Investment Performance Review Period Ending September 30, 2018

Southfield Employees' Retirement System



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

EXECUTIVE SUMMARY: 3Q 2018

Market Summary:

The US equity market posted strong results for the second consecutive quarter, driven by strong economic growth and higher corporate earnings. Large cap stocks generated the strongest results (S&P 500 up 7.7%), followed by mid-caps and small-caps. The markets were led by growth-oriented sectors - information technology, health care, and consumer discretionary. The international markets did not fully participate in the US rally, weighed down by slowing growth in China, political uncertainty in Europe (Brexit and Italy), and a strengthening dollar (MSCI EAFE Index up 1.4%; MSCI Emerging Market Index down 1.1%). The fixed income market was flat during the quarter (BB Aggregate 0.0%); Treasuries suffered minor losses while lower credit quality issues delivered positive results. The Federal Reserve hiked interest rates for the third time this year in September and the yield curve shifted upward; at quarter end the Fed Funds Rate was 2.00% - 2.25%.

Conclusions/Recommendations:

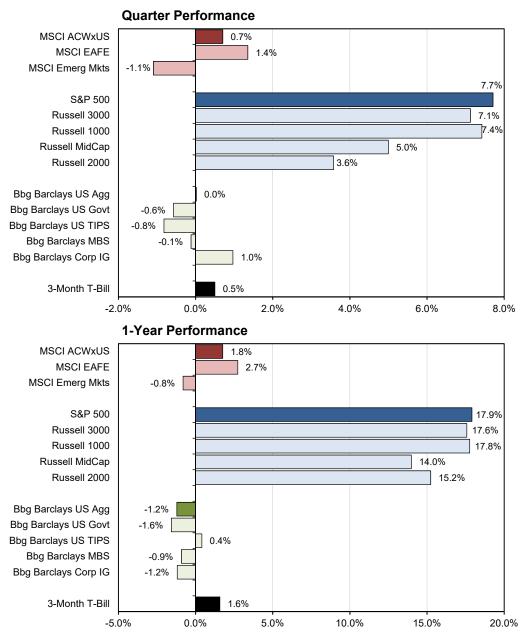
- 1. The Total Fund returned 3.06% during the quarter, narrowly trailing the Policy Index by 7 basis points and ranking near the median fund in the Public Fund universe. The Fund was hindered by weak performance from SouthernSun.
- 2. The Total Fund posted a return of 8.56% over the past year, performing in line with the Policy Index and ranking in the top half of the peer group. Longer-term, the Fund has performed very well, generally exceeding the Policy Index and ranking in the top decile of the peer group.
- 3. SouthernSun trailed expectations again this quarter. The manager has been on "Watch" for several quarters and a search has been initiated to review possible replacement candidates.
- 4. Champlain (mid cap) and WCM (intl equity) have generated relatively strong results within their asset class over the past 12 months.
- 5. Bloomfield Capital, Metropolitan, and BTG/RMK have not yet reported their third quarter 2018 results (about 9% of the portfolio); these strategies are expected to have a positive impact on the Total Fund. As of 9/30/18, the Plan has outstanding investment commitments with Bloomfield Capital V.
- 6. The Fund is slightly below the minimum allocation to domestic fixed income (8.6% vs. 10.0%); see AndCo's rebalancing recommendation on the Asset/Manager Summary handout. We did not detect any other violations of investment policies.



3rd Quarter 2018 Market Environment

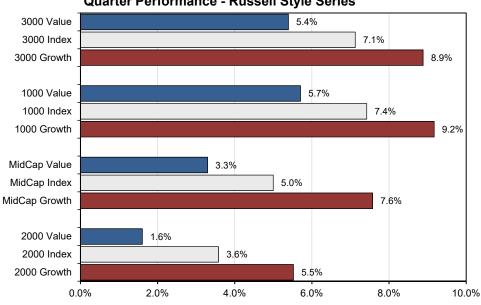


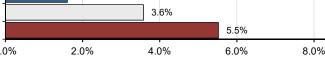
- Market returns were mixed across major equity and fixed income indices for the 3rd guarter of 2018 with many themes from the 2nd guarter repeating during the current period. Broad domestic equity indices pushed higher on continued strength in both economic and corporate earnings data. Corporate earnings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

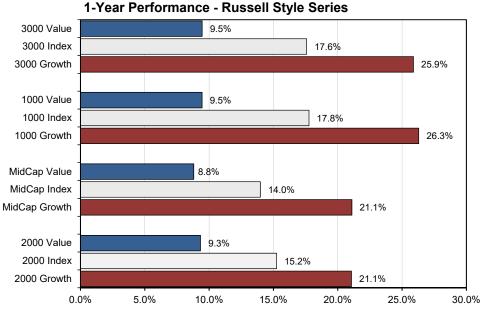




- US equity index returns were positive across the style and capitalization spectrum during the 3rd guarter of 2018. US equity markets were pushed higher by the ongoing strength in US economic data and corporate earnings. Positive data releases in GDP, unemployment, retail sales, consumer consumption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



