

Investment Performance Review  
Period Ending March 31, 2018

## City of Sioux Falls Firefighters'

---

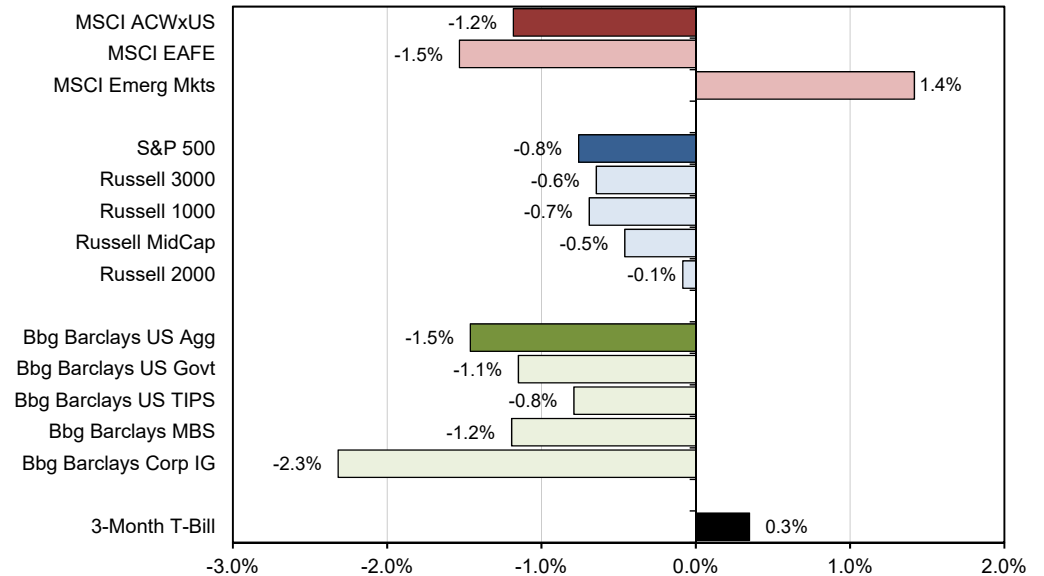


# 1st Quarter 2018 Market Environment

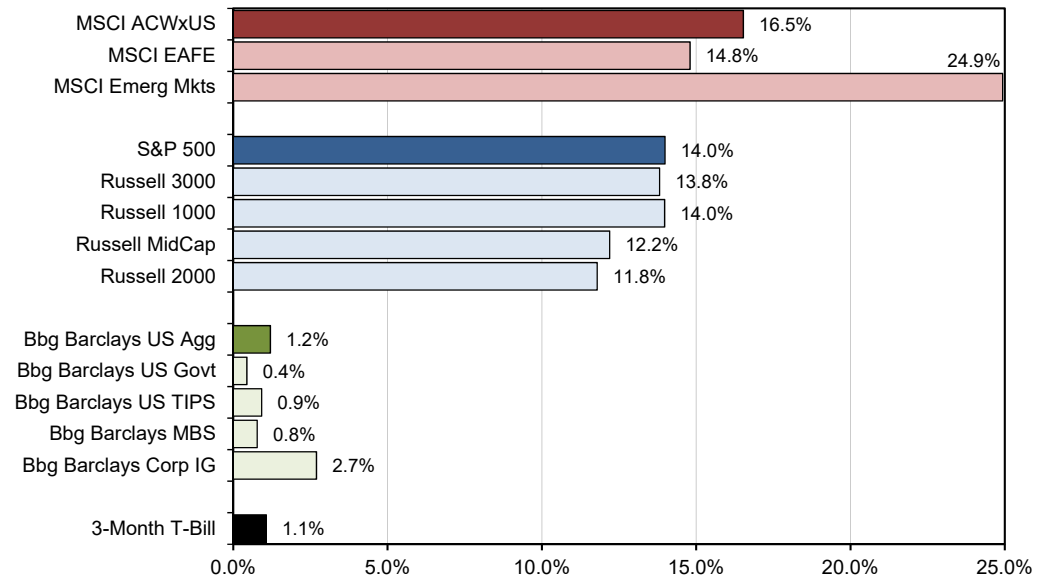


- Market returns were broadly negative across major equity and fixed income indices as we finished a highly volatile 1<sup>st</sup> quarter of 2018. Broad domestic and international equity markets pulled back modestly following a very strong 2017. Fixed income indices also posted negative results, producing returns in-line with those of equities during the quarter. However, when viewed over the past 1-year period, returns remain positive for major indices as improving macroeconomic data and robust corporate earnings worldwide outweighed the near-term market uncertainty. The US stock market represented by the Russell 3000 Index returned -0.6% and 13.8% for the quarter and 1-year period respectively. While the Russell 3000 outperformed the international MSCI ACWI ex US Index during the 1<sup>st</sup> quarter, international stocks have performed better over the last 12 months. While the US economy continues to show signs of expansion, investors focused on the future path of Federal Reserve (Fed) monetary policy and the emergence of new protectionist trade policies from the Trump administration during the quarter.
- International equity market benchmarks were mixed with developed markets posting modestly negative returns and emerging markets earning a slightly positive result. This is a continuation of the 2017 trend of emerging market outperformance relative to developed market equities. Emerging market stocks returned 1.4% and 24.9% over the quarter and 1-year period respectively. While the developed market MSCI EAFE Index lost ground through the 1<sup>st</sup> quarter, returning -1.5%, it still posted solid gains over the 1-year period returning 14.8%, narrowly outpacing major US indices. The strength in fundamentals abroad, ongoing US Dollar (USD) weakness and relatively accommodative global central bank policies continue to act as a tailwind to international markets relative to their US counterparts. Consequently, as the global recovery continues to take hold, international central banks have started to telegraph a greater likelihood of reduced stimulus in the future. Many international markets also saw their returns influenced, both positively and negatively, by ongoing political developments throughout the quarter.
- Interest rates on the US Treasury Yield Curve ended the 1<sup>st</sup> quarter of 2018 higher across all maturities. The movement in rates was considerable during the quarter as markets reacted to the greater likelihood of increasing inflation and a more restrictive than expected US monetary policy going forward. The Fed followed suit by increasing short-term interest rates by 25 basis points at their March meeting, the third increase in the last 12 months. The rising interest rate environment negatively impacted fixed income market returns for the quarter. The Bloomberg Barclays US Aggregate Index fell -1.5% for the quarter, but managed a positive 1.2% return for the 1-year period. Corporate credit reversed its 2017 trend of outperformance relative to other investment grade sectors returning -2.3% during the 1<sup>st</sup> quarter as credit spreads began to widen.

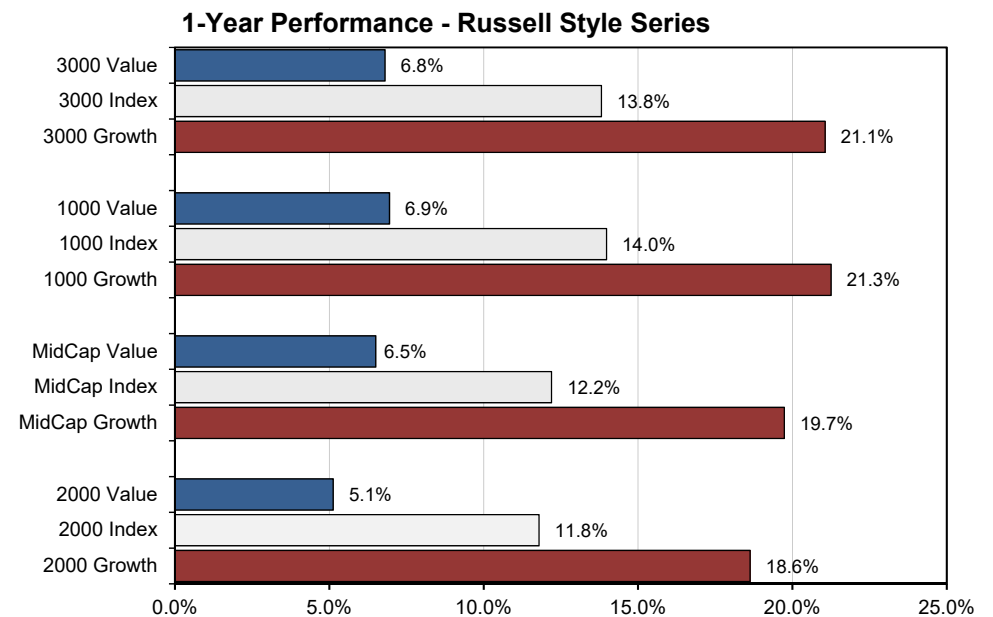
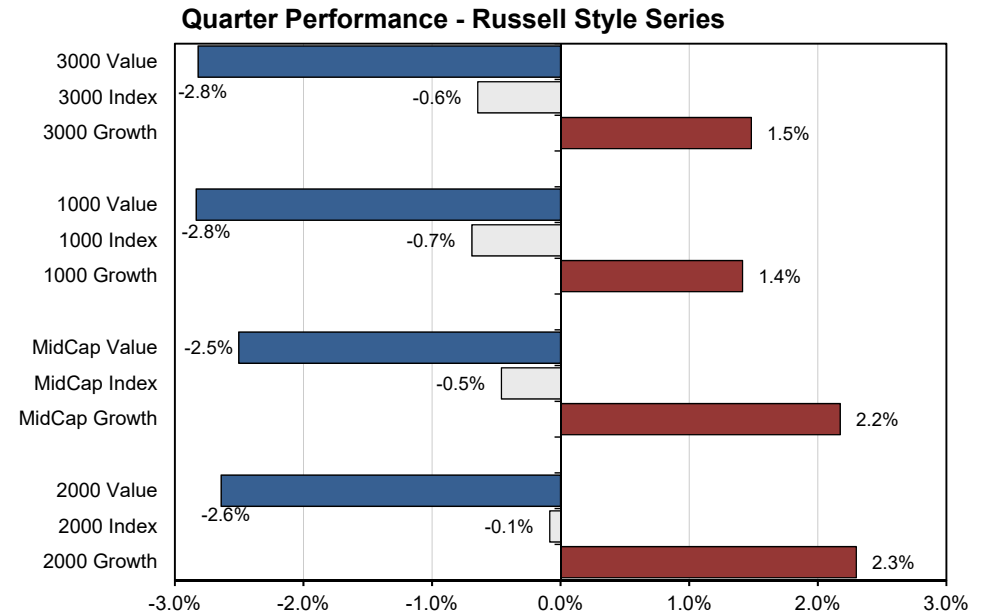
### Quarter Performance



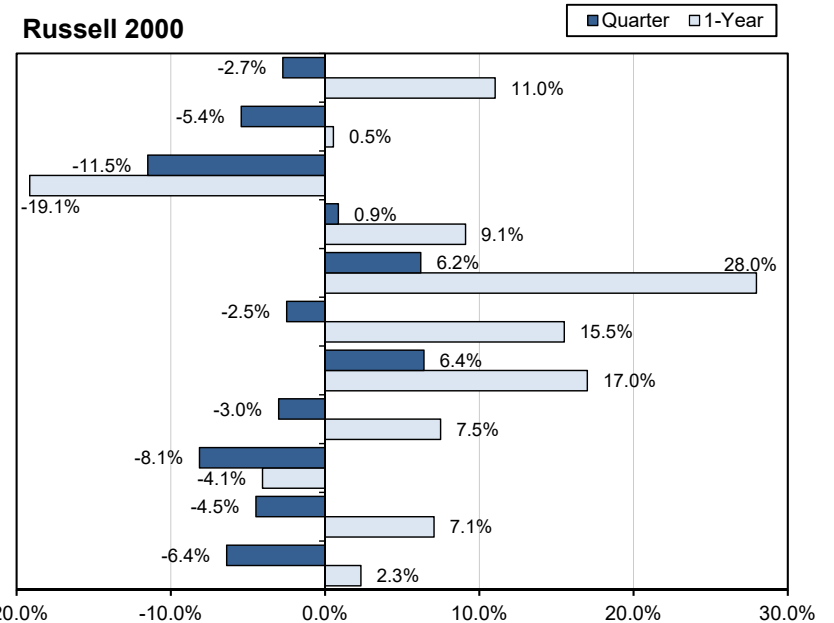
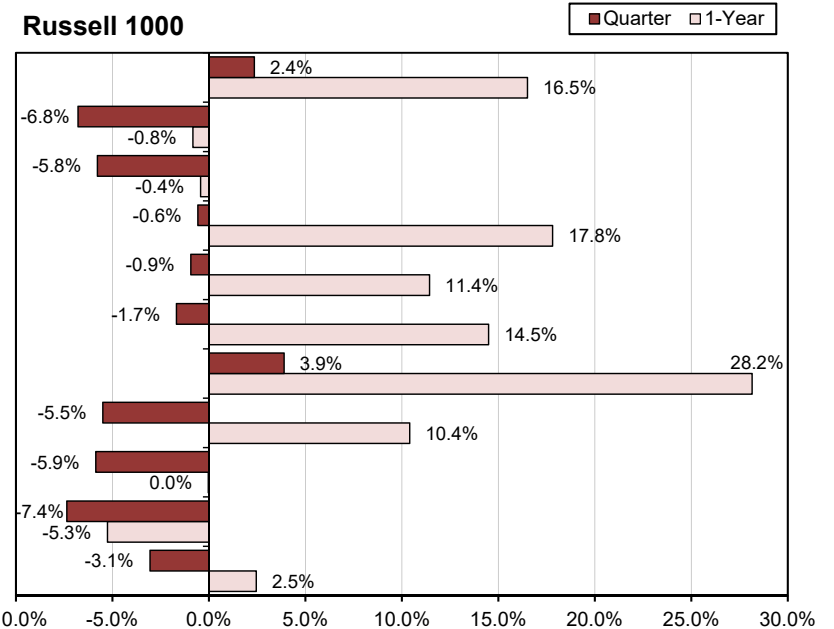
### 1-Year Performance



- US equity index returns were mixed across the style and capitalization spectrum to start 2018 with growth indices being the best performers. Markets were highly volatile throughout the quarter. Investors initially cheered the passage of the republican party tax reforms containing reductions to both individual and corporate income tax rates, increasing expectations for consumer spending and corporate earnings going forward. However, high US wage growth in January raised investor concerns that inflation could be picking up more quickly than the market expected, and would therefore require increased Fed action to prevent overheating of the economy. Market volatility rose and the S&P 500 Index had its first correction since 2015, falling over 10%. The market began a recovery from its February low as later economic releases made it appear that fears over inflation had likely been overstated. However, volatility returned in March when the Trump administration announced a series of protectionist tariff policies, with emphasis placed on China, increasing the potential for a global trade war. Despite the considerable market volatility, most US economic data was positive during the quarter and congress passed a new federal budget deal that will increase government spending by about \$300 billion over the next two years which can be used to stimulate the economy over the short-term.
- During the quarter, small cap stocks outperformed mid and large cap equities. The small cap Russell 2000 Index returned -0.1% during the period, while the large cap Russell 1000 Index returned -0.7%. The opposite was true over the 1-year period as large cap names were the best performers. The Russell 1000 returned 14.0% over the trailing year while the Russell 2000 posted a return of 11.8%. This large cap outperformance can be partially explained by their greater exposure to foreign markets relative to small cap companies. This can be especially beneficial during periods of USD weakness, such as that experienced over the last year. Large cap companies generate more revenue outside of the US which can expose them to faster growing markets, foreign tax benefits or strengthening foreign currencies.
- Growth indices outperformed value indices across the market cap spectrum for the fifth straight quarter and were all able to post a positive return for the 1<sup>st</sup> quarter of 2018. Performance for growth indices more than doubled value index performance for each respective cap segment for the year. Growth benchmarks benefitted from larger exposures to more cyclical names within the information technology, consumer discretionary, health care and industrials sectors. They also benefitted from underweights to more defensive “bond proxy” sectors such as REITs, utilities and telecom. Lower exposure to the energy sector also acted as tailwind to growth benchmarks.



- Sector performance was largely negative across large cap sectors for the 1<sup>st</sup> quarter of 2018. Only two of eleven sectors had positive returns for the quarter and only three of eleven economic sectors outpaced the Russell 1000 Index return. Cyclical sectors tended to do well through the quarter with the higher yielding bond proxy sectors lagging on a relative basis as interest rates rose sharply during the period. Technology stocks continued their 2017 gains over the quarter, gaining 3.9% and consumer discretionary stocks performed well on the back of a strong holiday season earning a 2.4% return. The largest detractors for the quarter were the more defensive telecom services, consumer staples and real estate sectors which returned -7.4%, -6.8% and -5.9% respectively. Over the trailing 1-year period, technology was the best performing sector by a relatively wide margin returning an impressive 28.2%. Consumer discretionary and financials also returned greater than 15%. Seven of eleven large cap economic sectors posted positive returns for the 1-year period with six posting double digit returns. Telecom services was the largest underperformer losing -5.3%. The three other sectors with negative returns for the trailing year (real estate, energy and consumer staples) fell by less than 1.0%.
- Small cap sector results were mixed relative to their large capitalization counterparts. Only three of eleven economic sectors outpaced the Russell 2000 Index return for the quarter and posted positive results for the period. Like the large cap index sector performance, higher dividend yielding sectors also tended to trail more economically sensitive sectors. Technology was the best performing sector returning 6.4%. However, there were several notable differences, particularly in consumer discretionary and energy where there was significant underperformance relative to their large cap counterparts. Small cap sectors trailed large cap sectors in those two categorizations by over 5.0% during the quarter. Similarly, the small cap health care sector had much stronger performance than the large cap health care sector posting a 6.2% gain for the quarter. Over the 1-year period, nine of eleven sectors have posted gains with four of eleven sectors having returns greater than 10%. Health care stocks were the best performers within the Russell 2000 for the year returning a solid 28.0%. Energy and real estate were the only Russell 2000 sectors to post a negative return, falling -19.1% and -4.1% respectively.
- Using S&P 500 sector valuations as a proxy for the market, forward P/E ratios for eight of the GICS sectors were higher than their long-term averages at quarter-end. Using these historical P/E measures, the utilities, materials and energy sectors appear the most extended. In contrast the telecommunications, technology and health care sectors were trading at a discount to their long-term average P/E ratios.



**The Market Environment**  
**Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000**  
As of March 31, 2018

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	3.41%	-0.5%	18.6%	Information Technology
Microsoft Corp	2.74%	7.2%	41.5%	Information Technology
Amazon.com Inc	2.33%	23.8%	63.3%	Consumer Discretionary
Berkshire Hathaway Inc B	1.54%	0.6%	19.7%	Financials
JPMorgan Chase & Co	1.52%	3.4%	28.0%	Financials
Facebook Inc A	1.51%	-9.4%	12.5%	Information Technology
Johnson & Johnson	1.38%	-7.7%	5.5%	Health Care
Exxon Mobil Corp	1.27%	-9.9%	-5.5%	Energy
Alphabet Inc C	1.25%	-1.4%	24.4%	Information Technology
Alphabet Inc A	1.24%	-1.5%	22.3%	Information Technology

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
bluebird bio Inc	0.52%	-4.1%	87.8%	Health Care
MGIC Investment Corp	0.49%	-7.9%	28.3%	Financials
Sterling Bancorp	0.49%	-8.1%	-3.7%	Financials
Wintrust Financial Corp	0.49%	4.7%	25.5%	Financials
Umpqua Holdings Corp	0.48%	3.9%	25.1%	Financials
Idacorp Inc	0.45%	-2.7%	9.2%	Utilities
Hancock Holding Co	0.44%	4.9%	15.8%	Financials
LivaNova PLC	0.44%	10.7%	80.6%	Health Care
WGL Holdings Inc	0.44%	-2.0%	3.8%	Utilities
Radian Group Inc	0.42%	-7.6%	6.1%	Financials

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
XL Group Ltd	0.06%	57.8%	41.6%	Financials
Abiomed Inc	0.05%	55.3%	132.4%	Health Care
Netflix Inc	0.48%	53.9%	99.8%	Consumer Discretionary
Validus Holdings Ltd	0.02%	44.6%	23.1%	Financials
Herbalife Ltd	0.02%	43.9%	67.6%	Consumer Staples
Agios Pharmaceuticals Inc	0.02%	43.0%	40.0%	Health Care
Match Group Inc	0.01%	41.9%	172.1%	Information Technology
Square Inc A	0.05%	41.9%	184.7%	Information Technology
CSRA Inc	0.03%	38.6%	43.0%	Information Technology
DST Systems Inc	0.02%	34.8%	37.9%	Information Technology

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Atara Biotherapeutics Inc	0.13%	115.5%	89.8%	Health Care
Iovance Biotherapeutics Inc	0.12%	111.3%	126.8%	Health Care
Cambium Learning Group Inc	0.01%	97.2%	128.6%	Consumer Discretionary
G1 Therapeutics Inc	0.01%	86.7%	N/A	Health Care
Arsanis Inc	0.00%	79.4%	N/A	Health Care
Eastman Kodak Co	0.00%	72.6%	-53.5%	Information Technology
American Public Education Inc	0.07%	71.7%	87.8%	Consumer Discretionary
Infinita Corp	0.16%	71.6%	6.2%	Information Technology
Novavax Inc	0.04%	69.4%	64.1%	Health Care
WMIH Corp	0.03%	67.2%	-2.1%	Financials

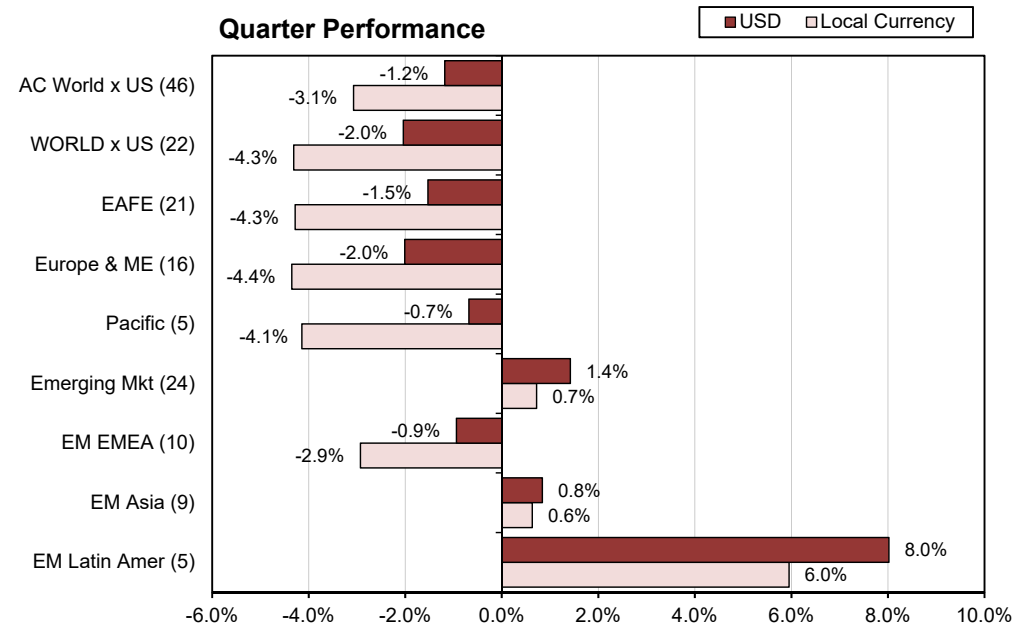
Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Colony NorthStar Inc A	0.01%	-49.8%	-52.7%	Real Estate
Weatherford International PLC	0.01%	-45.1%	-65.6%	Energy
Akorn Inc	0.01%	-41.9%	-22.3%	Health Care
Universal Display Corp	0.02%	-41.5%	17.4%	Information Technology
Macquarie Infrastructure Corp	0.01%	-40.3%	-49.7%	Industrials
Patterson Companies Inc	0.01%	-38.0%	-49.6%	Health Care
Mallinckrodt PLC	0.01%	-35.8%	-67.5%	Health Care
L Brands Inc	0.04%	-35.8%	-14.5%	Consumer Discretionary
OPKO Health Inc	0.00%	-35.3%	-60.4%	Health Care
Coherent Inc	0.02%	-33.6%	-8.9%	Information Technology

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Dermira Inc	0.01%	-71.3%	-76.6%	Health Care
Ascent Capital Group Inc A	0.00%	-68.0%	-74.0%	Consumer Discretionary
Roadrunner Transportation Systems Inc	0.01%	-67.1%	-63.0%	Industrials
Tintri Inc	0.00%	-66.5%	N/A	Information Technology
Westmoreland Coal Co	0.00%	-66.1%	-97.2%	Energy
Protagonist Therapeutics Inc	0.01%	-58.7%	-32.9%	Health Care
RAIT Financial Trust	0.00%	-56.9%	-94.5%	Real Estate
Ultra Petroleum Corp	0.08%	-54.0%	-67.4%	Energy
Melinta Therapeutics Inc	0.01%	-53.2%	-60.5%	Health Care
Tetraphase Pharmaceuticals Inc	0.02%	-51.3%	-66.6%	Health Care

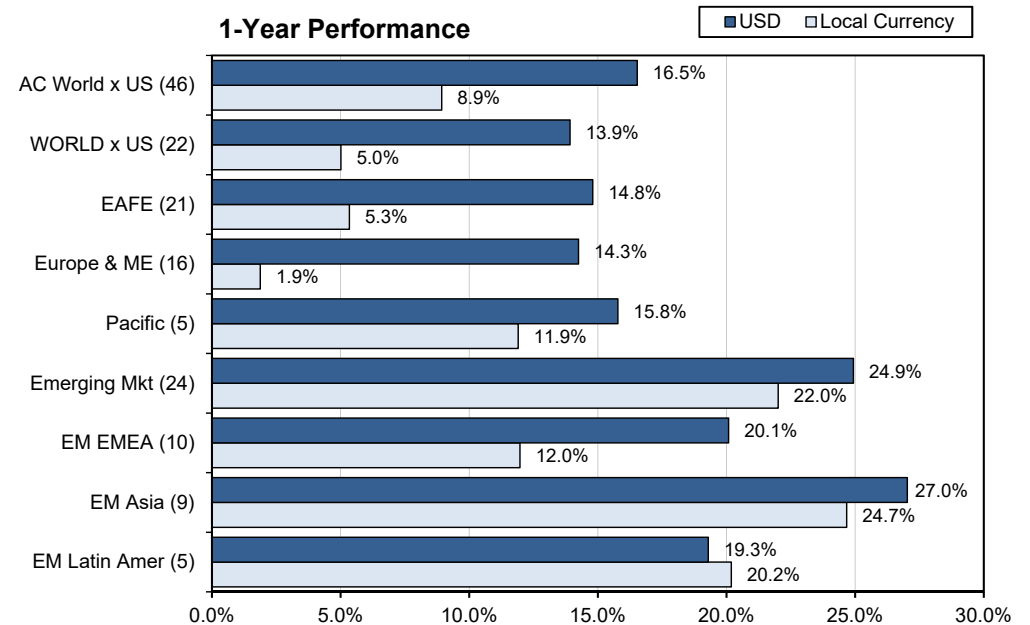


- Similar to domestic equities, broad international equity returns pulled back during the 1<sup>st</sup> quarter. Performance was largely driven by the same catalysts as the US equity markets, as global macroeconomic data remained generally positive. US investors in international markets had a currency effect tailwind as the USD continued its 2017 fall, weakening against most other currencies during the 1<sup>st</sup> quarter. The MSCI ACWI ex US Index lost -1.2% in USD terms and -3.1% in local currency terms. Emerging markets were a bright spot for the quarter with the MSCI Emerging Markets Index finishing with a slight gain. The returns over the 1-year period are substantially better with MSCI ACWI ex US returning 16.5% in USD terms and 8.9% in local currency terms.
- Results for developed market international indices were negative to start 2018 in both USD and local currency terms with the MSCI EAFE Index returning -1.5% and -4.3% respectively. Investors ignored broadly positive global economic data, focusing their attention on US monetary policy uncertainty and the outlook for global trade relations. There were several newsworthy political events during the quarter. In Europe, Italian elections resulted in a hung parliament with the populist Five Star Movement winning the largest number of seats. There is currently no clear path for a coalition government to be formed and it is possible elections may need to be re-held. In contrast, German Chancellor Merkel succeeded in forming a “grand coalition” government during March. In the UK, continued progress was made on “Brexit” as the UK and European Union were able to agree to initial terms on a transition period following the UK’s separation that should allow for an orderly withdrawal. In Japan, Prime Minister Abe was engulfed in a scandal regarding a discounted land sale to a school operator with ties to his wife and its subsequent coverup. The MSCI EAFE Index returned 14.8% and 5.3% for the last twelve months in USD and local currency terms respectively.
- The MSCI Emerging Market Index outperformed developed markets for the 1<sup>st</sup> quarter, posting a narrow gain of 1.4% and 0.7% in USD and local currency terms respectively. While emerging markets were also affected by the rise in global market volatility, strong GDP and corporate earnings growth combined with USD weakness helped them to finish the quarter ahead. China modestly outperformed despite late quarter trade tensions with the US. Brazil was the index’s strongest performer, returning 12.4% in USD terms, after former President Lula da Silva had a corruption and money laundering conviction upheld, likely preventing him from running for office again and opening the door for future economic reforms. Russian equities also performed well after Standard & Poor’s raised the countries credit rating to investment grade for the first time in over a decade citing prudent policy responses to sanctions and falling commodity prices. Indian stocks underperformed after fraud allegations emerged at a state-run bank. One year returns for the MSCI Emerging Market Index were 24.9% in USD terms and 22.0% in terms of local currency.

**Quarter Performance**



**1-Year Performance**



**The Market Environment**  
**US Dollar International Index Attribution & Country Detail**  
As of March 31, 2018

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	12.6%	0.7%	19.2%
Consumer Staples	11.1%	-3.0%	10.4%
Energy	5.3%	-2.0%	21.4%
Financials	21.1%	-2.2%	13.6%
Health Care	10.2%	-0.9%	7.0%
Industrials	14.6%	-1.5%	17.4%
Information Technology	6.6%	1.1%	26.2%
Materials	8.0%	-3.8%	19.8%
Real Estate	3.5%	-1.5%	13.1%
Telecommunication Services	3.8%	-3.9%	3.1%
Utilities	3.3%	1.3%	12.1%
<b>Total</b>	<b>100.0%</b>	<b>-1.5%</b>	<b>14.8%</b>

MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	11.4%	-1.0%	18.6%
Consumer Staples	9.5%	-2.8%	11.0%
Energy	6.7%	-1.8%	15.4%
Financials	23.1%	-1.1%	15.9%
Health Care	7.7%	-0.3%	9.1%
Industrials	11.8%	-1.6%	16.3%
Information Technology	11.8%	1.8%	34.3%
Materials	8.0%	-2.9%	18.4%
Real Estate	3.2%	-1.7%	16.5%
Telecommunication Services	3.9%	-4.1%	3.6%
Utilities	3.0%	1.2%	10.9%
<b>Total</b>	<b>100.0%</b>	<b>-1.2%</b>	<b>16.5%</b>

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	9.5%	-6.1%	16.5%
Consumer Staples	6.4%	-0.8%	15.8%
Energy	7.2%	7.5%	24.7%
Financials	24.0%	4.2%	25.6%
Health Care	2.8%	7.0%	34.6%
Industrials	5.2%	-0.8%	10.1%
Information Technology	27.8%	2.1%	40.1%
Materials	7.3%	0.7%	20.0%
Real Estate	2.8%	-2.1%	32.5%
Telecommunication Services	4.6%	-3.7%	4.5%
Utilities	2.4%	3.0%	9.2%
<b>Total</b>	<b>100.0%</b>	<b>1.4%</b>	<b>24.9%</b>

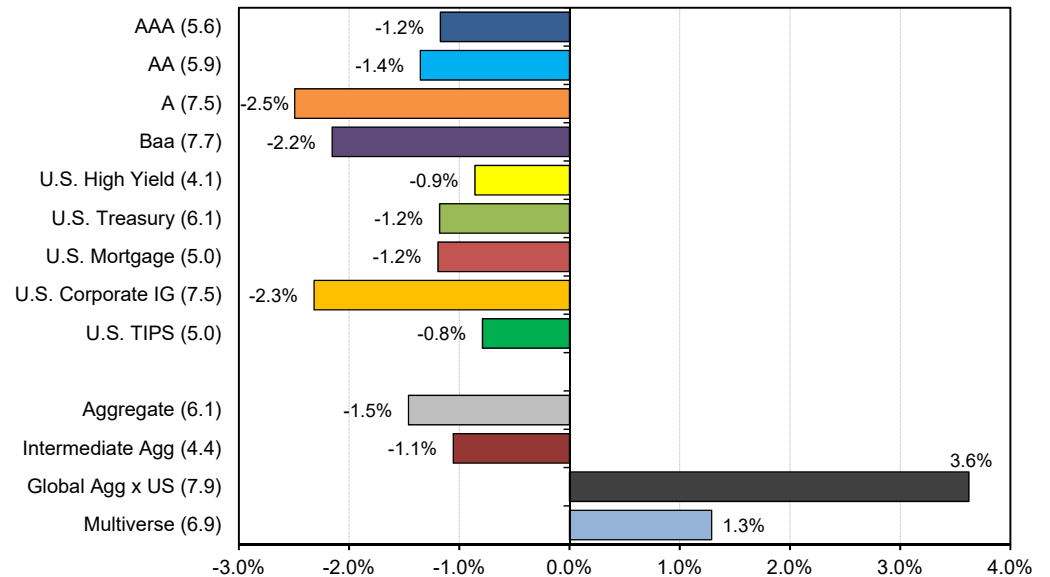
Country	MSCI-EAFE Weight	MSCI-ACWIXUS Weight	Quarter Return	1-Year Return
Japan	24.6%	16.8%	0.8%	19.6%
United Kingdom	17.3%	11.8%	-3.9%	11.9%
France	10.9%	7.5%	0.3%	20.4%
Germany	9.7%	6.6%	-3.6%	13.6%
Switzerland	7.8%	5.3%	-4.3%	8.2%
Australia	6.6%	4.5%	-6.2%	1.4%
Netherlands	3.7%	2.5%	1.0%	19.9%
Hong Kong	3.6%	2.5%	-1.4%	18.4%
Spain	3.2%	2.2%	-1.7%	8.8%
Sweden	2.7%	1.8%	-2.4%	7.6%
Italy	2.5%	1.7%	5.4%	27.5%
Denmark	1.8%	1.2%	-1.5%	25.1%
Singapore	1.4%	0.9%	2.8%	22.8%
Belgium	1.1%	0.8%	0.5%	13.3%
Finland	1.0%	0.7%	8.2%	23.5%
Norway	0.7%	0.5%	2.3%	29.3%
Ireland	0.5%	0.3%	-5.9%	7.2%
Israel	0.5%	0.3%	-5.3%	-8.4%
Austria	0.3%	0.2%	2.2%	48.5%
New Zealand	0.2%	0.1%	-5.1%	4.0%
Portugal	0.2%	0.1%	3.1%	17.9%
<b>Total EAFE Countries</b>	<b>100.0%</b>	<b>68.3%</b>	<b>-1.5%</b>	<b>14.8%</b>
Canada		6.2%	-7.4%	4.9%
<b>Total Developed Countries</b>		<b>74.5%</b>	<b>-2.0%</b>	<b>13.9%</b>
China		7.6%	1.8%	38.9%
Korea		3.9%	-0.5%	25.4%
Taiwan		3.0%	5.7%	20.6%
India		2.1%	-7.0%	10.2%
Brazil		1.9%	12.4%	26.4%
South Africa		1.7%	-4.2%	25.0%
Russia		0.9%	9.4%	20.6%
Mexico		0.7%	0.9%	0.9%
Malaysia		0.6%	8.5%	25.3%
Thailand		0.6%	9.0%	35.0%
Indonesia		0.5%	-7.2%	7.8%
Chile		0.3%	1.5%	24.5%
Poland		0.3%	-8.2%	20.7%
Philippines		0.3%	-11.6%	3.8%
Turkey		0.3%	-5.0%	18.6%
United Arab Emirates		0.2%	-1.0%	-0.4%
Qatar		0.1%	2.5%	-11.0%
Colombia		0.1%	4.9%	15.4%
Peru		0.1%	10.3%	44.7%
Greece		0.1%	-6.8%	24.3%
Hungary		0.1%	-1.0%	38.6%
Czech Republic		0.1%	6.4%	36.4%
Egypt		0.0%	10.9%	14.5%
Pakistan		0.0%	11.4%	-14.0%
<b>Total Emerging Countries</b>		<b>25.5%</b>	<b>1.4%</b>	<b>24.9%</b>
<b>Total ACWIXUS Countries</b>		<b>100.0%</b>	<b>-1.2%</b>	<b>16.5%</b>



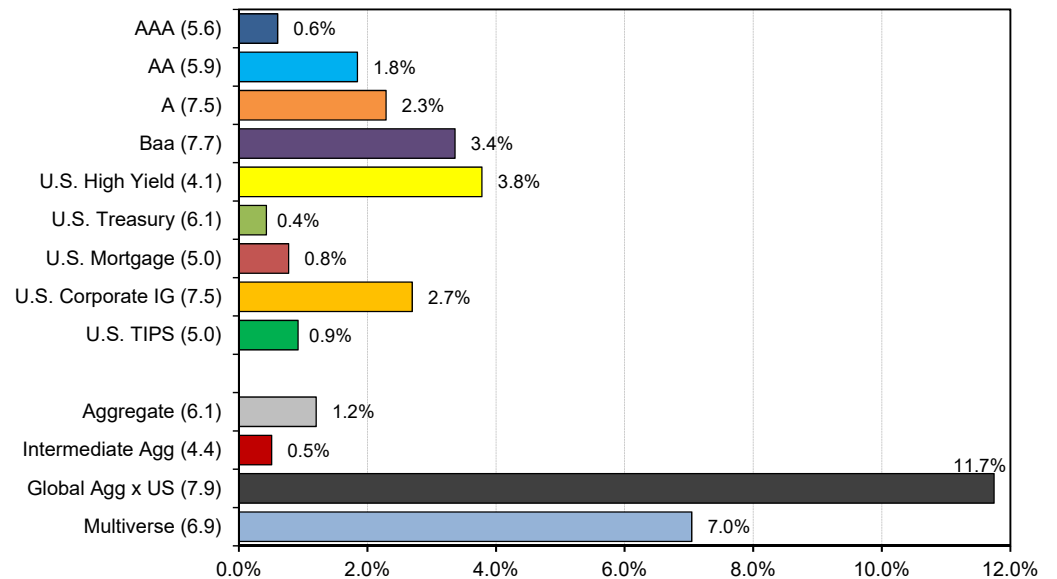


- Broad fixed income benchmarks were mostly negative during the 1<sup>st</sup> quarter, with international bonds being the exception. Early in the quarter, particularly strong January wage growth report caused investors to speculate that inflation was quickly increasing and that the Fed would need to tighten monetary policy to a greater degree than originally planned. This sent a shock through financial markets and caused interest rates to rise considerably. Economic releases later in the quarter showed that the fear of inflation was most likely overstated. Later in the quarter, the Federal Open Market Committee (FOMC), led by new Fed Chair Jerome Powell, decided to increase short-term interest rates by 25 basis points. The current Fed Funds Rate target sits at 1.50% - 1.75%. This rate increase was expected by the market and, importantly, the Fed did not change its plan for further rate increases for 2018. Concerns over new Treasury issuance needed to finance plans for increased fiscal spending also could have contributed to the rise in interest rates. The yield curve flattened through the quarter as short-term yields rose at a greater rate than longer-term yields. The Bloomberg Barclays US Aggregate Index fell -1.5% the quarter, but managed a positive 1.2% return for the trailing year.
- Within investment grade credit, higher quality corporate issues generally outperformed lower quality issues for the quarter as credit spreads widened and investors looked for safety amid increased financial market volatility. AAA rated credit was the best performing investment grade credit quality segment returning -1.2% for the quarter. Interestingly, high yield debt outperformed relative to investment grade credit, returning -0.9%, as spreads widened to a lesser degree for these issues and the index benefitted from a lower duration. Part of the reason for the increased spread widening for investment grade issues relative to high yield issues was selling pressure from companies repatriating foreign cash reserves in response to the new tax code. When viewed over the 1-year period, lower quality issues have advanced to a greater degree, partly due to the continued strength in the global economy. High yield debt returned 3.8% over the period whereas AAA rated issues returned 0.6%.
- US Treasury securities were the best performing investment grade sector through the quarter, narrowly outperforming US mortgage backed securities (MBS). This reversed the trend of corporate credit outperformance that was witnessed through 2017 as investors reacted to market volatility and moved into higher quality government issues. The Bloomberg Barclays US Corporate IG Index returned -2.3% for the quarter as widening credit spreads and a higher duration acted as headwinds to these issues. US Treasury and US MBS both posted a -1.2%. However, over the trailing year, Treasury securities were the worst performing investment grade sector returning 0.4%, while US investment grade corporate bonds were the best performing investment grade sector gaining 2.7%.

