Investment Performance Review Period Ending September 30, 2018

Miami Springs Police & Fire Retirement System



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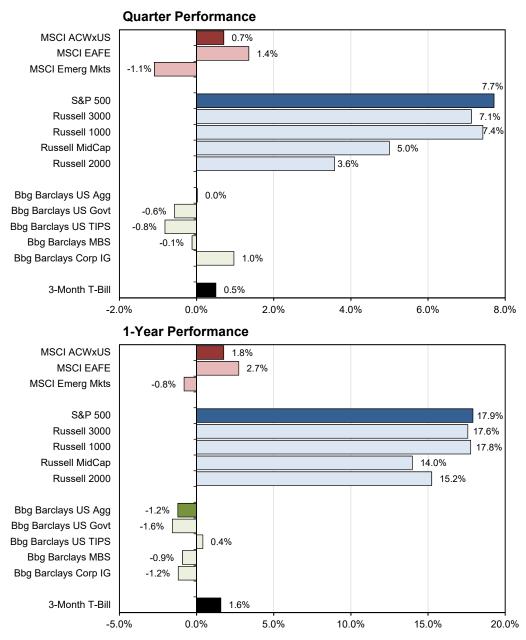
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3rd Quarter 2018 Market Environment

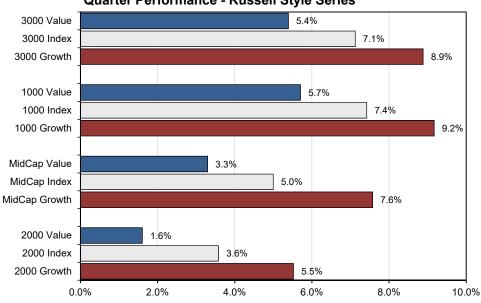


- Market returns were mixed across major equity and fixed income indices for the 3rd guarter of 2018 with many themes from the 2nd guarter repeating during the current period. Broad domestic equity indices pushed higher on continued strength in both economic and corporate earnings data. Corporate earnings continue to benefit from fiscal stimulus tailwinds in the form of the late 2017 tax reform. International indices underperformed domestic indices during the period, posting more muted returns in US dollar (USD) terms, as investors weighed relatively soft economic data, a strengthening USD and geopolitical concerns, especially around global trade relations. Fixed income returns were flat for the guarter as interest rates continued to rise. Domestic stocks rose as concerns around ongoing monetary policy tightening by the Federal Reserve (Fed) and an escalating trade war between the US and China were not substantial enough to dampen investor enthusiasm around the ongoing strength of the US economy. The US stock market represented by the Russell 3000 Index returned 7.1% and 17.6% for the guarter and 1-year period respectively.
- International equity returns finished the quarter slightly positive with the MSCI ACWI ex US Index returning 0.7%. Developed market stocks pushed higher through the period, however, relatively subdued economic growth and ongoing political and trade uncertainty tempered returns versus domestic equities. The developed market MSCI EAFE Index gained 1.4% during the quarter. Emerging market stocks struggled in comparison, posting negative returns for the period, as trade tensions grew between the US and China. In addition, a strengthening USD caused headwinds for most international markets, but caused particular difficulties for emerging market countries that issue debt in USD. The MSCI Emerging Markets Index posted a small decline of -1.1% during the 3rd quarter. The relative outperformance of developed markets can also be seen in the 1-year period with the MSCI EAFE and MSCI Emerging Markets indices returning 2.7% and -0.8% respectively.
- Interest rates on the US Treasury Yield Curve continued their year-to-date rise during the 3rd quarter as investor expectations for further Fed tightening of monetary policy increased during the period. The yield curve did flatten slightly as interest rates had the greatest increase in short-term maturities, but overall, the shift in rates was fairly consistent throughout the entire curve. The Fed did implement another interest rate increase following their September meeting citing the continued strength of the US economy and stable inflation. The broad market Bloomberg Barclays US Aggregate Index was flat for the quarter returning 0.0% and is slightly negative over the 1-year period returning -1.2%. Corporate issues rebounded following underperformance during the first half of the year and were the only investment grade sector to post a positive return during the quarter, as they benefitted from tightening credit spreads and strong investor demand.

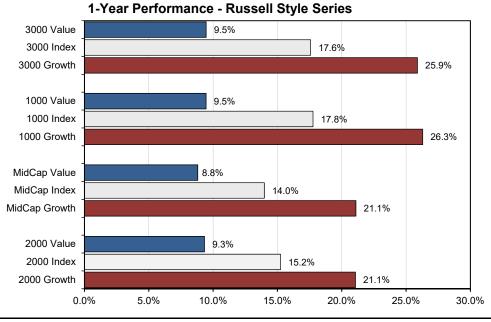




- US equity index returns were positive across the style and capitalization spectrum during the 3rd guarter of 2018. US equity markets were pushed higher by the ongoing strength in US economic data and corporate earnings. Positive data releases in GDP, unemployment, retail sales, consumer consumption and investor sentiment highlighted the continued health of the US economy. Corporate earnings released during the guarter were also impressive. Earnings reported for S&P 500 companies were up over 20% on a year-over-year basis for the second straight quarter as corporate profits continued to benefit from the new tax code. The current expansion in US equity markets now marks the longest bull market in history. While the positive economic data drove returns through the guarter, trade negotiations with China broke down with both the US and China instituting several rounds of new tariffs during the period. Currently the US is imposing tariffs on \$250 billion of Chinese imports with China placing tariffs on \$110 billion worth of goods. Further action has been threatened by both countries. While negotiations with China have been unsuccessful, progress was made in the renegotiation of the North American Free Trade Agreement (NAFTA) and discussions with the European Union (EU) appear to be moving ahead productively.
- During the quarter, large cap stocks outperformed mid and small cap equities across growth, value and core indices. The large cap Russell 1000 Index returned 7.4% for the quarter versus a 3.6% return for the Russell 2000 Index. The Russell 1000 benefitted from strong performance from some of its largest exposures. Apple Inc, Microsoft Corp and Amazon.com Inc alone make up over 10% of the index and posted quarterly returns of 22.4%, 16.4% and 17.8% respectively. Those same three stocks have gained 48.7%, 56.3% and 108.4% over the 1-year period. This strong performance from some of the index's largest constituents has helped large caps outperform small caps over the 1-year period as well with the Russell 1000 returning 17.8% over the trailing year while the Russell 2000 posted a still solid return of 15.2%.
- Growth stocks outperformed value stocks across the market cap spectrum during the 3rd quarter. The large cap Russell 1000 Growth Index was the best performing style index for the period returning a notable 9.2% for the quarter. The outperformance of growth indices relative to value indices is also evident over the 1-year period as growth indices continue to show significant outperformance relative to their value counterparts. The returns for growth indices more than double the returns of the corresponding value indices over the last 12 months. 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 sectors such as REITs and utilities.

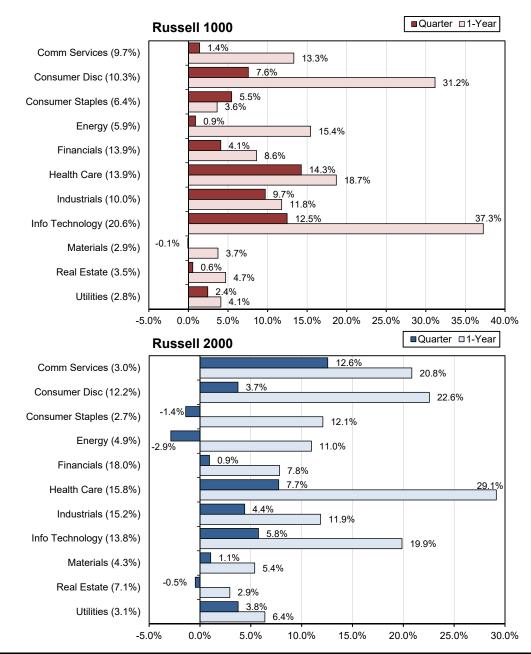








- Both S&P Dow Jones Indices and MSCI made changes to the Global Industry Classification Standard (GICS) sector configurations of their indices, creating a new GICS sector classification called Communication Services which replaced the Telecommunications sector on September 28, 2018. The Communication Services sector is comprised of companies in the Telecommunications sector, as well as certain companies formerly classified as Consumer Discretionary and Information Technology. As a result, the sector, went from a weighting of about 2% of the Russell 1000 Index to almost 10% post reclassification. Notable names now classified under Communication Services include Netflix, Alphabet, Facebook and Disney. This is just the second change to the GICS classifications since 1999.
- Sector performance was broadly positive across large cap sectors for the 3rd quarter. Ten of eleven sectors had positive returns for the quarter with four outpacing the Russell 1000 Index return. The consumer discretionary sector continues to do well on the back of strong retail sales and increased consumer spending, gaining 7.6% for the period. Health care and technology stocks increased 14.3% and 12.5% during the quarter respectively, with companies in both sectors reporting strong earnings. Industrials benefitted from continued economic strength returning 9.7%. The largest detractors for the quarter were the materials, real estate and energy sectors which returned -0.1%, 0.6% and 0.9% respectively. Over the trailing 1-year period, all large cap all sectors were positive. The information technology and consumer discretionary sectors were the best performers, returning over 30% over the last 12 months, and six of eleven sectors have returns over 10% for the year.
- Quarterly results for small cap sectors were generally lower relative to their large capitalization counterparts. Nine of eleven sectors had positive returns during the period with six of eleven economic sectors outpacing the Russell 2000 Index return for the quarter. Energy, consumer staples and real estate posted negative returns for the period returning -2.9%, -1.4% and -0.5% respectively. Communications services and health care were the best performers returning 12.6% and 7.7%. Over the trailing 1-year period, all eleven sectors posted gains. Health care stocks were the best performers within the Russell 2000 for the trailing year returning a solid 29.1%. Communication services, technology, and consumer discretionary also had particularly robust returns for the 1-year period.
- Using S&P 500 sector valuations as a proxy for the market, forward P/E ratios for seven of the eleven GICS sectors were higher than their long-term averages at quarter-end. Using these historical P/E measures, the utilities, consumer discretionary and real estate sectors appear the most extended. In contrast the financials, technology and 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 September 30, 2018