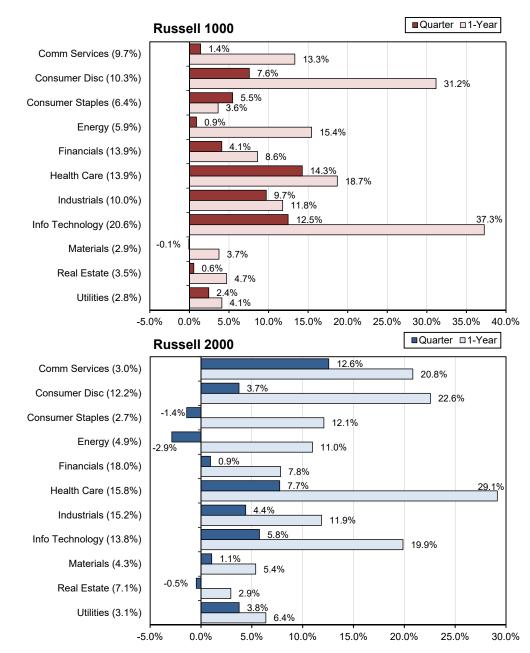




Quarter Performance - Russell Style Series



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





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

> Top 10 Weighted Stocks 1-Qtr

Weight

1-Year

D - A-

Sector

As of September 30, 2018

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

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

	_	Return	Return			
Five Below Inc	0.31%	33.1%	137.0%	Consumer Discretionary		
Etsy Inc	0.27%	21.8%	204.4%	Consumer Discretionary		
Integrated Device Technology Inc	0.27%	47.5%	76.9%	Information Technology		
LivaNova PLC	0.27%	24.2%	76.9%	Health Care		
Haemonetics Corp	0.26%	27.8%	155.4%	Health Care		
Teladoc Health Inc	0.25%	48.8%	160.5%	Health Care		
Ligand Pharmaceuticals Inc	0.25%	32.5%	101.6%	Health Care		
HubSpot Inc	0.24%	20.4%	79.6%	Information Technology		
Primerica Inc	0.23%	21.3%	49.2%	Financials		
HealthEquity Inc	0.22%	25.7%	86.7%	Health Care		
				•		
Тор	10 Performir	ng Stocks (by	y Quarter)			

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

В	ottom 10 Perform	ning Stocks	(by Quarter)		
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	Russell 2000
Floor & Decor Holdings Inc	0.01%	-38.8%	-22.5%	Consumer Discretionary	Vital Therapies Inc
Twitter Inc	0.07%	-34.8%	68.7%	Communication Services	GTx Inc
IPG Photonics Corp	0.02%	-29.3%	-15.7%	Information Technology	Ampio Pharmaceu
Visteon Corp	0.01%	-28.1%	-24.9%	Consumer Discretionary	Innovate Biopharn
Zillow Group Inc A	0.01%	-26.0%	10.1%	Communication Services	Zion Oil & Gas Inc
Zillow Group Inc C	0.02%	-25.1%	10.0%	Communication Services	Endologix Inc
Western Digital Corp	0.06%	-23.7%	-30.4%	Information Technology	Lannett Co Inc
Wynn Resorts Ltd	0.05%	-23.7%	-13.3%	Consumer Discretionary	Maiden Holdings L
Extraction Oil & Gas Inc	0.00%	-23.1%	-26.6%	Energy	Diebold Nixdorf Ind
Tesla Inc	0.13%	-22.8%	-22.4%	Consumer Discretionary	Sears Holdings Co