**Quarter Performance**

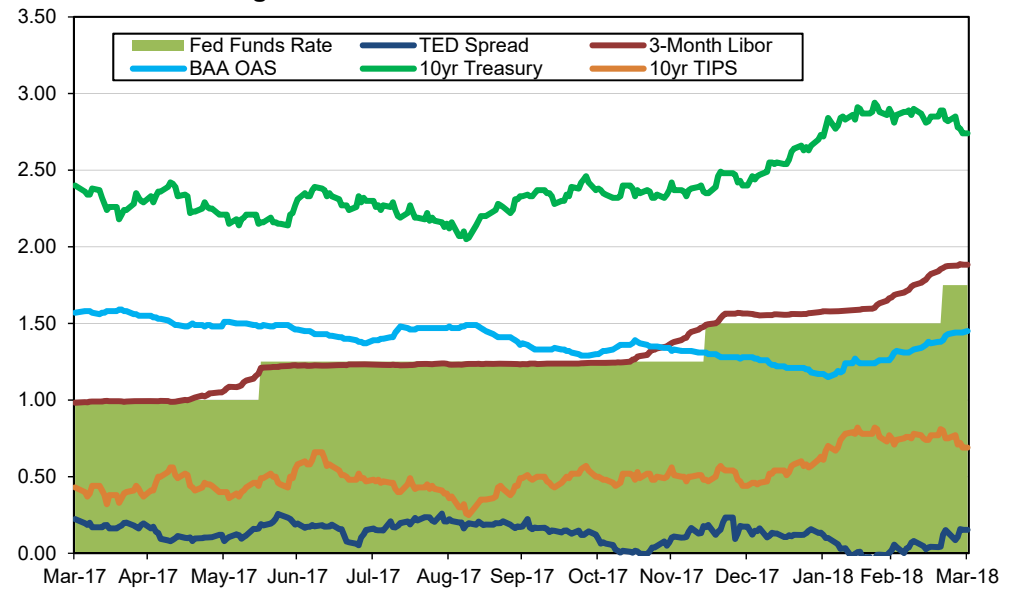


**1-Year Performance**

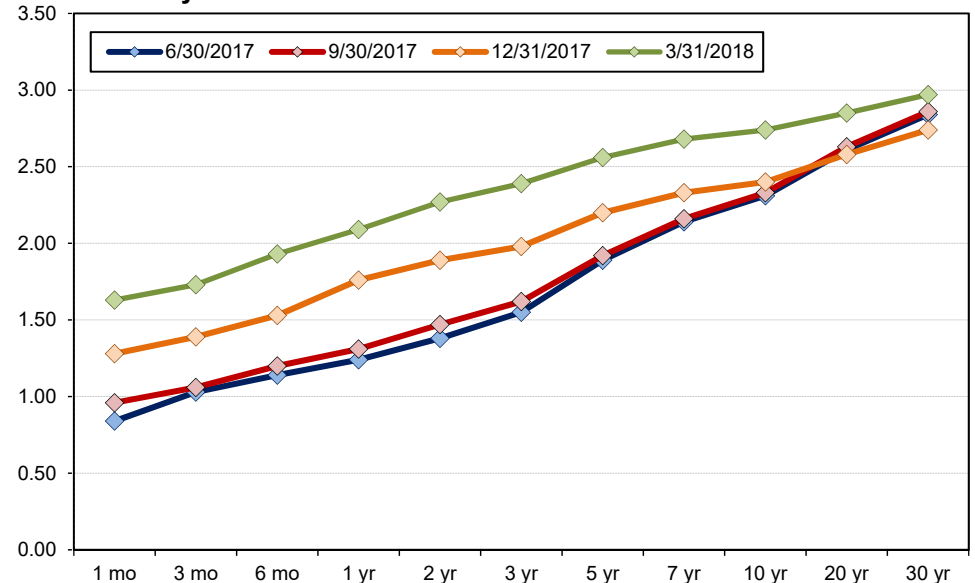


- In contrast to their domestic counterparts, global fixed income indices posted gains for the quarter. Global benchmarks are impacted by the same local yield and duration factors as domestic benchmarks. While these indices have relatively high durations, which would have acted as a headwind in the current quarter as interest rates increased, the returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. This currency effect can add additional return to foreign issues as it did during calendar year 2017, or it can further exacerbate negative performance as it did in 2016. Global bonds outperformed domestic issues during the quarter and 1-year period partially due to a currency effect tailwind caused by a weakening USD. Returns on global bonds represented by the Bloomberg Barclays Global Aggregate ex US Index were 3.6% and 11.7% for the 1<sup>st</sup> quarter and trailing twelve months respectively. As the global economy continues to recover, several international central banks have started to move toward a less accommodative posture. Notably, the ECB, has extended its current quantitative easing program well into 2018, but has reduced the amount of monthly asset purchases from 60 billion euro per month to 30 billion euro per month. They also signaled that they would end the program entirely if the eurozone recovery continues to flourish. Similarly, the Bank of Japan (BoJ) inferred that they could end their quantitative easing program sometime in 2019 if target metrics were met. Lastly, the BoE voted to raise interest rates for the first time in a decade during the 4<sup>th</sup> quarter of 2017 and indicated rates may rise again more quickly than expected.
- 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) rose significantly during the 1<sup>st</sup> quarter, rising from 2.40%, to a peak of 2.94%, before falling to 2.74% to end the period. 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 steady decline in credit spreads throughout 2017. However, the trend begins to reverse in early February. This increase is equivalent to an interest rate increase on corporate bonds, which produces a headwind for corporate bond index returns. These credit spreads have widened by about 17 basis points over the last 3-months. The green shading at the bottom of the graph illustrates the gradual increase in the Federal Funds Rate due to a less accommodative 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 significant upward shift in interest rates that occurred in the 1<sup>st</sup> quarter is clearly visible.

1-Year Trailing Market Rates



Treasury Yield Curve



Page Intentionally Left Blank



**Total Fund** The performance in the quarter of -0.6% ranked below median versus all Total Plans, and was just above the policy benchmark. The annual 10.9% return was top third and above the policy bogey, while the five-year 9.0% ranked in the top decile and beat the policy, as did the ten-year 8.0% performance. Performance was below average versus other Total Plans with a similar equity commitment for the quarter and for the year, top third for five years, and top quartile for ten years.

**Total Domestic Equities** Average return for the quarter, year and five years compared to the Total Domestic Equity universe. It was top third for ten years. It was above the Russell 3000 index for the quarter, about equal for the year, and below for five years, and above for ten years.

- **Cooke & Bieler** Below average return for the quarter and year versus Large Cap Value funds and above the Russell 1000 Value index. Top third for five years and for ten years and above the index.
- **NTGI S&P 500 Index Fund** Below average results for the quarter versus Large Cap Core funds. Average for the year and five years and slightly below average for ten. Close tracking of index returns
- **Sawgrass** Bottom quartile performance for the quarter versus large cap growth funds and below the Russell 1000 growth index. Results were bottom quartile for the year and five years and below the index. They were bottom third for ten years and lagged the index.
- **NTGI S&P 400 Index Fund** Average performance for the quarter versus Mid Cap Core funds; below average for the year and five years and average for ten. Close tracking of index returns.
- **T Rowe Price** Near top third results for the quarter versus Small Cap Value funds and above the Russell 2000 Value index. Top third and above the index for the year and near top third and above the index for five years. Top decile and well above the index for ten years.
- **Summit Creek** Top quartile performance versus Small Cap Growth funds and above the Russell 2000 Growth index in the quarter and for the year, but just below average and above the index for three years.

**Total International Equities** Bottom third performance versus universe for quarter; bottom third for the year and bottom quartile for five years. Below average for ten years. Above the MSCI ACWI-ex US index for the quarter, below for the year, and above for five years and ten years.

- **Templeton** Bottom quartile performance versus International Large Cap Value funds for the quarter and year, but above the EAFE Value index. Average for five years and just below the index and top quartile for ten and above the index.
- **MFS** Bottom third performance for the quarter versus International Large Cap Growth funds and below the EAFE Growth index. It was above average for the year and below the index. For five years it was near top third and just below the index and for ten years' results were top decile and above the index.
- **Vanguard Emerging Markets Fund** Top quartile return for the quarter compared to Emerging Market funds and above the index. Below average for the year and below the index. Four-year results were below average and below the index.

**Total Domestic Fixed Income** Bottom quartile return for quarter and for the year compared to Total Fixed funds. Above average for five years and top third for ten. Below the Bloomberg Barclays Aggregate index for the quarter, equal for the year, and above for five and ten years.

- **Schroder Intermediate Duration** Bottom third return for the quarter versus Domestic Intermediate Duration Bond funds and equal to the Bloomberg Barclay's Intermediate Duration Bond Index. Below average for the year and top quartile for five years and above the index.
- **NTGI Government / Credit Index Fund** Bottom quartile performance for the quarter versus Domestic Core Bond funds. Below average for the year and bottom quartile for five and ten years. Close tracking of actual index.
- **Schroder Long Duration** Fund closed at quarter end. Bottom quartile return for the quarter and year relative to Domestic Long Duration Bond funds and below the Bloomberg Barclay's Long Duration Bond index. Top quartile for five years and top third for ten years and above the index for both periods.

#### **Total Real Estate**

- **PGIM Real Estate.** Top third for the quarter versus Private Real Estate funds. Below median for the year and five years and above the index for all periods. Bottom quartile for ten and above the index.
- **Principal Enhanced Property Fund.** Account funded with \$1.5 million at year-end 2017. Top decile performance for the quarter and above the ODCE index.



**Financial Reconciliation**  
**Total Fund**  
**1 Quarter Ending March 31, 2018**

<b>1 Quarter</b>	<b>Market Value 01/01/2018</b>	<b>Net Flows</b>	<b>Return On Investment</b>	<b>Market Value 03/31/2018</b>
<b>Firefighters' Total Fund</b>	<b>162,907,384</b>	<b>-120,199</b>	<b>-1,046,487</b>	<b>161,740,697</b>
<b>Total Domestic Equity</b>	<b>80,177,361</b>	<b>-1,568,967</b>	<b>-312,633</b>	<b>78,295,761</b>
Cooke & Bieler	19,498,395	-571,935	-417,470	18,508,990
NTGI S&P 500	17,728,323	-1,847	-135,399	17,591,077
Sawgrass	19,279,083	-974,099	15,413	18,320,397
NTGI S&P 400	7,926,482	-826	-59,344	7,866,313
T Rowe Price	7,825,772	-	-126,016	7,699,756
Summit Creek	7,919,306	-20,260	410,183	8,309,229
<b>Total International Equity</b>	<b>34,009,534</b>	<b>-</b>	<b>-287,241</b>	<b>33,722,293</b>
Templeton	14,127,817	-	-269,836	13,857,981
MFS	14,127,800	-	-194,216	13,933,584
<b>International Emerging Equity</b>				
Vanguard EM	5,753,917	-	176,810	5,930,727
<b>Total Domestic Fixed Income</b>	<b>36,393,005</b>	<b>-19,806</b>	<b>-752,742</b>	<b>35,620,458</b>
Schroder Intermediate Duration	19,030,873	6,728,441	-184,693	25,574,621
NTGI Government / Credit	10,206,388	-1,063	-159,487	10,045,837
Schroder Long Duration	7,155,744	-6,747,183	-408,561	-
<b>Total Real Estate</b>	<b>10,823,891</b>	<b>1,468,574</b>	<b>305,708</b>	<b>12,598,172</b>
PGIM	10,823,891	-26,551	260,891	11,058,231
Principal Enhanced Property Fund, LP	-	1,495,125	44,817	1,539,942
Cash	1,503,592	-	420	1,504,013



**Financial Reconciliation**  
**Total Fund**  
January 1, 2018 To March 31, 2018

<b>Fiscal Year To Date</b>	<b>Market Value 01/01/2018</b>	<b>Net Flows</b>	<b>Return On Investment</b>	<b>Market Value 03/31/2018</b>
<b>Firefighters' Total Fund</b>	<b>162,907,384</b>	<b>-120,199</b>	<b>-1,046,487</b>	<b>161,740,697</b>
<b>Total Domestic Equity</b>	<b>80,177,361</b>	<b>-1,568,967</b>	<b>-312,633</b>	<b>78,295,761</b>
Cooke & Bieler	19,498,395	-571,935	-417,470	18,508,990
NTGI S&P 500	17,728,323	-1,847	-135,399	17,591,077
Sawgrass	19,279,083	-974,099	15,413	18,320,397
NTGI S&P 400	7,926,482	-826	-59,344	7,866,313
T Rowe Price	7,825,772	-	-126,016	7,699,756
Summit Creek	7,919,306	-20,260	410,183	8,309,229
<b>Total International Equity</b>	<b>34,009,534</b>	<b>-</b>	<b>-287,241</b>	<b>33,722,293</b>
Templeton	14,127,817	-	-269,836	13,857,981
MFS	14,127,800	-	-194,216	13,933,584
<b>International Emerging Equity</b>				
Vanguard EM	5,753,917	-	176,810	5,930,727
<b>Total Domestic Fixed Income</b>	<b>36,393,005</b>	<b>-19,806</b>	<b>-752,742</b>	<b>35,620,458</b>
Schroder Intermediate Duration	19,030,873	6,728,441	-184,693	25,574,621
NTGI Government / Credit	10,206,388	-1,063	-159,487	10,045,837
Schroder Long Duration	7,155,744	-6,747,183	-408,561	-
<b>Total Real Estate</b>	<b>10,823,891</b>	<b>1,468,574</b>	<b>305,708</b>	<b>12,598,172</b>
PGIM	10,823,891	-26,551	260,891	11,058,231
Principal Enhanced Property Fund, LP	-	1,495,125	44,817	1,539,942
Cash	1,503,592	-	420	1,504,013



**Financial Reconciliation**  
**Total Fund**  
**1 Year Ending March 31, 2018**

<b>1 Year</b>	<b>Market Value 04/01/2017</b>	<b>Net Flows</b>	<b>Return On Investment</b>	<b>Market Value 03/31/2018</b>
<b>Firefighters' Total Fund</b>	<b>151,205,317</b>	<b>-5,745,423</b>	<b>16,280,803</b>	<b>161,740,697</b>
<b>Total Domestic Equity</b>	<b>78,760,717</b>	<b>-10,695,389</b>	<b>10,230,433</b>	<b>78,295,761</b>
Cooke & Bieler	19,214,323	-2,536,435	1,831,102	18,508,990
NTGI S&P 500	17,460,305	-2,157,355	2,288,127	17,591,077
Sawgrass	18,446,430	-2,870,081	2,744,047	18,320,397
NTGI S&P 400	7,900,950	-853,301	818,664	7,866,313
T Rowe Price	8,243,372	-1,300,000	756,384	7,699,756
Summit Creek	7,495,337	-978,217	1,792,109	8,309,229
<b>Total International Equity</b>	<b>29,012,597</b>	<b>35,469</b>	<b>4,674,227</b>	<b>33,722,293</b>
Templeton	12,413,368	-114,531	1,559,144	13,857,981
MFS	12,122,459	-250,000	2,061,125	13,933,584
<b>International Emerging Equity</b>				
Vanguard EM	4,476,770	400,000	1,053,957	5,930,727
<b>Total Domestic Fixed Income</b>	<b>33,134,001</b>	<b>2,023,002</b>	<b>463,455</b>	<b>35,620,458</b>
Schroder Intermediate Duration	16,641,332	8,789,113	144,176	25,574,621
NTGI Government / Credit	9,909,376	-4,247	140,709	10,045,837
Schroder Long Duration	6,583,294	-6,761,864	178,570	-
<b>Total Real Estate</b>	<b>10,297,944</b>	<b>1,391,495</b>	<b>908,734</b>	<b>12,598,172</b>
PGIM	10,297,944	-103,630	863,917	11,058,231
Principal Enhanced Property Fund, LP	-	1,495,125	44,817	1,539,942
Cash	58	1,500,000	3,955	1,504,013



**Asset Allocation Attributes**

	Domestic Equity		International Equity		Emerging Equity		Domestic Fixed Income		Real Estate		Cash Equivalent		Total Fund	
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
<b>Firefighters' Total Fund</b>	<b>76,728</b>	<b>47.4</b>	<b>27,792</b>	<b>17.2</b>	<b>5,931</b>	<b>3.7</b>	<b>35,178</b>	<b>21.7</b>	<b>12,554</b>	<b>7.8</b>	<b>3,558</b>	<b>2.2</b>	<b>161,741</b>	<b>100.0</b>
<b>Total Domestic Equity</b>	<b>76,728</b>	<b>98.0</b>	-	-	-	-	-	-	-	-	<b>1,567</b>	<b>2.0</b>	<b>78,296</b>	<b>48.4</b>
Cooke & Bieler	17,946	97.0	-	-	-	-	-	-	-	-	563	3.0	18,509	11.4
NTGI S&P 500	17,591	100.0	-	-	-	-	-	-	-	-	-	-	17,591	10.9
Sawgrass	17,626	96.2	-	-	-	-	-	-	-	-	695	3.8	18,320	11.3
NTGI S&P 400	7,866	100.0	-	-	-	-	-	-	-	-	-	-	7,866	4.9
T Rowe Price	7,700	100.0	-	-	-	-	-	-	-	-	-	-	7,700	4.8
Summit Creek	8,000	96.3	-	-	-	-	-	-	-	-	309	3.7	8,309	5.1
<b>Total International Equity</b>	-	-	<b>27,792</b>	<b>82.4</b>	<b>5,931</b>	<b>17.6</b>	-	-	-	-	-	-	<b>33,722</b>	<b>20.8</b>
Templeton	-	-	13,858	100.0	-	-	-	-	-	-	-	-	13,858	8.6
MFS	-	-	13,934	100.0	-	-	-	-	-	-	-	-	13,934	8.6
<b>International Emerging Equity</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vanguard EM	-	-	-	-	5,931	100.0	-	-	-	-	-	-	5,931	3.7
<b>Total Domestic Fixed Income</b>	-	-	-	-	-	-	<b>35,178</b>	<b>98.8</b>	-	-	<b>442</b>	<b>1.2</b>	<b>35,620</b>	<b>22.0</b>
Schroder Intermediate Duration	-	-	-	-	-	-	25,133	98.3	-	-	442	1.7	25,575	15.8
NTGI Government / Credit	-	-	-	-	-	-	10,046	100.0	-	-	-	-	10,046	6.2
Schroder Long Duration	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0
<b>Total Real Estate</b>	-	-	-	-	-	-	-	-	<b>12,554</b>	<b>99.6</b>	<b>45</b>	<b>0.4</b>	<b>12,598</b>	<b>7.8</b>
PGIM	-	-	-	-	-	-	-	-	11,058	100.0	-	-	11,058	6.8
Principal Enhanced Property Fund, LP	-	-	-	-	-	-	-	-	1,495	97.1	45	2.9	1,540	1.0
<b>Cash</b>	-	-	-	-	-	-	-	-	-	-	<b>1,504</b>	<b>100.0</b>	<b>1,504</b>	<b>0.9</b>



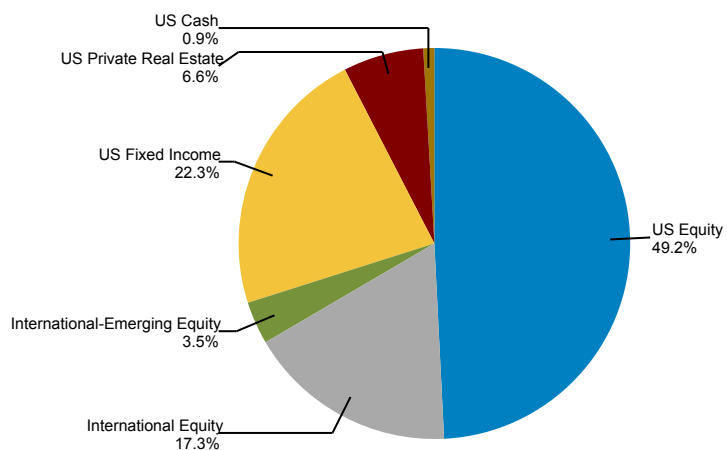


**Asset Allocation By Asset Class**

**Total Fund**

As of March 31, 2018

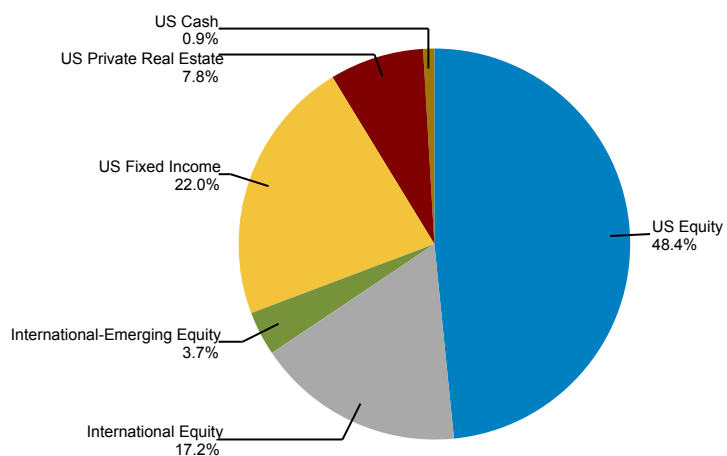
**December 31, 2017 : \$162,907,384**



**Allocation**

	Market Value	Allocation
US Equity	80,177,361	49.2
International Equity	28,255,617	17.3
International-Emerging Equity	5,753,917	3.5
US Fixed Income	36,393,005	22.3
US Private Real Estate	10,823,891	6.6
US Cash	1,503,592	0.9

**March 31, 2018 : \$161,740,697**



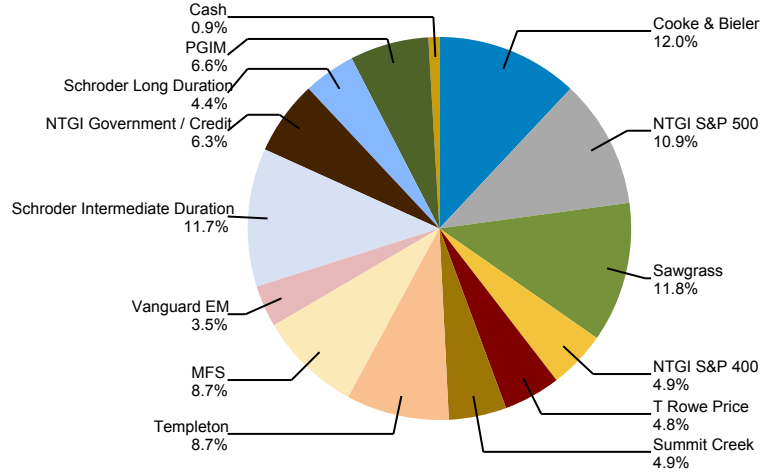
**Allocation**

	Market Value	Allocation
US Equity	78,295,761	48.4
International Equity	27,791,566	17.2
International-Emerging Equity	5,930,727	3.7
US Fixed Income	35,620,458	22.0
US Private Real Estate	12,598,172	7.8
US Cash	1,504,013	0.9



**Asset Allocation By Manager  
Total Fund  
As of March 31, 2018**

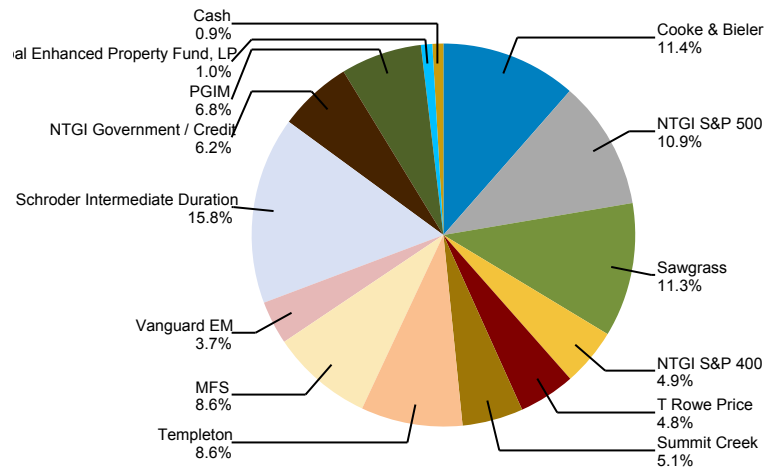
**December 31, 2017 : \$162,907,384**



**Allocation**

	Market Value	Allocation
Cooke & Bieler	19,498,395	12.0
NTGI S&P 500	17,728,323	10.9
Sawgrass	19,279,083	11.8
NTGI S&P 400	7,926,482	4.9
T Rowe Price	7,825,772	4.8
Summit Creek	7,919,306	4.9
Templeton	14,127,817	8.7
MFS	14,127,800	8.7
Vanguard EM	5,753,917	3.5
Schroder Intermediate Duration	19,030,873	11.7
NTGI Government / Credit	10,206,388	6.3
Schroder Long Duration	7,155,744	4.4
PGIM	10,823,891	6.6
Principal Enhanced Property Fund, LP	-	0.0
Cash	1,503,592	0.9

**March 31, 2018 : \$161,740,697**



**Allocation**

	Market Value	Allocation
Cooke & Bieler	18,508,990	11.4
NTGI S&P 500	17,591,077	10.9
Sawgrass	18,320,397	11.3
NTGI S&P 400	7,866,313	4.9
T Rowe Price	7,699,756	4.8
Summit Creek	8,309,229	5.1
Templeton	13,857,981	8.6
MFS	13,933,584	8.6
Vanguard EM	5,930,727	3.7
Schroder Intermediate Duration	25,574,621	15.8
NTGI Government / Credit	10,045,837	6.2
Schroder Long Duration	-	0.0
PGIM	11,058,231	6.8
Principal Enhanced Property Fund, LP	1,539,942	1.0
Cash	1,504,013	0.9



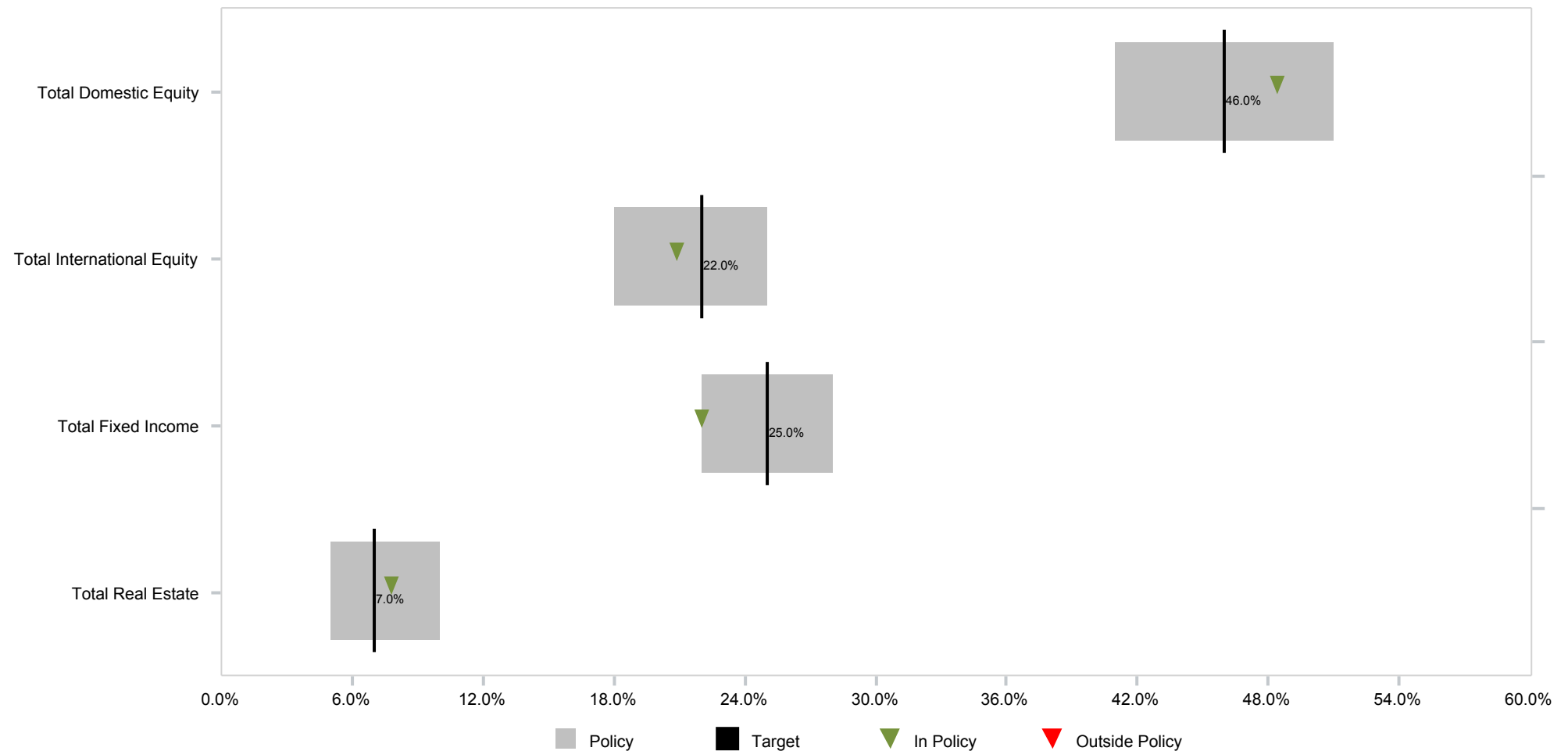
Page Intentionally Left Blank



Asset Allocation Compliance

	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)	Target Rebal. (\$)	Differences (%)
Firefighters' Total Fund	161,740,697	100.0		100.0		-	0.0
Total Domestic Equity	78,295,761	48.4	41.0	46.0	51.0	-3,895,041	2.4
Total International Equity	33,722,293	20.8	18.0	22.0	25.0	1,860,660	-1.2
Total Fixed Income	35,620,458	22.0	22.0	25.0	28.0	4,814,716	-3.0
Total Real Estate	12,598,172	7.8	5.0	7.0	10.0	-1,276,324	0.8

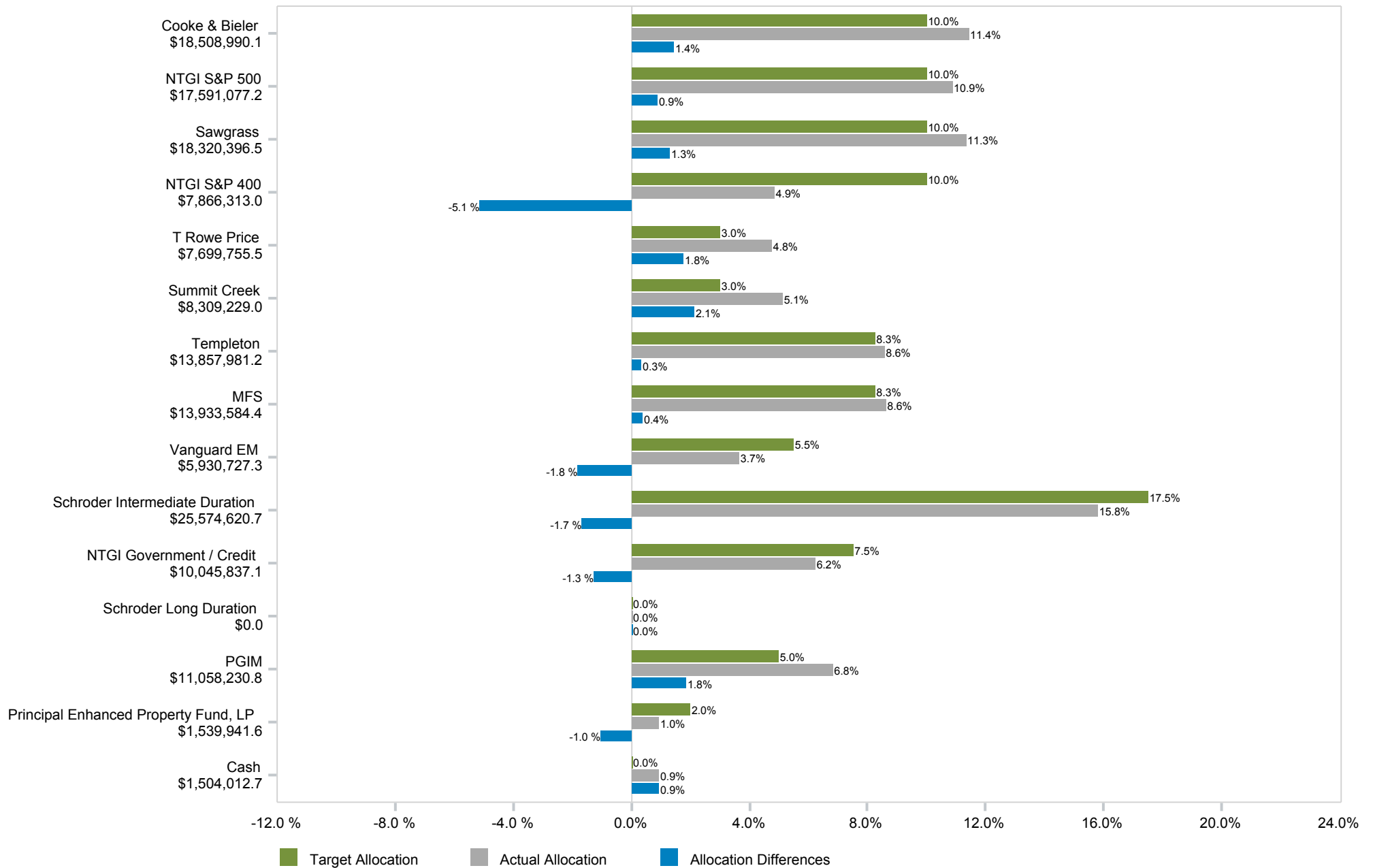
Allocation Summary



**Asset Allocation Compliance**

	Asset Allocation \$	Current Allocation (%)	Target Allocation (%)	Target Rebal. (\$000)	Differences (%)
Firefighters' Total Fund	161,740,697	100.0	100.0	-	0.0
Total Equity	112,018,054	69.3	68.0	-2,034,380	1.3
Total Domestic Equity	78,295,761	48.4	46.0	-3,895,041	2.4
Cooke & Bieler	18,508,990	11.4	10.0	-2,334,920	1.4
NTGI S&P 500	17,591,077	10.9	10.0	-1,417,007	0.9
Sawgrass	18,320,397	11.3	10.0	-2,146,327	1.3
NTGI S&P 400	7,866,313	4.9	10.0	8,307,757	-5.1
T Rowe Price	7,699,756	4.8	3.0	-2,847,535	1.8
Summit Creek	8,309,229	5.1	3.0	-3,457,008	2.1
Total International Equity	33,722,293	20.8	22.0	1,860,660	-1.2
Templeton	13,857,981	8.6	8.3	-514,374	0.3
MFS	13,933,584	8.6	8.3	-589,977	0.4
Vanguard EM	5,930,727	3.7	5.5	2,965,011	-1.8
Total Fixed Income	35,620,458	22.0	25.0	4,814,716	-3.0
Total Domestic Fixed Income	35,620,458	22.0	25.0	4,814,716	-3.0
Schroder Intermediate Duration	25,574,621	15.8	17.5	2,730,001	-1.7
NTGI Government / Credit	10,045,837	6.2	7.5	2,084,715	-1.3
Schroder Long Duration	-	0.0	0.0	-	0.0
Total Real Estate	12,598,172	7.8	7.0	-1,276,324	0.8
PGIM	11,058,231	6.8	5.0	-2,971,196	1.8
Principal Enhanced Property Fund, LP	1,539,942	1.0	2.0	1,694,872	-1.0
Cash	1,504,013	0.9	0.0	-1,504,013	0.9





**Comparative Performance**  
**Firefighters' Total Fund**  
As of March 31, 2018

<b>Comparative Performance</b>												
	<b>QTR</b>		<b>FYTD</b>		<b>1 YR</b>		<b>3 YR</b>		<b>5 YR</b>		<b>10 YR</b>	
<b>Firefighters' Total Fund</b>	<b>-0.64</b>	<b>(61)</b>	<b>-0.64</b>	<b>(61)</b>	<b>10.86</b>	<b>(29)</b>	<b>7.20</b>	<b>(15)</b>	<b>9.00</b>	<b>(9)</b>	<b>7.96</b>	<b>(4)</b>
Sioux Falls Total Policy	-0.68	(63)	-0.68	(63)	10.67	(32)	7.25	(13)	8.82	(12)	6.94	(27)
All Master Trust - Total Fund Median	-0.49		-0.49		9.85		6.01		7.36		6.36	
<b>Firefighters' Total Fund</b>	<b>-0.64</b>	<b>(58)</b>	<b>-0.64</b>	<b>(58)</b>	<b>10.86</b>	<b>(69)</b>	<b>7.20</b>	<b>(45)</b>	<b>9.00</b>	<b>(30)</b>	<b>7.96</b>	<b>(13)</b>
Sioux Falls Total Policy	-0.68	(63)	-0.68	(63)	10.67	(74)	7.25	(41)	8.82	(40)	6.94	(53)
Master Trust >=70% Equity Median	-0.49		-0.49		11.57		7.05		8.59		6.97	
<b>Total Domestic Equity</b>	<b>-0.40</b>	<b>(50)</b>	<b>-0.40</b>	<b>(50)</b>	<b>13.78</b>	<b>(51)</b>	<b>9.96</b>	<b>(50)</b>	<b>12.48</b>	<b>(54)</b>	<b>9.98</b>	<b>(28)</b>
Russell 3000 Index	-0.64	(65)	-0.64	(65)	13.81	(51)	10.22	(40)	13.03	(36)	9.62	(44)
All Master Trust-US Equity Segment Median	-0.40		-0.40		13.85		9.93		12.61		9.41	
Cooke & Bieler	-2.16	(57)	-2.16	(57)	10.18	(56)	9.57	(33)	12.71	(32)	9.68	(29)
Russell 1000 Value Index	-2.83	(77)	-2.83	(77)	6.95	(89)	7.88	(70)	10.78	(76)	7.78	(82)
IM U.S. Large Cap Value Equity (SA+CF) Median	-1.95		-1.95		10.53		8.88		11.99		9.03	
NTGI S&P 500	-0.76	(65)	-0.76	(65)	13.99	(52)	10.84	(31)	13.38	(46)	9.49	(62)
S&P 500 Index	-0.76	(64)	-0.76	(64)	13.99	(52)	10.78	(33)	13.31	(52)	9.49	(61)
IM U.S. Large Cap Core Equity (SA+CF) Median	-0.44		-0.44		14.02		10.23		13.32		9.75	
Sawgrass	0.07	(84)	0.07	(84)	15.32	(84)	9.66	(81)	13.02	(83)	10.07	(71)
Russell 1000 Growth Index	1.42	(61)	1.42	(61)	21.25	(46)	12.90	(30)	15.53	(39)	11.34	(41)
IM U.S. Large Cap Growth Equity (SA+CF) Median	1.99		1.99		20.83		11.66		15.03		10.99	
NTGI S&P 400	-0.75	(46)	-0.75	(46)	10.94	(62)	9.00	(41)	12.04	(63)	10.98	(53)
S&P MidCap 400 Index	-0.77	(54)	-0.77	(54)	10.97	(58)	8.96	(50)	11.97	(72)	10.90	(67)
IM U.S. Mid Cap Core Equity (SA+CF) Median	-0.76		-0.76		11.04		8.96		12.39		11.01	
T Rowe Price	-1.61	(35)	-1.61	(35)	10.09	(29)	10.67	(3)	10.57	(37)	10.27	(11)
Russell 2000 Value Index	-2.64	(48)	-2.64	(48)	5.13	(67)	7.87	(42)	9.96	(48)	8.61	(51)
IM U.S. Small Cap Value Equity (MF) Median	-2.71		-2.71		7.86		7.04		9.48		8.62	
Summit Creek	5.19	(18)	5.19	(18)	25.15	(20)	9.45	(53)	N/A		N/A	
Russell 2000 Growth Index	2.30	(52)	2.30	(52)	18.63	(51)	8.77	(61)	12.90	(58)	10.95	(62)
IM U.S. Small Cap Growth Equity (SA+CF+MF) Median	2.40		2.40		18.76		9.61		13.31		11.55	