Top 10 Weighted Stocks						
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector		
Apple Inc	3.97%	22.4%	48.7%	Information Technology		
Microsoft Corp	3.15%	16.4%	56.3%	Information Technology		
Amazon.com Inc	2.96%	17.8%	108.4%	Consumer Discretionary		
Berkshire Hathaway Inc B	1.51%	14.7%	16.8%	Financials		
Facebook Inc A	1.42%	-15.4%	-3.8%	Communication Services		
JPMorgan Chase & Co	1.37%	8.9%	20.7%	Financials		
Johnson & Johnson	1.35%	14.6%	9.1%	Health Care		
Alphabet Inc Class C	1.32%	7.0%	24.4%	Communication Services		
Alphabet Inc A	1.31%	6.9%	24.0%	Communication Services		
Exxon Mobil Corp	1.31%	3.8%	7.9%	Energy		

Top 10 Performing Stocks (by Quarter)							
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector			
Advanced Micro Devices Inc	0.10%	106.1%	142.3%	Information Technology			
Square Inc A	0.10%	60.6%	243.7%	Information Technology			
Paycom Software Inc	0.03%	57.2%	107.3%	Information Technology			
Twilio Inc A	0.02%	54.0%	189.0%	Information Technology			
Atlassian Corporation PLC A	0.03%	53.8%	173.5%	Information Technology			
Molina Healthcare Inc	0.03%	51.8%	116.3%	Health Care			
DexCom Inc	0.05%	50.6%	192.4%	Health Care			
Match Group Inc	0.01%	49.5%	149.7%	Communication Services			
Fortinet Inc	0.05%	47.8%	157.4%	Information Technology			
IAC/InterActiveCorp	0.06%	42.1%	84.3%	Communication Services			

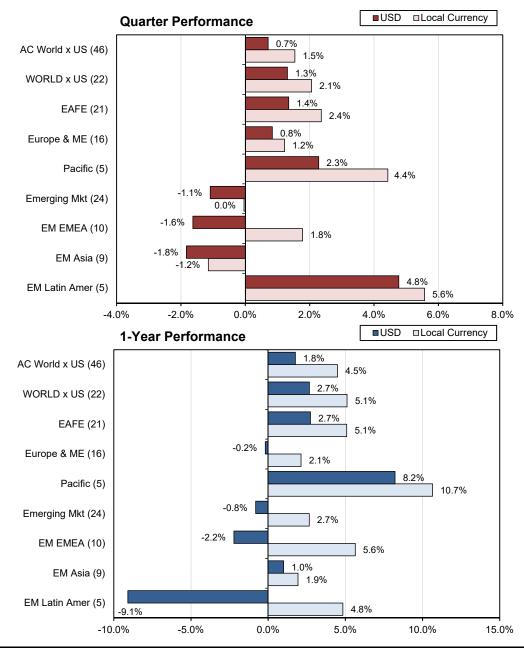
Top 10 Weighted Stocks						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
Five Below Inc	0.31%	33.1%	137.0%	Consumer Discretionary		
Etsy Inc	0.27%	21.8%	204.4%	Consumer Discretionary		
Integrated Device Technology Inc	0.27%	47.5%	76.9%	Information Technology		
LivaNova PLC	0.27%	24.2%	76.9%	Health Care		
Haemonetics Corp	0.26%	27.8%	155.4%	Health Care		
Teladoc Health Inc	0.25%	48.8%	160.5%	Health Care		
Ligand Pharmaceuticals Inc	0.25%	32.5%	101.6%	Health Care		
HubSpot Inc	0.24%	20.4%	79.6%	Information Technology		
Primerica Inc	0.23%	21.3%	49.2%	Financials		
HealthEquity Inc	0.22%	25.7%	86.7%	Health Care		

Top 10 Performing Stocks (by Quarter)							
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector			
CareDx Inc	0.04%	135.7%	679.7%	Health Care			
Reata Pharmaceuticals Inc A	0.07%	133.8%	162.9%	Health Care			
Invitae Corp	0.05%	127.6%	78.5%	Health Care			
RigNet Inc	0.01%	97.6%	18.3%	Energy			
Tandem Diabetes Care Inc	0.10%	94.6%	486.8%	Health Care			
Health Insurance Innovations Inc	0.03%	90.6%	325.2%	Financials			
Funko Inc Class A	0.01%	88.8%	N/A	Consumer Discretionary			
LSB Industries Inc	0.01%	84.5%	23.2%	Materials			
Viking Therapeutics Inc	0.04%	83.6%	812.0%	Health Care			
Ra Pharmaceuticals Inc	0.01%	81.8%	23.9%	Health Care			

Во		Bottom 10 Performing Stocks (by Quarter)							
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Floor & Decor Holdings Inc	0.01%	-38.8%	-22.5%	Consumer Discretionary	Vital Therapies Inc	0.00%	-96.0%	-94.5%	Health Care
Twitter Inc	0.07%	-34.8%	68.7%	Communication Services	GTx Inc	0.00%	-89.7%	-81.4%	Health Care
IPG Photonics Corp	0.02%	-29.3%	-15.7%	Information Technology	Ampio Pharmaceuticals Inc	0.00%	-76.9%	-16.9%	Health Care
Visteon Corp	0.01%	-28.1%	-24.9%	Consumer Discretionary	Innovate Biopharmaceuticals Inc	0.01%	-71.0%	-2.4%	Health Care
Zillow Group Inc A	0.01%	-26.0%	10.1%	Communication Services	Zion Oil & Gas Inc	0.00%	-68.4%	-62.5%	Energy
Zillow Group Inc C	0.02%	-25.1%	10.0%	Communication Services	Endologix Inc	0.01%	-66.3%	-57.2%	Health Care
Western Digital Corp	0.06%	-23.7%	-30.4%	Information Technology	Lannett Co Inc	0.01%	-65.1%	-74.3%	Health Care
Wynn Resorts Ltd	0.05%	-23.7%	-13.3%	Consumer Discretionary	Maiden Holdings Ltd	0.01%	-62.6%	-61.1%	Financials
Extraction Oil & Gas Inc	0.00%	-23.1%	-26.6%	Energy	Diebold Nixdorf Inc	0.02%	-62.3%	-80.1%	Information Technology
Tesla Inc	0.13%	-22.8%	-22.4%	Consumer Discretionary	Sears Holdings Corp	0.00%	-59.2%	-86.7%	Consumer Discretionary



- Broad international equity returns were mixed for the quarter. Most developed markets were positive in local currency and USD terms whereas emerging markets were negative in both local currency and USD terms. Performance was largely driven by the same catalysts as the US equity markets for the second straight quarter. We saw global macroeconomic data slow, but remain generally positive through the period, with returns being tempered by global trade tensions and ongoing political uncertainty. The USD continued to strengthen against most currencies for the period as relatively strong US economic fundamentals and the continued divergence in global monetary policy hurt US investors in international markets. The MSCI ACWI ex US Index gained 1.5% in local currency terms and 0.7% in USD terms during the 3rd quarter. Returns over the 1-year period are modestly positive in both local currency and USD terms with the MSCI ACWI ex US returning 4.5% and 1.8% respectively.
- Third quarter results for developed market international indices were positive in local currency terms and USD terms with the MSCI EAFE Index returning 2.4% and 1.4% respectively. Returns were dampened for US investors as continued strength in the USD pushed returns lower. Developed markets were pushed higher by broadly positive, but slowing, global economic and earnings data despite several significant political events in Europe during the quarter. Concerns over a "no deal" Brexit and worries over a pending budget approval in Italy weighed on returns, while markets were encouraged by progress in trade negotiations between the US and the eurozone and signs of continued political stability in Japan. The MSCI EAFE Index returned 5.1% and 2.7% for the last twelve months in local currency and USD terms respectively.
- Emerging markets underperformed relative to developed markets for the 3rd guarter, posting a flat return in local currency terms that was exacerbated by the rising USD. The MSCI Emerging Markets Index returned 0.0% and -1.1% in local currency and USD terms respectively. Returns in emerging markets were the hurt by the deterioration in trade negotiations between the US and China followed by several rounds of new tariffs enacted by both countries. Emerging market stocks were also negatively affected by rising US interest rates coupled with an appreciating USD. Many emerging market countries and companies issue debt denominated in USD and the combination of higher interest rates and a relatively weaker local currency can put stress on the balance sheets of these borrowers, especially those heavily dependent on external capital. This was particularly problematic for Turkey, Argentina and South Africa during the 3rd quarter with Argentina having to expedite their request for an emergency bailout of \$50 billion from the World Monetary Fund. In positive news, Mexico and the US made progress toward the renegotiation of NAFTA. One year returns for the MSCI Emerging Market Index were 2.7% in local currency terms and -0.8% in USD terms.