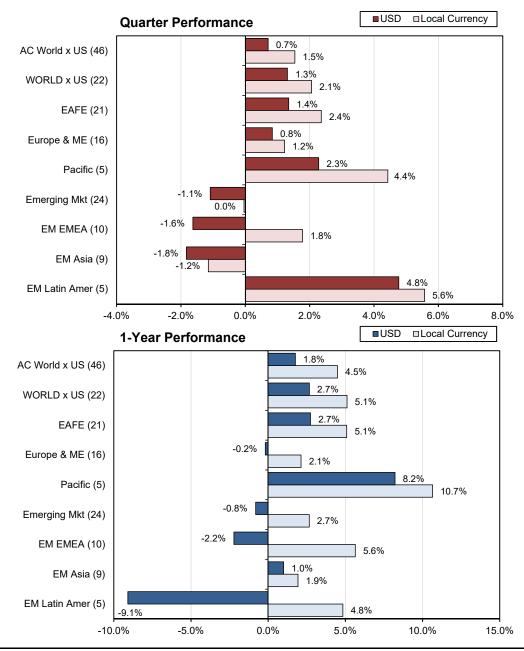
Bottom 10 Performing Stocks (by Quarter)							
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector			
Vital Therapies Inc	0.00%	-96.0%	-94.5%	Health Care			
GTx Inc	0.00%	-89.7%	-81.4%	Health Care			
Ampio Pharmaceuticals Inc	0.00%	-76.9%	-16.9%	Health Care			
Innovate Biopharmaceuticals Inc	0.01%	-71.0%	-2.4%	Health Care			
Zion Oil & Gas Inc	0.00%	-68.4%	-62.5%	Energy			
Endologix Inc	0.01%	-66.3%	-57.2%	Health Care			
Lannett Co Inc	0.01%	-65.1%	-74.3%	Health Care			
Maiden Holdings Ltd	0.01%	-62.6%	-61.1%	Financials			
Diebold Nixdorf Inc	0.02%	-62.3%	-80.1%	Information Technology			
Sears Holdings Corp	0.00%	-59.2%	-86.7%	Consumer Discretionary			



Russell 2000

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

The Market Environment International and Regional Market Index Performance (Country Count) As September 30, 2018





The N	larket Environment
US Dollar International Index Attributio	on & Country Detail
l l l l l l l l l l l l l l l l l l l	As of September 30, 2018

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.4%	3.3%	-2.4%
Consumer Discretionary	11.1%	-0.5%	3.3%
Consumer Staples	11.3%	-0.1%	2.5%
Energy	6.0%	3.5%	24.6%
Financials	19.8%	0.9%	-4.0%
Health Care	10.9%	5.6%	7.1%
Industrials	14.3%	2.6%	4.2%
Information Technology	6.2%	0.3%	7.4%
Materials	8.1%	0.4%	5.1%
Real Estate	3.5%	-3.0%	1.0%
Utilities	3.3%	-0.6%	0.7%
Total	100.0%	1.4%	2.7%
MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return

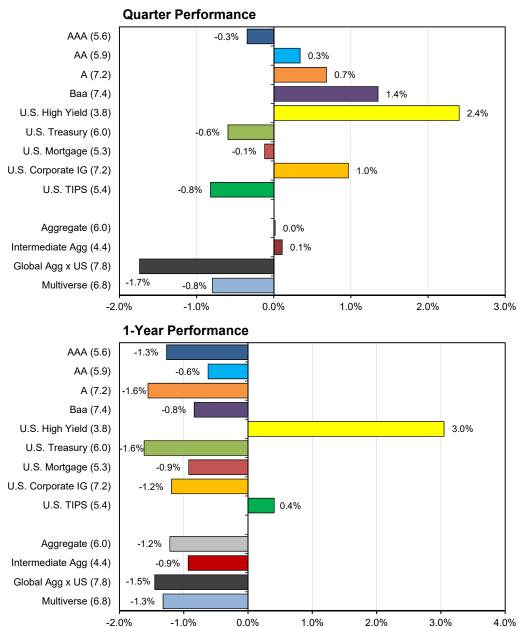
MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	7.6%	-3.0%	-4.1%
Consumer Discretionary	10.7%	-3.2%	-1.4%
Consumer Staples	9.7%	-0.6%	1.6%
Energy	7.1%	4.1%	18.3%
Financials	22.0%	1.7%	-1.9%
Health Care	8.3%	4.5%	7.6%
Industrials	11.7%	2.8%	3.8%
Information Technology	8.5%	1.3%	5.6%
Materials	8.2%	0.4%	5.2%
Real Estate	3.2%	-3.5%	-2.7%
Utilities	3.0%	-0.9%	-1.2%
Total	100.0%	0.7%	1.8%

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	14.8%	-9.4%	-6.0%
Consumer Discretionary	11.3%	-9.9%	-13.2%
Consumer Staples	6.7%	-2.9%	-1.9%
Energy	6.3%	14.5%	26.0%
Financials	23.3%	1.5%	0.4%
Health Care	3.1%	-7.2%	11.4%
Industrials	5.3%	2.5%	-4.3%
Information Technology	15.9%	2.2%	2.3%
Materials	7.8%	4.5%	8.6%
Real Estate	2.9%	-5.6%	-15.1%
Utilities	2.5%	-1.9%	-5.4%
Total	100.0%	-1.1%	-0.8%