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



**Comparative Performance**  
**Firefighters' Total Fund**  
As of March 31, 2018

	QTR		FYTD		1 YR		3 YR		5 YR		10 YR	
<b>Total International Equity</b>	<b>-0.84</b>	<b>(67)</b>	<b>-0.84</b>	<b>(67)</b>	<b>15.75</b>	<b>(72)</b>	<b>5.86</b>	<b>(82)</b>	<b>6.22</b>	<b>(85)</b>	<b>4.05</b>	<b>(55)</b>
MSCI AC World ex USA (Net)	-1.18	(77)	-1.18	(77)	16.53	(63)	6.18	(77)	5.89	(93)	2.70	(91)
All Master Trust-Intl. Equity Segment Median	-0.41		-0.41		17.64		7.29		7.33		4.26	
Templeton	-1.91	(77)	-1.91	(77)	12.48	(85)	4.14	(80)	5.69	(47)	3.08	(16)
MSCI EAFE Value Index (Net)	-2.03	(77)	-2.03	(77)	12.19	(89)	4.29	(64)	5.78	(46)	1.97	(43)
IM International Large Cap Value Equity (MF) Median	-1.49		-1.49		13.34		4.49		5.56		1.81	
MFS	-1.37	(70)	-1.37	(70)	16.68	(46)	6.08	(54)	7.01	(34)	5.34	(5)
MSCI EAFE Growth Index (Net)	-1.04	(59)	-1.04	(59)	17.51	(43)	6.73	(42)	7.14	(32)	3.44	(56)
IM International Large Cap Growth Equity (MF) Median	-0.70		-0.70		16.10		6.33		6.36		3.68	
Vanguard EM	3.07	(24)	3.07	(24)	21.68	(63)	9.87	(32)	N/A		N/A	
MSCI Emerging Markets (Net) Index	1.42	(61)	1.42	(61)	24.93	(42)	8.81	(47)	4.99	(45)	3.02	(47)
IM Emerging Markets Equity (MF) Median	1.96		1.96		23.87		8.55		4.74		2.84	
<b>Total Domestic Fixed Income</b>	<b>-2.07</b>	<b>(79)</b>	<b>-2.07</b>	<b>(79)</b>	<b>1.33</b>	<b>(74)</b>	<b>1.35</b>	<b>(75)</b>	<b>2.77</b>	<b>(44)</b>	<b>5.94</b>	<b>(27)</b>
Blmbg. Barc. U.S. Aggregate Index	-1.46	(71)	-1.46	(71)	1.20	(79)	1.20	(82)	1.82	(69)	3.63	(76)
All Master Trust-US Fixed Income Segment Median	-1.08		-1.08		2.11		2.06		2.47		4.57	
Schroder Intermediate Duration	-0.98	(70)	-0.98	(70)	0.78	(56)	1.42	(38)	2.02	(20)	N/A	
Bloomberg Barclays Intermediate US Govt/Credit Idx	-0.98	(70)	-0.98	(70)	0.35	(94)	0.94	(89)	1.25	(88)	2.92	(92)
IM U.S. Intermediate Duration (SA+CF) Median	-0.90		-0.90		0.83		1.32		1.62		3.57	
NTGI Government / Credit	-1.56	(89)	-1.56	(89)	1.42	(62)	1.26	(80)	1.89	(77)	3.72	(86)
Blmbg. Barc. U.S. Gov't/Credit	-1.58	(91)	-1.58	(91)	1.38	(67)	1.22	(82)	1.84	(82)	3.65	(89)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-1.37		-1.37		1.65		1.56		2.15		4.29	
Schroder Long Duration	-5.71	(100)	-5.71	(100)	2.71	(100)	2.03	(93)	4.86	(20)	8.21	(31)
Blmbg. Barc. U.S. Long Government/Credit	-3.58	(50)	-3.58	(50)	5.09	(67)	2.13	(89)	4.09	(89)	6.79	(98)
IM U.S. Long Duration (SA+CF) Median	-3.58		-3.58		5.22		2.66		4.49		7.62	
Total Real Estate	2.48	(24)	2.48	(24)	N/A		N/A		N/A		N/A	
NCREIF Fund Index-ODCE (EW) (Net)	1.95	(80)	1.95	(80)	7.25	(93)	9.33	(82)	10.53	(81)	4.02	(99)
IM U.S. Open End Private Real Estate (SA+CF) Median	2.23		2.23		8.62		10.38		12.13		5.37	
PGIM	2.41	(32)	2.41	(32)	8.42	(57)	10.19	(66)	11.69	(63)	4.65	(88)
NCREIF Fund Index-ODCE (EW) (Net)	1.95	(80)	1.95	(80)	7.25	(93)	9.33	(82)	10.53	(81)	4.02	(99)
IM U.S. Open End Private Real Estate (SA+CF) Median	2.23		2.23		8.62		10.38		12.13		5.37	
Principal Enhanced Property Fund, LP	2.99	(3)	2.99	(3)	N/A		N/A		N/A		N/A	
NCREIF Fund Index-ODCE (EW) (Net)	1.95	(80)	1.95	(80)	7.25	(93)	9.33	(82)	10.53	(81)	4.02	(99)
IM U.S. Open End Private Real Estate (SA+CF) Median	2.23		2.23		8.62		10.38		12.13		5.37	
Cash	0.30		0.30		0.95		N/A		N/A		N/A	
90 Day U.S. Treasury Bill	0.35		0.35		1.11		0.49		0.31		0.32	

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





**Comparative Performance**  
**Firefighters' Total Fund**  
Years Ending

**Comparative Performance**

	1 Year Ending Mar-2018		1 Year Ending Mar-2017		1 Year Ending Mar-2016		1 Year Ending Mar-2015		1 Year Ending Mar-2014	
<b>Firefighters' Total Fund</b>	<b>10.86</b>	<b>(29)</b>	<b>11.74</b>	<b>(29)</b>	<b>-0.56</b>	<b>(31)</b>	<b>8.17</b>	<b>(28)</b>	<b>15.45</b>	<b>(10)</b>
Sioux Falls Total Policy	10.67	(32)	12.91	(11)	-1.26	(46)	7.79	(33)	14.72	(15)
All Master Trust - Total Fund Median	9.85		10.71		-1.51		6.77		11.91	
<b>Firefighters' Total Fund</b>	<b>10.86</b>	<b>(69)</b>	<b>11.74</b>	<b>(72)</b>	<b>-0.56</b>	<b>(15)</b>	<b>8.17</b>	<b>(36)</b>	<b>15.45</b>	<b>(42)</b>
Sioux Falls Total Policy	10.67	(74)	12.91	(44)	-1.26	(25)	7.79	(47)	14.72	(58)
Master Trust >=70% Equity Median	11.57		12.72		-2.43		7.63		14.97	
<b>Total Domestic Equity</b>	<b>13.78</b>	<b>(51)</b>	<b>16.66</b>	<b>(70)</b>	<b>0.17</b>	<b>(24)</b>	<b>10.84</b>	<b>(54)</b>	<b>22.18</b>	<b>(51)</b>
Russell 3000 Index	13.81	(51)	18.07	(46)	-0.34	(33)	12.37	(23)	22.61	(46)
All Master Trust-US Equity Segment Median	13.85		17.75		-1.28		10.93		22.25	
Cooke & Bieler	10.18	(56)	19.99	(32)	-0.50	(30)	12.37	(25)	23.07	(52)
Russell 1000 Value Index	6.95	(89)	19.22	(40)	-1.54	(41)	9.33	(57)	21.57	(67)
IM U.S. Large Cap Value Equity (SA+CF) Median	10.53		18.19		-2.26		9.96		23.12	
NTGI S&P 500	13.99	(52)	17.21	(42)	1.93	(27)	12.85	(56)	21.94	(62)
S&P 500 Index	13.99	(52)	17.17	(43)	1.78	(29)	12.73	(58)	21.86	(64)
IM U.S. Large Cap Core Equity (SA+CF) Median	14.02		16.28		-0.18		13.26		22.74	
Sawgrass	15.32	(84)	10.23	(94)	3.74	(11)	13.61	(68)	23.06	(61)
Russell 1000 Growth Index	21.25	(46)	15.76	(48)	2.52	(21)	16.09	(43)	23.22	(61)
IM U.S. Large Cap Growth Equity (SA+CF) Median	20.83		15.42		-0.29		15.28		23.95	
NTGI S&P 400	10.94	(62)	20.95	(29)	-3.50	(41)	12.27	(56)	21.45	(78)
S&P MidCap 400 Index	10.97	(58)	20.92	(32)	-3.60	(58)	12.19	(67)	21.24	(87)
IM U.S. Mid Cap Core Equity (SA+CF) Median	11.04		19.63		-3.56		13.22		23.93	
T Rowe Price	10.09	(29)	26.65	(37)	-2.78	(12)	0.32	(68)	21.56	(70)
Russell 2000 Value Index	5.13	(67)	29.37	(22)	-7.72	(56)	4.43	(42)	22.65	(66)
IM U.S. Small Cap Value Equity (MF) Median	7.86		23.68		-7.23		3.45		24.11	
Summit Creek	25.15	(20)	9.25	(99)	-4.11	(12)	N/A		N/A	
Russell 2000 Growth Index	18.63	(51)	23.03	(53)	-11.84	(51)	12.06	(19)	27.19	(60)
IM U.S. Small Cap Growth Equity (SA+CF+MF) Median	18.76		23.33		-11.76		8.45		28.30	

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



**Comparative Performance**  
**Firefighters' Total Fund**  
Years Ending

	1 Year Ending Mar-2018		1 Year Ending Mar-2017		1 Year Ending Mar-2016		1 Year Ending Mar-2015		1 Year Ending Mar-2014	
<b>Total International Equity</b>	<b>15.75</b>	<b>(72)</b>	<b>13.23</b>	<b>(54)</b>	<b>-9.50</b>	<b>(86)</b>	<b>-1.05</b>	<b>(87)</b>	<b>15.20</b>	<b>(46)</b>
MSCI AC World ex USA (Net)	16.53	(63)	13.13	(56)	-9.19	(83)	-1.01	(87)	12.31	(72)
All Master Trust-Intl. Equity Segment Median	17.64		13.46		-7.26		0.80		14.39	
Templeton	12.48	(85)	12.10	(56)	-10.42	(41)	-3.34	(25)	20.79	(30)
MSCI EAFE Value Index (Net)	12.19	(89)	15.98	(1)	-12.82	(98)	-2.90	(23)	20.25	(37)
IM International Large Cap Value Equity (MF) Median	13.34		12.75		-10.94		-4.54		18.67	
MFS	16.68	(46)	11.14	(34)	-7.95	(63)	2.66	(22)	14.51	(46)
MSCI EAFE Growth Index (Net)	17.51	(43)	7.45	(72)	-3.70	(14)	1.05	(49)	14.92	(44)
IM International Large Cap Growth Equity (MF) Median	16.10		9.22		-6.81		0.90		14.15	
Vanguard EM	21.68	(63)	22.91	(9)	-11.32	(49)	-4.51	(77)	N/A	
MSCI Emerging Markets (Net) Index	24.93	(42)	17.21	(45)	-12.03	(57)	0.44	(37)	-1.43	(44)
IM Emerging Markets Equity (MF) Median	23.87		16.46		-11.49		-0.98		-1.91	
<b>Total Domestic Fixed Income</b>	<b>1.33</b>	<b>(74)</b>	<b>1.48</b>	<b>(67)</b>	<b>1.23</b>	<b>(52)</b>	<b>9.03</b>	<b>(25)</b>	<b>1.00</b>	<b>(31)</b>
Blmbg. Barc. U.S. Aggregate Index	1.20	(79)	0.44	(87)	1.96	(23)	5.72	(49)	-0.10	(63)
All Master Trust-US Fixed Income Segment Median	2.11		2.40		1.27		5.62		0.27	
Schroder Intermediate Duration	0.78	(56)	1.45	(30)	2.04	(60)	4.35	(26)	1.55	(12)
Bloomberg Barclays Intermediate US Govt/Credit Idx	0.35	(94)	0.42	(81)	2.06	(57)	3.58	(73)	-0.13	(82)
IM U.S. Intermediate Duration (SA+CF) Median	0.83		0.96		2.12		3.88		0.40	
NTGI Government / Credit	1.42	(62)	0.59	(69)	1.77	(75)	5.94	(44)	-0.17	(79)
Blmbg. Barc. U.S. Gov't/Credit	1.38	(67)	0.54	(70)	1.75	(77)	5.86	(54)	-0.26	(85)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	1.65		1.05		2.06		5.90		0.30	
Schroder Long Duration	2.71	(100)	2.14	(57)	1.25	(24)	17.07	(2)	1.97	(10)
Blmbg. Barc. U.S. Long Government/Credit	5.09	(67)	0.98	(93)	0.39	(46)	15.73	(24)	-0.88	(91)
IM U.S. Long Duration (SA+CF) Median	5.22		2.35		0.25		15.01		0.11	
Total Real Estate	N/A		N/A		N/A		N/A		N/A	
NCREIF Fund Index-ODCE (EW) (Net)	7.25	(93)	7.72	(73)	13.12	(65)	12.37	(88)	12.32	(79)
IM U.S. Open End Private Real Estate (SA+CF) Median	8.62		9.03		14.19		14.60		13.84	
PGIM	8.42	(57)	8.03	(72)	14.22	(48)	14.17	(59)	13.78	(56)
NCREIF Fund Index-ODCE (EW) (Net)	7.25	(93)	7.72	(73)	13.12	(65)	12.37	(88)	12.32	(79)
IM U.S. Open End Private Real Estate (SA+CF) Median	8.62		9.03		14.19		14.60		13.84	
Principal Enhanced Property Fund, LP	N/A		N/A		N/A		N/A		N/A	
NCREIF Fund Index-ODCE (EW) (Net)	7.25	(93)	7.72	(73)	13.12	(65)	12.37	(88)	12.32	(79)
IM U.S. Open End Private Real Estate (SA+CF) Median	8.62		9.03		14.19		14.60		13.84	

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



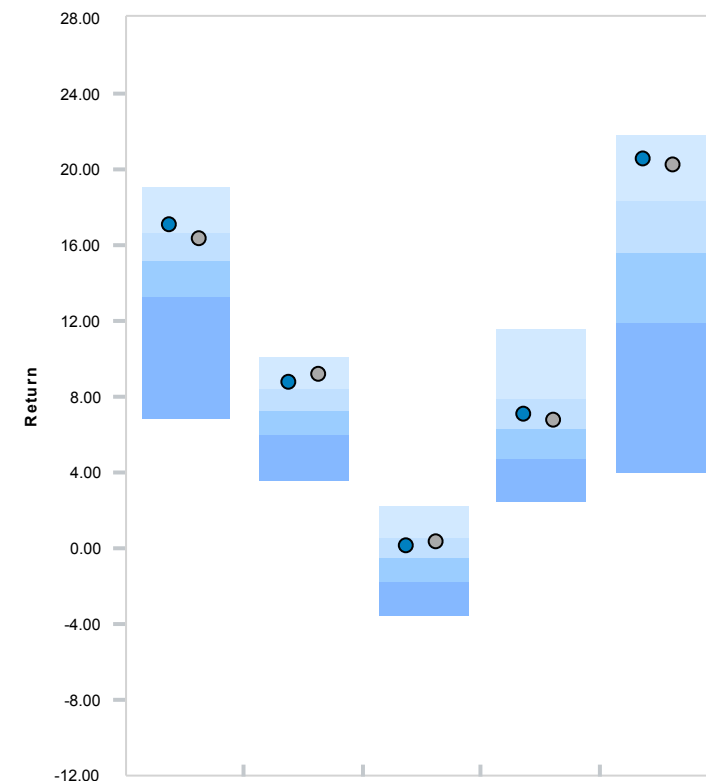
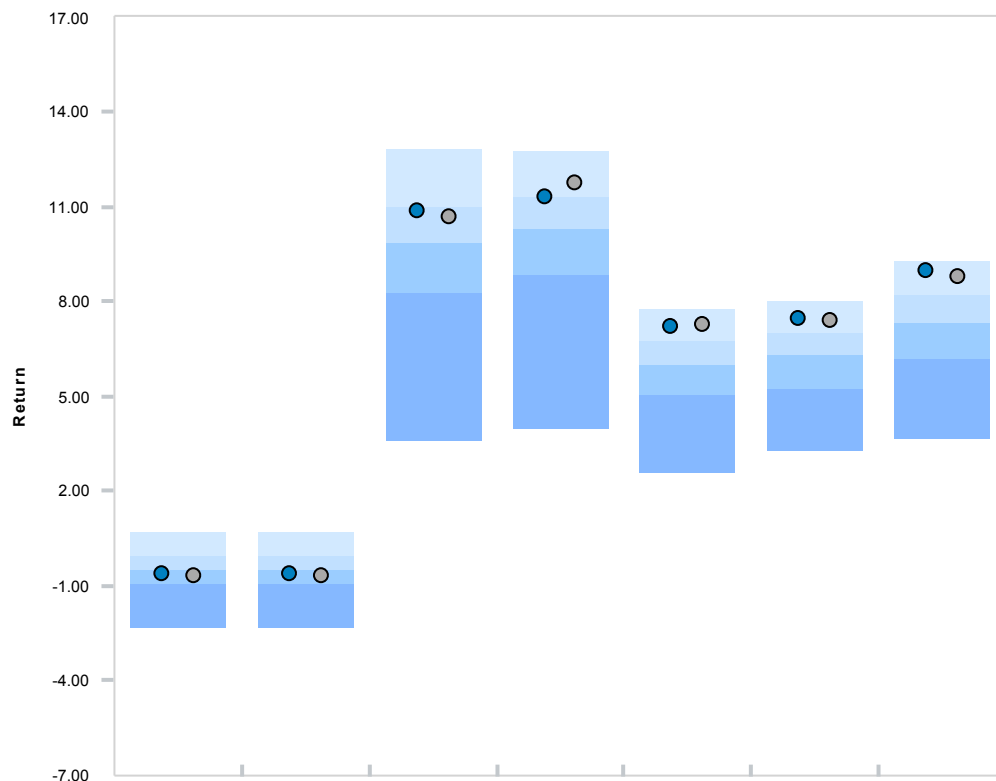
**Comparative Performance  
Firefighters' Total Fund  
Years Ending**

	<b>1 Year Ending Mar-2018</b>	<b>1 Year Ending Mar-2017</b>	<b>1 Year Ending Mar-2016</b>	<b>1 Year Ending Mar-2015</b>	<b>1 Year Ending Mar-2014</b>
Cash	0.95	0.29	N/A	0.90	0.01
90 Day U.S. Treasury Bill	1.11	0.30	0.08	0.03	0.05

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



**Peer Group Analysis - All Master Trust - Total Fund**



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Firefighters' Total	-0.64 (61)	-0.64 (61)	10.86 (29)	11.30 (26)	7.20 (15)	7.44 (15)	9.00 (9)
● Sioux Falls Policy	-0.68 (63)	-0.68 (63)	10.67 (32)	11.79 (16)	7.25 (13)	7.39 (16)	8.82 (12)
Median	-0.49	-0.49	9.85	10.28	6.01	6.31	7.36

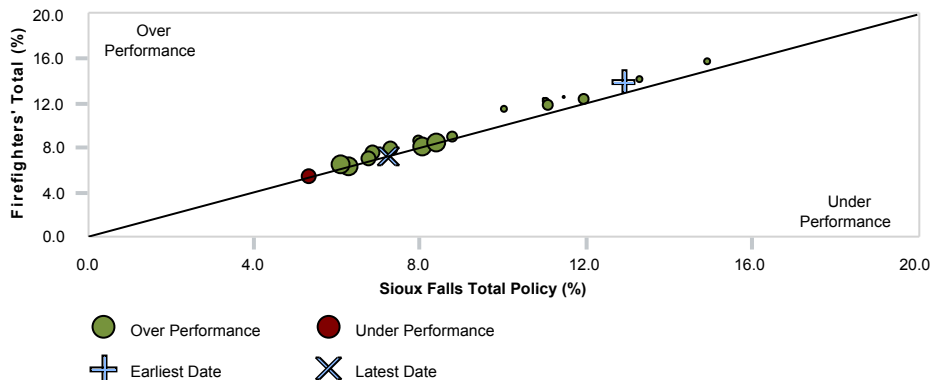
	2017	2016	2015	2014	2013
● Firefighters' Total	17.03 (20)	8.76 (19)	0.15 (36)	7.10 (36)	20.54 (10)
● Sioux Falls Policy	16.29 (32)	9.17 (14)	0.31 (32)	6.76 (42)	20.23 (12)
Median	15.17	7.24	-0.51	6.32	15.58

**Comparative Performance**

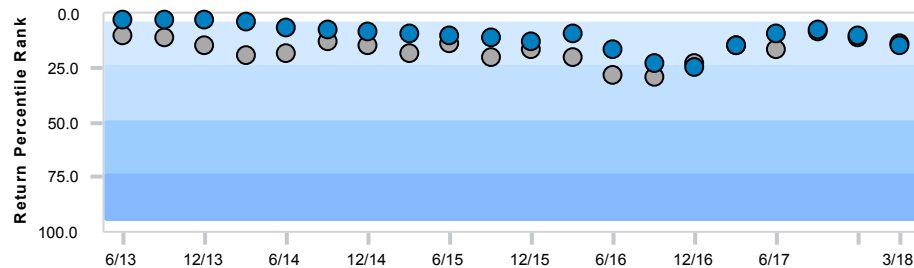
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Firefighters' Total	3.93 (32)	3.34 (50)	3.89 (14)	4.89 (22)	1.46 (19)	3.33 (57)
Sioux Falls Total Policy	3.97 (29)	3.91 (16)	3.14 (41)	4.36 (48)	1.82 (13)	4.29 (13)
All Master Trust - Total Fund Median	3.60	3.34	2.98	4.31	0.48	3.47



### 3 Yr Rolling Under/Over Performance - 5 Years

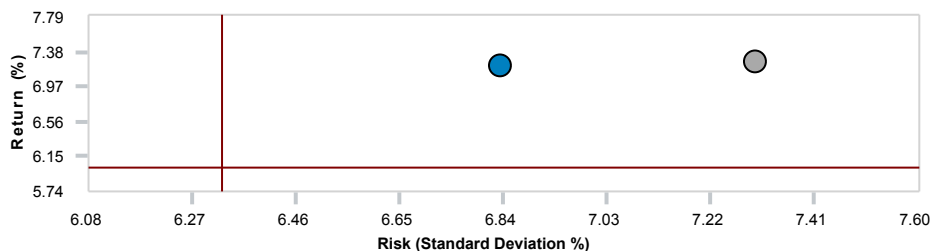


### 3 Yr Rolling Percentile Ranking - 5 Years



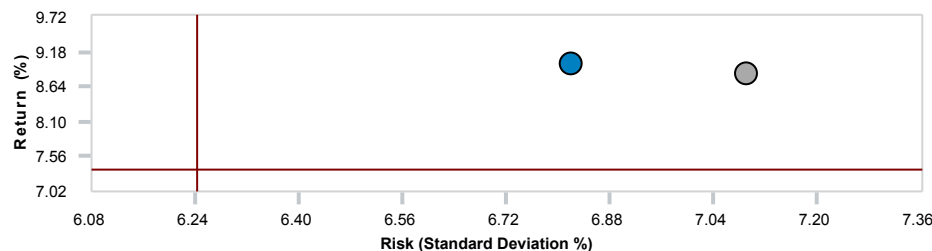
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Firefighters' Total	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
● Sioux Falls Policy	20	18 (90%)	2 (10%)	0 (0%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Firefighters' Total	7.20	6.84
● Sioux Falls Policy	7.25	7.31
— Median	6.01	6.32

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Firefighters' Total	9.00	6.82
● Sioux Falls Policy	8.82	7.09
— Median	7.36	6.24

### Historical Statistics - 3 Years

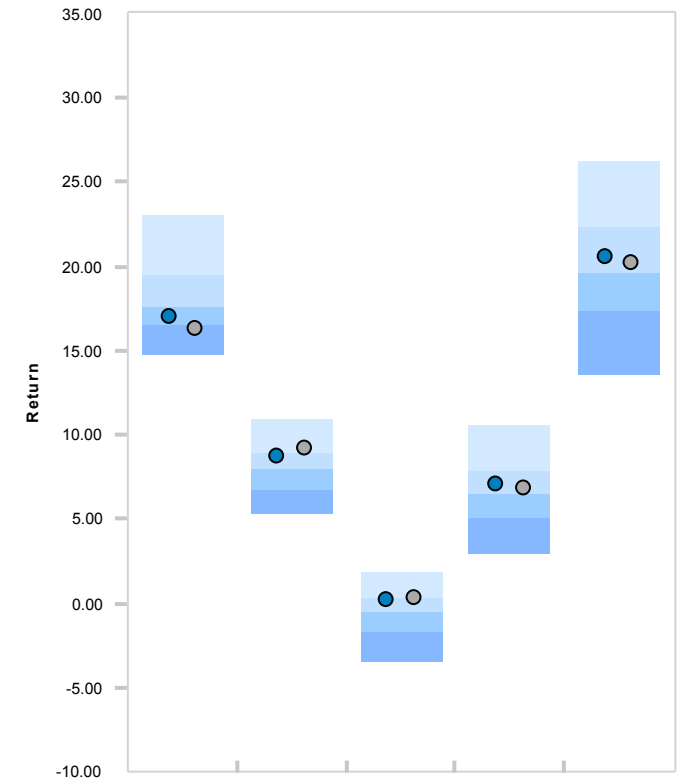
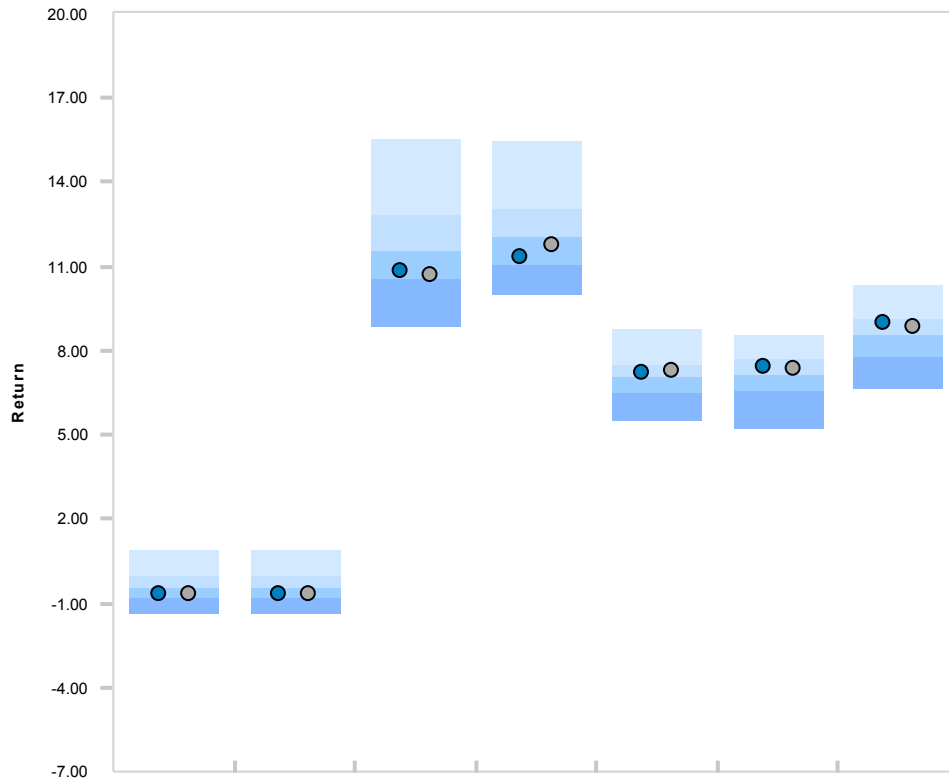
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Firefighters' Total	1.08	94.55	89.79	0.45	-0.08	0.98	0.93	4.17
Sioux Falls Total Policy	0.00	100.00	100.00	0.00	N/A	0.93	1.00	4.48

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Firefighters' Total	0.96	98.15	93.06	0.56	0.16	1.26	0.95	3.80
Sioux Falls Total Policy	0.00	100.00	100.00	0.00	N/A	1.19	1.00	4.00



Peer Group Analysis - Master Trust >=70% Equity



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Firefighters' Total Fund	-0.64 (58)	-0.64 (58)	10.86 (69)	11.30 (72)	7.20 (45)	7.44 (37)	9.00 (30)
● Sioux Falls Policy	-0.68 (63)	-0.68 (63)	10.67 (74)	11.79 (56)	7.25 (41)	7.39 (39)	8.82 (40)
Median	-0.49	-0.49	11.57	12.02	7.05	7.13	8.59

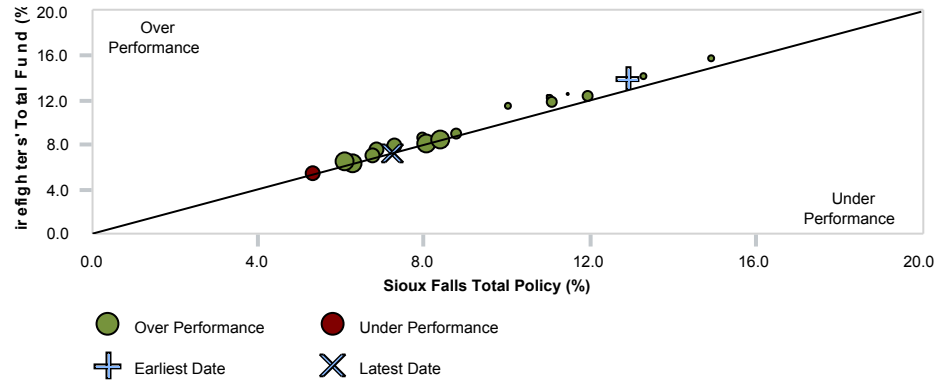
	2017	2016	2015	2014	2013
● Firefighters' Total Fund	17.03 (62)	8.76 (29)	0.15 (31)	7.10 (38)	20.54 (42)
● Sioux Falls Policy	16.29 (83)	9.17 (22)	0.31 (27)	6.76 (43)	20.23 (44)
Median	17.58	8.05	-0.58	6.47	19.66

Comparative Performance

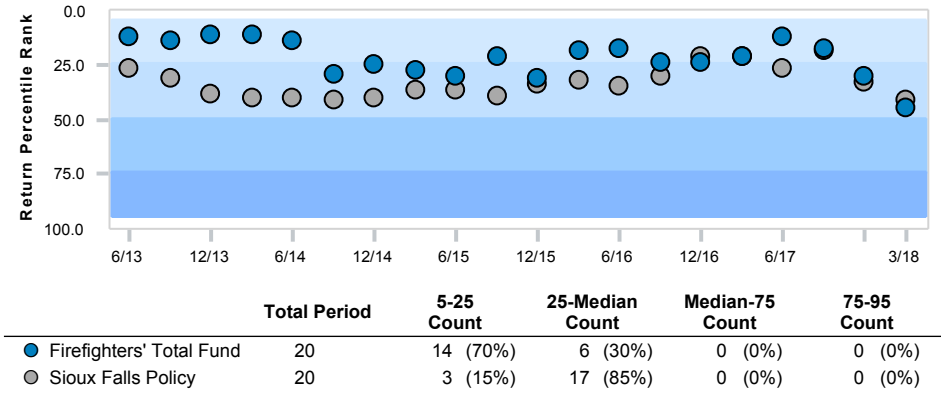
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Firefighters' Total Fund	3.93 (83)	3.34 (88)	3.89 (24)	4.89 (65)	1.46 (42)	3.33 (82)
Sioux Falls Total Policy	3.97 (80)	3.91 (54)	3.14 (72)	4.36 (89)	1.82 (31)	4.29 (38)
Master Trust >=70% Equity Median	4.43	3.94	3.41	5.14	1.27	4.08



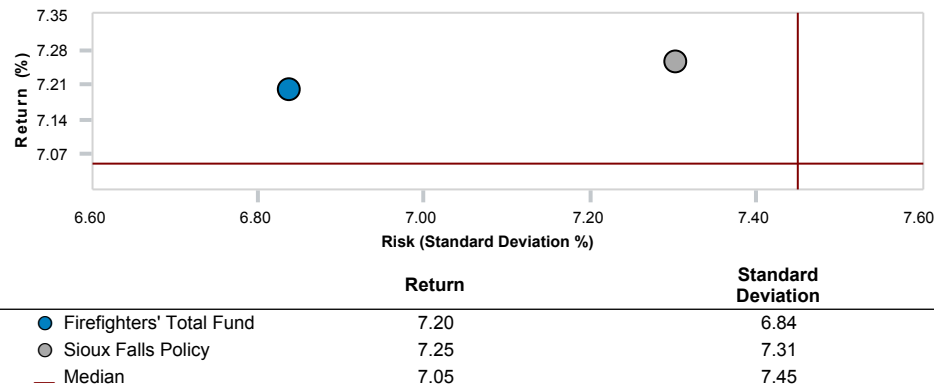
### 3 Yr Rolling Under/Over Performance - 5 Years



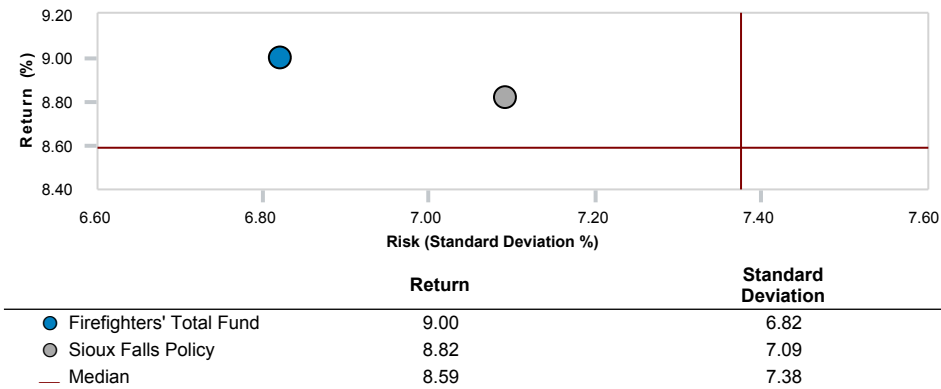
### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

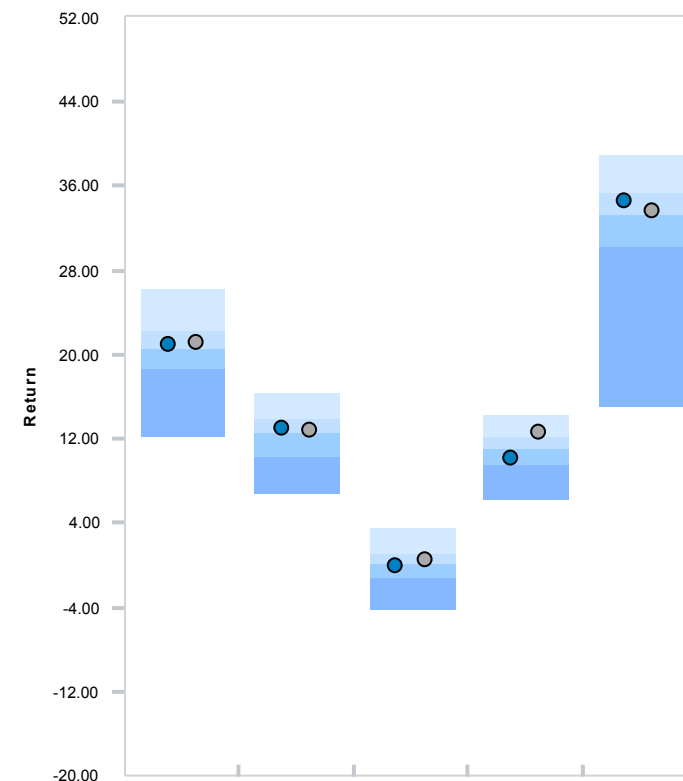
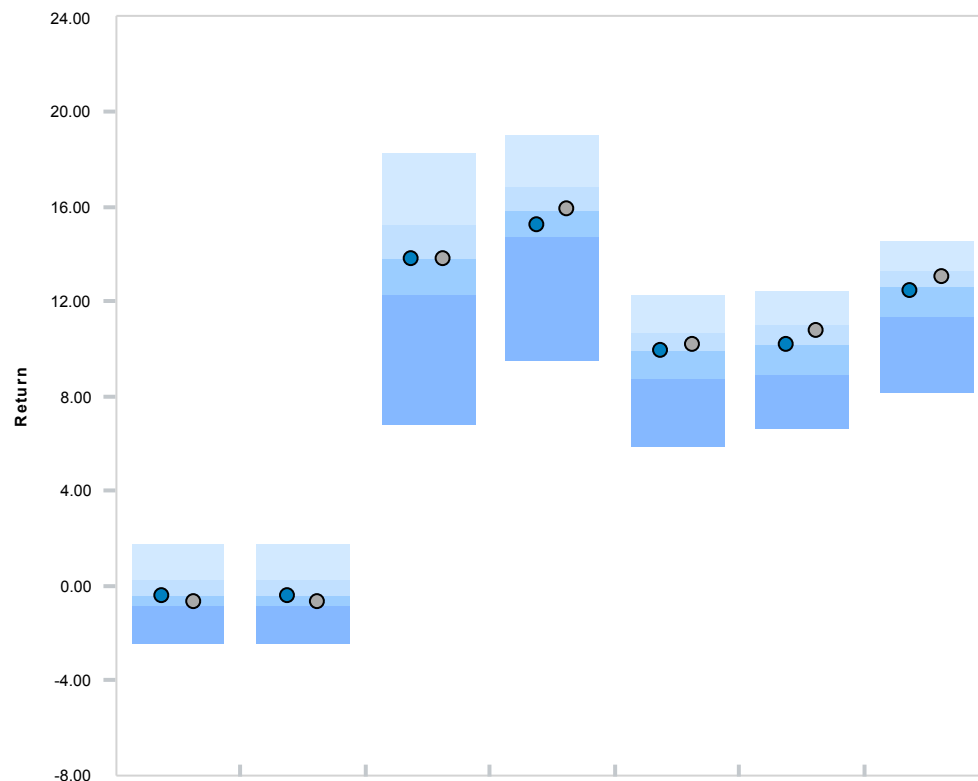
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Firefighters' Total Fund	1.08	94.55	89.79	0.45	-0.08	0.98	0.93	4.17
Sioux Falls Total Policy	0.00	100.00	100.00	0.00	N/A	0.93	1.00	4.48

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Firefighters' Total Fund	0.96	98.15	93.06	0.56	0.16	1.26	0.95	3.80
Sioux Falls Total Policy	0.00	100.00	100.00	0.00	N/A	1.19	1.00	4.00



Peer Group Analysis - All Master Trust-US Equity Segment



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Domestic Eqty	-0.40 (50)	-0.40 (50)	13.78 (51)	15.21 (68)	9.96 (50)	10.18 (51)	12.48 (54)
● Russell 3000	-0.64 (65)	-0.64 (65)	13.81 (51)	15.92 (46)	10.22 (40)	10.76 (34)	13.03 (36)
Median	-0.40	-0.40	13.85	15.81	9.93	10.20	12.61

	2017	2016	2015	2014	2013
● Total Domestic Eqty	20.88 (46)	12.94 (43)	-0.11 (56)	10.16 (64)	34.60 (34)
● Russell 3000	21.13 (42)	12.74 (46)	0.48 (41)	12.56 (21)	33.55 (47)
Median	20.63	12.57	0.14	11.16	33.25

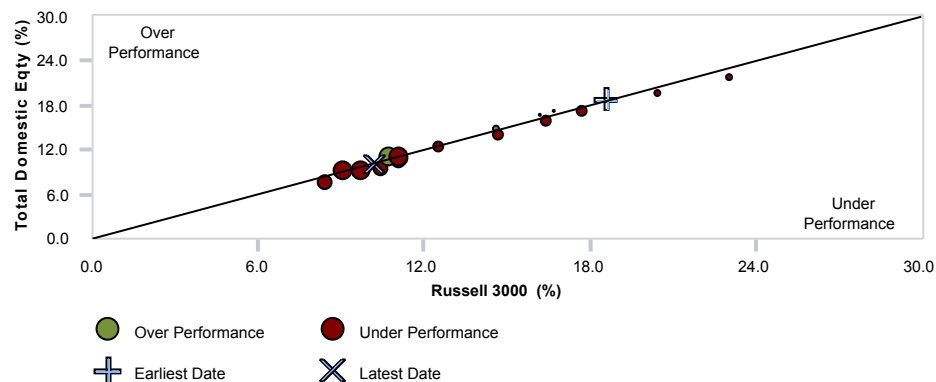
Comparative Performance

	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Total Domestic Eqty	5.68 (68)	3.97 (80)	3.96 (20)	5.82 (41)	4.60 (35)	3.47 (89)
Russell 3000	6.34 (30)	4.57 (45)	3.02 (59)	5.74 (46)	4.21 (44)	4.40 (63)
All Master Trust-US Equity Segment Median	6.02	4.53	3.11	5.68	4.08	4.66

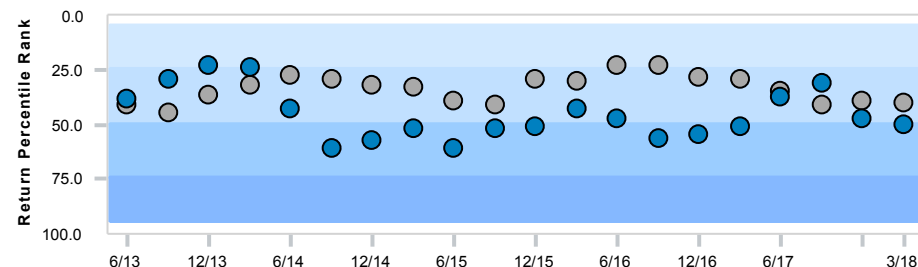




### 3 Yr Rolling Under/Over Performance - 5 Years

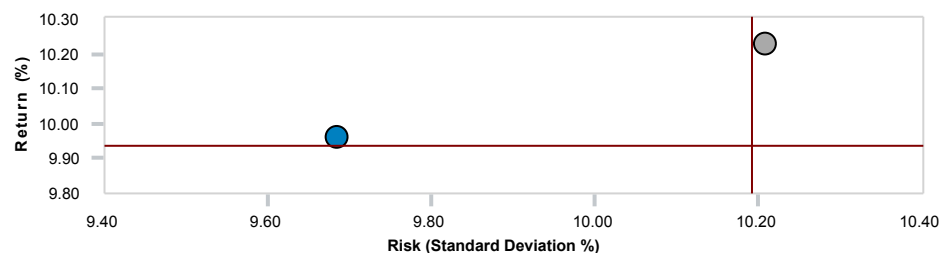


### 3 Yr Rolling Percentile Ranking - 5 Years



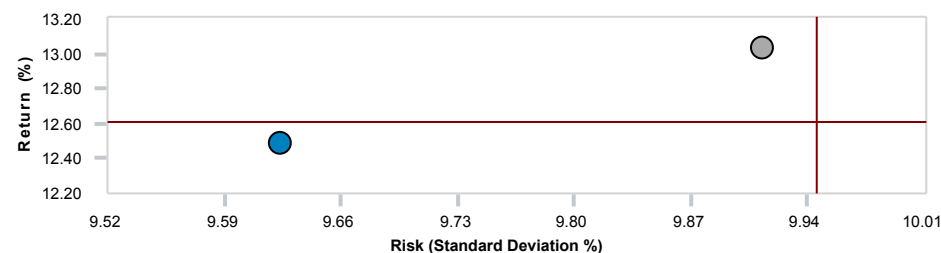
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Total Domestic Eqty	20	2 (10%)	9 (45%)	9 (45%)	0 (0%)
Russell 3000	20	2 (10%)	18 (90%)	0 (0%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Total Domestic Eqty	9.96	9.68
Russell 3000	10.22	10.21
Median	9.93	10.19

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Total Domestic Eqty	12.48	9.62
Russell 3000	13.03	9.91
Median	12.61	9.95