	The Market Environment
US Dollar International Index	Attribution & Country Detail
	As of September 30, 2018

Quarter

Return

3.7%

-1.7%

MSCI-ACWIxUS

Weight

16.9%

12.0%

-- -

1- Year

Return

10.2%

2.9%

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.4%	3.3%	-2.4%
Consumer Discretionary	11.1%	-0.5%	3.3%
Consumer Staples	11.3%	-0.1%	2.5%
Energy	6.0%	3.5%	24.6%
Financials	19.8%	0.9%	-4.0%
Health Care	10.9%	5.6%	7.1%
Industrials	14.3%	2.6%	4.2%
Information Technology	6.2%	0.3%	7.4%
Materials	8.1%	0.4%	5.1%
Real Estate	3.5%	-3.0%	1.0%
Utilities	3.3%	-0.6%	0.7%
Total	100.0%	1.4%	2.7%
MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	7.6%	-3.0%	-4.1%
Consumer Discretionary	10.7%	-3.2%	-1.4%
Consumer Staples	9.7%	-0.6%	1.6%
Energy	7.1%	4.1%	18.3%
Financials	22.0%	1.7%	-1.9%
Health Care	8.3%	4.5%	7.6%
Industrials	11.7%	2.8%	3.8%
Information Technology	8.5%	1.3%	5.6%
Materials	8.2%	0.4%	5.2%
Real Estate	3.2%	-3.5%	-2.7%
Utilities	3.0%	-0.9%	-1.2%
Total	100.0%	0.7%	1.8%
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	14.8%	-9.4%	-6.0%

Jnited Kingdom	17.5%	12.0%	-1.7%	2.9%
France	11.2%	7.7%	2.8%	4.2%
Germany	9.4%	6.5%	-0.6%	-5.4%
Switzerland	8.3%	5.7%	7.3%	1.6%
Australia	6.8%	4.7%	-0.9%	4.4%
Hong Kong	3.5%	2.4%	-1.0%	2.9%
Netherlands	3.3%	2.3%	-1.5%	-1.6%
Spain	3.0%	2.0%	-2.4%	-9.7%
Sweden	2.7%	1.9%	7.0%	-3.3%
Italy	2.3%	1.6%	-4.5%	-8.9%
Denmark	1.7%	1.2%	2.3%	-4.2%
Singapore	1.3%	0.9%	2.2%	6.9%
Finland	1.1%	0.7%	3.2%	10.3%
Belgium	1.0%	0.7%	-5.2%	-11.8%
Norway	0.8%	0.5%	6.7%	13.7%
Israel	0.6%	0.4%	5.1%	14.9%
Ireland	0.5%	0.4%	-5.4%	-6.1%
Austria	0.2%	0.2%	0.2%	-3.1%
New Zealand	0.2%	0.2%	2.4%	4.4%
Portugal	0.2%	0.1%	-0.6%	1.7%
Total EAFE Countries	100.0%	68.7%	1.4%	2.7%
Canada		6.7%	0.8%	1.9%
Total Developed Countries		75.3%	1.3%	2.7%
China		7.6%	-7.5%	-2.2%
Korea		3.7%	0.7%	1.4%
Taiwan		3.0%	6.5%	9.7%
India		2.1%	-2.3%	1.1%
Brazil		1.5%	6.1%	-14.0%
South Africa		1.5%	-7.4%	-5.1%
Russia		0.9%	6.2%	13.7%
Mexico		0.8%	6.9%	-4.4%
Thailand		0.6%	13.6%	15.2%
Malaysia		0.6%	3.8%	7.6%
Indonesia		0.5%	2.0%	-10.4%
Poland		0.3%	10.6%	-5.0%
Chile		0.3%	-2.0%	-5.7%
Philippines		0.3%	1.0%	-15.6%
Qatar		0.2%	12.8%	25.3%
United Arab Emirates		0.2%	3.1%	-6.9%
Turkev		0.2%	-20.5%	-41.7%
Colombia		0.1%	-20.5%	10.0%
Peru		0.1%	-2.5%	12.2%
		0.1%	-2.1%	-14.8%
Greece		0.1%	-17.6%	-14.8%
Hungary				
Czech Republic		0.1%	4.0%	12.8%
Egypt		0.0%	-6.8%	-7.1%
Pakistan		0.0%	-4.9%	-20.6%
Total Emerging Countries Total ACWIxUS Countries		24.7%	-1.1%	-0.8%
Total ACWIVIIS Countrine		100.0%	0.7%	1.8%

MSCI-EAFE

Weight

24.6%

17.5%

6.3% 14.5% 26.0% Energy Financials 23.3% 1.5% 0.4% Health Care -7.2% 11.4% 3.1% Industrials 5.3% 2.5% -4.3% Information Technology 15.9% 2.2% 2.3% Materials 7.8% 4.5% 8.6% Real Estate -5.6% -15.1% 2.9% Utilities 2.5% -1.9% -5.4% Total 100.0% -0.8%

6.7%

-2.9%

-1.9%

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

As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication 7 Services sector.

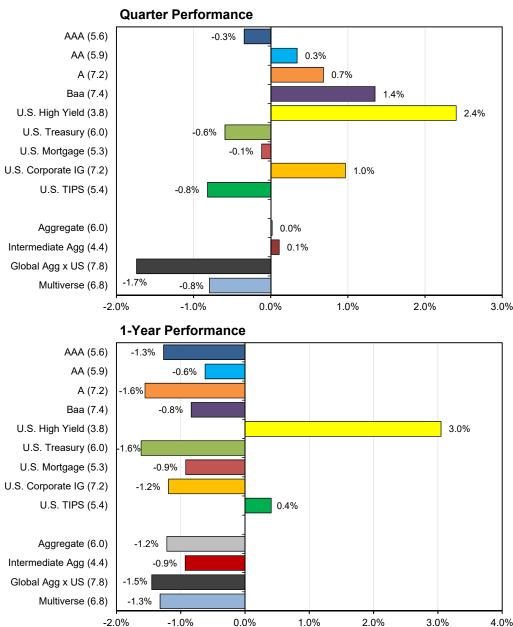
Country

United Kingdom

Japan

Consumer Staples

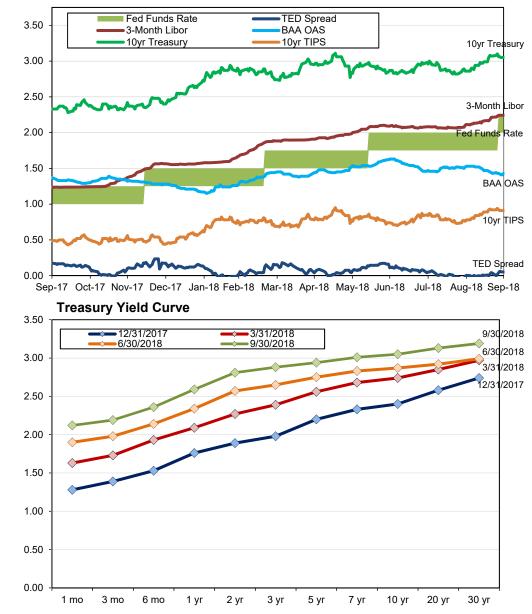
- Broad fixed income benchmarks had mixed results during the 3rd guarter. Interest rates rose across all maturities on the US Treasury Yield Curve. The Federal Open Market Committee (FOMC), decided to increase short-term interest rates by 25 basis points at their September meeting citing continued strength in the economy and stable inflation. This is the third rate hike of 2018. The current Fed Funds Rate target range sits at 2.00%-2.25%. The FOMC also changed the language used in its policy statement, removing the word "accommodative", which investors took as a signal that the Fed plans to continue its trend of monetary policy tightening. The yield curve continued to flatten, although very gradually, as short-term yields rose at a greater rate than long-term yields during the guarter. The difference in yields between the 2year and 10-year Treasury now sits at just 0.24%. As the curve continues to flatten, it moves closer to becoming "inverted", which happens when shortterm maturities have greater yields than long-term securities. Historically, an inverted yield curve has signaled a greater probability of a recession. The Fed is also continuing the reduction of the size of its balance sheet by slowing its pace of reinvestment as the securities it holds mature. The Bloomberg Barclays US Aggregate Index was flat during the guarter, posting a 0.0% return. Over the 1-year period the index has fallen -1.2%.
- Within investment grade credit, lower quality corporate issues outperformed higher quality issues as credit spreads tightened steadily over the quarter. On an absolute basis, without negating the duration differences in the sub-indices, Baa rated credit was the best performing investment grade credit quality segment returning 1.4% for the quarter, while AAA was the worst performing, falling -0.3%. High yield debt outperformed relative to investment grade credit, returning 2.0%, as spreads tightened to a greater degree for these issues and the index benefitted from less sensitivity to rising interest rates due to its lower duration. Returns are negative for all investment grade quality segments when viewed over the 1-year period while high yield continues to outperform with a return of 3.0%.
- Of the Bloomberg Barclays US Aggregate Index's three broad sectors, US investment grade corporates were the best performing investment grade sector through the quarter, returning 1.0%, and the only sector to post a positive return for the period. Corporate credit outperformed as credit spreads tightened. Demand for these securities outweighed supply for the period despite considerable new issuance and a headwind from the sectors higher duration relative to other index sectors. Treasuries were the worst performing sector posting a -0.6% return. Over the 1-year period, all three broad investment grade sectors posted losses with mortgages, investment grade credit and Treasuries falling -0.9%, -1.2% and -1.6% respectively.