	MSCI-EAFE	MSCI-ACWIxUS	Quarter	1- Year
Country	Weight	Weight	Return	Return
Japan	24.6%	16.9%	3.7%	10.2%
Jnited Kingdom	17.5%	12.0%	-1.7%	2.9%
France	11.2%	7.7%	2.8%	4.2%
Germany	9.4%	6.5%	-0.6%	-5.4%
Switzerland	8.3%	5.7%	7.3%	1.6%
Australia	6.8%	4.7%	-0.9%	4.4%
Hong Kong	3.5%	2.4%	-1.0%	2.9%
Netherlands	3.3%	2.3%	-1.5%	-1.6%
Spain	3.0%	2.0%	-2.4%	-9.7%
Sweden	2.7%	1.9%	7.0%	-3.3%
taly	2.3%	1.6%	-4.5%	-8.9%
Denmark	1.7%	1.2%	2.3%	-4.2%
Singapore	1.3%	0.9%	2.2%	6.9%
Finland	1.1%	0.7%	3.2%	10.3%
Belgium	1.0%	0.7%	-5.2%	-11.8%
Norway	0.8%	0.5%	6.7%	13.7%
srael	0.6%	0.4%	5.1%	14.9%
reland	0.5%	0.4%	-5.4%	-6.1%
Austria	0.2%	0.2%	0.2%	-3.1%
New Zealand	0.2%	0.2%	2.4%	4.4%
Portugal	0.2%	0.1%	-0.6%	1.7%
Total EAFE Countries	100.0%	68.7%	1.4%	2.7%
Canada	100.076	6.7%	0.8%	1.9%
Total Developed Countries		75.3%	1.3%	2.7%
China		7.6%	-7.5%	-2.2%
Korea		3.7%	0.7%	-2.2%
Taiwan		3.0%	6.5%	9.7%
		2.1%	-2.3%	9.7%
ndia			-	
Brazil		1.5%	6.1%	-14.0%
South Africa		1.5%	-7.4%	-5.1%
Russia		0.9%	6.2%	13.7%
Mexico		0.8%	6.9%	-4.4%
Thailand		0.6%	13.6%	15.2%
Valaysia		0.6%	3.8%	7.6%
ndonesia		0.5%	2.0%	-10.4%
Poland		0.3%	10.6%	-5.0%
Chile		0.3%	-2.0%	-5.7%
Philippines		0.2%	1.0%	-15.6%
Qatar		0.2%	12.8%	25.3%
United Arab Emirates		0.2%	3.1%	-6.9%
Turkey		0.2%	-20.5%	-41.7%
Colombia		0.1%	-2.5%	10.0%
Peru		0.1%	-2.1%	12.2%
Greece		0.1%	-17.6%	-14.8%
Hungary		0.1%	4.7%	-5.0%
Czech Republic		0.1%	4.0%	12.8%
Egypt		0.0%	-6.8%	-7.1%
Pakistan		0.0%	-4.9%	-20.6%
Total Emerging Countries		24.7%	-1.1%	-0.8%
Total ACWIxUS Countries		100.0%	0.7%	1.8%

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 represed to backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.

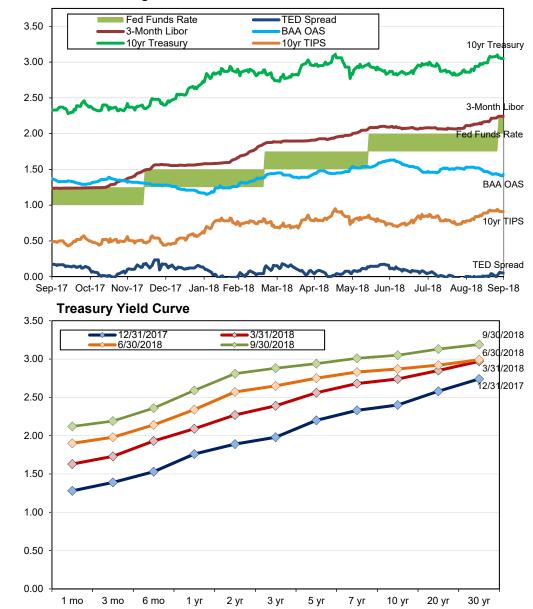
- Broad fixed income benchmarks had mixed results during the 3rd guarter. Interest rates rose across all maturities on the US Treasury Yield Curve. The Federal Open Market Committee (FOMC), decided to increase short-term interest rates by 25 basis points at their September meeting citing continued strength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