### Historical Statistics - 3 Years

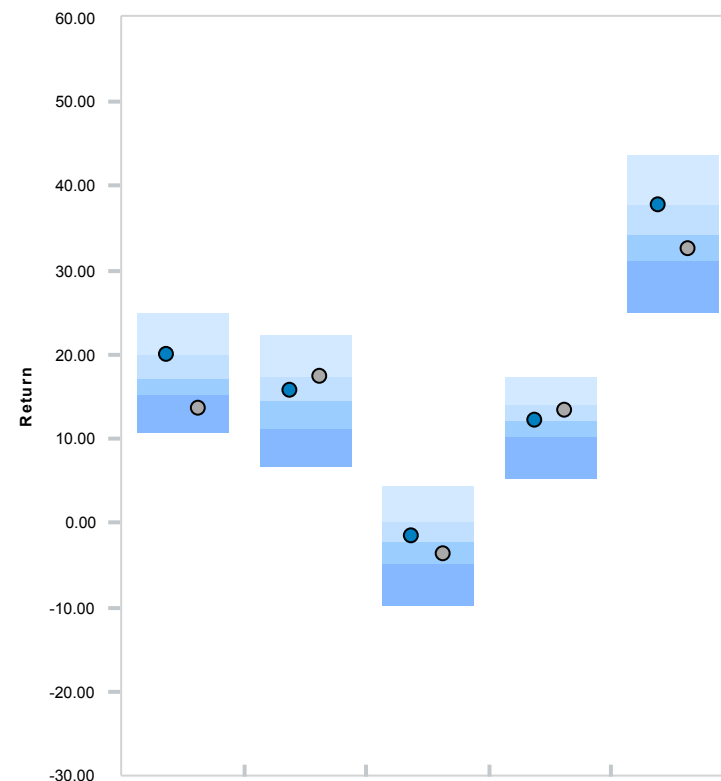
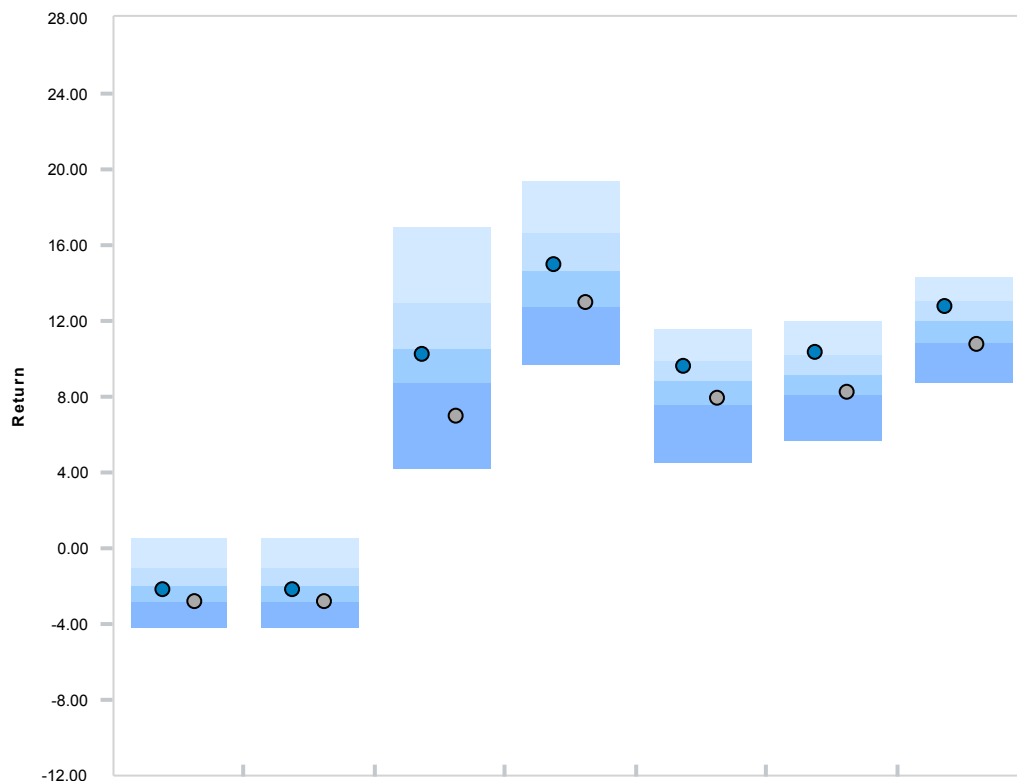
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Domestic Eqty	1.93	93.22	88.60	0.41	-0.15	0.98	0.93	5.62
Russell 3000	0.00	100.00	100.00	0.00	N/A	0.96	1.00	5.95

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Domestic Eqty	1.63	94.84	93.14	0.02	-0.32	1.24	0.96	5.22
Russell 3000	0.00	100.00	100.00	0.00	N/A	1.26	1.00	5.34



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Cooke & Bieler	-2.16 (57)	-2.16 (57)	10.18 (56)	14.98 (44)	9.57 (33)	10.27 (25)	12.71 (32)
● Russell 1000 V	-2.83 (77)	-2.83 (77)	6.95 (89)	12.92 (74)	7.88 (70)	8.24 (73)	10.78 (76)
Median	-1.95	-1.95	10.53	14.61	8.88	9.18	11.99

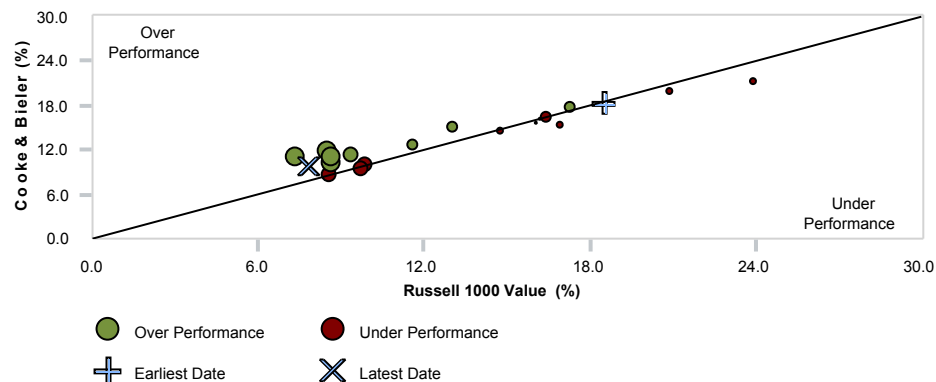
	2017	2016	2015	2014	2013
● Cooke & Bieler	20.02 (25)	15.80 (39)	-1.65 (45)	12.04 (53)	37.64 (27)
● Russell 1000 V	13.66 (88)	17.34 (25)	-3.83 (69)	13.45 (35)	32.53 (62)
Median	17.22	14.58	-2.25	12.24	34.27

Comparative Performance

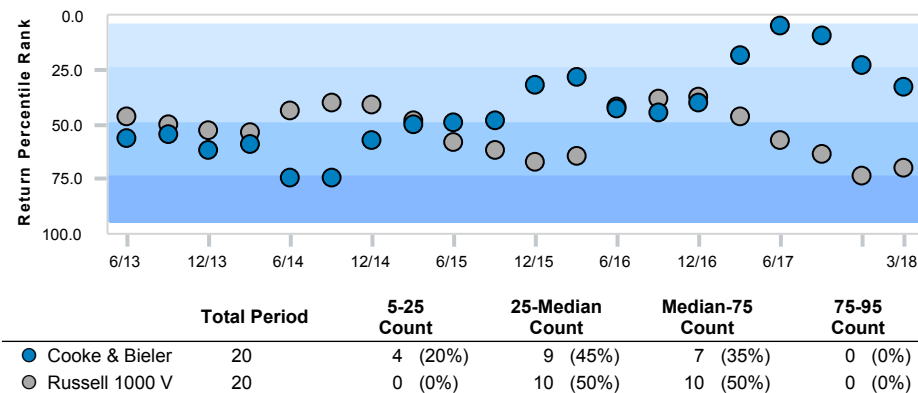
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Cooke & Bieler	4.68 (84)	2.07 (92)	5.39 (3)	6.58 (8)	6.62 (47)	4.41 (45)
Russell 1000 Value	5.33 (74)	3.11 (80)	1.34 (72)	3.27 (70)	6.68 (46)	3.48 (61)
IM U.S. Large Cap Value Equity (SA+CF) Median	6.28	4.10	2.05	3.97	6.48	4.06



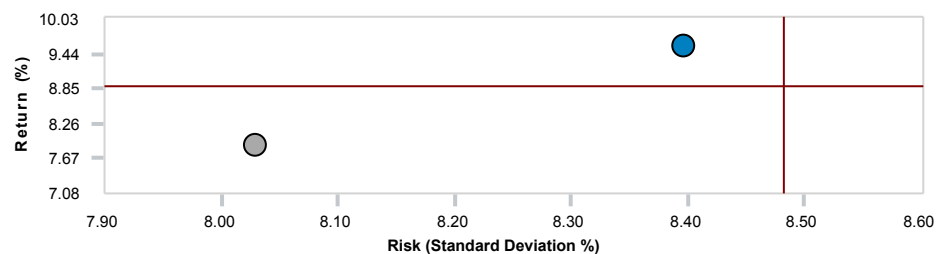
### 3 Yr Rolling Under/Over Performance - 5 Years



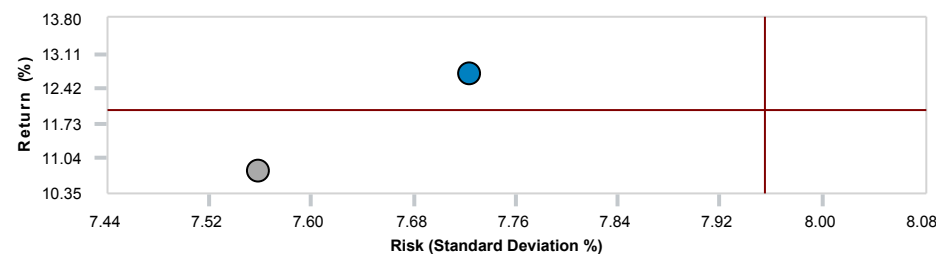
### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

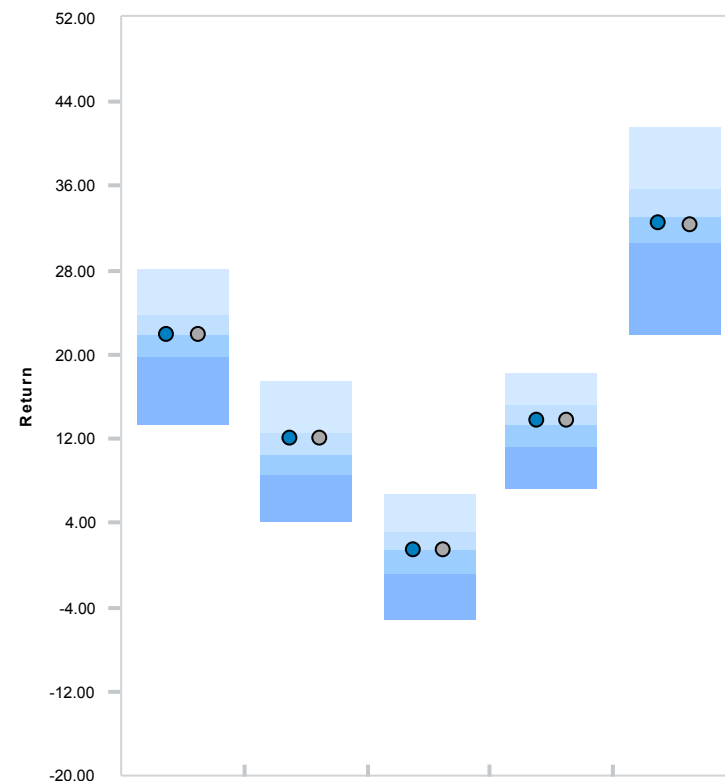
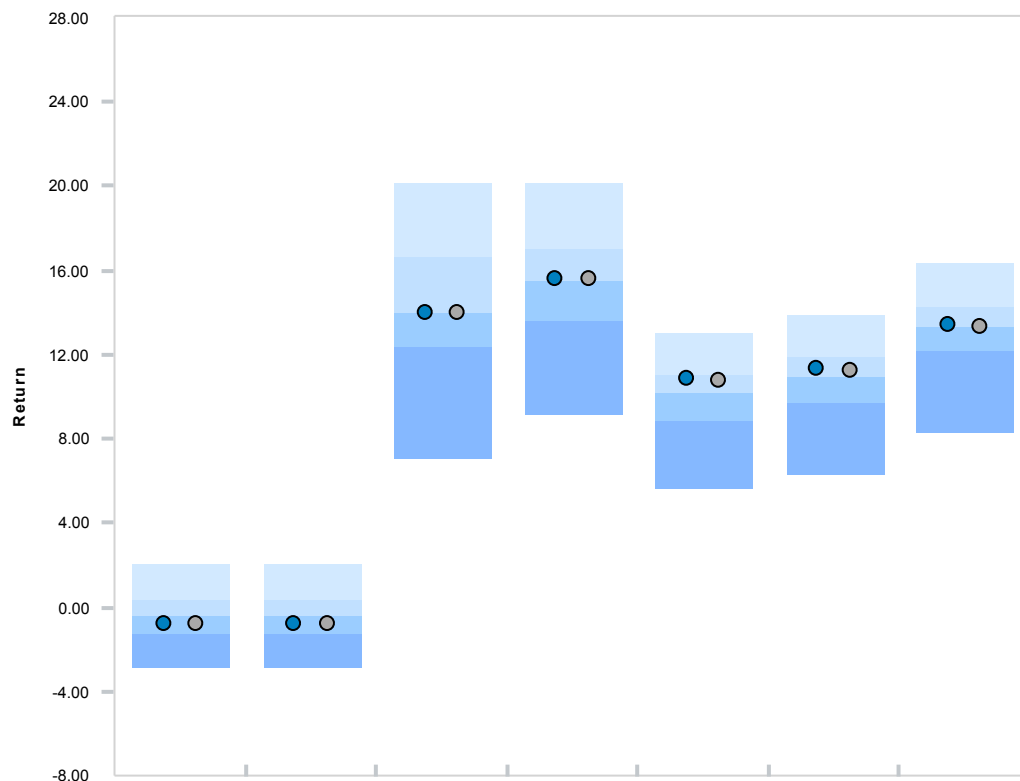
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Cooke & Bieler	3.10	99.44	82.31	1.65	0.52	0.87	1.00	6.33
Russell 1000 Value	0.00	100.00	100.00	0.00	N/A	0.75	1.00	6.07

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Cooke & Bieler	2.91	101.08	83.31	2.02	0.61	1.20	0.98	5.76
Russell 1000 Value	0.00	100.00	100.00	0.00	N/A	1.05	1.00	5.72



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● NTGI S&P 500	-0.76 (65)	-0.76 (65)	13.99 (52)	15.59 (48)	10.84 (31)	11.34 (38)	13.38 (46)
● S&P 500	-0.76 (64)	-0.76 (64)	13.99 (52)	15.57 (49)	10.78 (33)	11.26 (41)	13.31 (52)
Median	-0.44	-0.44	14.02	15.53	10.23	10.93	13.32

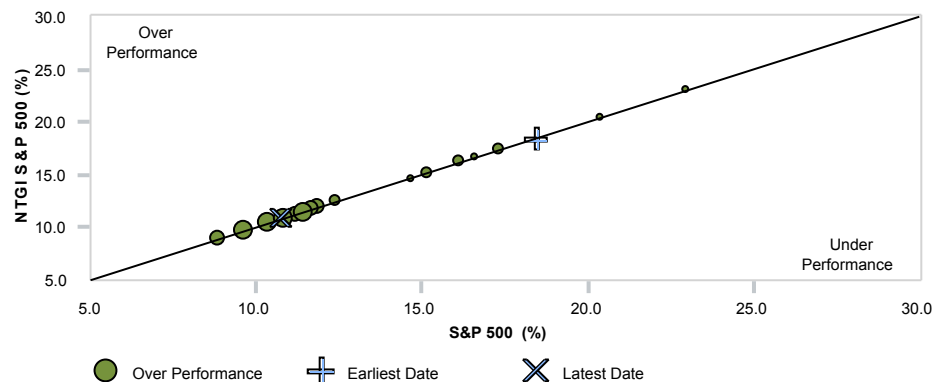
	2017	2016	2015	2014	2013
● NTGI S&P 500	21.83 (50)	12.03 (31)	1.50 (47)	13.82 (42)	32.48 (57)
● S&P 500	21.83 (50)	11.96 (32)	1.38 (51)	13.69 (44)	32.39 (60)
Median	21.82	10.50	1.39	13.43	32.98

**Comparative Performance**

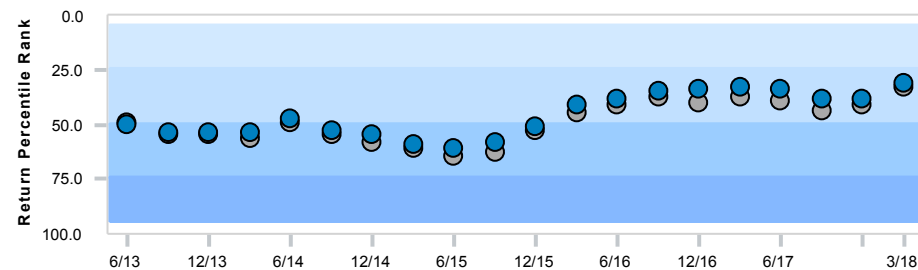
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
NTGI S&P 500	6.66 (51)	4.48 (58)	3.07 (45)	6.07 (45)	3.83 (52)	3.86 (54)
S&P 500	6.64 (52)	4.48 (59)	3.09 (44)	6.07 (45)	3.82 (53)	3.85 (54)
IM U.S. Large Cap Core Equity (SA+CF) Median	6.68	4.61	2.95	5.95	3.93	3.99



3 Yr Rolling Under/Over Performance - 5 Years

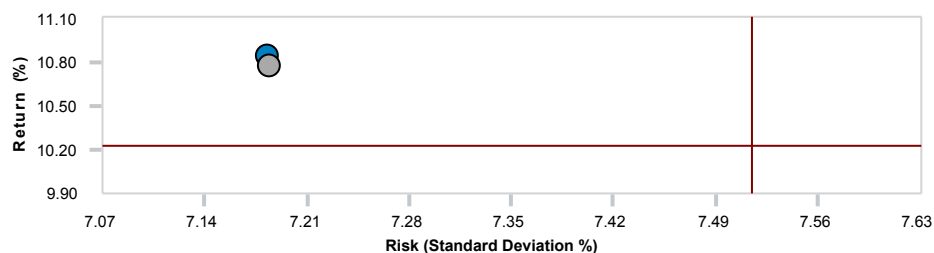


3 Yr Rolling Percentile Ranking - 5 Years



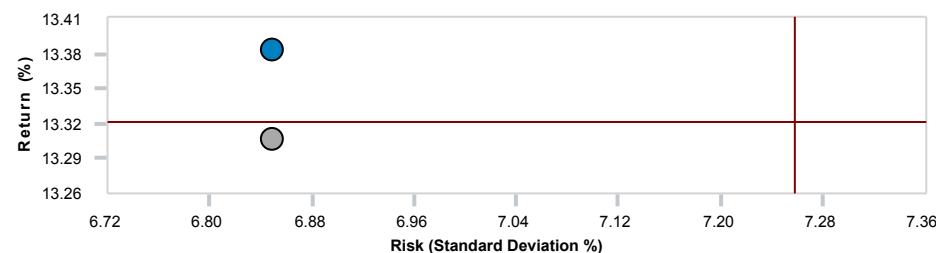
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● NTGI S&P 500	20	0 (0%)	11 (55%)	9 (45%)	0 (0%)
● S&P 500	20	0 (0%)	11 (55%)	9 (45%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● NTGI S&P 500	10.84	7.18
● S&P 500	10.78	7.18
— Median	10.23	7.52

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● NTGI S&P 500	13.38	6.85
● S&P 500	13.31	6.85
— Median	13.32	7.26

Historical Statistics - 3 Years

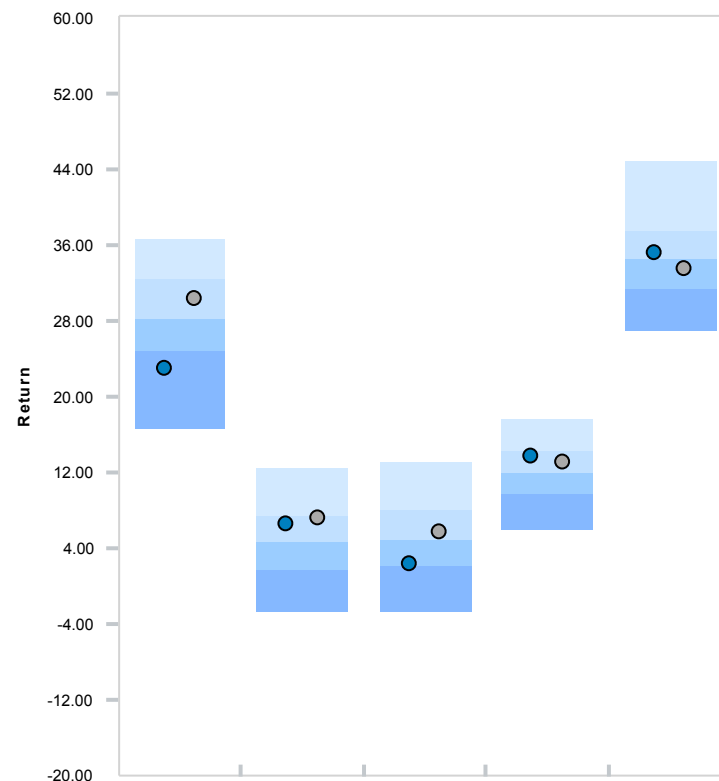
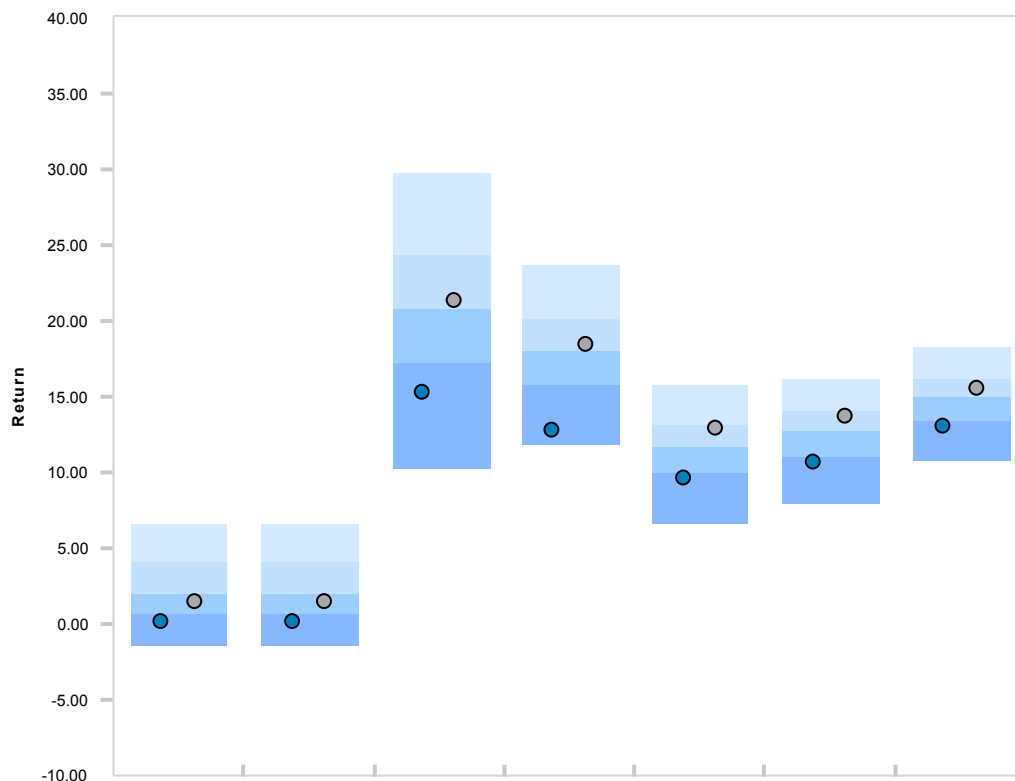
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI S&P 500	0.05	100.14	99.64	0.06	1.17	1.02	1.00	5.67
S&P 500	0.00	100.00	100.00	0.00	N/A	1.02	1.00	5.68

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI S&P 500	0.05	100.15	99.54	0.07	1.43	1.31	1.00	5.17
S&P 500	0.00	100.00	100.00	0.00	N/A	1.30	1.00	5.18



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Sawgrass	0.07 (84)	0.07 (84)	15.32 (84)	12.75 (93)	9.66 (81)	10.63 (82)	13.02 (83)
● Russell 1000 G	1.42 (61)	1.42 (61)	21.25 (46)	18.47 (45)	12.90 (30)	13.69 (32)	15.53 (39)
Median	1.99	1.99	20.83	18.08	11.66	12.82	15.03

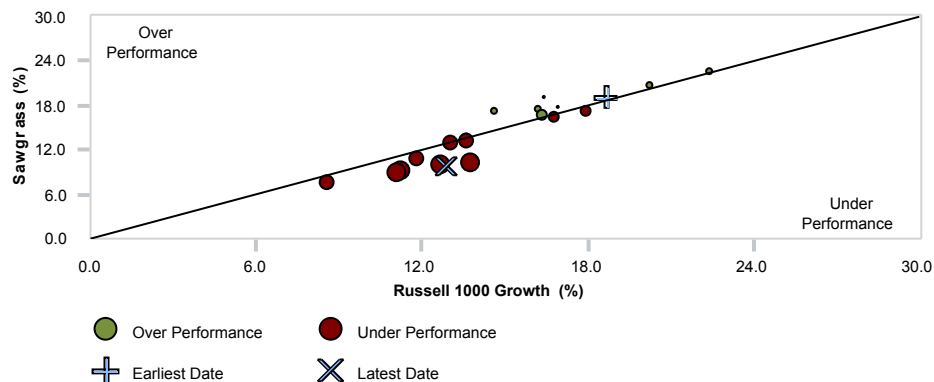
	2017	2016	2015	2014	2013
● Sawgrass	23.01 (84)	6.49 (34)	2.24 (74)	13.77 (32)	35.25 (45)
● Russell 1000 G	30.21 (38)	7.08 (27)	5.67 (45)	13.05 (39)	33.48 (59)
Median	28.21	4.65	4.93	11.91	34.52

Comparative Performance

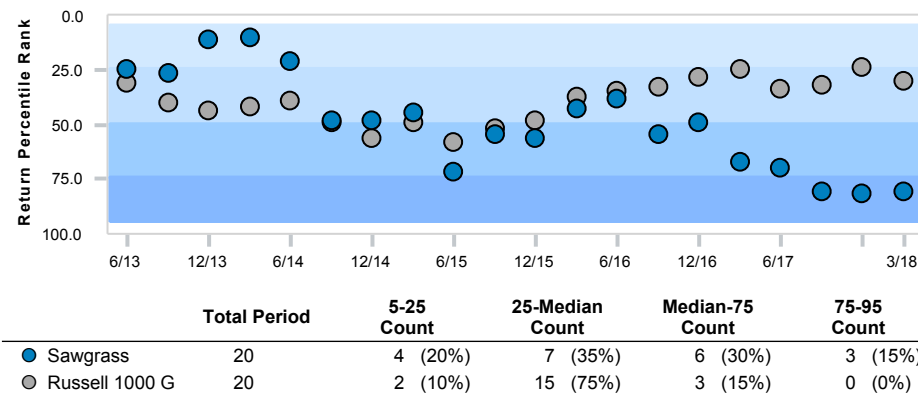
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Sawgrass	7.34 (35)	4.01 (79)	3.23 (85)	6.73 (82)	1.51 (32)	0.31 (100)
Russell 1000 Growth	7.86 (22)	5.90 (34)	4.67 (56)	8.91 (47)	1.01 (39)	4.58 (61)
IM U.S. Large Cap Growth Equity (SA+CF) Median	6.92	5.42	4.99	8.73	0.24	5.16



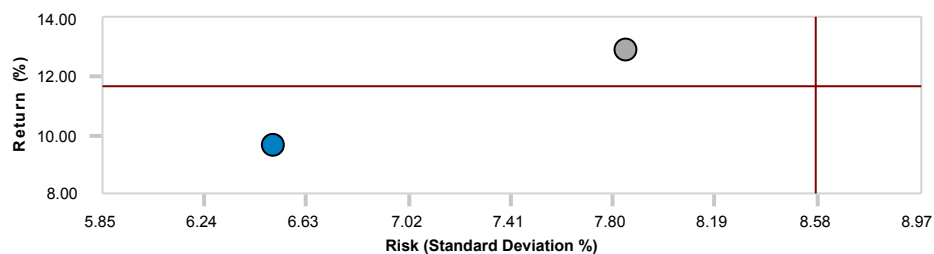
3 Yr Rolling Under/Over Performance - 5 Years



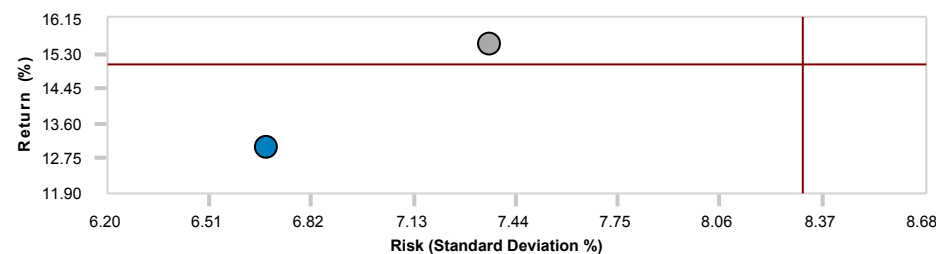
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

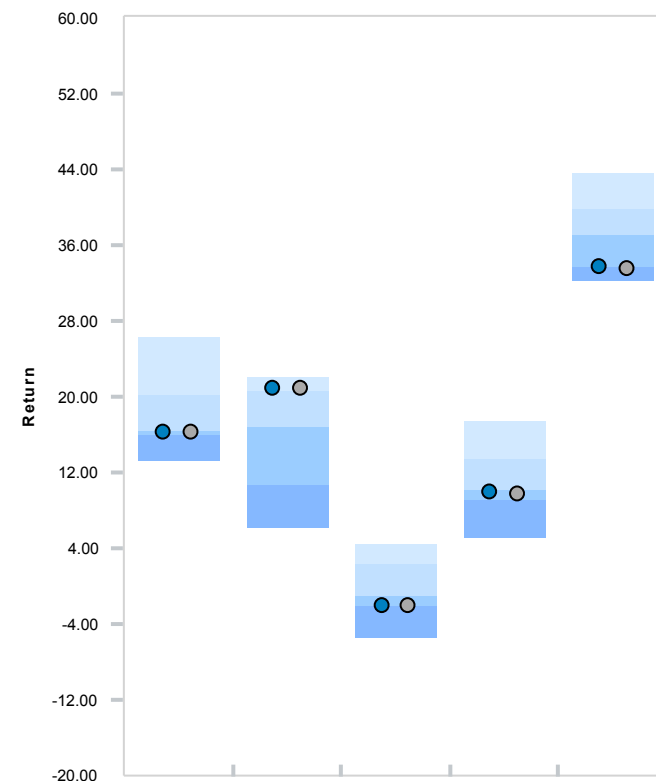
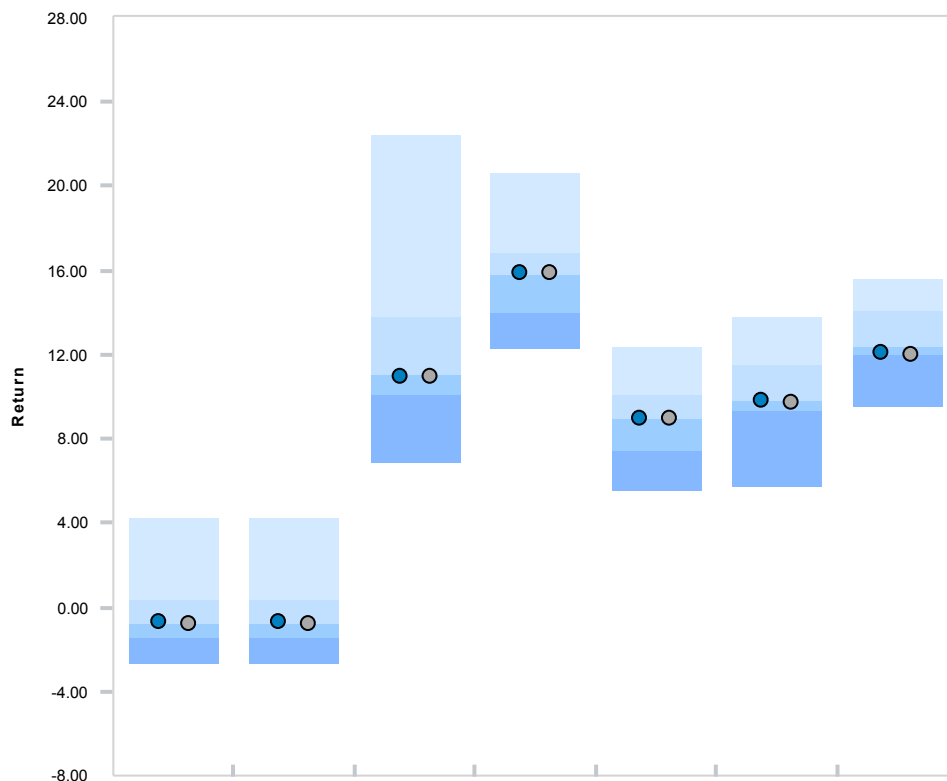
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Sawgrass	3.79	78.31	82.03	-0.39	-0.82	1.01	0.79	4.95
Russell 1000 Growth	0.00	100.00	100.00	0.00	N/A	1.13	1.00	5.79

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Sawgrass	3.40	83.70	82.50	0.29	-0.69	1.37	0.82	4.41
Russell 1000 Growth	0.00	100.00	100.00	0.00	N/A	1.42	1.00	5.01



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● NTGI S&P 400	-0.75 (46)	-0.75 (46)	10.94 (62)	15.84 (47)	9.00 (41)	9.81 (48)	12.04 (63)
● S&P MidCap 400 Index	-0.77 (54)	-0.77 (54)	10.97 (58)	15.84 (47)	8.96 (50)	9.76 (61)	11.97 (72)
Median	-0.76	-0.76	11.04	15.82	8.96	9.78	12.39

	2017	2016	2015	2014	2013
● NTGI S&P 400	16.20 (74)	20.79 (19)	-2.08 (66)	9.83 (56)	33.75 (76)
● S&P MidCap 400 Index	16.24 (68)	20.74 (23)	-2.18 (75)	9.77 (66)	33.50 (85)
Median	16.49	16.80	-0.98	10.17	37.10

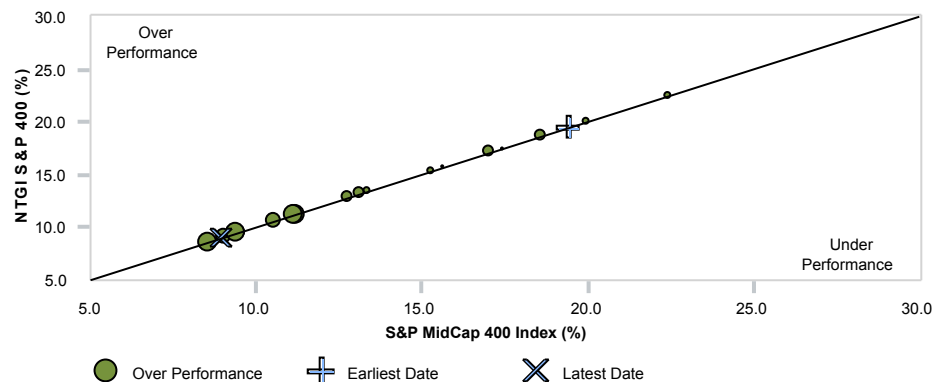
**Comparative Performance**

	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
NTGI S&P 400	6.27 (53)	3.24 (56)	1.89 (67)	3.95 (70)	7.39 (44)	4.17 (58)
S&P MidCap 400 Index	6.25 (59)	3.22 (65)	1.97 (57)	3.94 (75)	7.42 (35)	4.14 (62)
IM U.S. Mid Cap Core Equity (SA+CF) Median	6.27	3.47	1.98	4.70	6.82	4.52

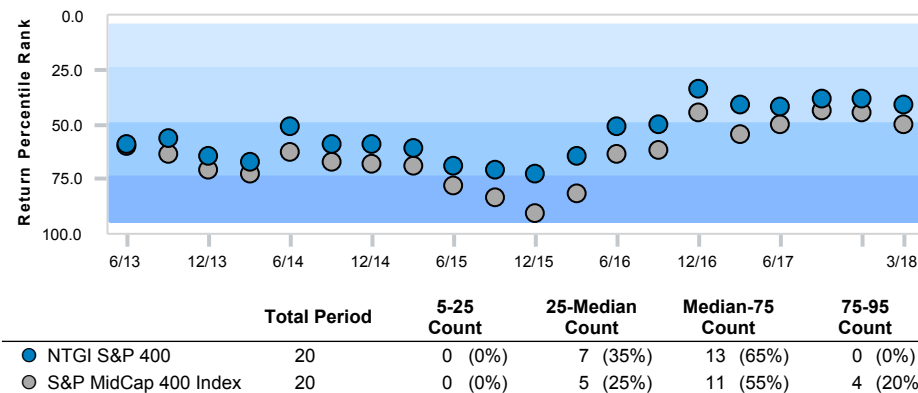




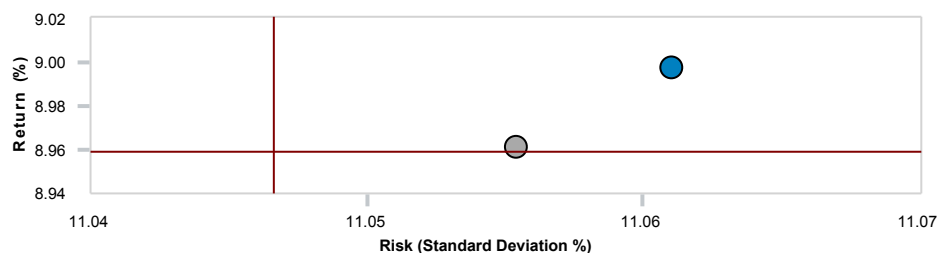
3 Yr Rolling Under/Over Performance - 5 Years



3 Yr Rolling Percentile Ranking - 5 Years

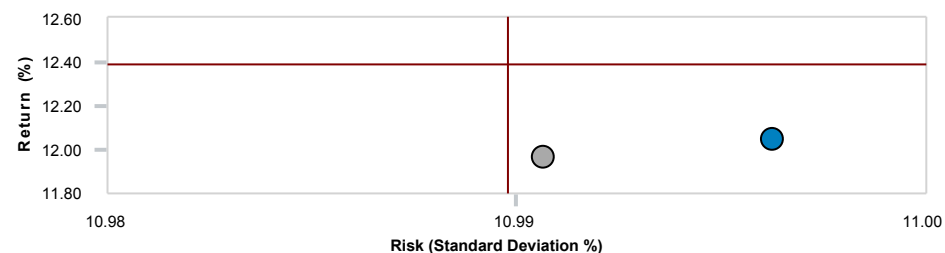


Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● NTGI S&P 400	9.00	11.06
● S&P MidCap 400 Index	8.96	11.06
— Median	8.96	11.05

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● NTGI S&P 400	12.04	11.00
● S&P MidCap 400 Index	11.97	10.99
— Median	12.39	10.99

