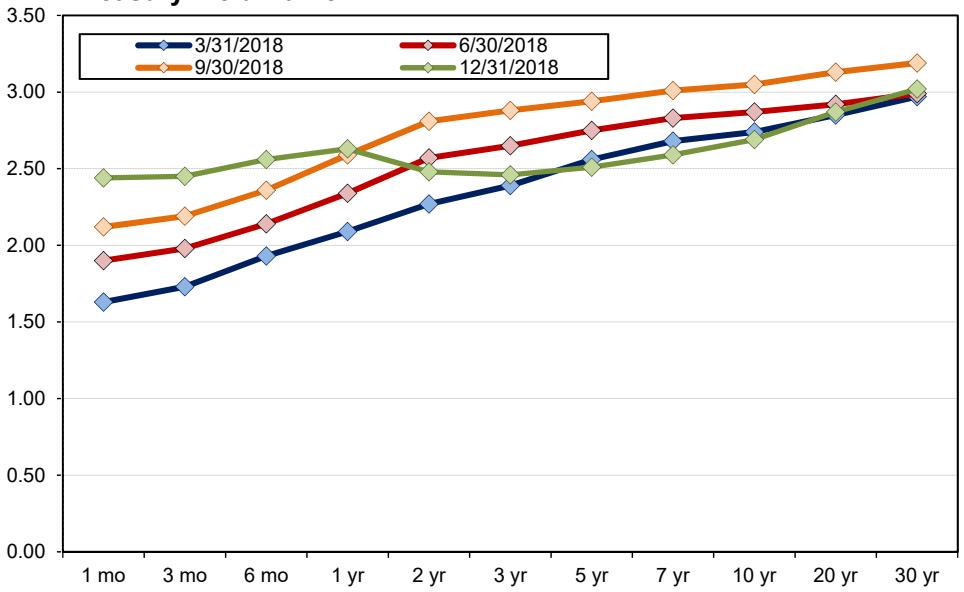
- Much of the index performance detailed in the bar graphs on the previous page is visible on a time series basis by reviewing the line graphs to the right. The '1-Year Trailing Market Rates' chart illustrates that the 10-year Treasury yield (green line) fell during the 4th quarter after rising steadily through most of the year as investors moved to safe haven assets during the period, ending the year at 2.69%. 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 a relatively tight range in credit spreads throughout most of 2018, but highlights an abrupt increase during the 4th quarter as investors moved to higher quality assets. This increase is equivalent to an interest rate increase on corporate bonds, which produces an additional headwind for corporate bond index returns. These credit spreads have widened by about 59 basis points over the last 3-months. The green band across the graph illustrates the gradual increase in the Federal Funds Rate (four increases in the last twelve months) due to the continued tightening of US monetary policy.

- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four calendar quarters. As mentioned, the yield curve continues to flatten as yields on shorter-term maturities have risen more than interest rates on the long end of the curve. The upward momentum of interest rates as well as a general flattening of the yield curve are clearly visible over the last twelve months with some minor inversion visible in the middle of the yield curve.

1-Year Trailing Market Rates

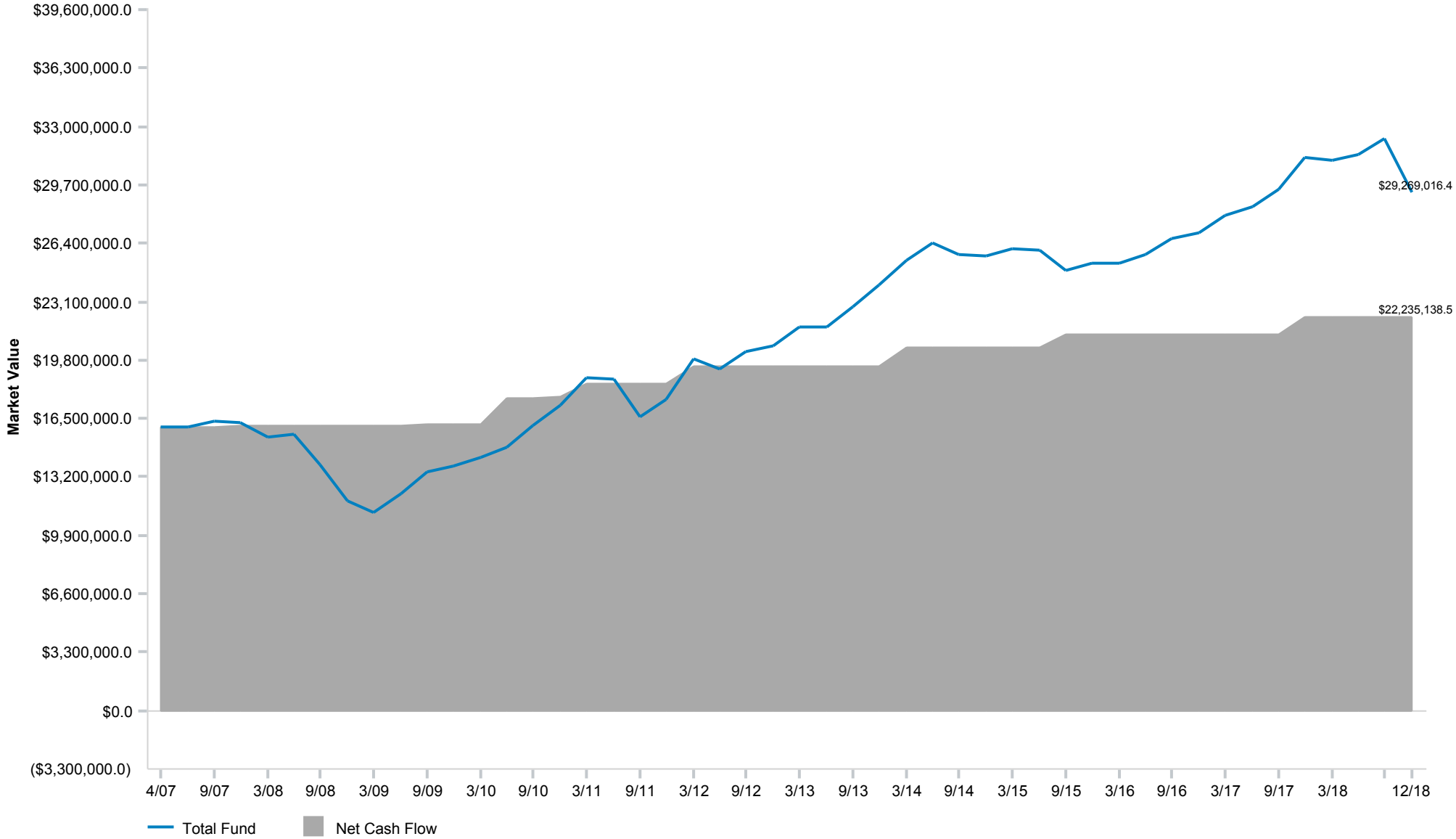


Treasury Yield Curve



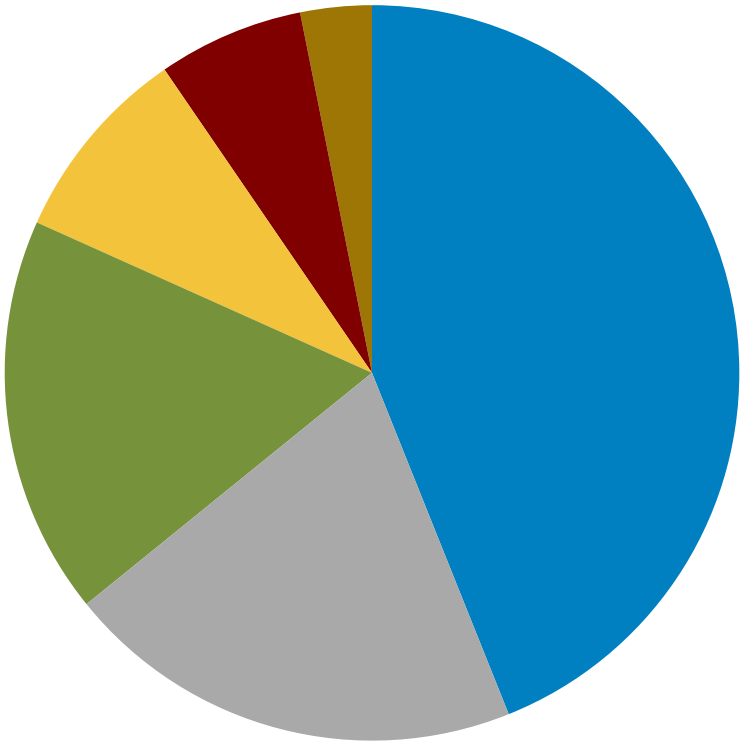
Source: US Department of Treasury, FRED (Federal Reserve of St. Louis)

Schedule of Investable Assets

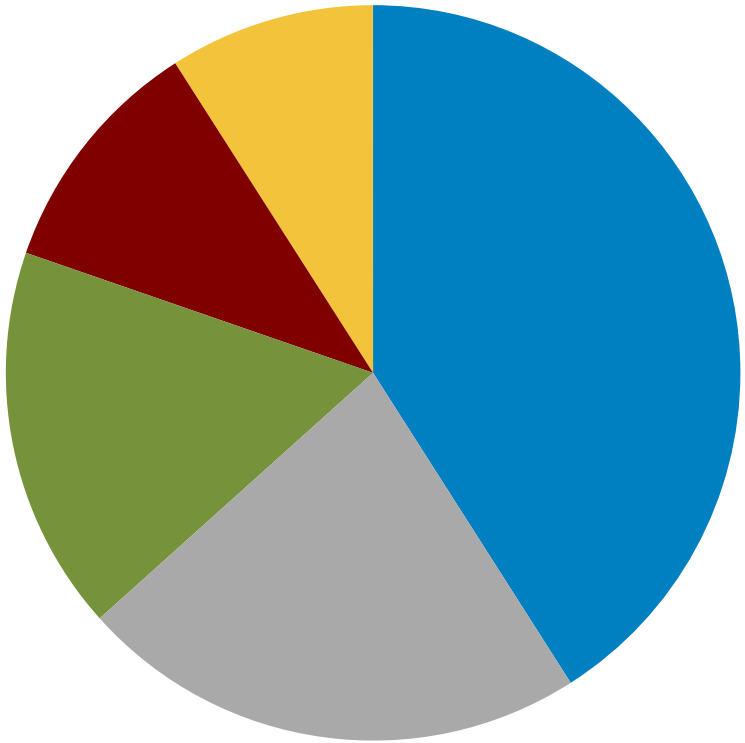


Periods Ending	Beginning Market Value $	Net Cash Flow $	Gain/Loss $	Ending Market Value $
Inception	16,000,000	6,235,139	7,033,878	29,269,016

September 30, 2018 : $32,293,472



December 31, 2018 : $29,269,016



Allocation

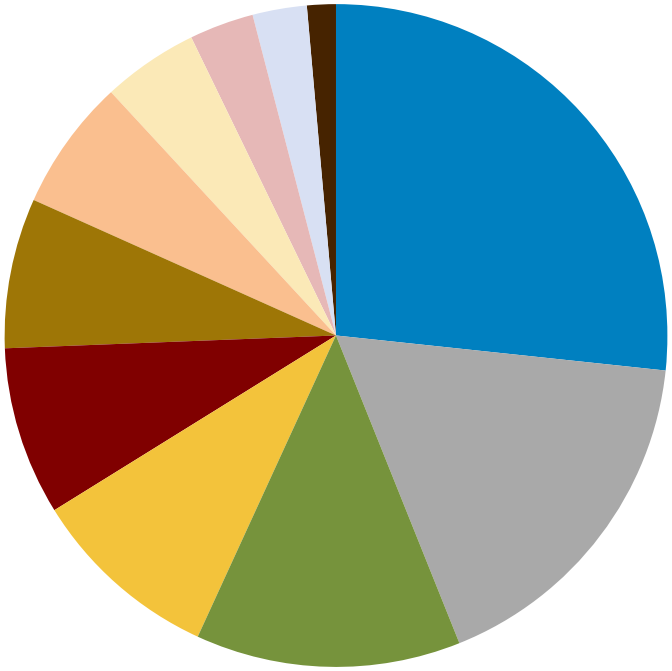
	Market Value ($)	Allocation (%)
Domestic Equity	14,186,881	43.93
Total Fixed Income	6,537,655	20.24
International Equity	5,662,702	17.54
Total Non-Traditional Assets	2,819,607	8.73
Total Real Estate	2,072,148	6.42
Total Liquid Capital	1,014,479	3.14

Allocation

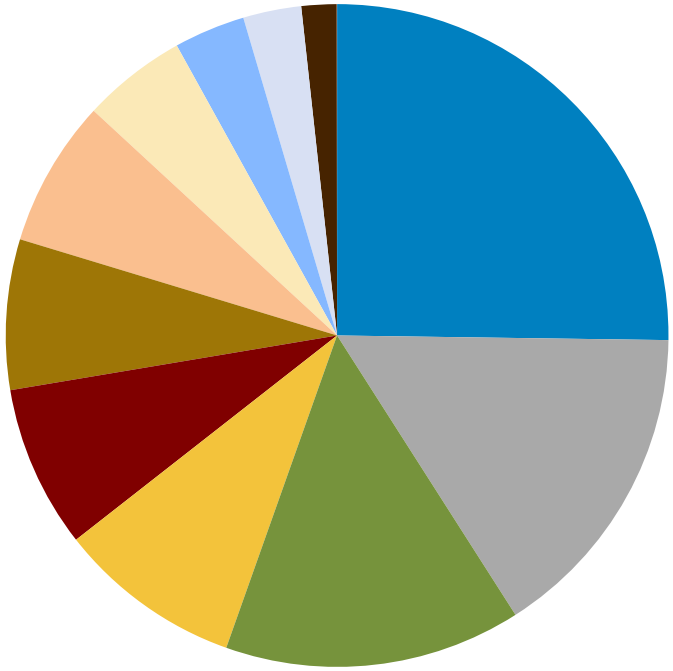
	Market Value ($)	Allocation (%)
Domestic Equity	11,988,025	40.96
Total Fixed Income	6,558,196	22.41
International Equity	4,955,828	16.93
Total Real Estate	3,115,209	10.64
Total Non-Traditional Assets	2,646,355	9.04
Total Liquid Capital	5,403	0.02

Asset Allocation by Manager
Total Fund
As of December 31, 2018

September 30, 2018 : $32,293,472



December 31, 2018 : $29,269,016



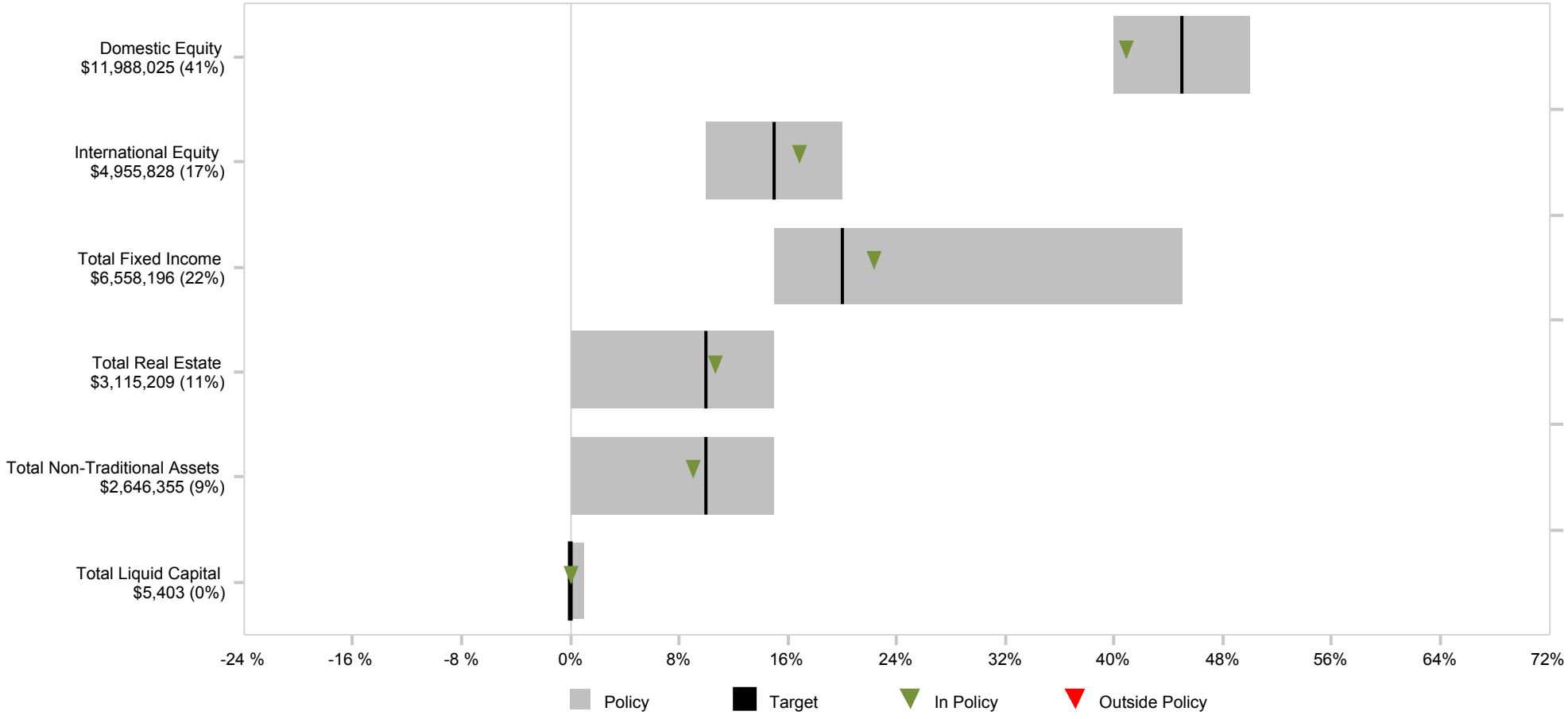
Allocation

	Market Value	Allocation
Fidelity Total Market Index Fund (FSKAX)	8,617,031	26.7
Vanguard S&P MC 400 (VSPMX)	5,569,849	17.2
Met West Total Return Bond Fund (MWTIX)	4,171,791	12.9
Dodge & Cox Intl Stock Fund (DODFX)	3,008,780	9.3
American Funds Europacific Growth R6 (RERGX)	2,653,922	8.2
Forester Offshore A2, Ltd.	2,364,799	7.3
Intercontinental U.S. REIF	2,072,148	6.4
PIMCO Div Inc Bond Fund (PDIIX)	1,510,763	4.7
Government STIF 25	1,014,479	3.1
Vanguard Total Bond Index Adm (VBTLX)	855,101	2.6
Crescent Direct Lending Levered Fund II	454,808	1.4
Principal Enhanced Property Fund	-	0.0