- Global fixed income indices continue to struggle relative to their domestic counterparts, underperforming during the 3rd quarter. These indices have lower yields and their relatively high duration acted as a headwind to performance 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. During the 3rd quarter the USD strengthened against most other currencies, negatively impacting the returns on global bond indices. The return on global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, was -1.7% and -1.5% for the guarter and 1-year period respectively. As the global economy continues to recover, several international central banks have started to move toward less accommodative postures. Notably, the ECB, began to slow its monthly bond purchase program in September, reducing new purchases to 15 billion euro per month from 30 billion euro per month, as well as forecasting an end to the program by the end of the year assuming the eurozone recovery continues to flourish. However, they have indicated a continuation of reinvestment in maturing securities and would likely not raise interest rates from current levels until summer 2019. The Bank of England increased interest rates by 0.25% during the guarter citing improvement in their near-term economic outlook and the Bank of Japan has changed its policy to allow flexibility for future tightening in the future.
- 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 steadily during the end of the 3rd quarter, ending the period at 3.05%. 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 increase in credit spreads through the first two quarters of 2018, followed by a smooth decline during the 3rd quarter. This decline is equivalent to an interest rate decrease on corporate bonds, which produces an additional tailwind for corporate bond index returns. These credit spreads have tightened by about 20 basis points over the last 3-months. The green band across the graph illustrates the gradual increase in the Federal Funds Rate (three increases in the last twelve months) due to the continued unwinding of 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 upward momentum of interest rates as well as a general flattening of the yield curve are clearly visible over the last twelve months.







Total Fund Compliance:	Yes	No
The total plan (Net) return equaled or exceeded the total plan benchmark over the trailing five year period.	•	
The three year return ranks in the top 40% of its peers.	•	
The three year standard deviation is less than the total fund benchmark's standard deviation.		•

Equity Compliance:	Yes	No
The equity (Net) return equaled or exceeded the benchmark over the trailing five year period.	•	
The amount invested in each issuing company is less than or equal to 5% of the Fund's equity portfolio at market.	•	
The aggregate investment in any one company is less than or equal to 5% of the outstanding shares of the company.	•	
The amount invested in common stocks and convertible bonds is less than or equal to 70% of the total fund market value.	•	

Fixed Income Compliance:	Yes	No
Total fixed income (Grosst) return equaled or exceed the benchmark over the trailing five year period.	•	
The three year return ranks in the top 40% of its peers.	•	
All fixed income securities ranked at least BBB by Standard & Poors or Baa by Moody's.	•	

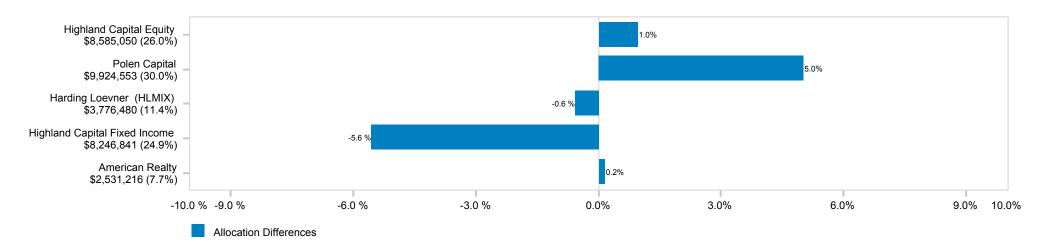


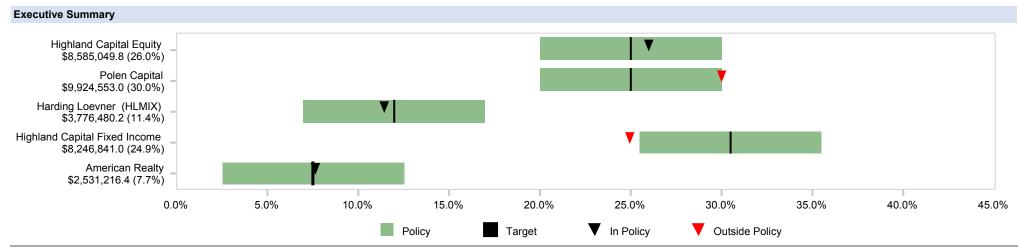
Asset Allocation Compliance

Miami Springs Police and Firefighters Retirement System Total Fund Composite

As of September 30, 2018

	Asset Allocation \$	Current Allocation (%)	Target Allocation (%)	Differences (%)	Target Rebal (\$000)
Total Fund Composite	33,064,140	100.0	100.0	0.0	-
Highland Capital Equity	8,585,050	26.0	25.0	1.0	-319,015
Polen Capital	9,924,553	30.0	25.0	5.0	-1,658,518
Harding Loevner (HLMIX)	3,776,480	11.4	12.0	-0.6	191,217
Highland Capital Fixed Income	8,246,841	24.9	30.5	-5.6	1,837,722
American Realty	2,531,216	7.7	7.5	0.2	-51,406

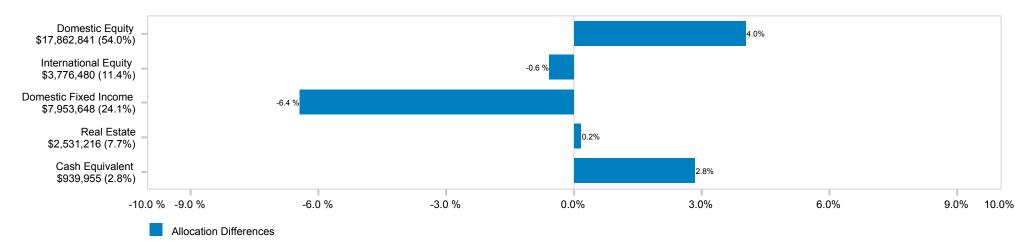






Asset Allocation Compliance Miami Springs Police and Firefighters Retirement System Segment Based As of September 30, 2018

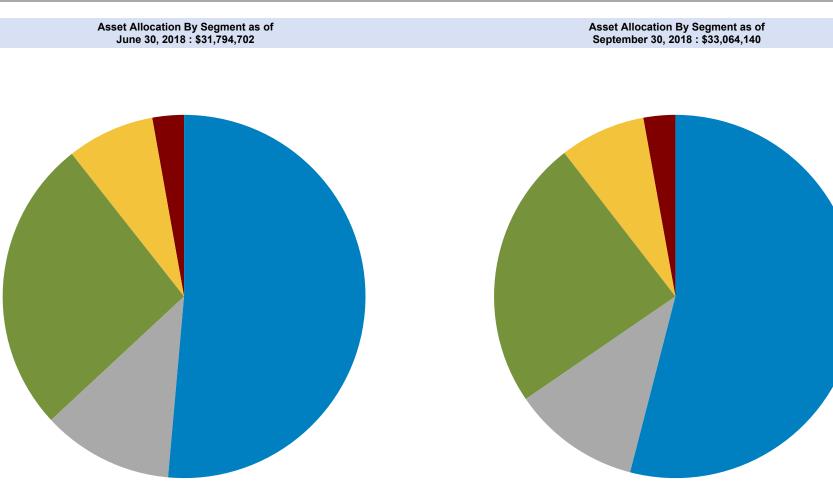
Asset Allocation Compliance					
	Asset Allocation \$	Current Allocation (%)	Target Allocation (%)	Differences (%)	Target Rebal. (\$000)
Domestic Equity	17,862,841	54.0	50.0	4.0	-1,330,771
International Equity	3,776,480	11.4	12.0	-0.6	191,217
Domestic Fixed Income	7,953,648	24.1	30.5	-6.4	2,130,915
Real Estate	2,531,216	7.7	7.5	0.2	-51,406
Cash Equivalent	939,955	2.8	0.0	2.8	-939,955
Total Fund	33,064,140	100.0	100.0	0.0	-







Asset Allocation Summary Total Fund Composite As of September 30, 2018



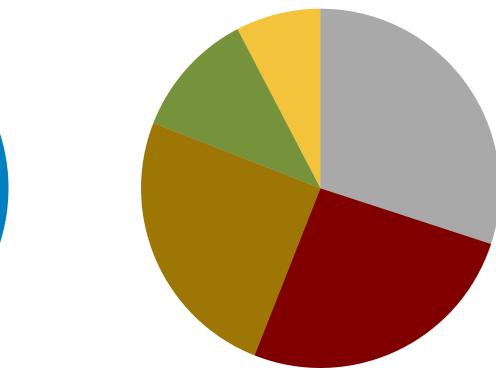
location					
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	16,345,406	51.4	Domestic Equity	17,862,841	54.0
International Equity	3,714,276	11.7	International Equity	3,776,480	11.4
Domestic Fixed Income	8,355,387	26.3	Domestic Fixed Income	7,953,648	24.1
Real Estate	2,483,748	7.8	Real Estate	2,531,216	7.7
Cash Equivalent	895,885	2.8	Cash Equivalent	939,955	2.8