Historical Statistics - 3 Years

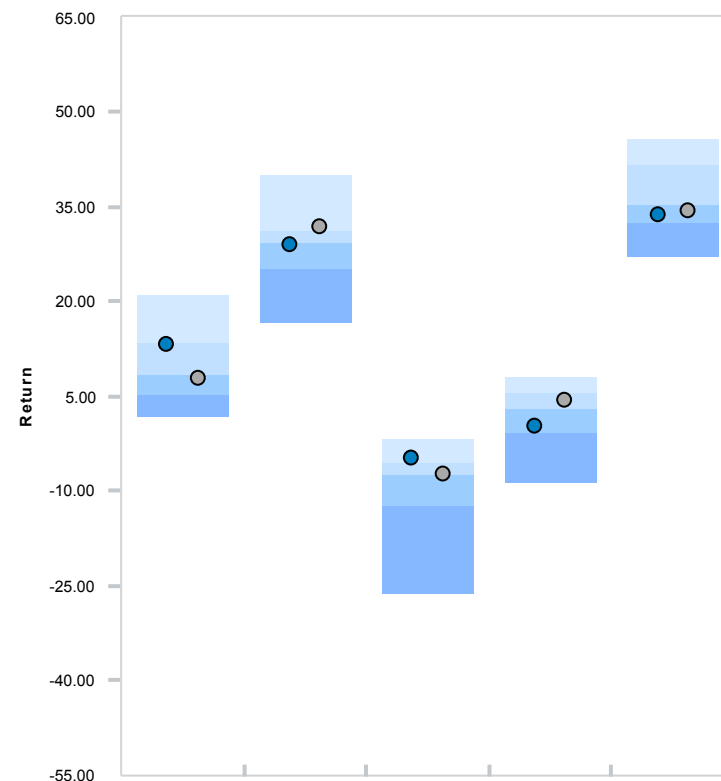
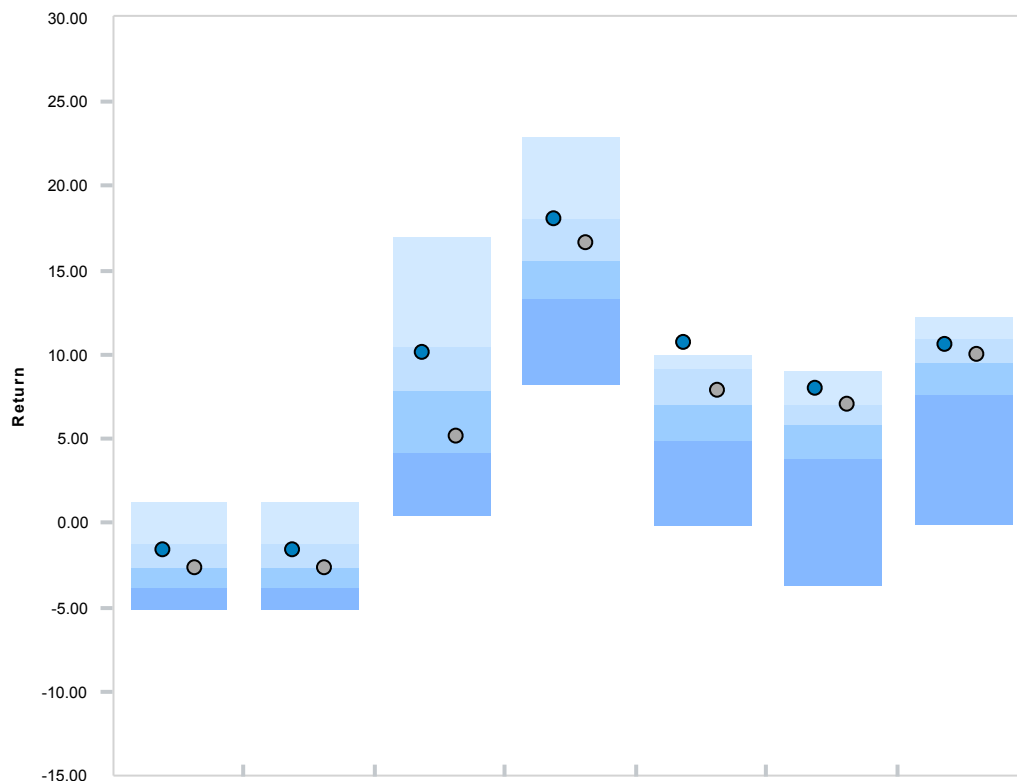
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI S&P 400	0.06	100.10	99.87	0.03	0.60	0.79	1.00	6.45
S&P MidCap 400 Index	0.00	100.00	100.00	0.00	N/A	0.79	1.00	6.46

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI S&P 400	0.06	100.18	99.72	0.06	1.23	1.07	1.00	6.15
S&P MidCap 400 Index	0.00	100.00	100.00	0.00	N/A	1.06	1.00	6.16



**Peer Group Analysis - IM U.S. Small Cap Value Equity (MF)**



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● T Rowe Price	-1.61 (35)	-1.61 (35)	10.09 (29)	18.08 (25)	10.67 (3)	7.99 (17)	10.57 (37)
● Russell 2000 V	-2.64 (48)	-2.64 (48)	5.13 (67)	16.62 (45)	7.87 (42)	6.99 (28)	9.96 (48)
Median	-2.71	-2.71	7.86	15.51	7.04	5.88	9.48

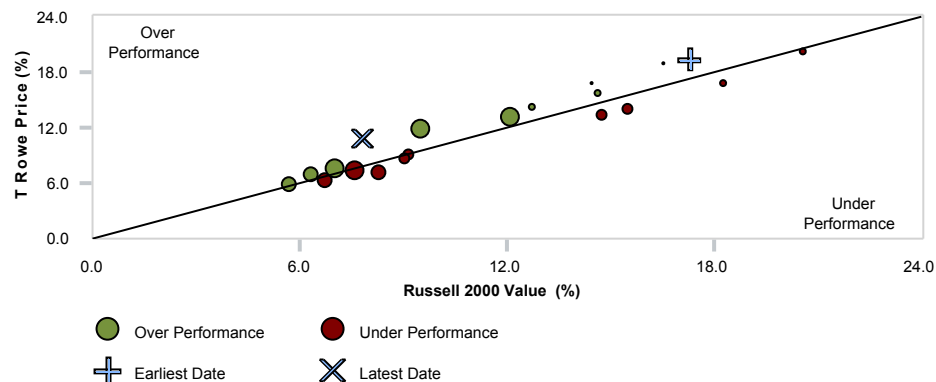
	2017	2016	2015	2014	2013
● T Rowe Price	13.36 (26)	28.97 (53)	-4.70 (17)	0.14 (70)	33.84 (62)
● Russell 2000 V	7.84 (55)	31.74 (21)	-7.47 (53)	4.22 (37)	34.52 (54)
Median	8.46	29.23	-7.33	3.12	35.18

**Comparative Performance**

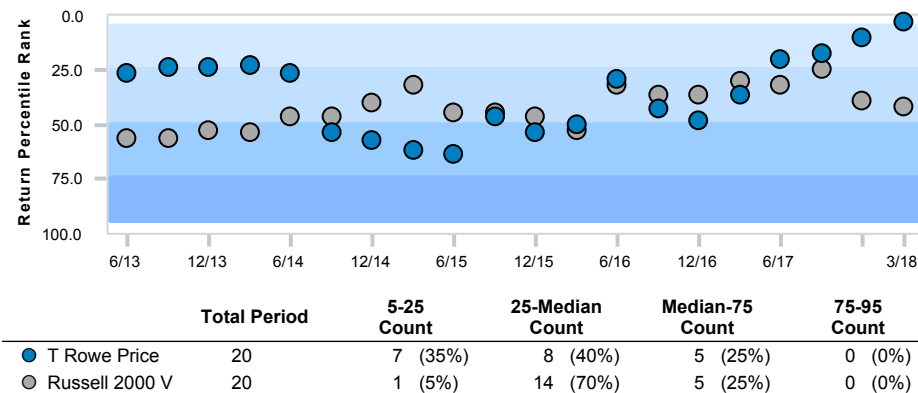
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
T Rowe Price	3.29 (44)	5.90 (44)	2.30 (26)	1.31 (18)	12.71 (52)	6.45 (77)
Russell 2000 Value	2.05 (74)	5.11 (64)	0.67 (54)	-0.13 (34)	14.07 (29)	8.87 (48)
IM U.S. Small Cap Value Equity (MF) Median	3.02	5.61	0.84	-0.92	12.98	8.63



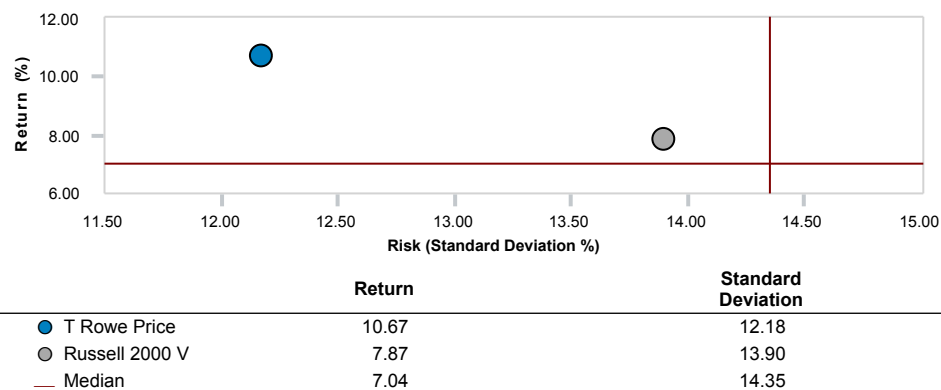
3 Yr Rolling Under/Over Performance - 5 Years



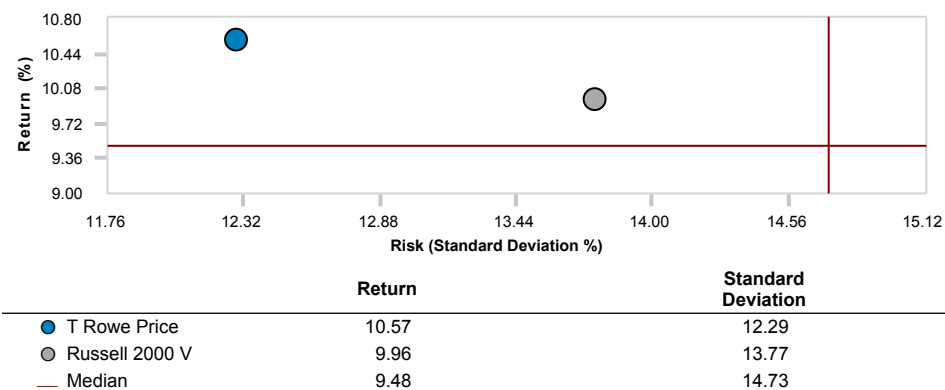
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

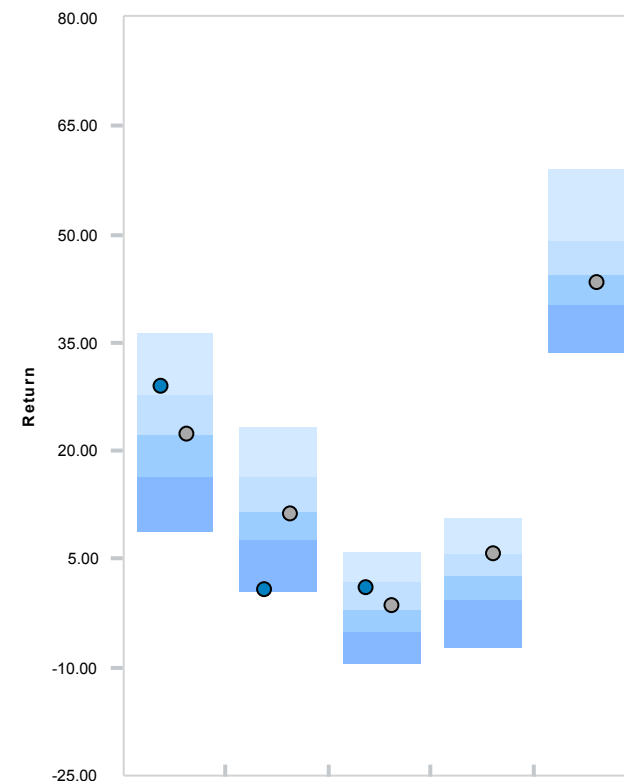
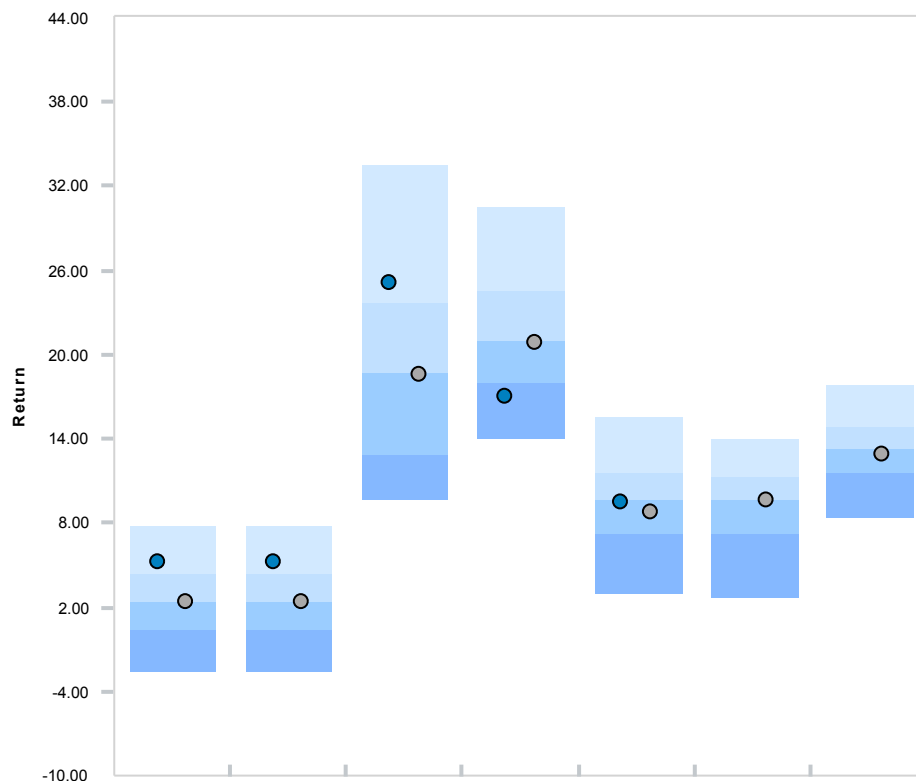
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
T Rowe Price	2.93	96.38	77.06	3.61	0.81	0.86	0.86	6.41
Russell 2000 Value	0.00	100.00	100.00	0.00	N/A	0.58	1.00	7.63

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
T Rowe Price	2.70	93.14	85.37	1.65	0.14	0.86	0.88	6.98
Russell 2000 Value	0.00	100.00	100.00	0.00	N/A	0.74	1.00	7.95



Peer Group Analysis - IM U.S. Small Cap Growth Equity (SA+CF+MF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Summit Creek	5.19 (18)	5.19 (18)	25.15 (20)	16.93 (85)	9.45 (53)	N/A	N/A
● Russell 2000 Growth Index	2.30 (52)	2.30 (52)	18.63 (51)	20.81 (54)	8.77 (61)	9.58 (52)	12.90 (58)
Median	2.40	2.40	18.76	21.05	9.61	9.62	13.31

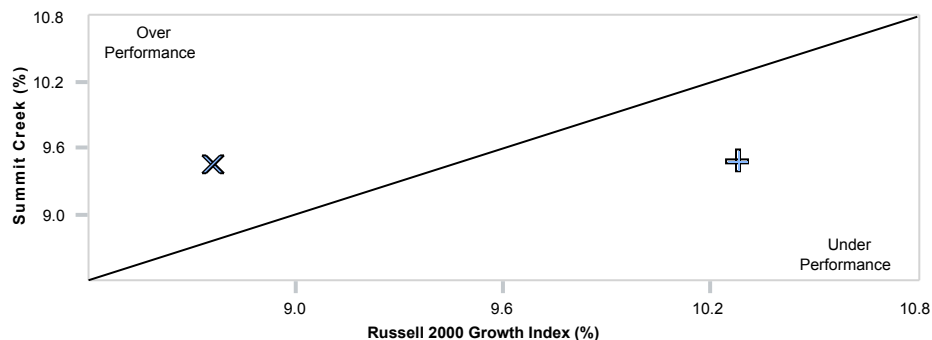
	2017	2016	2015	2014	2013
● Summit Creek	28.90 (18)	0.83 (95)	0.95 (30)	N/A	N/A
● Russell 2000 Growth Index	22.17 (52)	11.32 (54)	-1.38 (46)	5.60 (25)	43.30 (58)
Median	22.23	11.46	-2.02	2.57	44.47

Comparative Performance

	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Summit Creek	3.68 (64)	6.10 (49)	8.16 (11)	8.34 (12)	-2.11 (94)	4.64 (94)
Russell 2000 Growth Index	4.59 (52)	6.22 (47)	4.39 (60)	5.35 (51)	3.57 (44)	9.22 (40)
IM U.S. Small Cap Growth Equity (SA+CF+MF) Median	4.63	6.01	5.00	5.42	3.19	8.45

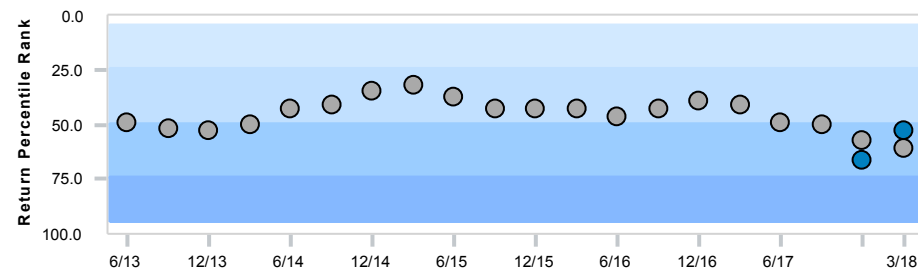


### 3 Yr Rolling Under/Over Performance - 5 Years



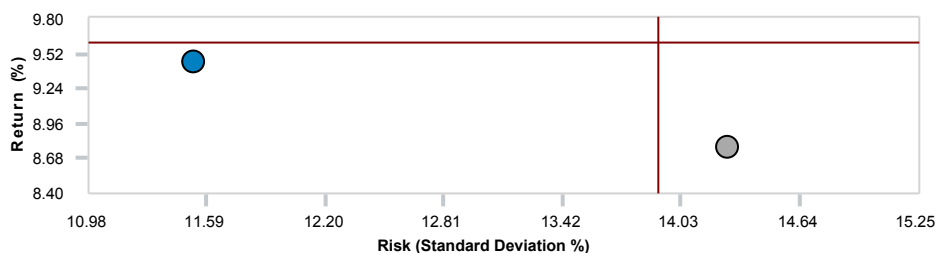
+ Earliest Date X Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



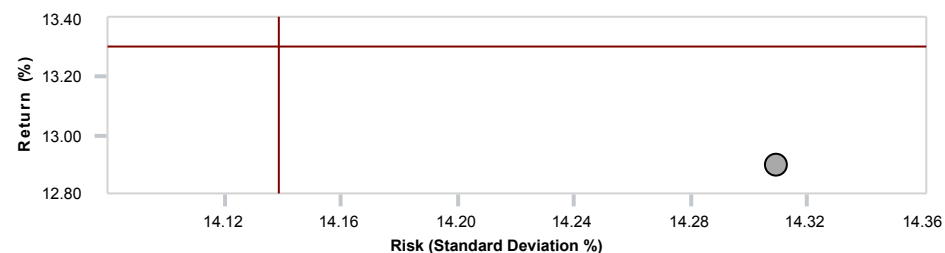
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Summit Creek	2	0 (0%)	0 (0%)	2 (100%)	0 (0%)
Russell 2000 Growth Index	20	0 (0%)	16 (80%)	4 (20%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Summit Creek	9.45	11.52
Russell 2000 Growth Index	8.77	14.27
Median	9.61	13.91

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Summit Creek	N/A	N/A
Russell 2000 Growth Index	12.90	14.31
Median	13.31	14.14

### Historical Statistics - 3 Years

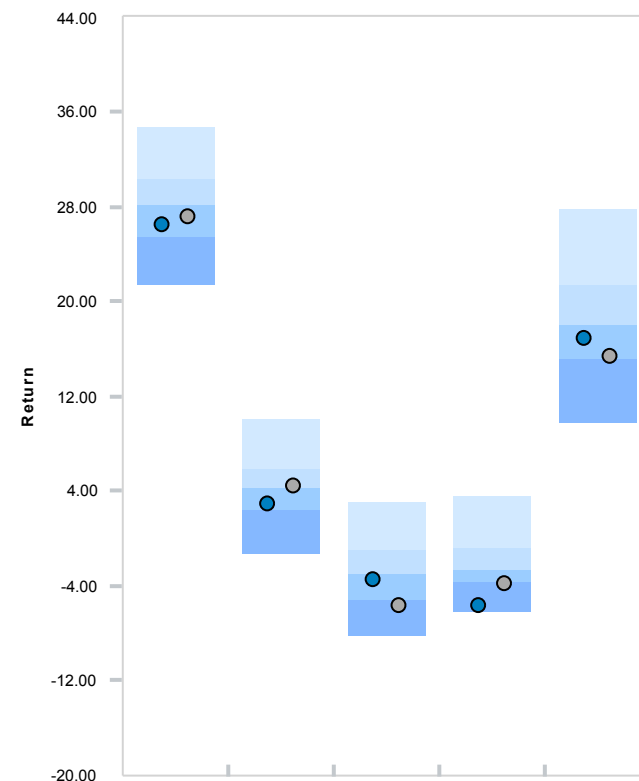
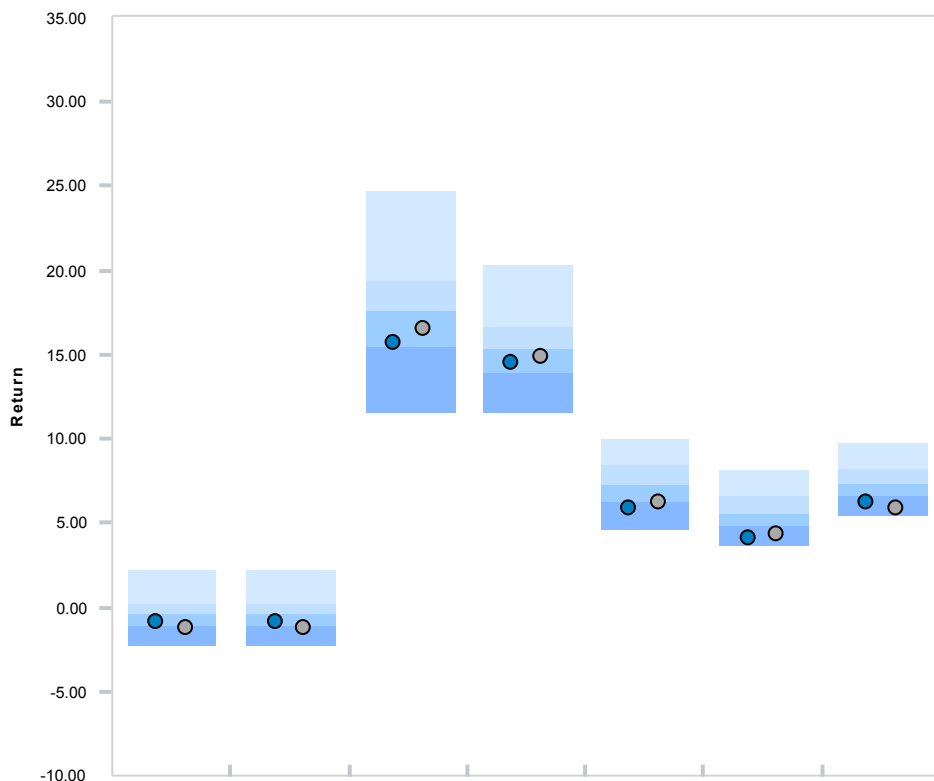
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Summit Creek	6.50	81.54	67.67	2.94	0.04	0.80	0.72	7.96
Russell 2000 Growth Index	0.00	100.00	100.00	0.00	N/A	0.63	1.00	9.91

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Summit Creek	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2000 Growth Index	0.00	100.00	100.00	0.00	N/A	0.90	1.00	9.00



Peer Group Analysis - All Master Trust-Intl. Equity Segment



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Int'l Eqty	-0.84 (67)	-0.84 (67)	15.75 (72)	14.49 (65)	5.86 (82)	4.09 (89)	6.22 (85)
● MSCI AC Wd exUSA-Net	-1.18 (77)	-1.18 (77)	16.53 (63)	14.82 (60)	6.18 (77)	4.34 (85)	5.89 (93)
Median	-0.41	-0.41	17.64	15.37	7.29	5.57	7.33

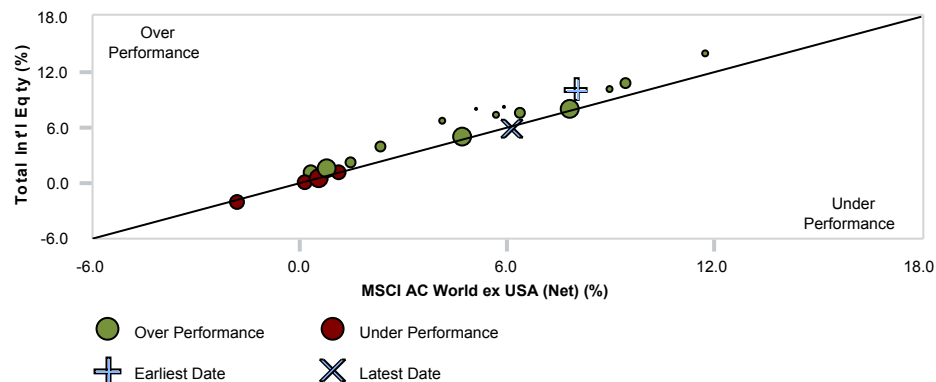
	2017	2016	2015	2014	2013
● Total Int'l Eqty	26.47 (68)	2.97 (68)	-3.49 (59)	-5.66 (95)	16.89 (60)
● MSCI AC Wd exUSA-Net	27.19 (62)	4.50 (48)	-5.66 (82)	-3.87 (79)	15.29 (74)
Median	28.11	4.23	-3.03	-2.62	18.14

Comparative Performance

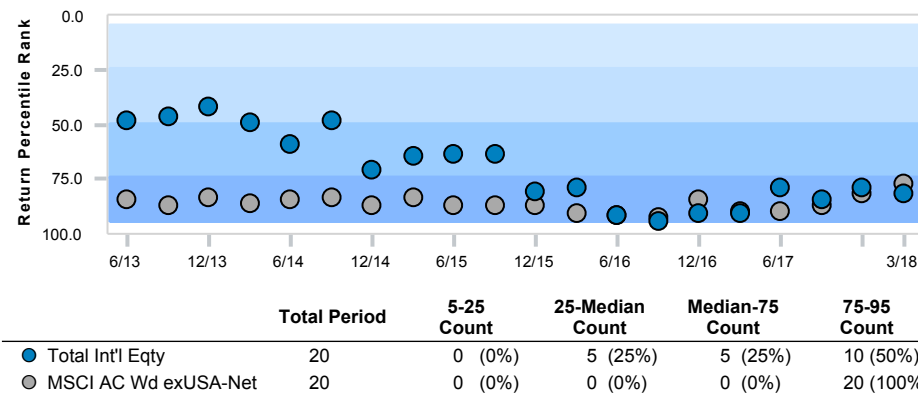
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Total Int'l Eqty	4.07 (79)	5.05 (85)	6.78 (31)	8.34 (51)	-0.85 (24)	7.13 (32)
MSCI AC World ex USA (Net)	5.00 (42)	6.16 (44)	5.78 (69)	7.86 (68)	-1.25 (34)	6.91 (44)
All Master Trust-Intl. Equity Segment Median	4.81	6.01	6.20	8.35	-1.85	6.78



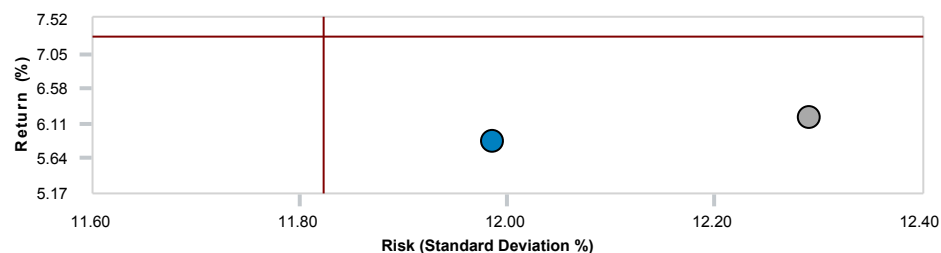
### 3 Yr Rolling Under/Over Performance - 5 Years



### 3 Yr Rolling Percentile Ranking - 5 Years

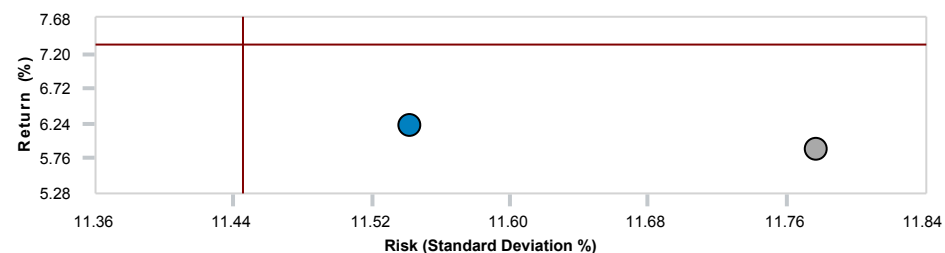


### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Total Int'l Eqty	5.86	11.99
MSCI AC Wd exUSA-Net	6.18	12.29
Median	7.29	11.82

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Total Int'l Eqty	6.22	11.54
MSCI AC Wd exUSA-Net	5.89	11.78
Median	7.33	11.44

### Historical Statistics - 3 Years

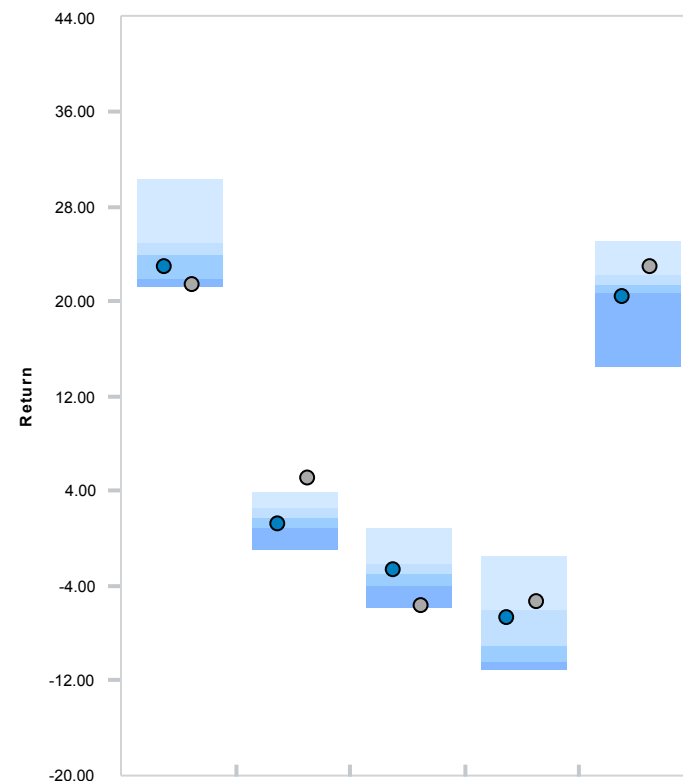
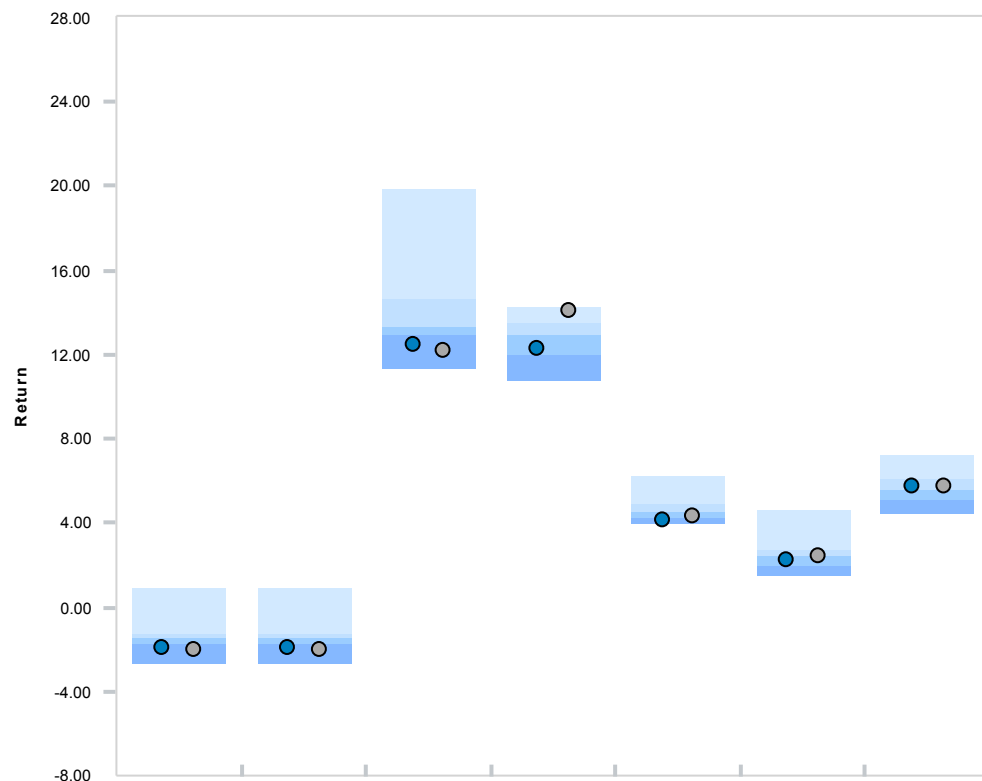
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Int'l Eqty	1.92	95.73	96.15	-0.10	-0.18	0.50	0.96	7.64
MSCI AC World ex USA (Net)	0.00	100.00	100.00	0.00	N/A	0.51	1.00	7.82

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Int'l Eqty	2.21	97.71	94.46	0.53	0.13	0.56	0.96	7.20
MSCI AC World ex USA (Net)	0.00	100.00	100.00	0.00	N/A	0.52	1.00	7.37



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Templeton	-1.91 (77)	-1.91 (77)	12.48 (85)	12.29 (72)	4.14 (80)	2.22 (61)	5.69 (47)
● MSCI EAFE V (Net)	-2.03 (77)	-2.03 (77)	12.19 (89)	14.07 (8)	4.29 (64)	2.45 (43)	5.78 (46)
Median	-1.49	-1.49	13.34	12.96	4.49	2.39	5.56

	2017	2016	2015	2014	2013
● Templeton	22.97 (61)	1.30 (62)	-2.67 (39)	-6.78 (36)	20.47 (82)
● MSCI EAFE V (Net)	21.44 (83)	5.02 (3)	-5.68 (89)	-5.39 (15)	22.95 (16)
Median	23.93	1.68	-2.97	-9.08	21.36

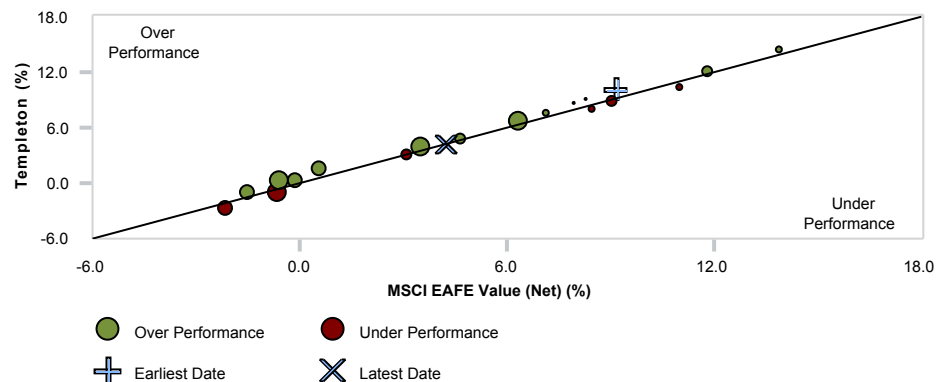
Comparative Performance

	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Templeton	3.64 (50)	4.76 (98)	5.61 (38)	7.24 (37)	0.95 (45)	7.27 (3)
MSCI EAFE Value (Net)	3.24 (73)	5.87 (68)	4.78 (67)	6.05 (77)	4.17 (3)	7.99 (1)
IM International Large Cap Value Equity (MF) Median	3.63	6.03	5.13	6.97	0.90	6.26

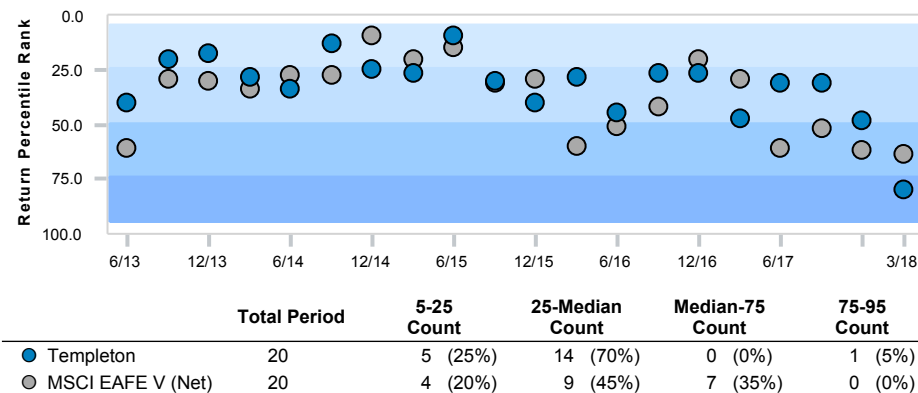




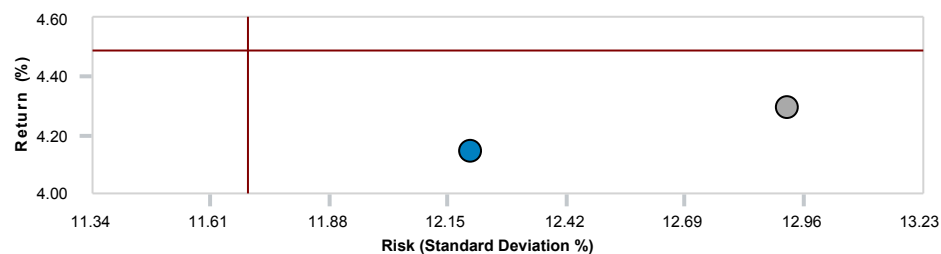
### 3 Yr Rolling Under/Over Performance - 5 Years



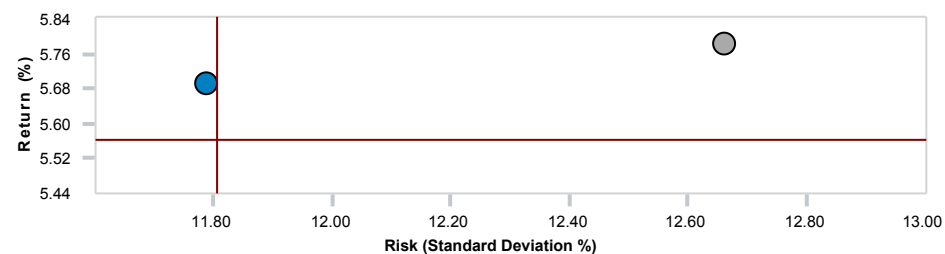
### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

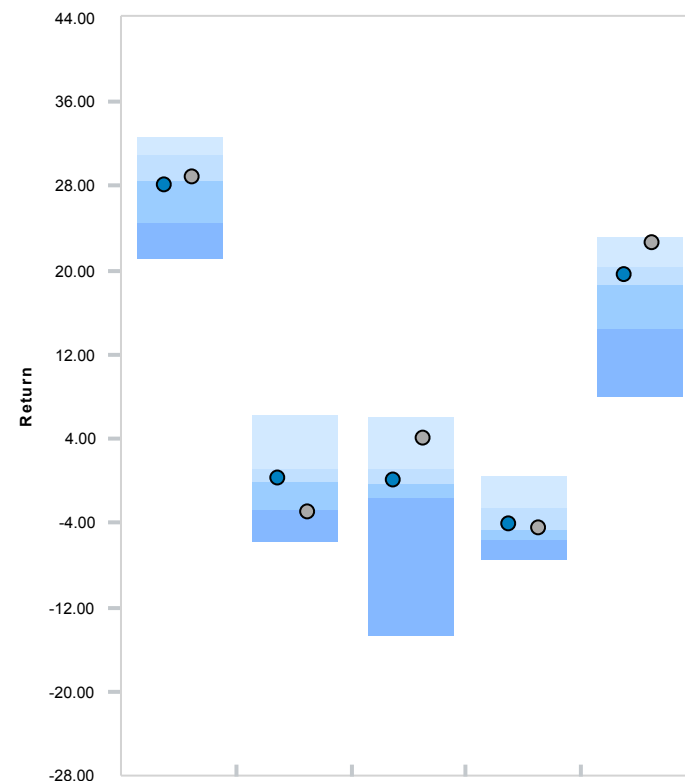
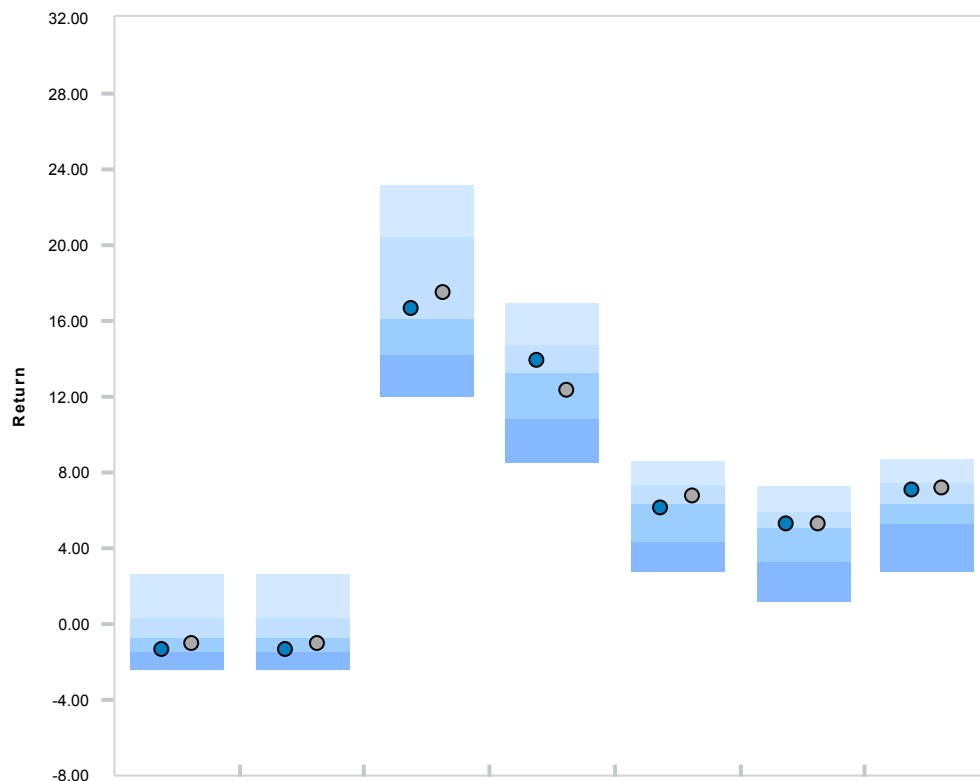
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Templeton	3.13	93.19	92.55	0.18	-0.08	0.35	0.92	8.13
MSCI EAFE Value (Net)	0.00	100.00	100.00	0.00	N/A	0.35	1.00	8.98