Allocation

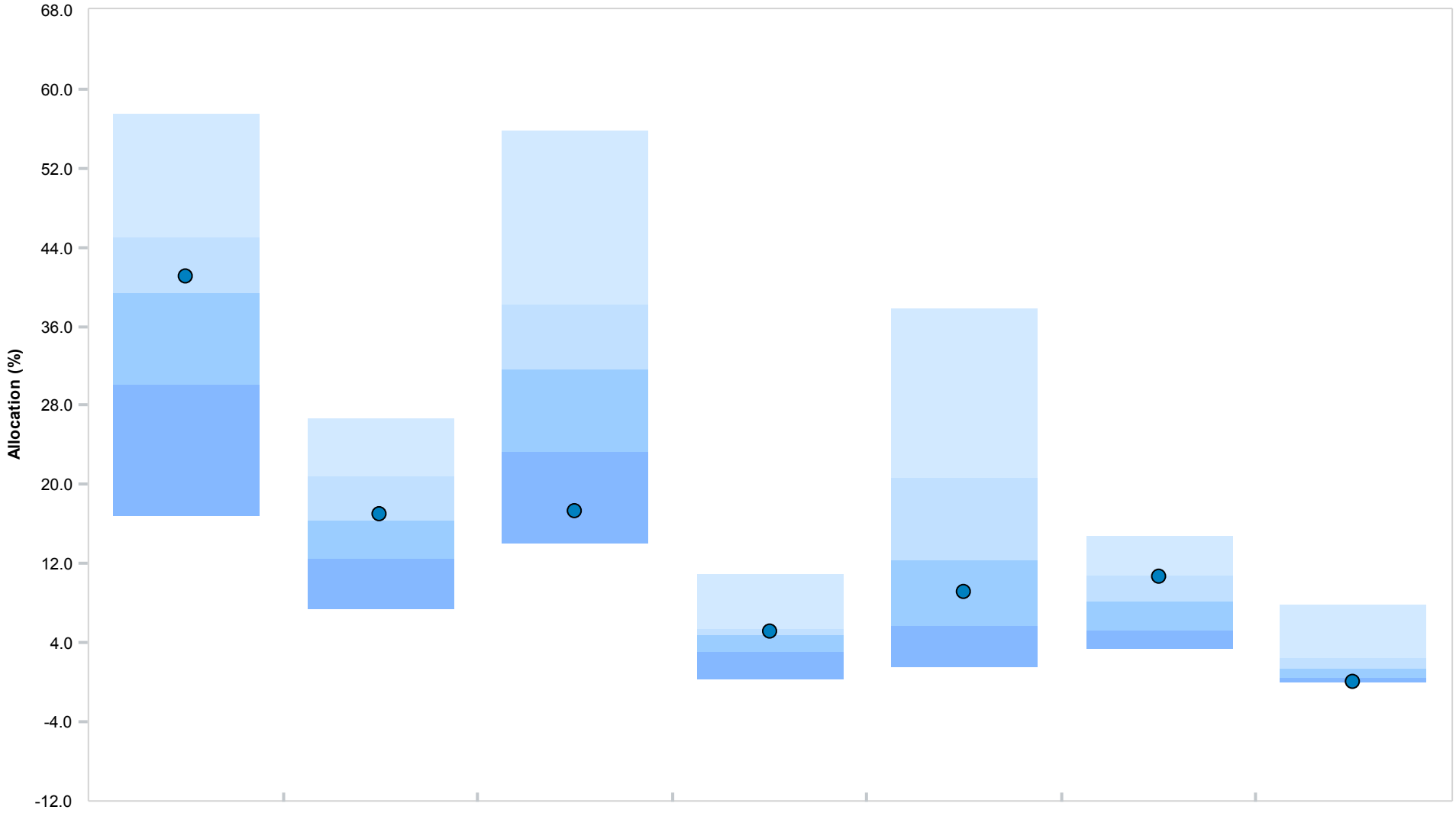
	Market Value	Allocation
Fidelity Total Market Index Fund (FSKAX)	7,381,040	25.2
Vanguard S&P MC 400 (VSPMX)	4,606,984	15.7
Met West Total Return Bond Fund (MWTIX)	4,235,446	14.5
Dodge & Cox Intl Stock Fund (DODFX)	2,636,132	9.0
American Funds Europacific Growth R6 (RERGX)	2,319,696	7.9
Forester Offshore A2, Ltd.	2,144,832	7.3
Intercontinental U.S. REIF	2,100,195	7.2
PIMCO Div Inc Bond Fund (PDIIX)	1,491,778	5.1
Principal Enhanced Property Fund	1,015,014	3.5
Vanguard Total Bond Index Adm (VBTLX)	830,972	2.8
Crescent Direct Lending Levered Fund II	501,523	1.7
Government STIF 25	5,403	0.0

Executive Summary



Asset Allocation Compliance

	Asset Allocation $	Current Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)	Target Rebal.
Total Fund	29,269,016	100.0	N/A	100.0	N/A	-
Domestic Equity	11,988,025	41.0	40.0	45.0	50.0	1,183,033
International Equity	4,955,828	16.9	10.0	15.0	20.0	-565,476
Total Fixed Income	6,558,196	22.4	15.0	20.0	45.0	-704,393
Total Real Estate	3,115,209	10.6	0.0	10.0	15.0	-188,308
Total Non-Traditional Assets	2,646,355	9.0	0.0	10.0	15.0	280,547
Total Liquid Capital	5,403	0.0	0.0	0.0	1.0	-5,403



	US Equity	Intl. Equity	US Fixed Income	Intl. Fixed Income	Alternative Inv.	Real Estate	Cash
Total Fund	40.96 (38)	16.93 (45)	17.31 (90)	5.10 (39)	9.04 (60)	10.64 (27)	0.02 (99)
5th Percentile	57.47	26.67	55.89	10.99	37.76	14.89	7.84
1st Quartile	45.10	20.83	38.23	5.46	20.75	10.76	2.49
Median	39.26	16.39	31.68	4.77	12.28	8.25	1.45
3rd Quartile	30.12	12.58	23.25	3.05	5.76	5.33	0.46
95th Percentile	16.84	7.36	14.06	0.39	1.52	3.41	0.06

Financial Reconciliation: Quarter To Date

	Market Value 10/01/2018	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 12/31/2018
Domestic Equity	**14,186,881**	**-**	**-**	**-**	**-**	**-**	**177,917**	**-2,376,773**	**11,988,025**
Fidelity Total Market Index Fund (FSKAX)	8,617,031	-	-	-	-	-	155,926	-1,391,917	7,381,040
Vanguard S&P MC 400 (VSPMX)	5,569,849	-	-	-	-	-	21,991	-984,856	4,606,984
FMI Common Stock Fund	-	-	-	-	-	-	-	-	-
FPA Crescent Fund	-	-	-	-	-	-	-	-	-
International Equity	**5,662,702**	**-**	**-**	**-**	**-**	**-**	**143,616**	**-850,490**	**4,955,828**
Dodge & Cox Intl Stock Fund (DODFX)	3,008,780	-	-	-	-	-	74,942	-447,590	2,636,132
Artisan International Instl Fd	-	-	-	-	-	-	-	-	-
American Funds Europacific Growth R6 (RERGX)	2,653,922	-	-	-	-	-	68,674	-402,900	2,319,696
Total Non-Traditional Assets	**2,819,607**	**46,715**	**-**	**-**	**-**	**-**	**-**	**-219,967**	**2,646,355**
Forester Offshore A2, Ltd.	2,364,799	-	-	-	-	-	-	-219,967	2,144,832
Crescent Direct Lending Levered Fund II	454,808	46,715	-	-	-	-	-	-	501,523
Total Core Plus Fixed Income	**5,026,892**	**-37,602**	**-**	**-**	**-**	**-**	**35,109**	**42,019**	**5,066,418**
Vanguard Total Bond Index Adm (VBTLX)	855,101	-37,602	-	-	-	-	4,148	9,325	830,972
Vanguard Short Term US Treas Adm Fd	-	-	-	-	-	-	-	-	-
Met West Total Return Bond Fund (MWTIX)	4,171,791	-	-	-	-	-	30,961	32,694	4,235,446
Total Global Fixed Income (Composite)	**1,510,763**	**-**	**-**	**-**	**-**	**-**	**18,017**	**-37,002**	**1,491,778**
PIMCO Div Inc Bond Fund (PDIIX)	1,510,763	-	-	-	-	-	18,017	-37,002	1,491,778
Total Non-Core Fixed Income	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Vanguard Short-Term Inflation Protected Securities Adm. Fund	-	-	-	-	-	-	-	-	-
Total Real Assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Van Eck Global Hard Assets I Fund	-	-	-	-	-	-	-	-	-
Nuveen Gresham Diversified Commodities Fund	-	-	-	-	-	-	-	-	-
Total Real Estate	**2,072,148**	**1,000,000**	**-**	**-**	**-8,997**	**-**	**12,909**	**39,149**	**3,115,209**
Intercontinental U.S. REIF	2,072,148	-	-	-	-5,497	-	-	33,544	2,100,195
Total Liquid Capital	**1,014,479**	**-1,009,113**	**-**	**-**	**-**	**-**	**37**	**-**	**5,403**
Government STIF 25	1,014,479	-1,009,113	-	-	-	-	37	-	5,403
Total Fund	**32,293,472**	**-**	**-**	**-**	**-8,997**	**-**	**387,606**	**-3,403,065**	**29,269,016**

Financial Reconciliation: Fiscal Year To Date

	Market Value 10/01/2018	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 12/31/2018
Domestic Equity	**14,186,881**	**-**	**-**	**-**	**-**	**-**	**177,917**	**-2,376,773**	**11,988,025**
Fidelity Total Market Index Fund (FSKAX)	8,617,031	-	-	-	-	-	155,926	-1,391,917	7,381,040
Vanguard S&P MC 400 (VSPMX)	5,569,849	-	-	-	-	-	21,991	-984,856	4,606,984
FMI Common Stock Fund	-	-	-	-	-	-	-	-	-
FPA Crescent Fund	-	-	-	-	-	-	-	-	-
International Equity	**5,662,702**	**-**	**-**	**-**	**-**	**-**	**143,616**	**-850,490**	**4,955,828**
Dodge & Cox Intl Stock Fund (DODFX)	3,008,780	-	-	-	-	-	74,942	-447,590	2,636,132
Artisan International Instl Fd	-	-	-	-	-	-	-	-	-
American Funds Europacific Growth R6 (RERGX)	2,653,922	-	-	-	-	-	68,674	-402,900	2,319,696
Total Non-Traditional Assets	**2,819,607**	**46,715**	**-**	**-**	**-**	**-**	**-**	**-219,967**	**2,646,355**
Forester Offshore A2, Ltd.	2,364,799	-	-	-	-	-	-	-219,967	2,144,832
Crescent Direct Lending Levered Fund II	454,808	46,715	-	-	-	-	-	-	501,523
Total Core Plus Fixed Income	**5,026,892**	**-37,602**	**-**	**-**	**-**	**-**	**35,109**	**42,019**	**5,066,418**
Vanguard Total Bond Index Adm (VBTLX)	855,101	-37,602	-	-	-	-	4,148	9,325	830,972
Vanguard Short Term US Treas Adm Fd	-	-	-	-	-	-	-	-	-
Met West Total Return Bond Fund (MWTIX)	4,171,791	-	-	-	-	-	30,961	32,694	4,235,446
Total Global Fixed Income (Composite)	**1,510,763**	**-**	**-**	**-**	**-**	**-**	**18,017**	**-37,002**	**1,491,778**
PIMCO Div Inc Bond Fund (PDIIX)	1,510,763	-	-	-	-	-	18,017	-37,002	1,491,778
Total Non-Core Fixed Income	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Vanguard Short-Term Inflation Protected Securities Adm. Fund	-	-	-	-	-	-	-	-	-
Total Real Assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Van Eck Global Hard Assets I Fund	-	-	-	-	-	-	-	-	-
Nuveen Gresham Diversified Commodities Fund	-	-	-	-	-	-	-	-	-
Total Real Estate	**2,072,148**	**1,000,000**	**-**	**-**	**-8,997**	**-**	**12,909**	**39,149**	**3,115,209**
Intercontinental U.S. REIF	2,072,148	-	-	-	-5,497	-	-	33,544	2,100,195
Total Liquid Capital	**1,014,479**	**-1,009,113**	**-**	**-**	**-**	**-**	**37**	**-**	**5,403**
Government STIF 25	1,014,479	-1,009,113	-	-	-	-	37	-	5,403
Total Fund	**32,293,472**	**-**	**-**	**-**	**-8,997**	**-**	**387,606**	**-3,403,065**	**29,269,016**

Asset Allocation & Performance [Gross of Fees] - Trailing Returns

	Allocation		Performance(%)																		
	Market Value $	%	QTD		FYTD		YTD		1 YR		3 YR		5 YR		Inception		Inception Date
Total Fund	**29,269,016**	**100.0**	**-9.34**	**(80)**	**-9.34**	**(80)**	**-6.41**	**(93)**	**-6.41**	**(93)**	**3.93**	**(94)**	**1.90**	**(98)**	**2.90**	**(99)**	**05/01/2007**
Total Fund Policy			-7.65	(35)	-7.65	(35)	-4.25	(49)	-4.25	(49)	4.44	(91)	3.37	(92)	N/A		
60% R3000/ 40% BB Agg.			-8.21	(46)	-8.21	(46)	-3.34	(30)	-3.34	(30)	6.62	(20)	5.31	(25)	5.61	(21)	
All Public Plans-Total Fund Median			-8.32		-8.32		-4.35		-4.35		5.77		4.77		5.09		
Domestic Equity	**11,988,025**	**41.0**	**-15.50**	**(52)**	**-15.50**	**(52)**	**-7.63**	**(51)**	**-7.63**	**(51)**	**7.70**	**(39)**	**6.49**	**(36)**	**4.78**	**(62)**	**06/01/2007**
Russell 3000 Index			-14.30	(41)	-14.30	(41)	-5.24	(35)	-5.24	(35)	8.97	(24)	7.91	(20)	6.54	(30)	
IM U.S. Equity (MF) Median			-15.37		-15.37		-7.49		-7.49		6.82		5.38		5.42		
Vanguard S&P MC 400 (VSPMX)	4,606,984	15.7	-17.29	(59)	-17.29	(59)	-11.14	(55)	-11.14	(55)	N/A		N/A		-6.62	(55)	11/01/2017
S&P MidCap 400 Index			-17.28	(59)	-17.28	(59)	-11.08	(54)	-11.08	(54)	7.66	(30)	6.03	(28)	-6.56	(55)	
IM U.S. Mid Cap Equity (MF) Median			-16.75		-16.75		-10.70		-10.70		5.82		4.63		-6.06		
Fidelity Total Market Index Fund (FSKAX)	7,381,040	25.2	-14.34	(49)	-14.34	(49)	-5.29	(28)	-5.29	(28)	8.93	(12)	7.92	(11)	6.63	(16)	06/01/2007
Wilshire 5000 Total Market Index (full-cap) Index			-14.43	(52)	-14.43	(52)	-5.29	(28)	-5.29	(28)	9.01	(10)	7.69	(17)	6.62	(16)	
IM U.S. Multi-Cap Core Equity (MF) Median			-14.38		-14.38		-7.20		-7.20		7.04		5.85		5.20		
International Equity	**4,955,828**	**16.9**	**-12.48**	**(53)**	**-12.48**	**(53)**	**-16.57**	**(57)**	**-16.57**	**(57)**	**1.87**	**(71)**	**-0.55**	**(72)**	**1.03**	**(44)**	**06/01/2007**
Total International Equity Policy			-11.41	(43)	-11.41	(43)	-13.78	(27)	-13.78	(27)	3.15	(55)	0.70	(47)	0.49	(56)	
IM International Equity (MF) Median			-12.23		-12.23		-16.01		-16.01		3.52		0.50		0.70		
Dodge & Cox Intl Stock Fund (DODFX)	2,636,132	9.0	-12.39	(26)	-12.39	(26)	-17.98	(82)	-17.98	(82)	3.24	(15)	-0.47	(46)	1.00	(36)	06/01/2007
MSCI EAFE (Net) Index			-12.54	(27)	-12.54	(27)	-13.79	(29)	-13.79	(29)	2.87	(23)	0.53	(8)	0.42	(50)	
IM International Large Cap Core Equity (MF) Median			-13.68		-13.68		-14.90		-14.90		1.60		-0.49		0.33		
American Funds Europacific Growth R6 (RERGX)	2,319,696	7.9	-12.59	(43)	-12.59	(43)	N/A		N/A		N/A		N/A		-13.33	(50)	07/01/2018
MSCI AC World ex USA (Net)			-11.46	(28)	-11.46	(28)	-14.20	(43)	-14.20	(43)	4.48	(23)	0.68	(41)	-10.84	(29)	
IM International Large Cap Growth Equity (MF) Median			-12.68		-12.68		-15.06		-15.06		2.84		0.10		-13.33		
Total Non-Traditional Assets	**2,646,355**	**9.0**	**-7.75**		**-7.75**		**-4.95**		**-4.95**		**1.67**		**0.79**		**2.61**		**07/01/2007**
Forester Offshore A2, Ltd.	2,144,832	7.3	-9.30		-9.30		-6.78		-6.78		0.24		1.33		3.52		07/01/2007
Crescent Direct Lending Levered Fund II	501,523	1.7	0.00		0.00		N/A		N/A		N/A		N/A		6.60		03/01/2018

Current period valuation is not yet available for Crescent Direct Lending, and a stale value was used in this report.
Returns for periods greater than one year are annualized.

Returns are expressed as percentages. Mutual fund and ETF investments are reported net of fees.

	Allocation		Performance(%)							
	Market Value $	%	QTD	FYTD	YTD	1 YR	3 YR	5 YR	Inception	Inception Date
Total Fixed Income	**6,558,196**	**22.4**	**0.89 (31)**	**0.89 (31)**	**0.22 (14)**	**0.22 (14)**	**1.34 (92)**	**1.52 (43)**	**2.59 (79)**	**06/01/2007**
Fixed Income Composite Index			1.51 (10)	1.51 (10)	-0.06 (17)	-0.06 (17)	1.44 (90)	1.72 (34)	N/A	
IM Global Fixed Income (MF) Median			0.33	0.33	-1.76	-1.76	2.68	1.27	3.50	
Vanguard Total Bond Index Adm (VBTLX)	830,972	2.8	1.62 (12)	1.62 (12)	-0.07 (21)	-0.07 (21)	N/A	N/A	-0.02 (58)	09/01/2016
Blmbg. Barc. U.S. Aggregate Index			1.64 (11)	1.64 (11)	0.01 (18)	0.01 (18)	2.06 (45)	2.52 (28)	0.18 (41)	
IM U.S. Broad Market Core Fixed Income (MF) Median			0.99	0.99	-0.63	-0.63	1.99	2.26	0.08	
Met West Total Return Bond Fund (MWTIX)	4,235,446	14.5	1.53 (18)	1.53 (18)	0.22 (10)	0.22 (10)	N/A	N/A	0.56 (10)	12/01/2017
Blmbg. Barc. U.S. Aggregate Index			1.64 (11)	1.64 (11)	0.01 (18)	0.01 (18)	2.06 (45)	2.52 (28)	0.43 (15)	
IM U.S. Broad Market Core Fixed Income (MF) Median			0.99	0.99	-0.63	-0.63	1.99	2.26	-0.18	
PIMCO Div Inc Bond Fund (PDIIX)	1,491,778	5.1	-1.26 (90)	-1.26 (90)	-0.99 (36)	-0.99 (36)	N/A	N/A	-0.43 (29)	12/01/2017
Blmbg. Barc. Global Credit (Hedged)			-0.19 (65)	-0.19 (65)	-0.81 (33)	-0.81 (33)	4.08 (13)	3.71 (1)	-0.30 (27)	
IM Global Fixed Income (MF) Median			0.33	0.33	-1.76	-1.76	2.68	1.27	-1.36	
Total Real Estate	**3,115,209**	**10.6**	**1.70**	**1.70**	**N/A**	**N/A**	**N/A**	**N/A**	**7.09**	**04/01/2018**
Intercontinental U.S. REIF	2,100,195	7.2	1.62 (75)	1.62 (75)	N/A	N/A	N/A	N/A	7.01 (25)	04/01/2018
NCREIF Fund Index-Open End Diversified Core (EW)			1.62 (76)	1.62 (76)	8.25 (66)	8.25 (66)	8.44 (52)	10.52 (63)	5.95 (69)	
IM U.S. Private Real Estate (SA+CF) Median			1.80	1.80	8.71	8.71	8.66	10.82	6.15	
Principal Enhanced Property Fund	1,015,014	3.5	1.85 (39)	1.85 (39)	N/A	N/A	N/A	N/A	1.85 (39)	10/01/2018
NCREIF Fund Index-Open End Diversified Core (EW)			1.62 (76)	1.62 (76)	8.25 (66)	8.25 (66)	8.44 (52)	10.52 (63)	1.62 (76)	
IM U.S. Private Real Estate (SA+CF) Median			1.80	1.80	8.71	8.71	8.66	10.82	1.80	
Total Liquid Capital	**5,403**	**0.0**								
Government STIF 25	5,403	0.0								

Current period valuation is not yet available for Crescent Direct Lending, and a stale value was used in this report.
Returns for periods greater than one year are annualized.