- Global fixed income indices continue to struggle relative to their domestic counterparts, underperforming during the 3rd quarter. These indices have lower yields and their relatively high duration acted as a headwind to performance in the current quarter as interest rates increased. The returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. During the 3rd guarter the USD strengthened against most other currencies, negatively impacting the returns on global bond indices. The return on global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, was -1.7% and -1.5% for the guarter and 1-year period respectively. As the global economy continues to recover, several international central banks have started to move toward less accommodative postures. Notably, the ECB, began to slow its monthly bond purchase program in September, reducing new purchases to 15 billion euro per month from 30 billion euro per month, as well as forecasting an end to the program by the end of the year assuming the eurozone recovery continues to flourish. However, they have indicated a continuation of reinvestment in maturing securities and would likely not raise interest rates from current levels until summer 2019. The Bank of England increased interest rates by 0.25% during the guarter citing improvement in their near-term economic outlook and the Bank of Japan has changed its policy to allow flexibility for future tightening in the future.
- Much of the index performance detailed in the bar graphs on the previous page is visible on a time series basis by reviewing the line graphs to the right. The '1-Year Trailing Market Rates' chart illustrates that the 10-year Treasury yield (green line) rose steadily during the end of the 3rd quarter, ending the period at 3.05%. The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-Treasury issues. This line illustrates a steady increase in credit spreads through the first two quarters of 2018, followed by a smooth decline during the 3rd quarter. This decline is equivalent to an interest rate decrease on corporate bonds, which produces an additional tailwind for corporate bond index returns. These credit spreads have tightened by about 20 basis points over the last 3-months. The green band across the graph illustrates the gradual increase in the Federal Funds Rate (three increases in the last twelve months) due to the continued unwinding of accommodative US monetary policy.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four calendar quarters. As mentioned, the yield curve continues to flatten as yields on shorter-term maturities have risen more than interest rates on the long end of the curve. The upward momentum of interest rates as well as a general flattening of the yield curve are clearly visible over the last twelve months.

1-Year Trailing Market Rates

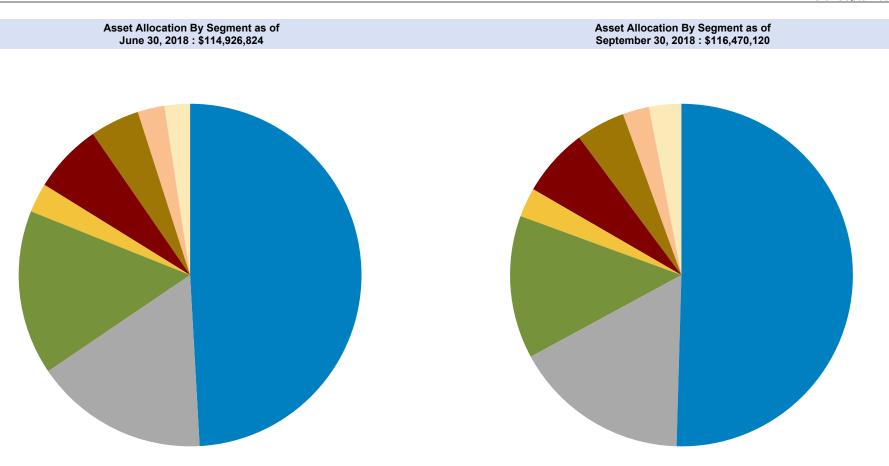




Total Portfolio Compliance Summary							
	September 30, 2018	Current	Target	Range	Act 314	Compliance	Compliance
	Market Value \$	Allocation %	Allocation %	Allocation %	Limit %	within Ranges	w/314 Limits
Total Portfolio (excluding Unfunded Commitments)	116,470,119.00	100.0%	100.0%				
Total Equity (14)	80,096,458.00	68.8%	63.5%	53.0% - 70.0%	70.0%	YES	YES
Domestic Equity (14)	60,368,006.00	51.8%	48.0%	43.0% - 53.0%	70.0%	YES	YES
International Equity (14)	19,728,452.00	16.9%	15.5%	10.0% - 20.0%	70.0%	YES	YES
Total US Fixed Income (17 & 17.1.a.iii)	15,967,143.00	13.7%	22.0%	15.0% - 30.0%	100.0%	NO	YES
US Investment Grade Fixed Income (17)	9,958,682.00	8.6%	15.0%	10.0% - 25.0%	100.0%	NO	YES
US Non-Investment Grade Fixed Income (17.1.a.iii)	6,008,461.00	5.2%	5.0%	0.0% - 10.0%	100.0%	YES	YES
Total Non US Fixed Income (20k)	3,217,690.00	2.8%	2.0%	0.0% - 10.0%	20.0%	YES	YES
Total Real Estate (18 & 19)	7,593,212.00	6.5%	6.0%	0.0% - 10.0%	20.0%	YES	YES
Alternative Investments (20d)	8,299,136.00	7.1%	8.5%	0.0% - 10.0%	20.0%	YES	YES
Short Term/Cash Reserves	1,296,480.00	1.1%	0.0%	0.0% - 5.0%	N/A	YES	YES