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Templeton	3.51	90.70	87.95	0.48	-0.06	0.50	0.89	7.40
MSCI EAFE Value (Net)	0.00	100.00	100.00	0.00	N/A	0.48	1.00	8.00



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● MFS	-1.37 (70)	-1.37 (70)	16.68 (46)	13.88 (36)	6.08 (54)	5.21 (47)	7.01 (34)
● MSCI EAFE G(Net)	-1.04 (59)	-1.04 (59)	17.51 (43)	12.36 (56)	6.73 (42)	5.28 (46)	7.14 (32)
Median	-0.70	-0.70	16.10	13.31	6.33	5.04	6.36

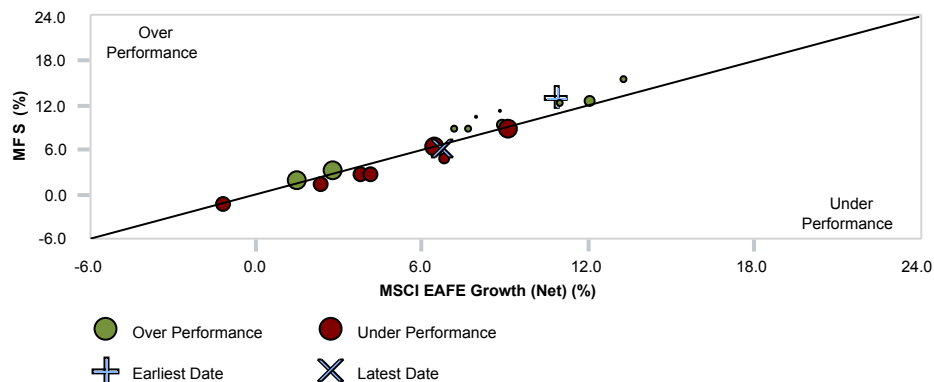
	2017	2016	2015	2014	2013
● MFS	28.06 (54)	0.28 (42)	0.02 (43)	-4.21 (38)	19.47 (37)
● MSCI EAFE G(Net)	28.86 (48)	-3.04 (79)	4.09 (8)	-4.43 (43)	22.55 (10)
Median	28.48	-0.15	-0.39	-4.75	18.69

Comparative Performance

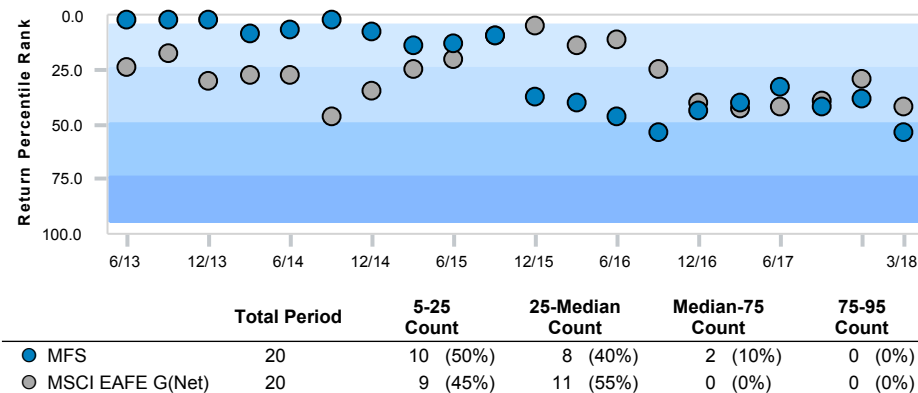
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
MFS	4.00 (54)	4.38 (68)	8.98 (14)	8.24 (47)	-2.05 (13)	6.15 (46)
MSCI EAFE Growth (Net)	5.24 (9)	4.94 (52)	7.52 (37)	8.52 (43)	-5.53 (81)	4.96 (65)
IM International Large Cap Growth Equity (MF) Median	4.07	4.99	6.99	8.09	-4.17	6.01



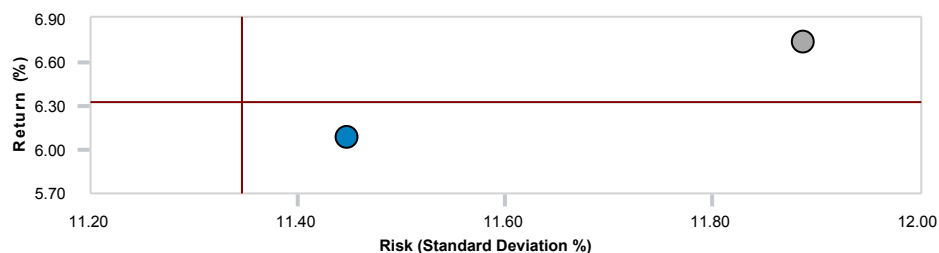
3 Yr Rolling Under/Over Performance - 5 Years



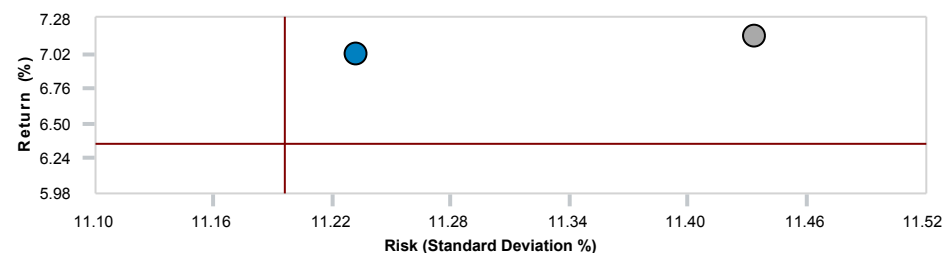
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

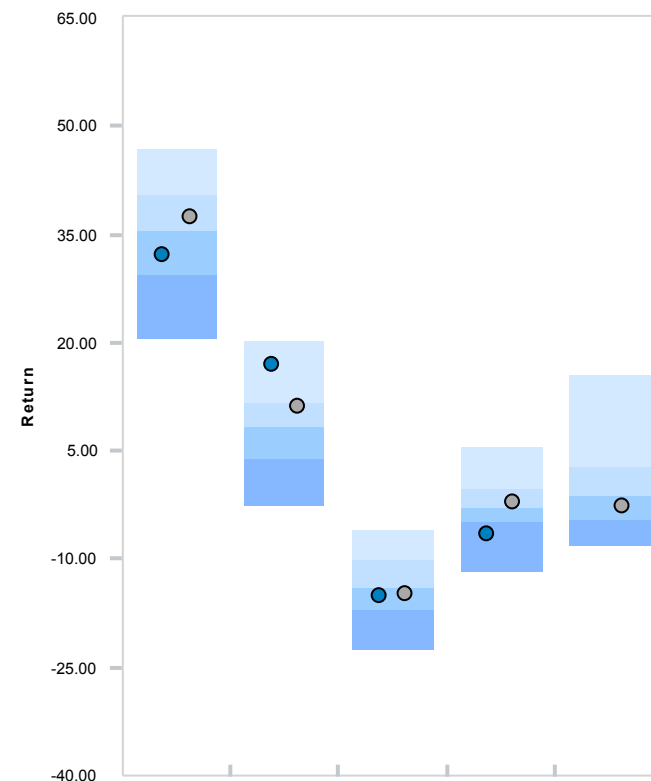
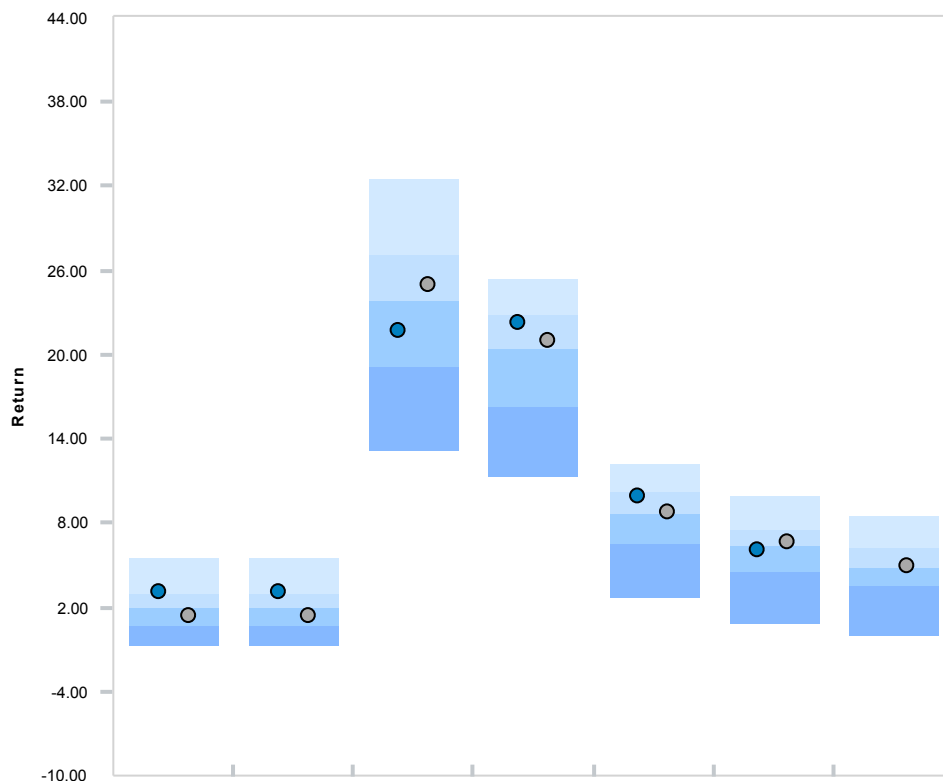
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
MFS	2.92	92.46	93.35	-0.18	-0.23	0.53	0.93	7.47
MSCI EAFE Growth (Net)	0.00	100.00	100.00	0.00	N/A	0.57	1.00	7.62

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
MFS	2.83	96.18	95.05	0.22	-0.05	0.63	0.95	6.97
MSCI EAFE Growth (Net)	0.00	100.00	100.00	0.00	N/A	0.64	1.00	6.97



**Peer Group Analysis - IM Emerging Markets Equity (MF)**



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Vanguard EM	3.07 (24)	3.07 (24)	21.68 (63)	22.29 (31)	9.87 (32)	6.08 (56)	N/A
● MSCI Emerging Mk-Net	1.42 (61)	1.42 (61)	24.93 (42)	21.01 (44)	8.81 (47)	6.65 (40)	4.99 (45)
Median	1.96	1.96	23.87	20.36	8.55	6.30	4.74

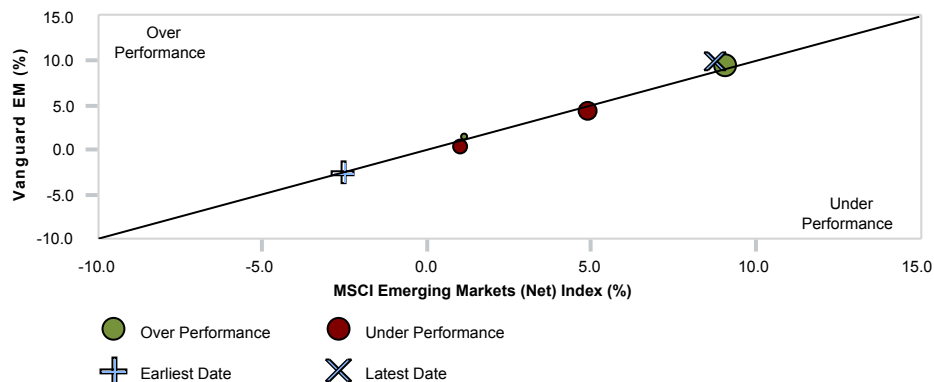
	2017	2016	2015	2014	2013
● Vanguard EM	32.00 (67)	16.86 (10)	-15.26 (61)	-6.62 (84)	N/A
● MSCI Emerging Mk-Net	37.28 (42)	11.19 (30)	-14.92 (58)	-2.19 (43)	-2.60 (58)
Median	35.33	8.29	-14.05	-2.92	-1.42

**Comparative Performance**

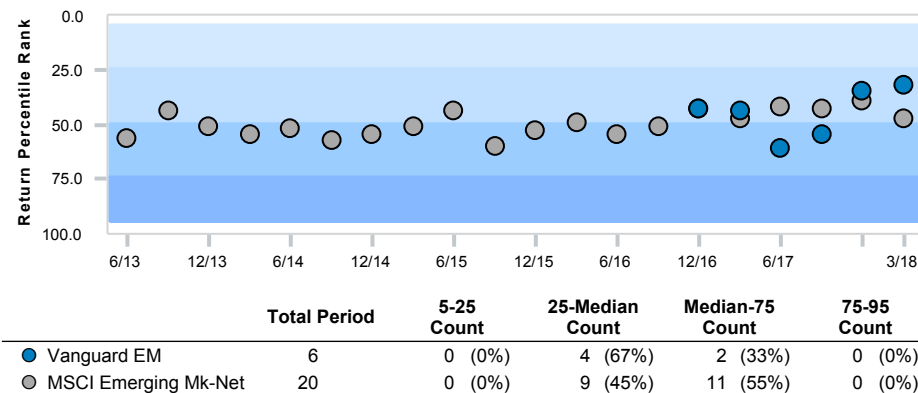
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Vanguard EM	5.32 (73)	7.64 (53)	4.13 (79)	11.81 (51)	-2.22 (13)	9.58 (18)
MSCI Emerging Markets (Net) Index	7.44 (22)	7.89 (48)	6.27 (40)	11.44 (55)	-4.16 (34)	9.03 (27)
IM Emerging Markets Equity (MF) Median	6.35	7.78	5.92	11.81	-5.17	7.84



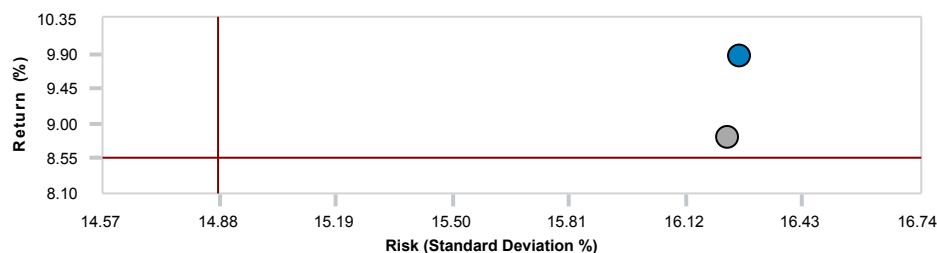
### 3 Yr Rolling Under/Over Performance - 5 Years



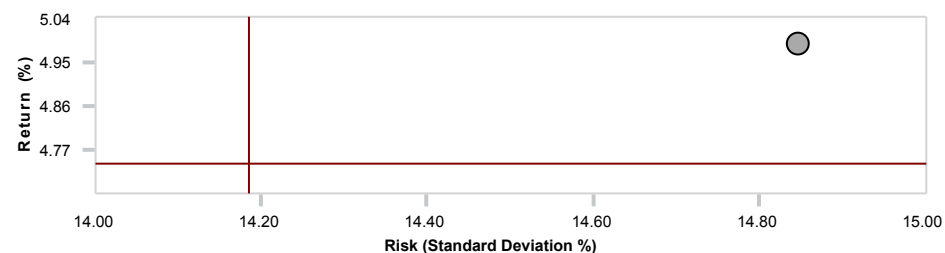
### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

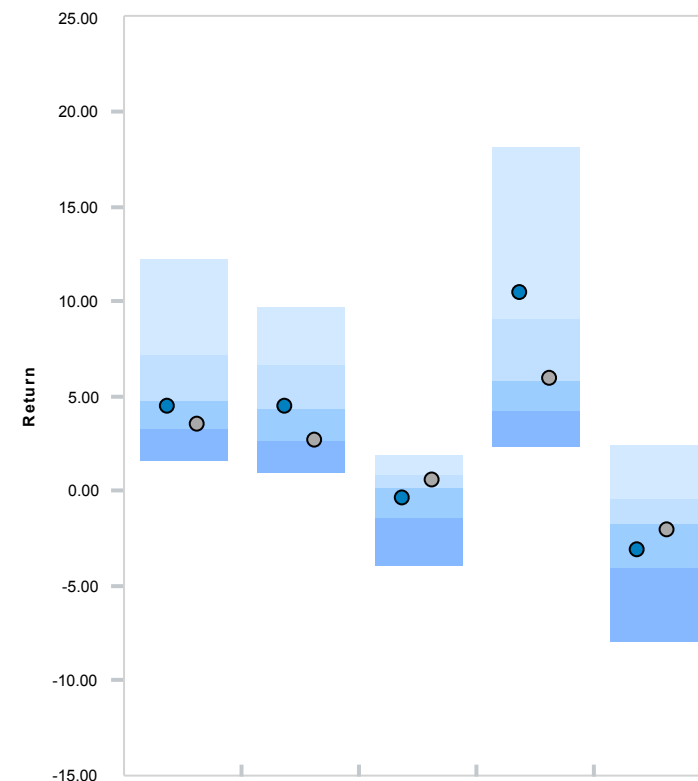
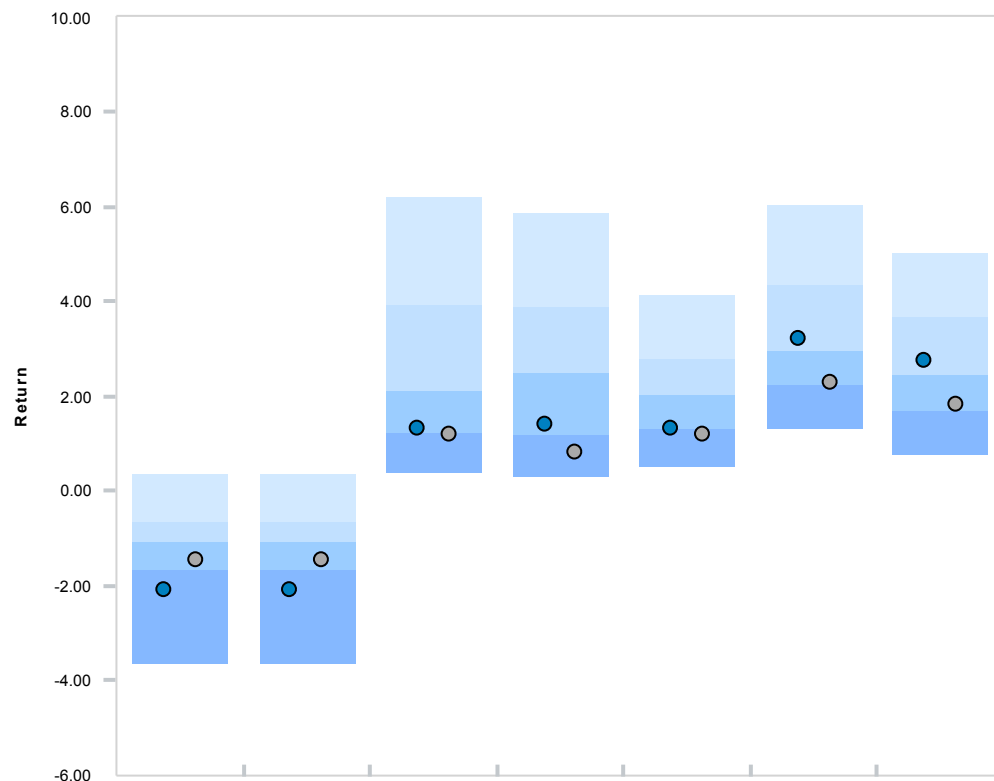
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard EM	2.55	99.80	94.23	1.08	0.38	0.63	0.99	9.48
MSCI Emerging Markets (Net) Index	0.00	100.00	100.00	0.00	N/A	0.57	1.00	9.73

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard EM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI Emerging Markets (Net) Index	0.00	100.00	100.00	0.00	N/A	0.38	1.00	9.59



Peer Group Analysis - All Master Trust-US Fixed Income Segment



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Domestic Fx	-2.07 (79)	-2.07 (79)	1.33 (74)	1.41 (71)	1.35 (75)	3.22 (44)	2.77 (44)
● Barclays Agg	-1.46 (71)	-1.46 (71)	1.20 (79)	0.82 (85)	1.20 (82)	2.31 (73)	1.82 (69)
Median	-1.08	-1.08	2.11	2.51	2.06	2.96	2.47

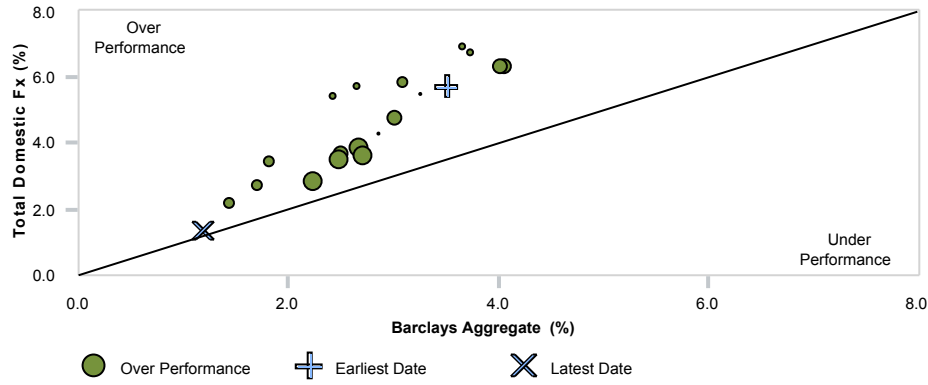
	2017	2016	2015	2014	2013
● Total Domestic Fx	4.52 (53)	4.45 (50)	-0.33 (62)	10.45 (24)	-3.13 (69)
● Barclays Agg	3.54 (69)	2.65 (77)	0.55 (35)	5.97 (48)	-2.02 (57)
Median	4.78	4.33	0.15	5.87	-1.74

Comparative Performance

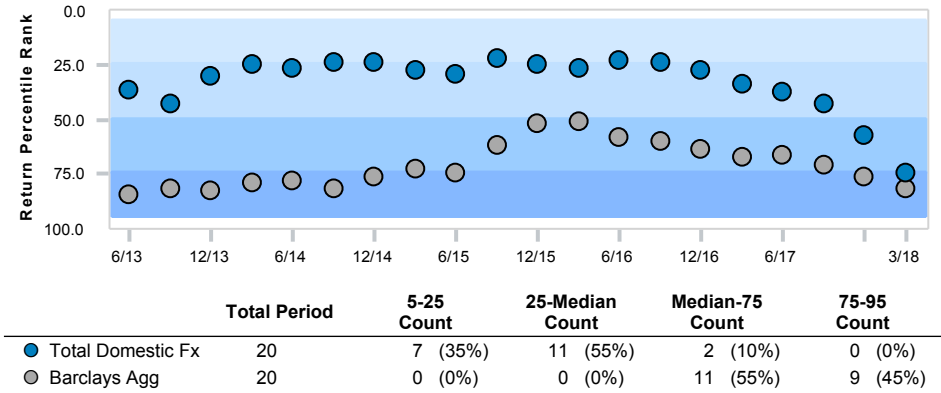
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Total Domestic Fx	0.65 (47)	0.88 (66)	1.91 (35)	1.01 (69)	-3.57 (73)	0.82 (61)
Barclays Aggregate	0.39 (66)	0.85 (70)	1.45 (59)	0.82 (81)	-2.98 (64)	0.46 (76)
All Master Trust-US Fixed Income Segment Median	0.60	1.12	1.58	1.33	-2.43	1.09



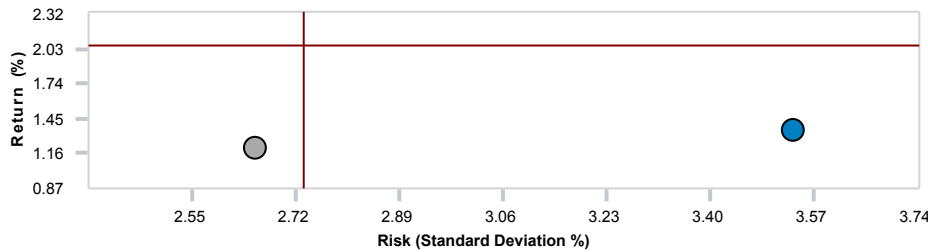
3 Yr Rolling Under/Over Performance - 5 Years



3 Yr Rolling Percentile Ranking - 5 Years

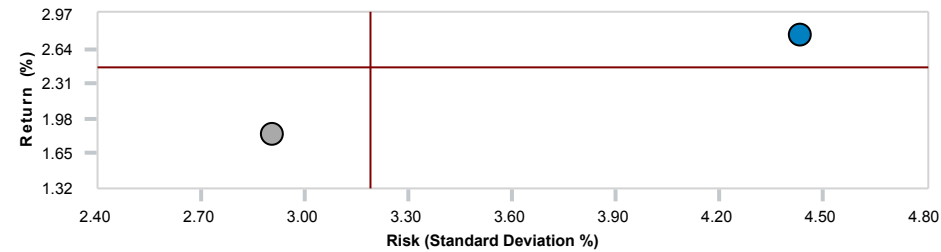


Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Total Domestic Fx	1.35	3.54
Barclays Agg	1.20	2.65
Median	2.06	2.73

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Total Domestic Fx	2.77	4.44
Barclays Agg	1.82	2.91
Median	2.47	3.19

Historical Statistics - 3 Years

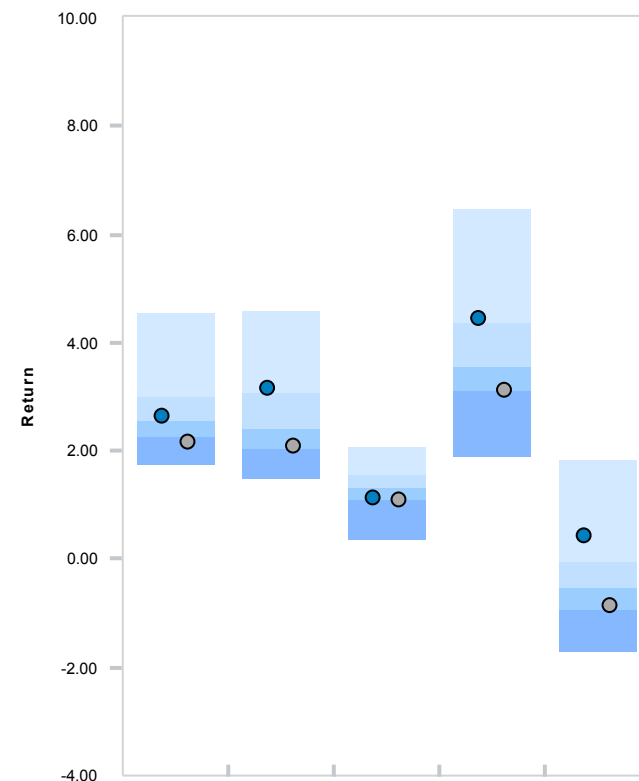
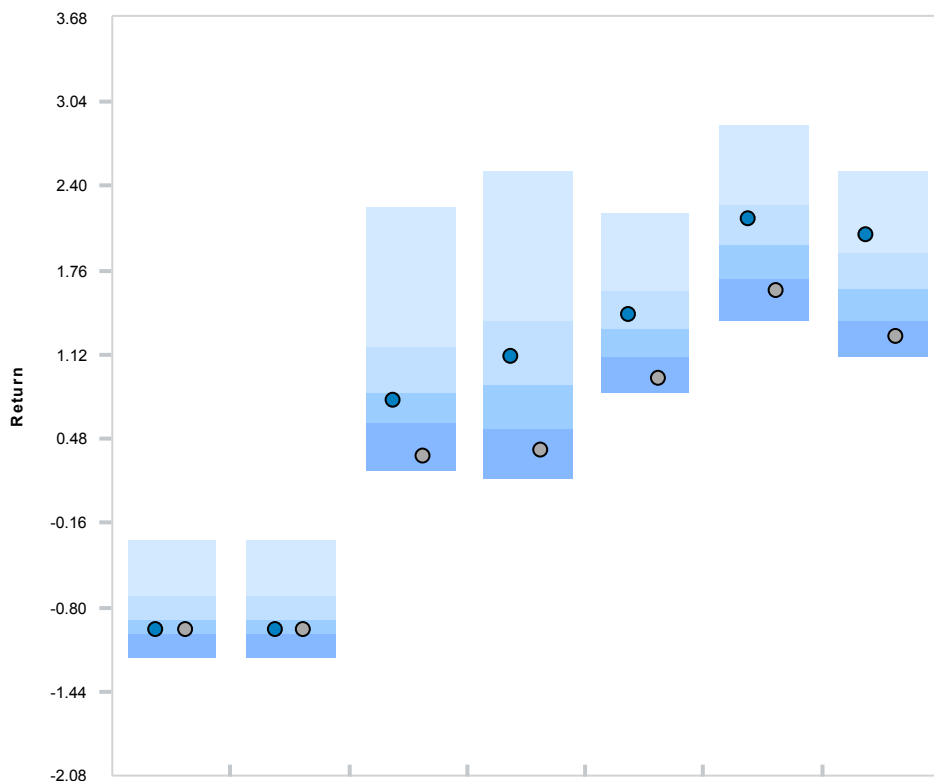
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Domestic Fx	1.24	132.68	140.69	-0.17	0.14	0.26	1.28	2.46
Barclays Aggregate	0.00	100.00	100.00	0.00	N/A	0.28	1.00	1.85

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Domestic Fx	1.82	148.80	146.31	0.11	0.54	0.57	1.47	2.92
Barclays Aggregate	0.00	100.00	100.00	0.00	N/A	0.53	1.00	1.90



Peer Group Analysis - IM U.S. Intermediate Duration (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Schroder Interm Duration	-0.98 (70)	-0.98 (70)	0.78 (56)	1.11 (35)	1.42 (38)	2.14 (33)	2.02 (20)
● Barclays Interm G/C	-0.98 (70)	-0.98 (70)	0.35 (94)	0.39 (89)	0.94 (89)	1.60 (85)	1.25 (88)
Median	-0.90	-0.90	0.83	0.89	1.32	1.95	1.62

	2017	2016	2015	2014	2013
● Schroder Interm Duration	2.65 (43)	3.14 (25)	1.12 (73)	4.44 (23)	0.42 (16)
● Barclays Interm G/C	2.14 (84)	2.08 (73)	1.07 (76)	3.13 (76)	-0.86 (70)
Median	2.57	2.40	1.30	3.57	-0.53

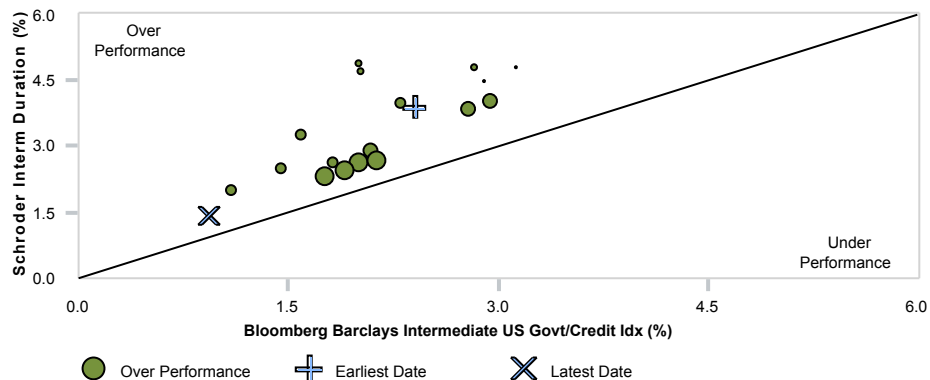
Comparative Performance

	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Schroder Interm Duration	-0.07 (76)	0.74 (48)	1.10 (29)	0.86 (33)	-1.99 (72)	0.57 (30)
Bloomberg Barclays Intermediate US Govt/Credit Idx	-0.20 (95)	0.60 (83)	0.94 (70)	0.78 (58)	-2.07 (82)	0.16 (77)
IM U.S. Intermediate Duration (SA+CF) Median	0.02	0.72	1.02	0.81	-1.83	0.38

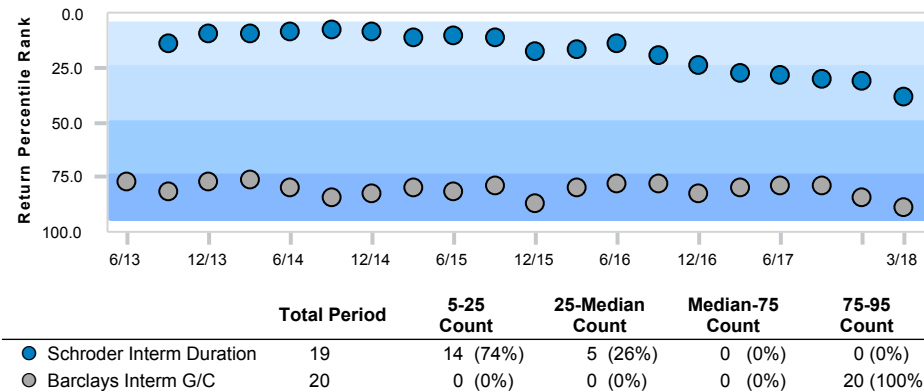




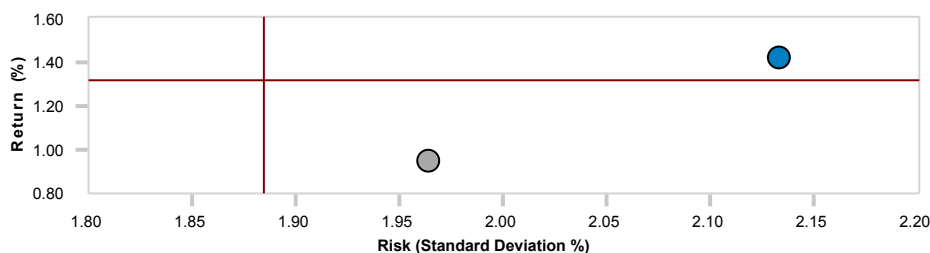
### 3 Yr Rolling Under/Over Performance - 5 Years



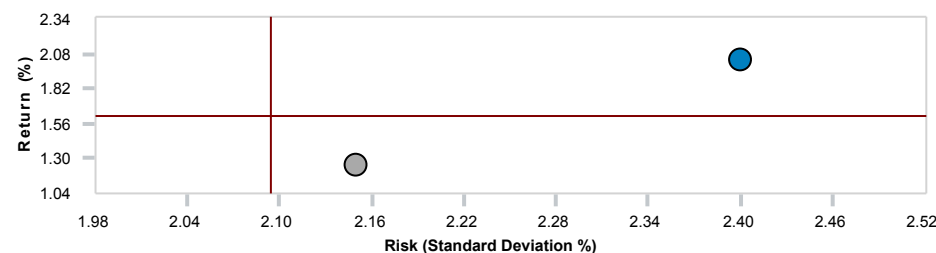
### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

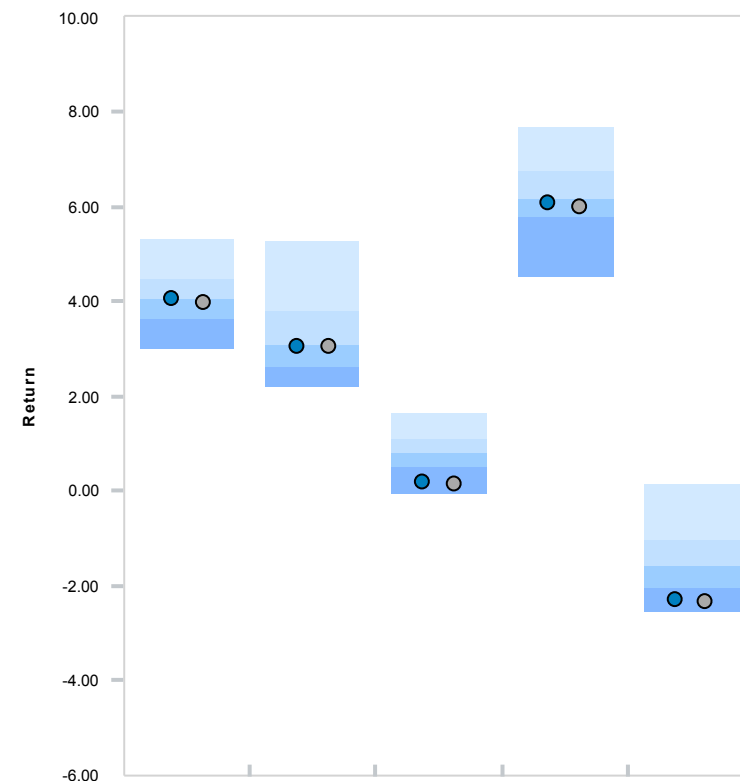
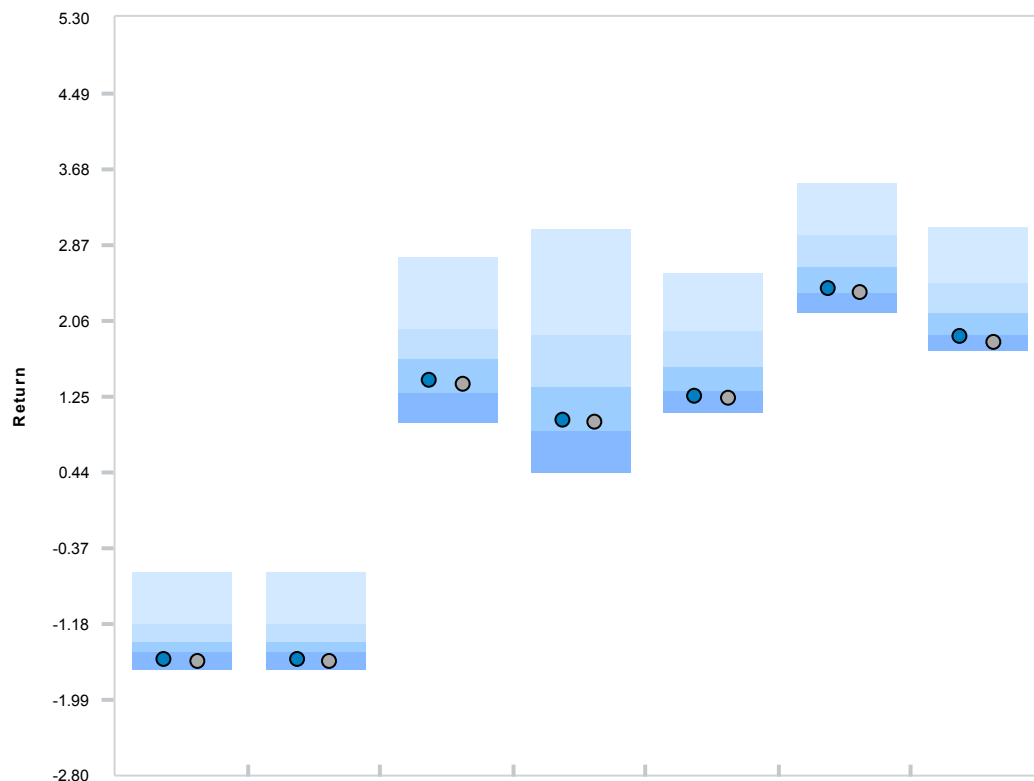
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Schroder Interm Duration	0.80	112.98	96.12	0.47	0.59	0.44	1.01	1.34
Bloomberg Barclays Intermediate US Govt/Credit Idx	0.00	100.00	100.00	0.00	N/A	0.24	1.00	1.31

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Schroder Interm Duration	0.74	118.39	95.63	0.69	1.04	0.72	1.06	1.47
Bloomberg Barclays Intermediate US Govt/Credit Idx	0.00	100.00	100.00	0.00	N/A	0.44	1.00	1.37



Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● NTGI G/C	-1.56 (89)	-1.56 (89)	1.42 (62)	1.00 (69)	1.26 (80)	2.41 (71)	1.89 (77)
● Barclays G/C	-1.58 (91)	-1.58 (91)	1.38 (67)	0.96 (70)	1.22 (82)	2.36 (75)	1.84 (82)
Median	-1.37	-1.37	1.65	1.36	1.56	2.64	2.15

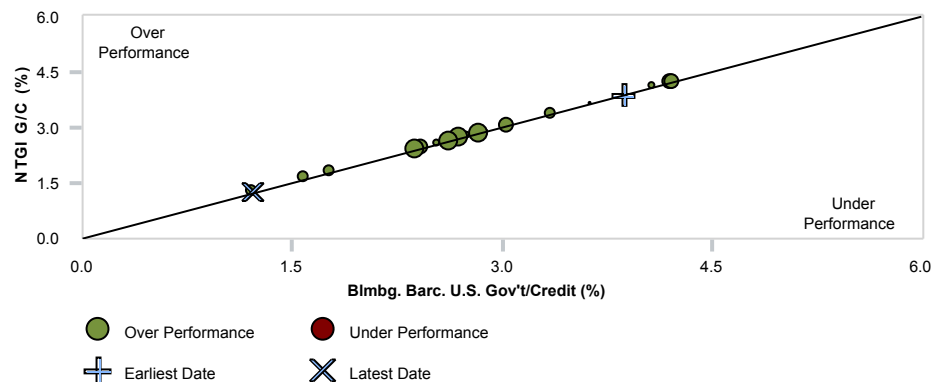
	2017	2016	2015	2014	2013
● NTGI G/C	4.05 (50)	3.04 (53)	0.17 (88)	6.10 (56)	-2.29 (91)
● Barclays G/C	4.00 (54)	3.05 (53)	0.15 (90)	6.01 (63)	-2.35 (92)
Median	4.05	3.10	0.82	6.16	-1.56