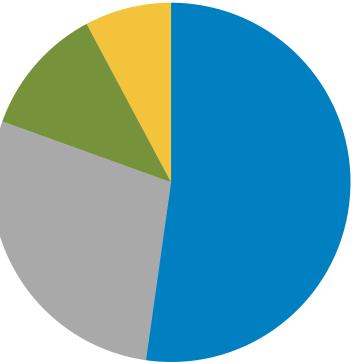


Asset Allocation Summary Total Fund Composite As of September 30, 2018



Asset Allocation By Manager as of June 30, 2018 : \$31,794,702





location			Allocation				
	Market Value	Allocation		Market Value	Allocation		
Highland Capital Balanced	16,606,904	52.2	Polen Capital	9,924,553	30.0		
Polen Capital	8,989,774	28.3	Highland Capital Equity	8,585,050	26.0		
Harding Loevner (HLMIX)	3,714,276	11.7	Highland Capital Fixed Income	8,246,841	24.9		
American Realty	2,483,748	7.8	Harding Loevner (HLMIX)	3,776,480	11.4		
Highland Capital Equity	-	0.0	American Realty	2,531,216	7.7		
Highland Capital Fixed Income	-	0.0	Highland Capital Balanced	-	0.0		



Asset Allocation & Performance Allocation Performance(%) Market % QTR FYTD 5 YR 1 YR 3 YR Value \$ **Total Fund Composite** 4.96 (5) (5) 11.84 (8) 33.064.140 100.0 12.25 12.25 (5) 10.51 (1) **Total Policy Index** 4.56 (10) 10.91 (14)10.91 (14)11.31 (17) 9.68 (4) 3.39 All Public Plans-Total Fund Median 8.75 8.75 10.15 8.04 **Total Equity Composite** 21.639.321 65.4 7.41 19.25 17.47 15.13 19.25 **Total Equity Index** 7.08 18.00 18.00 17.11 13.77 26.0 6.07 Highland Capital Equity 8,585,050 (68) 12.66 (75)12.66 (75)15.29 (66) 12.71 (62) S&P 500 Index 7.71 (35) 17.91 (41) 17.91 (41)17.31 (35)13.95 (41)Russell 1000 Value Index 5.70 (75) 9.45 (90)9.45 (90) 13.55 (85) 10.72 (86) IM U.S. Large Cap Equity (SA+CF) Median 7.10 17.06 17.06 16.34 13.47 Polen Capital 9,924,553 30.0 10.55 (8) 31.18 (13)31.18 (13)20.58 (23)19.73 (5) Russell 1000 Growth Index (25) 26.30 20.55 9.17 26.30 (37)(37) (23)16.58 (31)8.19 IM U.S. Large Cap Growth Equity (SA+CF) Median 24.66 24.66 18.85 15.70 Harding Loevner (HLMIX) 3,776,480 11.4 N/A 1.67 (21) 5.85 (19)5.85 (19)13.89 (21) **MSCI EAFE Index** 1.42 (25) 3.25 (34)3.25 (34) 9.77 (68) 4.90 (62)IM International Equity (SA+CF) Median 0.17 1.46 1.46 11.12 5.63 **Total Fixed Income** 8.246.841 24.9 Highland Capital Fixed Income 0.21 (47) -1.01 (76)-1.01 (76) 2.06 (32) 2.52 (59) Blmbg. Barc. U.S. Gov't/Credit 0.06 (92) -1.37 (100)-1.37 (100)1.45 (93) 2.23 (92) IM U.S. Broad Market Gov./Corp. (SA+CF) Median 0.20 -0.87 -0.87 1.82 2.67 **Total Real Estate Composite** American Realty 2.531.216 7.7 2.19 (59) 8.50 (70)8.50 (70) 8.36 (82) 10.27 (72) **Real Estate Policy** 2.09 (62) 8.68 (68) 8.68 (68) 8.80 (78) 10.72 (64)IM U.S. Open End Private Real Estate (SA+CF) Median 2.35 9.69 9.69 9.53 11.41



Historical returns prior to 07/01/2018 for Highland Capital Equity and Fixed Income do not include cash.

Asset Allocation & Performance Total Fund Composite (Net)

As of September 30, 2018

	AI	location			Performance(%)		
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR
Total Fund Composite	33,064,140	100.0	4.83	11.70	11.70	11.23	9.95
Total Policy Index			4.56	10.91	10.91	11.31	9.68
Total Equity Composite	21,639,321	65.4	7.41	19.25	19.25	17.47	15.13
Total Equity Index			7.08	18.00	18.00	17.11	13.77
Highland Capital Equity	8,585,050	26.0	5.94	N/A	N/A	N/A	N/A
S&P 500 Index			7.71	17.91	17.91	17.31	13.95
Russell 1000 Value Index			5.70	9.45	9.45	13.55	10.72
Polen Capital	9,924,553	30.0	10.40	30.48	30.48	19.93	19.05
Russell 1000 Growth Index			9.17	26.30	26.30	20.55	16.58
Harding Loevner (HLMIX)	3,776,480	11.4	1.67	5.85	5.85	13.89	N/A
MSCI EAFE Index			1.42	3.25	3.25	9.77	4.90
Total Fixed Income							
Highland Capital Fixed Income	8,246,841	24.9	0.08	N/A	N/A	N/A	N/A
Blmbg. Barc. U.S. Gov't/Credit	t		0.06	-1.37	-1.37	1.45	2.23
Total Real Estate Composite							
American Realty	2,531,216	7.7	1.91	7.31	7.31	7.19	9.12
Real Estate Policy			2.09	8.68	8.68	8.80	10.72



Asset Allocation & Performance							_								
		ocation							ance(%)						
	Market Value \$	%	FYTD	Oct-2016 To Sep-2017	Oct-20 To Sep-20		Oct-20 To Sep-20		Oct-2 T Sep-2	0	Oct-2012 To Sep-2013	Oct-2 To Sep-2	0	Т	2010 'o 2011
Total Fund Composite	33,064,140	100.0	12.25 (5)	12.53 (43)	10.73 ((17)	-	(1)	12.33	(8)	12.16 (56)	19.53	(19)	-3.10	(99)
Total Policy Index			10.91 (14)	12.25 (49)	10.78 ((17)	1.66 ((12)	13.20	(4)	10.70 (79)	20.11	(11)	3.02	(7)
All Public Plans-Total Fund Median			8.75	12.19	9.66		-0.53		10.17		12.49	17.96		0.29	
Balanced Fund															
Highland Capital Balanced	-	0.0	N/A	8.48 (77)	9.81 ((50)	2.01 ((11)	9.82	(70)	12.39 (51)	19.53	(50)	-3.10	(95)
Highland Policy Index			7.36 (61)	8.62 (77)		(43)		(15)	13.33	(28)	10.46 (66)	20.11	(40)	3.02	(14)
IM U.S. Balanced (SA+CF) Median			7.84	11.73	9.72		-2.10		11.40		12.51	19.52		0.73	
Total Equity Composite	21,639,321	65.4	19.25	19.81	13.46		5.41		18.42		23.23	28.76		-8.10	
Total Equity Index			18.00	19.94	13.47		-0.66		19.50		19.80	30.20		1.14	
Highland Capital Equity	8,585,050	26.0	12.66 (75)	18.59 (56)	14.71 ((35)	1.04 ((38)	17.46	(66)	28.23 (10)	28.76	(53)	-8.10	(98)
S&P 500 Index			17.91 (41)	18.61 (55)		(24)		(57)	19.73	(37)	19.34 (70)	30.20	(38)	1.14	(46)
Russell 1000 Value Index			9.45 (90)	15.12 (84)		(17)		(85)	18.89	(49)	22.30 (38)	30.92	(28)	-1.89	(77)
IM U.S. Large Cap Equity (SA+CF) Median			17.06	18.85	13.19		-0.30		18.78		21.07	29.11		0.78	
Polen Capital	9,924,553	30.0	31.18 (13)	20.81 (50)	10.63 ((63)	18.10 ((1)	18.82	(42)	N/A	N/A		N/A	
Russell 1000 Growth Index			26.30 (37)	21.94 (36)	13.76 (2	(22)	3.17 ((55)	19.15	(40)	19.27 (64)	29.19	(38)	3.78	(30)
IM U.S. Large Cap Growth Equity (SA+CF) Median			24.66	20.80	11.60		3.61		18.12		20.24	27.62		1.40	
Harding Loevner (HLMIX)	3,776,480	11.4	5.85 (19)	18.66 (69)	17.62 (2	(22)	-9.04 ((55)	N/A		N/A	N/A		N/A	
MSCI EAFE Index			3.25 (34)	19.65 (61)	7.06 ((76)	-8.27 ((50)	4.70	(63)	24.29 (33)	14.33	(71)	-8.94	(45)
IM International Equity (SA+CF) Median			1.46	21.05	11.48		-8.30	. ,	5.80		20.28	17.27	. ,	-9.58	
Total Fixed Income															
Highland Capital Fixed Income	8,246,841	24.9	-1.01 (76)	0.62 (37)	((20)	2.80 ((72)	3.62	(80)	-3.82 (100)	7.21	(26)	5.01	(57)
Blmbg. Barc. U.S. Gov't/Credit			-1.37 (100)	-0.01 (94)	5.86 ((58)	2.73 ((77)	4.08	(68)	-1.96 (86)	5.66	(81)	5.14	(52)
IM U.S. Broad Market Gov./Corp. (SA+CF) Median			-0.87	0.46	5.91		3.13		4.26		-1.36	6.28		5.17	
Total Real Estate Composite															
American Realty	2,531,216	7.7	8.50 (70)	7.52 (67)	•	· /		(69)	12.43	(67)	N/A	N/A		N/A	
Real Estate Policy			8.68 (68)	7.66 (62)				(61)	12.40	(68)	13.04 (53)	11.61	(67)	18.27	(43)
IM U.S. Open End Private Real Estate (SA+CF) Medi	an		9.69	8.29	11.32		15.45		12.78		13.18	12.90		16.96	

