

Investment Performance Review  
Period Ending September 30, 2019

## **Southfield Employees' Retirement System**

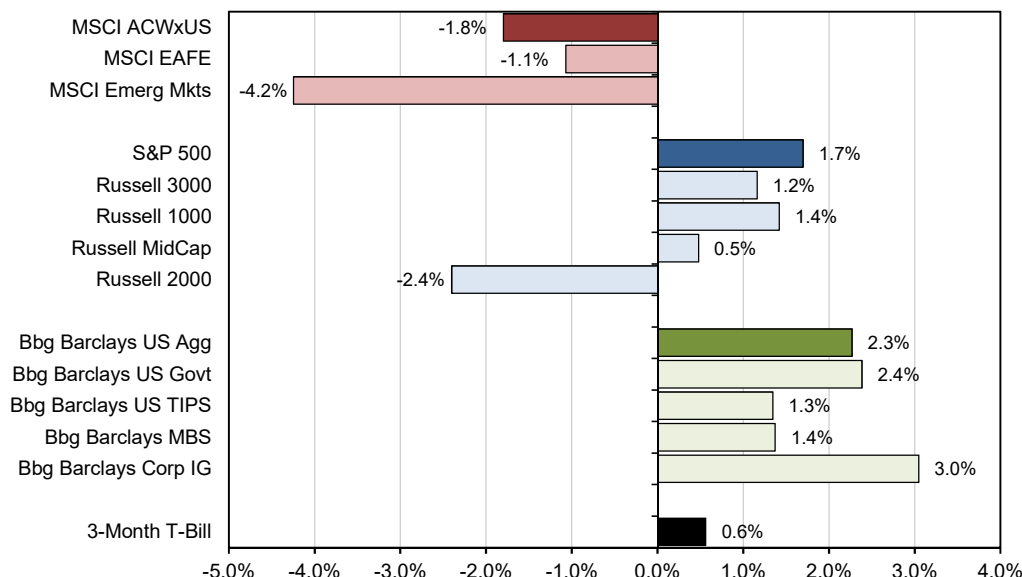
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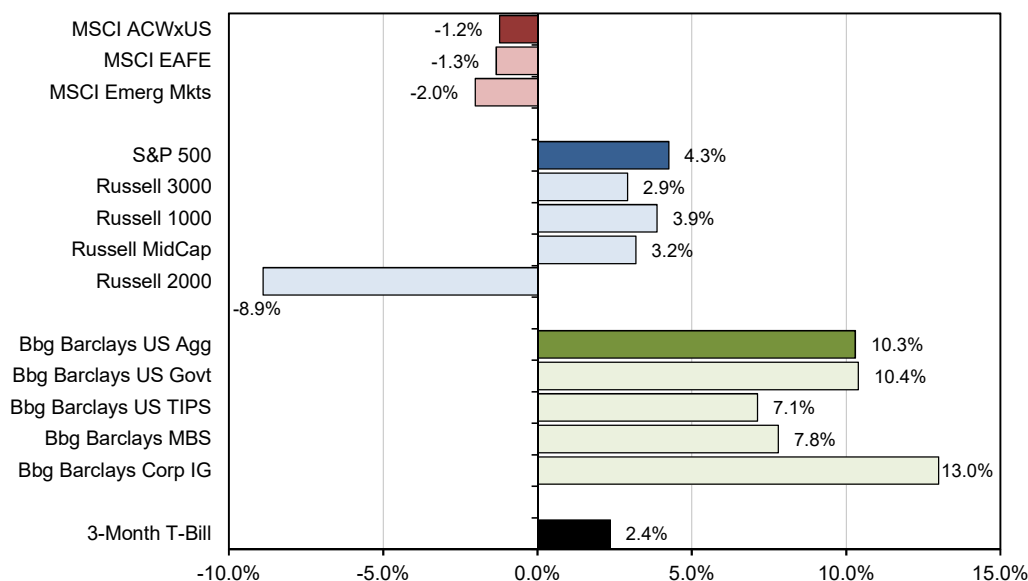
## **3rd Quarter 2019 Market Environment**

- Broad asset class returns were mixed during the 3rd quarter of 2019 with both US large cap equity and fixed income indices extending their year-to-date gains while US small cap and international indices declined. Volatility was high during the period as investors weighed the effects of ongoing trade disruption and slowing global economic data against the announcement of several new central bank stimulus measures. US stocks continued their year-to-date outperformance relative to international stocks during the period. US markets faced headwinds from continued escalation in the ongoing trade dispute with China, slowing economic data, particularly with regards to manufacturing, and political uncertainty following a late quarter impeachment inquiry against President Donald Trump. However, markets were supported by easing monetary policy from the Federal Reserve (Fed) which cut interest rates twice during the period. In general, lower risk assets performed better through the period as investors weighed the increased risk of a recession. Within domestic equity markets, large cap stocks outperformed small cap equities during the quarter with the S&P 500 Index returning 1.7% versus a -2.4% return on the small cap Russell 2000 Index. US equity returns over the 1-year period were positive for large and mid-cap stocks, returning 4.3% and 3.2% respectively, but small cap stocks posted a loss, falling -8.9%.
- International markets posted negative returns for the 3rd quarter. Similar to US markets, international returns were impacted by continued weakness in economic data, heightened geopolitical uncertainty around global trade and Brexit and newly announced stimulus measures from global central banks including the European Central Bank (ECB) and Peoples Bank of China (PBoC). International returns also faced headwinds from a strengthening US dollar (USD) which appreciated against most major currencies during the period. Developed markets continued their outperformance relative to emerging markets during the period with the MSCI EAFE Index falling -1.1% versus a -4.2% decline for the MSCI Emerging Markets Index. Both developing and emerging markets posted slight losses over the 1-year period, returning -1.3% and -2.0% respectively.
- Fixed income returns outperformed equities during the 3rd quarter as investors looked for relative safety amid the equity market volatility. The broad market Bloomberg Barclays Aggregate Index gained 2.3% as interest rates fell following central bank stimulus from the Fed and other global central banks. The US Treasury Yield Curve also inverted in August, contributing to growing concern around the potential for an upcoming recession. Investment grade corporate issues were the best performing securities for the third quarter in a row, returning 3.0%, outperforming Treasury and securitized issues. Corporate issues benefitted from their relatively high duration and yield. The bond market has meaningfully outperformed the equity market over the trailing 1-year period with the Bloomberg Barclays Aggregate posting a solid 10.3% return.

### Quarter Performance

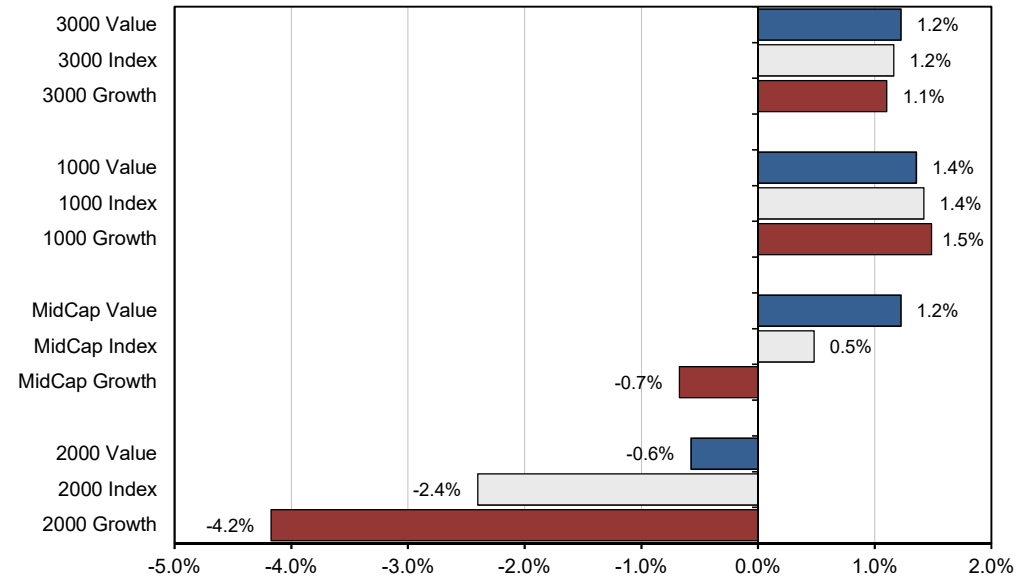


### 1-Year Performance

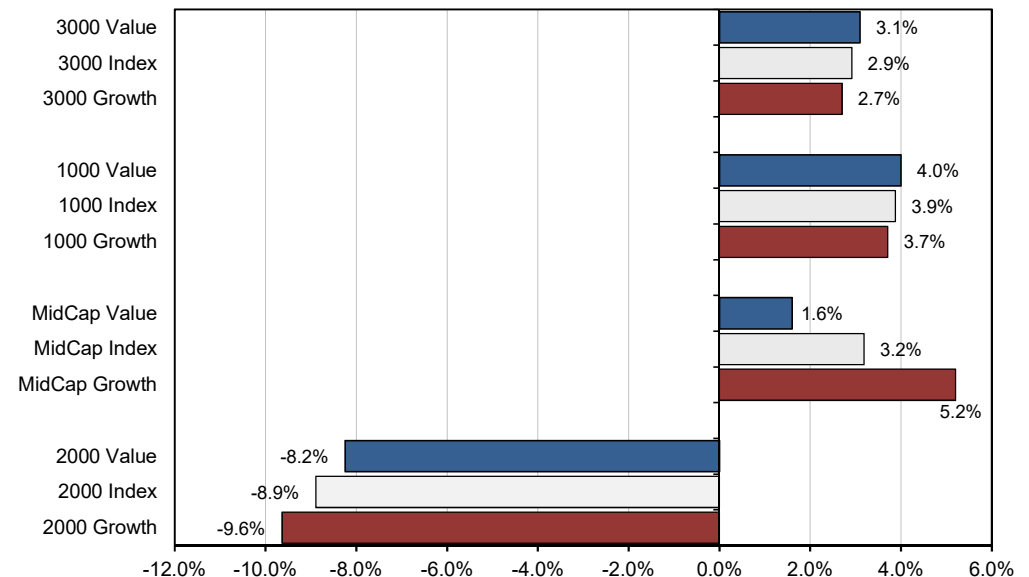


- US equity returns were modestly positive during the 3rd quarter, but results varied considerably across the style and capitalization spectrum. Data released during the quarter showed signs that the US economy could be slowing down. Weakening metrics around manufacturing and sentiment were particularly concerning and employment, typically a bright spot for the US economy, missed expectations for the pace of new jobs and hours worked. A likely contributor to the softening economic data is the ongoing trade war between the US and China. Despite last quarter's agreement to cease escalations following a meeting between President Trump and President Jinping at the G20 summit, the 3rd quarter saw the announcement and implementation of a series of new tariffs from both the US and China. Additionally, in response to new tariffs, the PBoC allowed the yuan to depreciate to its lowest level since 2008 leading US Treasury officials to accuse China of currency manipulation. Even with the apparent breakdown in relations between the two sides, both China and the US agreed to continue negotiations set to take place in October. Markets also reacted to the late quarter announcement of a formal impeachment inquiry against President Trump following a whistle blower report alleging that President Trump pressured the government of Ukraine to investigate the son of political opponent Joe Biden. Despite these substantial headwinds, the US equity market found support from Fed easing of monetary policy in the form of two separate interest rate cuts and ended the period with a gain. The Russell 3000 Index returned 1.2% and 2.9% for the quarter and 1-year period respectively.
- During the quarter, higher market cap stocks outperformed lower market cap stocks across the style spectrum. The large cap Russell 1000 Index gained 1.4% during the period versus a -2.4% return for the small cap Russell 2000 Index. Investors may have been attracted to large cap names as a result of the quarter's volatility as large cap stocks are typically viewed as less risky than their small cap counterparts. When viewed over the most recent 1-year period, large cap stocks significantly outperformed small cap stocks with the Russell 1000 posting a 3.9% gain while the Russell 2000 had considerable losses, declining -8.9%.
- In general, value stocks outperformed growth stocks during the 3rd quarter as investors gravitated toward the relative safety these securities typically provide. However, large cap growth stocks slightly outperformed large cap value stocks due to favorable holdings in the technology and industrials sectors as well as a large underweight to the underperforming energy sector. The Russell 1000 Growth Index was the best performing style index for the period, returning 1.5%, with the small cap growth index posting the lowest relative return, a loss of -4.2%. Results over the 1-year period are mixed with value stocks outperforming in large and small cap and growth stocks outperforming in mid-cap.

**Quarter Performance - Russell Style Series**



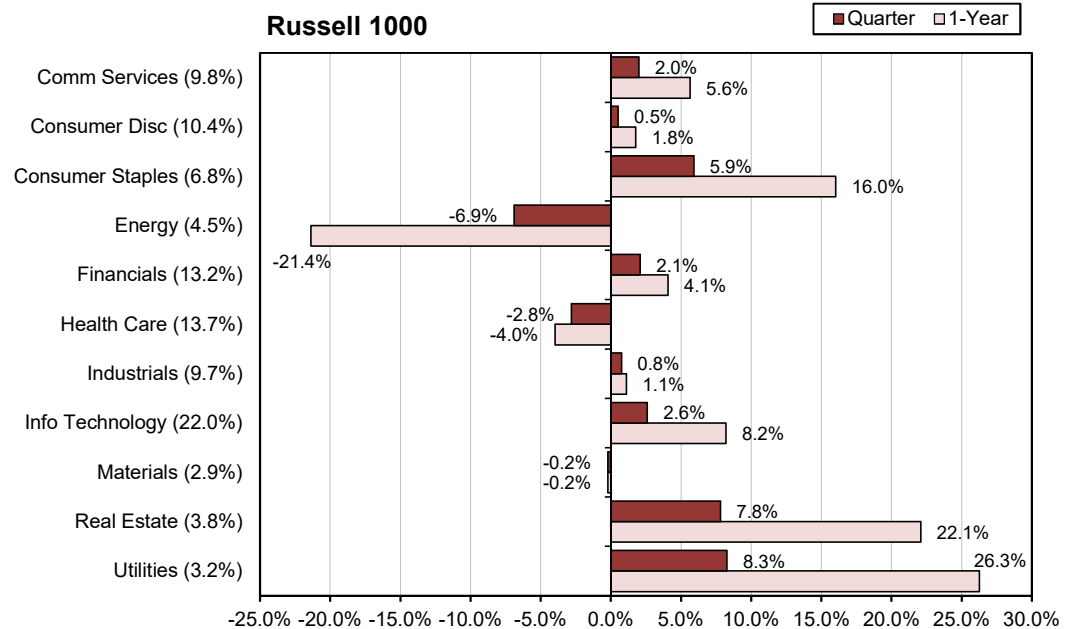
**1-Year Performance - Russell Style Series**



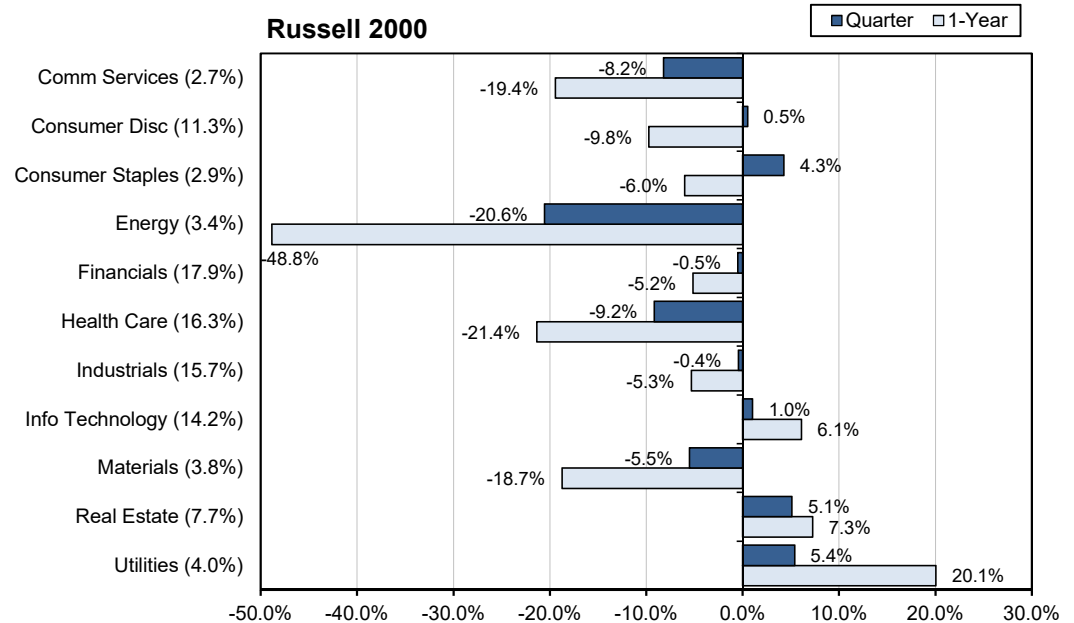
- Sector performance was mixed across large cap sectors for the 3rd quarter. There were gains for eight out of eleven sectors within the Russell 1000 Index during the period with six sectors outpacing the return of the index. Defensive sectors such as utilities, real estate and consumer staples were the best performers through the quarter returning 8.3%, 7.8% and 16.0% respectively as investors looked toward these sectors for their higher yields and lower historical volatility. Energy, health care and materials stocks were the worst performers during the period. Energy stocks fell -6.9% as crude oil prices fell during the period despite a sharp upward spike in September following a terrorist attack in Saudi Arabia that temporarily reduced the country's oil production, causing a large disruption in supply. Health care stocks also lagged, declining -2.8%, as discussions in Washington around the potential for increased regulation on drug pricing acted as a headwind. Health care reform has also been a major topic of discussion among candidates for the 2020 US Presidential election, creating additional uncertainty within the sector. Materials returned -0.2% as demand concerns weighed on the economically sensitive sector. Returns over the 1-year period were also generally positive with eight out of eleven sectors posting gains. Similar to the quarter's results, defensive sectors outperformed by a considerable margin. Utilities, real estate and consumer staples performed well returning 26.3%, 22.1% and 16.0% respectively. Technology returns were also strong gaining 8.2%. Energy, health care and materials were the only sectors to post negative results over the 1-year period with energy falling -21.4%, health care dropping -4.0% and materials returning -0.2%.

- Quarterly results for small cap sectors were worse than their large capitalization counterparts with all eleven sectors trailing their corresponding large cap equivalents. Five of eleven economic sectors produced gains during the period with seven of eleven sectors outpacing the Russell 2000 Index return for the quarter. Similar to large caps, defensive sectors performed well as investors gravitated toward their relative safety and higher yields. Utilities were the best performers, returning 5.4% followed closely by REITs and consumer staples which returned 5.1% and 4.3% respectively. The cyclically oriented energy sector was the largest detractor for the period, posting a loss of -20.6%. Health care and communication services stocks also experienced notable declines, falling -9.2% and -8.2% respectively. Over the trailing 1-year period, returns were broadly negative. Utilities, real estate and technology were the only sectors to post gains returning 20.1%, 7.3% and 6.1%. The energy sector was an outlier in terms of negative returns dropping -48.8% during the period. There were also notable losses in health care, communication services and materials which declined -21.4%, -19.4% and -18.7% respectively.

**Russell 1000**



**Russell 2000**



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

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Microsoft Corp	3.82%	4.1%	22.9%	Information Technology
Apple Inc	3.68%	13.6%	0.8%	Information Technology
Amazon.com Inc	2.61%	-8.3%	-13.3%	Consumer Discretionary
Facebook Inc A	1.55%	-7.7%	8.3%	Communication Services
Berkshire Hathaway Inc B	1.48%	-2.4%	-2.8%	Financials
JPMorgan Chase & Co	1.36%	6.0%	7.4%	Financials
Alphabet Inc Class C	1.35%	12.8%	2.1%	Communication Services
Alphabet Inc A	1.33%	12.8%	1.2%	Communication Services
Johnson & Johnson	1.25%	-6.4%	-3.8%	Health Care
Procter & Gamble Co	1.12%	14.2%	54.0%	Consumer Staples

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Insulet Corp	0.04%	38.2%	55.7%	Health Care
CyrusOne Inc	0.03%	37.9%	28.8%	Real Estate
KLA Corp	0.09%	35.7%	61.1%	Information Technology
New York Community Bancorp Inc	0.02%	27.6%	28.7%	Financials
Entegris Inc	0.02%	26.3%	63.9%	Information Technology
Pilgrims Pride Corp	0.01%	26.2%	77.1%	Consumer Staples
Western Digital Corp	0.06%	25.4%	5.6%	Information Technology
DocuSign Inc	0.03%	24.6%	17.8%	Information Technology
Target Corp	0.19%	24.4%	24.3%	Consumer Discretionary
XPO Logistics Inc	0.02%	23.8%	-37.3%	Industrials

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
2U Inc	0.00%	-56.7%	-78.3%	Information Technology
PG&E Corp	0.02%	-56.4%	-78.3%	Utilities
Covetrus Inc	0.00%	-51.4%	N/A	Health Care
Sarepta Therapeutics Inc	0.02%	-50.4%	-53.4%	Health Care
Nektar Therapeutics Inc	0.01%	-48.8%	-70.1%	Health Care
DXC Technology Co	0.03%	-46.2%	-67.9%	Information Technology
Antero Resources Corp	0.00%	-45.4%	-82.9%	Energy
Range Resources Corp	0.00%	-45.0%	-77.3%	Energy
Pluralsight Inc Class A	0.00%	-44.6%	-47.5%	Information Technology
Fluor Corp	0.01%	-42.5%	-66.1%	Industrials

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
NovoCure Ltd	0.34%	18.3%	42.7%	Health Care
Haemonetics Corp	0.33%	4.8%	10.1%	Health Care
Trex Co Inc	0.28%	26.8%	18.1%	Industrials
Science Applications International	0.27%	1.3%	10.4%	Information Technology
Portland General Electric Co	0.26%	4.8%	27.2%	Utilities
ONE Gas Inc	0.26%	7.0%	19.5%	Utilities
First Industrial Realty Trust Inc	0.26%	8.3%	29.3%	Real Estate
Southwest Gas Holdings Inc	0.26%	2.2%	18.2%	Utilities
Maximus Inc	0.25%	6.9%	20.4%	Information Technology
Teladoc Health Inc	0.25%	2.0%	-21.6%	Health Care

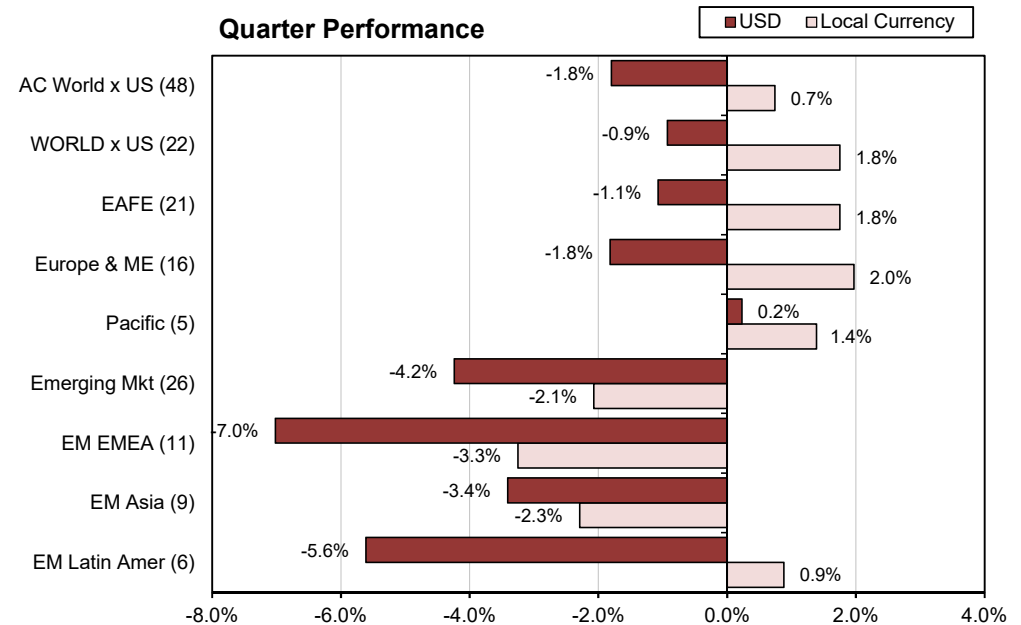
Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
NextCure Inc	0.00%	105.9%	N/A	Health Care
Dova Pharmaceuticals Inc	0.01%	98.2%	33.3%	Health Care
WW International Inc	0.09%	98.0%	-47.5%	Consumer Discretionary
R.R.Donnelley & Sons Co	0.01%	94.7%	-27.6%	Industrials
Infinera Corp	0.05%	87.3%	-25.3%	Information Technology
Lannett Co Inc	0.02%	84.8%	135.8%	Health Care
Owens & Minor Inc	0.02%	81.6%	-64.4%	Health Care
Allakos Inc	0.08%	81.5%	74.8%	Health Care
Solid Biosciences Inc	0.01%	79.8%	-78.1%	Health Care
Ardelyx Inc	0.01%	74.7%	8.0%	Health Care

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Tocagen Inc	0.00%	-90.1%	-95.8%	Health Care
Waitr Holdings Inc Class A	0.00%	-79.6%	-88.1%	Consumer Discretionary
McDermott International Inc	0.02%	-79.1%	-89.0%	Energy
Sonim Technologies Inc	0.00%	-77.0%	N/A	Information Technology
Synlogic Inc	0.00%	-74.8%	-83.9%	Health Care
Mallinckrodt PLC	0.01%	-73.7%	-91.8%	Health Care
Clovis Oncology Inc	0.01%	-73.6%	-86.6%	Health Care
Bloom Energy Corp Class A	0.01%	-73.5%	-90.5%	Industrials
Chaparral Energy Inc Class A	0.00%	-71.5%	-92.4%	Energy
Pacific Drilling SA	0.01%	-69.3%	-99.7%	Energy

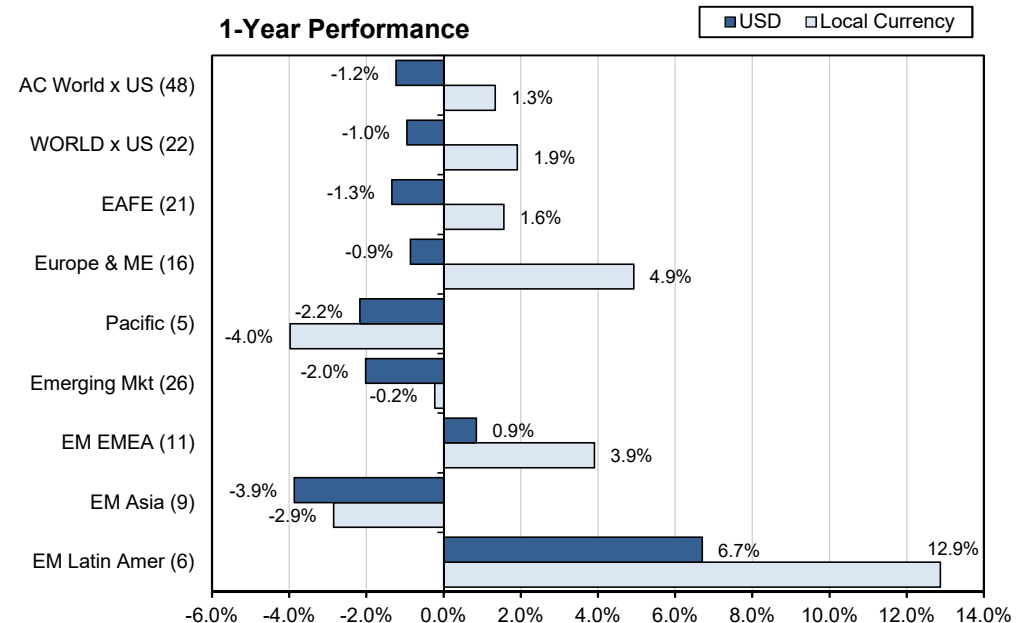


- Broad international equity returns were negative in USD terms for the 3rd quarter as US investors in international markets faced a meaningful headwind from a USD that strengthened against most major currencies. In local currency terms, developed markets were generally positive while emerging markets posted losses. The MSCI ACWI ex US Index gained 0.7% in local currency terms, but a USD investor experienced a loss of -1.8% due to the currency effect. Similar to US markets, international equity markets balanced headwinds from slowing economic data and concerns around global trade with tailwinds from central bank shifts toward more accommodative policies. Among others, the ECB and PBoC announced new stimulus measures during the quarter. The ECB cut its policy rate and committed to a new quantitative easing program and the PBoC announced new stimulus measures designed to encourage bank lending and reduce borrowing costs as it tries to counteract a cooling economy and the effects of its ongoing trade war with the US. The recent USD strength can also be seen over the 1-year period with USD returns trailing most local currency returns. Returns for the MSCI ACWI ex US Index were 1.3% in local currency terms and -1.2% in USD terms for the trailing year.
- Results for developed market international indices were generally positive in local currency terms, but negative in USD terms for the 3rd quarter, with the MSCI EAFE Index returning 1.8% and -0.9% respectively. Outside of central bank policy and trade, there were notable developments within the political sphere. In Europe, Christine Lagarde was nominated to succeed Mario Draghi as the head of the ECB. Japanese stocks rose as election results appeared to support continuity for Prime Minister Abe's ongoing policy efforts. In the UK, pro-Brexit Boris Johnson was appointed to prime minister, replacing Theresa May. The UK continues to face uncertainty around Brexit as its late October deadline to agree to a withdrawal agreement with the European Union (EU) quickly approaches. Stocks in Hong Kong fell as the government dealt with major pro-democracy protests throughout the quarter. The MSCI EAFE Index returned 1.6% and -1.3% for the last twelve months in local currency and USD terms respectively.
- Emerging markets continued their trend of 2019 underperformance relative to developed markets during the 3rd quarter, posting negative returns in both local currency and USD terms. The MSCI Emerging Markets Index fell -2.1% and -4.2% respectively. As expected, geopolitical tensions around trade continued to put pressure on emerging market stocks. Countries with greater sensitivities to commodity prices or a strong USD tended to underperform during the period. Argentina's stock market fell -46.8% as primary elections in the country saw the defeat of the country's current market friendly president. One year returns for the MSCI Emerging Market Index were -0.2% in local currency terms and -2.0% in USD terms.