Comparative Performance

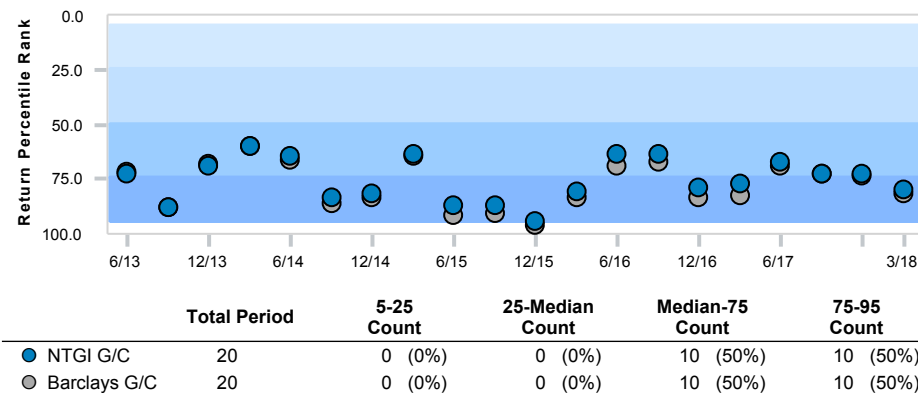
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
NTGI G/C	0.50 (54)	0.81 (85)	1.69 (25)	1.00 (43)	-3.41 (99)	0.42 (83)
Blmbg. Barc. U.S. Gov't/Credit	0.49 (57)	0.81 (85)	1.69 (25)	0.96 (48)	-3.39 (99)	0.40 (84)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	0.52	0.92	1.54	0.93	-2.80	0.69



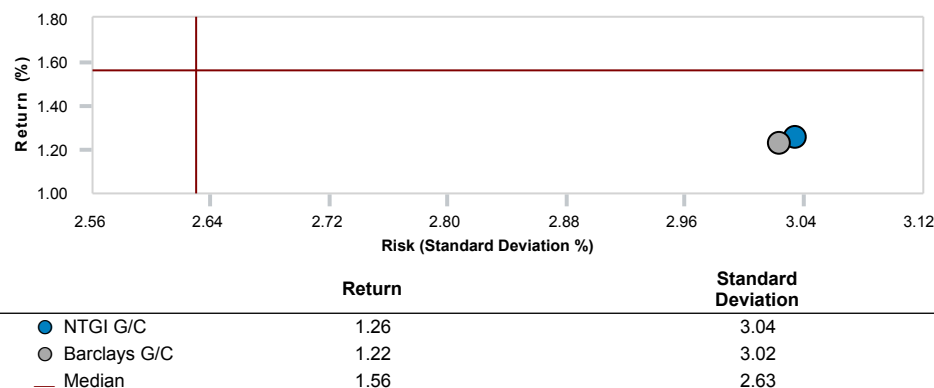
3 Yr Rolling Under/Over Performance - 5 Years



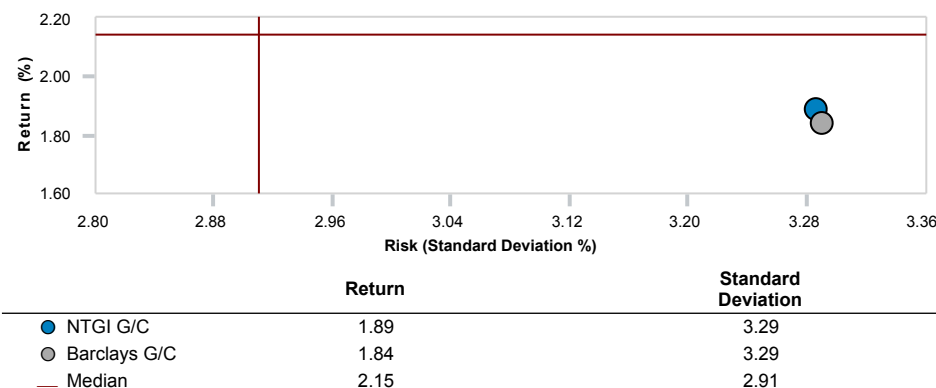
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

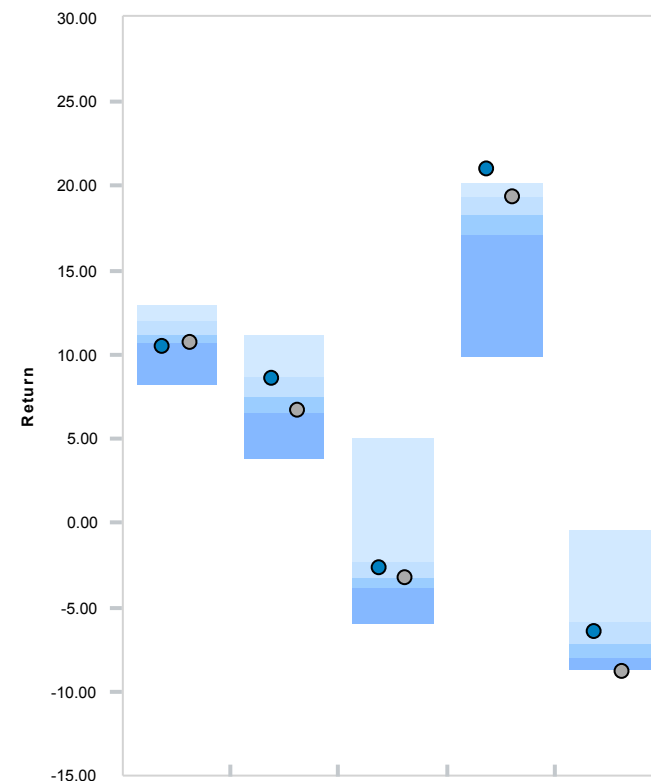
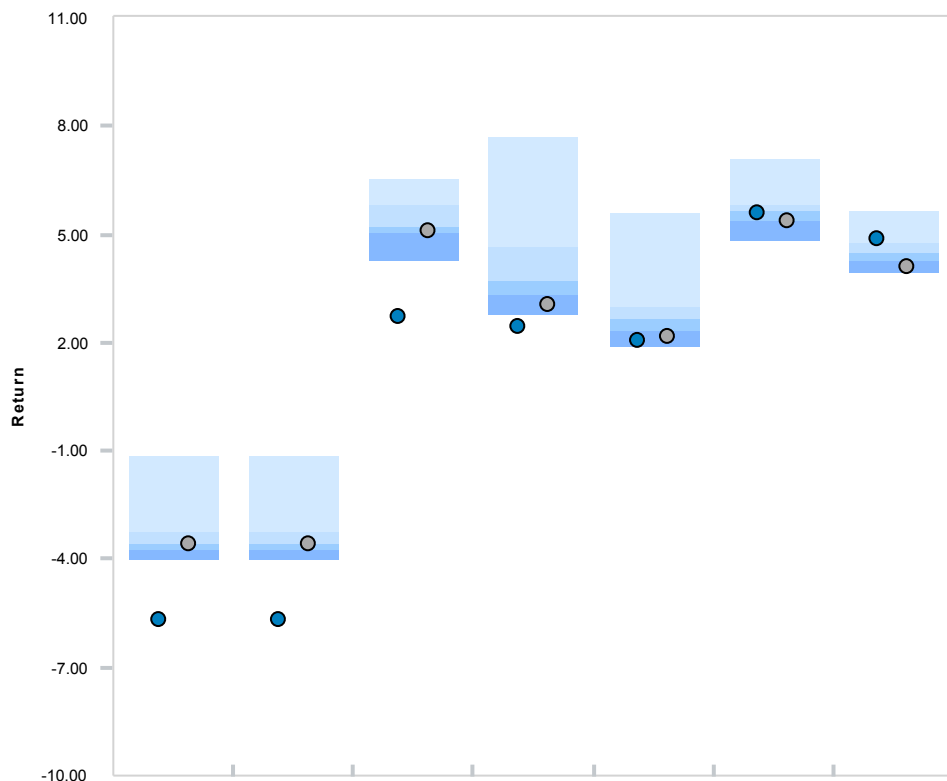
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI G/C	0.08	100.94	100.28	0.03	0.42	0.27	1.00	2.09
Blmbg. Barc. U.S. Gov't/Credit	0.00	100.00	100.00	0.00	N/A	0.25	1.00	2.09

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI G/C	0.09	100.65	99.58	0.05	0.54	0.49	1.00	2.15
Blmbg. Barc. U.S. Gov't/Credit	0.00	100.00	100.00	0.00	N/A	0.47	1.00	2.16



Peer Group Analysis - IM U.S. Long Duration (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Schroder Long Duration	-5.71 (100)	-5.71 (100)	2.71 (100)	2.42 (97)	2.03 (93)	5.60 (52)	4.86 (20)
● Barclays Long G/C	-3.58 (50)	-3.58 (50)	5.09 (67)	3.01 (93)	2.13 (89)	5.37 (75)	4.09 (89)
Median	-3.58	-3.58	5.22	3.69	2.66	5.62	4.49

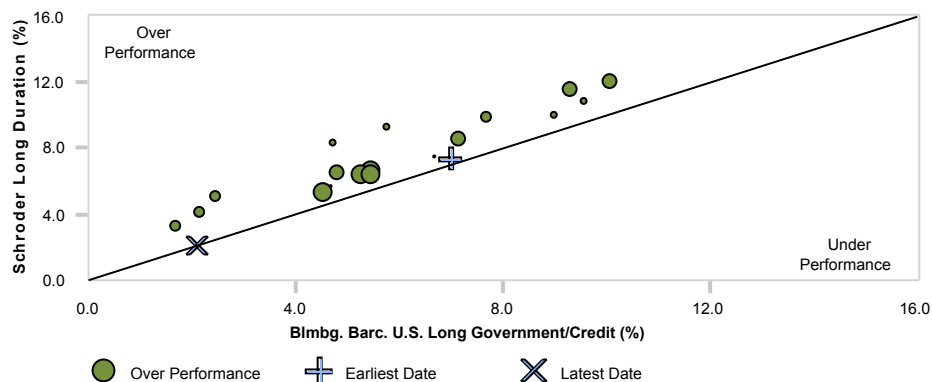
	2017	2016	2015	2014	2013
● Schroder Long Duration	10.49 (79)	8.61 (28)	-2.72 (32)	21.04 (2)	-6.41 (33)
● Barclays Long G/C	10.71 (74)	6.67 (71)	-3.30 (49)	19.31 (31)	-8.83 (98)
Median	11.23	7.44	-3.33	18.31	-7.16

Comparative Performance

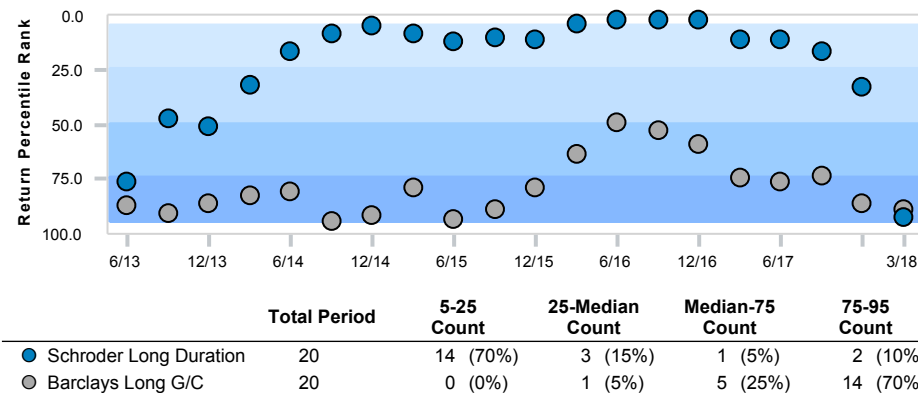
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Schroder Long Duration	2.81 (59)	1.37 (87)	4.52 (41)	1.44 (94)	-7.55 (66)	1.83 (40)
Blmbg. Barc. U.S. Long Government/Credit	2.84 (56)	1.53 (70)	4.39 (66)	1.58 (86)	-7.84 (89)	1.24 (87)
IM U.S. Long Duration (SA+CF) Median	2.88	1.63	4.46	1.84	-7.20	1.72



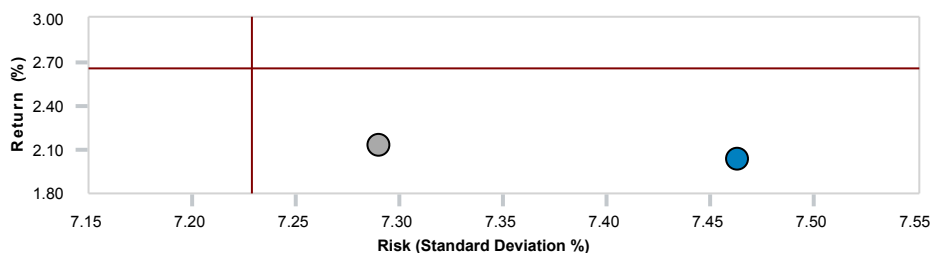
### 3 Yr Rolling Under/Over Performance - 5 Years



### 3 Yr Rolling Percentile Ranking - 5 Years

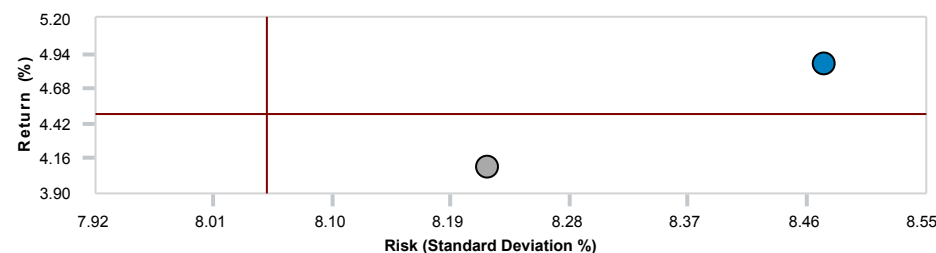


### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Schroder Long Duration	2.03	7.46
Barclays Long G/C	2.13	7.29
Median	2.66	7.23

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Schroder Long Duration	4.86	8.47
Barclays Long G/C	4.09	8.22
Median	4.49	8.05

### Historical Statistics - 3 Years

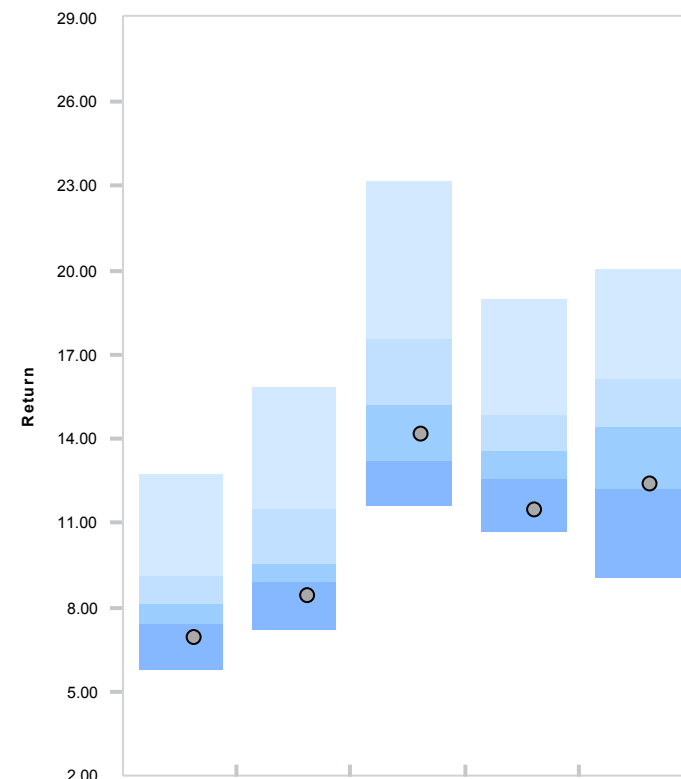
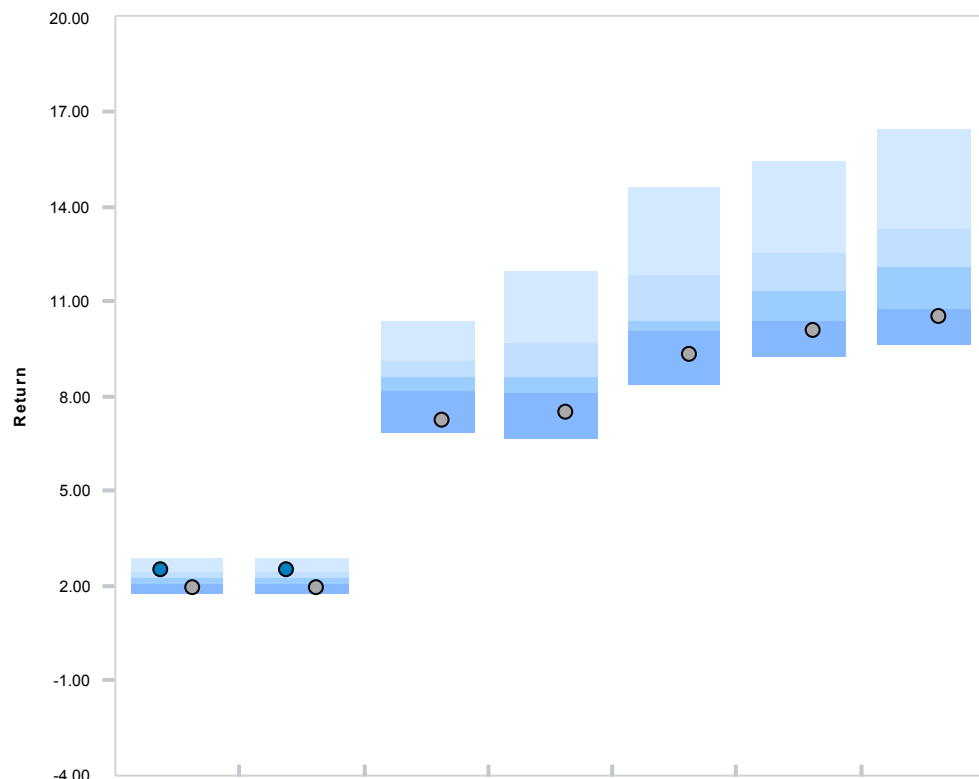
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Schroder Long Duration	1.59	99.47	100.28	-0.08	-0.05	0.24	1.00	5.34
Bimbg. Barc. U.S. Long Government/Credit	0.00	100.00	100.00	0.00	N/A	0.26	1.00	5.25

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Schroder Long Duration	1.46	103.60	96.97	0.70	0.52	0.57	1.02	5.67
Bimbg. Barc. U.S. Long Government/Credit	0.00	100.00	100.00	0.00	N/A	0.49	1.00	5.55



Peer Group Analysis - IM U.S. Open End Private Real Estate (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Real Estate	2.48 (24)	2.48 (24)	N/A	N/A	N/A	N/A	N/A
● NCREIF Fund Index	1.95 (80)	1.95 (80)	7.25 (93)	7.49 (83)	9.33 (82)	10.09 (89)	10.53 (81)
Median	2.23	2.23	8.62	8.66	10.38	11.37	12.13

	2017	2016	2015	2014	2013
● Total Real Estate	N/A	N/A	N/A	N/A	N/A
● NCREIF Fund Index	6.91 (85)	8.36 (84)	14.18 (72)	11.42 (90)	12.36 (71)
Median	8.08	9.52	15.23	13.59	14.47

Comparative Performance

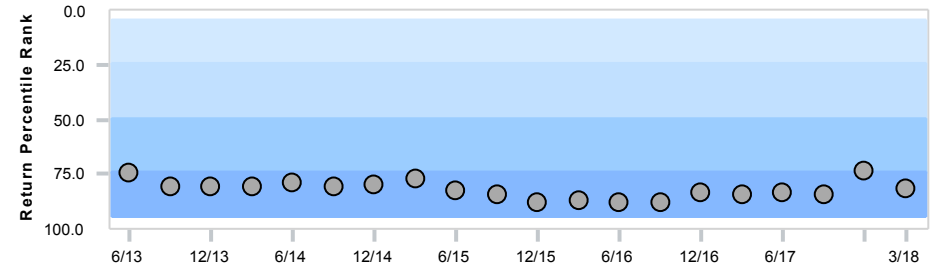
	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Total Real Estate	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW) (Net)	1.93 (75)	1.68 (61)	1.51 (85)	1.62 (57)	1.95 (64)	1.96 (68)
IM U.S. Open End Private Real Estate (SA+CF) Median	2.25	1.75	1.91	1.91	2.26	2.16



3 Yr Rolling Under/Over Performance - 5 Years

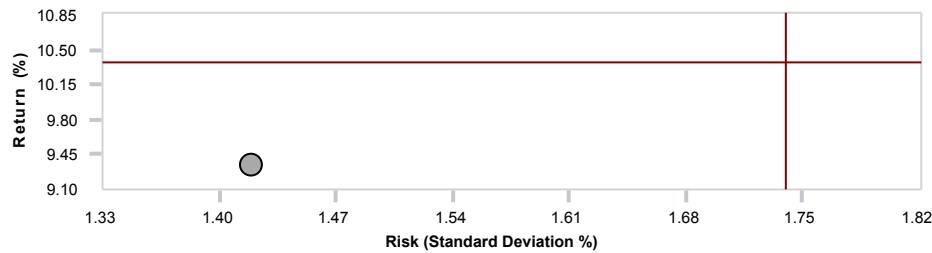
No data found.

3 Yr Rolling Percentile Ranking - 5 Years



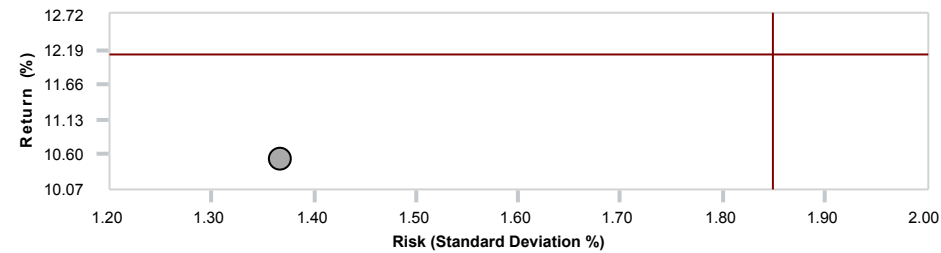
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Total Real Estate	0	0	0	0	0
NCREIF Fund Index	20	0 (0%)	0 (0%)	2 (10%)	18 (90%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Total Real Estate	N/A	N/A
NCREIF Fund Index	9.33	1.42
Median	10.38	1.74

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Total Real Estate	N/A	N/A
NCREIF Fund Index	10.53	1.37
Median	12.13	1.85

Historical Statistics - 3 Years

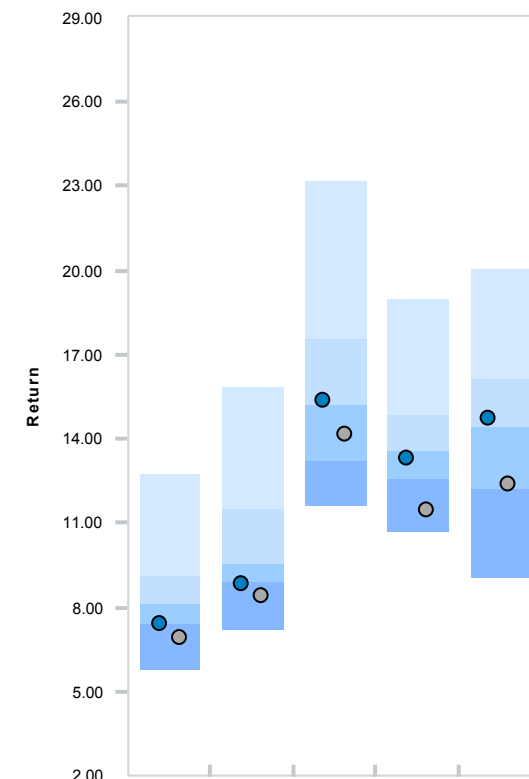
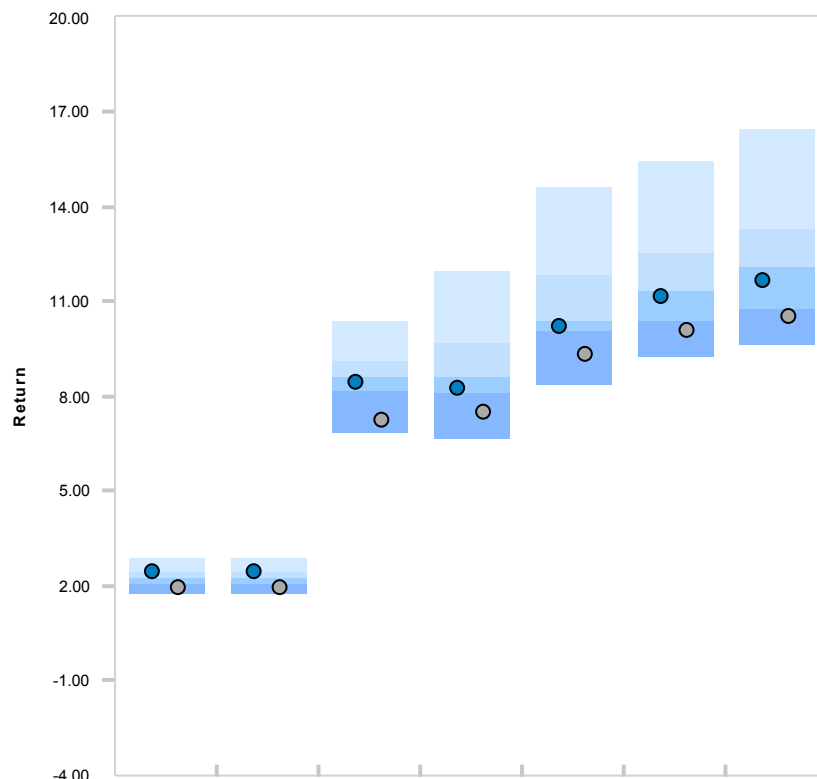
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW) (Net)	0.00	100.00	N/A	0.00	N/A	2.17	1.00	0.00

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW) (Net)	0.00	100.00	N/A	0.00	N/A	2.25	1.00	0.00



Peer Group Analysis - IM U.S. Open End Private Real Estate (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● PGIM	2.41 (32)	2.41 (32)	8.42 (57)	8.23 (71)	10.19 (66)	11.17 (63)	11.69 (63)
● NCREIF Fund Index-ODCE (EW) (Net)	1.95 (80)	1.95 (80)	7.25 (93)	7.49 (83)	9.33 (82)	10.09 (89)	10.53 (81)
Median	2.23	2.23	8.62	8.66	10.38	11.37	12.13

	2017	2016	2015	2014	2013
● PGIM	7.43 (76)	8.80 (81)	5.36 (44)	3.32 (56)	4.71 (43)
● NCREIF Fund Index-ODCE (EW) (Net)	6.91 (85)	8.36 (84)	4.18 (72)	1.42 (90)	2.36 (71)
Median	8.08	9.52	5.23	3.59	4.47

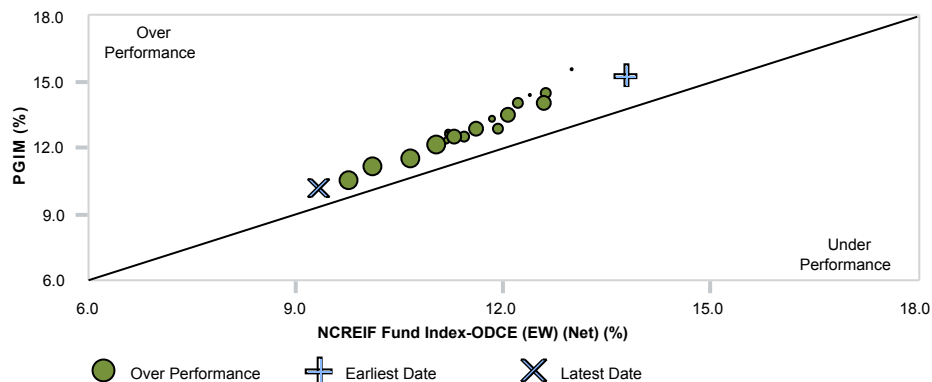
Comparative Performance

	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
PGIM	1.90 (79)	2.22 (34)	1.64 (78)	1.47 (75)	2.44 (40)	1.95 (68)
NCREIF Fund Index-ODCE (EW) (Net)	1.93 (75)	1.68 (61)	1.51 (85)	1.62 (57)	1.95 (64)	1.96 (68)
IM U.S. Open End Private Real Estate (SA+CF) Median	2.25	1.75	1.91	1.91	2.26	2.16

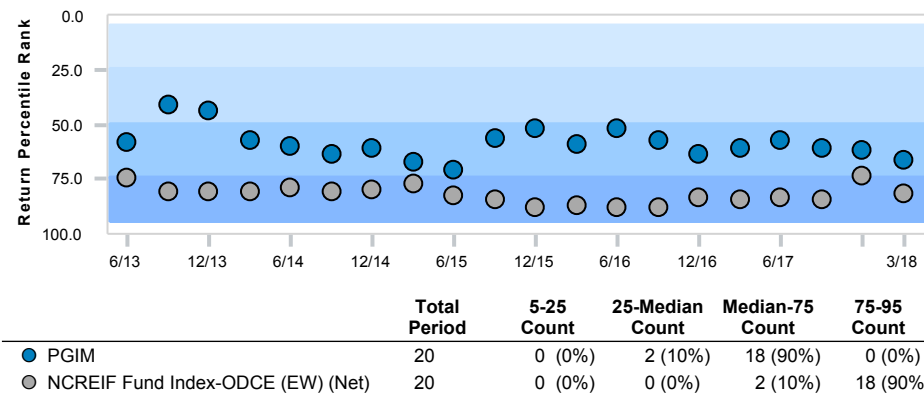




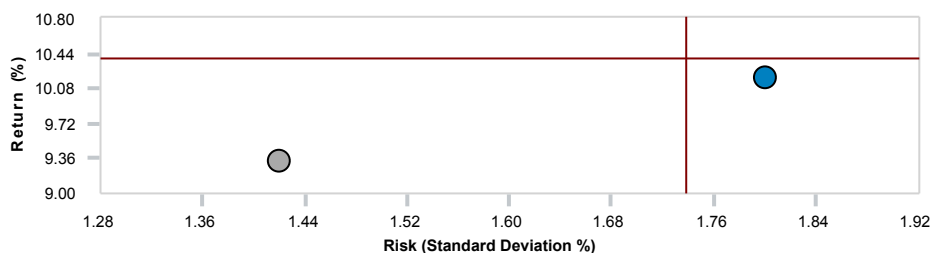
### 3 Yr Rolling Under/Over Performance - 5 Years



### 3 Yr Rolling Percentile Ranking - 5 Years

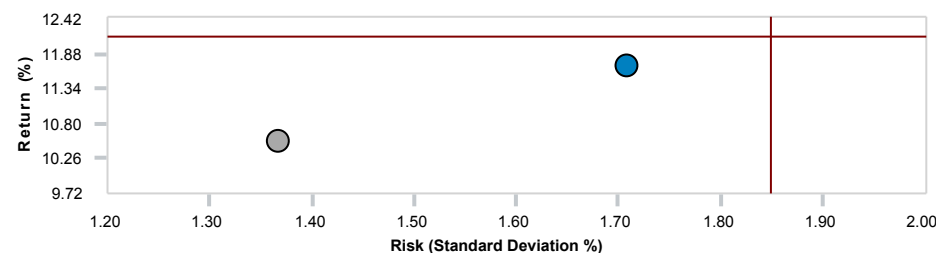


### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
PGIM	10.19	1.80
NCREIF Fund Index-ODCE (EW) (Net)	9.33	1.42
— Median	10.38	1.74

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
PGIM	11.69	1.71
NCREIF Fund Index-ODCE (EW) (Net)	10.53	1.37
— Median	12.13	1.85

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
PGIM	1.01	108.89	N/A	0.01	0.79	2.13	1.09	0.00
NCREIF Fund Index-ODCE (EW) (Net)	0.00	100.00	N/A	0.00	N/A	2.17	1.00	0.00

### Historical Statistics - 5 Years

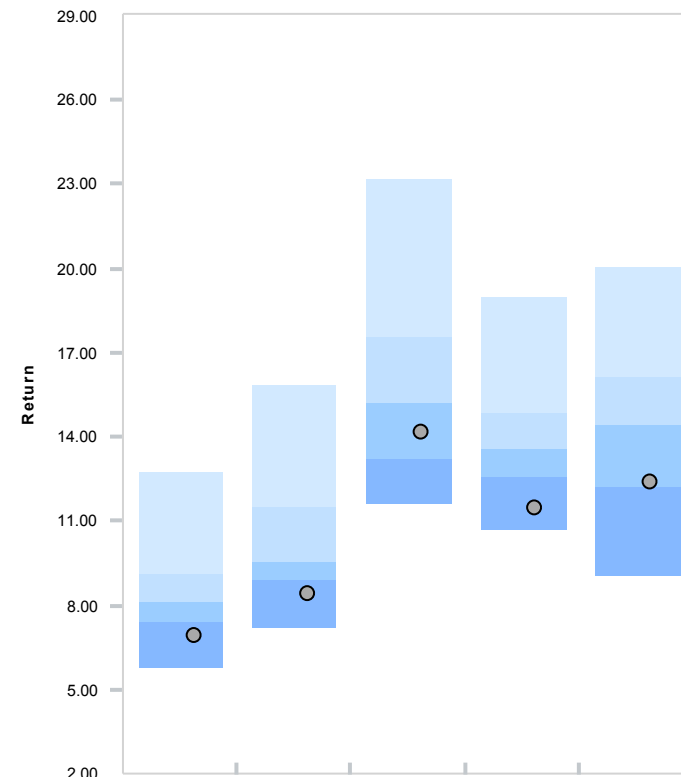
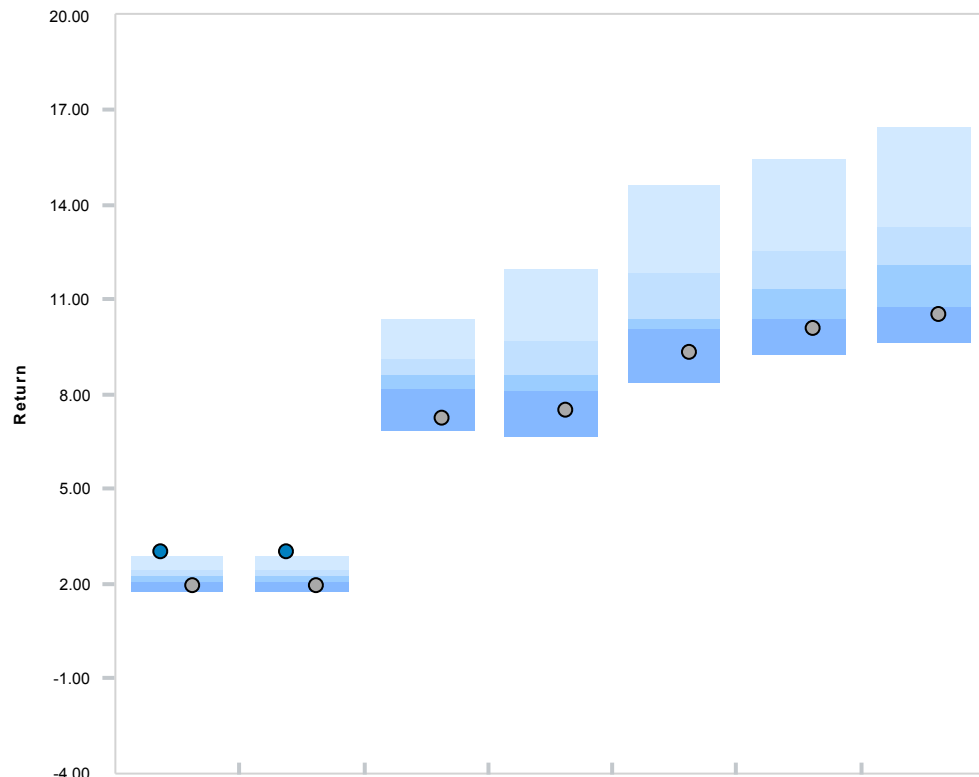
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
PGIM	1.00	110.61	N/A	0.04	1.08	2.23	1.10	0.00
NCREIF Fund Index-ODCE (EW) (Net)	0.00	100.00	N/A	0.00	N/A	2.25	1.00	0.00



Page Intentionally Left Blank



Peer Group Analysis - IM U.S. Open End Private Real Estate (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Principal Enhanced	2.99 (3)	2.99 (3)	N/A	N/A	N/A	N/A	N/A
● NCREIF Fund Index	1.95 (80)	1.95 (80)	7.25 (93)	7.49 (83)	9.33 (82)	10.09 (89)	10.53 (81)
Median	2.23	2.23	8.62	8.66	10.38	11.37	12.13

	2017	2016	2015	2014	2013
● Principal Enhanced	N/A	N/A	N/A	N/A	N/A
● NCREIF Fund Index	6.91 (85)	8.36 (84)	14.18 (72)	11.42 (90)	12.36 (71)
Median	8.08	9.52	15.23	13.59	14.47

Comparative Performance

	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017	1 Qtr Ending Jun-2017	1 Qtr Ending Mar-2017	1 Qtr Ending Dec-2016	1 Qtr Ending Sep-2016
Principal Enhanced	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW) (Net)	1.93 (75)	1.68 (61)	1.51 (85)	1.62 (57)	1.95 (64)	1.96 (68)
IM U.S. Open End Private Real Estate (SA+CF) Median	2.25	1.75	1.91	1.91	2.26	2.16



**Portfolio Characteristics (Benchmark: Russell 1000 Value Index)**

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	79,338,910,372	122,119,495,789
Median Mkt. Cap (\$)	35,025,840,235	9,446,527,360
Price/Earnings ratio	17.8	17.0
Price/Book ratio	2.5	2.1
5 Yr. EPS Growth Rate (%)	7.9	8.4
Current Yield (%)	1.9	2.5
Beta (5 Years, Monthly)	0.98	1.00
Number of Stocks	51	711

**Top Ten Equity Holdings (Benchmark: Russell 1000 Value Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Allergan PLC	3.2	0.5	2.7	3.3
AerCap Holdings NV	3.0	0.0	3.0	-3.6
Verizon Communications Inc	2.8	0.8	2.0	-8.6
IntercontinentalExchange	2.8	0.2	2.6	3.1
Gildan Activewear Inc	2.7	0.0	2.7	-10.6
Omnicom Group Inc.	2.6	0.0	2.6	0.6
Crown Holdings Inc	2.5	0.0	2.5	-9.8
Wells Fargo & Co	2.5	1.9	0.6	-13.1
Arrow Electronics Inc	2.5	0.1	2.4	-4.2
Berkshire Hathaway Inc	2.4	3.2	-0.8	0.6

**Ten Best Performers (Benchmark: Russell 1000 Value Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
RenaissanceRe Holdings Ltd	1.7	0.0	1.7	10.6
Progressive Corp (The)	1.6	0.0	1.6	10.5
CBRE Group Inc	1.6	0.1	1.5	9.0
Twenty-First Century Fox Inc	2.3	0.3	2.0	6.8
TE Connectivity Ltd	1.0	0.0	1.0	5.5
Abbott Laboratories	1.7	0.8	0.9	5.5
PNC Financial Services Inc.	1.4	0.6	0.8	5.3
Ball Corp	2.2	0.1	2.1	5.2
AMETEK Inc	1.6	0.1	1.5	5.0
JPMorgan Chase & Co	2.3	3.1	-0.8	3.4

**Ten Worst Performers (Benchmark: Russell 1000 Value Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Alliance Data Systems Corp	1.6	0.0	1.6	-15.8
Snap-On Inc	2.3	0.1	2.2	-14.9
Wells Fargo & Co	2.5	1.9	0.6	-13.1
Synchrony Financial	1.7	0.2	1.5	-12.8
World Fuel Services Corp	1.2	0.0	1.2	-12.5
United Parcel Service Inc	2.3	0.0	2.3	-11.4
Hanesbrands Inc	2.2	0.0	2.2	-11.3
Gildan Activewear Inc	2.7	0.0	2.7	-10.6
Brookfield Asset Management	2.3	0.0	2.3	-10.5
Exxon Mobil Corp	2.3	2.6	-0.3	-9.9

**Buy and Hold Sector Attribution (Benchmark: Russell 1000 Value Index)**

	Allocation		Performance		Stock	Attribution		Portfolio Comparison	
	Portfolio	Benchmark	Portfolio	Benchmark		Sector	Total	Cooke & Bieler	
Consumer Discretionary	16.0	6.8	-4.01	-2.64	-0.22	0.02	-0.20	Market Capitalization (%)	
Consumer Staples	3.9	8.6	-4.11	-8.38	0.17	0.26	0.43	Greater than 25000M	56.2
Energy	5.8	11.0	-8.32	-5.78	-0.15	0.16	0.01	16000M To 25000M	10.8
Financials	28.6	26.6	-0.76	-1.18	0.12	0.03	0.15	12000M To 16000M	2.2
Health Care	13.7	13.5	1.15	-1.64	0.38	0.00	0.39	8000M To 12000M	10.0
Industrials	13.8	8.3	-5.98	-4.72	-0.17	-0.11	-0.28	5000M To 8000M	15.7
Information Technology	7.6	8.6	-3.19	6.21	-0.71	-0.09	-0.80	1000M To 3000M	2.0
Materials	5.0	3.0	-3.15	-5.33	0.11	-0.05	0.06	Cash	3.1
Real Estate	1.4	4.7	9.03	-7.19	0.23	0.14	0.38		
Telecommunication Services	1.0	3.0	-8.62	-7.12	-0.01	0.09	0.07		
Utilities	0.0	5.9	0.00	-3.10	0.00	0.02	0.02		
Cash	3.3	0.0	0.35	0.00	0.00	0.10	0.10		
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>-2.52</b>	<b>-2.83</b>	<b>-0.26</b>	<b>0.57</b>	<b>0.31</b>		