Returns are expressed as percentages. Mutual fund and ETF investments are reported net of fees.

Asset Allocation & Performance [Gross of Fees] - Fiscal Year Returns

	Allocation		Performance(%)								
	Market Value $	%	FYTD	FY2018	FY2017	FY2016	FY2015	FY2014	FY2013	FY2012	FY2011
Total Fund (Net of PBA Fees)	**29,269,016**	**100.0**	**-9.34 (80)**	**6.34 (84)**	**10.31 (83)**	**7.16 (92)**	**-6.34 (100)**	**8.51 (84)**	**12.77 (46)**	**15.85 (82)**	**-1.70 (87)**
Total Fund Policy			-7.65 (35)	7.59 (63)	9.69 (88)	6.94 (93)	-1.91 (79)	7.36 (94)	9.79 (85)	N/A	N/A
60% R3000/ 40% BB Agg.			-8.21 (46)	9.74 (23)	10.41 (81)	12.69 (2)	-1.46 (73)	10.94 (36)	11.41 (71)	19.76 (16)	2.13 (15)
All Public Plans-Total Fund Median			-8.32	8.14	12.19	9.66	-0.45	10.24	12.51	17.94	0.29
Total Fund	**29,269,016**	**100.0**	**-9.34 (80)**	**6.34 (84)**	**10.31 (83)**	**7.16 (92)**	**-6.34 (100)**	**8.51 (84)**	**12.77 (46)**	**15.89 (81)**	**-1.61 (86)**
Total Fund Policy			-7.65 (35)	7.59 (63)	9.69 (88)	6.94 (93)	-1.91 (79)	7.36 (94)	9.79 (85)	N/A	N/A
60% S&P 500/40% Blbg BC Aggregate Index			-7.56 (34)	9.99 (19)	10.90 (76)	11.43 (8)	0.95 (21)	13.28 (3)	10.58 (79)	19.87 (15)	3.05 (7)
All Public Plans-Total Fund Median			-8.32	8.14	12.19	9.66	-0.45	10.24	12.51	17.94	0.29
Domestic Equity	**11,988,025**	**41.0**	**-15.50 (52)**	**15.90 (39)**	**17.81 (48)**	**13.63 (38)**	**-1.23 (53)**	**15.92 (36)**	**21.80 (54)**	**28.88 (38)**	**-1.86 (50)**
Russell 3000 Index			-14.30 (41)	17.58 (31)	18.71 (39)	14.96 (28)	-0.49 (46)	17.76 (23)	21.60 (55)	30.20 (26)	0.55 (31)
IM U.S. Equity (MF) Median			-15.37	13.29	17.48	12.13	-0.92	13.74	22.53	27.33	-1.87
Fidelity Total Market Index Fund (FSKAX)	7,381,040	25.2	-14.34 (49)	17.57 (20)	18.67 (36)	14.93 (18)	-0.51 (33)	17.91 (30)	21.40 (62)	30.39 (15)	0.62 (29)
Wilshire 5000 Total Market Index (full-cap) Index			-14.43 (52)	17.73 (17)	18.62 (38)	14.77 (20)	-1.18 (42)	17.67 (33)	22.03 (55)	29.64 (24)	0.48 (30)
IM U.S. Multi-Cap Core Equity (MF) Median			-14.38	14.56	17.48	11.72	-1.79	16.35	22.72	26.92	-1.49
Vanguard S&P MC 400 (VSPMX)	4,606,984	15.7	-17.29 (59)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P MidCap 400 Index			-17.28 (59)	14.21 (44)	17.52 (40)	15.33 (15)	1.40 (36)	11.82 (49)	27.68 (43)	28.54 (27)	-1.28 (39)
IM U.S. Mid Cap Equity (MF) Median			-16.75	13.11	16.52	10.77	-0.37	11.67	27.22	25.46	-2.46
International Equity	**4,955,828**	**16.9**	**-12.48 (53)**	**-2.33 (71)**	**21.40 (33)**	**5.63 (74)**	**-12.84 (67)**	**9.63 (8)**	**25.48 (15)**	**23.04 (8)**	**-13.12 (59)**
Total International Equity Policy			-11.41 (43)	2.25 (29)	19.10 (53)	6.52 (68)	-8.66 (50)	4.25 (51)	23.77 (22)	13.75 (71)	-9.36 (27)
IM International Equity (MF) Median			-12.23	0.08	19.36	9.34	-8.75	4.27	17.81	16.20	-12.09
Dodge & Cox Intl Stock Fund (DODFX)	2,636,132	9.0	-12.39 (26)	-5.26 (100)	26.58 (2)	5.62 (47)	-16.19 (97)	13.24 (1)	27.76 (2)	15.88 (41)	-12.97 (82)
MSCI EAFE (Net) Index			-12.54 (27)	2.74 (15)	19.10 (39)	6.52 (26)	-8.66 (63)	4.25 (51)	23.77 (24)	13.75 (63)	-9.36 (25)
IM International Large Cap Core Equity (MF) Median			-13.68	1.35	18.57	5.51	-7.87	4.30	21.64	14.76	-11.30
Artisan International Instl Fd	-	0.0	N/A	N/A	15.66 (80)	5.64 (58)	-9.34 (69)	6.14 (17)	N/A	N/A	N/A
MSCI EAFE (Net) Index			-12.54 (35)	2.74 (29)	19.10 (38)	6.52 (50)	-8.66 (64)	4.25 (51)	23.77 (15)	13.75 (72)	-9.36 (29)
IM International Large Cap Equity (MF) Median			-13.39	1.32	18.24	6.51	-7.64	4.31	19.87	16.53	-11.07
American Funds Europacific Growth R6 (RERGX)	2,319,696	7.9	-12.59 (43)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI AC World ex USA (Net)			-11.46 (28)	1.76 (50)	19.61 (21)	9.26 (34)	-12.16 (93)	4.77 (40)	16.48 (74)	14.49 (78)	-10.81 (55)
IM International Large Cap Growth Equity (MF) Median			-12.68	1.63	17.75	7.99	-5.66	4.39	18.17	17.99	-10.67

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.
Mutual fund and ETF investments are reported net of fees.
Prior to 10/31/2017, returns for Vanguard ST Infl. are not included in Total FI composite, as this fund was included in the Real Assets composite.

	Allocation		Performance(%)								
	Market Value $	%	FYTD	FY2018	FY2017	FY2016	FY2015	FY2014	FY2013	FY2012	FY2011
Total Non-Traditional Assets	**2,646,355**	**9.0**	**-7.75**	**4.85**	**9.34**	**-0.33**	**-3.25**	**5.84**	**11.24**	**8.67**	**-0.63**
Forester Offshore A2, Ltd.	2,144,832	7.3	-9.30	4.59	9.05	-0.03	1.35	7.23	11.72	11.22	-1.96
Crescent Direct Lending Levered Fund II	501,523	1.7	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Fixed Income	**6,558,196**	**22.4**	**0.89 (31)**	**-0.65 (40)**	**0.02 (68)**	**3.03 (93)**	**2.51 (3)**	**1.75 (75)**	**-0.73 (35)**	**6.93 (58)**	**1.55 (56)**
Fixed Income Composite Index			1.51 (10)	-1.12 (49)	-0.01 (68)	3.35 (92)	2.50 (3)	2.29 (68)	-0.85 (37)	4.54 (89)	2.18 (43)
IM Global Fixed Income (MF) Median			0.33	-1.24	1.02	7.42	-3.85	3.37	-1.81	7.17	1.74
Vanguard Total Bond Index Adm (VBTLX)	830,972	2.8	1.62 (12)	-1.27 (45)	-0.13 (76)	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. U.S. Aggregate Index			1.64 (11)	-1.22 (41)	0.07 (64)	5.19 (52)	2.94 (9)	3.96 (59)	-1.68 (53)	5.16 (81)	5.26 (14)
IM U.S. Broad Market Core Fixed Income (MF) Median			0.99	-1.35	0.48	5.21	1.98	4.19	-1.62	6.79	4.30
Vanguard Short Term US Treas Adm Fd	-	0.0	N/A	N/A	0.20 (42)	1.19 (27)	1.49 (25)	0.43 (50)	N/A	N/A	N/A
Blmbg. Barc. U.S. Treasury: 1-5 Year			1.75 (6)	-0.64 (72)	-0.10 (64)	1.54 (8)	2.06 (5)	0.63 (40)	-0.01 (14)	1.28 (43)	2.21 (16)
IM U.S. Short Term Treasury/Govt Bonds (MF) Median			0.98	-0.18	0.13	0.82	0.84	0.43	-0.72	1.15	1.08
Met West Total Return Bond Fund (MWTIX)	4,235,446	14.5	1.53 (18)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. U.S. Aggregate Index			1.64 (11)	-1.22 (41)	0.07 (64)	5.19 (52)	2.94 (9)	3.96 (59)	-1.68 (53)	5.16 (81)	5.26 (14)
IM U.S. Broad Market Core Fixed Income (MF) Median			0.99	-1.35	0.48	5.21	1.98	4.19	-1.62	6.79	4.30
PIMCO Div Inc Bond Fund (PDIIX)	1,491,778	5.1	-1.26 (90)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. Global Credit (Hedged)			-0.19 (65)	0.39 (18)	3.04 (27)	9.19 (25)	0.86 (18)	6.83 (9)	1.46 (8)	11.61 (5)	1.69 (53)
IM Global Fixed Income (MF) Median			0.33	-1.24	1.02	7.42	-3.85	3.37	-1.81	7.17	1.74
Vanguard Short-Term Inflation Protected Securities Adm. Fund	-	0.0	N/A	N/A	0.40 (30)	2.51 (93)	-1.22 (19)	N/A	N/A	N/A	N/A
Bloomberg Barclays US TIPS 0-5 Year Index			-0.22 (14)	1.01 (18)	0.51 (26)	2.62 (90)	-1.19 (18)	0.21 (73)	-1.00 (12)	2.78 (97)	4.46 (89)
IM U.S. TIPS (MF) Median			-0.84	0.29	-0.43	5.77	-1.90	0.95	-6.17	8.21	8.10
Total Liquid Capital	**5,403**	**0.0**									
Government STIF 25	5,403	0.0									

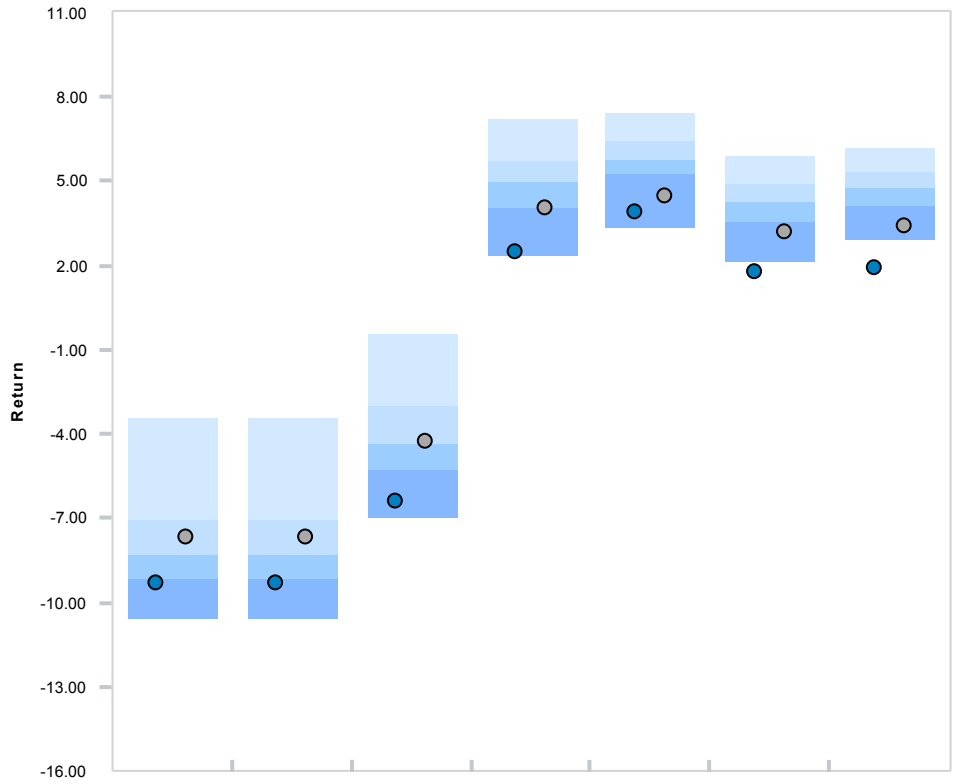
Returns for periods greater than one year are annualized.
Returns are expressed as percentages.
Mutual fund and ETF investments are reported net of fees.
Prior to 10/31/2017, returns for Vanguard ST Infl. are not included in Total FI composite, as this fund was included in the Real Assets composite.

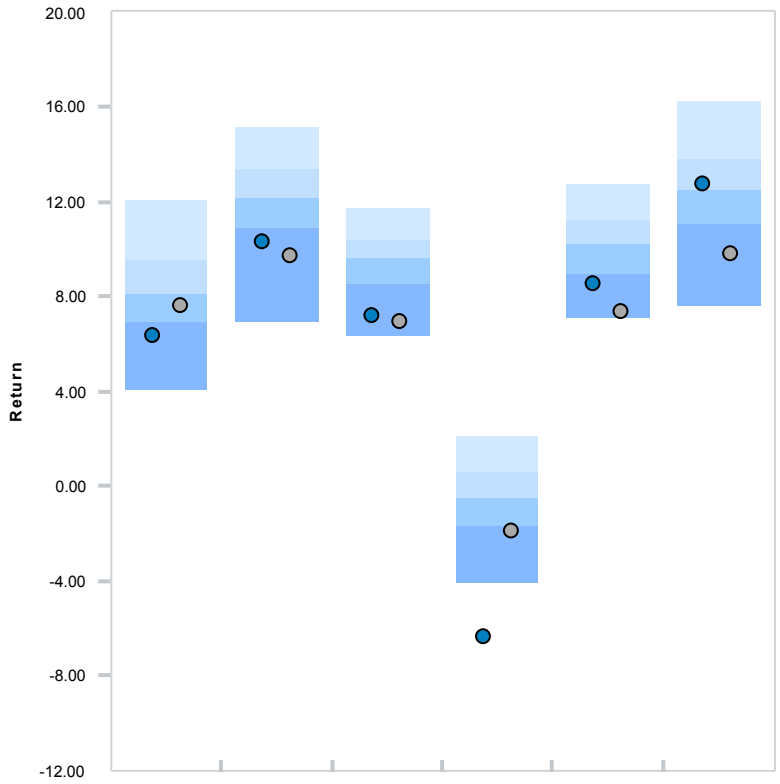
Comparative Performance - IRR

	QTD	1 YR	3 YR	5 YR	Inception	Inception Date
Crescent Direct Lending Levered Fund II	0.00	N/A	N/A	N/A	6.16	03/13/2018
Intercontinental U.S. REIF	1.35	N/A	N/A	N/A	5.87	04/30/2018
Principal Enhanced Property Fund	1.50	N/A	N/A	N/A	1.50	10/01/2018

Current period valuation is not yet available for Crescent Direct Lending and Intercontinental RE; a stale value was used in this report.

Plan Sponsor Peer Group Analysis - All Public Plans-Total Fund





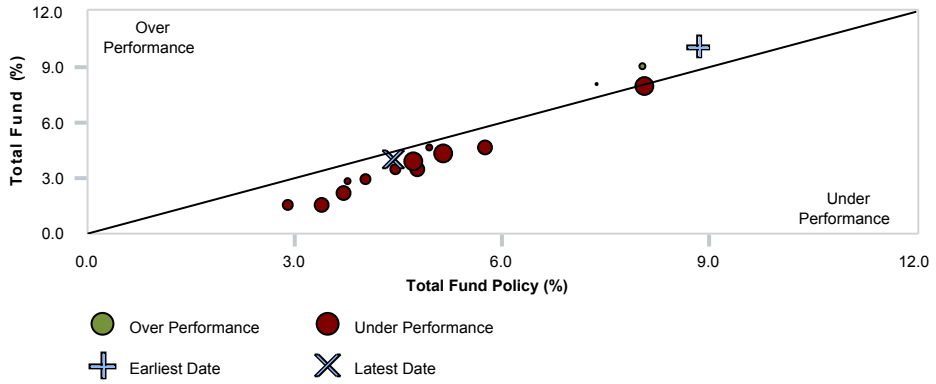
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
Total Fund	-9.34 (80)	-9.34 (80)	-6.41 (93)	2.45 (94)	3.93 (94)	1.76 (96)	1.90 (98)
Total Fund Policy	-7.65 (35)	-7.65 (35)	-4.25 (49)	4.04 (75)	4.44 (91)	3.16 (89)	3.37 (92)
Median	-8.32	-8.32	-4.35	4.93	5.77	4.22	4.77

	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
Total Fund	6.34 (84)	10.31 (83)	7.16 (92)	-6.34 (100)	8.51 (84)	12.77 (46)
Total Fund Policy	7.59 (63)	9.69 (88)	6.94 (93)	-1.91 (79)	7.36 (94)	9.79 (85)
Median	8.14	12.19	9.66	-0.45	10.24	12.51

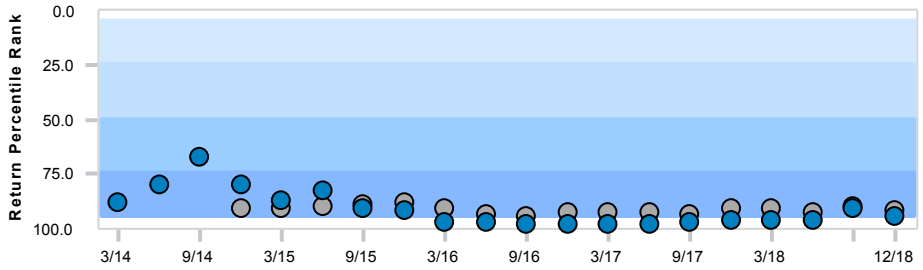
Comparative Performance

	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017
Total Fund	2.80 (64)	1.17 (64)	-0.73 (82)	3.01 (88)	3.46 (47)	1.72 (95)
Total Fund Policy	3.29 (41)	1.34 (54)	-0.95 (88)	3.77 (46)	2.97 (84)	2.10 (90)
All Public Plans-Total Fund Median	3.09	1.43	-0.27	3.71	3.43	2.93

3 Yr Rolling Under/Over Performance - 5 Years

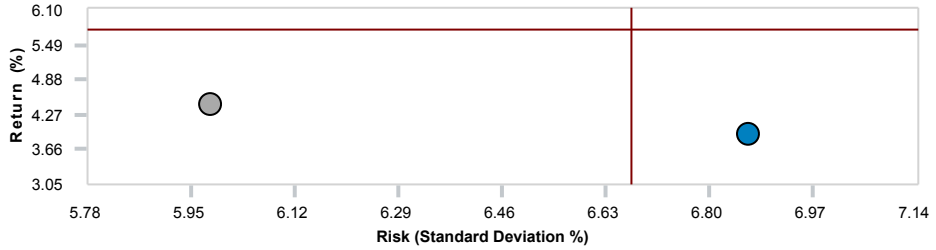


3 Yr Rolling Percentile Ranking - 5 Years



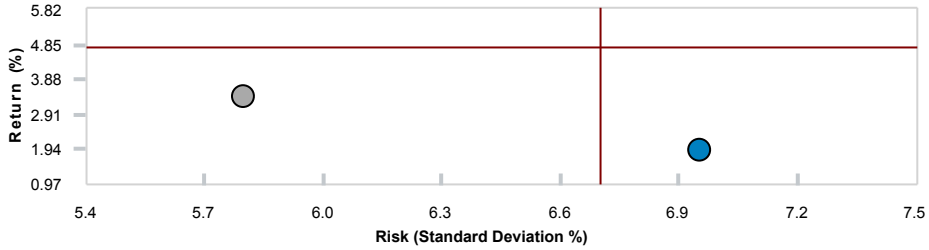
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Total Fund	20	0 (0%)	0 (0%)	1 (5%)	19 (95%)
Total Fund Policy	17	0 (0%)	0 (0%)	0 (0%)	17 (100%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Total Fund	3.93	6.87
Total Fund Policy	4.44	5.98
Median	5.77	6.67