### Quarter Performance



### 1-Year Performance





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

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.4%	-0.9%	-0.7%
Consumer Discretionary	11.5%	0.3%	-2.0%
Consumer Staples	12.0%	1.9%	6.9%
Energy	5.1%	-6.5%	-14.5%
Financials	18.6%	-2.6%	-6.3%
Health Care	11.6%	2.4%	4.3%
Industrials	14.7%	-2.0%	-2.1%
Information Technology	6.7%	-0.5%	1.8%
Materials	7.0%	-5.4%	-5.7%
Real Estate	3.6%	-1.3%	4.3%
Utilities	3.8%	2.4%	13.2%
<b>Total</b>	<b>100.0%</b>	<b>-1.1%</b>	<b>-1.3%</b>

MSCI - ACWIxUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	6.8%	-2.9%	-1.0%
Consumer Discretionary	11.4%	-0.7%	-1.6%
Consumer Staples	10.2%	1.5%	6.8%
Energy	6.7%	-4.6%	-9.8%
Financials	21.6%	-3.6%	-3.2%
Health Care	8.5%	1.1%	0.9%
Industrials	11.9%	-2.5%	-2.4%
Information Technology	8.9%	2.2%	4.1%
Materials	7.3%	-6.5%	-7.2%
Real Estate	3.2%	-3.1%	5.0%
Utilities	3.5%	1.3%	12.6%
<b>Total</b>	<b>100.0%</b>	<b>-1.8%</b>	<b>-1.2%</b>

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	11.6%	-5.2%	-2.5%
Consumer Discretionary	13.1%	-3.1%	0.1%
Consumer Staples	6.9%	-0.8%	3.0%
Energy	7.7%	-4.0%	-2.3%
Financials	24.7%	-8.0%	1.6%
Health Care	2.6%	-6.6%	-24.2%
Industrials	5.4%	-5.2%	-4.4%
Information Technology	15.1%	5.6%	3.9%
Materials	7.3%	-10.7%	-15.9%
Real Estate	2.9%	-8.8%	6.8%
Utilities	2.8%	-3.6%	7.2%
<b>Total</b>	<b>100.0%</b>	<b>-4.2%</b>	<b>-2.0%</b>

Country	MSCI-EAFE Weight	MSCI-ACWIxUS Weight	Quarter Return	1- Year Return
Japan	24.6%	16.5%	3.1%	-4.7%
United Kingdom	16.4%	11.0%	-2.5%	-2.9%
France	11.4%	7.6%	-1.7%	-1.6%
Switzerland	9.4%	6.3%	0.3%	12.0%
Germany	8.5%	5.7%	-4.0%	-7.1%
Australia	7.0%	4.7%	-1.4%	6.1%
Netherlands	4.0%	2.7%	2.4%	9.5%
Hong Kong	3.5%	2.4%	-11.9%	-1.8%
Spain	2.9%	2.0%	-3.8%	-3.5%
Sweden	2.6%	1.7%	-4.8%	-8.0%
Italy	2.3%	1.6%	-0.1%	3.9%
Denmark	1.8%	1.2%	-1.0%	2.3%
Singapore	1.3%	0.9%	-5.8%	-0.2%
Belgium	1.0%	0.7%	3.4%	-0.8%
Finland	1.0%	0.7%	-1.8%	-9.3%
Norway	0.7%	0.4%	-3.4%	-13.4%
Israel	0.6%	0.4%	-3.7%	-12.5%
Ireland	0.5%	0.4%	-0.6%	-4.6%
New Zealand	0.2%	0.2%	-2.9%	10.0%
Austria	0.2%	0.2%	-3.1%	-16.0%
Portugal	0.2%	0.1%	1.6%	-2.5%
<b>Total EAFE Countries</b>	<b>100.0%</b>	<b>67.0%</b>	<b>-1.1%</b>	<b>-1.3%</b>
Canada		7.0%	0.5%	3.0%
<b>Total Developed Countries</b>		<b>74.0%</b>	<b>-0.9%</b>	<b>-1.0%</b>
China		8.3%	-4.7%	-3.9%
Korea		3.2%	-4.5%	-13.8%
Taiwan		3.0%	5.2%	-0.2%
India		2.3%	-5.2%	4.7%
Brazil		2.0%	-4.6%	25.4%
South Africa		1.2%	-12.6%	-6.4%
Russia		1.0%	-1.4%	18.0%
Thailand		0.8%	-6.0%	-0.9%
Saudi Arabia		0.7%	-9.5%	4.0%
Mexico		0.7%	-1.7%	-14.8%
Indonesia		0.5%	-5.2%	11.9%
Malaysia		0.5%	-6.3%	-10.4%
Philippines		0.3%	-4.6%	13.1%
Poland		0.3%	-12.1%	-12.2%
Qatar		0.3%	-0.2%	5.0%
Chile		0.3%	-7.3%	-16.8%
United Arab Emirates		0.2%	-0.2%	-0.3%
Turkey		0.2%	11.7%	16.5%
Colombia		0.1%	-6.1%	-7.3%
Peru		0.1%	-9.3%	-4.0%
Greece		0.1%	-3.1%	6.8%
Hungary		0.1%	-3.9%	3.4%
Argentina		0.1%	-46.8%	-32.3%
Czech Republic		0.0%	-10.1%	-12.6%
Egypt		0.0%	7.4%	21.5%
Pakistan		0.0%	1.1%	-32.7%
<b>Total Emerging Countries</b>		<b>26.0%</b>	<b>-4.2%</b>	<b>-2.0%</b>
<b>Total ACWIxUS Countries</b>		<b>100.0%</b>	<b>-1.8%</b>	<b>-1.2%</b>

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

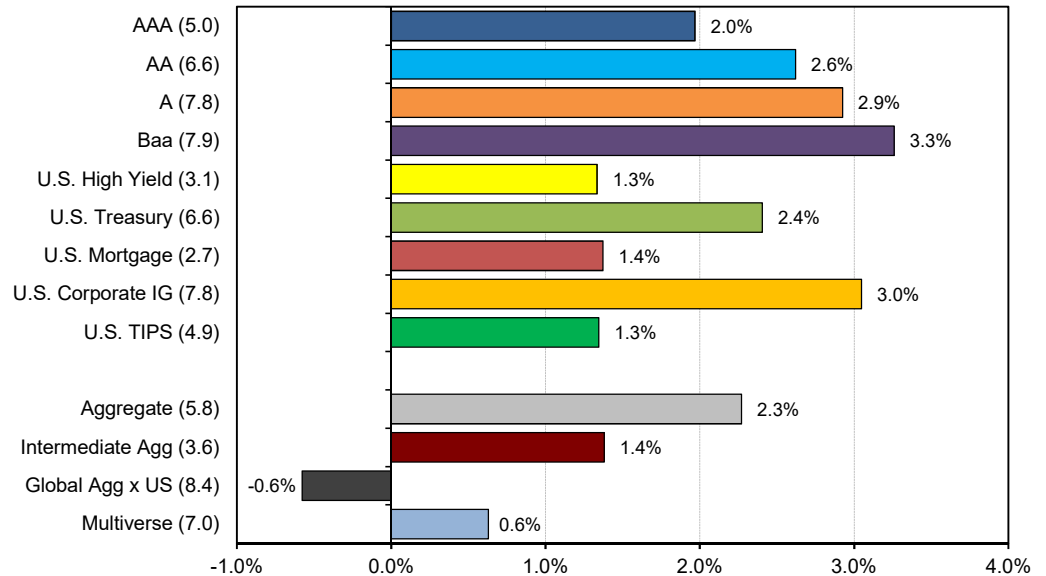
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.



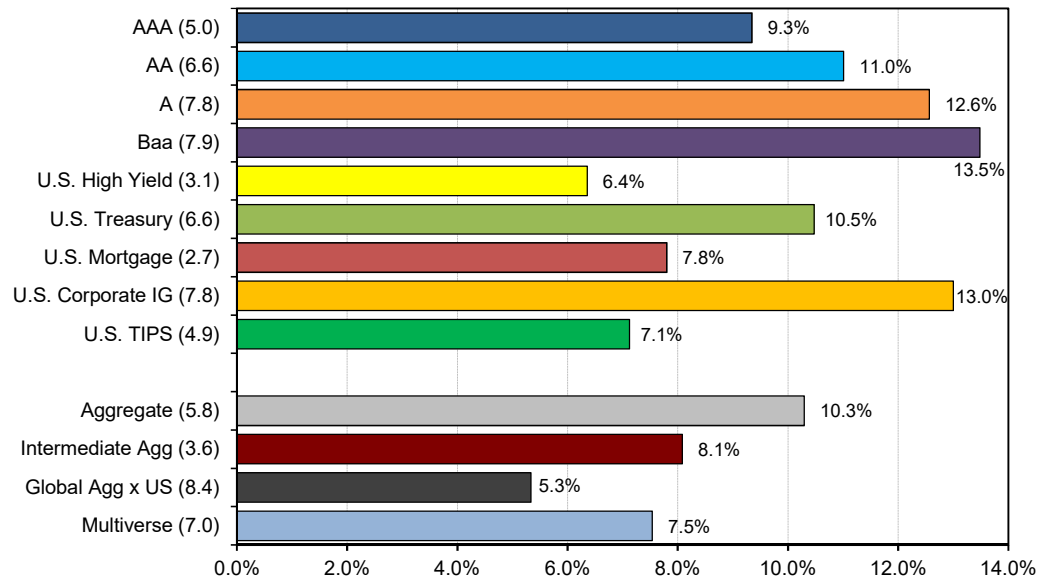


- Broad fixed income benchmarks continued their trend of 2019 gains during the 3rd quarter. Interest rates fell across the US Treasury Yield Curve through the quarter as the Fed continued to shift toward an easing of monetary policy in an attempt to combat slowing economic data. The Fed cut short-term interest rates twice during the period following their July and September meetings. In addition, it ended its balance sheet reduction plan in September which represents a further easing of monetary policy. After its September meeting, the Fed issued a statement commenting that future changes to monetary policy are not on a preset course and will be evaluated as the Fed receives new information on the state of the economy, but that Fed officials “will continue to monitor the implications of incoming information for the economic outlook and will act as appropriate to sustain the expansion.” The Fed response provided market support in a quarter where we saw the formal inversion of the yield curve. Treasury yields on 2-year issues briefly surpassed the yield on 10-year issues in August. This inversion of the yield curve has historically preceded a recession within the next 6-24 months. However, the magnitude of the inversion was mild and short in duration with rates on the 10-year Treasury rising above the yield of the 2-year by early September. The bellwether Bloomberg Barclays US Aggregate Index posted positive returns for both the 3rd quarter and the 1-year period, returning 2.3% and 10.3% respectively.
- Within investment grade credit, lower quality issues outperformed higher quality issues during the quarter. Lower quality issues benefitted from their higher durations as interest rates fell during 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 3.3% for the quarter, while AAA was the worst performing, returning 2.0%. High yield issues returned 1.3% for the quarter as these issues did not commensurately benefit from the drop in interest rates due to their relatively low durations. Returns over the 1-year period show lower quality securities outperforming higher quality issues with Baa rated issues returning 13.5% versus a 9.3% return for AAA securities.
- Investment grade corporates outperformed the more defensive Treasury and mortgage backed sectors of the Bloomberg Barclays US Aggregate Index’s three broad sectors during the 3rd quarter. Investment grade corporate credit returned 3.0%, as they benefitted from their higher sensitivity to interest rates, low credit spreads and high investor demand for yield. When viewed over the 1-year period, corporate credit outperformed both Treasuries and mortgage backed securities. Corporate issues returned 13.0% versus a 7.8% return for mortgages and 10.5% gain on Treasury securities.

#### Quarter Performance

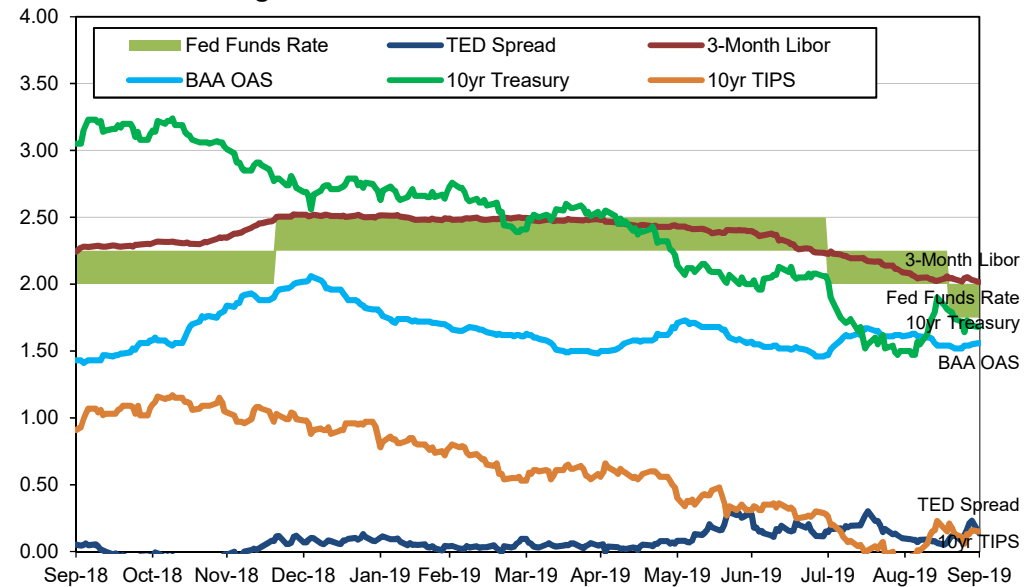


#### 1-Year Performance

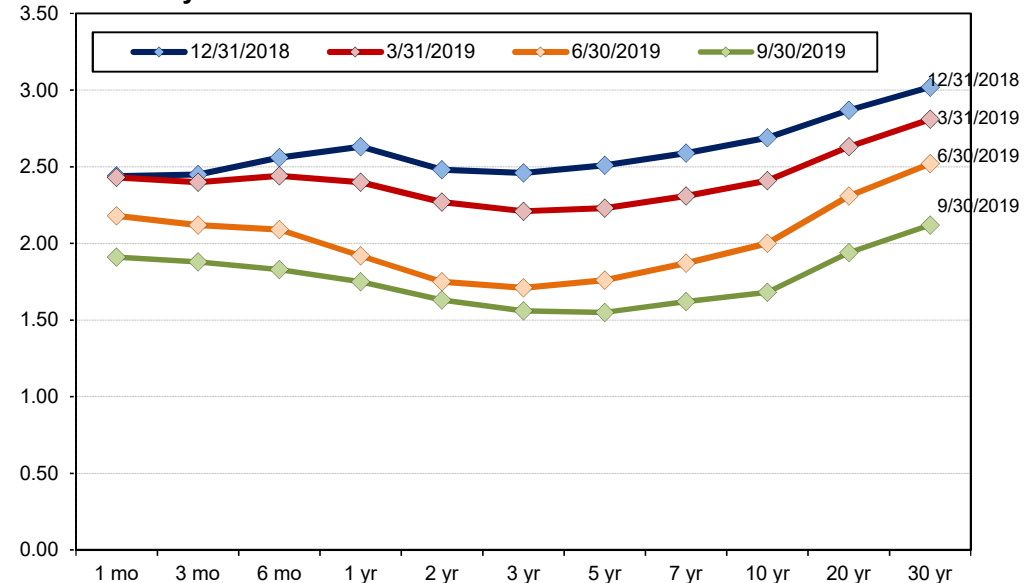


- Global fixed income returns underperformed their domestic counterparts during the 3rd quarter. These indices have lower, or in some cases (Germany, Japan), negative yields, but have higher durations. Given their higher durations, these issues would be expected to perform relatively well during periods of falling rates, however, the returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. As mentioned, the USD appreciated against most other developed currencies during the quarter, acting as a headwind to global bond indices. The return on global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, was -0.6%. Global bonds also trailed over the 1-year period with the Global Aggregate ex US Index returning 5.3% versus a 10.3% return on the domestically focused Bloomberg Barclays Aggregate Index. As global growth has shown signs of stalling, several international central banks have started to step back from more restrictive postures. The ECB and the PBoC have moved toward an easing of monetary policy and implemented various stimulus programs designed to support their respective economies. The Bank of England and the Bank of Japan made no major policy changes during the quarter as they continue to review macroeconomic data within their respective countries.
- Much of the index performance detailed in the bar graphs on the previous page is visible on a time series basis by reviewing the line graphs to the right. The '1-Year Trailing Market Rates' chart illustrates that over the last year, the 10-year Treasury yield (green line) fell from high's greater than 3.0%, to yields below 1.5% before ending the quarter at 1.68%. The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-Treasury issues. This line illustrates an abrupt increase in credit spreads during the 4th quarter of 2018 as investors moved to higher quality assets during the quarter's risk-off environment. Subsequently, spreads declined steadily, remaining somewhat range bound with increases in May and August. There was little change through the quarter with spreads tightening by about 1 basis point. Spread tightening is equivalent to an interest rate decrease on corporate bonds, which produces an additional tailwind for corporate bond index returns. The green band across the graph illustrates the decrease in the Federal Funds Rate due to the recent easing in US monetary policy. The rate cuts in July and September have pushed the Fed Funds Rate to 1-year lows.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four calendar quarters. The downward shift in interest rates as well as a general flattening of the yield curve are clearly visible over the last quarter. As mentioned, the yield curve continues to invert as yields on shorter- and middle-term maturities fell less than interest rates at the long-end of the curve.

**1-Year Trailing Market Rates**



**Treasury Yield Curve**



**Southfield Employees Retirement System**  
**Total Fund Asset Allocation Compliance Summary**

September 30, 2019

Total Portfolio Compliance Summary							
	September 30, 2019 Market Value \$	Current Allocation %	Target Allocation %	Range Allocation %	Act 314 Limit %	Compliance within Ranges	Compliance w/314 Limits
Total Portfolio (excluding Unfunded Commitments)	110,271,900.00	100.0%	100.0%				
Total Equity (14)	71,811,040.00	65.1%	63.5%	53.0% - 70.0%	70.0%	YES	YES
Domestic Equity (14)	54,135,933.00	49.1%	48.0%	43.0% - 53.0%	70.0%	YES	YES
International Equity (14)	17,675,107.00	16.0%	15.5%	10.0% - 20.0%	70.0%	YES	YES
Total US Fixed Income (17 & 17.1.a.iii)	16,047,953.00	14.6%	22.0%	15.0% - 30.0%	100.0%	NO	YES
US Investment Grade Fixed Income (17)	10,582,207.00	9.6%	15.0%	10.0% - 25.0%	100.0%	NO	YES
US Non-Investment Grade Fixed Income (17.1.a.iii)	5,465,746.00	5.0%	5.0%	0.0% - 10.0%	100.0%	YES	YES
Total Non US Fixed Income (20k)	3,255,083.00	3.0%	2.0%	0.0% - 10.0%	20.0%	YES	YES
Total Real Estate (18 & 19)	10,478,438.00	9.5%	6.0%	0.0% - 10.0%	20.0%	YES	YES
Alternative Investments (20d)	8,591,906.00	7.8%	8.5%	0.0% - 10.0%	20.0%	YES	YES
Short Term/Cash Reserves	87,480.00	0.1%	0.0%	0.0% - 5.0%	N/A	YES	YES

## EXECUTIVE SUMMARY: 3Q 2019

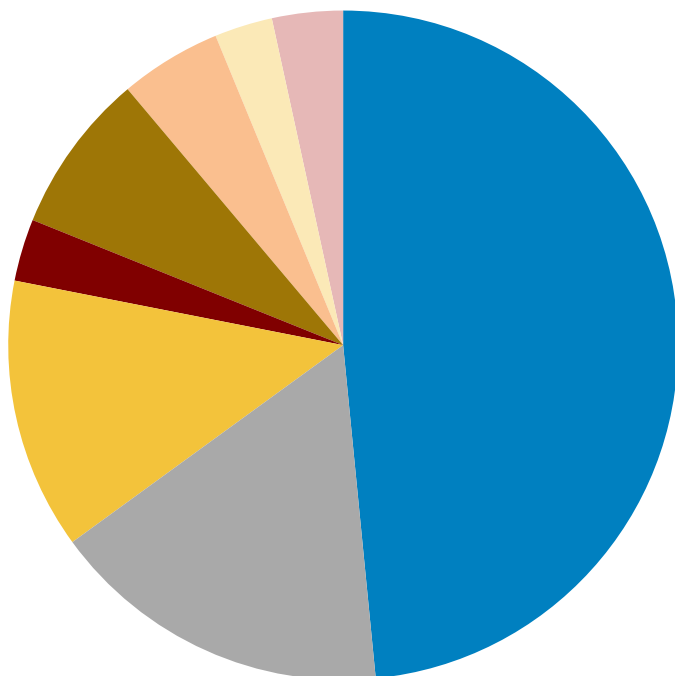
### Market Summary:

Broad asset class returns were mixed during the 3rd quarter with more conservative segments faring better during this period. The Federal Reserve and slowing global economic growth played major roles in the market's performance. Equities advanced in July in anticipation of rate cuts from the Fed. However, the U.S. central bank indicated additional stimulus was not anticipated, causing investors to fear a recession in coming quarters; the stock market sold off and the yield curve inverted further. As evidence of the slowing global economy mounted, the Fed suggested more accommodative policies would be forthcoming. Stocks rallied and interest rates rose to finish the quarter. Large cap posted positive results, but small caps and international markets ended in negative territory. Fixed income provided the strongest returns. Over the past 12 months core fixed income is up over 10%, handily beating all major equity indices, some of which are down over this period.

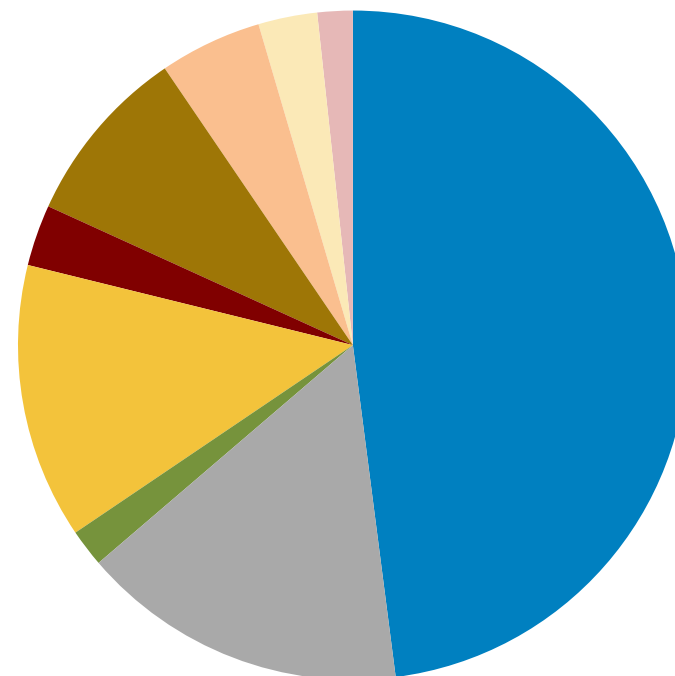
### Conclusions/Recommendations:

1. The Total Fund returned 0.25% during the quarter, slightly behind the Policy Index and ranking in the bottom half of the Public Fund universe. Strong returns from the domestic equity allocation were offset by weaker returns in fixed income and real estate.
2. The Total Fund posted a return of 2.01% over the past year, under performing the Policy Index and ranking in the bottom half of the peer group. Longer-term, the Fund has performed well, generally exceeding the Policy Index and ranking in the top quartile of the peer group.
3. QMA and SouthernSun out performed their benchmarks this quarter as value out performed growth in the mid cap and small cap segments. Both managers trail longer-term performance expectations.
4. LSV and WCM exceeded the MSCI EAFE Index this quarter and ranked in the top quartile of their peer group. LSV benefited from their value bias and WCM out performed due to strong stock selection. Both managers meet or exceed longer-term performance expectations.
5. Templeton struggled this quarter, trailing their benchmark by almost 4%. The manager was hindered by declining global interest rates, as the manager was positioned for rising rates. The manager trails expectations during their relatively short history with the Fund.
6. Metropolitan, TerraCap, PCCP, and BTG/RMK have not yet reported their third quarter 2019 results (about 6% of the portfolio); these strategies will have minimal impact on the Total Fund. As of 6/30/19, the Plan has outstanding investment commitments with Bloomfield Capital V.
7. The Fund was slightly below the minimum allocation to domestic fixed income (9.6% vs. 10.0%); see AndCo's rebalancing recommendation on the Asset/Manager Summary handout. We did not detect any other violations of investment policies.