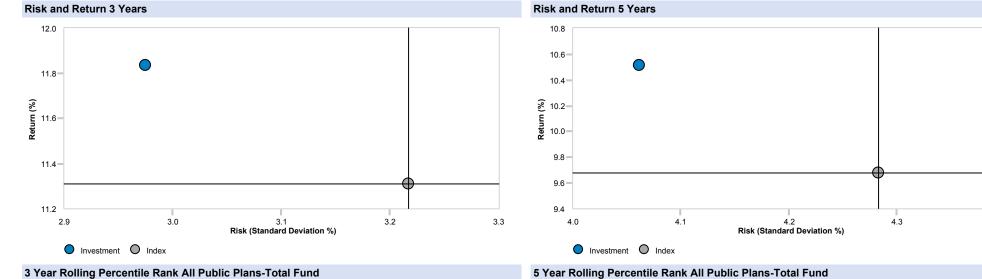
Historical returns prior to 07/01/2018 for Highland Capital Equity and Fixed Income do not include cash.

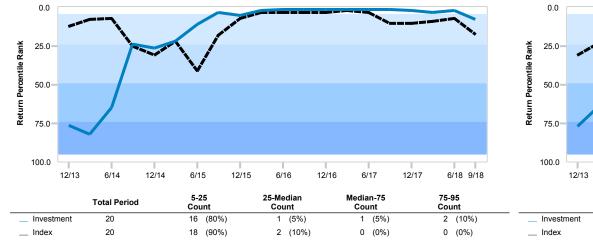


	Allo	ocation				Perforr	nance(%)			
	Market Value \$	%	FYTD	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012	Oct-2010 To Sep-201 ¹
Total Fund Composite	33,064,140	100.0	11.70	11.94	10.05	4.53	11.70	11.64	18.93	-3.58
Total Policy Index			10.91	12.25	10.78	1.66	13.20	10.70	20.11	3.02
Balanced Fund										
Highland Capital Balanced	-	0.0	N/A	7.90	9.10	1.76	9.28	11.73	18.93	-3.58
Highland Policy Index			7.36	8.62	10.57	1.29	13.33	10.46	20.11	3.02
Total Equity Composite	21,639,321	65.4	19.25	19.81	13.46	5.41	18.42	23.23	28.76	-8.10
Total Equity Index			18.00	19.94	13.47	-0.66	19.50	19.80	30.20	1.14
Highland Capital Equity	8,585,050	26.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P 500 Index			17.91	18.61	15.43	-0.61	19.73	19.34	30.20	1.14
Russell 1000 Value Index			9.45	15.12	16.19	-4.42	18.89	22.30	30.92	-1.89
Polen Capital	9,924,553	30.0	30.48	20.17	10.01	17.47	18.01	N/A	N/A	N/A
Russell 1000 Growth Index			26.30	21.94	13.76	3.17	19.15	19.27	29.19	3.78
Harding Loevner (HLMIX)	3,776,480	11.4	5.85	18.66	17.62	-9.04	N/A	N/A	N/A	N/A
MSCI EAFE Index			3.25	19.65	7.06	-8.27	4.70	24.29	14.33	-8.94
Total Fixed Income										
Highland Capital Fixed Income	8,246,841	24.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. U.S. Gov't/Credit	t		-1.37	-0.01	5.86	2.73	4.08	-1.96	5.66	5.14
Total Real Estate Composite										
American Realty	2,531,216	7.7	7.31	6.34	7.92	12.83	11.36	N/A	N/A	N/A
Real Estate Policy			8.68	7.66	10.08	14.93	12.40	13.04	11.61	18.27

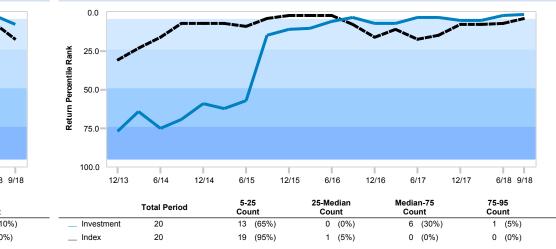


Historical Statistics	s 3 Years							Historical Statis	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	11.84	2.98	3.60	102.81	12	-14.39	N/A	Investment	10.51	4.06	2.41	103.92	19	54.44	1
Index	11.31	3.22	3.15	100.00	11	100.00	1	Index	9.68	4.28	2.10	100.00	17	100.00	3





5 Year Rolling Percentile Rank All Public Plans-Total Fund



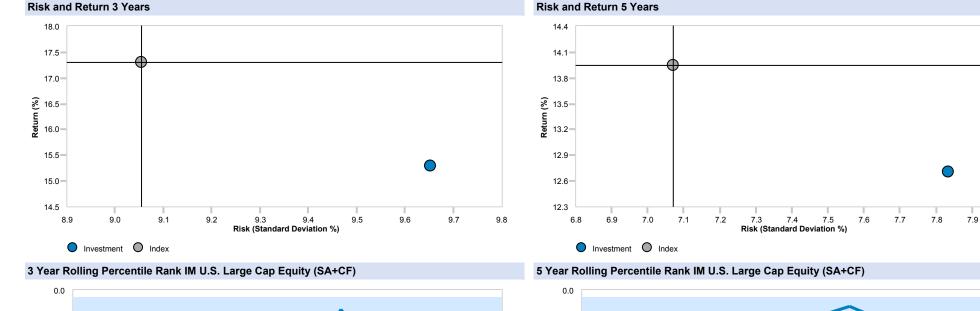


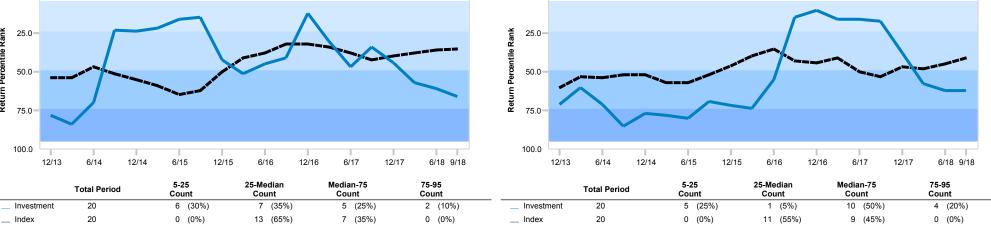
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Historical Statistic	s 3 Years							Historical Statis	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	15.29	9.65	1.45	92.38	11	101.44	1	Investment	12.71	7.83	1.52	95.14	16	124.02	4
Index	17.31	9.05	1.73	100.00	11	100.00	1	Index	13.95	7.07	1.85	100.00	18	100.00	2





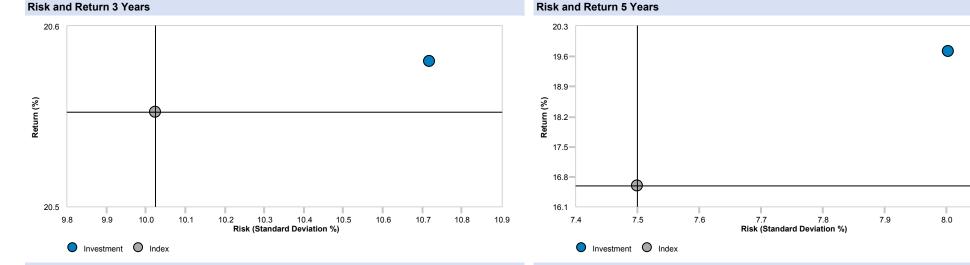
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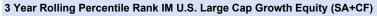
Return Percentile Rank

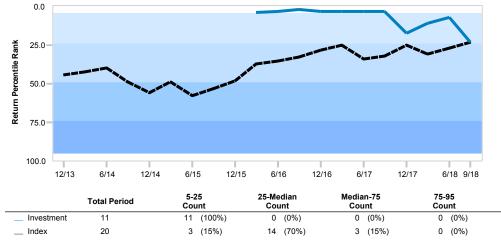




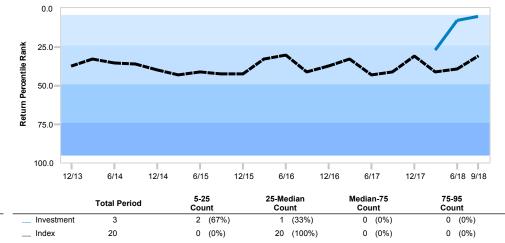
Historical Statistic	s 3 Years							Historical Statis	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	20.58	10.72	1.74	100.17	10	99.16	2	Investment	19.73	8.00	2.31	109.17	18	-18.15	2
Index	20.55	10.02	1.85	100.00	12	100.00	N/A	Index	16.58	7.50	2.08	100.00	19	100.00	1