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Total Fund	1.90	6.95
Total Fund Policy	3.37	5.80
Median	4.76	6.70

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.62	104.75	116.30	-0.99	-0.27	0.45	1.12	5.24
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.59	1.00	4.44

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.79	105.00	130.45	-1.95	-0.76	0.22	1.17	5.08
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.50	1.00	4.08

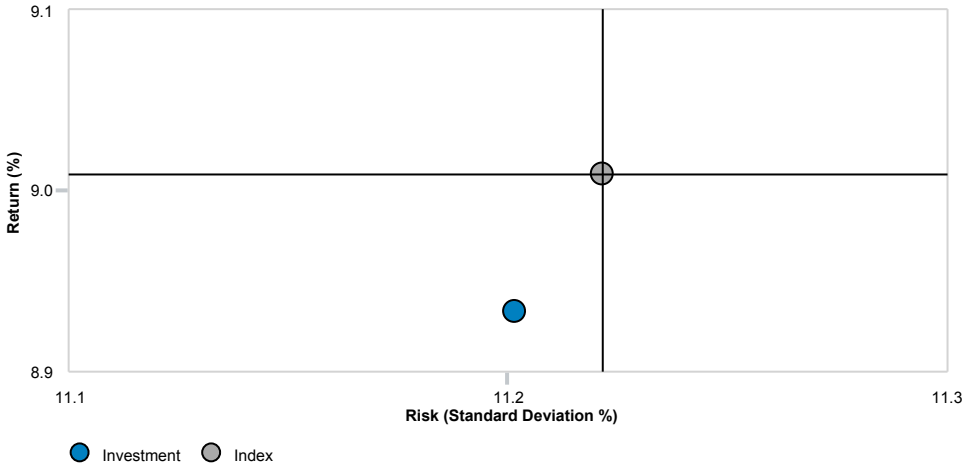
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.93	11.20	0.73	99.29	10	99.37	2
Index	9.01	11.22	0.74	100.00	10	100.00	2

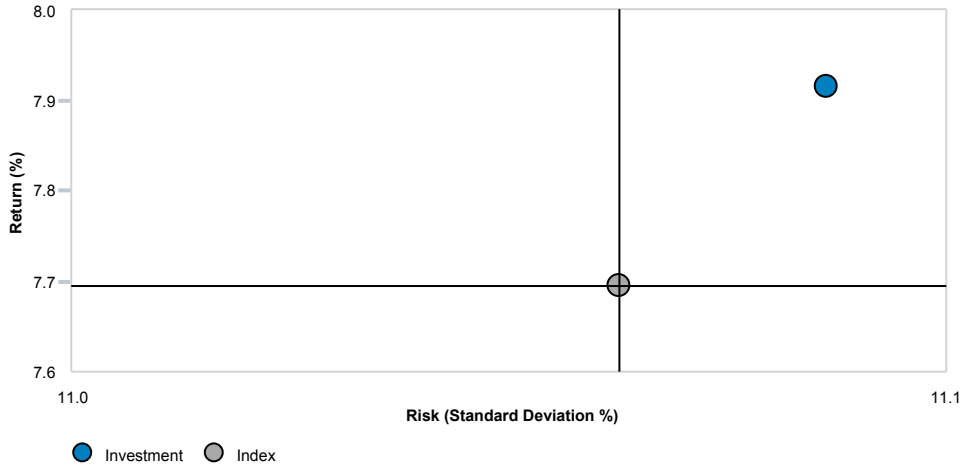
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.92	11.09	0.69	100.42	16	98.81	4
Index	7.69	11.06	0.67	100.00	15	100.00	5

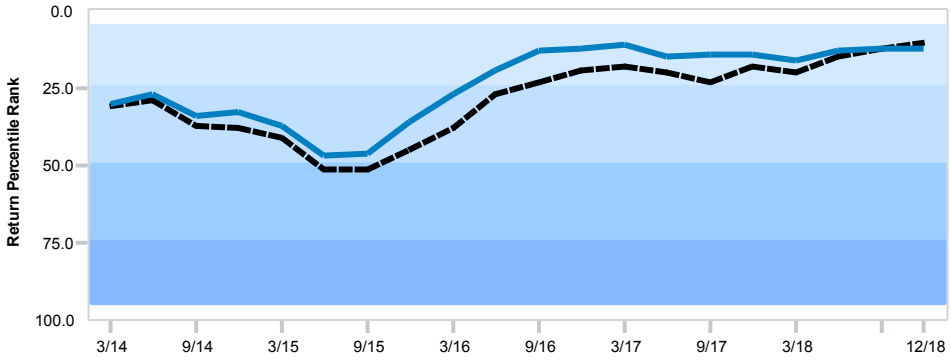
Risk and Return 3 Years



Risk and Return 5 Years

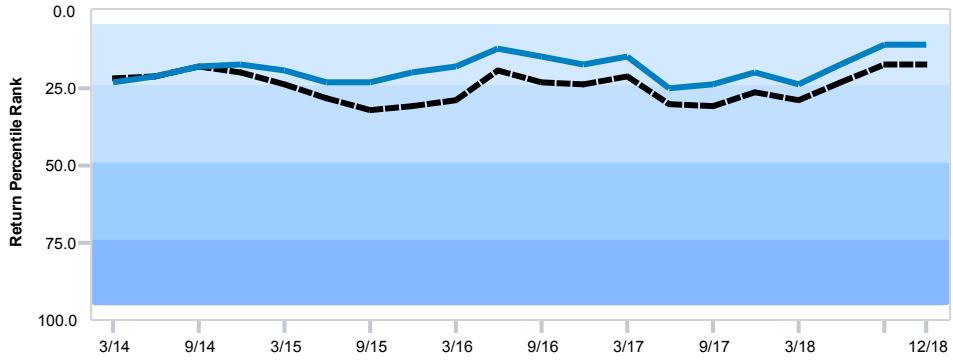


3 Year Rolling Percentile Rank IM U.S. Multi-Cap Core Equity (MF)



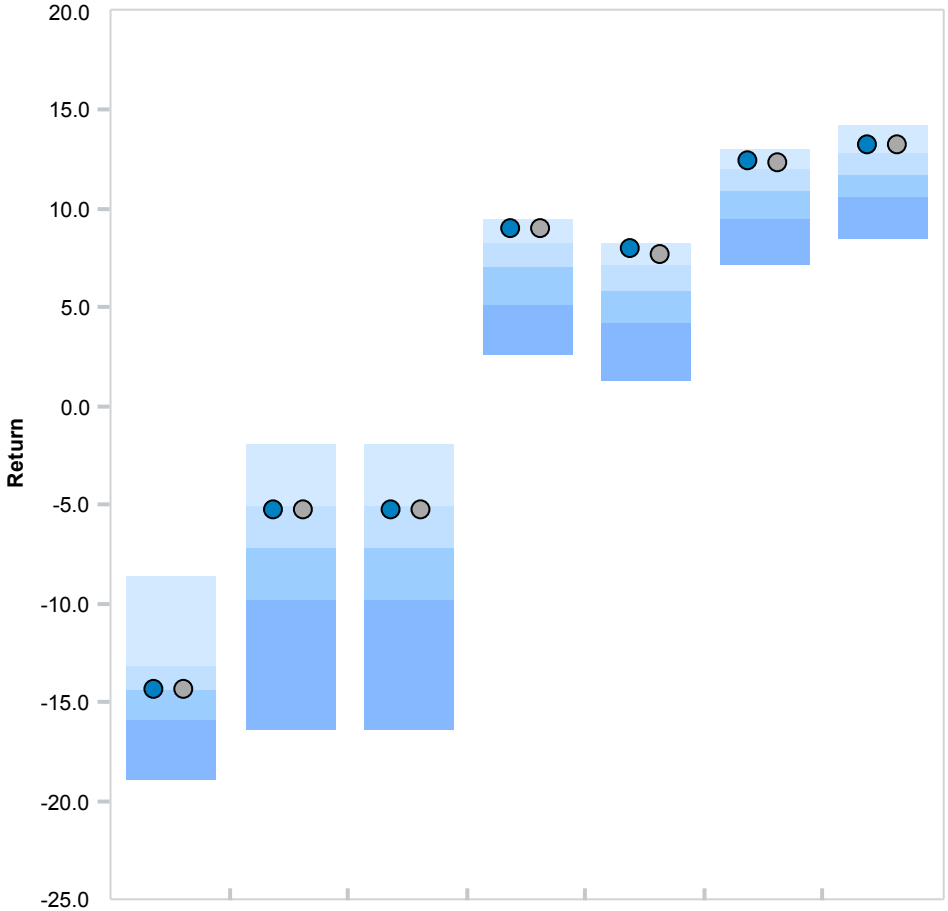
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	11 (55%)	9 (45%)	0 (0%)	0 (0%)
Index	20	10 (50%)	8 (40%)	2 (10%)	0 (0%)

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



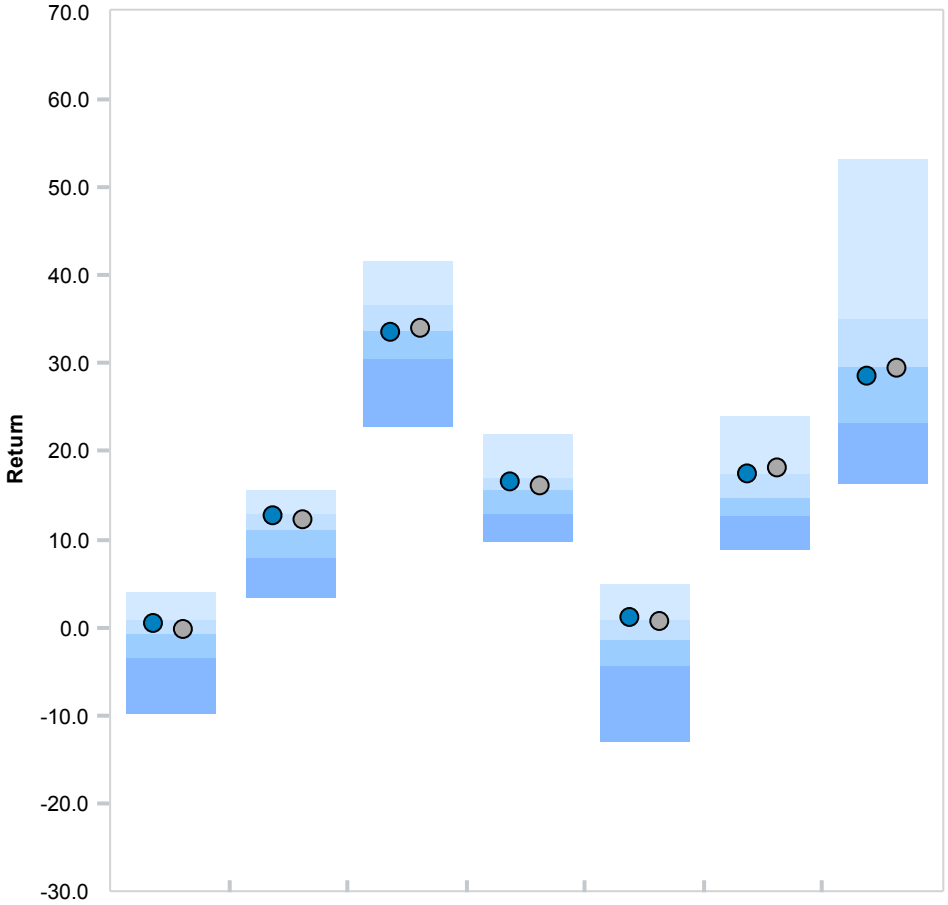
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	12 (60%)	8 (40%)	0 (0%)	0 (0%)

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



	QTD	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
Investment	-14.34 (49)	-5.29 (28)	-5.29 (28)	8.93 (12)	7.92 (11)	12.46 (13)	13.23 (16)
Index	-14.43 (52)	-5.29 (28)	-5.29 (28)	9.01 (10)	7.69 (17)	12.31 (18)	13.23 (16)
Median	-14.38	-7.20	-7.20	7.04	5.85	10.91	11.73

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



	2015	2014	2013	2012	2011	2010	2009
Investment	0.46 (31)	12.72 (27)	33.39 (53)	16.53 (31)	1.01 (24)	17.43 (25)	28.43 (58)
Index	-0.24 (43)	12.10 (37)	33.98 (47)	16.12 (39)	0.59 (28)	18.06 (22)	29.42 (52)
Median	-0.81	10.98	33.61	15.61	-1.34	14.58	29.66

Comparative Performance

	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017
Investment	7.10 (21)	3.86 (21)	-0.60 (49)	6.34 (42)	4.57 (41)	3.00 (47)
Index	7.06 (25)	4.11 (16)	-0.70 (54)	6.37 (40)	4.50 (46)	2.96 (50)
Median	5.83	2.66	-0.61	6.07	4.35	2.94

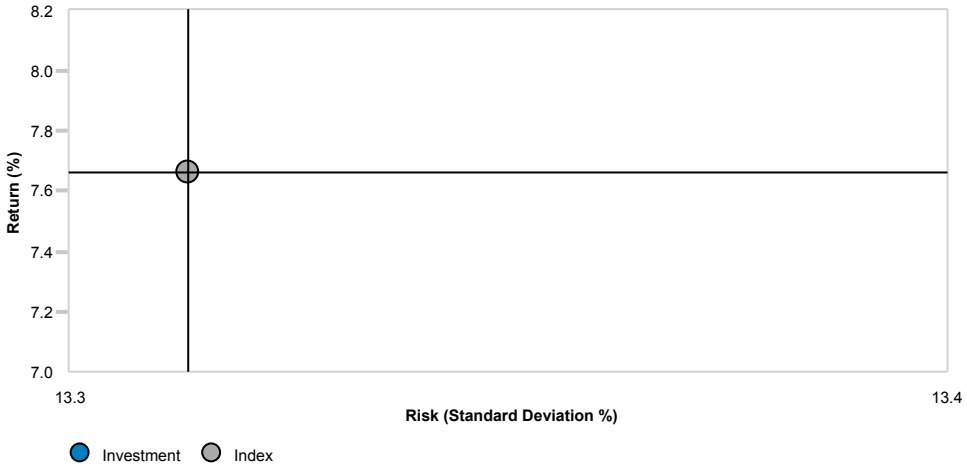
Historical Statistics 3 Years

	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	7.66	13.31	0.55	100.00	10	100.00	2

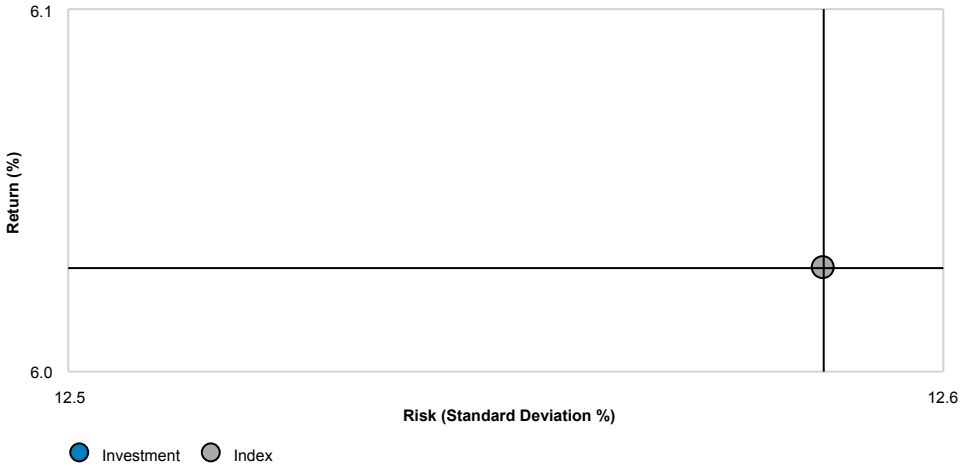
Historical Statistics 5 Years

	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	6.03	12.59	0.48	100.00	15	100.00	5

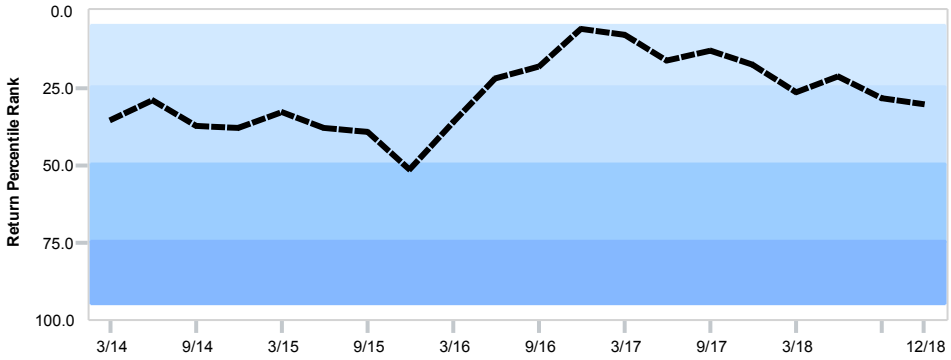
Risk and Return 3 Years



Risk and Return 5 Years

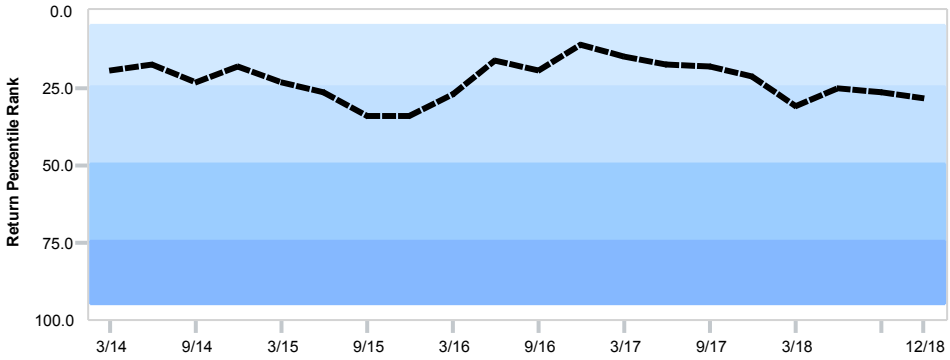


3 Year Rolling Percentile Rank IM U.S. Mid Cap Equity (MF)



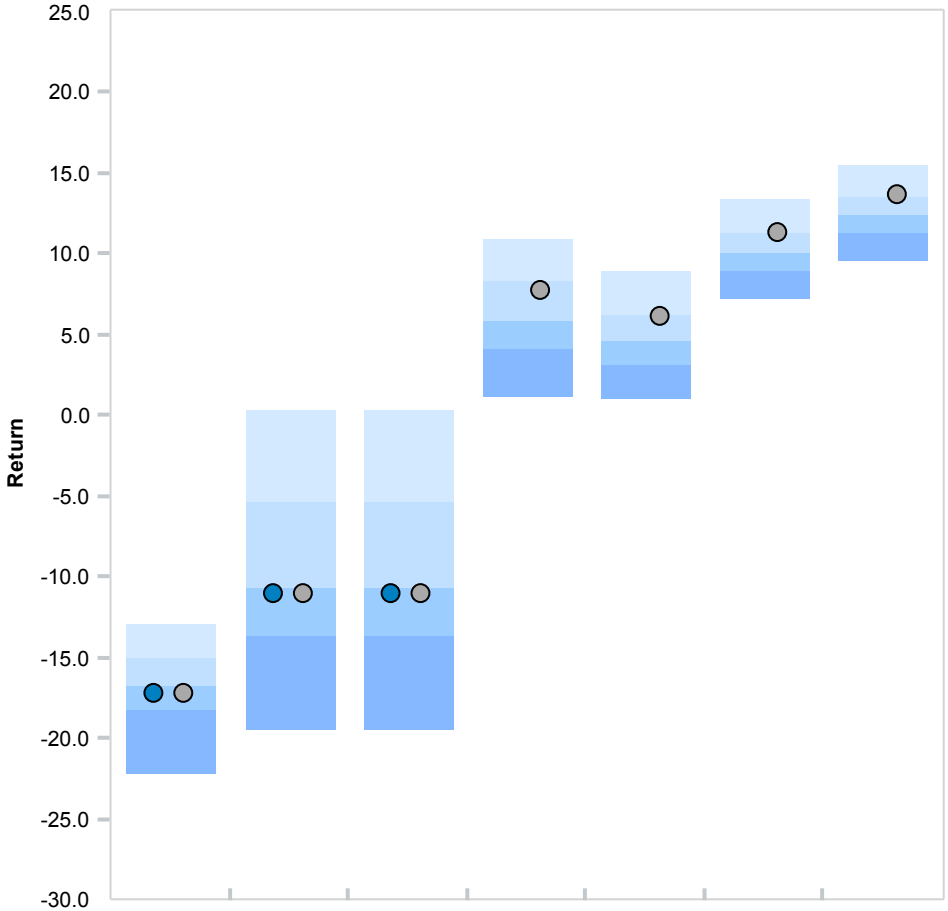
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	8 (40%)	11 (55%)	1 (5%)	0 (0%)