Asset Allocation By Segment as of  
June 30, 2019 : \$112,102,711



Asset Allocation By Segment as of  
September 30, 2019 : \$110,271,900



Allocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	54,309,779	48.4	Domestic Equity	52,884,482	48.0
International Equity	18,546,926	16.5	International Equity	17,388,215	15.8
Canadian Equity	-	0.0	Canadian Equity	2,000,000	1.8
Domestic Fixed Income	14,692,470	13.1	Domestic Fixed Income	14,682,980	13.3
Global Fixed Income	3,366,422	3.0	Global Fixed Income	3,255,083	3.0
Real Estate	8,707,423	7.8	Real Estate	9,586,927	8.7
Hedge Fund	5,505,779	4.9	Hedge Fund	5,456,627	4.9
Other Illiquid Asset	3,135,279	2.8	Other Illiquid Asset	3,135,279	2.8
Cash Equivalent	3,838,634	3.4	Cash Equivalent	1,882,307	1.7

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

<b>Financial Reconciliation</b>								
	<b>Market Value 07/01/2019</b>	<b>Net Transfers</b>	<b>Contributions</b>	<b>Distributions</b>	<b>Management Fees</b>	<b>Other Expenses</b>	<b>Return On Investment</b>	<b>Market Value 09/30/2019</b>
<b>Total Domestic Equity</b>	<b>56,848,126</b>	<b>-3,000,000</b>	<b>-</b>	<b>-</b>	<b>-65,951</b>	<b>-3,490</b>	<b>357,248</b>	<b>54,135,933</b>
Comerica S&P 500 Index Fund	23,085,893	-1,000,000	-	-	-3,133	-	401,416	22,484,176
Champlain MC Equity	9,131,550	-2,000,000	-	-	-16,215	-1,188	-38,598	7,075,548
QMA US MC Equity	7,380,008	-	-	-	-8,143	-	37,627	7,409,492
SouthernSun SC	5,800,676	-	-	-	-17,298	-771	-100,721	5,681,887
Walhausen & Co. SMID Value	6,021,765	-	-	-	-14,045	-799	15,132	6,022,053
Great Lakes Equity	5,428,234	-	-	-	-7,116	-732	42,392	5,462,777
<b>Total International Equity</b>	<b>18,835,124</b>	<b>-982,971</b>	<b>-</b>	<b>-</b>	<b>-35,685</b>	<b>-1,351</b>	<b>-140,010</b>	<b>17,675,107</b>
LSV International LCV	9,339,793	17,029	-	-	-17,029	-	-18,645	9,321,148
WCM Focused Growth International	9,495,331	-1,000,000	-	-	-18,656	-1,351	-121,365	8,353,958
<b>Total Fixed Income</b>	<b>19,200,779</b>	<b>-30,530</b>	<b>-</b>	<b>-</b>	<b>-7,645</b>	<b>-1,453</b>	<b>141,885</b>	<b>19,303,036</b>
Pacific Fixed Income	10,781,235	-425,000	-	-	-7,645	-1,453	235,070	10,582,207
Bloomfield Capital Income Fund II	576,594	-	-	-	-	-	-10,268	566,327
Bloomfield Capital Income Fund III	3,521,873	183,616	-	-	-	-	29,134	3,734,624
Bloomfield Capital Income Fund V	954,655	210,854	-	-	-	-	-713	1,164,795
Templeton Global Bond R6 (FBNRX)	3,366,422	-	-	-	-	-	-111,339	3,255,083
<b>Total Real Estate</b>	<b>7,825,778</b>	<b>2,737,167</b>	<b>-</b>	<b>-</b>	<b>-19,693</b>	<b>-18,384</b>	<b>-46,430</b>	<b>10,478,438</b>
AEW Core Property Trust	7,038,739	-	-	-	-19,693	-	122,407	7,141,453
Metropolitan Real Estate V	787,039	-	-	-	-	-	-	787,039
PCCP Equity VIII	-	595,716	-	-	-	-18,384	-27,386	549,946
TerraCap Partners IV	-	2,141,451	-	-	-	-	-141,451	2,000,000
<b>Total Timber Funds</b>	<b>3,135,279</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,135,279</b>
RMK Timberland US Fund	2,218,331	-	-	-	-	-	-	2,218,331
RMK Timberland Intl Fund	916,948	-	-	-	-	-	-	916,948
<b>Total Hedge Fund of Funds</b>	<b>5,505,779</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-49,152</b>	<b>5,456,627</b>
Magnitude Institutional	2,854,215	-	-	-	-	-	-5,153	2,849,062
Titan Masters Int'l Fund	2,651,564	-	-	-	-	-	-43,999	2,607,565
Cash Account	751,846	1,276,334	1,012,382	-2,936,766	-	-22,378	6,062	87,480
<b>Total Fund</b>	<b>112,102,711</b>	<b>-</b>	<b>1,012,382</b>	<b>-2,936,766</b>	<b>-128,974</b>	<b>-47,056</b>	<b>269,602</b>	<b>110,271,900</b>

\*Other expenses represent any professional fees outside of the management fee (custody, consultant, attorney, and admin).



**Comparative Performance**  
**Trailing Returns**  
As of September 30, 2019

Comparative Performance																	
	QTR		FYTD		1 YR		3 YR		5 YR		7 YR		10 YR		Inception		Inception Date
Total Fund	0.25	(86)	0.25	(86)	2.01	(92)	8.69	(20)	6.39	(44)	8.80	(8)	10.04	(1)	7.63	(7)	06/01/1997
Total Fund Policy	0.42	(78)	0.42	(78)	2.87	(80)	8.04	(41)	7.06	(17)	8.53	(13)	9.00	(8)	7.88	(3)	
Difference	-0.17		-0.17		-0.86		0.65		-0.67		0.27		1.04		-0.25		
All Public Plans-Total Fund Median	0.80		0.80		3.99		7.84		6.27		7.55		7.85		6.65		
Total Domestic Equity	0.67	(46)	0.67	(46)	0.35	(49)	10.91	(45)	7.64	(62)	11.27	(54)	12.81	(34)	8.79	(76)	02/01/1992
Total Domestic Equity Policy	-0.02	(57)	-0.02	(57)	-1.66	(61)	10.72	(46)	9.54	(38)	12.07	(40)	12.52	(39)	10.13	(38)	
Difference	0.69		0.69		2.01		0.19		-1.90		-0.80		0.29		-1.34		
IM U.S. Equity (SA+CF+MF) Median	0.40		0.40		0.18		10.24		8.55		11.45		11.91		9.70		
Total International Equity	-0.73	(22)	-0.73	(22)	1.46	(26)	9.56	(9)	6.80	(10)	9.06	(10)	6.64	(26)	2.83	(29)	12/01/2007
Total International Equity Policy	-1.07	(29)	-1.07	(29)	-1.34	(46)	6.48	(37)	3.27	(47)	6.12	(39)	4.90	(56)	1.20	(62)	
Difference	0.34		0.34		2.80		3.08		3.53		2.94		1.74		1.63		
IM International Equity (SA+CF+MF) Median	-1.88		-1.88		-1.78		5.72		3.15		5.47		5.14		1.69		
Total Fixed Income	0.77	(99)	0.77	(99)	5.97	(99)	4.58	(4)	4.97	(3)	4.09	(5)	4.91	(18)	5.45	(31)	03/01/2009
Total Fixed Income Policy	2.27	(73)	2.27	(73)	10.30	(70)	2.92	(92)	3.38	(91)	2.72	(92)	3.75	(94)	4.21	(94)	
Difference	-1.50		-1.50		-4.33		1.66		1.59		1.37		1.16		1.24		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	2.34		2.34		10.48		3.38		3.76		3.13		4.37		5.12		
Total Real Estate	-0.54	(100)	-0.54	(100)	4.42	(94)	6.65	(88)	8.73	(89)	9.45	(91)	N/A		5.27	(100)	01/01/2012
Total Real Estate Policy	1.41	(83)	1.41	(83)	6.24	(87)	6.76	(87)	8.57	(91)	9.29	(92)	9.77	(96)	9.41	(93)	
Difference	-1.95		-1.95		-1.82		-0.11		0.16		0.16		N/A		-4.14		
IM U.S. Open End Private Real Estate (SA+CF) Median	1.80		1.80		7.05		8.43		9.97		11.13		11.67		11.16		
Total Hedge Fund of Funds	-0.89		-0.89		1.17		4.27		N/A		N/A		N/A		2.24		08/01/2015
HFRI FOF: Diversified Index	-0.67		-0.67		0.51		3.26		1.98		3.22		2.76		1.43		
Difference	-0.22		-0.22		0.66		1.01		N/A		N/A		N/A		0.81		
Total Timber Funds	0.00		0.00		9.13		0.44		-0.63		0.45		N/A		0.44		08/01/2012
Total Timber Policy	0.18		0.18		2.10		3.12		4.36		5.95		3.97		5.84		
Difference	-0.18		-0.18		7.03		-2.68		-4.99		-5.50		N/A		-5.40		

\*\* All History prior to 3/31/2015, obtained from prior consultant.\*\*

# LP Real Estate and Timber Funds separate accounts are presented on the IRR page.





**Comparative Performance**  
**Trailing Returns**  
**As of September 30, 2019**

	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
<b>Total Domestic Equity</b>	<b>0.67 (46)</b>	<b>0.67 (46)</b>	<b>0.35 (49)</b>	<b>10.91 (45)</b>	<b>7.64 (62)</b>	<b>11.27 (54)</b>	<b>12.81 (34)</b>	<b>8.79 (76)</b>	<b>02/01/1992</b>
Total Domestic Equity Policy	-0.02 (57)	-0.02 (57)	-1.66 (61)	10.72 (46)	9.54 (38)	12.07 (40)	12.52 (39)	10.13 (38)	
Difference	0.69	0.69	2.01	0.19	-1.90	-0.80	0.29	-1.34	
IM U.S. Equity (SA+CF+MF) Median	0.40	0.40	0.18	10.24	8.55	11.45	11.91	9.70	
 Comerica S&P 500 Index Fund	1.70 (43)	1.70 (43)	4.28 (36)	13.37 (36)	10.83 (37)	13.24 (49)	13.26 (44)	8.65 (52)	04/01/2006
S&P 500 Index	1.70 (43)	1.70 (43)	4.25 (39)	13.39 (35)	10.84 (36)	13.26 (49)	13.24 (45)	8.62 (57)	
Difference	0.00	0.00	0.03	-0.02	-0.01	-0.02	0.02	0.03	
IM U.S. Large Cap Core Equity (SA+CF) Median	1.54	1.54	3.02	12.74	10.36	13.22	13.12	8.67	
 Champlain MC Equity	-0.52 (70)	-0.52 (70)	6.36 (10)	N/A	N/A	N/A	N/A	15.30 (5)	08/01/2017
Russell Midcap Index	0.48 (37)	0.48 (37)	3.19 (28)	10.69 (37)	9.10 (41)	12.57 (44)	13.07 (50)	8.75 (33)	
Difference	-1.00	-1.00	3.17	N/A	N/A	N/A	N/A	6.55	
IM U.S. Mid Cap Core Equity (SA+CF) Median	-0.08	-0.08	-1.92	9.46	8.90	12.22	13.07	6.86	
 QMA US MC Equity	0.51 (36)	0.51 (36)	-3.92 (77)	N/A	N/A	N/A	N/A	4.00 (90)	08/01/2017
S&P MidCap 400 Index	-0.09 (57)	-0.09 (57)	-2.49 (67)	9.38 (60)	8.88 (54)	11.81 (69)	12.56 (78)	6.21 (67)	
Difference	0.60	0.60	-1.43	N/A	N/A	N/A	N/A	-2.21	
IM U.S. Mid Cap Core Equity (SA+CF) Median	-0.08	-0.08	-1.92	9.46	8.90	12.22	13.07	6.86	
 SouthernSun SC	-1.74 (52)	-1.74 (52)	-7.66 (52)	4.20 (97)	-0.18 (100)	5.87 (100)	11.19 (86)	8.06 (92)	04/01/2008
Russell 2000 Index	-2.40 (67)	-2.40 (67)	-8.89 (65)	8.23 (68)	8.19 (72)	10.43 (80)	11.19 (86)	8.66 (84)	
Difference	0.66	0.66	1.23	-4.03	-8.37	-4.56	0.00	-0.60	
IM U.S. Small Cap Core Equity (SA+CF) Median	-1.65	-1.65	-7.34	9.28	9.40	12.12	12.72	9.86	
 Walhausen & Co. SMID Value	0.25 (53)	0.25 (53)	-2.44 (46)	10.31 (26)	N/A	N/A	N/A	9.91 (46)	10/01/2015
Russell 2500 Value Index	0.13 (54)	0.13 (54)	-4.35 (66)	6.87 (74)	6.98 (66)	10.13 (82)	11.00 (82)	9.47 (52)	
Difference	0.12	0.12	1.91	3.44	N/A	N/A	N/A	0.44	
IM U.S. SMID Cap Value Equity (SA+CF) Median	0.42	0.42	-2.84	8.45	7.60	11.34	12.00	9.66	
 Great Lakes Equity	0.78 (28)	0.78 (28)	N/A	N/A	N/A	N/A	N/A	-1.62 (65)	05/01/2019
Russell 2500 Index	-1.28 (76)	-1.28 (76)	-4.04 (63)	9.51 (76)	8.57 (78)	11.43 (92)	12.22 (86)	-1.80 (69)	
Difference	2.06	2.06	N/A	N/A	N/A	N/A	N/A	0.18	
IM U.S. SMID Cap Core Equity (SA+CF) Median	-0.12	-0.12	-2.14	10.17	9.92	12.65	13.23	-0.16	

\*\* All History prior to 3/31/2015, obtained from prior consultant.\*\*

# LP Real Estate and Timber Funds separate accounts are presented on the IRR page.



**Comparative Performance**  
**Trailing Returns**  
**As of September 30, 2019**

	QTR		FYTD		1 YR		3 YR		5 YR		7 YR		10 YR		Inception		Inception Date
Total International Equity	-0.73	(22)	-0.73	(22)	1.46	(26)	9.56	(9)	6.80	(10)	9.06	(10)	6.64	(26)	2.83	(29)	12/01/2007
Total International Equity Policy	-1.07	(29)	-1.07	(29)	-1.34	(46)	6.48	(37)	3.27	(47)	6.12	(39)	4.90	(56)	1.20	(62)	
Difference	0.34		0.34		2.80		3.08		3.53		2.94		1.74		1.63		
IM International Equity (SA+CF+MF) Median	-1.88		-1.88		-1.78		5.72		3.15		5.47		5.14		1.69		
LSV International LCV	-0.20	(16)	-0.20	(16)	-5.66	(75)	5.79	(52)	3.26	(45)	6.79	(38)	5.24	(65)	4.18	(76)	01/01/2006
MSCI EAFE Index	-1.00	(35)	-1.00	(35)	-0.82	(29)	7.01	(27)	3.77	(37)	6.62	(41)	5.39	(62)	4.23	(74)	
Difference	0.80		0.80		-4.84		-1.22		-0.51		0.17		-0.15		-0.05		
IM International Large Cap Value Equity (SA+CF) Median	-1.52		-1.52		-3.30		5.85		3.02		6.16		5.86		4.78		
WCM Focused Growth International	0.54	(10)	0.54	(10)	10.56	(1)	14.24	(2)	11.24	(4)	11.95	(6)	N/A		11.29	(7)	11/01/2011
MSCI EAFE (Net) Index	-1.07	(39)	-1.07	(39)	-1.34	(56)	6.48	(70)	3.27	(95)	6.12	(89)	4.90	(99)	5.88	(95)	
Difference	1.61		1.61		11.90		7.76		7.97		5.83		N/A		5.41		
IM International Growth Equity (SA+CF) Median	-1.51		-1.51		-0.81		7.79		5.54		7.66		7.51		7.85		

\*\* All History prior to 3/31/2015, obtained from prior consultant.\*\*

# LP Real Estate and Timber Funds separate accounts are presented on the IRR page.



**Comparative Performance**  
**Trailing Returns**  
**As of September 30, 2019**

	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
<b>Total Fixed Income</b>	<b>0.77 (99)</b>	<b>0.77 (99)</b>	<b>5.97 (99)</b>	<b>4.58 (4)</b>	<b>4.97 (3)</b>	<b>4.09 (5)</b>	<b>4.91 (18)</b>	<b>5.45 (31)</b>	<b>03/01/2009</b>
Total Fixed Income Policy	2.27 (73)	2.27 (73)	10.30 (70)	2.92 (92)	3.38 (91)	2.72 (92)	3.75 (94)	4.21 (94)	
Difference	-1.50	-1.50	-4.33	1.66	1.59	1.37	1.16	1.24	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	2.34	2.34	10.48	3.38	3.76	3.13	4.37	5.12	
Pacific Fixed Income	2.42 (33)	2.42 (33)	10.38 (58)	3.30 (60)	3.62 (66)	3.04 (62)	4.02 (77)	5.45 (65)	06/01/1997
Blmbg. Barc. U.S. Aggregate Index	2.27 (73)	2.27 (73)	10.30 (70)	2.92 (92)	3.38 (91)	2.72 (92)	3.75 (94)	5.18 (94)	
Difference	0.15	0.15	0.08	0.38	0.24	0.32	0.27	0.27	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	2.34	2.34	10.48	3.38	3.76	3.13	4.37	5.61	
Templeton Global Bond R6 (FBNRX)	-3.31 (100)	-3.31 (100)	1.16 (100)	N/A	N/A	N/A	N/A	-0.45 (100)	04/01/2017
Blmbg. Barc. Global Multiverse	0.63 (58)	0.63 (58)	7.54 (51)	1.81 (65)	2.14 (51)	1.40 (65)	2.55 (69)	4.25 (35)	
Difference	-3.94	-3.94	-6.38	N/A	N/A	N/A	N/A	-4.70	
IM Global Fixed Income (MF) Median	1.01	1.01	7.65	2.29	2.16	1.70	3.03	3.92	
<b>Total Real Estate</b>	<b>-0.54 (100)</b>	<b>-0.54 (100)</b>	<b>4.42 (94)</b>	<b>6.65 (88)</b>	<b>8.73 (89)</b>	<b>9.45 (91)</b>	<b>N/A</b>	<b>5.27 (100)</b>	<b>01/01/2012</b>
Total Real Estate Policy	1.41 (83)	1.41 (83)	6.24 (87)	6.76 (87)	8.57 (91)	9.29 (92)	9.77 (96)	9.41 (93)	
Difference	-1.95	-1.95	-1.82	-0.11	0.16	0.16	N/A	-4.14	
IM U.S. Open End Private Real Estate (SA+CF) Median	1.80	1.80	7.05	8.43	9.97	11.13	11.67	11.16	
AEW Core Property Trust	1.74 (58)	1.74 (58)	7.01 (53)	7.60 (79)	9.22 (81)	9.85 (87)	N/A	9.85 (87)	10/01/2012
NCREIF Fund Index-ODCE (VW)	1.31 (87)	1.31 (87)	5.60 (90)	7.31 (82)	9.35 (78)	10.30 (76)	10.86 (69)	10.30 (76)	
Difference	0.43	0.43	1.41	0.29	-0.13	-0.45	N/A	-0.45	
IM U.S. Open End Private Real Estate (SA+CF) Median	1.80	1.80	7.05	8.43	9.97	11.13	11.67	11.13	
<b>Total Hedge Fund of Funds</b>	<b>-0.89</b>	<b>-0.89</b>	<b>1.17</b>	<b>4.27</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>2.24</b>	<b>08/01/2015</b>
HFRI FOF: Diversified Index	-0.67	-0.67	0.51	3.26	1.98	3.22	2.76	1.43	
Difference	-0.22	-0.22	0.66	1.01	N/A	N/A	N/A	0.81	
Magnitude Institutional	-0.18	-0.18	2.62	4.26	N/A	N/A	N/A	3.19	08/01/2015
HFRI FOF: Diversified Index	-0.67	-0.67	0.51	3.26	1.98	3.22	2.76	1.43	
Difference	0.49	0.49	2.11	1.00	N/A	N/A	N/A	1.76	
Titan Masters Int'l Fund	-1.66	-1.66	-0.37	4.29	N/A	N/A	N/A	1.02	08/01/2015
HFRI FOF: Diversified Index	-0.67	-0.67	0.51	3.26	1.98	3.22	2.76	1.43	
Difference	-0.99	-0.99	-0.88	1.03	N/A	N/A	N/A	-0.41	

\*\* All History prior to 3/31/2015, obtained from prior consultant.\*\*

# LP Real Estate and Timber Funds separate accounts are presented on the IRR page.



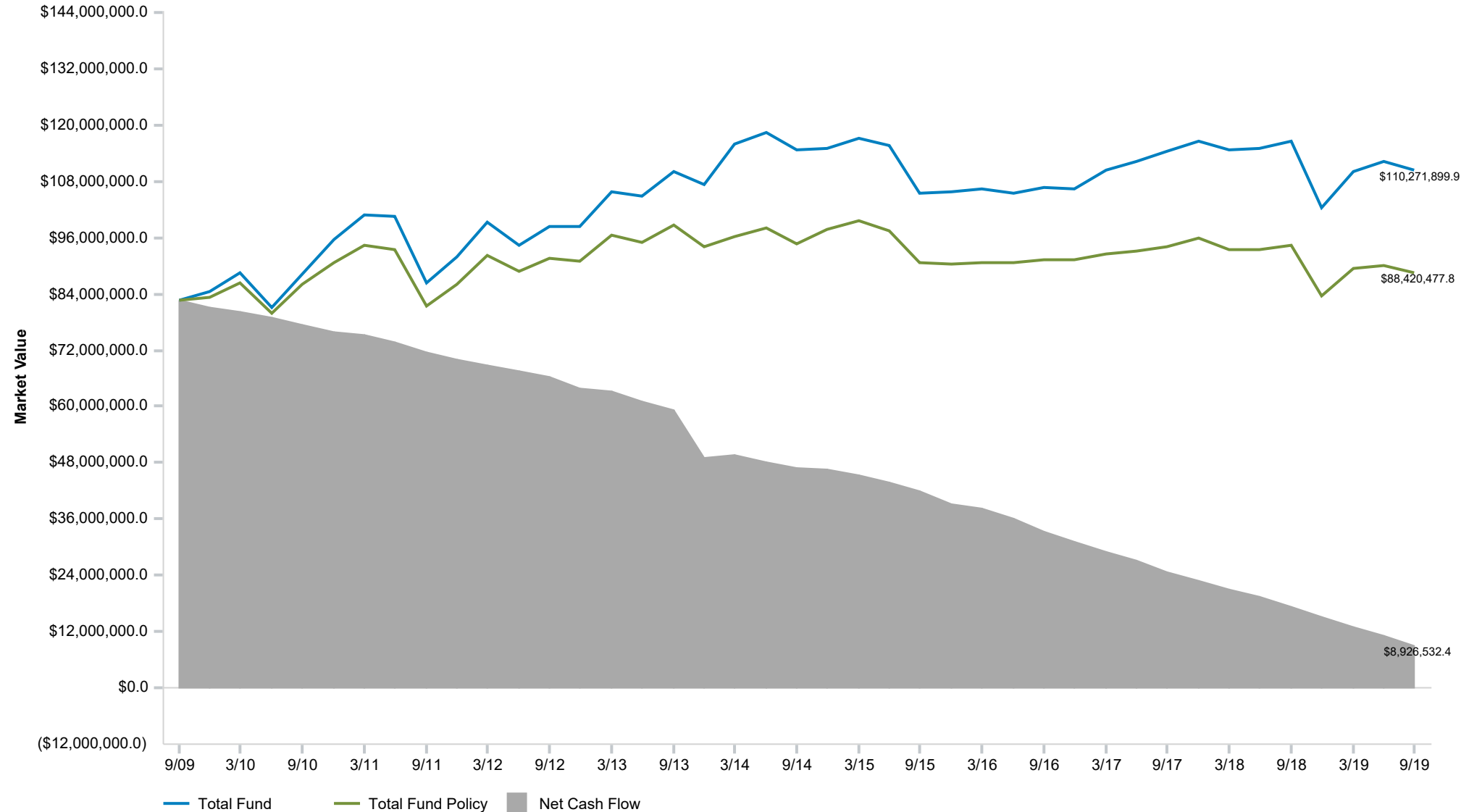
As of September 30, 2019

## Comparative Performance - IRR

	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	Since Inception Ending Sep-2019	Inception Date
Bloomfield Capital Income Fund II	-1.78	-1.78	-11.28	4.76	N/A	N/A	7.30	12/22/2014
Bloomfield Capital Income Fund III	0.93	0.93	5.04	N/A	N/A	N/A	8.59	12/31/2016
Bloomfield Capital Income Fund V	-0.07	-0.07	N/A	N/A	N/A	N/A	2.33	02/14/2019
Metropolitan Real Estate V	0.00	0.00	3.33	6.12	9.56	9.93	8.67	11/30/2011
PCCP Equity VIII	-7.68	-7.68	N/A	N/A	N/A	N/A	-7.68	07/23/2019
RMK Timberland US Fund	0.00	0.00	9.05	5.63	3.34	N/A	4.73	10/31/2012
RMK Timberland Intl Fund	0.00	0.00	9.31	-8.68	-6.96	N/A	-6.65	11/21/2012
TerraCap Partners IV	-6.61	-6.61	N/A	N/A	N/A	N/A	-6.61	07/03/2019

**Schedule of Investable Assets**  
**Total Fund**  
**10 Years Ending September 30, 2019**

**Schedule of Investable Assets**

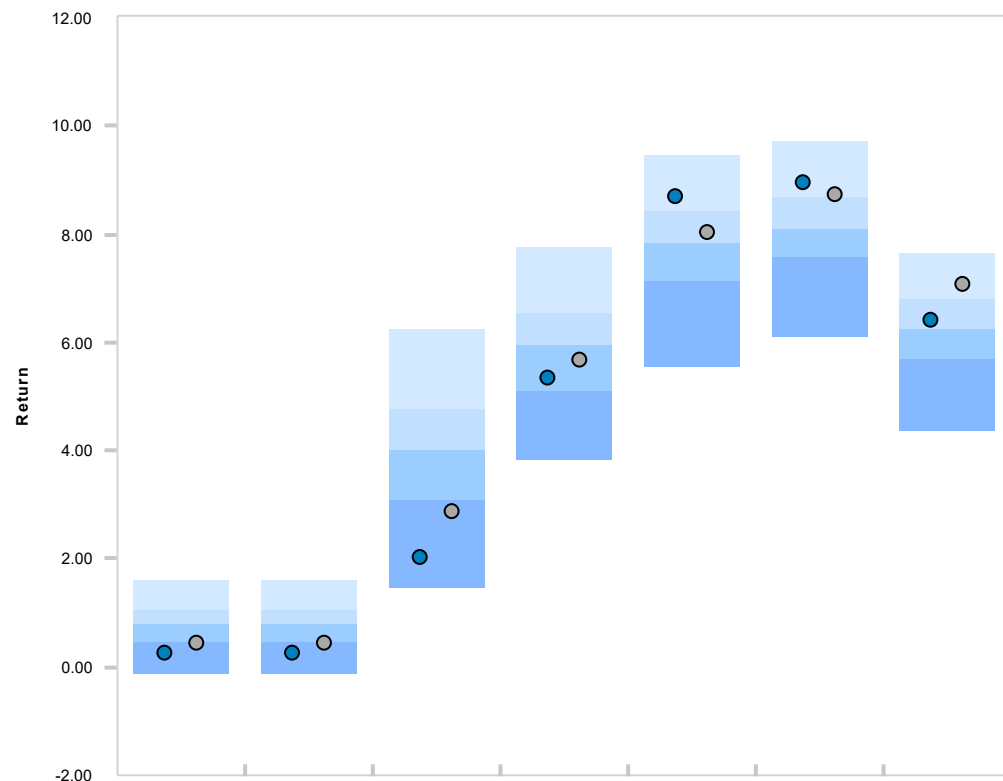


**Schedule of Investable Assets**

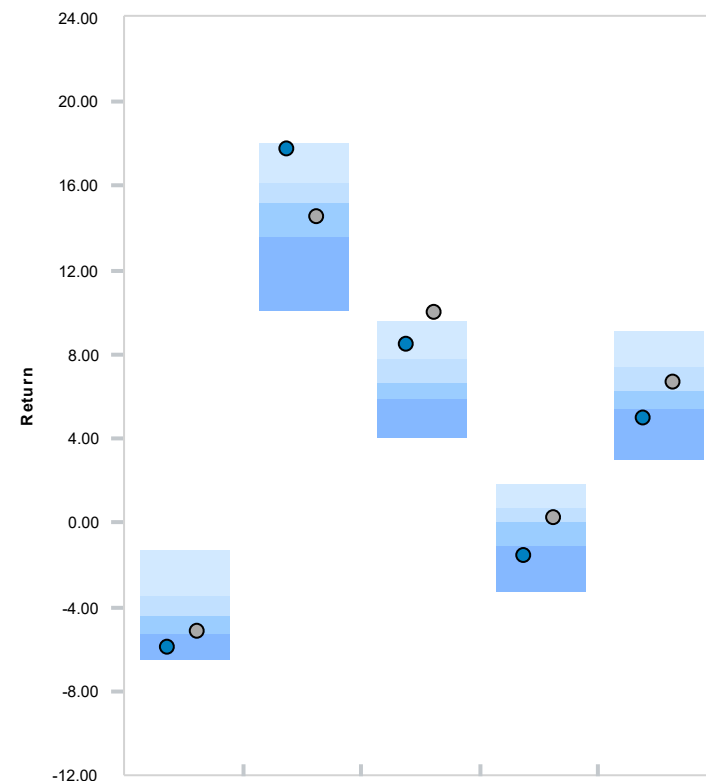
Periods Ending	Beginning Market Value \$	Contributions \$	Withdrawals \$	Gain/Loss \$	Net Cash Flow \$	Ending Market Value \$
10 YR	82,553,663	132,864,733	206,491,864	101,345,368	-73,627,131	110,271,900



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Fund	0.25 (86)	0.25 (86)	2.01 (92)	5.32 (72)	8.69 (20)	8.94 (17)	6.39 (44)
● Total Fund Policy	0.42 (78)	0.42 (78)	2.87 (80)	5.66 (63)	8.04 (41)	8.72 (24)	7.06 (17)
Median	0.80	0.80	3.99	5.96	7.84	8.11	6.27