Asset Allocation Summary Total Fund As of September 30, 2018



ocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	56,441,070	49.1	Domestic Equity	58,764,746	50.5
International Equity	18,848,817	16.4	International Equity	19,378,026	16.6
Domestic Fixed Income	17,877,534	15.6	Domestic Fixed Income	15,722,269	13.5
Global Fixed Income	3,185,148	2.8	Global Fixed Income	3,217,690	2.8
Real Estate	7,547,428	6.6	Real Estate	7,535,706	6.5
Hedge Fund	5,351,338	4.7	Hedge Fund	5,393,645	4.6
Other Illiquid Asset	2,905,491	2.5	Other Illiquid Asset	2,905,491	2.5
Cash Equivalent	2,769,998	2.4	Cash Equivalent	3,552,547	3.1



Financial Reconciliation								
	Market Value 07/01/2018	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Return On Investment	Market Value 09/30/2018
Total Domestic Equity	57,690,370	-	-	-	-87,219	-6,674	2,771,528	60,368,006
Comerica S&P 500 Index Fund	23,781,904	-	-	-	-	-3,250	1,832,170	25,610,824
Champlain MC Equity	7,977,857	-	-	-	-33,261	-1,053	672,792	8,616,335
QMA US MC Equity	7,551,028	-	-	-	-8,479	-	202,848	7,745,397
SouthernSun SC	12,314,366	-	-	-	-30,317	-1,561	-121,041	12,161,447
Walthausen & Co. SMID Value	6,065,215	-	-	-	-15,162	-810	184,760	6,234,003
Total International Equity	19,222,580	18,716	-	-	-36,476	-1,277	524,909	19,728,452
LSV International LCV	9,706,244	18,716	-	-	-18,716	-	174,563	9,880,807
WCM Focused Growth International	9,516,336	-	-	-	-17,760	-1,277	350,346	9,847,645
Total Fixed Income	21,178,020	-2,026,667	-	-	-9,201	-1,535	44,216	19,184,833
Pacific Fixed Income	11,727,743	-1,770,000	-	-	-9,201	-1,535	11,674	9,958,682
Bloomfield Capital Income Fund II	2,122,626	-256,667	-	-	-	-	-	1,865,959
Bloomfield Capital Income Fund III	4,142,502	-	-	-	-	-	-	4,142,502
Templeton Global Bond R6 (FBNRX)	3,185,148	-	-	-	-	-	32,542	3,217,690
Total Real Estate	7,608,638	-106,592	-	-	-18,608	-	109,775	7,593,212
AEW Core Property Trust	6,656,660	-	-	-	-18,608	-	109,775	6,747,827
Metropolitan Real Estate V	951,978	-106,592	-	-	-	-	-	845,385
Total Timber Funds	2,905,491	-	-	-	-	-	-	2,905,491
RMK Timberland US Fund	1,974,043	-	-	-	-	-	-	1,974,043
RMK Timberland Intl Fund	931,448	-	-	-	-	-	-	931,448
Total Hedge Fund of Funds	5,351,338	-	-	-	-	-	42,307	5,393,645
Magnitude Institutional	2,747,585	-	-	-	-	-	28,752	2,776,336
Titan Masters Int'l Fund	2,603,753	-	-	-	-	-	13,556	2,617,309
Cash Account	970,387	2,114,543	979,947	-2,759,935	-	-22,011	13,549	1,296,480
Total Fund	114,926,824	-	979,947	-2,759,935	-151,504	-31,496	3,506,285	116,470,120