5 Year Rolling Percentile Rank IM U.S. Mid Cap Equity (MF)



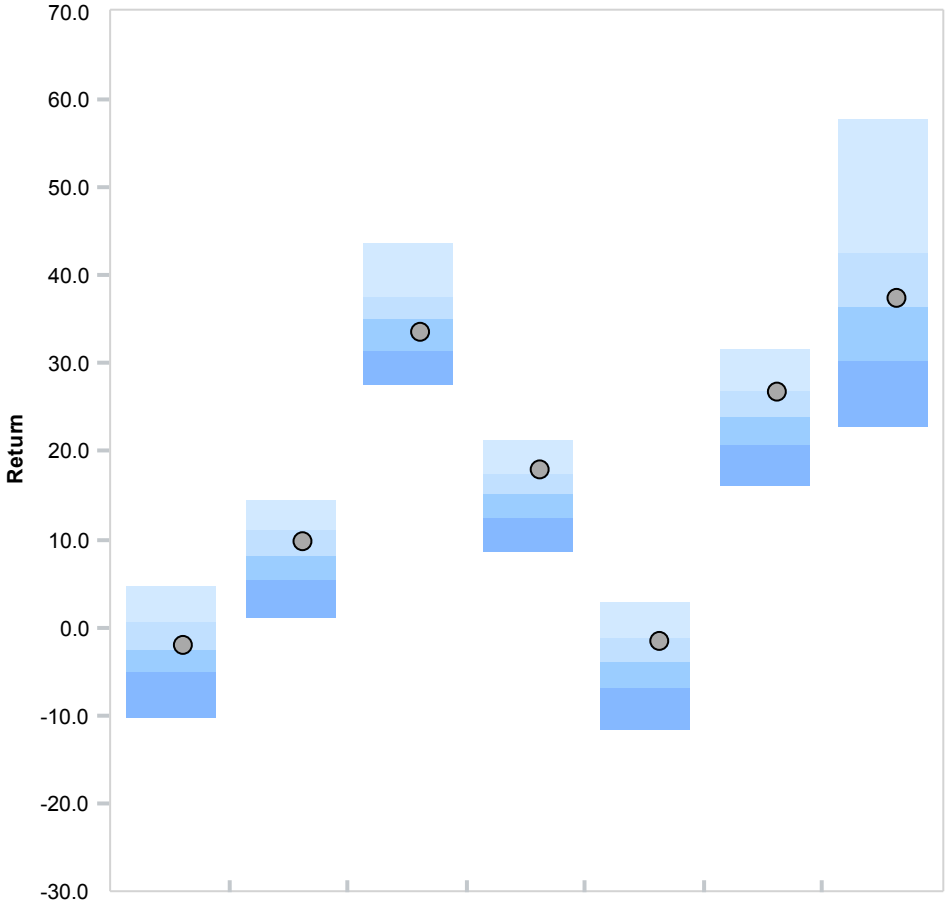
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	13 (65%)	7 (35%)	0 (0%)	0 (0%)

Peer Group Analysis - IM U.S. Mid Cap Equity (MF)



	QTD	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
Investment	-17.29 (59)	-11.14 (55)	-11.14 (55)	N/A	N/A	N/A	N/A
Index	-17.28 (59)	-11.08 (54)	-11.08 (54)	7.66 (30)	6.03 (28)	11.25 (27)	13.68 (22)
Median	-16.75	-10.70	-10.70	5.82	4.63	10.06	12.44

Peer Group Analysis - IM U.S. Mid Cap Equity (MF)



	2015	2014	2013	2012	2011	2010	2009
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	-2.18 (46)	9.77 (36)	33.50 (63)	17.88 (21)	-1.73 (31)	26.64 (28)	37.38 (46)
Median	-2.56	8.19	35.15	15.20	-3.97	24.01	36.36

Comparative Performance

	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017
Investment	3.85 (61)	4.28 (25)	-0.79 (54)	N/A	N/A	N/A
Index	3.86 (60)	4.29 (25)	-0.77 (54)	6.25 (31)	3.22 (63)	1.97 (61)
Median	4.59	2.59	-0.59	5.55	3.70	2.60

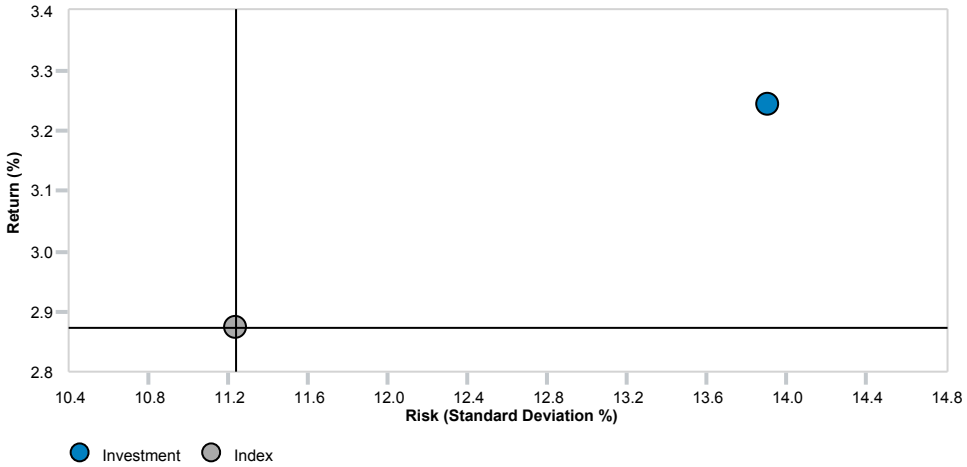
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	3.24	13.91	0.23	116.47	7	115.60	5
Index	2.87	11.24	0.22	100.00	6	100.00	6

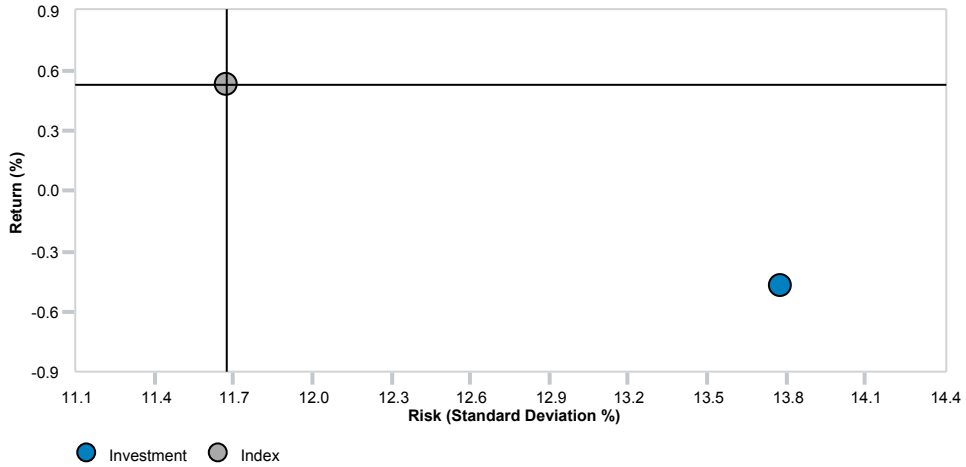
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-0.47	13.78	-0.01	105.26	11	110.37	9
Index	0.53	11.68	0.05	100.00	11	100.00	9

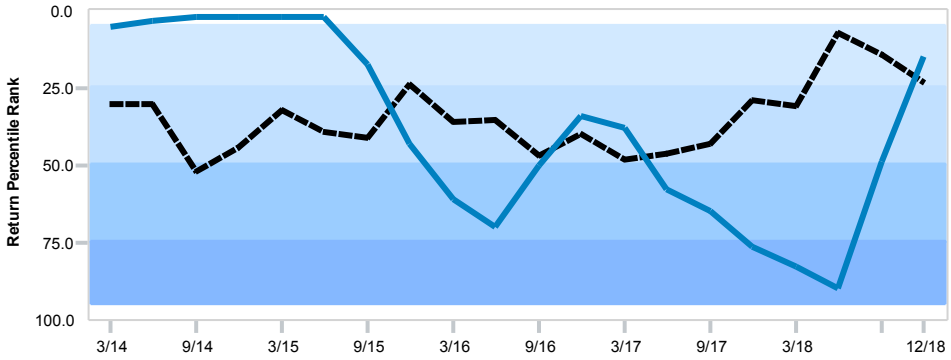
Risk and Return 3 Years



Risk and Return 5 Years

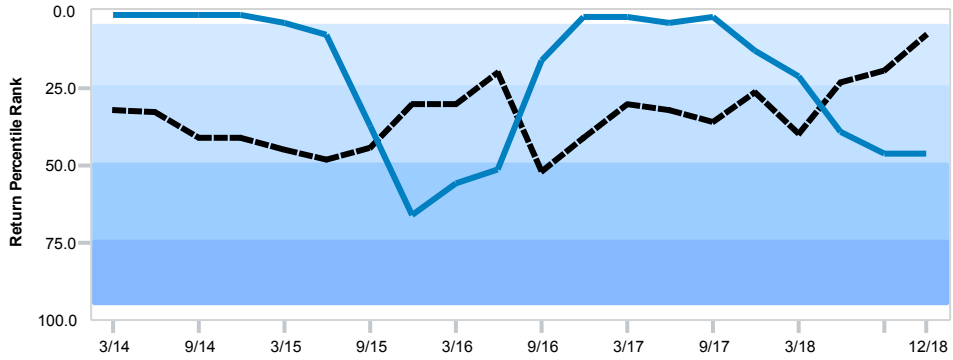


3 Year Rolling Percentile Rank IM International Large Cap Core Equity (MF)



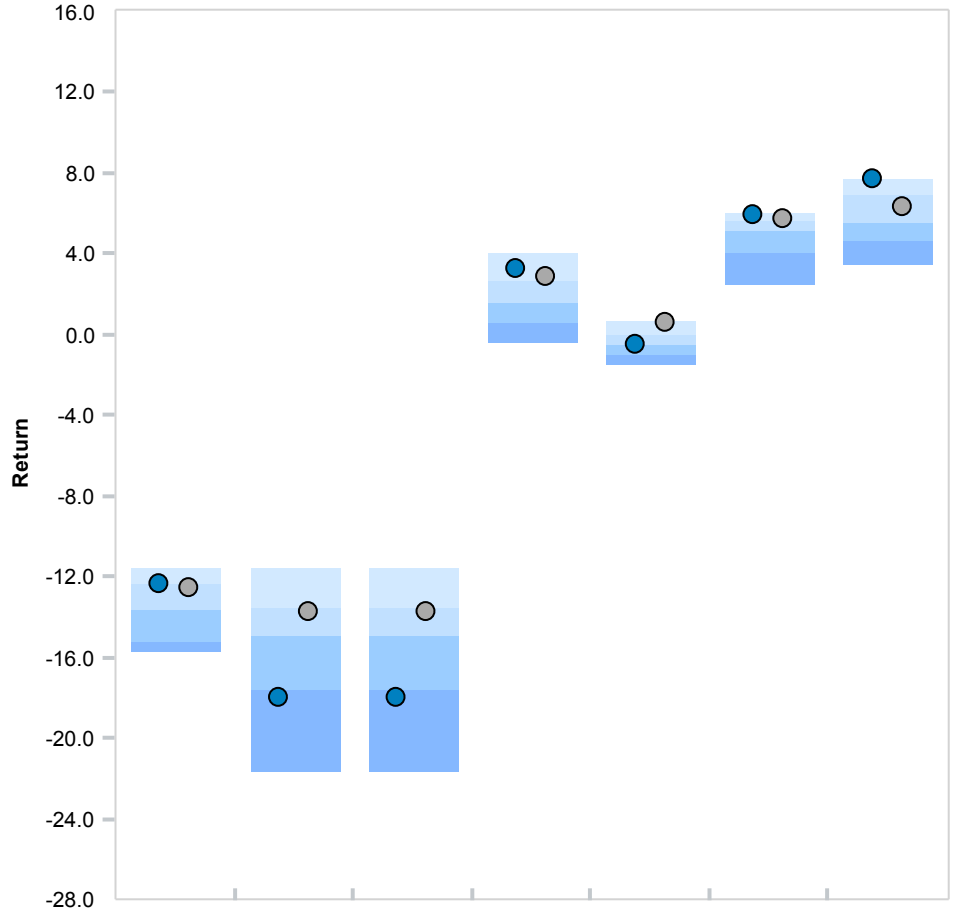
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	8 (40%)	5 (25%)	4 (20%)	3 (15%)
Index	20	4 (20%)	15 (75%)	1 (5%)	0 (0%)

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



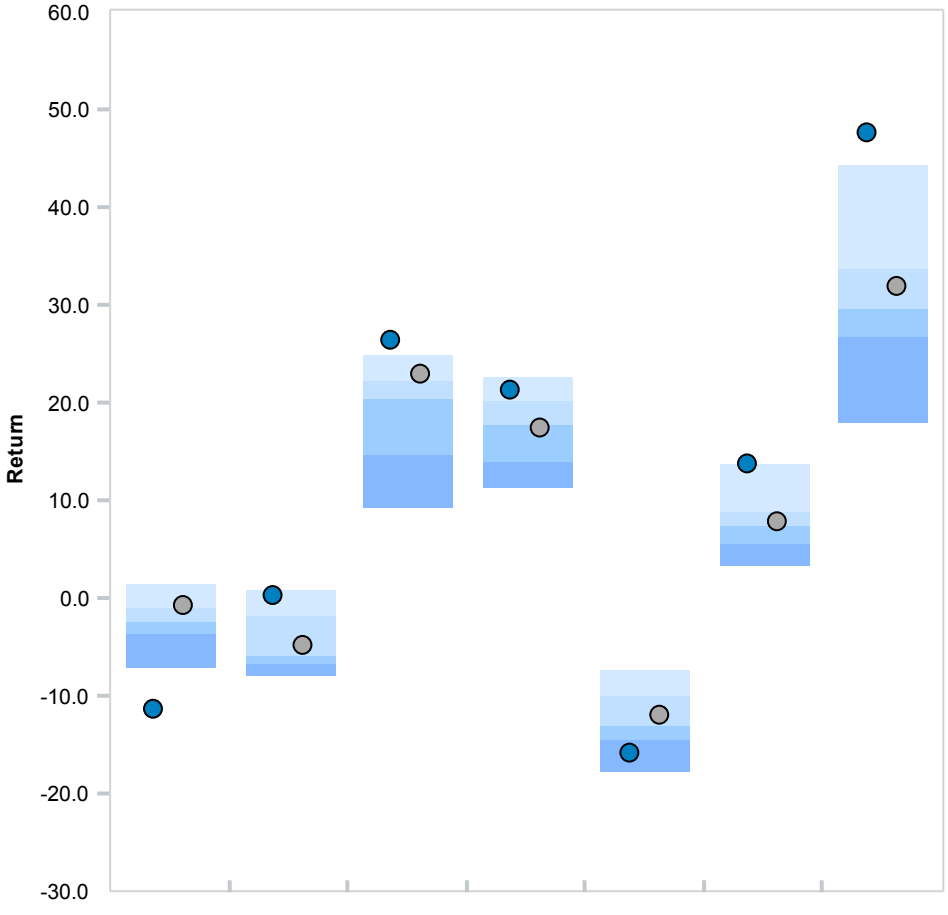
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	13 (65%)	4 (20%)	3 (15%)	0 (0%)
Index	20	4 (20%)	15 (75%)	1 (5%)	0 (0%)

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



	QTD	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
Investment	-12.39 (26)	-17.98 (82)	-17.98 (82)	3.24 (15)	-0.47 (46)	5.92 (7)	7.74 (3)
Index	-12.54 (27)	-13.79 (29)	-13.79 (29)	2.87 (23)	0.53 (8)	5.75 (14)	6.32 (33)
Median	-13.68	-14.90	-14.90	1.60	-0.49	5.11	5.54

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



	2015	2014	2013	2012	2011	2010	2009
Investment	-11.35 (97)	0.12 (11)	26.31 (4)	21.25 (17)	-15.97 (92)	13.68 (5)	47.47 (1)
Index	-0.81 (21)	-4.90 (35)	22.78 (22)	17.32 (55)	-12.14 (38)	7.75 (41)	31.78 (28)
Median	-2.38	-5.89	20.47	17.70	-13.09	7.28	29.51

Comparative Performance

	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017
Investment	0.81 (31)	-5.12 (92)	-2.14 (83)	1.21 (99)	6.94 (18)	4.75 (95)
Index	1.35 (21)	-1.24 (22)	-1.53 (61)	4.23 (47)	5.40 (51)	6.12 (44)
Median	0.49	-1.75	-1.16	4.16	5.42	5.80

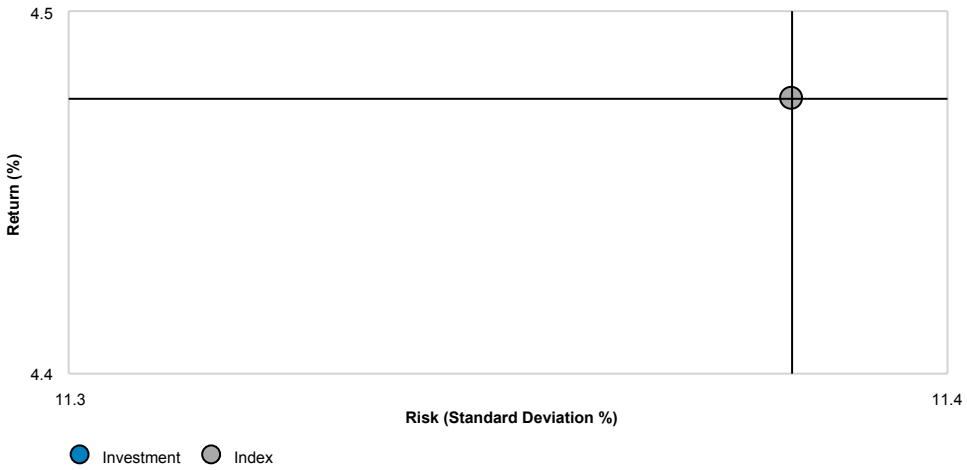
Historical Statistics 3 Years

	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	4.48	11.38	0.35	100.00	6	100.00	6