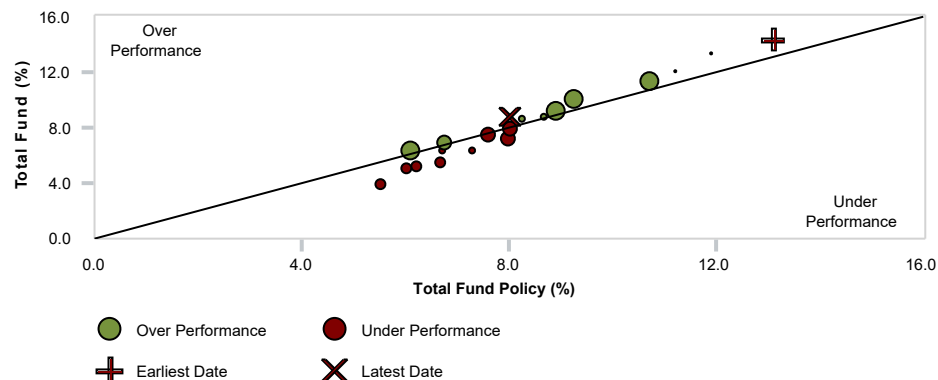


	2018	2017	2016	2015	2014
● Total Fund	-5.93 (90)	17.76 (6)	8.43 (15)	-1.58 (82)	4.92 (83)
● Total Fund Policy	-5.15 (71)	14.48 (63)	9.99 (3)	0.18 (47)	6.66 (40)
Median	-4.44	15.20	6.68	-0.01	6.27

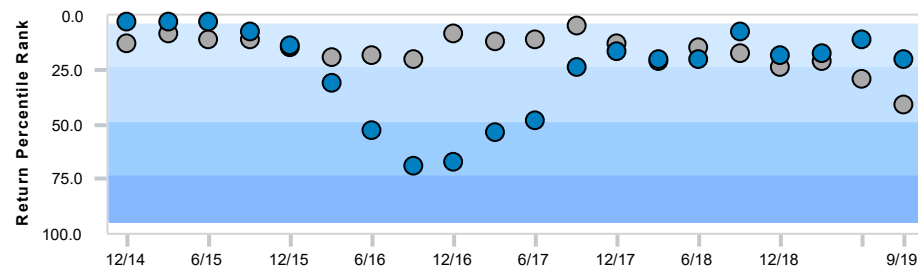
Comparative Performance

	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018
Total Fund	3.44 (34)	9.67 (20)	-10.30 (96)	3.22 (53)	1.79 (25)	-0.19 (31)
Total Fund Policy	3.16 (70)	9.57 (23)	-9.38 (83)	3.13 (55)	2.06 (14)	-0.56 (60)
All Public Plans-Total Fund Median	3.34	8.88	-8.28	3.26	1.22	-0.49

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

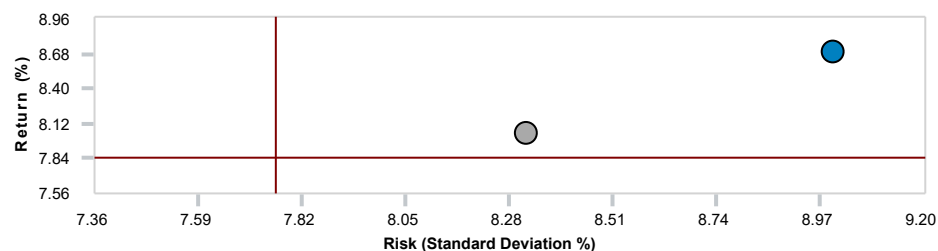


### 3 Yr Rolling Percentile Ranking - 5 Years



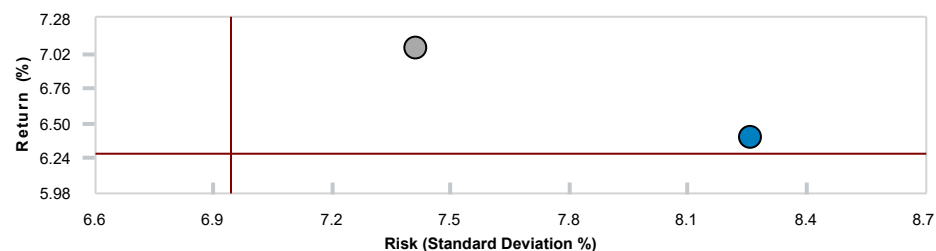
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Total Fund	20	14 (70%)	2 (10%)	4 (20%)	0 (0%)
Total Fund Policy	20	18 (90%)	2 (10%)	0 (0%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Total Fund	8.69	9.00
Total Fund Policy	8.04	8.32
Median	7.84	7.76

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Total Fund	6.39	8.26
Total Fund Policy	7.06	7.41
Median	6.27	6.94

### Historical Statistics - 3 Years

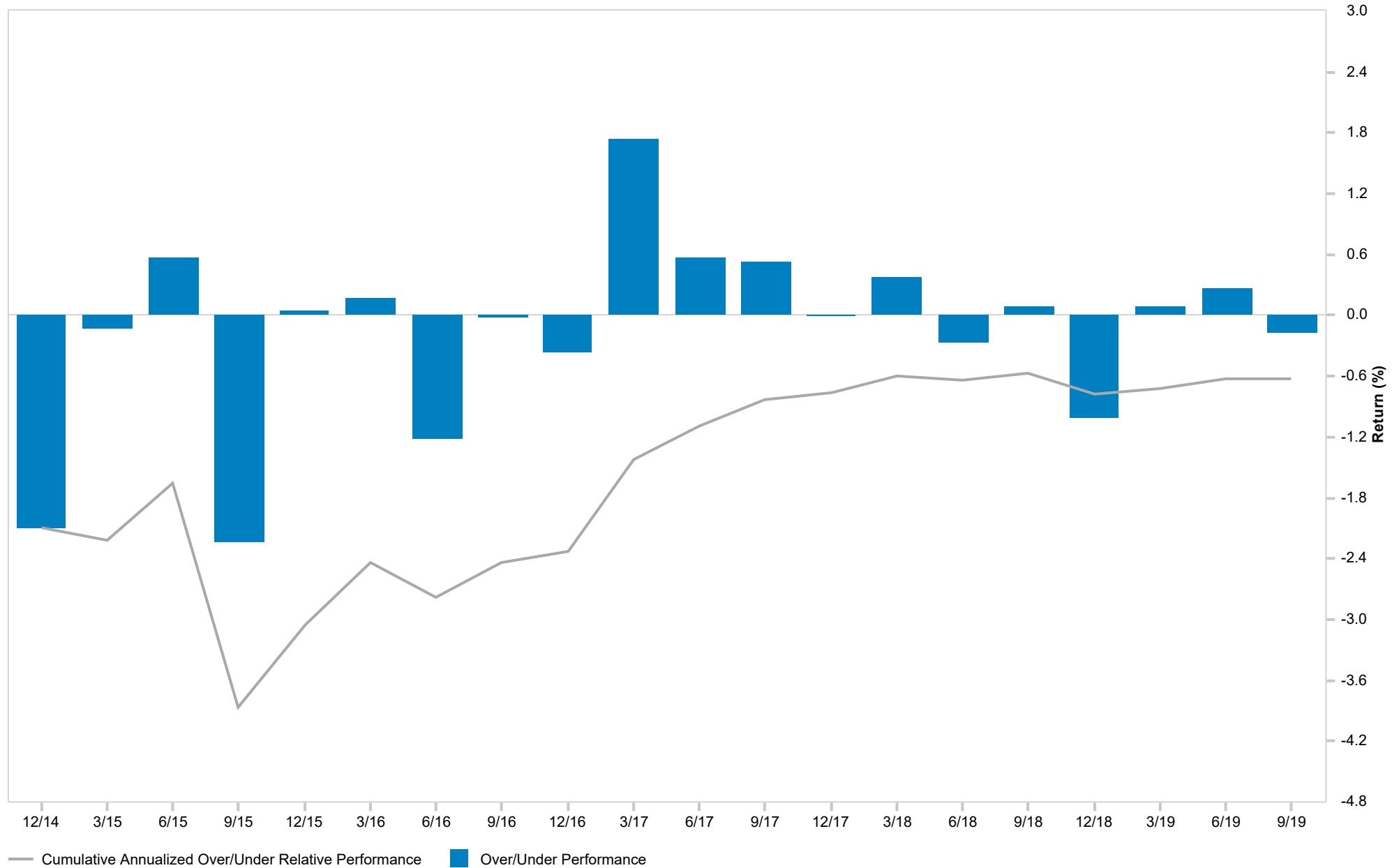
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.28	107.50	105.52	0.08	0.53	0.80	1.07	5.95
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.79	1.00	5.42

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.78	98.56	113.49	-1.22	-0.32	0.68	1.09	5.69
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.83	1.00	4.84



**Relative Performance**



Calculation based on quarterly periodicity.  
 Benchmark: 65% MSCI ACWi / 35% Barclays Global Agg



#### Comerica S&P 500 - Portfolio Description

- Strategy: S&P 500 Index Fund
- Vehicle: Commingled Fund
- Objective: To replicate the S&P 500
- Annual fees: .10% on first \$5M  
.08% on next \$20M  
.06% on next \$25M
- Benchmark: S&P 500 Index

#### Comerica S&P 500 - Strategy Details

The 500 Index Strategy seeks to provide investment results generally corresponding to the aggregate price and dividend performance of the publicly traded common stocks in the large- capitalization sector of the U.S. equity market. The fund pursues this objective by investing primarily in the 500 common stocks that compose the S&P 500 Index.

#### Champlain MidCap Equity - Portfolio Description

- Strategy: Mid Cap Equity
- Vehicle: Separately Managed Account
- Objective: To outperform the Russell Midcap Index
- Annual fees: .85% on first \$50MM  
.75% on next \$50MM  
.65% over \$100M
- Benchmark: Russell Midcap Index

#### Champlain MidCap Equity - Strategy Details

Champlain's mid cap strategy invests in a broadly diversified portfolio of approximately 50 to 75 common stocks of medium sized companies, and to a lesser extent small and large sized companies, which have attractive long-term fundamentals, appreciation potential, and valuations. They believe that investing in companies with sustainable competitive advantages, durable business models, sound balance sheets, credible and sincere management, and that are trading at valuations deemed reasonable by the team, can, over time, provide attractive returns with less risk than the overall market. Their investment processes are focused on absolute returns and avoiding large losses, which they believe is critical to wealth creation.

#### QMA Midcap Equity - Portfolio Description

- Strategy: US Mid Cap Fore Equity
- Vehicle: Commingled Account
- Objective: To outperform the Russell Midcap Index
- Annual fees: .45% on first \$50MM  
.40% over \$50M
- Benchmark: Russell Midcap Index

#### QMA Midcap Equity - Strategy Details

At QMA, they believe that an adaptive, bottom-up, systematic investment process based on fundamental insights is the most efficient way to exploit market inefficiencies and add value. On a daily basis they assess the relative attractiveness of their universe, scoring stocks according to fundamentals most relevant to their growth characteristics-more emphasis on valuation for slowly growing companies and indicators of future growth prospects for faster growing companies. These scores form the basis of the construction process whereby they focus risk on a breadth of exposures most likely to produce alpha and limit exposures to uncompensated off-benchmark risk. Rebalancing is done with experienced judgment to maintain desired portfolio alpha exposures and risk limits and with careful attention to trading costs.

#### SouthernSun Smallcap Equity - Portfolio Description

- Strategy: Small Cap
- Vehicle: Separately Managed Account
- Objective: To outperform the Russell 2000 Index
- Annual fees: 1.00% on first \$15M
- 0.85% over \$15M
- Benchmark: Russell 2000 Index

#### SouthernSun Smallcap Equity - Strategy Details

The Small Cap strategy targets companies with market caps of \$500 million to \$3.5 billion at time of initial purchase. While idea generation may come from traditional screening, new names are often sourced through research on existing portfolio holdings, industry trade publications, and industry conferences. The Investment Team relies almost solely on internally conducted research for idea generation. This strategy is generally closed to new investors.

#### Walhausen SMID Value Equity - Portfolio Description

- Strategy: Select Value (SMID)
- Vehicle: Separately Managed Account
- Objective: To outperform the Russell 2500 Index
- Annual fees: 1.00% of Assets
- Benchmark: Russell 2500 Index

#### Walhausen SMID Value Equity - Strategy Details

This portfolio is constructed to provide strong returns with moderate volatility. It incorporates 40-50 equally weighted holdings, broadly diversified across industry sectors. Positions are reduced when they begin to exceed 3.0% of the portfolio. Companies included in the portfolio have a market capitalization between \$700 million and \$7.0 billion. The majority (about 80%) of the portfolio is with companies which have consistently high returns on capital, ample free cash flow, well proven management and sell at moderate valuations. Many of these stocks are frequently too dull to attract much "Wall Street" attention and thus have carried low valuations and lower volatility. The remaining 20% of the fund is invested in "Special Situations." For these stocks a focused approach is utilized to find 8-10 names with unusual potential returns. The goal is for both parts of the strategy to outperform over the market cycle, and to deliver annualized returns 200 basis points above the Russell 2500 Value index.

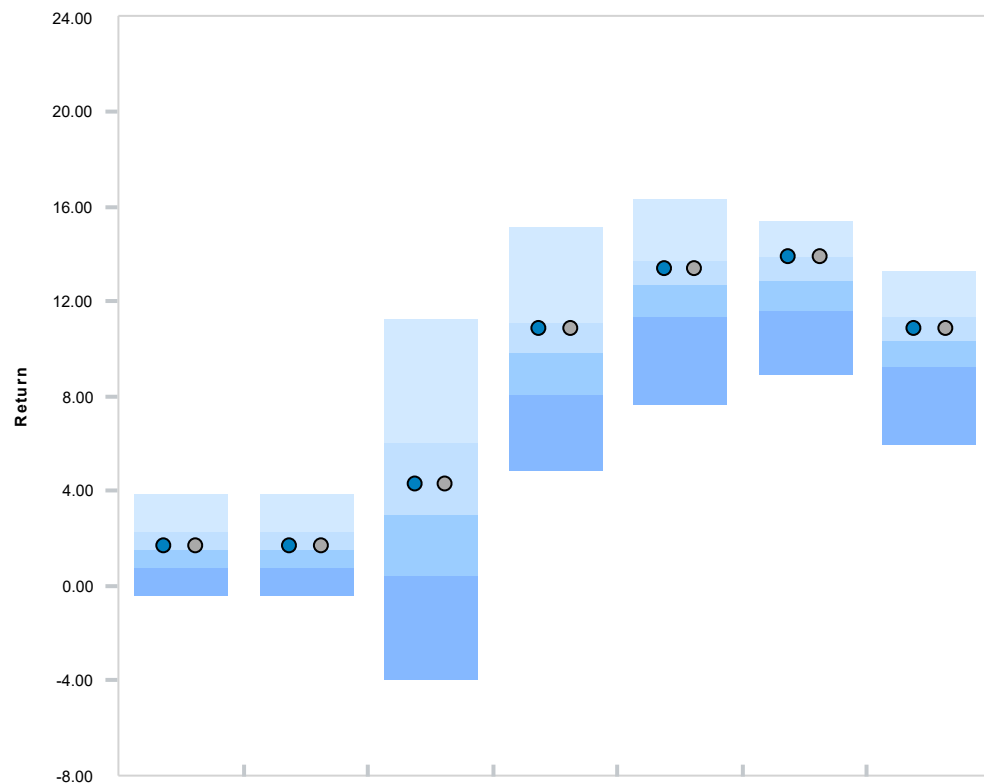
#### Great Lakes SMID Equity - Portfolio Description

- Strategy: Smid Cap
- Vehicle: Separately Managed Account
- Objective: To outperform the Russell 2500 Index
- Annual fees: 55 bps
- Benchmark: Russell 2500 Index

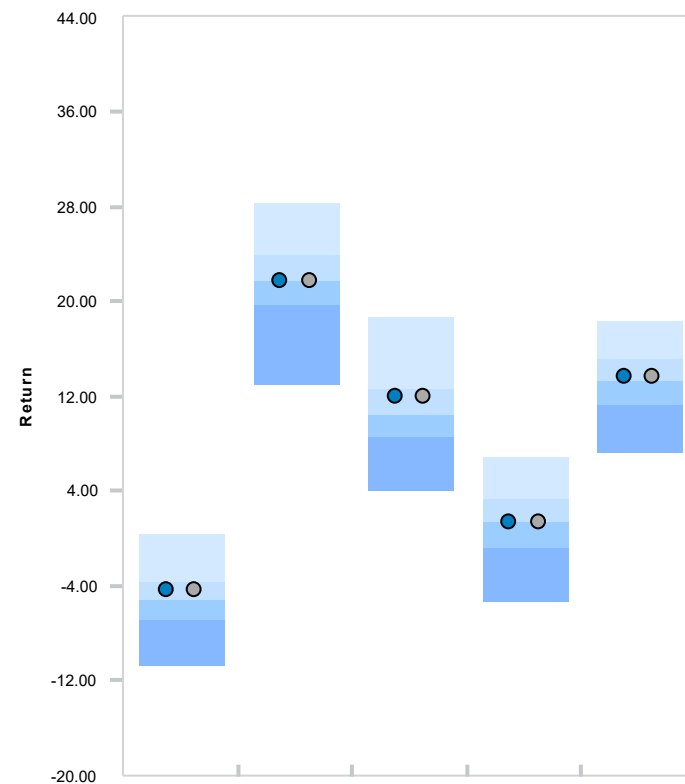
#### Great Lakes SMID Equity - Strategy Details

The Disciplined Equity SMidCap strategy seeks to outperform the benchmark over time through superior stock selection while maintaining similar risk characteristics. Use a "bottom up" systematic process to evaluate the universe of stocks using three independent analyses, each of which is designed to provide a unique valuation perspective: Broad Universe Analysis (Evaluates each stock relative to all other stocks in the investment universe), Style-Specific Analysis (Evaluates each stock relative to its peers with the same combined market capitalization and style profile), Sector-Specific Analysis (Evaluates each stock relative to all other stocks in the same economic sector).

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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Comerica S&P 500	1.70 (43)	1.70 (43)	4.28 (36)	10.86 (33)	13.37 (36)	13.89 (26)	10.83 (37)
● S&P 500 Index	1.70 (43)	1.70 (43)	4.25 (39)	10.87 (33)	13.39 (35)	13.90 (26)	10.84 (36)
Median	1.54	1.54	3.02	9.86	12.74	12.92	10.36

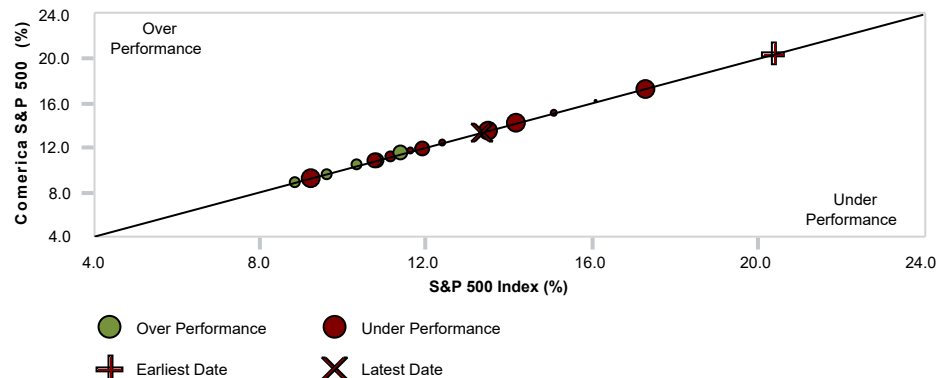


	2018	2017	2016	2015	2014
● Comerica S&P 500	-4.35 (36)	21.80 (52)	11.94 (34)	1.44 (50)	13.66 (45)
● S&P 500 Index	-4.38 (37)	21.83 (51)	11.96 (34)	1.38 (52)	13.69 (44)
Median	-5.20	21.83	10.52	1.43	13.42

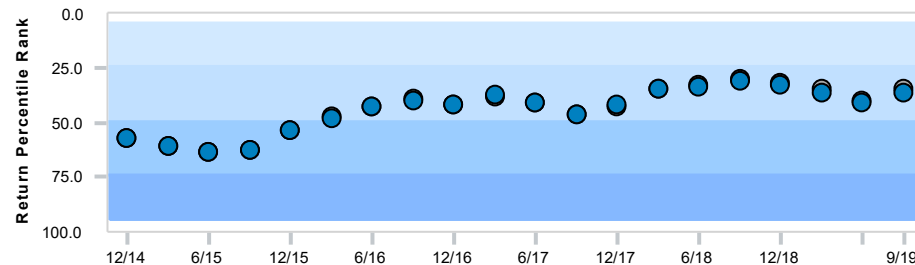
Comparative Performance

	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018
Comerica S&P 500	4.31 (48)	13.60 (42)	-13.47 (43)	7.70 (35)	3.43 (34)	-0.77 (65)
S&P 500 Index	4.30 (49)	13.65 (38)	-13.52 (46)	7.71 (34)	3.43 (33)	-0.76 (63)
IM U.S. Large Cap Core Equity (SA+CF) Median	4.21	13.19	-13.79	7.13	2.90	-0.45

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

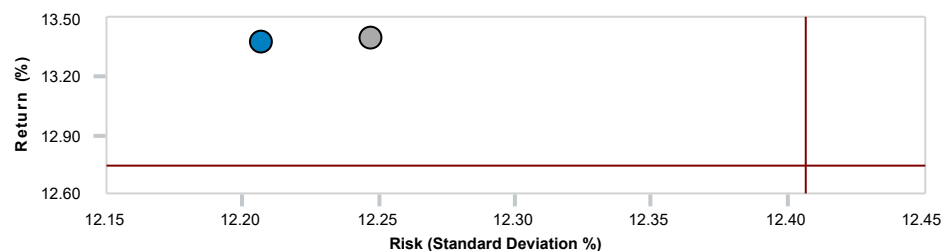


### 3 Yr Rolling Percentile Ranking - 5 Years



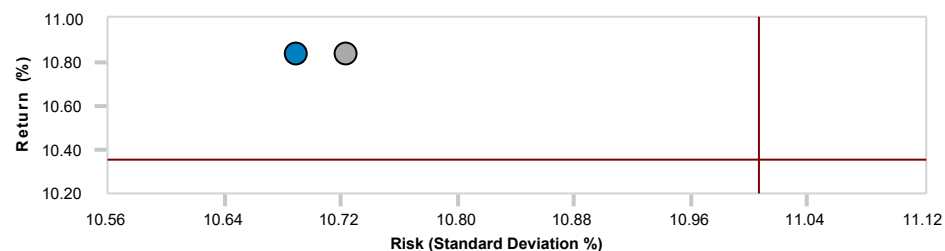
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Comerica S&P 500	20	0 (0%)	15 (75%)	5 (25%)	0 (0%)
S&P 500 Index	20	0 (0%)	15 (75%)	5 (25%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Comerica S&P 500	13.37	12.21
S&P 500 Index	13.39	12.25
Median	12.74	12.41

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Comerica S&P 500	10.83	10.69
S&P 500 Index	10.84	10.72
Median	10.36	11.01

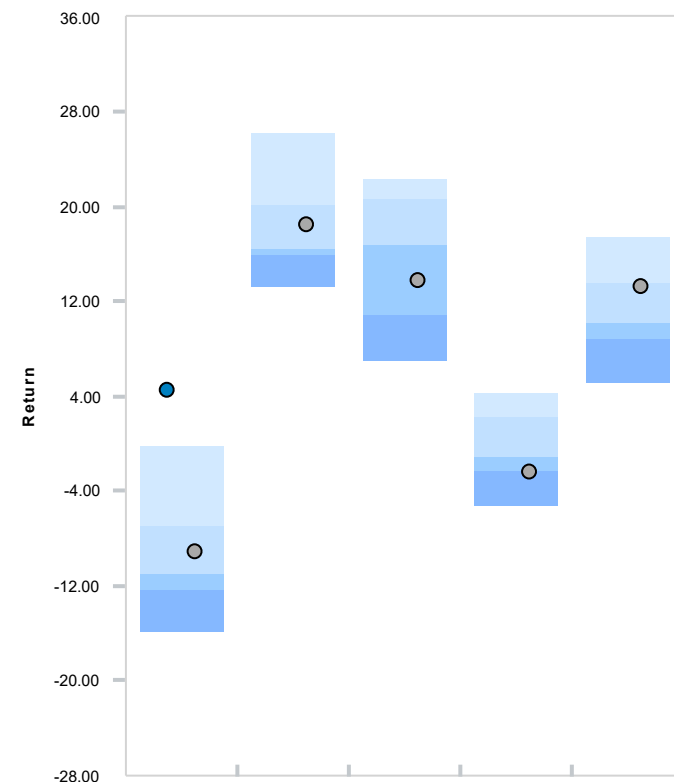
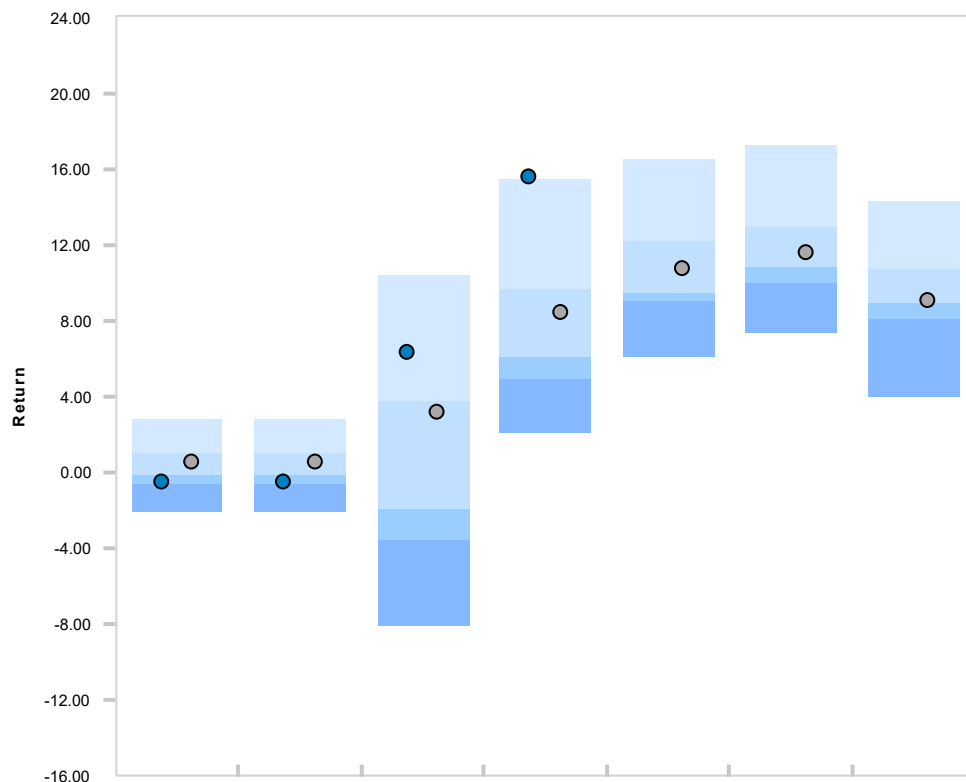
### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Comerica S&P 500	0.05	99.81	99.77	0.02	-0.46	0.99	1.00	8.03
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	0.98	1.00	8.05

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Comerica S&P 500	0.04	99.89	99.82	0.02	-0.12	0.85	1.00	7.46
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	0.85	1.00	7.48

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



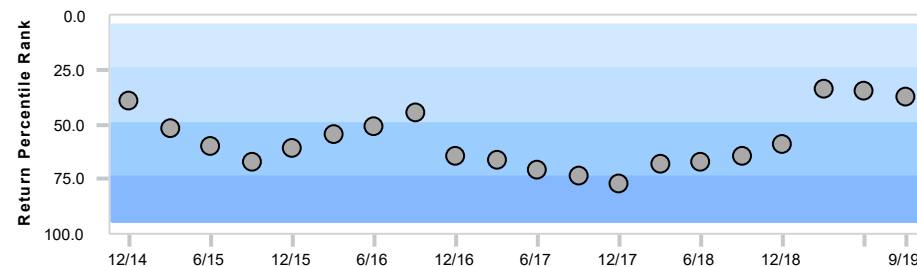
Comparative Performance

	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018
Champlain MC Equity	3.34 (41)	16.90 (20)	-11.50 (4)	8.46 (2)	3.95 (43)	4.77 (6)
Russell Midcap Index	4.13 (33)	16.54 (29)	-15.37 (27)	5.00 (37)	2.82 (58)	-0.46 (41)
IM U.S. Mid Cap Core Equity (SA+CF) Median	3.07	14.65	-17.15	4.50	3.58	-0.76