Comparative Performance																	
	Q	TR	FY	'TD	1 \	ŕ R	3 `	YR	5	YR	7 `	YR	10	YR	Ince	ption	Inception Date
Total Fund	3.06	(54)	3.06	(54)	8.56	(41)	11.29	(13)	8.02	(43)	11.54	(4)	9.99	(1)	7.90	(6)	06/01/1997
Total Fund Policy	3.13	(49)	3.13	(49)	8.52	(42)	10.74	(25)	8.28	(31)	10.85	(13)	8.70	(20)	8.12	(3)	
Difference	-0.07		-0.07		0.04		0.55		-0.26		0.69		1.29		-0.22		
All Public Plans-Total Fund Median	3.12		3.12		8.15		10.00		7.83		9.87		8.05		7.05		
Total Domestic Equity	4.81	(57)	4.81	(57)	12.56	(57)	14.85	(51)	10.44	(61)	15.38	(54)	11.86	(40)	9.12	(75)	02/01/1992
Total Domestic Equity Policy	5.32	(52)	5.32	(52)	16.03	(40)	16.81	(31)	12.56	(34)	16.66	(34)	11.98	(38)	10.60	(38)	
Difference	-0.51		-0.51		-3.47		-1.96		-2.12		-1.28		-0.12		-1.48		
IM U.S. Equity (SA+CF+MF) Median	5.44		5.44		13.79		14.92		11.28		15.65		11.30		10.08		
Total International Equity	2.73	(7)	2.73	(7)	6.32	(11)	13.23	(15)	7.83	(13)	10.55	(18)	7.18	(32)	2.96	(33)	12/01/2007
Total International Equity Policy	1.35	(20)	1.35	(20)	2.74	(28)	9.23	(56)	4.42	(52)	8.30	(48)	5.38	(62)	1.44	(62)	
Difference	1.38		1.38		3.58		4.00		3.41		2.25		1.80		1.52		
IM International Equity (SA+CF+MF) Median	-0.17		-0.17		0.39		9.75		4.48		8.16		5.97		1.94		
Total Fixed Income	0.20	(45)	0.20	(45)	2.03	(2)	5.05	(1)	4.62	(1)	3.99	(5)	N/A		5.32	(23)	03/01/2009
Total Fixed Income Policy	0.02	(83)	0.02	(83)	-1.22	(90)	1.31	(89)	2.16	(90)	2.02	(95)	3.77	(95)	3.59	(92)	
Difference	0.18		0.18		3.25		3.74		2.46		1.97		N/A		1.73		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	0.18		0.18		-0.74		1.84		2.61		2.66		4.60		4.52		
Total Real Estate	1.45	(100)	1.45	(100)	7.66	(85)	8.71	(72)	10.26	(81)	N/A		N/A		5.40	(100)	01/01/2012
Total Real Estate Policy	1.67	(85)	1.67	(85)	7.16	(96)	7.75	(88)	9.57	(93)	9.98	(93)	6.42	(16)	9.89	(93)	
Difference	-0.22		-0.22		0.50		0.96		0.69		N/A		N/A		-4.49		
IM U.S. Open End Private Real Estate (SA+CF) Median	2.19		2.19		9.63		9.72		11.25		11.80		6.05		11.56		
Total Hedge Fund of Funds	0.79		0.79		7.30		3.15		N/A		N/A		N/A		2.58		08/01/2015
HFRI FOF: Diversified Index	0.63		0.63		3.49		3.01		3.16		3.55		2.61		1.73		
Difference	0.16		0.16		3.81		0.14		N/A		N/A		N/A		0.85		
Total Timber Funds	0.00		0.00		-4.04		-1.66		-2.73		N/A		N/A		-1.11		08/01/2012
Total Timber Policy	1.02		1.02		4.00		3.52		6.00		5.97		4.01		6.46		
Difference	-1.02		-1.02		-8.04		-5.18		-8.73		N/A		N/A		-7.57		



	Q	TR	FY	TD	1 ۱	(R	3 `	YR	5`	YR	7	ŕR	10	YR	Ince	ption	Inception Date
Total Domestic Equity	4.81	(57)	4.81	(57)	12.56	(57)	14.85	(51)	10.44	(61)	15.38	(54)	11.86	(40)	9.12	(75)	02/01/1992
Total Domestic Equity Policy	5.32	(52)	5.32	(52)	16.03	(40)	16.81	(31)	12.56	(34)	16.66	(34)	11.98	(38)	10.60	(38)	
Difference	-0.51		-0.51		-3.47		-1.96		-2.12		-1.28		-0.12		-1.48		
IM U.S. Equity (SA+CF+MF) Median	5.44		5.44		13.79		14.92		11.28		15.65		11.30		10.08		
Comerica S&P 500 Index Fund	7.70	(35)	7.70	(35)	17.87	(42)	17.28	(30)	13.92	(43)	16.91	(48)	11.98	(52)	9.01	(61)	04/01/2006
S&P 500 Index	7.71	(34)	7.71	(34)	17.91	(39)	17.31	(30)	13.95	(41)	16.91	(48)	11.97	(53)	8.98	(64)	
Difference	-0.01		-0.01		-0.04		-0.03		-0.03		0.00		0.01		0.03		
IM U.S. Large Cap Core Equity (SA+CF) Median	7.13		7.13		17.25		16.23		13.55		16.86		12.03		9.17		
Champlain MC Equity	8.46	(2)	8.46	(2)	25.62	(6)	N/A		N/A		N/A		N/A		23.55	(6)	08/01/2017
Russell Midcap Index	5.00	(36)		(36)	13.98	(55)	14.52	(64)	11.65	(72)	16.09	(76)	12.31	(80)	13.76	(70)	
Difference	3.46	. ,	3.46		11.64		N/A		N/A		N/A	· · ·	N/A		9.79		
IM U.S. Mid Cap Core Equity (SA+CF) Median	4.37		4.37		14.18		15.61		11.98		16.52		12.68		14.30		
QMA US MC Equity	2.69	(95)	2.69	(95)	10.18	(87)	N/A		N/A		N/A		N/A		11.30	(82)	08/01/2017
Russell Midcap Index	5.00	(36)	5.00	(36)	13.98	(55)	14.52	(64)	11.65	(72)	16.09	(76)	12.31	(80)	13.76	(70)	
Difference	-2.31	. ,	-2.31		-3.80		N/A		N/A		N/A	· · ·	N/A		-2.46		
IM U.S. Mid Cap Core Equity (SA+CF) Median	4.37		4.37		14.18		15.61		11.98		16.52		12.68		14.30		
SouthernSun SC	-0.99	(99)	-0.99	(99)	-2.43	(100)	9.93	(100)	2.66	(100)	11.71	(100)	10.47	(96)	9.69	(94)	04/01/2008
Russell 2000 Index	3.58	(61)		(61)	15.24	` '	17.12	· ,		(75)	16.43	• •	11.11	(85)		• •	
Difference	-4.57		-4.57		-17.67	. /	-7.19		-8.41		-4.72	` '	-0.64	. /	-0.81		
IM U.S. Small Cap Core Equity (SA+CF) Median	3.97		3.97		14.54		17.17		12.20		17.47		12.46		11.36		
Walthausen & Co. SMID Value	3.05	(48)	3.05	(48)	12.44	(31)	14.36	(47)	N/A		N/A		N/A		14.36	(47)	10/01/2015
Russell 2500 Value Index	2.67	(55)	2.67	(55)	10.24	• •	14.51	(46)	9.99	(62)	15.33	(63)	10.53	(87)	14.51	` '	
Difference	0.38		0.38		2.20	. /	-0.15		N/A		N/A	` '	N/A	. /	-0.15		
IM U.S. SMID Cap Value Equity (SA+CF) Median	2.91		2.91		10.09		14.04		10.48		15.98		12.15		14.04		