Historical Statistics 5 Years

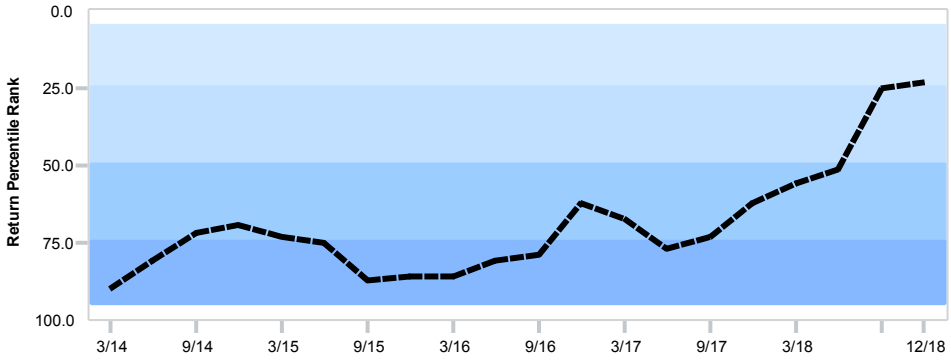
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	0.68	11.82	0.06	100.00	11	100.00	9

Risk and Return 3 Years



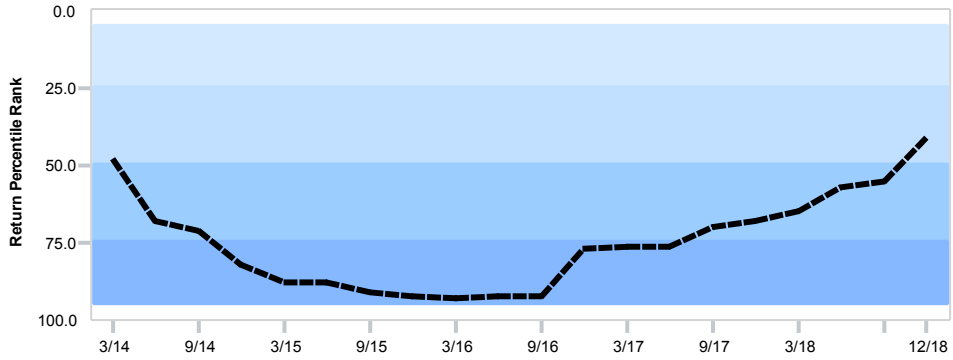
Risk and Return 5 Years

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



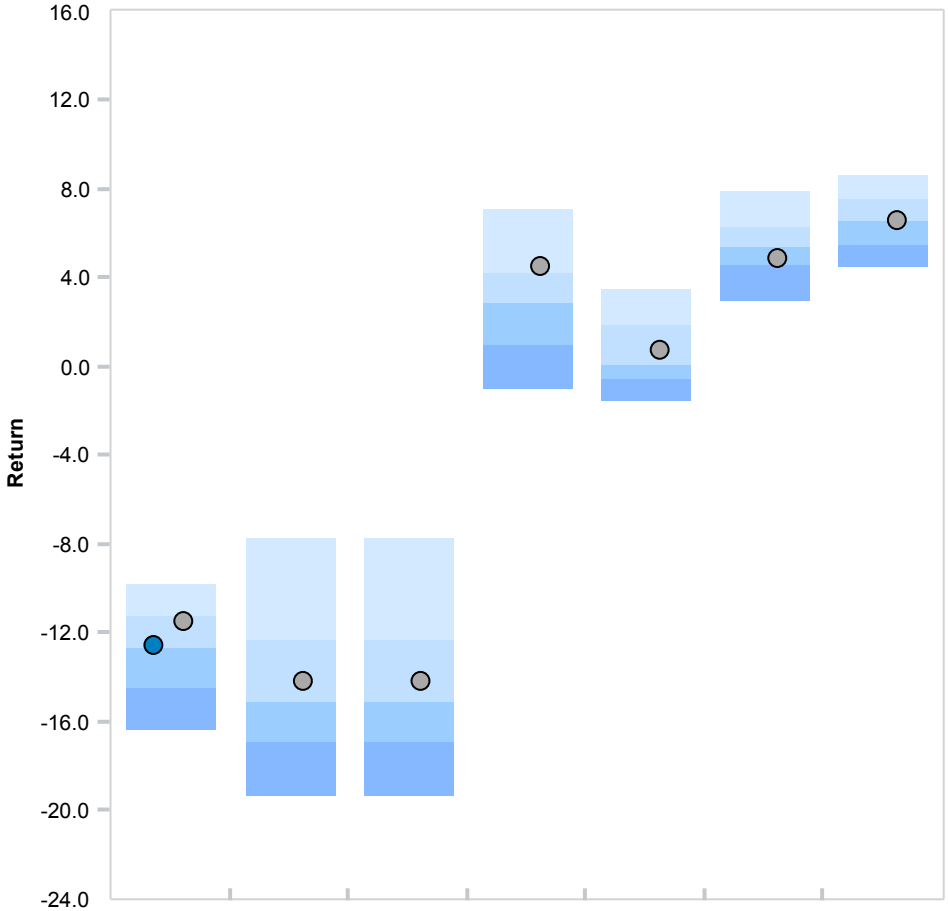
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	2 (10%)	0 (0%)	10 (50%)	8 (40%)

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



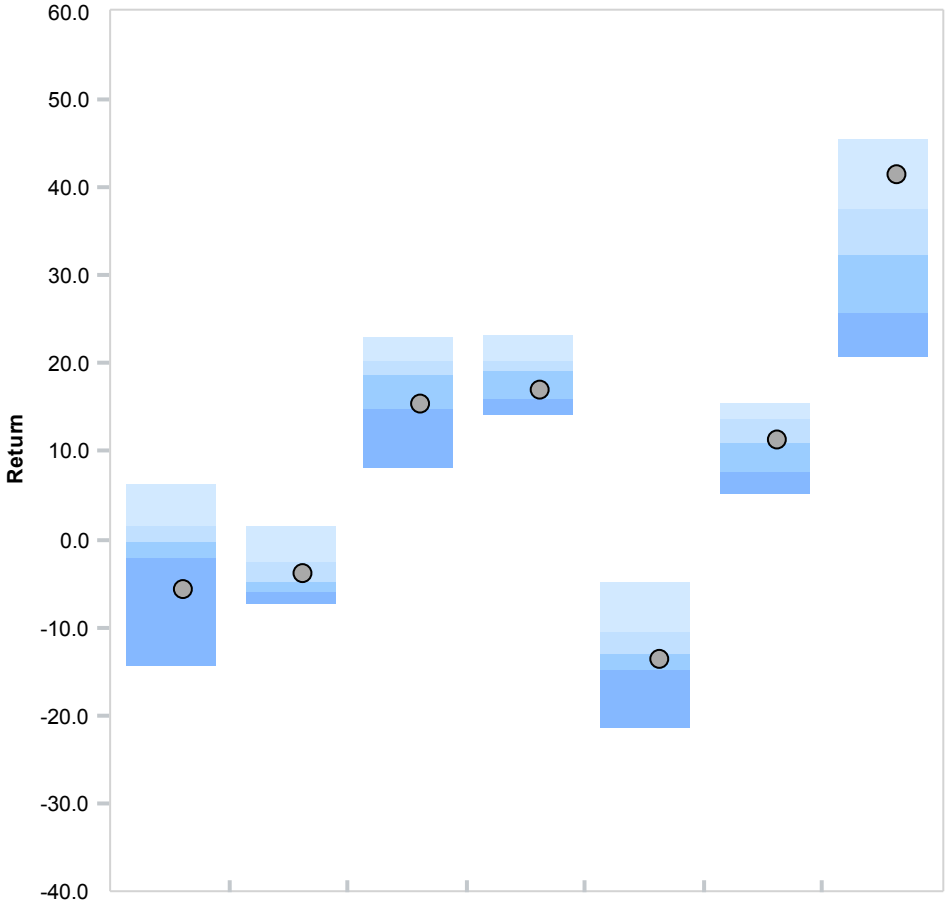
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	0 (0%)	2 (10%)	7 (35%)	11 (55%)

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



	QTD	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
Investment	-12.59 (43)	N/A	N/A	N/A	N/A	N/A	N/A
Index	-11.46 (28)	-14.20 (43)	-14.20 (43)	4.48 (23)	0.68 (41)	4.85 (66)	6.57 (49)
Median	-12.68	-15.06	-15.06	2.84	0.10	5.36	6.54

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



	2015	2014	2013	2012	2011	2010	2009
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	-5.66 (93)	-3.87 (35)	15.29 (73)	16.83 (72)	-13.71 (62)	11.15 (50)	41.45 (7)
Median	-0.36	-4.76	18.71	19.13	-13.06	11.09	32.43

Comparative Performance

	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017
Investment	-0.84 (79)	N/A	N/A	N/A	N/A	N/A
Index	0.71 (40)	-2.61 (56)	-1.18 (63)	5.00 (12)	6.16 (39)	5.78 (95)
Median	0.24	-2.30	-0.68	4.10	5.24	7.22

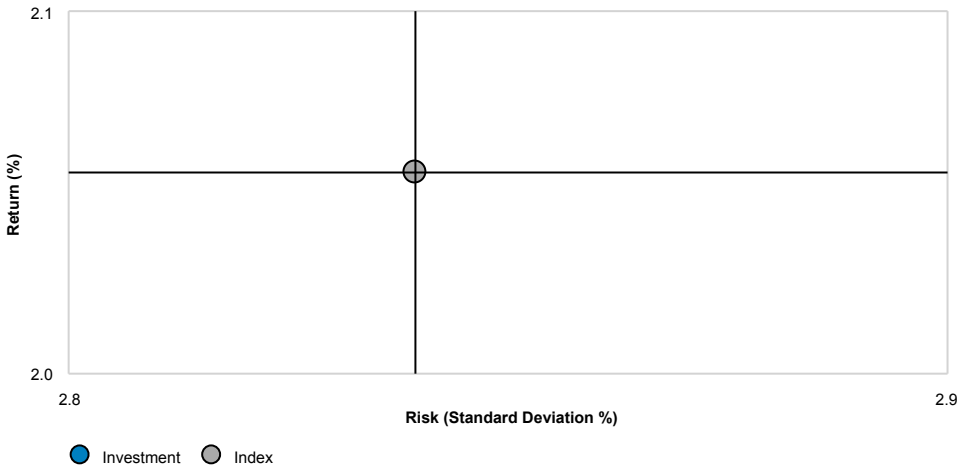
Historical Statistics 3 Years

	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	2.06	2.84	0.38	100.00	9	100.00	3

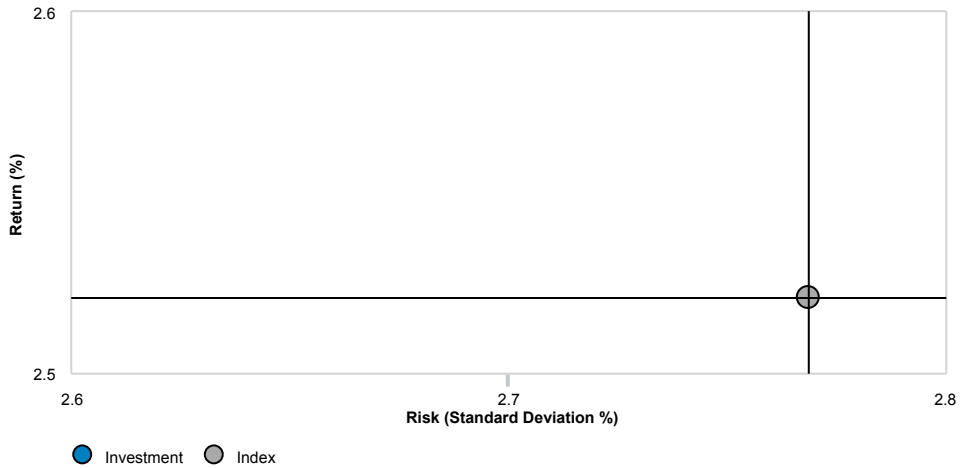
Historical Statistics 5 Years

	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	2.52	2.77	0.69	100.00	15	100.00	5

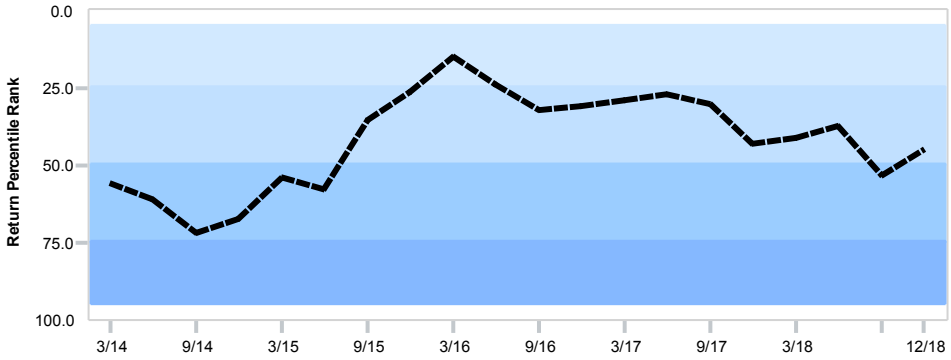
Risk and Return 3 Years



Risk and Return 5 Years

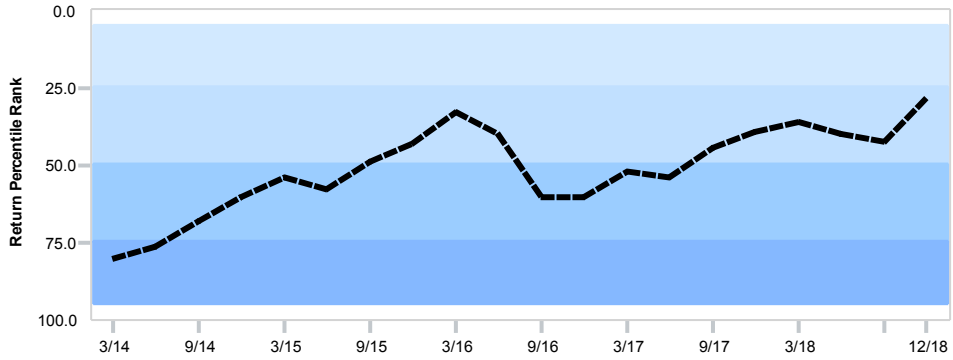


3 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (MF)



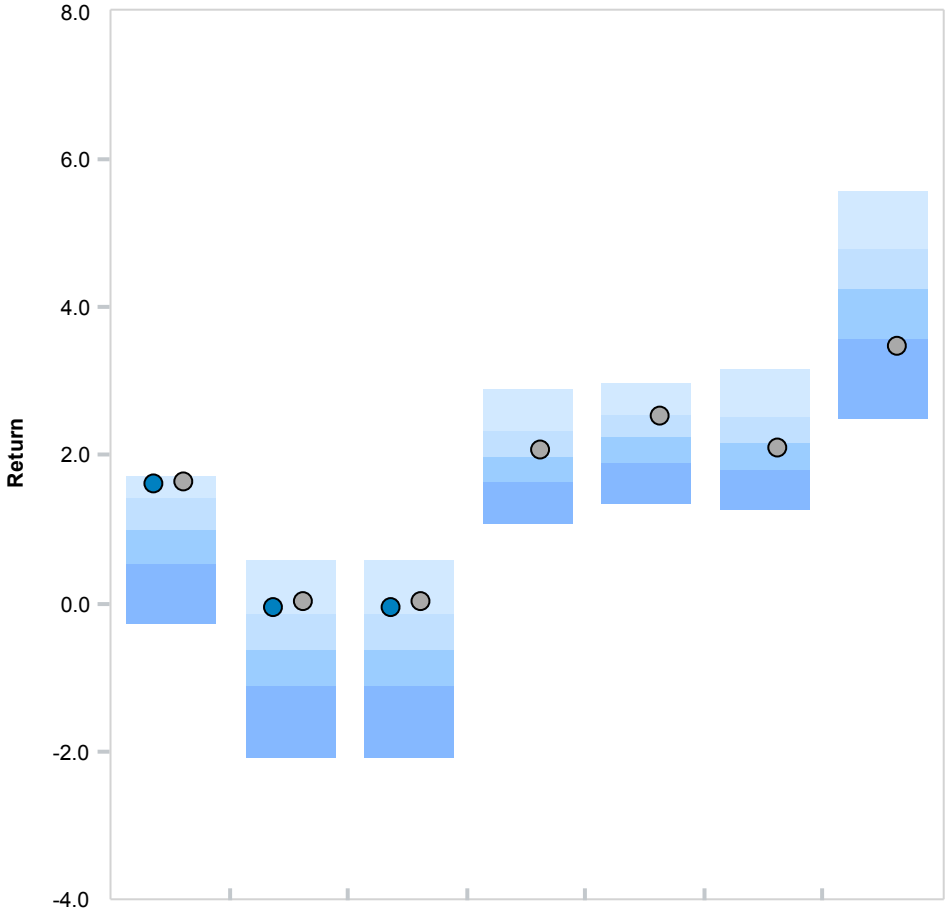
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	2 (10%)	11 (55%)	7 (35%)	0 (0%)

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



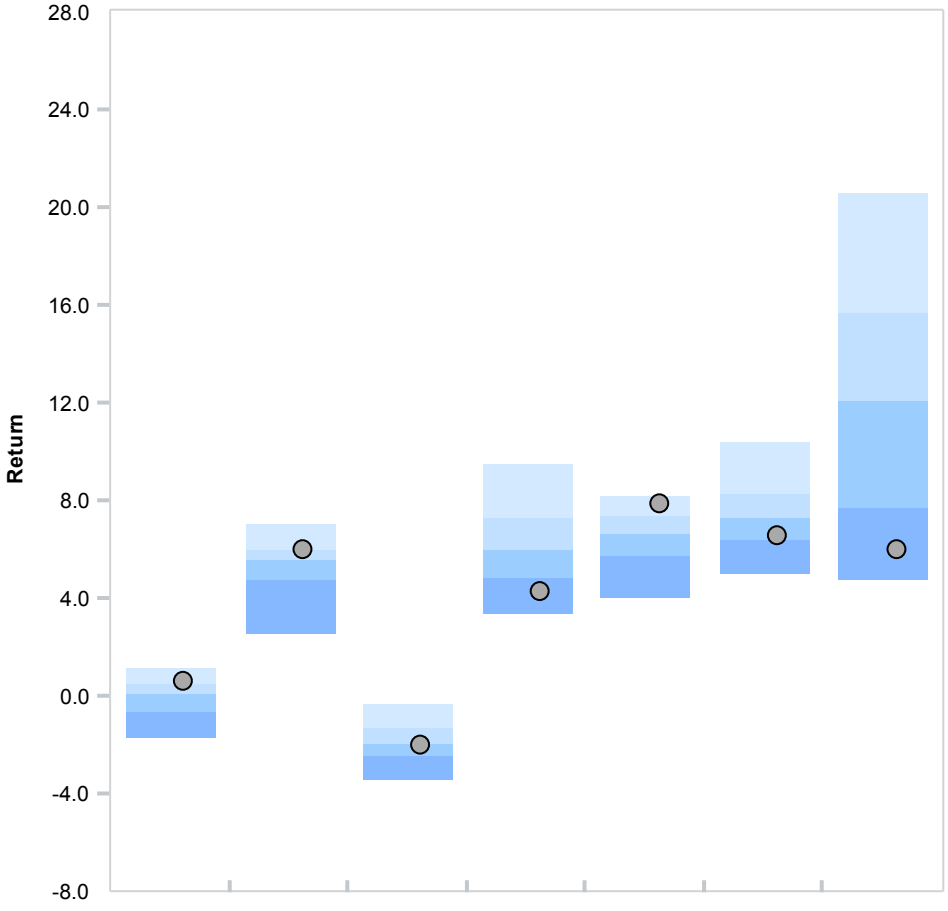
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	0 (0%)	10 (50%)	8 (40%)	2 (10%)