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

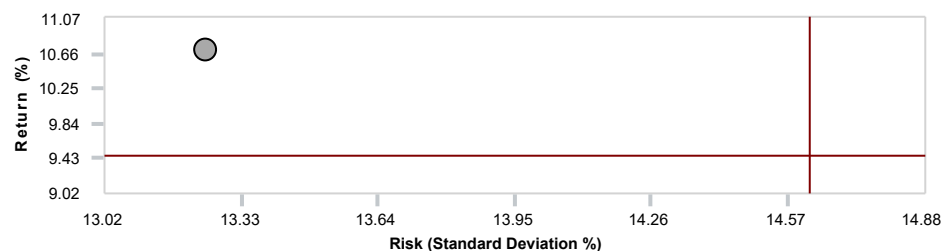
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### 3 Yr Rolling Percentile Ranking - 5 Years



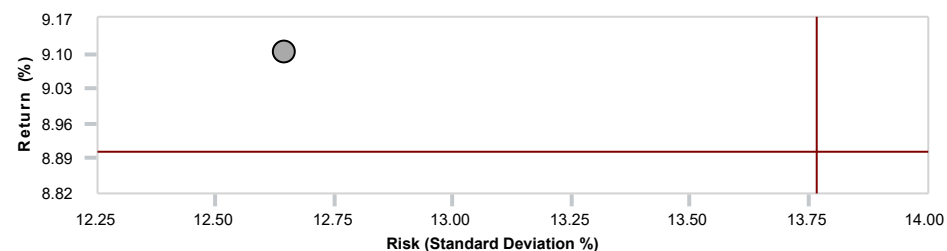
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Champlain MC Equity	0	0	0	0	0
Russell Midcap Index	20	0 (0%)	5 (25%)	14 (70%)	1 (5%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Champlain MC Equity	N/A	N/A
Russell Midcap Index	10.69	13.25
Median	9.46	14.62

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Champlain MC Equity	N/A	N/A
Russell Midcap Index	9.10	12.64
Median	8.90	13.77

### Historical Statistics - 3 Years

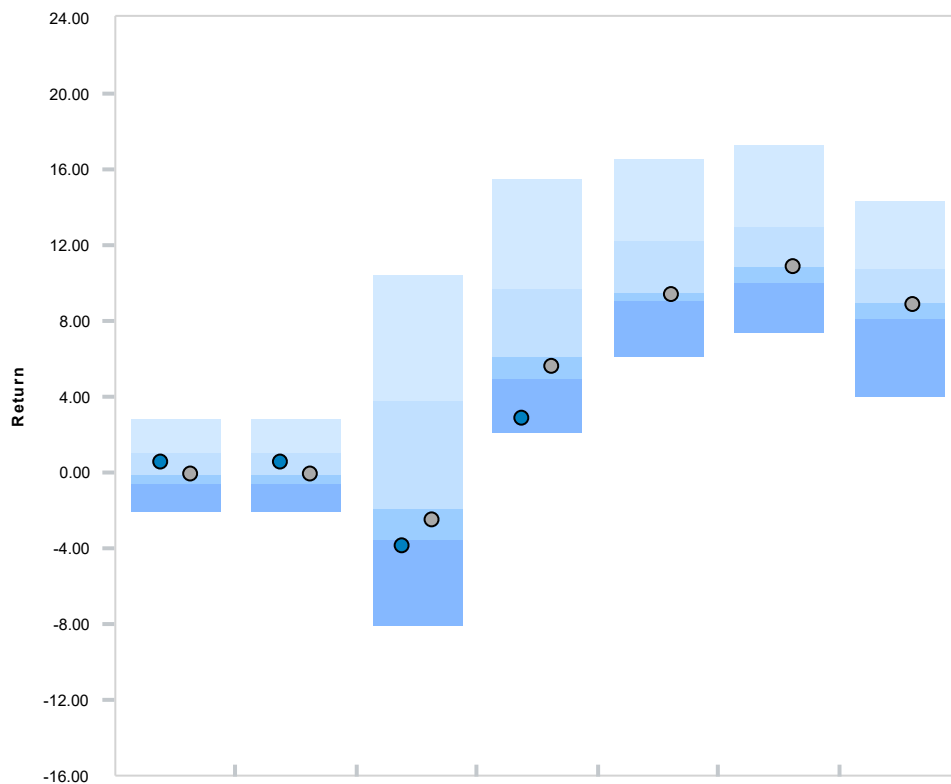
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Champlain MC Equity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	0.72	1.00	8.97

### Historical Statistics - 5 Years

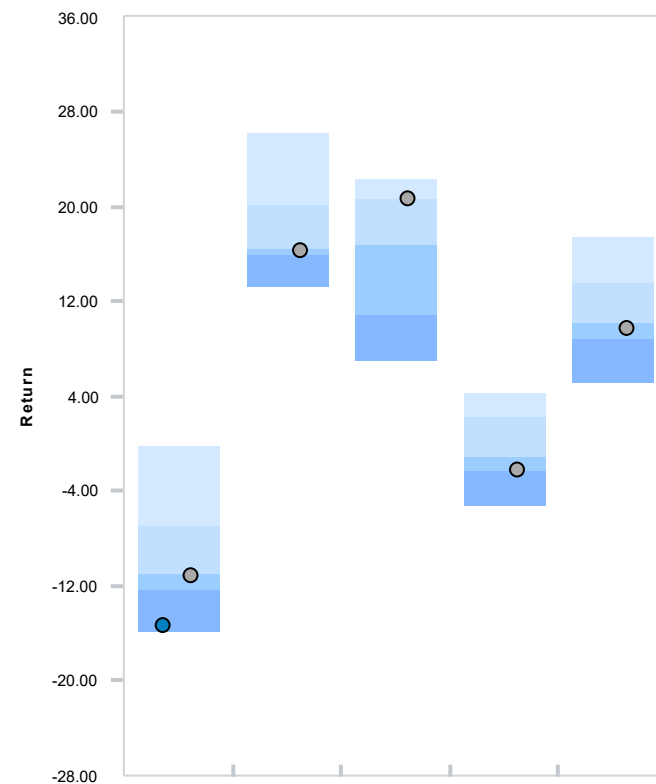
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Champlain MC Equity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	0.68	1.00	8.24



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● QMA US MC Equity	0.51 (36)	0.51 (36)	-3.92 (77)	2.89 (89)	N/A	N/A	N/A
● S&P MidCap 400 Index	-0.09 (57)	-0.09 (57)	-2.49 (67)	5.53 (70)	9.38 (60)	10.84 (56)	8.88 (54)
Median	-0.08	-0.08	-1.92	6.15	9.46	10.87	8.90



	2018	2017	2016	2015	2014
● QMA US MC Equity	-15.29 (92)	N/A	N/A	N/A	N/A
● S&P MidCap 400 Index	-11.08 (61)	16.24 (67)	20.74 (25)	-2.18 (74)	9.77 (65)
Median	-11.01	16.49	16.80	-0.98	10.17

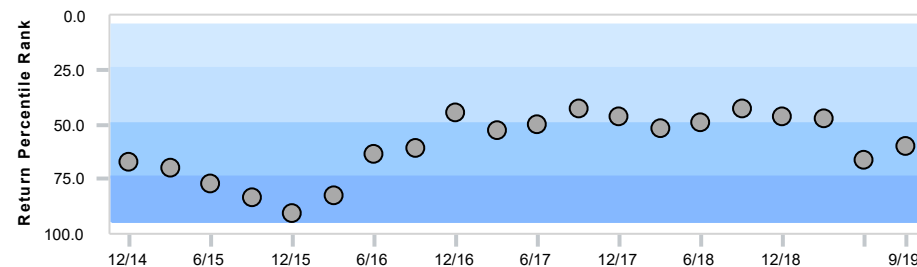
Comparative Performance

	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018
QMA US MC Equity	2.33 (73)	14.44 (68)	-18.37 (85)	2.69 (95)	2.16 (78)	-1.08 (68)
S&P MidCap 400 Index	3.05 (61)	14.49 (58)	-17.28 (66)	3.86 (69)	4.29 (24)	-0.77 (56)
IM U.S. Mid Cap Core Equity (SA+CF) Median	3.07	14.65	-17.15	4.50	3.58	-0.76

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

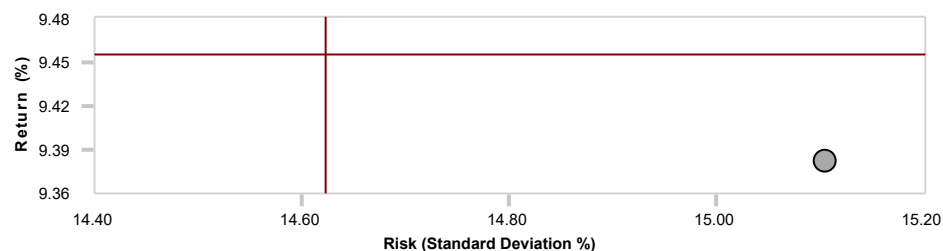
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### 3 Yr Rolling Percentile Ranking - 5 Years



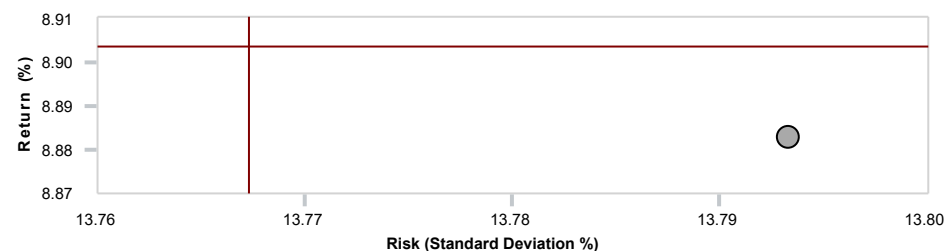
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
QMA US MC Equity	0	0	0	0	0
S&P MidCap 400 Index	20	0 (0%)	8 (40%)	8 (40%)	4 (20%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
QMA US MC Equity	N/A	N/A
S&P MidCap 400 Index	9.38	15.10
Median	9.46	14.62

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
QMA US MC Equity	N/A	N/A
S&P MidCap 400 Index	8.88	13.79
Median	8.90	13.77

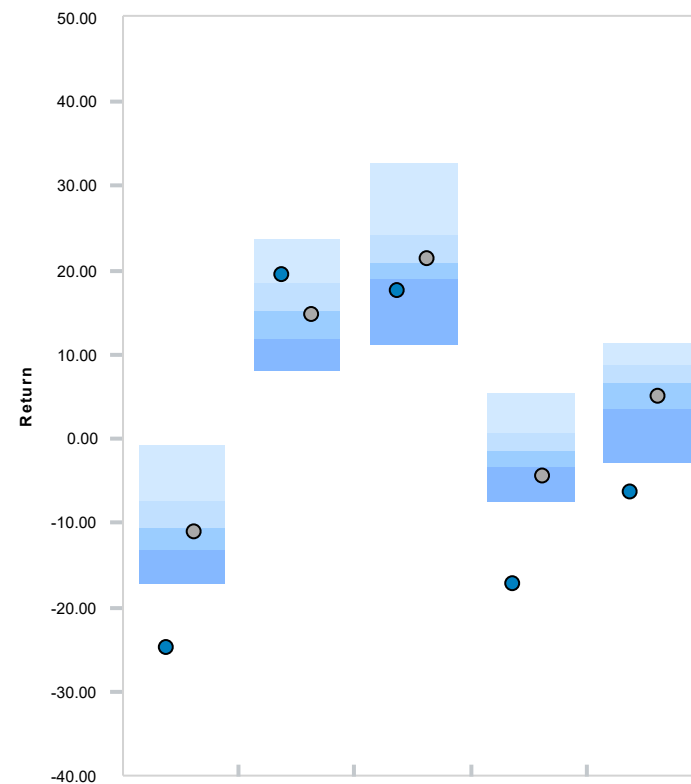
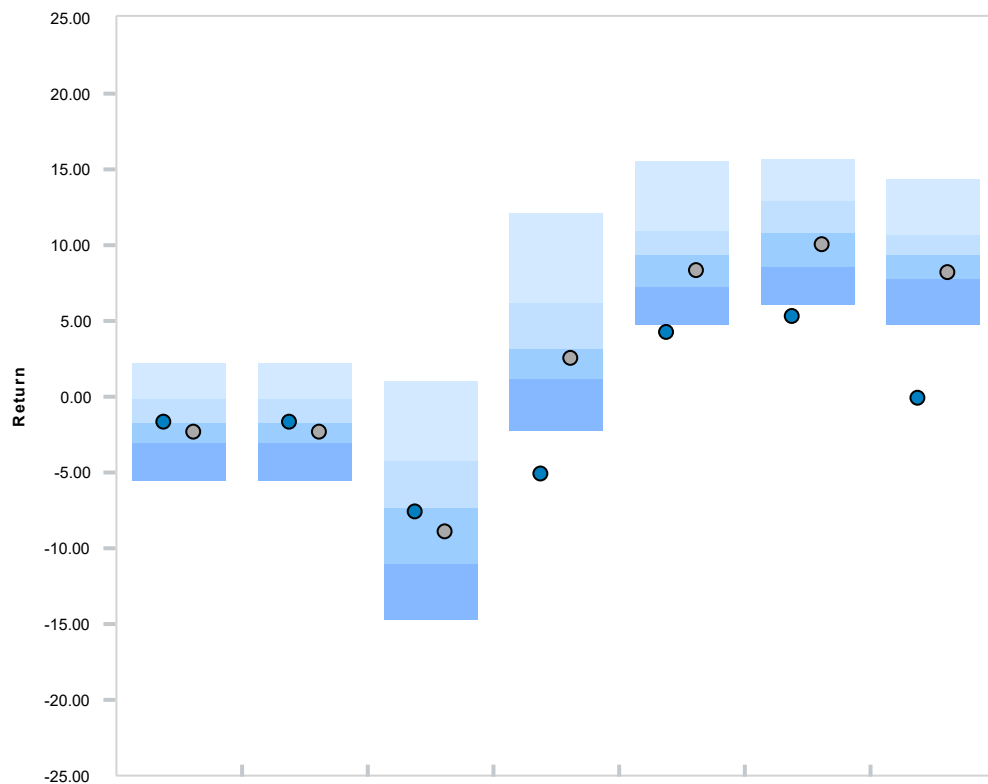
### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
QMA US MC Equity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P MidCap 400 Index	0.00	100.00	100.00	0.00	N/A	0.57	1.00	10.51

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
QMA US MC Equity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P MidCap 400 Index	0.00	100.00	100.00	0.00	N/A	0.62	1.00	9.26

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



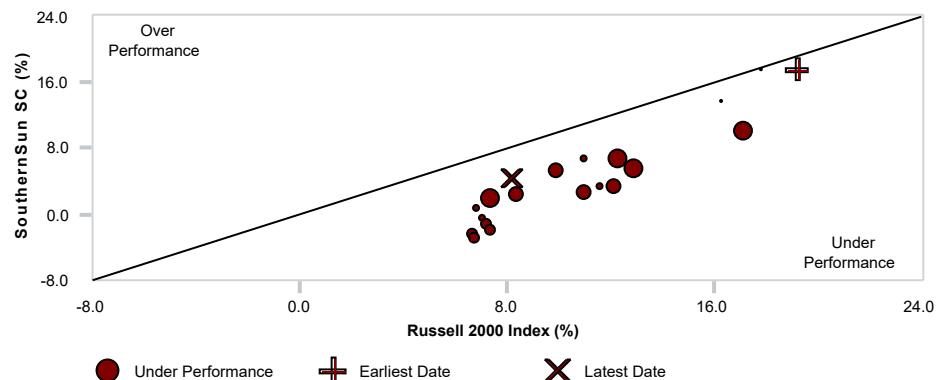
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● SouthernSun SC	-1.74 (52)	-1.74 (52)	-7.66 (52)	-5.08 (100)	4.20 (97)	5.24 (98)	-0.18 (100)
● Russell 2000 Index	-2.40 (67)	-2.40 (67)	-8.89 (65)	2.47 (62)	8.23 (68)	9.99 (63)	8.19 (72)
Median	-1.65	-1.65	-7.34	3.16	9.28	10.84	9.40

	2018	2017	2016	2015	2014
● SouthernSun SC	-24.95 (100)	19.53 (21)	17.63 (83)	-17.16 (100)	-6.30 (99)
● Russell 2000 Index	-11.01 (56)	14.65 (57)	21.31 (47)	-4.41 (81)	4.89 (66)
Median	-10.73	15.18	20.77	-1.35	6.72

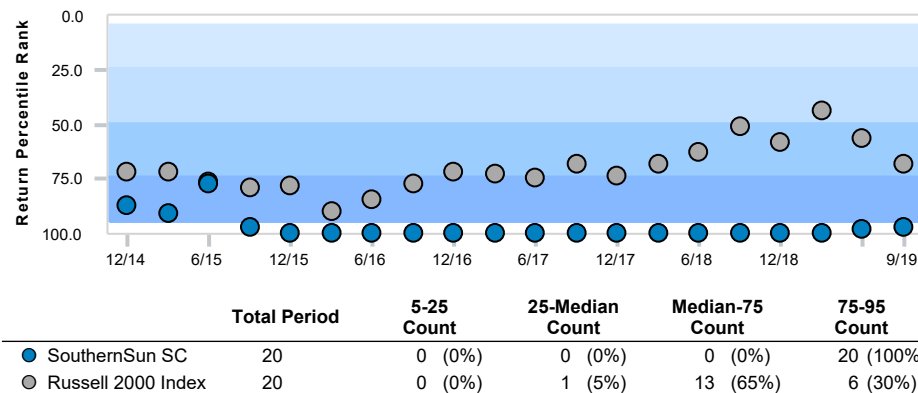
Comparative Performance

	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018
SouthernSun SC	2.62 (51)	17.27 (15)	-21.91 (90)	-0.99 (99)	3.41 (97)	-6.14 (100)
Russell 2000 Index	2.10 (60)	14.58 (43)	-20.20 (61)	3.58 (61)	7.75 (30)	-0.08 (51)
IM U.S. Small Cap Core Equity (SA+CF) Median	2.62	14.15	-19.75	3.97	6.83	-0.07

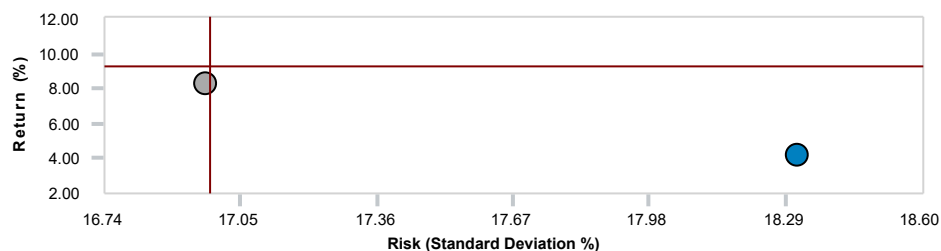
### 3 Yr Rolling Under/Over Performance - 5 Years



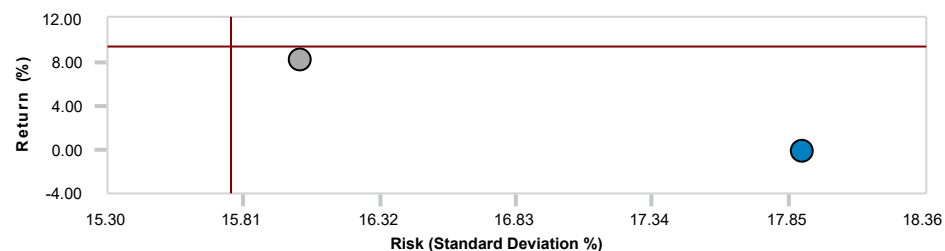
### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



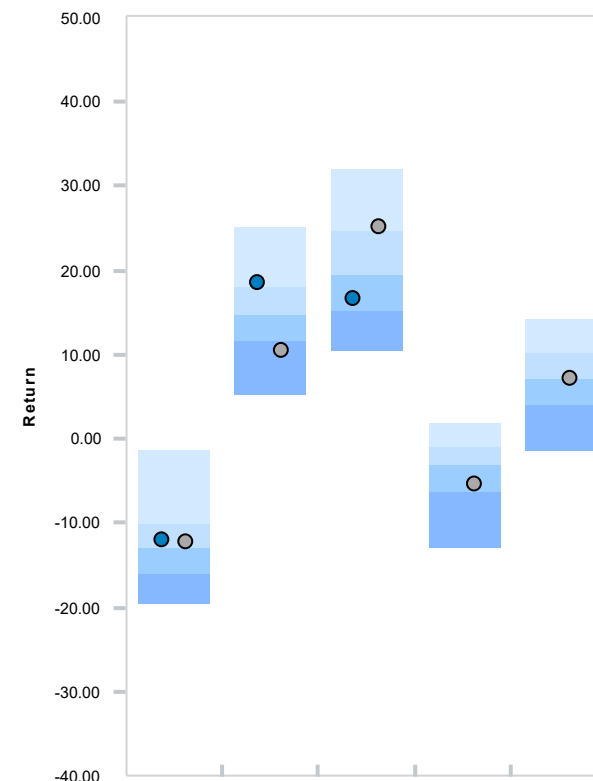
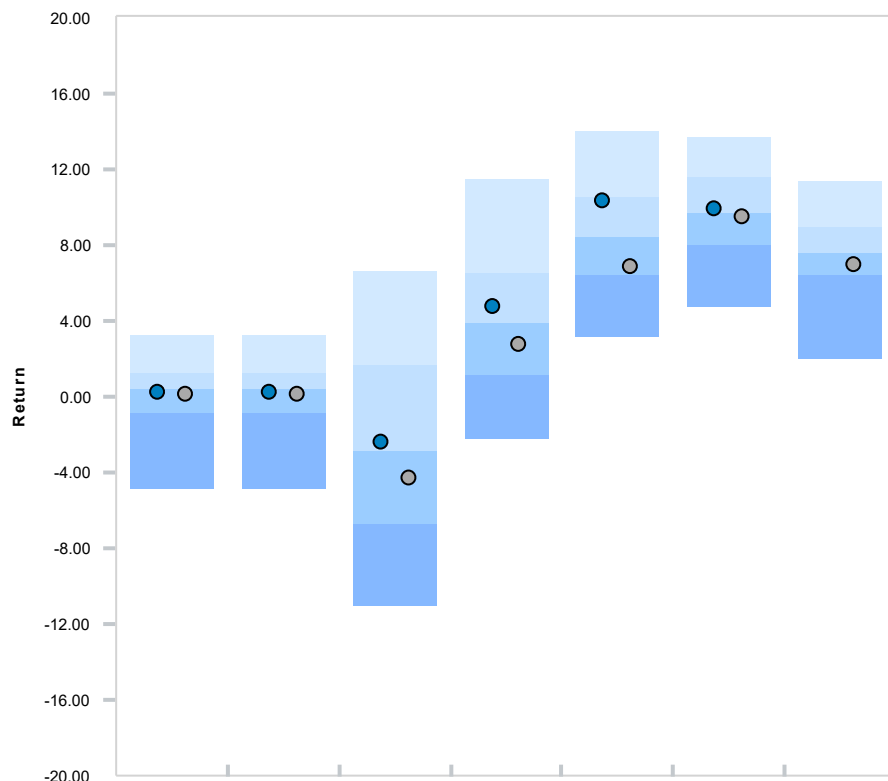
### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
SouthernSun SC	7.07	91.50	107.40	-3.48	-0.50	0.23	1.00	12.86
Russell 2000 Index	0.00	100.00	100.00	0.00	N/A	0.46	1.00	11.51

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
SouthernSun SC	8.36	79.92	115.01	-7.39	-0.93	0.03	0.99	12.51
Russell 2000 Index	0.00	100.00	100.00	0.00	N/A	0.51	1.00	10.79

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



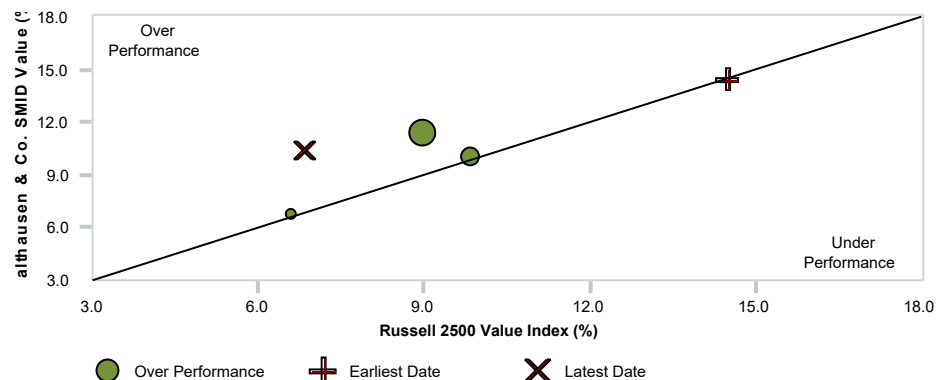
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Walthausen & Co. SMID Value	0.25 (53)	0.25 (53)	-2.44 (46)	4.74 (38)	10.31 (26)	9.91 (46)	N/A
● Russell 2500 Value Index	0.13 (54)	0.13 (54)	-4.35 (66)	2.69 (60)	6.87 (74)	9.47 (52)	6.98 (66)
Median	0.42	0.42	-2.84	3.85	8.45	9.66	7.60

	2018	2017	2016	2015	2014
● Walthausen & Co. SMID Value	12.04 (38)	18.43 (20)	16.63 (68)	N/A	N/A
● Russell 2500 Value Index	12.36 (42)	10.36 (85)	25.20 (25)	-5.49 (67)	7.11 (50)
Median	12.98	14.62	19.48	-3.14	7.09

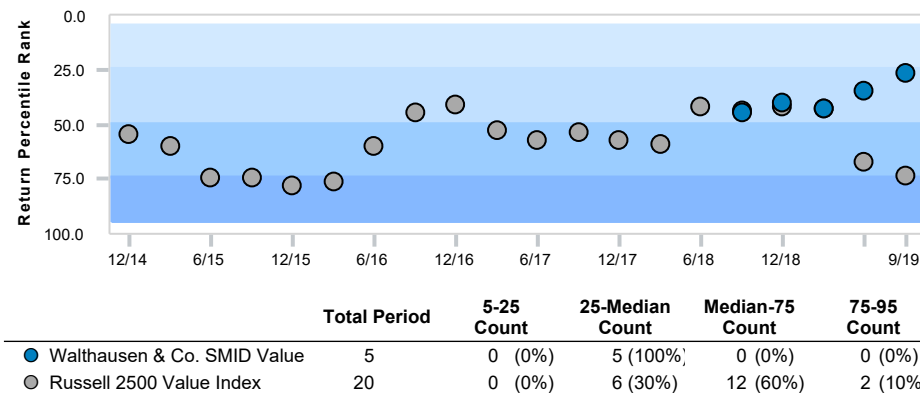
Comparative Performance

	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018
Walthausen & Co. SMID Value	5.87 (7)	11.83 (87)	-17.80 (60)	3.05 (46)	4.62 (25)	-0.75 (35)
Russell 2500 Value Index	1.89 (79)	13.12 (66)	-17.12 (40)	2.67 (53)	5.80 (16)	-2.65 (80)
IM U.S. SMID Cap Value Equity (SA+CF) Median	3.52	13.91	-17.50	2.87	3.14	-1.36

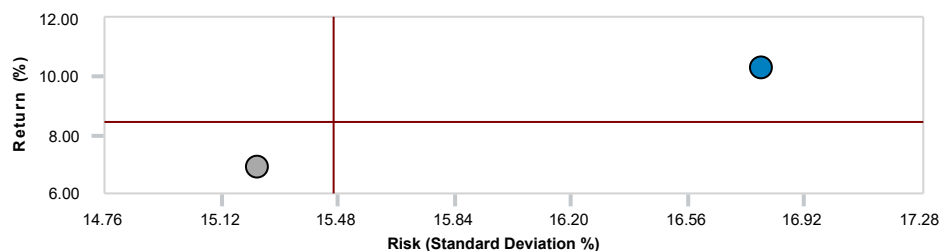
### 3 Yr Rolling Under/Over Performance - 5 Years