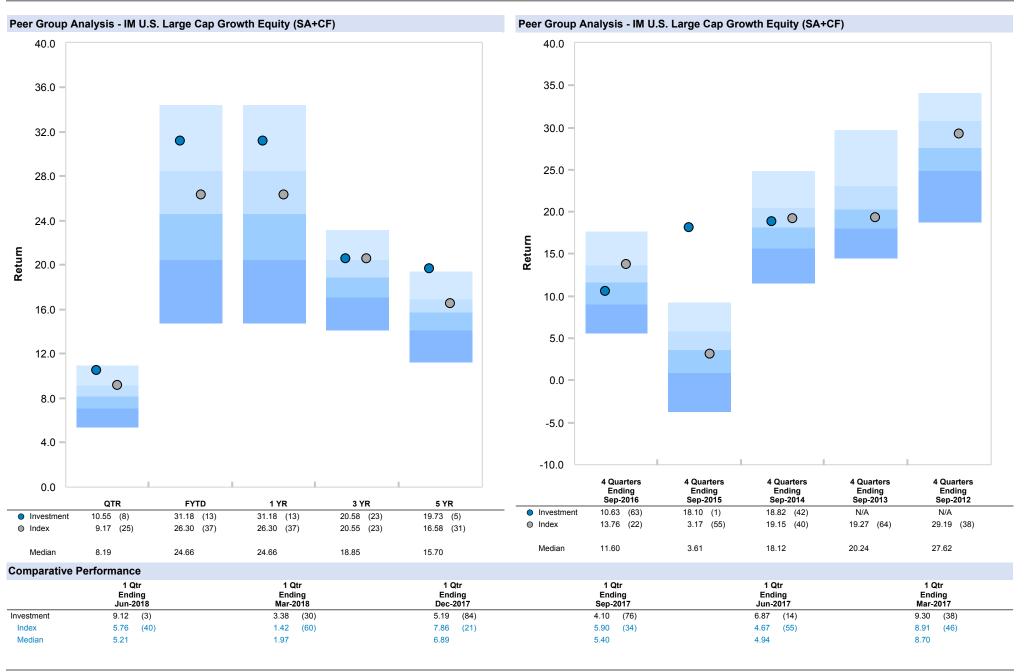


5 Year Rolling Percentile Rank IM U.S. Large Cap Growth Equity (SA+CF)



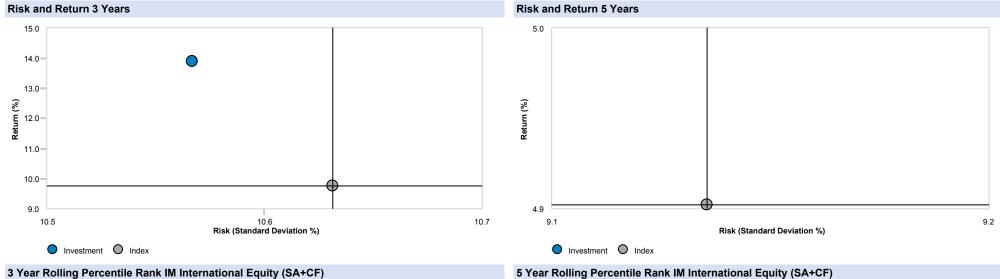


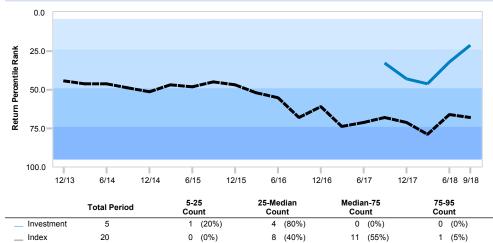
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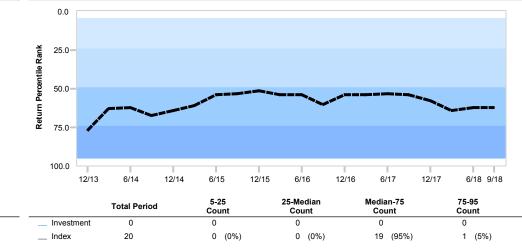


Historical Statistic	s 3 Years							Historical Statis	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	13.89	10.57	1.21	101.82	10	68.33	2	Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	9.77	10.63	0.86	100.00	7	100.00	5	Index	4.90	9.14	0.52	100.00	12	100.00	8

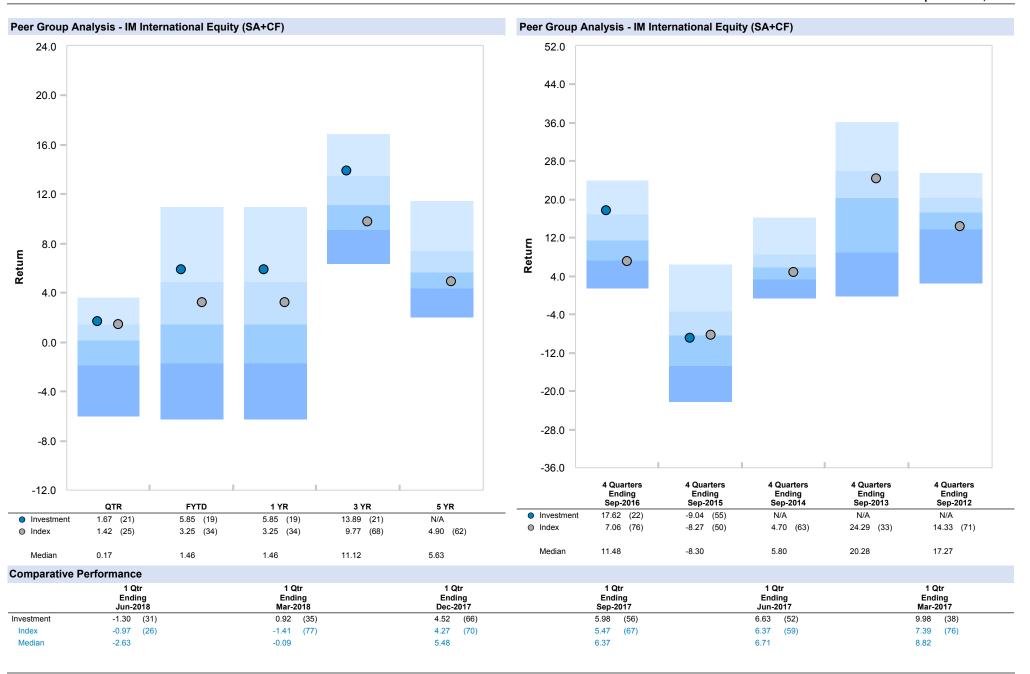




5 Year Rolling Percentile Rank IM International Equity (SA+CF)



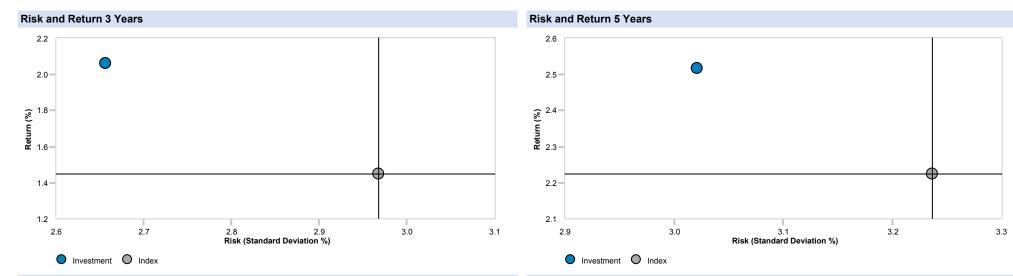


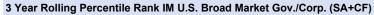


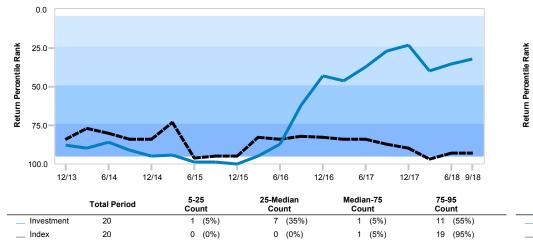


Strategy Review Highland Capital Fixed Income | Blmbg. Barc. U.S. Gov't/Credit As of September 30, 2018

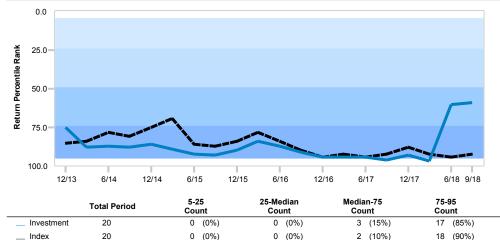
Historical Statistic	cs 3 Years							Historical Statis	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	2.06	2.66	0.48	96.97	9	76.76	3	Investment	2.52	3.02	0.66	99.76	15	82.26	5
Index	1.45	2.97	0.23	100.00	8	100.00	4	Index	2.23	3.24	0.53	100.00	14	100.00	6