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



	QTD	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
Investment	1.62 (12)	-0.07 (21)	-0.07 (21)	N/A	N/A	N/A	N/A
Index	1.64 (11)	0.01 (18)	0.01 (18)	2.06 (45)	2.52 (28)	2.10 (58)	3.48 (78)
Median	0.99	-0.63	-0.63	1.99	2.26	2.18	4.24

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



	2015	2014	2013	2012	2011	2010	2009
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	0.55 (20)	5.97 (26)	-2.02 (53)	4.21 (81)	7.84 (11)	6.54 (69)	5.93 (90)
Median	0.09	5.55	-1.98	5.99	6.65	7.25	12.12

Comparative Performance

	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017
Investment	0.04 (60)	-0.23 (47)	-1.47 (49)	0.40 (36)	0.73 (73)	1.48 (45)
Index	0.02 (65)	-0.16 (30)	-1.46 (47)	0.39 (39)	0.85 (42)	1.45 (53)
Median	0.09	-0.25	-1.48	0.34	0.81	1.46

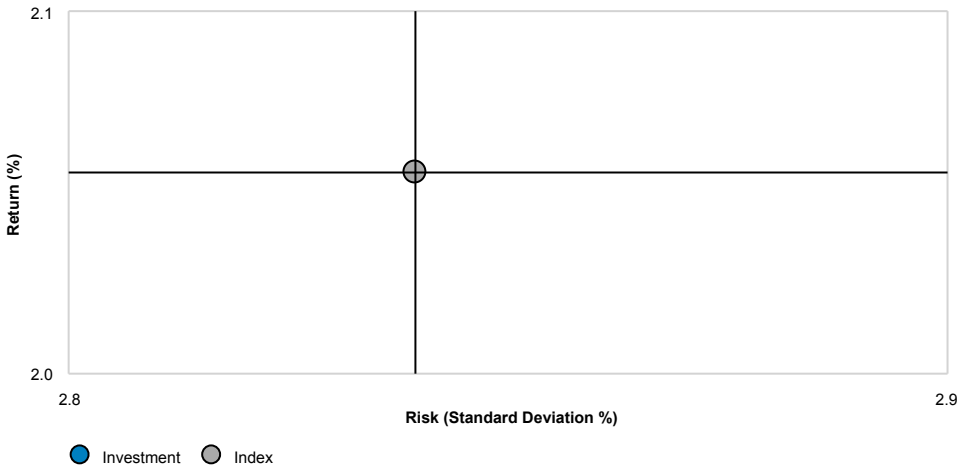
Historical Statistics 3 Years

	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	2.06	2.84	0.38	100.00	9	100.00	3

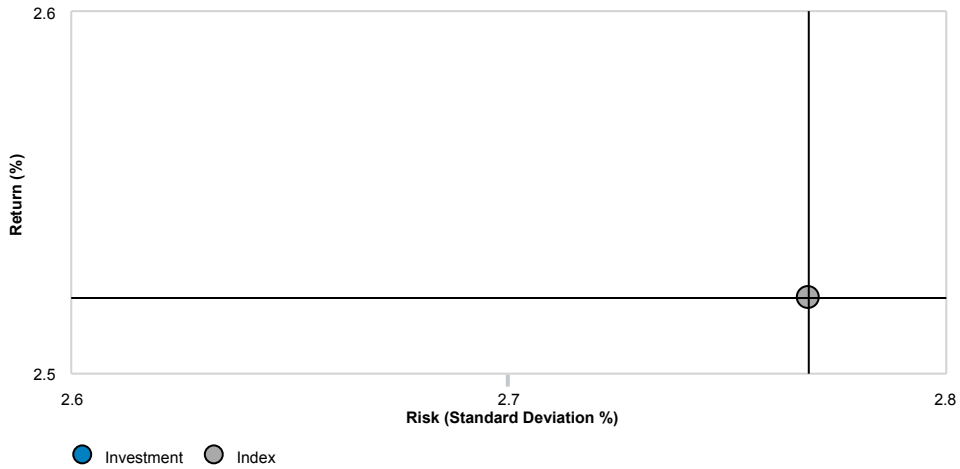
Historical Statistics 5 Years

	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	2.52	2.77	0.69	100.00	15	100.00	5

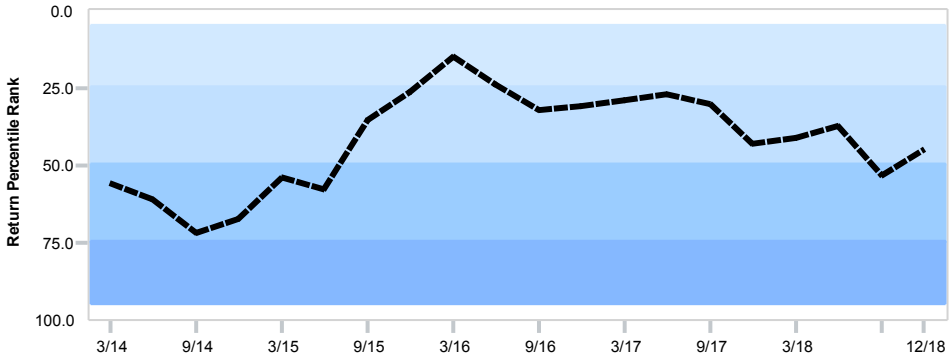
Risk and Return 3 Years



Risk and Return 5 Years

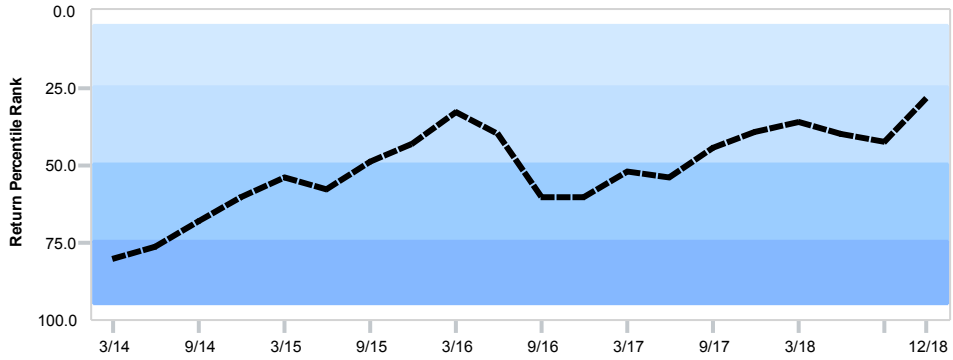


3 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (MF)



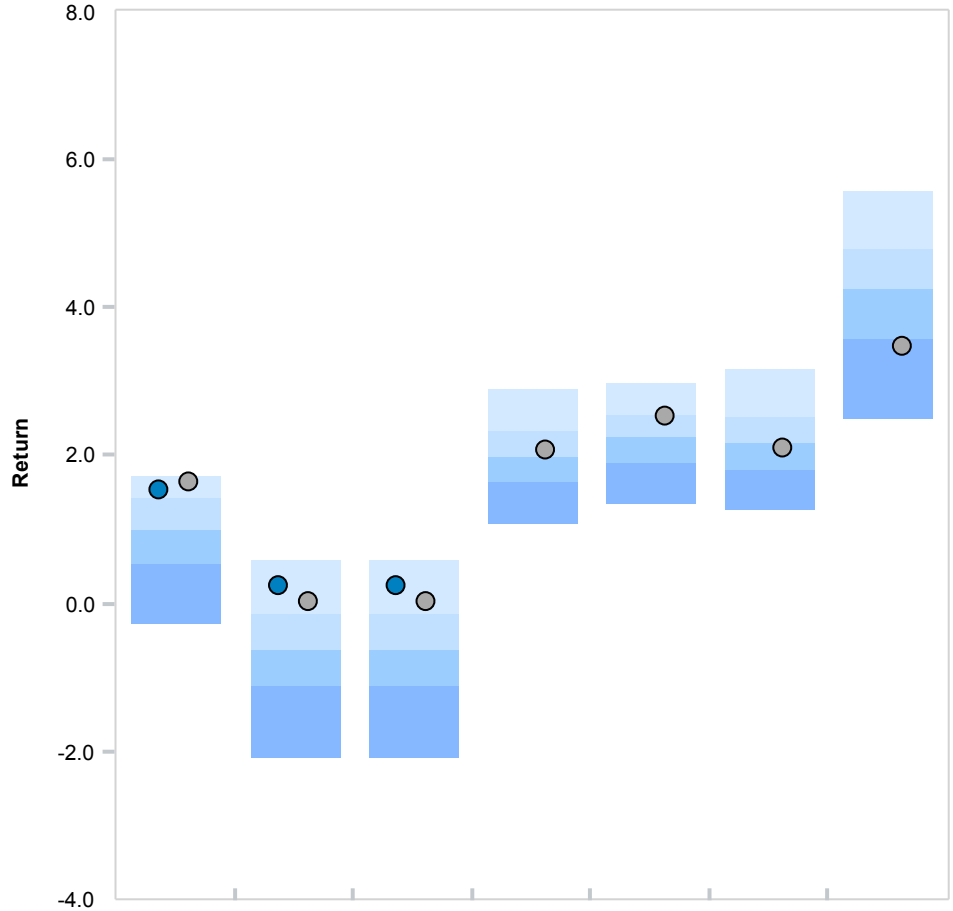
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	2 (10%)	11 (55%)	7 (35%)	0 (0%)

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



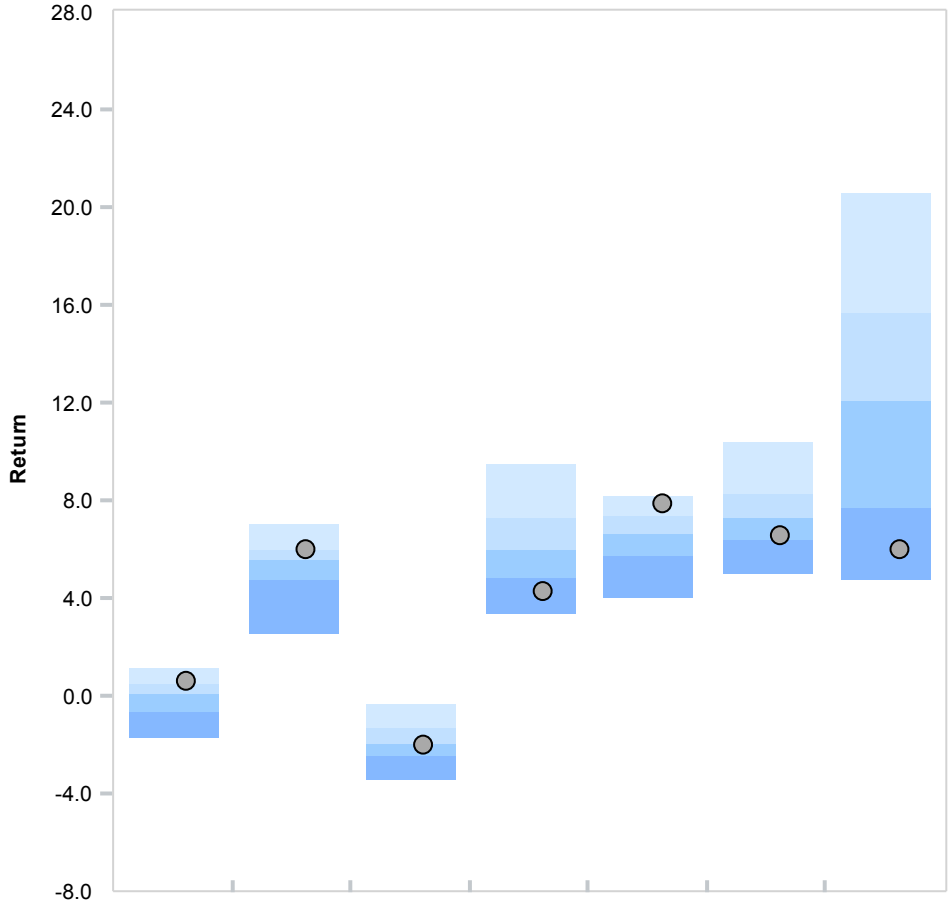
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	0 (0%)	10 (50%)	8 (40%)	2 (10%)

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



	QTD	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
Investment	1.53 (18)	0.22 (10)	0.22 (10)	N/A	N/A	N/A	N/A
Index	1.64 (11)	0.01 (18)	0.01 (18)	2.06 (45)	2.52 (28)	2.10 (58)	3.48 (78)
Median	0.99	-0.63	-0.63	1.99	2.26	2.18	4.24

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



	2015	2014	2013	2012	2011	2010	2009
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	0.55 (20)	5.97 (26)	-2.02 (53)	4.21 (81)	7.84 (11)	6.54 (69)	5.93 (90)
Median	0.09	5.55	-1.98	5.99	6.65	7.25	12.12

Comparative Performance

	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017
Investment	0.11 (47)	-0.09 (20)	-1.30 (26)	N/A	N/A	N/A
Index	0.02 (65)	-0.16 (30)	-1.46 (47)	0.39 (39)	0.85 (42)	1.45 (53)
Median	0.09	-0.25	-1.48	0.34	0.81	1.46

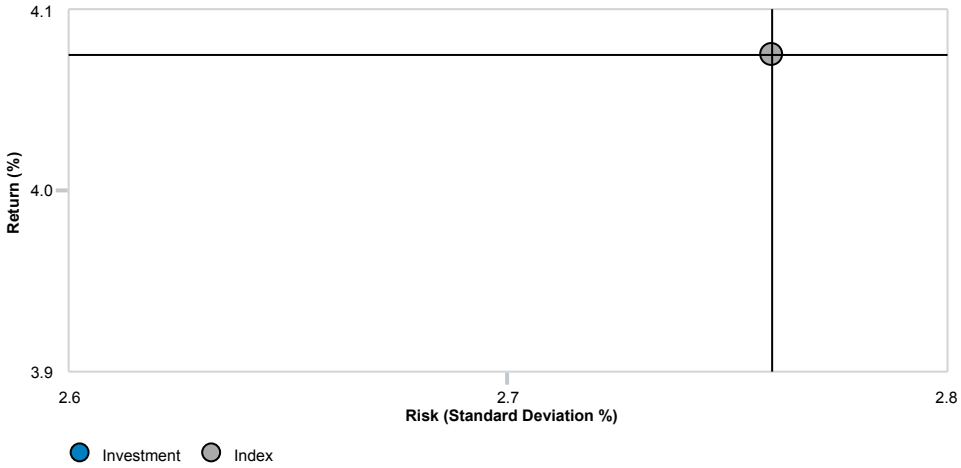
Historical Statistics 3 Years

	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	4.08	2.76	1.08	100.00	8	100.00	4

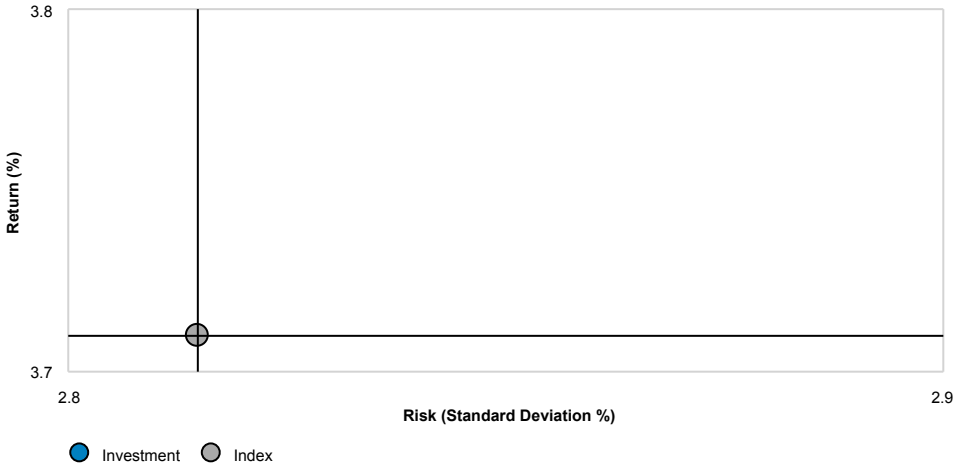
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	3.71	2.81	1.08	100.00	13	100.00	7

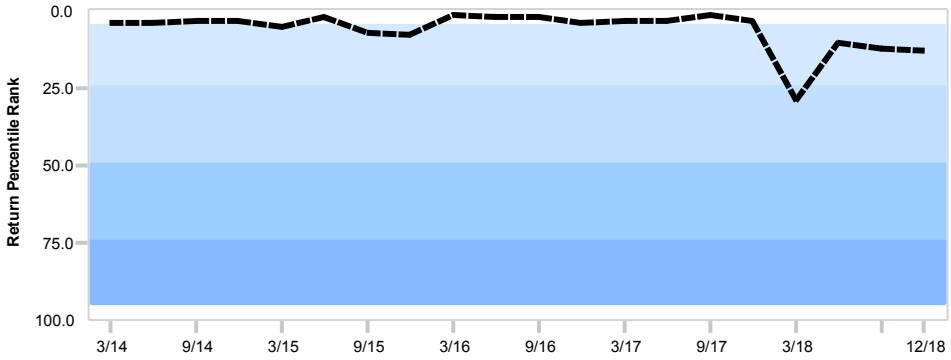
Risk and Return 3 Years



Risk and Return 5 Years

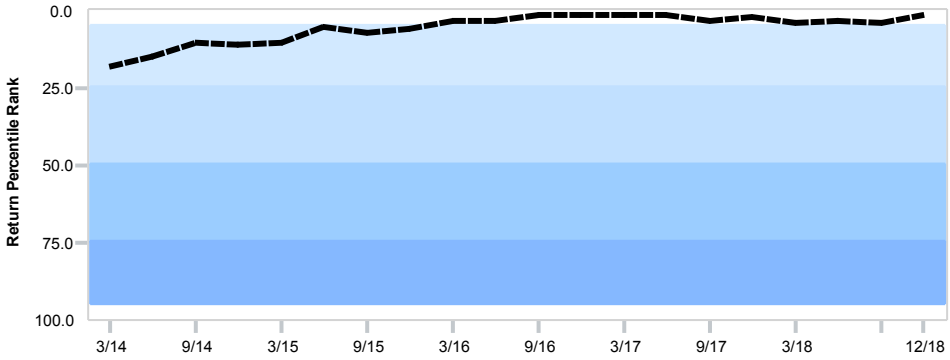


3 Year Rolling Percentile Rank IM Global Fixed Income (MF)



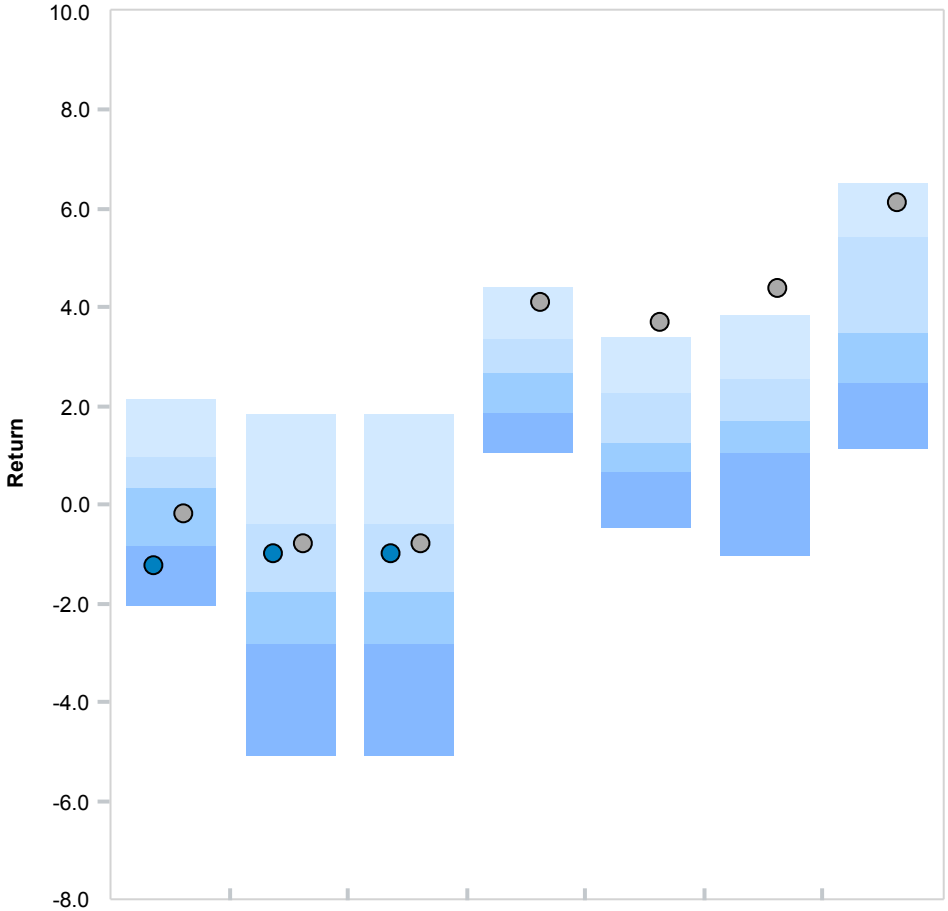
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	19 (95%)	1 (5%)	0 (0%)	0 (0%)