### 3 Yr Rolling Percentile Ranking - 5 Years

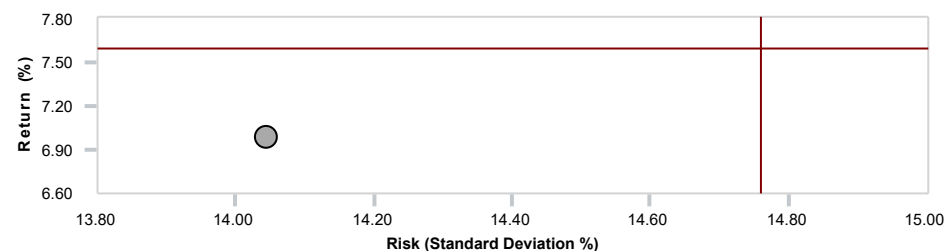


### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Walthausen & Co. SMID Value	10.31	16.79
Russell 2500 Value Index	6.87	15.23
Median	8.45	15.47

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Walthausen & Co. SMID Value	N/A	N/A
Russell 2500 Value Index	6.98	14.05
Median	7.60	14.76

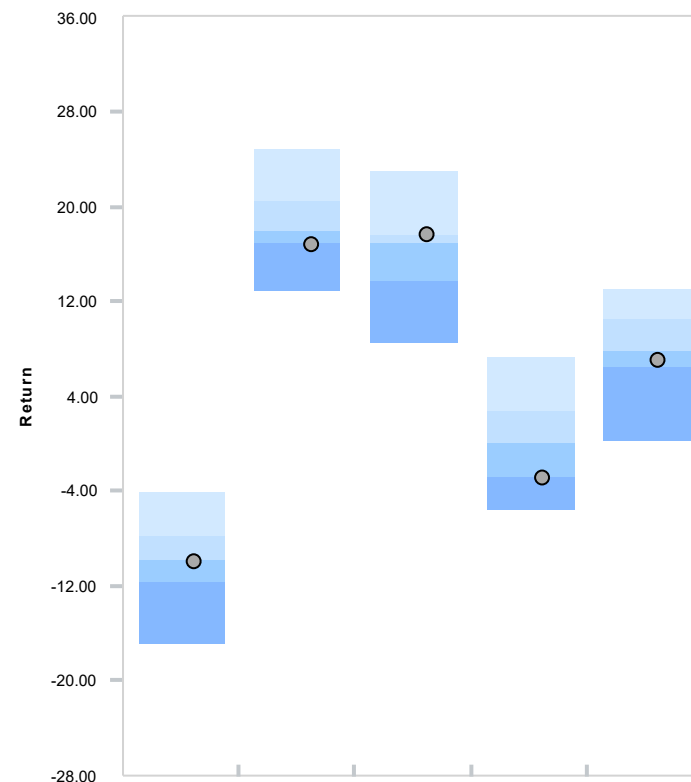
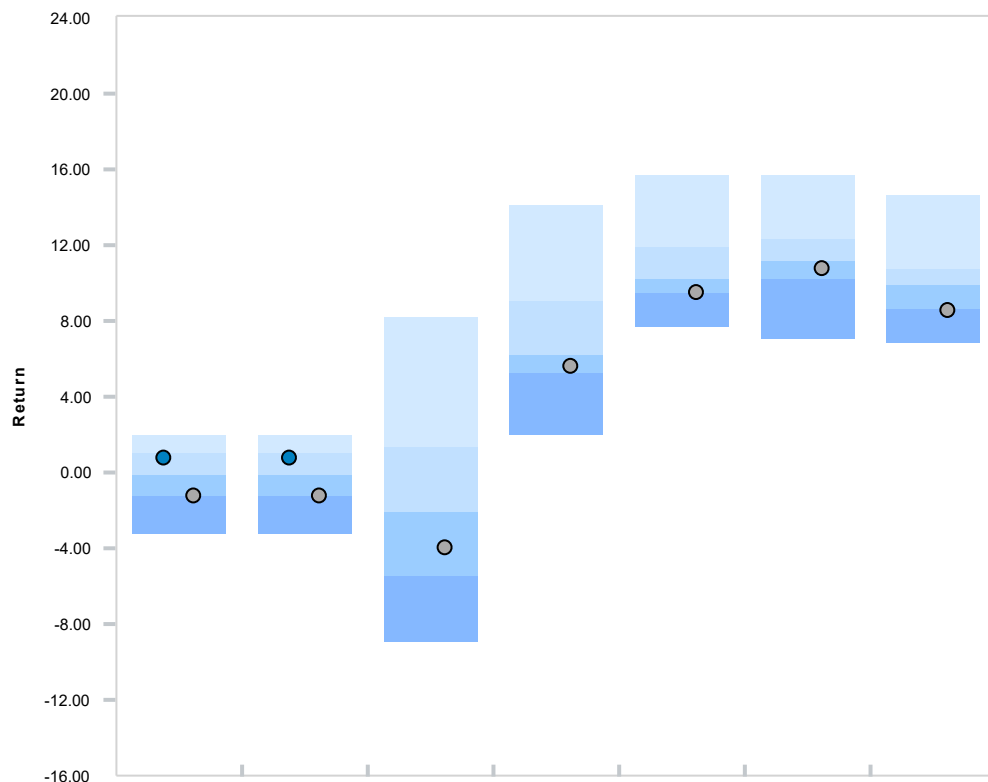
### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Walthausen & Co. SMID Value	4.17	112.97	97.71	2.93	0.82	0.58	1.07	10.87
Russell 2500 Value Index	0.00	100.00	100.00	0.00	N/A	0.41	1.00	10.35

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Walthausen & Co. SMID Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Value Index	0.00	100.00	100.00	0.00	N/A	0.48	1.00	9.25

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



Comparative Performance

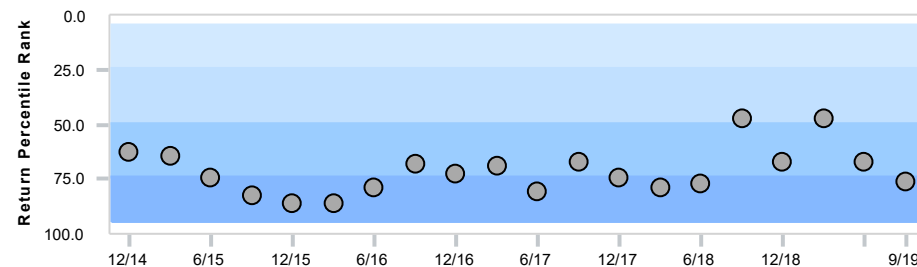
	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018
Great Lakes Equity	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Index	2.96 (77)	15.82 (31)	-18.49 (65)	4.70 (54)	5.71 (32)	-0.24 (63)
IM U.S. SMID Cap Core Equity (SA+CF) Median	4.29	15.11	-18.20	4.75	4.65	0.17



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

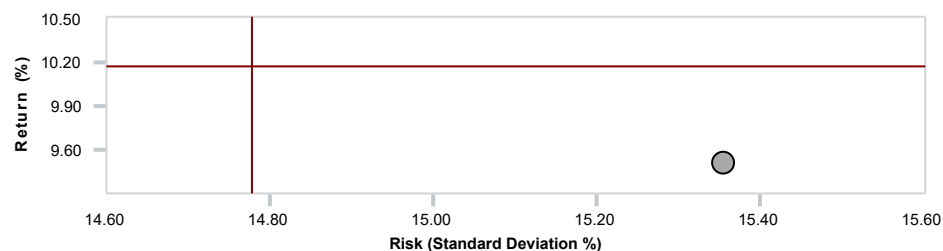
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### 3 Yr Rolling Percentile Ranking - 5 Years



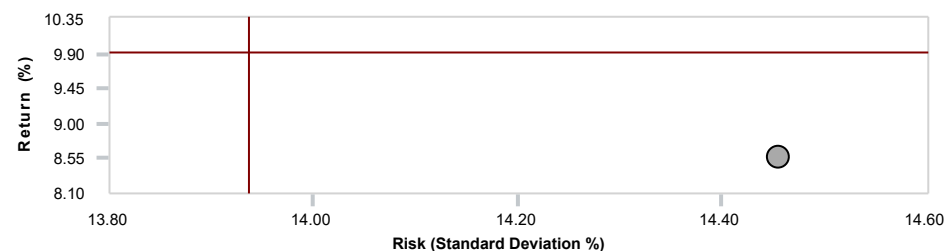
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Great Lakes Equity	0	0	0	0	0
Russell 2500 Index	20	0 (0%)	2 (10%)	10 (50%)	8 (40%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Great Lakes Equity	N/A	N/A
Russell 2500 Index	9.51	15.36
Median	10.17	14.78

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Great Lakes Equity	N/A	N/A
Russell 2500 Index	8.57	14.45
Median	9.92	13.94

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Great Lakes Equity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Index	0.00	100.00	100.00	0.00	N/A	0.57	1.00	10.46

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Great Lakes Equity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Index	0.00	100.00	100.00	0.00	N/A	0.58	1.00	9.71

#### LSV International - Portfolio Description

- Strategy: International Large Cap Value Equity
- Vehicle: Commingled Fund
- Objective: To outperform the MSCI EAFE Index
- Annual fees: .75% on first \$25M  
• .65% on next \$25M
- Benchmark: MSCI EAFE Index

#### LSV International - Strategy Details

The International Large Cap Value Equity strategy's primary emphasis is the use of quantitative techniques to select individual securities in what would be considered a bottom-up approach. A risk control discipline limits the over- or under-exposure of the portfolio to industry concentrations. Value factors and security selection dominate sector/industry factors as explanators of performance. The portfolio decision making process is strictly quantitative and driven by (1) a proprietary model which ranks securities based on fundamental measures of value and indicators of near-term appreciation potential and, (2) a risk control process that controls for residual benchmark risk while maximizing the expected return of the portfolio. There is no subjective modification applied to the results of the process. This leads to a high degree of consistency in the practical application of our investment philosophy.

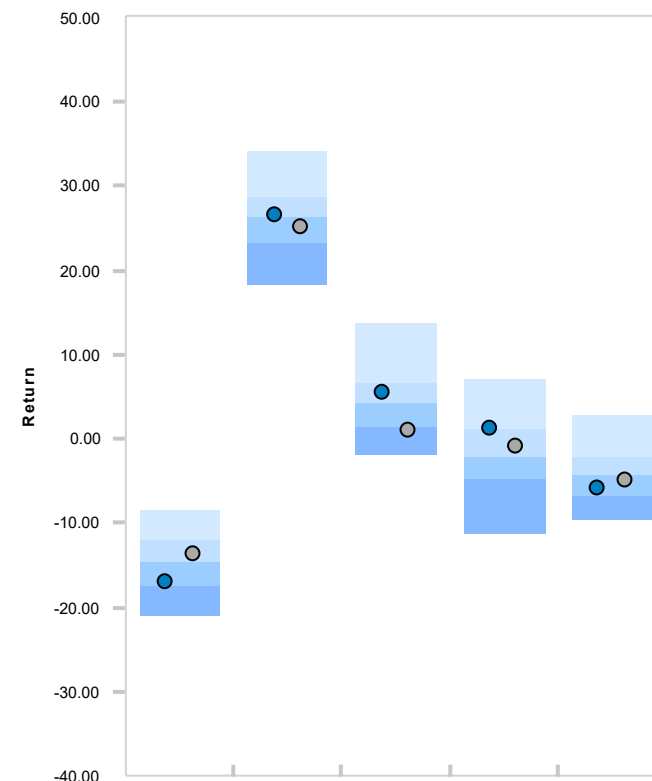
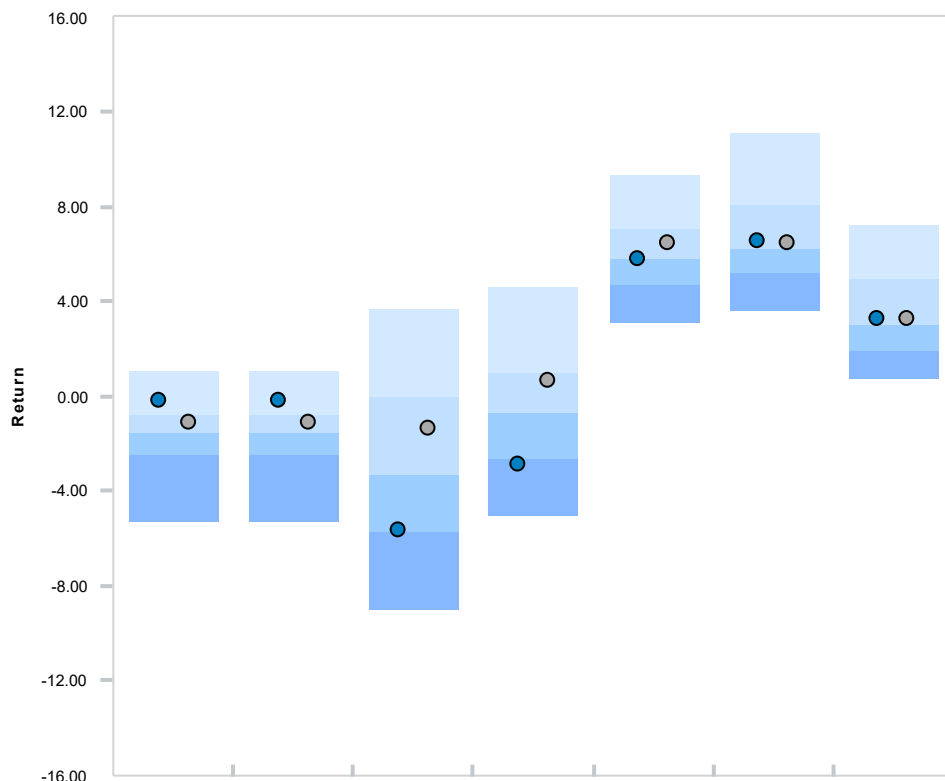
#### WCM Intl Growth - Portfolio Description

- Strategy: Focused Growth International
- Vehicle: Separately Managed Account
- Objective: To outperform the MSCI EAFE Index
- Annual fees: 1.00% on all assets
- Benchmark: MSCI EAFE Index

#### WCM Intl Growth - Strategy Details

This is a concentrated, large cap, quality, international growth product. They are distinct from the broad international indices with a traditional growth bias, seeking select quality growth businesses from conventional growth sectors. That combined with a concentrated focus (between 25-40) means the product will have investment characteristics distinct from any broad international benchmark. The product includes mega-, large- and mid-cap international shares from developed and emerging markets. The investment process includes top-down thematic analysis and bottom-up fundamental stock selection. They focus on each company's business model (economic moat), corporate culture, management, and valuation (using conservative DCF models). Currency hedging is not utilized in this strategy but careful attention is paid to region, country, and currency exposures. The projected annual turnover is 15-35%, suggesting tax efficiency for tax-sensitive clients.

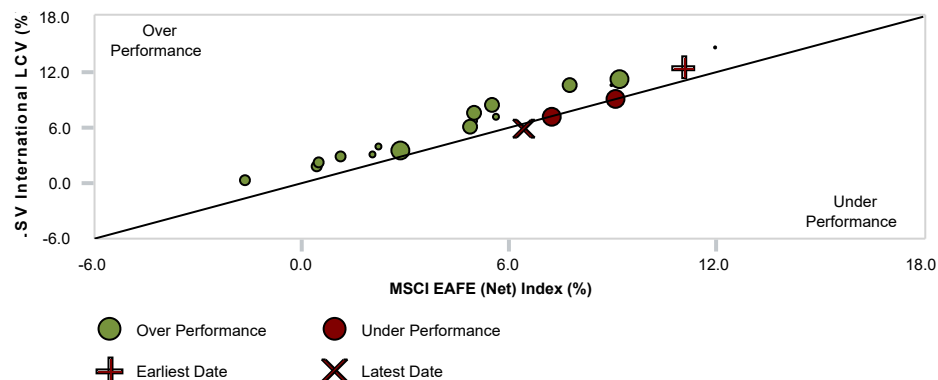
Peer Group Analysis - IM International Large Cap Value Equity (SA+CF)



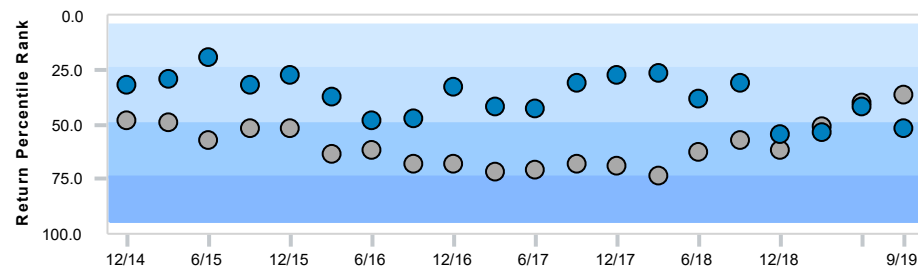
Comparative Performance

	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018
LSV International LCV	1.73 (61)	8.28 (83)	-14.19 (76)	1.80 (22)	-3.84 (85)	-1.16 (48)
MSCI EAFE (Net) Index	3.68 (21)	9.98 (41)	-12.54 (46)	1.35 (35)	-1.24 (22)	-1.53 (62)
IM International Large Cap Value Equity (SA+CF) Median	2.41	9.55	-12.88	0.88	-2.16	-1.26

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

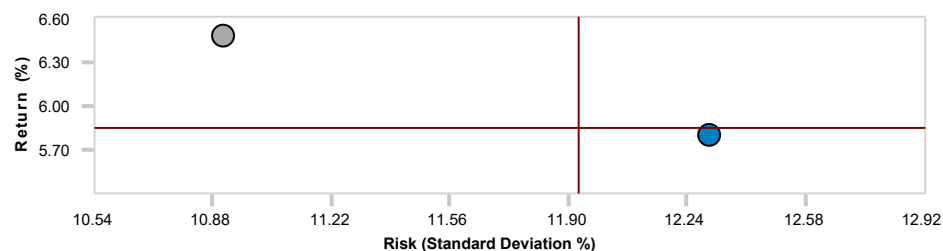


### 3 Yr Rolling Percentile Ranking - 5 Years



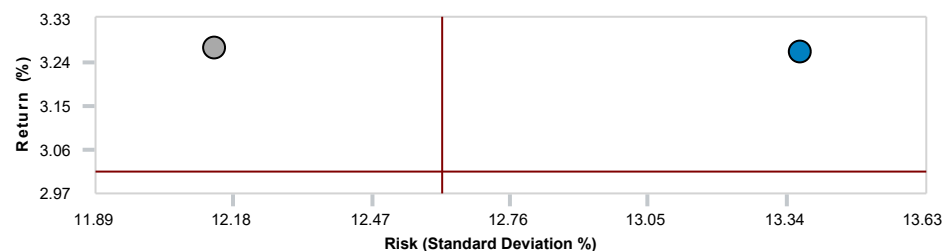
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
LSV International LCV	20	1 (5%)	16 (80%)	3 (15%)	0 (0%)
MSCI EAFE (Net) Index	20	0 (0%)	4 (20%)	16 (80%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
LSV International LCV	5.79	12.31
MSCI EAFE (Net) Index	6.48	10.91
Median	5.85	11.93

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
LSV International LCV	3.26	13.37
MSCI EAFE (Net) Index	3.27	12.14
Median	3.02	12.62

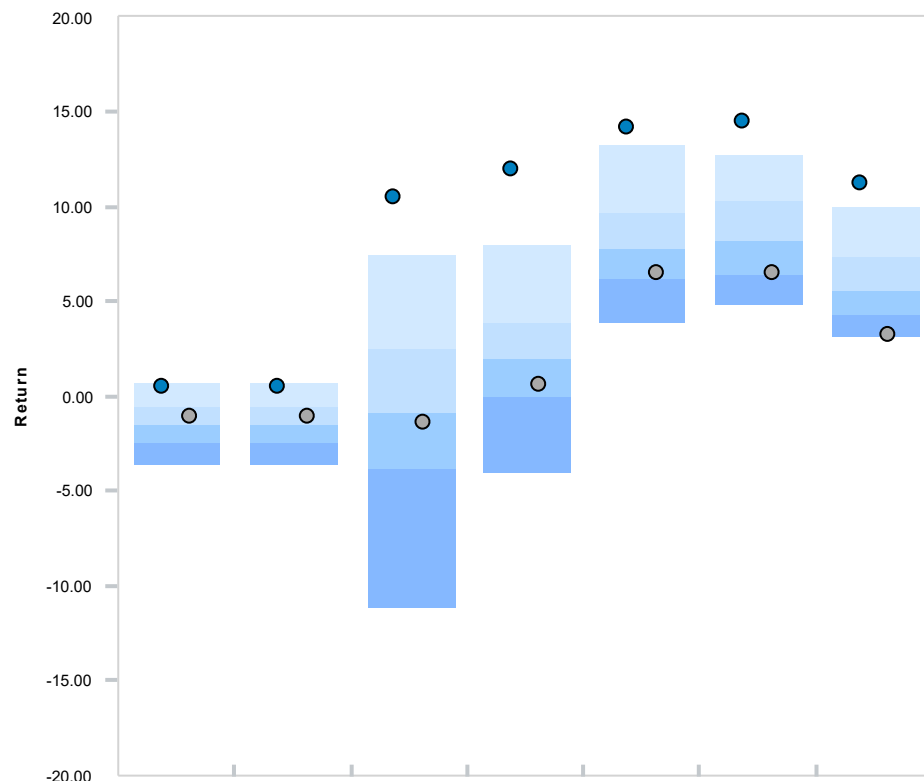
### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
LSV International LCV	3.18	104.24	110.47	-1.13	-0.15	0.39	1.09	8.34
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.49	1.00	7.31

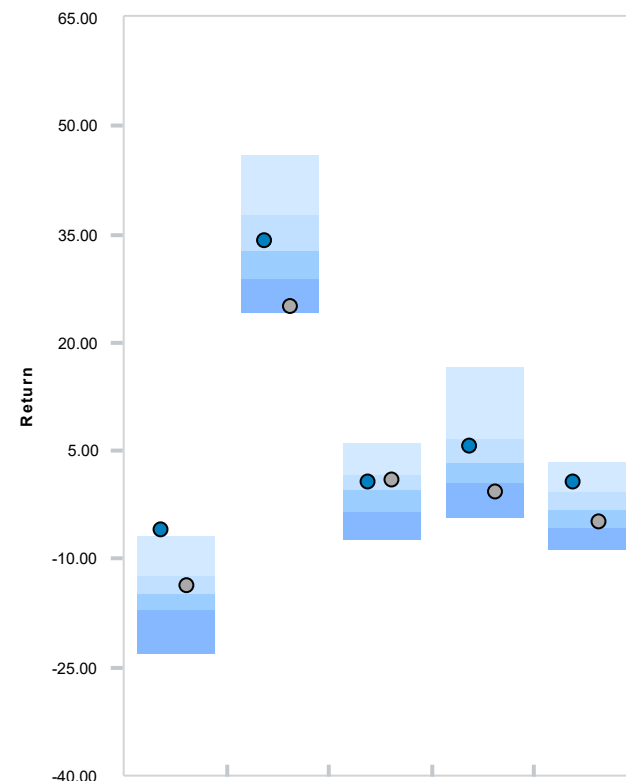
### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
LSV International LCV	3.01	105.53	106.01	-0.15	0.05	0.24	1.08	8.99
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.25	1.00	8.21

Peer Group Analysis - IM International Growth Equity (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● WCM Focused Growth Int'l	0.54 (10)	0.54 (10)	10.56 (1)	12.04 (1)	14.24 (2)	14.58 (3)	11.24 (4)
● MSCI EAFE (Net) Index	-1.07 (39)	-1.07 (39)	-1.34 (56)	0.68 (65)	6.48 (70)	6.49 (75)	3.27 (95)
Median	-1.51	-1.51	-0.81	1.95	7.79	8.17	5.54

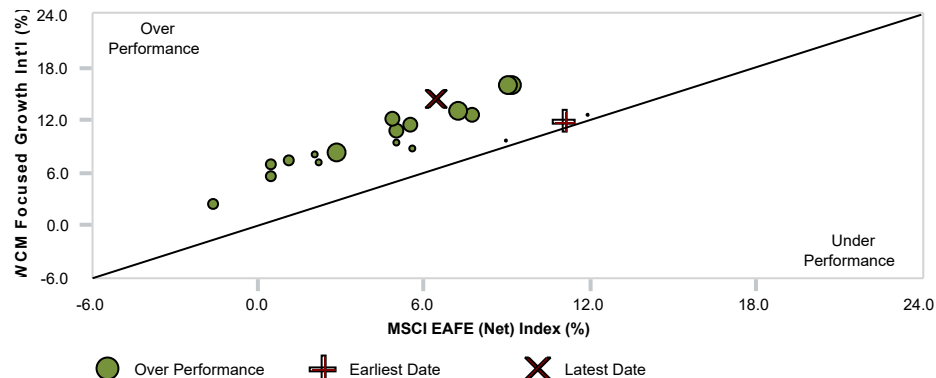


	2018	2017	2016	2015	2014
● WCM Focused Growth Int'l	-5.96 (4)	33.97 (42)	0.70 (39)	5.67 (31)	0.67 (17)
● MSCI EAFE (Net) Index	13.79 (40)	25.03 (93)	1.00 (33)	-0.81 (86)	-4.90 (66)
Median	14.91	32.57	-0.54	3.27	-3.31

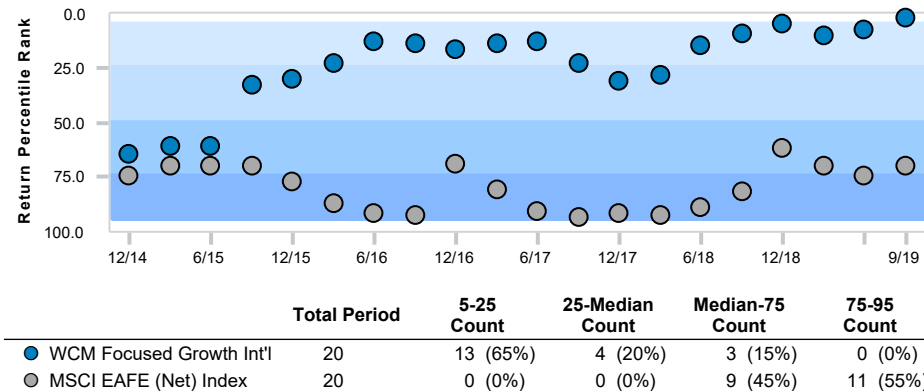
Comparative Performance

	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018
WCM Focused Growth Int'l	10.56 (1)	14.15 (24)	-12.86 (30)	3.68 (3)	2.70 (9)	1.35 (28)
MSCI EAFE (Net) Index	3.68 (69)	9.98 (92)	-12.54 (28)	1.35 (35)	-1.24 (59)	-1.53 (85)
IM International Growth Equity (SA+CF) Median	4.77	12.24	-14.79	0.42	-1.00	0.19

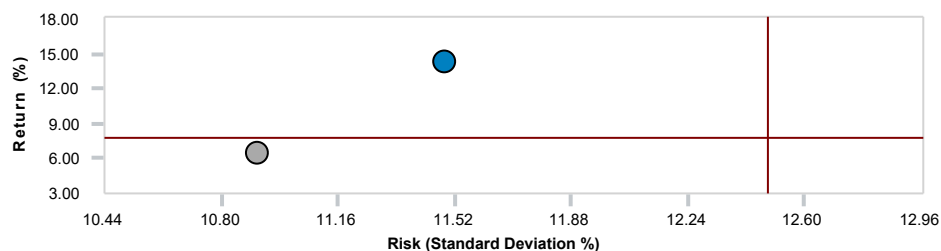
### 3 Yr Rolling Under/Over Performance - 5 Years



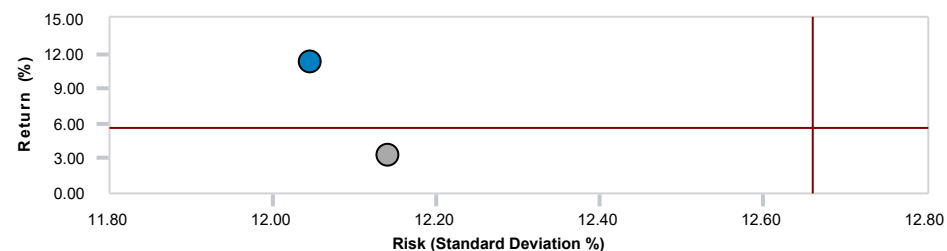
### 3 Yr Rolling Percentile Ranking - 5 Years