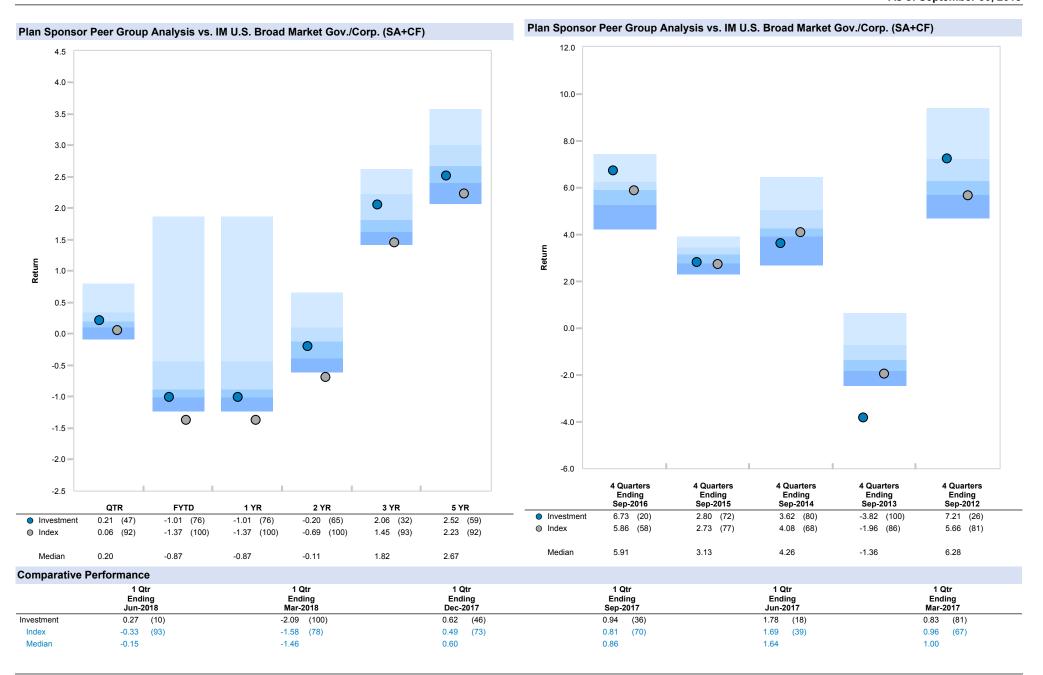


5 Year Rolling Percentile Rank IM U.S. Broad Market Gov./Corp. (SA+CF)



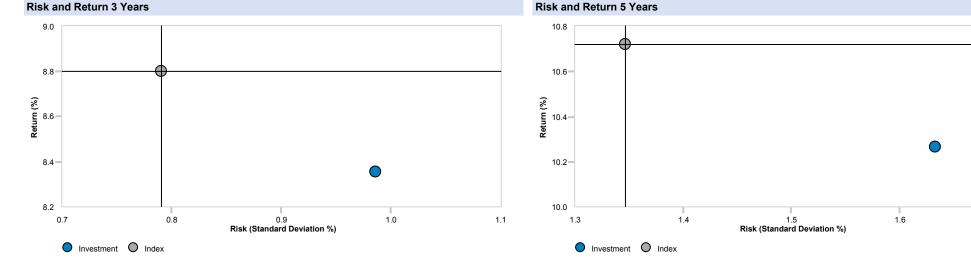


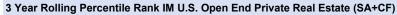
Strategy Review Highland Capital Fixed Income | Blmbg. Barc. U.S. Gov't/Credit As of September 30, 2018

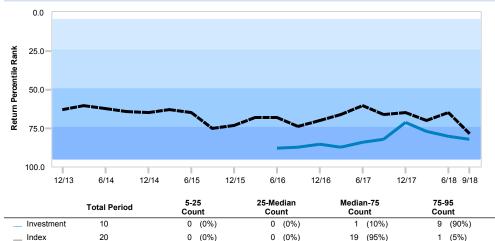




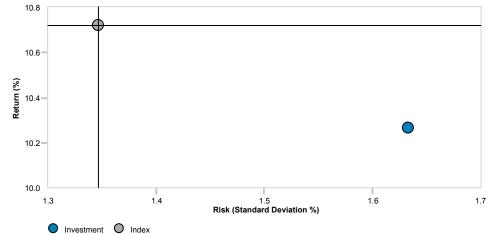
Historical Statistics 3 Years					Historical Statistics 5 Years										
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.36	0.99	7.03	95.10	12	N/A	N/A	Investment	10.27	1.63	5.28	95.98	20	N/A	N/A
Index	8.80	0.79	8.16	100.00	12	N/A	N/A	Index	10.72	1.35	6.31	100.00	20	N/A	N/A



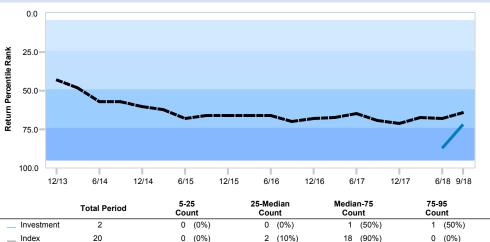




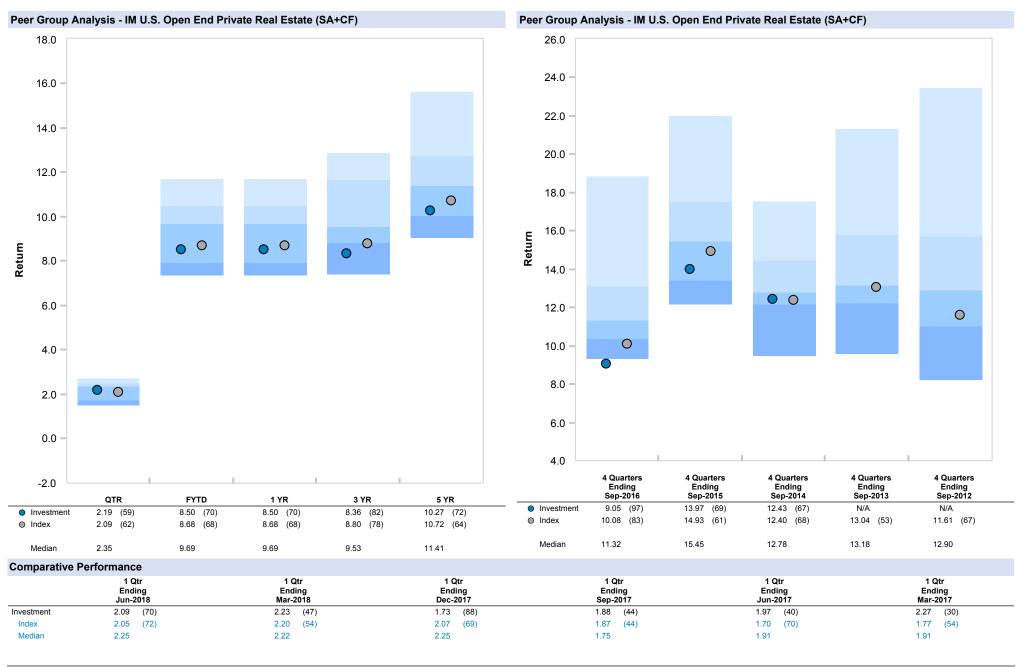
Risk and Return 5 Years



5 Year Rolling Percentile Rank IM U.S. Open End Private Real Estate (SA+CF)









Benchmark History Investment Policy Benchmarks As of September 30, 2018

Total Fund Historical Hybrid Com	position	Total Equity Historical Hybrid Composition		
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)	
Jan-1973		Jan-1996		
S&P 500 Index	50.00	S&P 500 Index	100.00	
Blmbg. Barc. U.S. Gov't/Credit	50.00			
		Jan-2013		
Jan-2007		S&P 500 Index	58.00	
S&P 500 Index	60.00	Russell 1000 Growth Index	42.00	
Blmbg. Barc. U.S. Gov't/Credit	40.00			
		Oct-2014		
Jan-2013		S&P 500 Index	50.00	
S&P 500 Index	35.00	Russell 1000 Growth Index	33.30	
Russell 1000 Growth Index	25.00	MSCI EAFE Index	16.70	
Blmbg. Barc. U.S. Gov't/Credit	40.00			
		Jul-2018		
Oct-2014		S&P 500 Index	40.30	
S&P 500 Index	30.00	Russell 1000 Growth Index	40.30	
Russell 1000 Growth Index	20.00	MSCI EAFE Index	19.40	
MSCI EAFE Index	10.00			
Blmbg. Barc. U.S. Gov't/Credit	32.50			
NCREIF Fund Index-ODCE (VW)	7.50			
Jul-2018				

S&P 500 Index	25.00
Russell 1000 Growth Index	25.00
MSCI EAFE Index	12.00
Dimba Dava II C Cault/Cradit	20 50

Highland Capital Historical Hybrid Composition					
Allocation Mandate	Weight (%)				
Jan-1973					
S&P 500 Index	50.00				
Blmbg. Barc. U.S. Gov't/Credit	50.00				
Jan-2007					
S&P 500 Index	60.00				
Blmbg. Barc. U.S. Gov't/Credit	40.00				
Oct-2014					
S&P 500 Index	48.00				
Blmbg. Barc. U.S. Gov't/Credit	52.00				
Jul-2018					
S&P 500 Index	45.00				
Blmbg Barc U.S. Gov't/Credit	55.00				

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



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