5 Year Rolling Percentile Rank IM Global Fixed Income (MF)



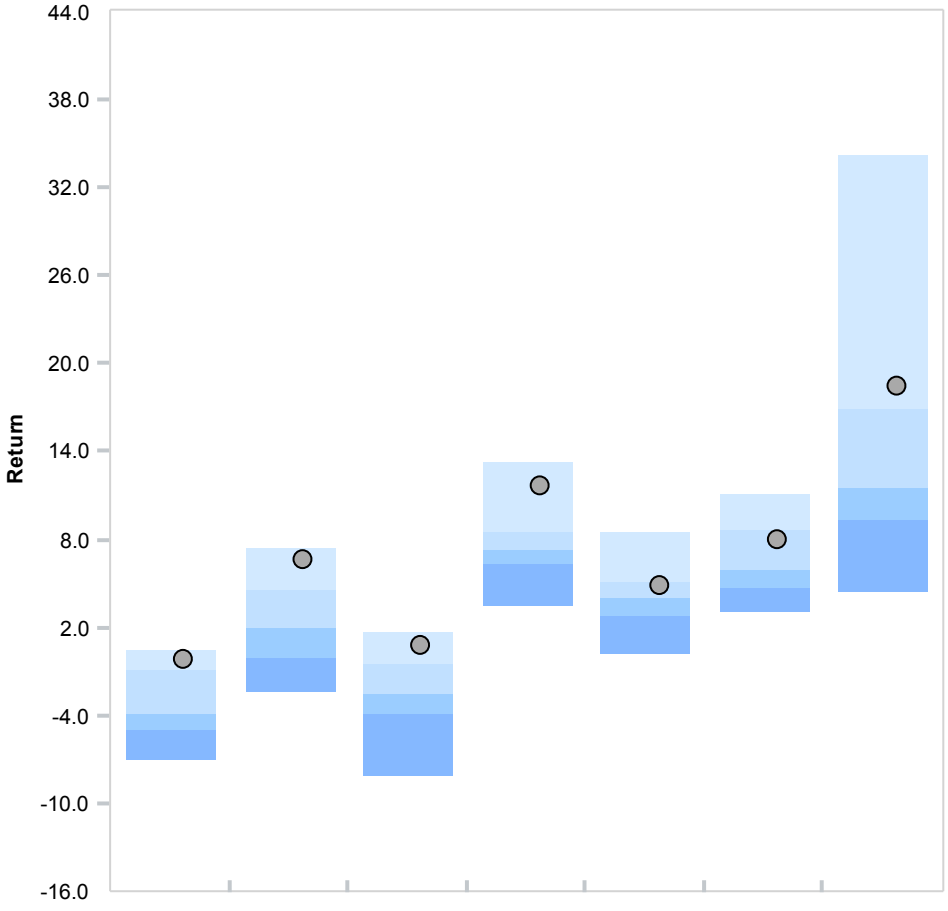
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)

Peer Group Analysis - IM Global Fixed Income (MF)



	QTD	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
Investment	-1.26 (90)	-0.99 (36)	-0.99 (36)	N/A	N/A	N/A	N/A
Index	-0.19 (65)	-0.81 (33)	-0.81 (33)	4.08 (13)	3.71 (1)	4.36 (2)	6.10 (8)
Median	0.33	-1.76	-1.76	2.68	1.27	1.71	3.49

Peer Group Analysis - IM Global Fixed Income (MF)



	2015	2014	2013	2012	2011	2010	2009
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	-0.20 (16)	6.64 (10)	0.68 (16)	11.64 (13)	4.87 (28)	8.00 (30)	18.39 (24)
Median	-3.83	1.91	-2.52	7.33	4.01	5.97	11.42

Comparative Performance

	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017
Investment	1.66 (3)	-0.73 (27)	-0.64 (92)	N/A	N/A	N/A
Index	0.98 (9)	-0.44 (14)	-1.15 (96)	1.02 (19)	1.44 (61)	1.79 (66)
Median	-0.39	-2.25	0.77	0.67	1.59	2.30

Private Equity Summary of Partnership

Partnerships	Valuation Date	Vintage Year	Investment Strategy	Capital Commitment $	Drawn Down $	Market Value $	Distributed $	IRR (%)	TVPI Multiple	Remaining Commitment
Crescent Direct Lending Levered Fund II	12/31/2018	2017	Other	1,400,000	517,449	501,523	37,399	6.16	1.04	911,895
Intercontinental U.S. REIF	12/31/2018	2015	Other	2,000,000	2,028,618	2,100,195	28,618	5.87	1.05	-28,618
Principal Enhanced Property Fund	12/31/2018	2004	Core Real Estate	1,000,000	1,000,000	1,015,014	-	1.50	1.02	-
Total				**4,400,000**	**3,546,067**	**3,616,732**	**66,017**	**-**	**-**	**883,277**

Fund Information

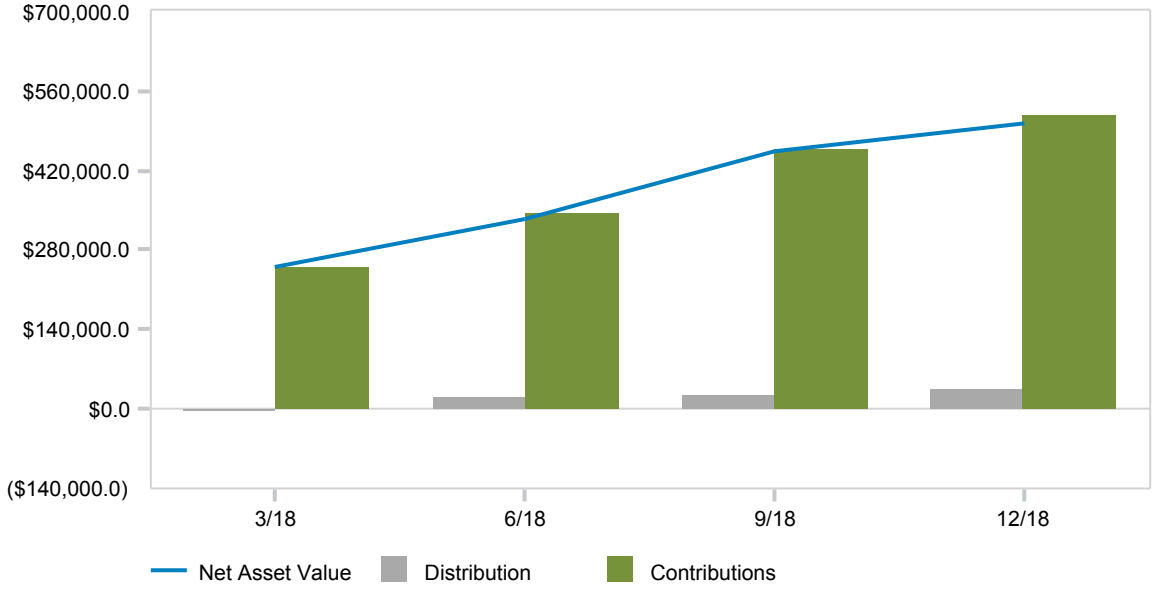
Type of Fund:	Direct	**Vintage Year:**	2017
Strategy Type:	Other	**Management Fee:**	75.% of invested equity capital
Size of Fund:	1,500,000,000	**Preferred Return:**	7.00%
Inception:	09/27/2017	**General Partner:**	Crescent Direct Lending II GP, LLC
Final Close:		**Number of Funds:**	

Investment Strategy: Crescent Direct Lending Levered Fund II intends to invest in directly originated senior secured loans (including primarily first lien and unitranche loans and to a lesser extent second lien loans) of private U.S. lower-middle-market companies, primarily in conjunction with private equity investment firms.

Cash Flow Summary

Capital Committed:	$1,400,000
Capital Invested:	$517,449
Management Fees:	-
Expenses:	-
Interest:	-
Total Contributions:	$517,449
Remaining Capital Commitment:	$911,895
Total Distributions:	$37,399
Market Value:	$501,523
Inception Date:	03/13/2018
Inception IRR:	6.2
TVPI:	1.0

Cash Flow Analysis



Fund Information

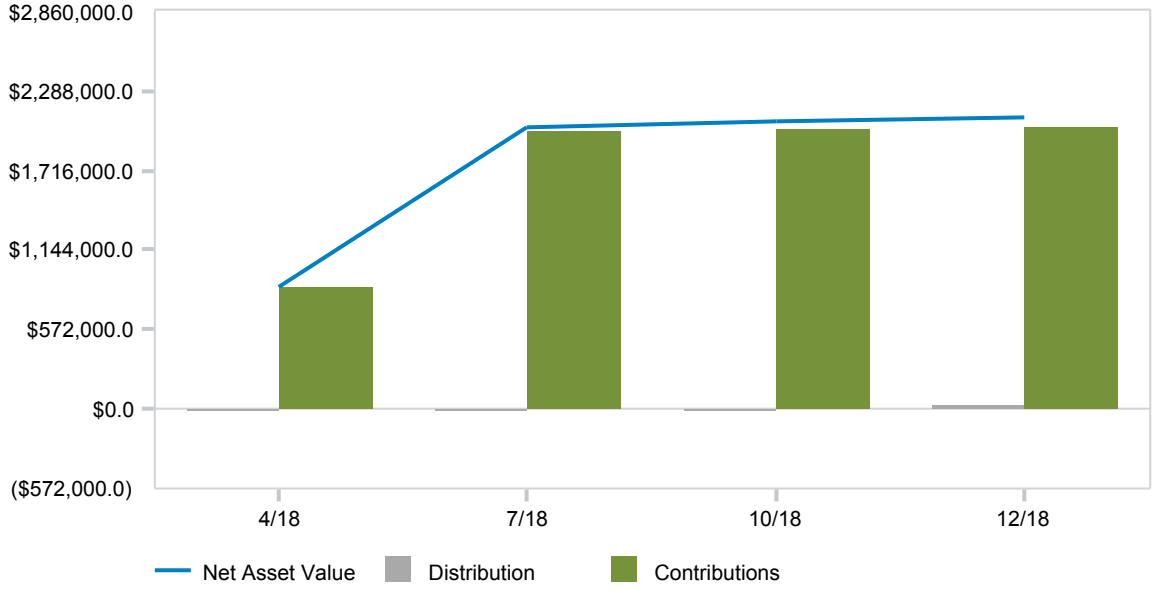
Type of Fund:	Partnership	**Vintage Year:**	2015
Strategy Type:	Other	**Management Fee:**	1.10% up to $25M, 1.00% on $25-50M, 0.85% on $50-100M, 0.75% on $100M+
Size of Fund:	-	**Preferred Return:**	6-8%
Inception:	05/01/2015	**General Partner:**	
Final Close:		**Number of Funds:**	

Investment Strategy: US Real Estate Investment Fund, LLC is a balanced portfolio of yield-driven real estate and real estate-related assets that are broadly diversified by geography and product type. The objectives of the Fund are to preserve and protect investors' capital, provide potential for capital appreciation, produce income on invested capital of 6-8% per annum, and target total annual average returns of 10% per annum.

Cash Flow Summary

Capital Committed:	$2,000,000
Capital Invested:	$2,020,834
Management Fees:	$7,784
Expenses:	-
Interest:	-
Total Contributions:	$2,028,618
Remaining Capital Commitment:	-$28,618
Total Distributions:	$28,618
Market Value:	$2,100,195
Inception Date:	04/30/2018
Inception IRR:	5.9
TVPI:	1.0

Cash Flow Analysis



Fund Information

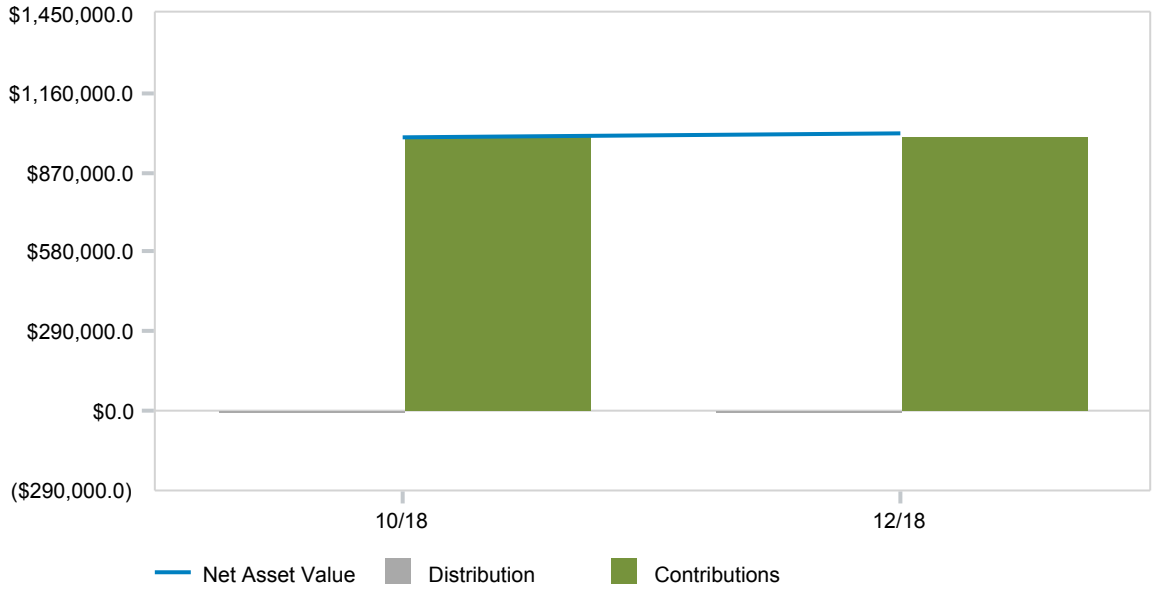
Type of Fund:	Partnership	**Vintage Year:**	2004
Strategy Type:	Core Real Estate	**Management Fee:**	1.50% up to $1M.
Size of Fund:	2,604,976,139	**Preferred Return:**	11% to 13% total return (IRR) over a long-term investment period.
Inception:	05/01/2004	**General Partner:**	Principal Enhanced Property Fund GP, LLC
Final Close:		**Number of Funds:**	

Investment Strategy: Asset allocation - Focus on stabilized, income producing assets (at least 75% of Gross Asset Value), Consider value-add and development opportunities expected to enhance total returns (up to 25% of Gross Asset Value) and Pursue property types and markets expected to provide relative value.
Leverage - Utilize moderate leverage (target 40% - 45% LTV) to attempt to enhance Fund returns and portfolio diversification, leverage is allowed up to 50% LTV at the Portfolio level and 75% LTV at the individual asset level.May increase to 60% LTV at Portfolio level for investor liquidity or capital expenditures.

Cash Flow Summary

Capital Committed:	$1,000,000
Capital Invested:	$1,000,000
Management Fees:	-
Expenses:	-
Interest:	-
Total Contributions:	$1,000,000
Remaining Capital Commitment:	-
Total Distributions:	-
Market Value:	$1,015,014
Inception Date:	10/01/2018
Inception IRR:	1.5
TVPI:	1.0

Cash Flow Analysis



	Market Value ($)	Estimated Annual Fee (%)	Estimated Annual Fee ($)
Fidelity Total Market Index Fund (FSKAX)	7,381,040	0.02	1,476
Vanguard S&P MC 400 (VSPMX)	4,606,984	0.08	3,686
Dodge & Cox Intl Stock Fund (DODFX)	2,636,132	0.64	16,871
American Funds Europacific Growth R6 (RERGX)	2,319,696	0.49	11,367
Forester Offshore A2, Ltd.	2,144,832	0.95	20,376
Crescent Direct Lending Levered Fund II	501,523	0.75	3,761
Vanguard Total Bond Index Adm (VBTLX)	830,972	0.05	415
Met West Total Return Bond Fund (MWTIX)	4,235,446	0.40	16,942
PIMCO Div Inc Bond Fund (PDIIX)	1,491,778	0.75	11,188
Intercontinental U.S. REIF	2,100,195	1.10	23,102
Government STIF 25	5,403		-
Total Fund	**29,269,016**	**0.42**	**123,395**

Total Fund Historical Hybrid Composition

Allocation Mandate	Weight (%)
Oct-2017	
Russell 3000 Index	45.00
MSCI AC World ex USA	15.00
Blmbg. Barc. U.S. Aggregate Index	37.50
Bloomberg Barclays U.S. TIPS Index	2.50
Jan-2015	
Russell 3000 Index	27.50
MSCI AC World ex USA (Net)	17.50
HFRI Fund of Funds Composite Index	20.00
Real Assets Composite Index Attribution Hybrid	15.00
Blmbg. Barc. U.S. Aggregate Index	10.00
Blmbg. Barc. U.S. Treasury: 1-5 Year	10.00
Sep-2013	
Russell 3000 Index	27.50
MSCI AC World ex USA (Net)	17.50
HFRI Fund of Funds Composite Index	20.00
Real Assets Composite Index	15.00
Fixed Income Composite Index	20.00
Dec-2011	
Russell 3000 Index	27.50
MSCI EAFE (Net) Index	17.50
HFRI Fund of Funds Composite Index	20.00
Real Assets Composite Index	15.00
Fixed Income Composite Index	20.00
Jul-2007	
Target Index	100.00

Fixed Income Composite Historical Hybrid Composition

Allocation Mandate	Weight (%)
Oct-2017	
Blmbg. Barc. U.S. Aggregate Index	94.00
Bloomberg Barclays U.S. TIPS Index	6.00
Dec-2011	
Blmbg. Barc. U.S. Aggregate Index	50.00
Blmbg. Barc. U.S. Treasury: 1-5 Year	50.00
Jan-2011	
Blmbg. Barc. U.S. Aggregate Index	50.00
ICE BofAML Conv. Bonds, U.S. Investment Grade	50.00
Jun-2007	
Fixed Income Composite Index	100.00

Total International Equity Policy

Allocation Mandate	Weight (%)
Jun-2007	
MSCI EAFE (Net) Index	100.00
Oct-2017	
MSCI AC World ex USA	100.00

Active Return - Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.

Alpha - 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.

Beta - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.

Consistency - 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.

Distributed to Paid In (DPI) - 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.

Down Market Capture - The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance

Downside Risk - 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.

Excess Return - Arithmetic difference between the manager's performance and the risk-free return over a specified time period.

Excess Risk - A measure of the standard deviation of a portfolio's performance relative to the risk free return.

Information Ratio - 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.

Public Market Equivalent (PME) - 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.

R-Squared - 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.

Return - Compounded rate of return for the period.

Sharpe Ratio - 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.

Standard Deviation - 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.

Total Value to Paid In (TVPI) - 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

Tracking Error - This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.

Treynor Ratio - 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.

Up Market Capture - 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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