### 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
WCM Focused Growth Int'l	6.29	104.46	49.74	8.22	1.14	1.09	0.89	7.47
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.49	1.00	7.31

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
WCM Focused Growth Int'l	6.13	98.00	48.34	8.31	1.22	0.87	0.86	7.55
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.25	1.00	8.21

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**Pacific Moderate Duration - Portfolio Description**

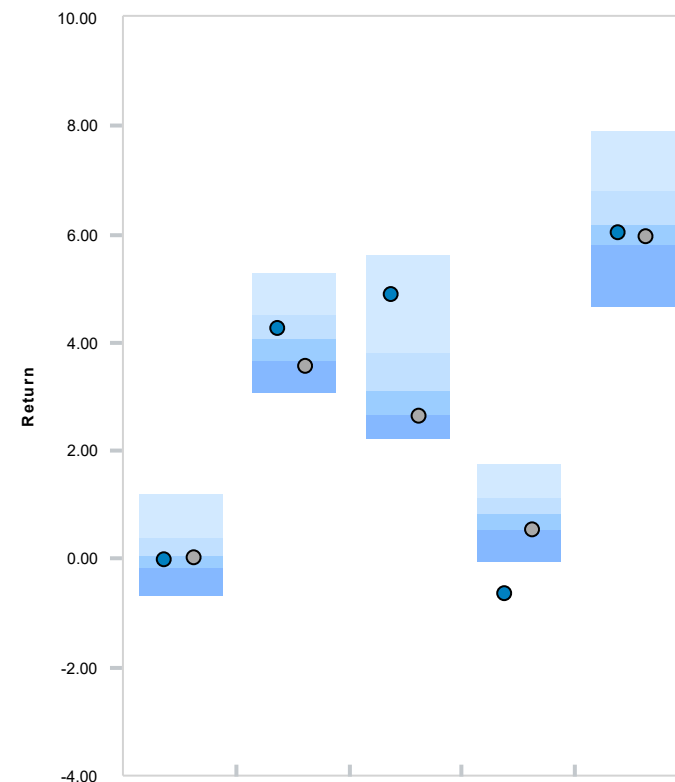
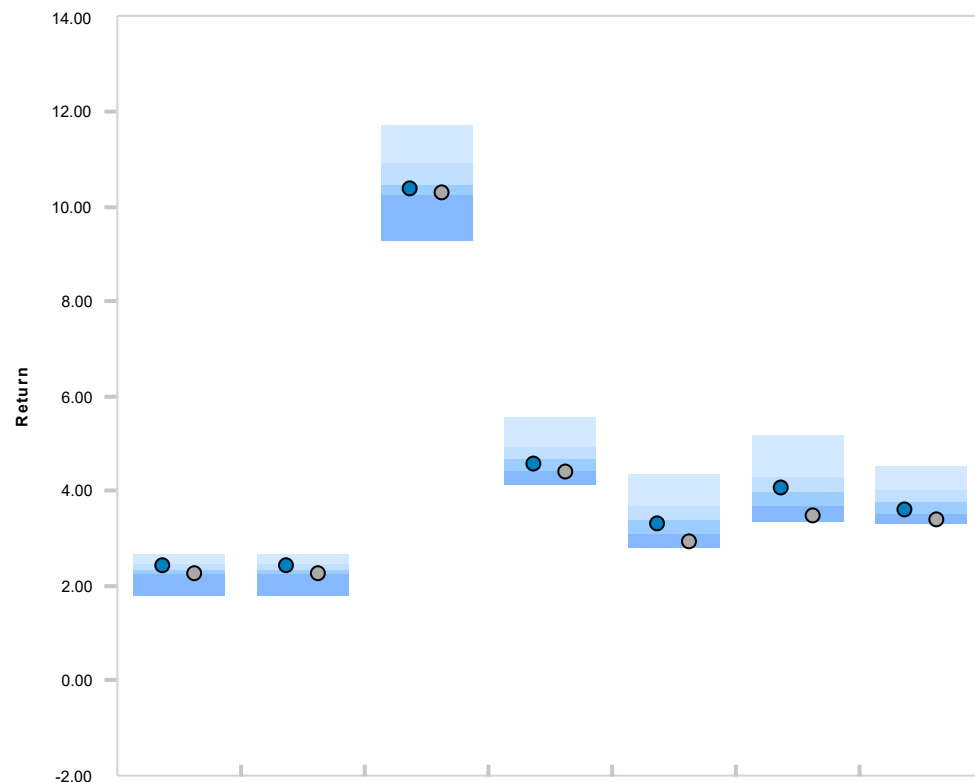
- Strategy: Moderate Duration
- Vehicle: Separately Managed Account
- Objective: To outperform the Bloomberg Barclays US Aggregate Index
- Annual fees: .30% on all assets
- Benchmark: Bloomberg Barclays US Aggregate Index

**Pacific Moderate Duration - Strategy Details**

The Moderate Duration product is a core bond strategy that seeks to outperform the Barclays Capital Aggregate Index on both an absolute and risk-adjusted basis over a full market cycle. The Moderate Duration product invests in U.S. Government securities, mortgage-backed securities, corporate debt securities and asset-backed securities. The product maintains duration of between 3.0 to 7.0 years and is generally within one year of the index.



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



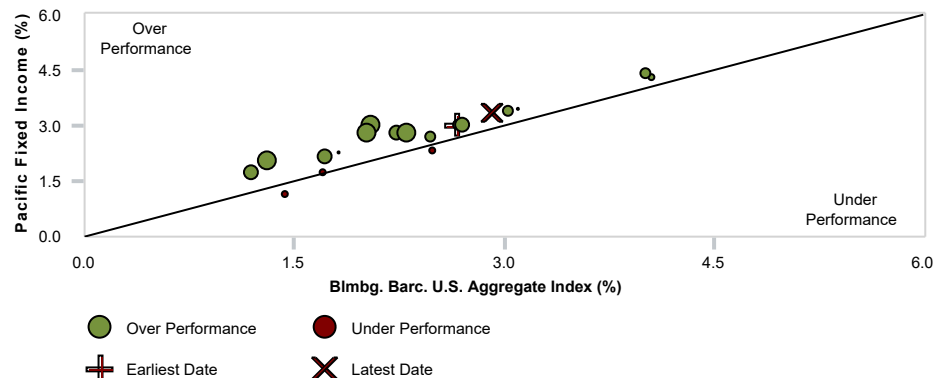
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Pacific Fixed Income	2.42 (33)	2.42 (33)	10.38 (58)	4.57 (62)	3.30 (60)	4.06 (43)	3.62 (66)
● Blmbg Barc US Agg	2.27 (73)	2.27 (73)	10.30 (70)	4.38 (85)	2.92 (92)	3.49 (90)	3.38 (91)
Median	2.34	2.34	10.48	4.71	3.38	3.97	3.76

	2018	2017	2016	2015	2014
● Pacific Fixed Income	-0.01 (65)	4.24 (36)	4.86 (9)	-0.65 (98)	6.02 (64)
● Blmbg Barc US Agg	0.01 (61)	3.54 (85)	2.65 (77)	0.55 (75)	5.97 (67)
Median	0.07	4.06	3.12	0.83	6.17

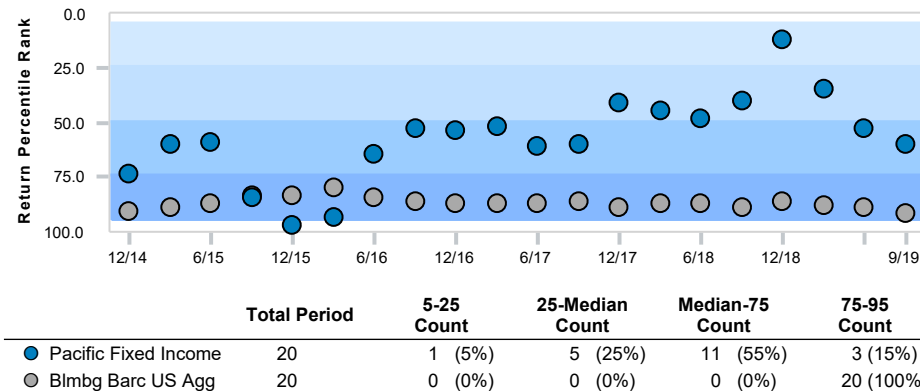
Comparative Performance

	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018
Pacific Fixed Income	3.11 (59)	2.90 (85)	1.59 (32)	0.06 (75)	-0.22 (88)	-1.42 (60)
Blmbg. Barc. U.S. Aggregate Index	3.08 (71)	2.94 (83)	1.64 (23)	0.02 (84)	-0.16 (73)	-1.46 (67)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	3.14	3.22	1.39	0.18	-0.09	-1.37

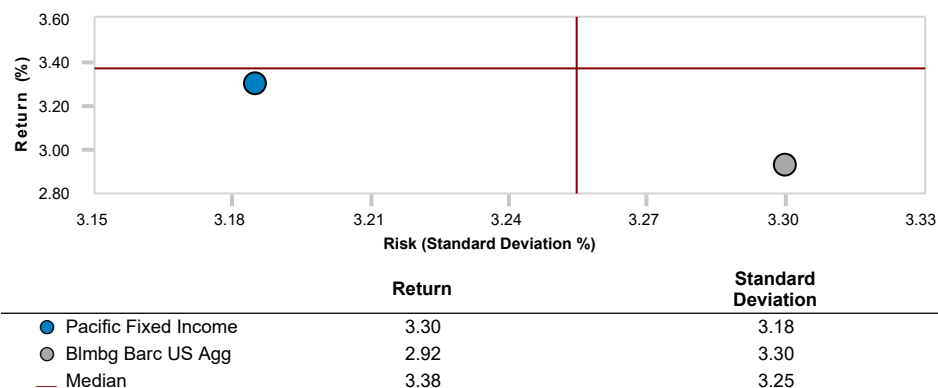
### 3 Yr Rolling Under/Over Performance - 5 Years



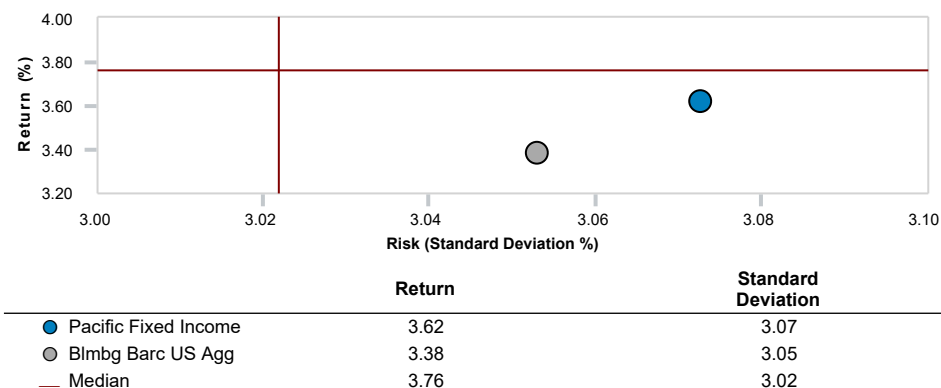
### 3 Yr Rolling Percentile Ranking - 5 Years



### 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
Pacific Fixed Income	0.25	101.81	91.37	0.47	1.43	0.58	0.96	1.74
Blmbg. Barc. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	0.44	1.00	1.88

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Pacific Fixed Income	0.95	102.51	96.42	0.38	0.25	0.88	0.96	1.58
Blmbg. Barc. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	0.81	1.00	1.61

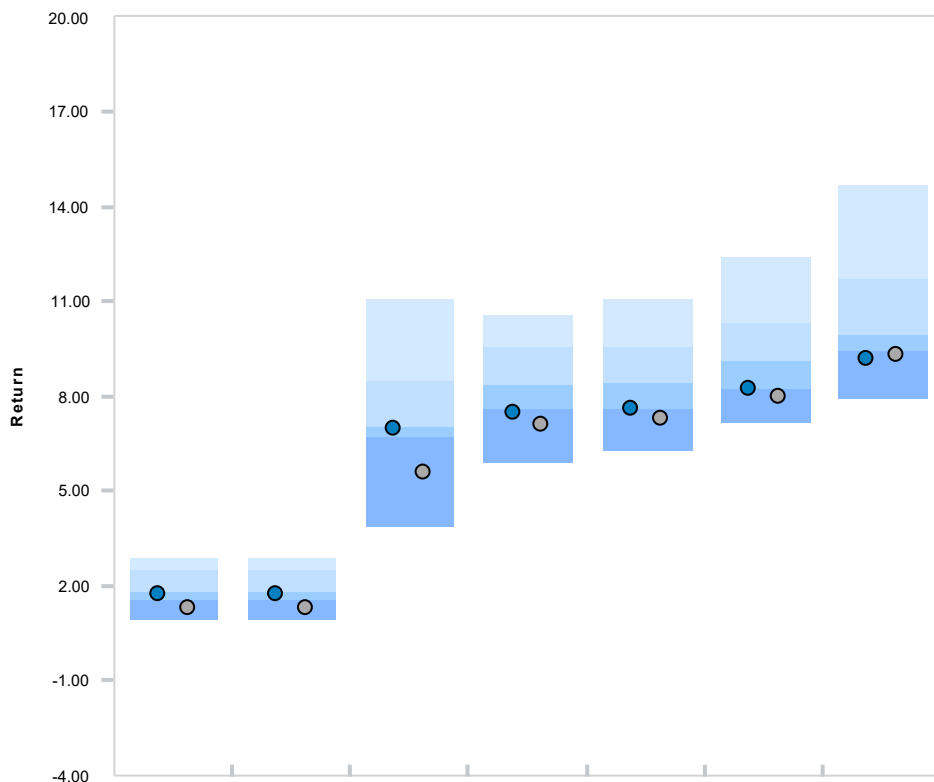
#### AEW Core Property - Portfolio Description

- Strategy: Core Property Trust
- Vehicle: Open Ended Commingled Real Estate Fund
- Objective: To outperform the NCREIF ODCE Index
- Annual fees: 1.10% on all assets
- Benchmark: NCREIF ODCE Index

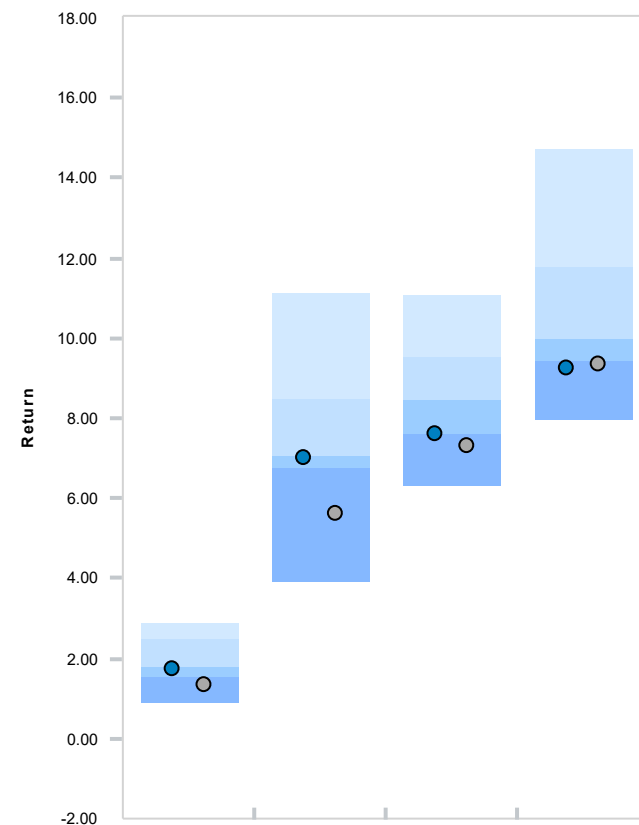
#### AEW Core Property - Strategy Details

The AEW Core Property Trust combines research-driven strategies with on-the-ground market knowledge and experience to construct a diversified portfolio of multifamily, retail, office, industrial and, to a lesser extent, hotel properties. The Fund seeks to acquire primarily well-located, institutional-quality assets in markets throughout the U.S. - investments that are designed to provide durable income streams and appreciation over the mid- to long-term. AEW expects to invest primarily in major metropolitan markets that feature barriers to new supply - whether physical, governmental or economic - as well as solid population and job growth. With limited supply and increasing demand, these markets should provide an opportunity for peak-to-peak rent growth and thus, long-term value creation. The Fund also seeks to exploit America's changing demographics, and the impact they will have on economic growth and demand for real estate. The Fund also focuses on markets and properties that are positively influenced by globalization as it continues to change the nature of U.S. jobs and affect the movement of goods and services and consumer spending. Finally, the Fund's target markets also exhibit economic diversity in terms of the underlying industries that are driving the demand in the marketplace; providing both growth and diversification to the Fund.

**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
● AEW Core Property Trust	1.74 (58)	1.74 (58)	7.01 (53)	7.51 (77)	7.60 (79)	8.23 (77)	9.22 (81)
● NCREIF-ODCE (VW)	1.31 (87)	1.31 (87)	5.60 (90)	7.13 (83)	7.31 (82)	7.99 (84)	9.35 (78)
Median	1.80	1.80	7.05	8.35	8.43	9.15	9.97



	FYTD	1 YR	3 YR	5 YR
● AEW Core Property Trust	1.74 (58)	7.01 (53)	7.60 (79)	9.22 (81)
● NCREIF-ODCE (VW)	1.31 (87)	5.60 (90)	7.31 (82)	9.35 (78)
Median	1.80	7.05	8.43	9.97

**Comparative Performance**

	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018
AEW Core Property Trust	1.49 (37)	1.71 (81)	1.89 (30)	1.65 (81)	2.31 (44)	1.66 (87)
NCREIF Fund Index-ODCE (VW)	1.00 (90)	1.42 (84)	1.76 (51)	2.09 (54)	2.05 (67)	2.20 (52)
IM U.S. Open End Private Real Estate (SA+CF) Median	1.46	1.99	1.76	2.10	2.22	2.21

#### Bloomfield Income Fund - Portfolio Description

- Strategy: Bloomfield Capital Income Fund II
- Objective: To provide an absolute return in excess of 9%
- Annual fees: 2.00% on Committed Capital

#### Bloomfield Income Fund - Strategy Details

The Bloomfield Capital Income Fund II is a real estate opportunity fund focused on two primary strategies. 1. Originating senior secured, high yield, interim and bridge loans on income producing real estate in the U.S. and 2. Acquiring a diverse portfolio of commercial mortgage loans, deeds of trust, and other real estate related opportunistic investments. The Fund's objective is to build a diverse portfolio of senior, secured mortgages providing investors with consistent income and superior risk adjusted returns. Bloomfield Capital targets a double-digit yield on secure, risk-mitigated investments. The portfolio management team implements conservative underwriting techniques to provide a margin of safety.

#### Metropolitan MREP VI - Portfolio Description

- Strategy: Metropolitan Real Estate MREP VI Fund
- Vehicle: Real Estate Fund of Funds
- Objective: To outperform the NCREIF Property Index
- Annual fees: 1.35% on first \$5M
- 1.00% on the next \$20M
- Benchmark: NCREIF Property Index

#### Metropolitan MREP VI - Strategy Details

Invest in a diversified portfolio of private real estate funds or other investment vehicles with direct or indirect exposure to real estate. The manager invests in funds with exposure to office, retail, industrials, multi-family, and other types of properties located primarily in the United States. The manager selects value added and opportunistic funds with superior performance track records. The manager diversifies the strategy across property types, geographic markets, managers, and strategies.

#### RMK Timber - Portfolio Description

- Strategy: RMK Global Timberland Resources US Fund  
RMK Global Timberland Resources Intl Alternative Investment
- Objective: To outperform the NCREIF Timberland Index
- Management fees: US Fund: 1.00%  
Intl Fund: 1.25%
- Performance Fee: US Fund: 20% (6% Hurdle)  
Intl Fund: 20% (10% Hurdle)

#### RMK Timber - Strategy Details

The portfolio team develops an investment strategy for the Fund based on the current environment and market forecasts for timberlands, and related end products. RMK utilizes industry contacts to identify attractive acquisition targets that achieve the Fund's investment strategy. Prior to purchasing a tract of land, the team performs rigorous due diligence and develops an asset management plan. The portfolio is actively managed, evaluating the benefits of harvesting the forests, letting the trees further mature, or selling the timberland. The manager will diversify the portfolio by growth stage/maturity of the forests, geographic locations (50% US exposure / 50% International exposure), and species.

#### PCCP - Portfolio Description

- Strategy: PCCP VIII
- Preferred Return: 9.00%
- Annual fees: During the investment period, an amount equal to the product of 1/4 of 1.5% and such limited partner's Capital Commitment; after the termination of the investment period, an

amount equal to 1/4 of 1.5% and such limited partner's Net Equity

Inv

#### Terracap - Portfolio Description

- Strategy: Terracap IV
- Annual fees: 1.50%
- Other fees: 8.00% + carried interest 30% to GP, 70% to investor after gross return of 15%

#### PCCP - Strategy Details

The objective of the Fund is to create a portfolio of equity interests in U.S. middle-market commercial real estate assets, diversified by geography, asset class, strategy type and operating partner. By focusing on middle-market assets with transitional characteristics (i.e., some value-add attribute or complexity), PCCP expects to encounter less competition for transactions than that experienced by many larger opportunistic funds that require sizeable investments. Additionally, the Fund will target opportunities with the following investment characteristics with a focus on adding value and selling to buyers of stabilized real estate: Physical repositioning, rehabilitation and redevelopment; Recapitalizing impaired financial structures, particularly in complex situations; Discounted purchases of inefficiently marketed or distressed situations; and Executing on select opportunistic development or build-to-suit opportunities.

#### Terracap - Strategy Details

The Fund's investment strategy is to make investments in income producing real estate assets for which TerraCap seeks to achieve gross compound annual levered returns on Invested Capital of fifteen percent (15%) to nineteen percent (19%) Net IRRs over rolling three (3) to seven (7) year periods. TerraCap expects to engage in activities that improve income producing assets the Fund plans to acquire, such as completing deferred maintenance, renovations, new signage, tenant improvements, leasing, or repositioning.

## Fund Information

Type of Fund:	Fund Of Funds	Vintage Year:	2008
Strategy Type:	Real Estate	Management Fee:	1%
Target IRR:	9%	Inception:	03/19/2008
General Partner:	MREP6, LLC		
Investment Strategy:	Private Equity Real Estate value add/opportunistic multi-manager		

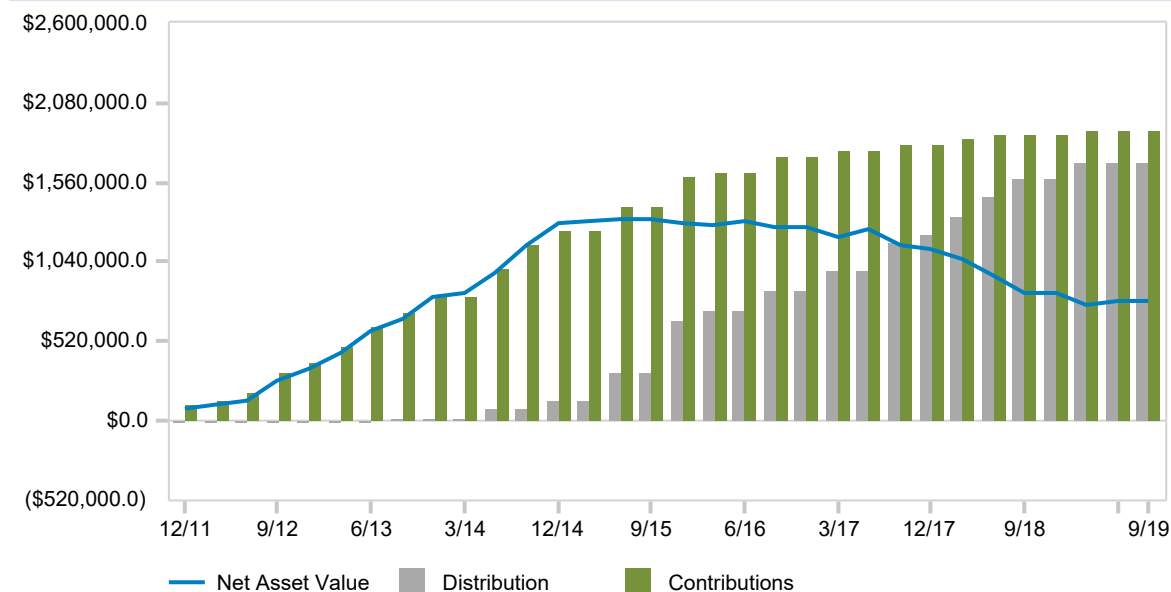
## Cash Flow Summary

Capital Committed:	\$2,000,000
Capital Invested:	\$1,887,530
Management Fees:	-
Expenses:	-
Interest:	\$1,188
Total Contributions:	\$1,888,718
Remaining Capital Commitment:	\$112,470

Total Distributions:	\$1,679,798
Market Value:	\$787,039

Inception Date:	11/30/2011
Inception IRR:	8.7
TVPI:	1.3

## Cash Flow Analysis



## Fund Information

<b>Type of Fund:</b>	Partnership	<b>Vintage Year:</b>	2016
<b>Strategy Type:</b>	Timber	<b>Management Fee:</b>	1% of NAV
<b>Target IRR:</b>		<b>Inception:</b>	12/01/2016
<b>General Partner:</b>			
<b>Investment Strategy:</b>	South: Focus on pine plantations in the emerging growth stage to maximize biological growth and allow for market recovery from the sawtimber overhang currently impacting the region.		

Pacific Northwest: Acquire high-quality timberland assets with a strong component of mature timber and overall diverse age class structure to take advantage of fiber-short domestic markets and export opportunities to the Pacific Rim.

Mixed Quality Hardwood Regions: Focus on timberland assets that offer exposure to export markets, multiple income streams, low management costs, and low correlation with softwood markets in the South and Pacific Northwest.