**Portfolio Characteristics (Benchmark: Russell 1000 Growth Index)**

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	192,997,458,883	228,882,072,017
Median Mkt. Cap (\$)	74,877,369,065	11,781,694,980
Price/Earnings ratio	24.0	27.0
Price/Book ratio	5.5	6.3
5 Yr. EPS Growth Rate (%)	8.0	19.6
Current Yield (%)	1.5	1.4
Beta (5 Years, Monthly)	0.82	1.00
Number of Stocks	51	553

**Top Ten Equity Holdings (Benchmark: Russell 1000 Growth Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Microsoft Corp	4.9	5.3	-0.4	7.2
Alphabet Inc	4.8	2.4	2.4	-1.5
Apple Inc	4.8	6.6	-1.8	-0.5
TJX Companies Inc (The)	3.0	0.4	2.6	7.1
Starbucks Corp	2.7	0.6	2.1	1.4
Mastercard Inc	2.7	1.3	1.4	15.9
Home Depot Inc. (The)	2.7	1.6	1.1	-5.4
Oracle Corp	2.7	0.1	2.6	-2.9
Nike Inc	2.6	0.7	1.9	6.5
Unitedhealth Group Inc	2.5	1.6	0.9	-2.6

**Ten Best Performers (Benchmark: Russell 1000 Growth Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Dr Pepper Snapple Group Inc	0.8	0.2	0.6	22.6
Broadridge Fin. Solutions	1.9	0.1	1.8	21.5
Mastercard Inc	2.7	1.3	1.4	15.9
Cognizant Technology	2.0	0.4	1.6	13.6
Intel Corp	1.4	0.0	1.4	13.6
Varian Medical Systems Inc	1.0	0.1	0.9	10.3
F5 Networks Inc	2.0	0.1	1.9	10.2
Fiserv Inc.	1.5	0.2	1.3	8.8
Verisk Analytics Inc	1.3	0.1	1.2	8.3
Fortive Corp	1.1	0.2	0.9	7.2

**Ten Worst Performers (Benchmark: Russell 1000 Growth Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Celgene Corp	0.7	0.5	0.2	-14.5
Comcast Corp	1.9	1.1	0.8	-14.4
Cerner Corp	1.8	0.1	1.7	-13.9
Clorox Co (The)	1.3	0.1	1.2	-10.0
Dell Technologies Inc	0.8	0.1	0.7	-9.9
Verizon Communications Inc	2.1	0.8	1.3	-8.6
McDonald's Corp	2.0	1.0	1.0	-8.6
Johnson & Johnson	2.1	0.4	1.7	-7.7
Dunkin' Brands Group Inc	1.0	0.0	1.0	-6.9
Walt Disney Co (The)	2.2	0.8	1.4	-6.6

**Buy and Hold Sector Attribution (Benchmark: Russell 1000 Growth Index)**

	Allocation		Performance		Stock	Attribution		Portfolio Comparison	
	Portfolio	Benchmark	Portfolio	Benchmark		Sector	Total	Sawgrass	
Consumer Discretionary	16.9	18.1	-2.68	4.21	-1.16	-0.03	-1.20	Market Capitalization (%)	
Consumer Staples	7.2	6.8	0.44	-4.82	0.38	-0.03	0.35	Greater than 25000M	75.1
Energy	0.0	0.9	0.00	-5.86	0.00	0.06	0.06	16000M To 25000M	7.2
Financials	5.0	3.4	-0.59	4.31	-0.25	0.05	-0.20	12000M To 16000M	6.4
Health Care	19.2	12.8	-3.03	-0.19	-0.55	-0.10	-0.65	8000M To 12000M	6.6
Industrials	14.7	12.7	-0.93	-0.08	-0.13	-0.03	-0.15	3000M To 5000M	1.0
Information Technology	28.6	38.0	5.20	3.45	0.50	-0.19	0.31	Cash	3.7
Materials	2.4	3.7	2.46	-5.64	0.19	0.10	0.29		
Real Estate	0.0	2.5	0.00	-3.44	0.00	0.12	0.12		
Telecommunication Services	3.0	1.0	-8.62	-8.11	-0.02	-0.20	-0.21		
Utilities	0.0	0.0	0.00	7.32	0.00	0.00	0.00		
Cash	2.9	0.0	0.35	0.00	0.00	-0.03	-0.03		
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.12</b>	<b>1.43</b>	<b>-1.02</b>	<b>-0.28</b>	<b>-1.30</b>		

## Portfolio Characteristics (Benchmark: Russell 2000 Growth Index)

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	3,418,593,232	2,959,810,300
Median Mkt. Cap (\$)	2,004,062,200	1,023,531,075
Price/Earnings ratio	36.3	23.5
Price/Book ratio	4.1	4.1
5 Yr. EPS Growth Rate (%)	22.5	16.2
Current Yield (%)	0.2	0.7
Beta (3 Years, Monthly)	0.72	1.00
Number of Stocks	54	1,188

## Ten Best Performers (Benchmark: Russell 2000 Growth Index)

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
GrubHub Inc	2.1	0.8	1.3	41.3
Bofl Holding Inc	2.0	0.1	1.9	35.6
Chegg Inc	1.9	0.2	1.7	26.6
Qualys Inc	1.3	0.2	1.1	22.6
CoStar Group Inc	2.1	0.0	2.1	22.1
Ligand Pharmaceuticals	1.6	0.3	1.3	20.6
Tyler Technologies Inc.	2.1	0.0	2.1	19.2
Willdan Group Inc	1.3	0.0	1.3	18.4
Grand Canyon Education Inc	3.1	0.4	2.7	17.2
Bio-Techne Corp	3.2	0.0	3.2	16.9

## Buy and Hold Sector Attribution (Benchmark: Russell 2000 Growth Index)

	Allocation		Performance		Stock	Attribution		Total
	Portfolio	Benchmark	Portfolio	Benchmark		Sector	Total	
Consumer Discretionary	22.2	14.0	4.88	-3.09	1.77	-0.44	1.33	
Consumer Staples	0.0	2.8	0.00	-3.81	0.00	0.17	0.17	
Energy	0.0	1.4	0.00	-15.33	0.00	0.24	0.24	
Financials	4.5	6.1	21.85	2.38	0.87	0.00	0.87	
Health Care	22.9	23.8	1.93	6.32	-1.01	-0.04	-1.04	
Industrials	11.2	18.4	-10.61	-3.44	-0.80	0.41	-0.39	
Information Technology	36.3	23.8	9.44	10.03	-0.22	0.97	0.76	
Materials	1.4	4.6	1.43	-0.67	0.03	0.10	0.12	
Real Estate	0.0	3.3	0.00	-7.28	0.00	0.32	0.32	
Telecommunication Services	0.0	1.0	0.00	-1.78	0.00	0.04	0.04	
Utilities	0.0	0.8	0.00	-10.58	0.00	0.10	0.10	
Cash	1.5	0.0	0.35	0.00	0.00	-0.03	-0.03	
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>4.76</b>	<b>2.28</b>	<b>0.64</b>	<b>1.85</b>	<b>2.49</b>	

## Top Ten Equity Holdings (Benchmark: Russell 2000 Growth Index)

	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Bio-Techne Corp	3.2	0.0	3.2	16.9
Grand Canyon Education Inc	3.1	0.4	2.7	17.2
Carbonite Inc	3.1	0.1	3.0	14.7
EPAM Systems Inc	3.1	0.5	2.6	6.6
Icon PLC	2.9	0.0	2.9	5.3
RealPage Inc	2.9	0.3	2.6	16.3
Ultimate Software Group Inc (The)	2.8	0.0	2.8	11.7
Healthcare Services Group Inc	2.7	0.3	2.4	-17.2
Five Below Inc	2.6	0.4	2.2	10.6
Envestnet Inc	2.6	0.2	2.4	14.9

## Ten Worst Performers (Benchmark: Russell 2000 Growth Index)

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Maco Tech Solutions	0.6	0.1	0.5	-49.0
MiMedx Group Inc	0.5	0.1	0.4	-44.7
WageWorks Inc	2.1	0.2	1.9	-27.1
Dave & Buster's Entertainment Inc	1.1	0.2	0.9	-24.3
Kornit Digital Ltd	1.2	0.0	1.2	-20.1
Healthcare Services Group Inc	2.7	0.3	2.4	-17.2
Omniceil Inc	1.7	0.1	1.6	-10.5
Neogenomics Inc	1.6	0.0	1.6	-7.9
MAXIMUS Inc.	2.1	0.4	1.7	-6.7
LKQ Corp	1.6	0.0	1.6	-6.7

## Portfolio Comparison

	Summit Creek
<b>Market Capitalization (%)</b>	
12000M To 16000M	2.1
8000M To 12000M	5.8
5000M To 8000M	17.6
3000M To 5000M	20.8
1000M To 3000M	30.8
500M To 1000M	15.5
200M To 500M	3.5
Cash	3.8

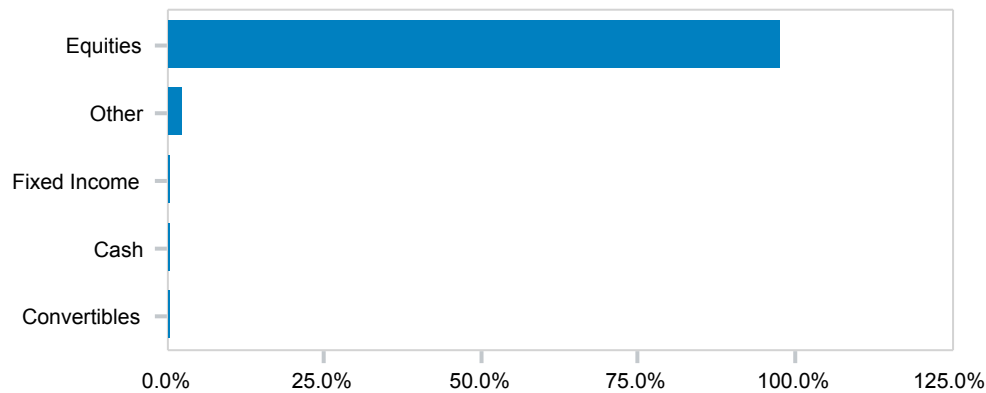
**Fund Information**

Fund Name :	T Rowe Price Small-Cap Value Fund, Inc	Portfolio Assets :	\$10,377 Million
Fund Family :	T. Rowe Price Associates Inc	Portfolio Manager :	Preston G. Athey
Ticker :	PRSVX	PM Tenure :	1991
Inception Date :	06/30/1988	Fund Style :	IM U.S. SMID Cap Core Equity (MF)
Fund Assets :	\$8,068 Million	Style Benchmark :	Russell 2500 Index
Portfolio Turnover :	22%		

**Fund Investment Policy**

The Fund seeks long-term capital growth by investing primarily in the common stock of companies with relatively small market capitalizations which are believed to be undervalued and have good prospects for capital appreciation.

**Asset Allocation As of 12/31/2017**



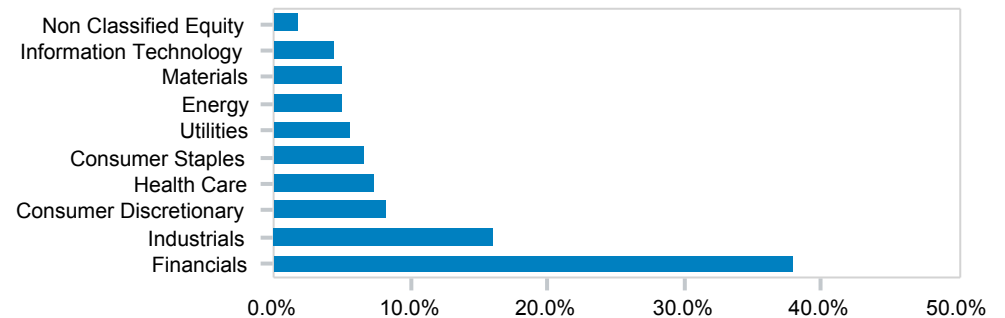
**Fund Characteristics As of 12/31/2017**

Total Securities	319
Avg. Market Cap	\$3,029 Million
P/E	30.5
P/B	3.4
Div. Yield	2.0%
Annual EPS	15.6
5Yr EPS	10.1
3Yr EPS Growth	9.4

**Top Ten Securities As of 12/31/2017**

SHS OF BENEF INTEREST	1.8 %
Western Alliance Bancorp ORD	1.2 %
Home BancShares Inc ORD	1.1 %
Belden Inc ORD	1.0 %
Columbia Banking System Inc ORD	1.0 %
Landstar System Inc ORD	1.0 %
ONE Gas Inc ORD	1.0 %
BankUnited Inc ORD	1.0 %
PNM Resources Inc ORD	1.0 %
Nomad Foods Ltd ORD	1.0 %

**Sector/Quality Allocation As of 12/31/2017**



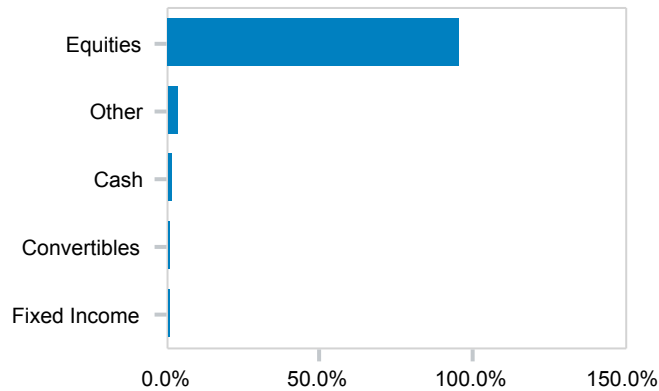
**Fund Information**

Fund Name :	Templeton Institutional Funds: International Equity Series; Primary Shares	Portfolio Assets :	-
Fund Family :	Franklin Templeton Investments	Portfolio Manager :	Nori/Docal/Sweeting
Ticker :	TFEQX	PM Tenure :	1999--2001--2003
Inception Date :	10/18/1990	Fund Style :	IM International Multi-Cap Value Equity (MF)
Fund Assets :	-	Style Benchmark :	MSCI EAFE IMI Value
Portfolio Turnover :	15%		

**Fund Investment Policy**

The Fund seeks long-term capital growth through a flexible policy of investing in equity securities and debt obligations of companies and governments outside the United States.

**Asset Allocation As of 12/31/2017**



**Top Ten Securities As of 12/31/2017**

Samsung Electronics Co Ltd ORD	3.5 %
Institutional Money Market Portfolio	3.0 %
BP PLC ORD	2.7 %
Roche Holding AG Par	2.0 %
BNP Paribas SA ORD	1.9 %
HSBC Holdings PLC ORD	1.8 %
Telenor ASA ORD	1.7 %
Royal Dutch Shell PLC DR	1.7 %
Standard Chartered PLC ORD	1.7 %
Bayer AG ORD	1.6 %

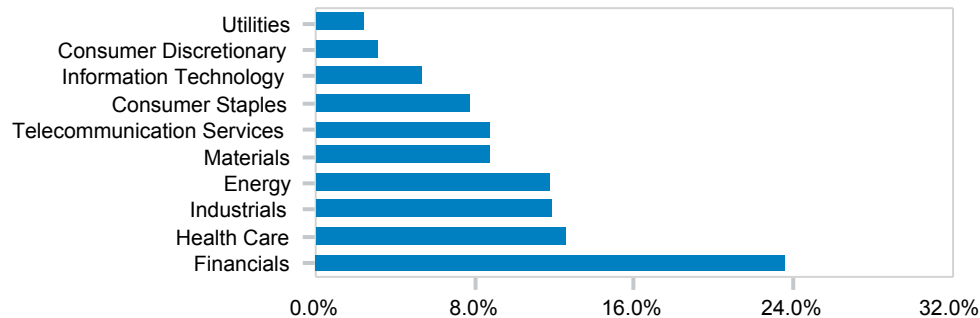
**Top 5 Countries As of 12/31/2017**

United Kingdom	14.8 %
Japan	11.7 %
France	10.2 %
Germany	9.5 %
Netherlands	8.3 %

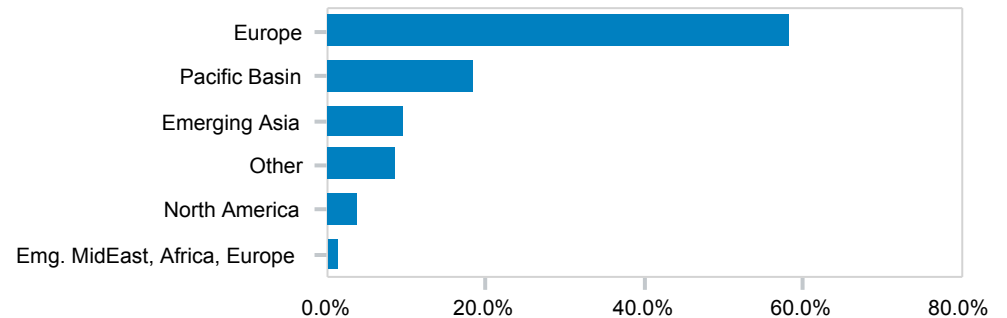
**Fund Characteristics As of 12/31/2017**

Total Securities	97
Avg. Market Cap	\$66,558 Million
P/E	25.2
P/B	2.1
Div. Yield	2.8%
Annual EPS	20.9
5Yr EPS	-0.4
3Yr EPS Growth	1.8

**Sector/Quality Allocation As of 12/31/2017**



**Regional Allocation As of 12/31/2017**





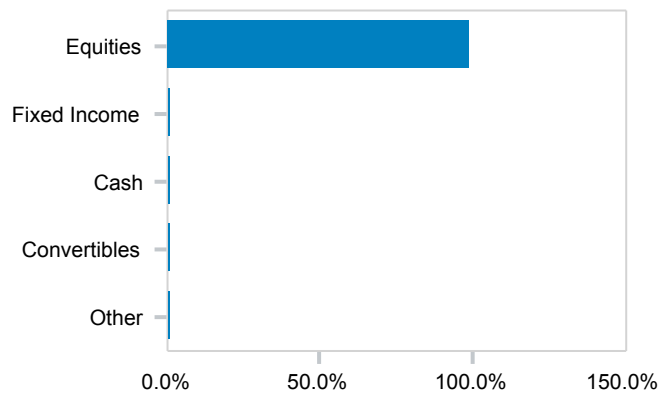
**Fund Information**

Fund Name :	MFS Institutional Trust: MFS Institutional International Equity Fund	Portfolio Assets :	\$9,893 Million
Fund Family :	MFS Investment Management	Portfolio Manager :	Ling/Benzinho
Ticker :	MIEIX	PM Tenure :	2009--2016
Inception Date :	01/31/1996	Fund Style :	IM International Large Cap Growth Equity (MF)
Fund Assets :	\$9,893 Million	Style Benchmark :	MSCI EAFE Growth
Portfolio Turnover :	17%		

**Fund Investment Policy**

The Fund seeks capital appreciation. The Fund normally invests at least 80% of its net assets in non-U.S. equity securities. The Fund uses a bottom-up investment approach. Stocks are selected primarily based on fundamental analysis of issuers and their potential.

**Asset Allocation As of 02/28/2018**



**Top Ten Securities As of 02/28/2018**

Nestle SA ORD	3.4 %
Bayer AG ORD	3.0 %
AIA Group Ltd ORD	2.7 %
Roche Holding AG Par	2.5 %
Schneider Electric SE ORD	2.4 %
Terumo Corp ORD	2.4 %
UBS Group AG ORD	2.4 %
Air Liquide SA ORD	2.4 %
Hoya Corp ORD	2.4 %
Pernod Ricard SA ORD	2.4 %

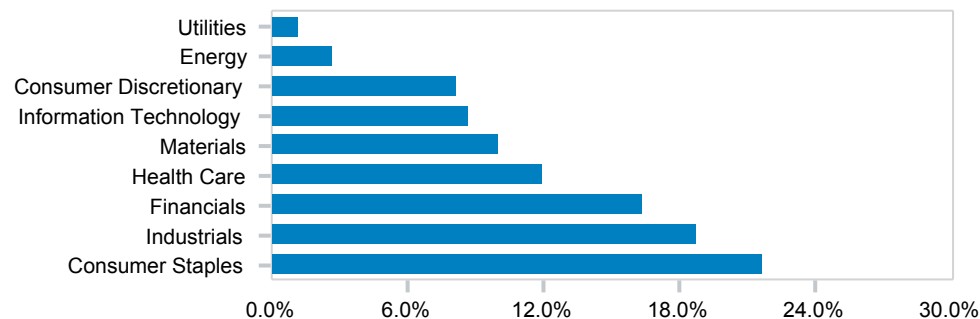
**Top 5 Countries As of 02/28/2018**

France	15.4 %
Japan	14.5 %
Switzerland	12.5 %
United Kingdom	12.0 %
Germany	10.2 %

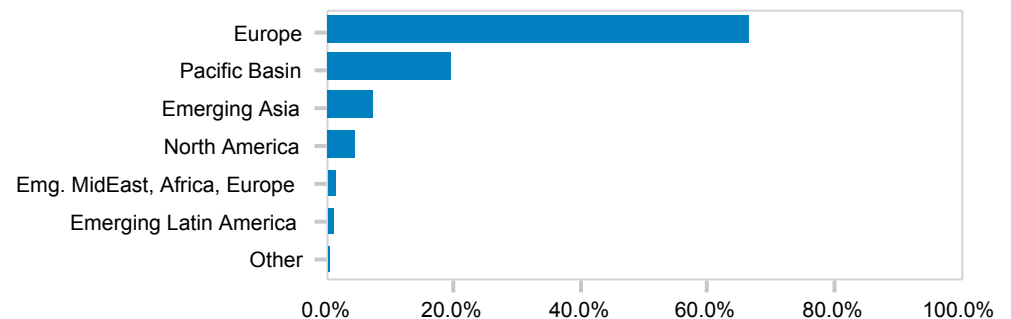
**Fund Characteristics As of 02/28/2018**

Total Securities	77
Avg. Market Cap	\$71,690 Million
P/E	23.1
P/B	4.0
Div. Yield	2.7%
Annual EPS	14.0
5Yr EPS	9.8
3Yr EPS Growth	10.1

**Sector/Quality Allocation As of 02/28/2018**



**Regional Allocation As of 02/28/2018**



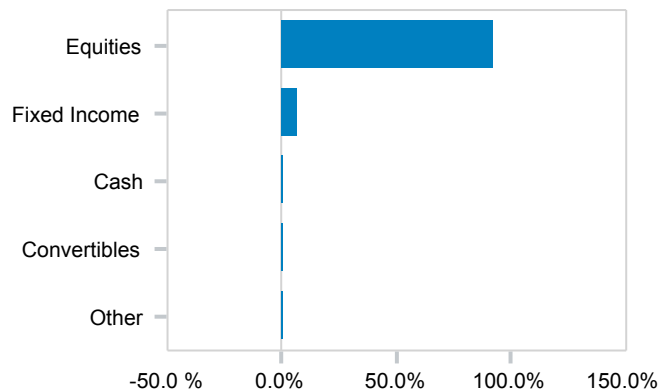
**Fund Information**

Fund Name :	Vanguard Trustees' Equity Fund: Vanguard Emerging Markets Select Stock Fund; Investor Shares	Portfolio Assets :	\$798 Million
Fund Family :	Vanguard Group Inc	Portfolio Manager :	Team Managed
Ticker :	VMMSX	PM Tenure :	
Inception Date :	06/14/2011	Fund Style :	IM Emerging Markets Equity (MF)
Fund Assets :	\$798 Million	Style Benchmark :	MSCI Emerging Markets Index
Portfolio Turnover :	44%		

**Fund Investment Policy**

The Fund seeks long-term capital appreciation. The Fund invests in small-, mid-, and large-capitalization companies and is expected to diversify its assets among companies located in emerging markets around the world. The Fund invests at least 80% of its assets in common stocks of companies located in emerging markets.

**Asset Allocation As of 12/31/2017**



**Top Ten Securities As of 12/31/2017**

Vanguard Market Liquidity Fund	6.9 %
Tencent Holdings Ltd ORD	3.2 %
Taiwan Semiconductor Manufacturing	2.5 %
NK Lukoil PAO DR	1.9 %
Taiwan Semiconductor Manufacturing	1.8 %
China Construction Bank Corp ORD	1.7 %
Alibaba Group Holding Ltd DR	1.5 %
Baidu Inc DR	1.4 %
Reliance Industries Ltd ORD	1.2 %
Sberbank Rossii PAO DR	1.2 %

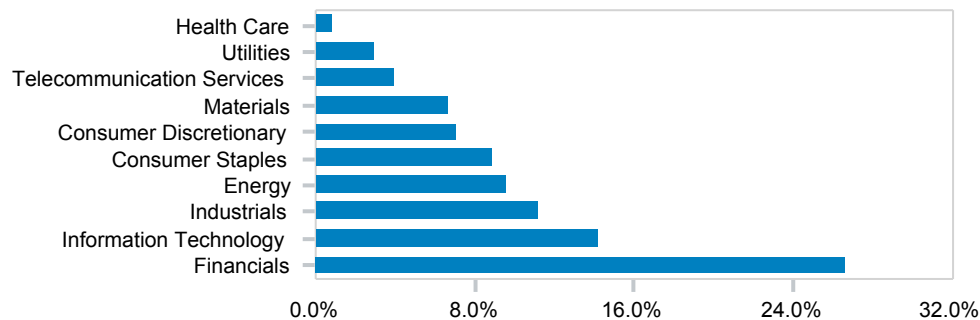
**Top 5 Countries As of 12/31/2017**

China	21.7 %
Taiwan	10.1 %
Brazil	9.8 %
India	7.8 %
Hong Kong	5.9 %

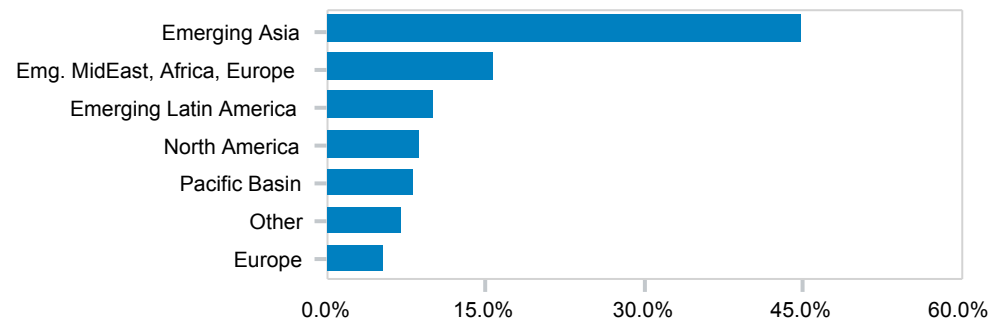
**Fund Characteristics As of 12/31/2017**

Total Securities	306
Avg. Market Cap	\$73,802 Million
P/E	22.5
P/B	3.1
Div. Yield	2.9%
Annual EPS	13.7
5Yr EPS	6.4
3Yr EPS Growth	7.3

**Sector/Quality Allocation As of 12/31/2017**



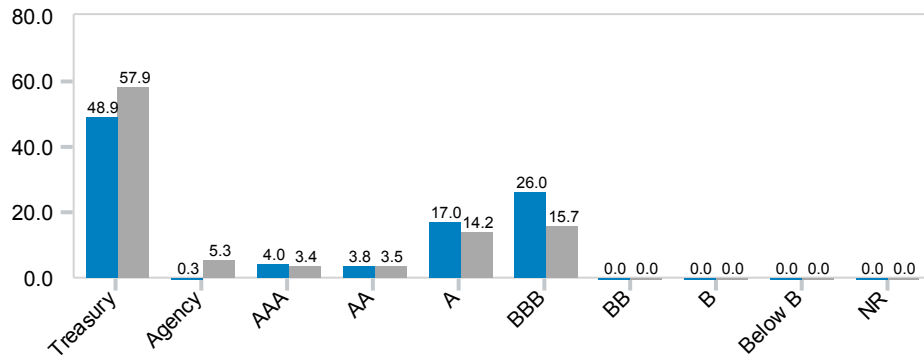
**Regional Allocation As of 12/31/2017**



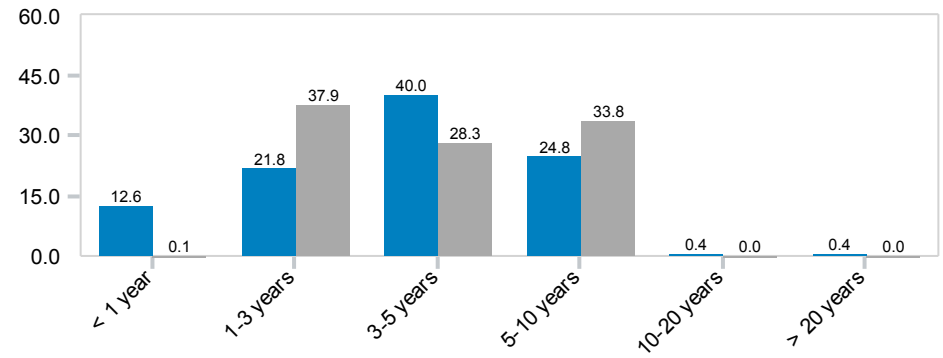
Portfolio Characteristics

	Portfolio	Benchmark
Avg. Maturity	4.82	4.44
Avg. Quality	AA-	AA
Coupon Rate (%)	2.71	2.51
Current Yield	2.70	2.52
Effective Duration	3.98	3.99

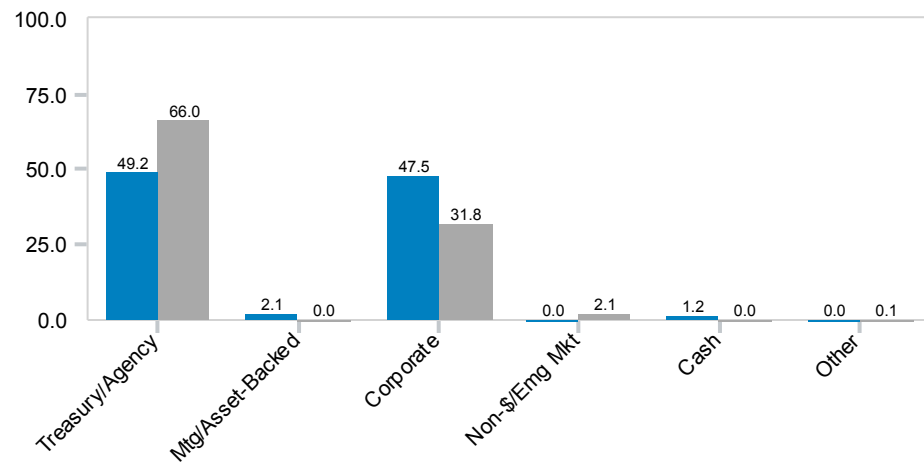
Credit Quality Distribution (%)



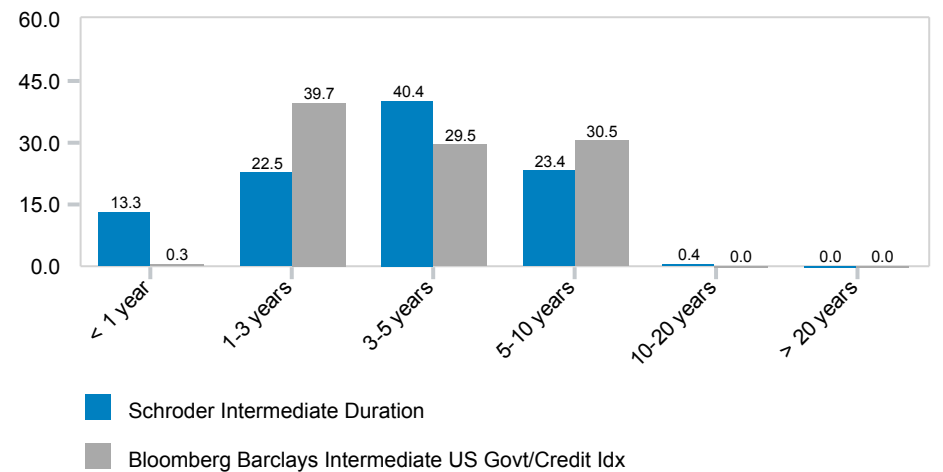
Maturity Distribution (%)



Sector Distribution (%)



Duration Distribution (%)



■ Schroder Intermediate Duration  
 ■ Bloomberg Barclays Intermediate US Govt/Credit Idx



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
<b>Firefighters' Total Fund</b>	<b>0.51</b>	<b>161,740,697</b>	<b>825,756</b>	
<b>Domestic Equity</b>				
Cooke & Bieler	0.45	18,508,990	83,290	0.45 % of Assets
NTGI S&P 500	0.05	17,591,077	8,796	0.05 % of First \$100 M 0.02 % Thereafter
Sawgrass	0.50	18,320,397	91,602	0.50 % of Assets
NTGI S&P 400	0.05	7,866,313	3,933	0.05 % of First \$100 M 0.02 % Thereafter
T Rowe Price	0.80	7,699,756	61,598	0.80 % of Assets
Summit Creek	1.00	8,309,229	83,092	1.00 % of Assets
<b>International Equity</b>				
MFS	0.71	13,933,584	98,928	0.71 % of Assets
Templeton	0.78	13,857,981	108,092	0.78 % of Assets
Vanguard EM	0.93	5,930,727	55,156	0.93 % of Assets
<b>Domestic Fixed Income</b>				
NTGI Government / Credit	0.05	10,045,837	5,023	0.05 % of First \$100 M 0.02 % Thereafter
Schroder Intermediate Duration	0.38	25,574,621	97,184	0.38 % of First \$30 M 0.25 % of Next \$70 M 0.13 % Thereafter
<b>Real Estate</b>				
PGIM	1.00	11,058,231	110,582	1.00 % of Assets
Principal Enhanced Property Fund, LP	1.20	1,539,942	18,479	1.20 % of Assets
<b>Cash</b>	<b>0.00</b>	<b>1,504,013</b>	<b>-</b>	<b>0.00 % of Assets</b>

\* Principal Enhanced Property Fund fee is 1.2% of assets plus 15% of excess over 11% IRR



**Comparative Performance**  
**Firefighters' Total Fund Net**  
As of March 31, 2018

Comparative Performance						
	<b>QTR</b>	<b>FYTD</b>	<b>1 YR</b>	<b>3 YR</b>	<b>5 YR</b>	<b>10 YR</b>
<b>Firefighters' Total Fund</b>	<b>-0.72</b>	<b>-0.72</b>	<b>10.54</b>	<b>6.89</b>	<b>8.67</b>	<b>7.55</b>
Sioux Falls Total Policy	-0.68	-0.68	10.67	7.25	8.82	6.94
<b>Total Domestic Equity</b>	<b>-0.48</b>	<b>-0.48</b>	<b>13.39</b>	<b>9.57</b>	<b>12.11</b>	<b>9.57</b>
Russell 3000 Index	-0.64	-0.64	13.81	10.22	13.03	9.62
Cooke & Bieler	-2.26	-2.26	9.68	9.01	12.12	9.09
Russell 1000 Value Index	-2.83	-2.83	6.95	7.88	10.78	7.78
NTGI S&P 500	-0.77	-0.77	13.94	10.79	13.34	9.43
S&P 500 Index	-0.76	-0.76	13.99	10.78	13.31	9.49
Sawgrass	-0.06	-0.06	14.76	9.12	12.49	9.54
Russell 1000 Growth Index	1.42	1.42	21.25	12.90	15.53	11.34
NTGI S&P 400	-0.76	-0.76	10.90	8.95	11.99	10.93
S&P MidCap 400 Index	-0.77	-0.77	10.97	8.96	11.97	10.90
T Rowe Price	-1.61	-1.61	10.09	10.67	10.44	9.74
Russell 2000 Value Index	-2.64	-2.64	5.13	7.87	9.96	8.61
Summit Creek	4.92	4.92	23.95	8.38	N/A	N/A
Russell 2000 Growth Index	2.30	2.30	18.63	8.77	12.90	10.95

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



**Comparative Performance**  
**Firefighters' Total Fund Net**  
As of March 31, 2018

	<b>QTR</b>	<b>FYTD</b>	<b>1 YR</b>	<b>3 YR</b>	<b>5 YR</b>	<b>10 YR</b>
<b>Total International Equity</b>	<b>-0.84</b>	<b>-0.84</b>	<b>15.75</b>	<b>5.86</b>	<b>6.11</b>	<b>3.60</b>
MSCI AC World ex USA (Net)	-1.18	-1.18	16.53	6.18	5.89	2.70
Templeton	-1.91	-1.91	12.48	4.14	5.56	2.60
MSCI EAFE Value Index (Net)	-2.03	-2.03	12.19	4.29	5.78	1.97
MFS	-1.37	-1.37	16.68	6.08	6.89	4.90
MSCI EAFE Growth Index (Net)	-1.04	-1.04	17.51	6.73	7.14	3.44
Vanguard EM	3.07	3.07	21.68	9.87	N/A	N/A
MSCI Emerging Markets (Net) Index	1.42	1.42	24.93	8.81	4.99	3.02
<b>Total Domestic Fixed Income</b>	<b>-2.12</b>	<b>-2.12</b>	<b>1.11</b>	<b>1.13</b>	<b>2.54</b>	<b>5.70</b>
Blmbg. Barc. U.S. Aggregate Index	-1.46	-1.46	1.20	1.20	1.82	3.63
Schroder Intermediate Duration	-1.05	-1.05	0.49	1.15	1.74	N/A
Bloomberg Barclays Intermediate US Govt/Credit Idx	-0.98	-0.98	0.35	0.94	1.25	2.92
NTGI Government / Credit	-1.57	-1.57	1.38	1.21	1.84	3.67
Blmbg. Barc. U.S. Gov't/Credit	-1.58	-1.58	1.38	1.22	1.84	3.65
Schroder Long Duration	-5.78	-5.78	2.41	1.74	4.56	7.91
Blmbg. Barc. U.S. Long Government/Credit	-3.58	-3.58	5.09	2.13	4.09	6.79
Total Real Estate	2.23	2.23	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW) (Net)	1.95	1.95	7.25	9.33	10.53	4.02
PGIM	2.17	2.17	7.38	9.22	10.72	3.65
NCREIF Fund Index-ODCE (VW)	2.20	2.20	8.07	9.99	11.43	5.11
Principal Enhanced Property Fund, LP	2.66	2.66	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW) (Net)	1.95	1.95	7.25	9.33	10.53	4.02
Cash	0.30	0.30	0.95	N/A	N/A	N/A
90 Day U.S. Treasury Bill	0.35	0.35	1.11	0.49	0.31	0.32

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



---

<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.



AndCo compiled this report for the sole use of the client for which it was prepared. AndCo is responsible for evaluating the performance results of the Total Fund along with the investment advisors by comparing their performance with indices and other related peer universe data that is deemed appropriate. AndCo uses the results from this evaluation to make observations and recommendations to the client.

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.

This performance report is based on data obtained by the client's custodian(s), investment fund administrator, or other sources believed to be reliable. While these sources are believed to be reliable, the data providers are responsible for the accuracy and completeness of their statements. Clients are encouraged to compare the records of their custodian(s) to ensure this report fairly and accurately reflects their various asset positions.

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.

Additional information included in this document may contain data provided by from index databases, public economic sources and the managers themselves.

This document may contain data provided by Bloomberg Barclays. Bloomberg Barclays Index data provided by way of Barclays Live.

This document may contain data provided by Standard and Poor's. Nothing contained within any document, advertisement or presentation from S&P Indices constitutes an offer of services in jurisdictions where S&P Indices does not have the necessary licenses. All information provided by S&P Indices is impersonal and is not tailored to the needs of any person, entity or group of persons. Any returns or performance provided within any document is provided for illustrative purposes only and does not demonstrate actual performance. Past performance is not a guarantee of future investment results.

This document may contain data provided by MSCI, Inc. Copyright MSCI, 2017. Unpublished. All Rights Reserved. This information may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used to create any financial instruments or products or any indices. This information is provided on an "as is" basis and the user of this information assumes the entire risk of any use it may make or permit to be made of this information. Neither MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information makes any express or implied warranties or representations with respect to such information or the results to be obtained by the use thereof, and MSCI, its affiliates and each such other person hereby expressly disclaim all warranties (including, without limitation, all warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information have any liability for any direct, indirect, special, incidental, punitive, consequential or any other damages (including, without limitation, lost profits) even if notified of, or if it might otherwise have anticipated, the possibility of such damages.

This document may contain data provided by Russell Investment Group. Russell Investment Group is the source owner of the data contained or reflected in this material and all trademarks and copyrights related thereto. The material may contain confidential information and unauthorized use, disclosure, copying, dissemination or redistribution is strictly prohibited. This is a user presentation of the data. Russell Investment Group is not responsible for the formatting or configuration of this material or for any inaccuracy in presentation thereof.

This document may contain data provided by Morningstar. All rights reserved. Use of this content requires expert knowledge. It is to be used by specialist institutions only. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied, adapted or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information, except where such damages or losses cannot be limited or excluded by law in your jurisdiction. Past financial performance is not guarantee of future results.





**Putting clients first.**



CHICAGO | CLEVELAND | DALLAS | DETROIT | ORLANDO | PITTSBURGH | RENO | TULSA

**AndCo Consulting** | (844) 44-ANDCO | *AndCoConsulting.com*