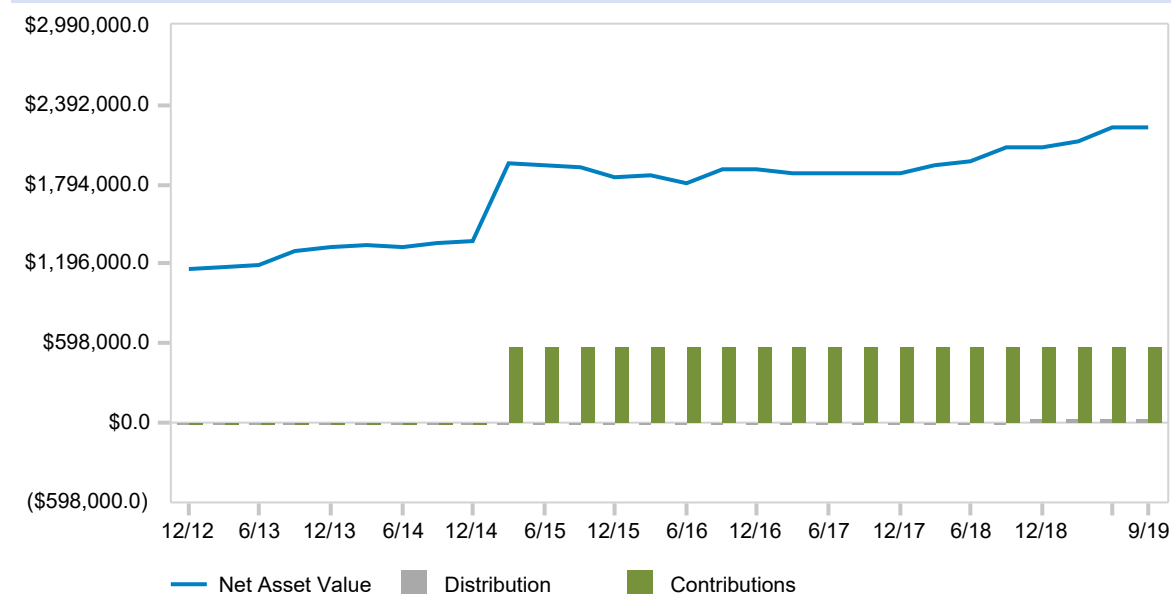
## Cash Flow Summary

<b>Capital Committed:</b>	\$1,700,000
<b>Capital Invested:</b>	\$1,700,000
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$1,700,000
<b>Remaining Capital Commitment:</b>	-

<b>Total Distributions:</b>	\$38,224
<b>Market Value:</b>	\$2,218,331

<b>Inception Date:</b>	11/01/2012
<b>Inception IRR:</b>	4.7
<b>TVPI:</b>	1.3

## Cash Flow Analysis





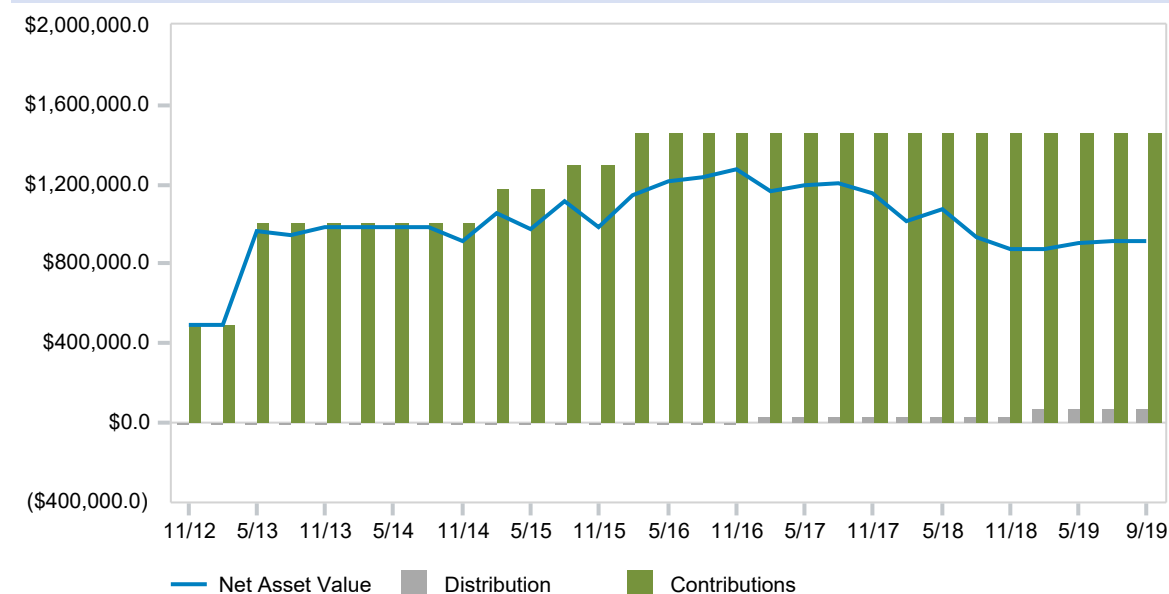
## Fund Information

Type of Fund:	Partnership	Vintage Year:	2011
Strategy Type:	Timber	Management Fee:	1.25% of NAV
Target IRR:		Inception:	09/07/2011
General Partner:			
Investment Strategy:	A portfolio of timberland investments in South America, Eastern/Central Europe, and South Africa through tax efficient investment vehicles and to maximize returns through a portfolio diversified by geography, end-products and end-markets		

## Cash Flow Summary

Capital Committed:	\$1,275,000
Capital Invested:	\$1,461,858
Management Fees:	-
Expenses:	-
Interest:	-
Total Contributions:	\$1,461,858
Remaining Capital Commitment:	-\$186,858
Total Distributions:	\$67,042
Market Value:	\$916,948
Inception Date:	11/21/2012
Inception IRR:	-6.6
TVPI:	0.7

## Cash Flow Analysis



#### Fund Information

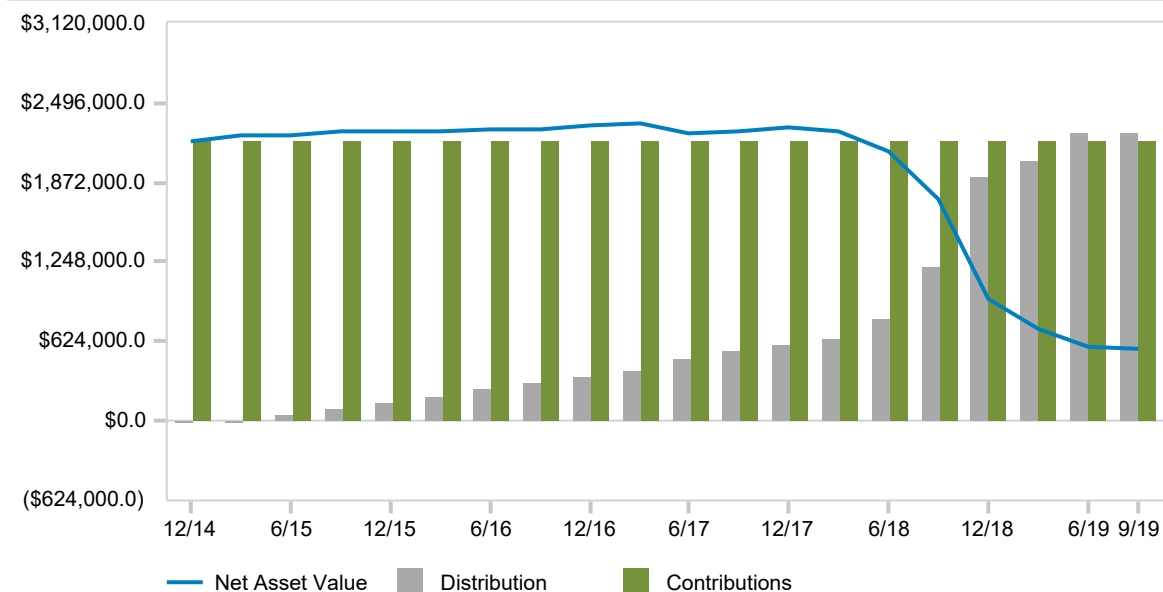
<b>Type of Fund:</b>	Direct	<b>Vintage Year:</b>	2011
<b>Strategy Type:</b>	Other	<b>Management Fee:</b>	2.00%
<b>Target IRR:</b>	9.00%	<b>Inception:</b>	11/13/2011
<b>General Partner:</b>	Bloomfield Capital Partners, LLC		
<b>Investment Strategy:</b>	Bloomfield Capital Income Fund II invests primarily in debt obligations consisting of commercial mortgage loans, deeds of trust and other real estate and/or debt-related investments, with the objective of creating a diversified portfolio producing strong and consistent returns while providing considerable downside protection.		

The Fund's investment strategy has a primary focus on commercial real estate loans and investments collateralized by significant margins of protective collateral such as real estate and other assets including but not limited to cash, marketable securities, equity interests, corporate interests and personal/corporate guarantees.

#### Cash Flow Summary

<b>Capital Committed:</b>	\$2,200,000
<b>Capital Invested:</b>	\$2,200,000
<b>Management Fees:</b>	\$317,000
<b>Expenses:</b>	\$135,239
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$2,200,000
<b>Remaining Capital Commitment:</b>	-
<b>Total Distributions:</b>	\$2,265,864
<b>Market Value:</b>	\$566,327
<b>Inception Date:</b>	12/22/2014
<b>Inception IRR:</b>	7.3
<b>TVPI:</b>	1.3

#### Cash Flow Analysis



#### Fund Information

<b>Type of Fund:</b>	Direct	<b>Vintage Year:</b>	2015
<b>Strategy Type:</b>	Other	<b>Management Fee:</b>	2.00%
<b>Target IRR:</b>	8.00%	<b>Inception:</b>	11/01/2015
<b>General Partner:</b>	Bloomfield Capital Partners, LLC		
<b>Investment Strategy:</b>	Bloomfield Capital Income Fund III invests primarily in debt obligations consisting of commercial mortgage loans, deeds of trust and other real estate and/or debt-related investments, with the objective of creating a diversified portfolio producing strong and consistent returns while providing considerable downside protection.		

The Fund's investment strategy has a primary focus on commercial real estate loans and investments collateralized by significant margins of protective collateral such as real estate and other assets including but not limited to cash, marketable securities, equity interests, corporate interests and personal/corporate guarantees.

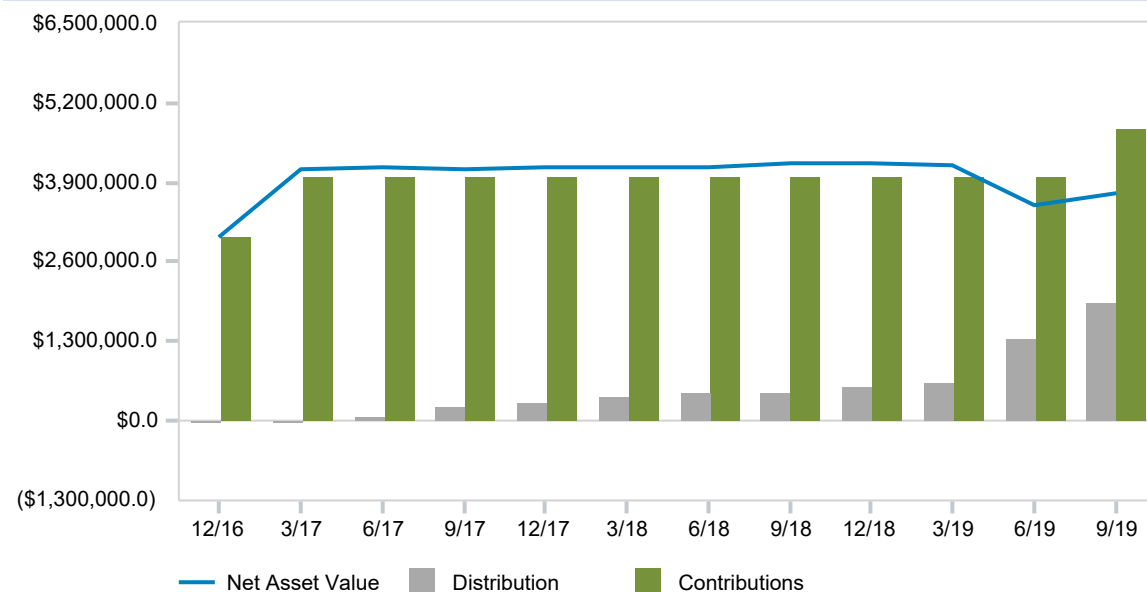
#### Cash Flow Summary

<b>Capital Committed:</b>	\$4,000,000
<b>Capital Invested:</b>	\$4,780,000
<b>Management Fees:</b>	\$248,970
<b>Expenses:</b>	\$85,895
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$4,780,000
<b>Remaining Capital Commitment:</b>	\$360,000

<b>Total Distributions:</b>	\$1,928,712
<b>Market Value:</b>	\$3,734,624

<b>Inception Date:</b>	12/31/2016
<b>Inception IRR:</b>	8.6
<b>TVPI:</b>	1.2

#### Cash Flow Analysis



#### Fund Information

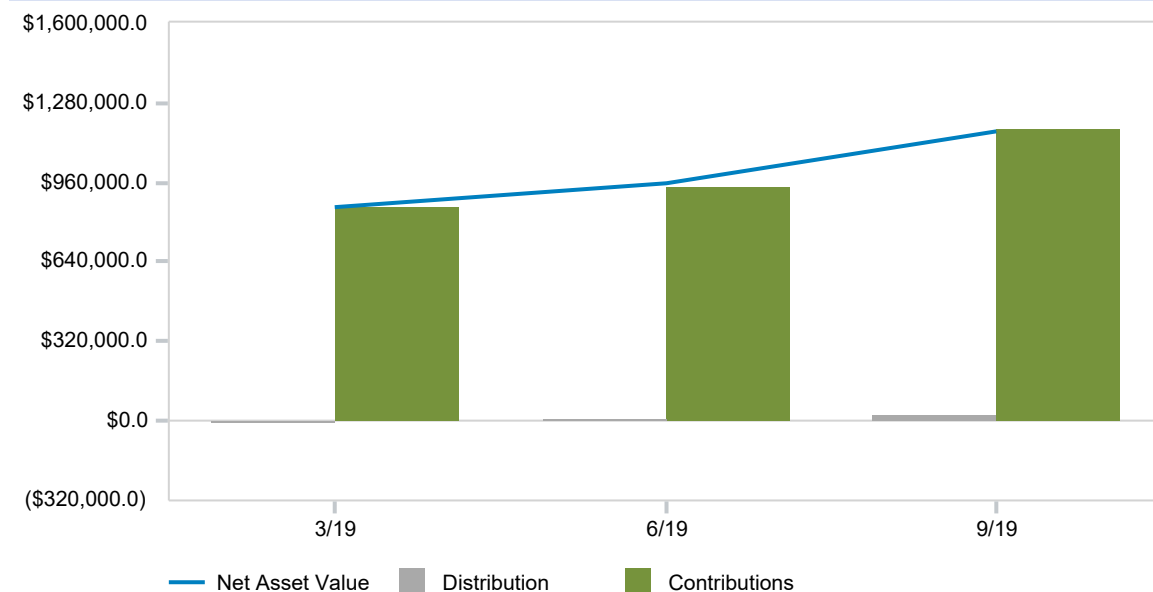
<b>Type of Fund:</b>	Direct	<b>Vintage Year:</b>	2018
<b>Strategy Type:</b>	Other	<b>Management Fee:</b>	1.5%
<b>Target IRR:</b>	8.5% (Series A only)	<b>Inception:</b>	11/16/2018
<b>General Partner:</b>	Bloomfield Capital Partners V, LLC		

**Investment Strategy:** The investment strategy of each Series of the Fund will have a primary focus on private credit and specialty finance assets (which is expected to include real estate debt and other general debt and debt-related investments) with short to intermediate-term durations and often contractual cash flows. The Managing Member's goal is to preserve invested capital, and generate returns that have a low correlation to traditional public markets (although there can be no assurances that this goal will be realized). The Fund will target middle market opportunities in real estate debt and other general debt and debt-related transactions (including REO properties, and preferred equity, that would include debt-like characteristics). The Fund generally will not invest in traditional leveraged common equity positions in real estate; however, the Fund may acquire REO and similar non-traditional properties and may also take incidental or pledged equity positions in connection with certain loans in order to obtain supplemental collateral to enhance the strength of the primary credit investment, and/or to expedite any requisite foreclosure process with such loan for the benefit of the Fund. The primary focus of private credit and specialty finance assets (including real estate debt and other general debt and debt-related investments) will be to capitalize on gap, transitional, bridge, special situation and opportunistic financings that are time sensitive, complex, and that the Managing Member believes offer attractive risk-adjusted returns. Each Series of the Fund may also variously co-invest in opportunities originated by other investors where the overall investment opportunity is of the same or similar nature as the Series typically invests.

#### Cash Flow Summary

<b>Capital Committed:</b>	\$2,000,000
<b>Capital Invested:</b>	\$1,170,365
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$1,170,365
<b>Remaining Capital Commitment:</b>	\$829,635
<b>Total Distributions:</b>	\$25,430
<b>Market Value:</b>	\$1,164,795
<b>Inception Date:</b>	02/14/2019
<b>Inception IRR:</b>	2.3
<b>TVPI:</b>	1.0

#### Cash Flow Analysis



## Fund Information

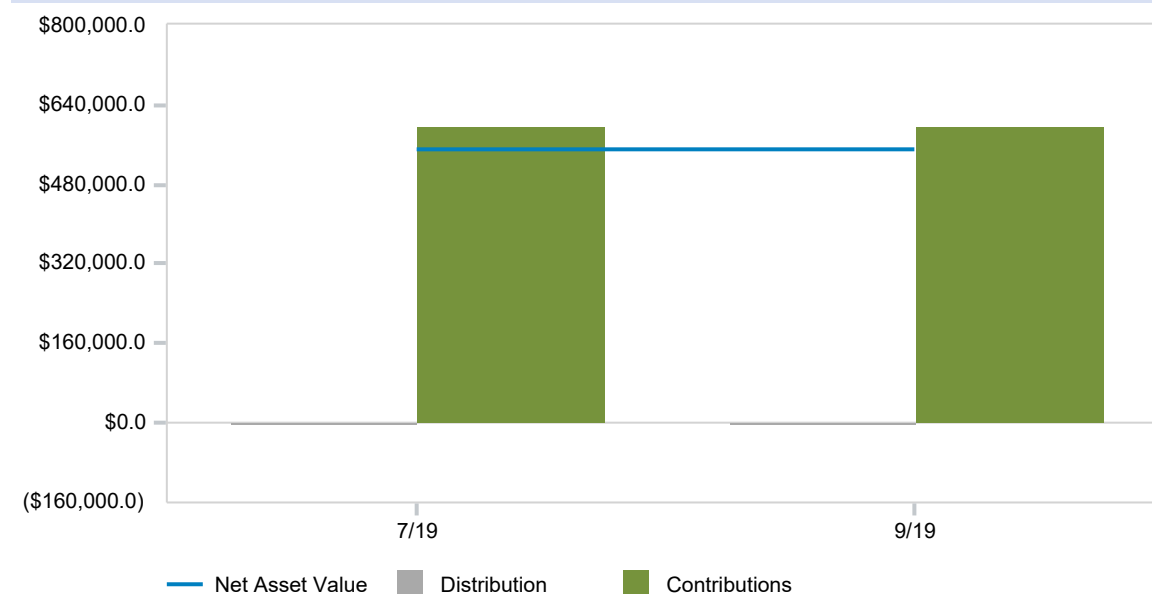
<b>Type of Fund:</b>	Direct	<b>Vintage Year:</b>	2018
<b>Strategy Type:</b>	Opportunistic Real Estate	<b>Management Fee:</b>	During the investment period, an amount equal to the product of 1/4 of 1.5% and such limited partner's Capital Commitment; after the termination of the investment period, an amount equal to 1/4 of 1.5% and such limited partner's Net Equity Inv
<b>Target IRR:</b>	9.00%	<b>Inception:</b>	04/06/2018
<b>General Partner:</b>	PCCP Equity VIII GP, LLC		
<b>Investment Strategy:</b>	<p>The objective of the Fund is to create a portfolio of equity interests in U.S. middle-market commercial real estate assets, diversified by geography, asset class, strategy type and operating partner. By focusing on middle-market assets with transitional characteristics (i.e., some value-add attribute or complexity), PCCP expects to encounter less competition for transactions than that experienced by many larger opportunistic funds that require sizeable investments. Additionally, the Fund will target opportunities with the following investment characteristics with a focus on adding value and selling to buyers of stabilized real estate:</p> <ul style="list-style-type: none"> <li>• Physical repositioning, rehabilitation and redevelopment;</li> <li>• Recapitalizing impaired financial structures, particularly in complex situations;</li> <li>• Discounted purchases of inefficiently marketed or distressed situations; and</li> <li>• Executing on select opportunistic development or build-to-suit opportunities.</li> </ul>		

## Cash Flow Summary

<b>Capital Committed:</b>	\$2,000,000
<b>Capital Invested:</b>	\$552,332
<b>Management Fees:</b>	-
<b>Expenses:</b>	\$18,384
<b>Interest:</b>	\$25,000
<b>Total Contributions:</b>	\$595,716
<b>Remaining Capital Commitment:</b>	\$1,429,284

<b>Total Distributions:</b>	-
<b>Market Value:</b>	\$549,946
<b>Inception Date:</b>	07/23/2019
<b>Inception IRR:</b>	-7.7
<b>TVPI:</b>	1.0

## Cash Flow Analysis



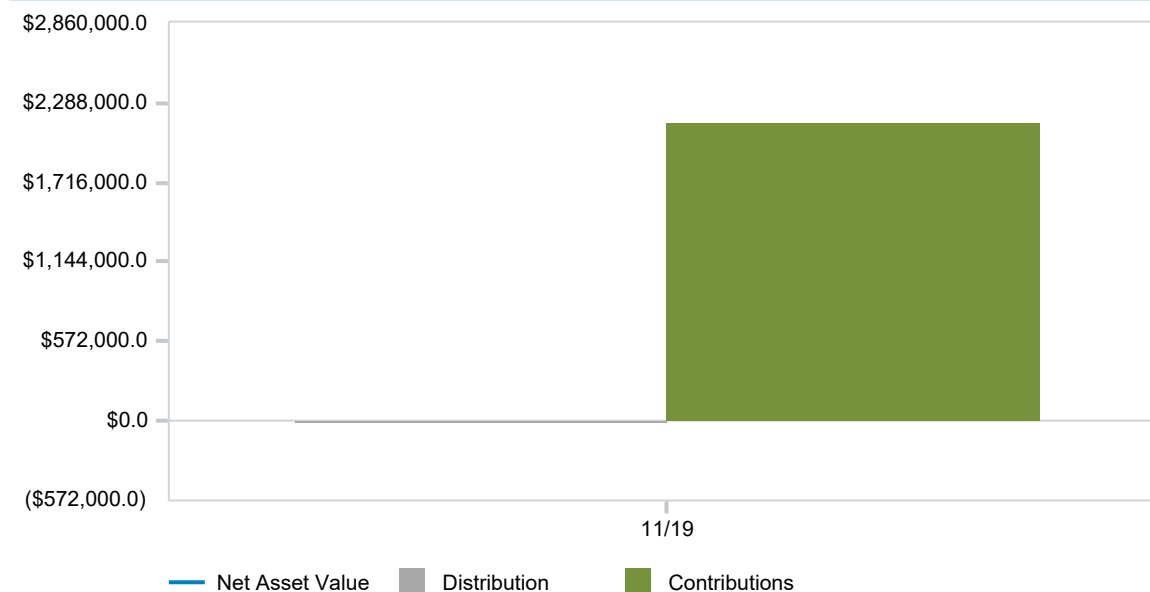
## Fund Information

<b>Type of Fund:</b>	Partnership	<b>Vintage Year:</b>	2017
<b>Strategy Type:</b>	Value-Add Real Estate	<b>Management Fee:</b>	1.50%
<b>Target IRR:</b>	8.00% + carried interest 30% to GP, 70% to investor after gross return of 15%	<b>Inception:</b>	11/01/2016
<b>General Partner:</b>	TerraCap GP IV, LLC		
<b>Investment Strategy:</b>	<p>TerraCap Management, LLC is a commercial real estate investment management company focused on value-add real estate acquisitions in the Southern United States. TerraCap considers thematic factors such as business formation, employment growth and population growth on a market-by-market basis, as most metros and sub-markets have different economic-based industries and therefore move through their economic cycles differently. TerraCap's principals aim to diversify the firm's real estate portfolio across geographies and asset classes, including office, flex, multifamily, and hospitality.</p> <p>The Fund's investment strategy is to make investments in income producing real estate assets for which TerraCap seeks to achieve gross compound annual levered returns on Invested Capital of fifteen percent (15%) to nineteen percent (19%) Net IRRs over rolling three (3) to seven (7) year periods. TerraCap expects to engage in activities that improve income producing assets the Fund plans to acquire, such as completing deferred maintenance, renovations, new signage, tenant improvements, leasing, or repositioning.</p>		

## Cash Flow Summary

<b>Capital Committed:</b>	\$2,000,000
<b>Capital Invested:</b>	\$2,000,000
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	\$141,451
<b>Total Contributions:</b>	\$2,141,451
<b>Remaining Capital Commitment:</b>	-
<b>Total Distributions:</b>	-
<b>Market Value:</b>	\$2,000,000
<b>Inception Date:</b>	07/03/2019
<b>Inception IRR:</b>	-6.6
<b>TVPI:</b>	1.0

## Cash Flow Analysis



<b>Total Fund Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1985</b>	
S&P 500 Index	20.50
S&P MidCap 400 Index	16.00
Russell 2000 Index	14.00
MSCI EAFE (Net) Index	15.00
Blmbg. Barc. U.S. Aggregate Index	30.00
NCREIF Fund Index-ODCE (VW)	4.50

<b>Jan-2017</b>	
S&P 500 Index	20.00
Russell Midcap Index	14.00
Russell 2000 Index	14.00
MSCI EAFE (Net) Index	15.50
Blmbg. Barc. U.S. Aggregate Index	20.00
Blmbg. Barc. Global Multiverse	2.00
NCREIF Fund Index-ODCE (VW)	6.00
HFRI FOF: Diversified Index	5.00
NCREIF Timberland Index	3.50

<b>Total Fixed Income Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1976</b>	
Blmbg. Barc. U.S. Aggregate Index	100.00

<b>Total Real Estate Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1978</b>	
NCREIF Property Index	100.00

<b>Total Domestic Equity Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1985</b>	
S&P 500 Index	40.00
S&P MidCap 400 Index	32.00
Russell 2000 Index	28.00

<b>Total International Equity Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1970</b>	
MSCI EAFE (Net) Index	100.00

<b>Total Timber Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Apr-1987</b>	
NCREIF Timberland Index	100.00

Plan Disclosures:

- All composite returns (except Timber and Real Estate) prior to March 31, 2015 was obtained from prior consultant.
- Though there was no changes made to any of the composites (except Timber and Real Estate) from 3/31/2015 and back to inception, and are shown as reported by prior consultant, there are changes made to individual portfolios.
- AEW Core Property- obtained all historical statements and built history.
- Bloomfield Capital Income Fund- obtained all historical statements and built history.
- Metropolitan Real Estate VI- obtained all historical statements and built history.
- RMK Timberland Intl Fund- obtained all historical statements and built history.
- RMK Timberland US Fund- obtained all historical statements and built history.
- After rebuilding history for all Real Estate Funds and all Timber funds, recalculated composite returns for each composite.



# Southfield Employees Retirement System

## Fee Analysis

As of September 30, 2019

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Comerica S&P 500 Index Fund	0.09	22,484,176	19,387	0.12 % of First \$2 M 0.10 % of Next \$3 M 0.08 % of Next \$20 M 0.06 % of Next \$25 M 0.04 % of Next \$50 M 0.02 % Thereafter
Champlain MC Equity	0.85	7,075,548	60,142	0.85 % of Assets
QMA US MC Equity	0.00	7,409,492	333	0.00 % of Assets
SouthernSun SC	1.00	5,681,887	56,819	1.00 % of First \$15 M 0.85 % Thereafter
Walhausen & Co. SMID Value	0.93	6,022,053	56,187	0.95 % of First \$5 M 0.85 % of Next \$20 M 0.75 % of Next \$25 M 0.65 % Thereafter
Great Lakes Equity	0.55	5,462,777	30,045	0.55 % of Assets
<b>Total Domestic Equity</b>	<b>0.41</b>	<b>54,135,933</b>	<b>222,915</b>	
WCM Focused Growth International	0.75	8,353,958	62,655	0.75 % of Assets
LSV International LCV	0.75	9,321,148	69,909	0.75 % of First \$25 M 0.65 % of Next \$25 M 0.55 % of Next \$50 M 0.45 % Thereafter
<b>Total International Equity</b>	<b>0.75</b>	<b>17,675,107</b>	<b>132,563</b>	
Pacific Fixed Income	0.30	10,582,207	31,747	0.30 % of Assets
Templeton Global Bond R6 (FBNRX)	0.51	3,255,083	16,601	0.51 % of Assets
Bloomfield Capital Income Fund II	2.00	566,327	11,327	2.00 % of Assets
Bloomfield Capital Income Fund III	2.00	3,734,624	74,692	2.00 % of Assets
Bloomfield Capital Income Fund V	1.50	1,164,795	17,472	1.50 % of Assets
<b>Total Fixed Income</b>	<b>0.79</b>	<b>19,303,036</b>	<b>151,838</b>	
AEW Core Property Trust	1.25	7,141,453	89,268	1.25 % of Assets
Metropolitan Real Estate V	1.00	787,039	7,870	1.00 % of Assets
PCCP Equity VIII	1.00	549,946	5,499	1.00 % of Assets
TerraCap Partners IV	1.50	2,000,000	30,000	1.50 % of Assets
<b>Total Real Estate</b>	<b>1.27</b>	<b>10,478,438</b>	<b>132,638</b>	
Magnitude Institutional	1.00	2,849,062	28,491	1.00 % of Assets
Titan Masters Int'l Fund	0.70	2,607,565	18,253	0.70 % of Assets
<b>Total Hedge Fund of Funds</b>	<b>0.86</b>	<b>5,456,627</b>	<b>46,744</b>	
RMK Timberland US Fund	1.00	2,218,331	22,183	1.00 % of Assets
RMK Timberland Intl Fund	1.25	916,948	11,462	1.25 % of Assets



# Southfield Employees Retirement System

## Fee Analysis

As of September 30, 2019

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Timber Funds	1.07	3,135,279	33,645	
Cash		87,480	-	
Total Fund	0.65	110,271,900	720,343	

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

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