Comparative Performance

Trailing Returns

As of September 30, 2018

	Q	TR	FY	TD	1	ſR	3 `	YR	5`	YR	7	(R	10	YR	Ince	ption	Inception Date
Total International Equity	2.73	(7)	2.73	(7)	6.32	(11)	13.23	(15)	7.83	(13)	10.55	(18)	7.18	(32)	2.96	(33)	12/01/2007
Total International Equity Policy	1.35	(20)	1.35	(20)	2.74	(28)	9.23	(56)	4.42	(52)	8.30	(48)	5.38	(62)	1.44	(62)	
Difference	1.38		1.38		3.58		4.00		3.41		2.25		1.80		1.52		
IM International Equity (SA+CF+MF) Median	-0.17		-0.17		0.39		9.75		4.48		8.16		5.97		1.94		
SV International LCV	1.80	(21)	1.80	(21)	0.02	(75)	11.04	(29)	5.70	(31)	9.62	(36)	6.55	(51)	4.99	(67)	01/01/2006
MSCI EAFE Index	1.42	(32)	1.42	(32)	3.25	(29)	9.77	(45)	4.90	(50)	8.80	(49)	5.87	(62)	4.63	(84)	
Difference	0.38		0.38		-3.23		1.27		0.80		0.82		0.68		0.36		
IM International Large Cap Value Equity (SA+CF) Median	0.89		0.89		1.51		9.45		4.85		8.74		6.59		5.36		
WCM Focused Growth International	3.68	(4)	3.68	(4)	13.54	(4)	15.95	(8)	10.51	(11)	N/A		N/A		11.40	(16)	11/01/2011
MSCI EAFE (Net) Index	1.35	(35)	1.35	• •		(72)	9.23		4.42	(97)	8.30	(96)	5.38	(97)	6.97	(95)	
Difference	2.33		2.33		10.80		6.72		6.09		N/A		N/A		4.43		
IM International Growth Equity (SA+CF) Median	0.49		0.49		5.00		11.57		6.84		10.50		8.05		9.19		



Comparative Performance Trailing Returns

As of September 30, 2018

	Q	TR	FY	TD	1`	' R	3 `	YR	5	YR	7	(R	10	YR	Ince	ption	Inception Date
Total Fixed Income	0.20	(45)	0.20	(45)	2.03	(2)	5.05	(1)	4.62	(1)	3.99	(5)	N/A		5.32	(23)	03/01/2009
Total Fixed Income Policy	0.02	(83)	0.02	(83)	-1.22	(90)	1.31	(89)	2.16	(90)	2.02	(95)	3.77	(95)	3.59	(92)	
Difference	0.18		0.18		3.25		3.74		2.46		1.97		N/A		1.73		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	0.18		0.18		-0.74		1.84		2.61		2.66		4.60		4.52		
Pacific Fixed Income	0.06	(74)	0.06	(74)	-0.94	(64)	2.03	(37)	2.57	(53)	2.36	(70)	4.21	(73)	5.23	(64)	06/01/1997
Blmbg. Barc. U.S. Aggregate Index	0.02	(83)	0.02	(83)	-1.22	(90)	1.31	(89)	2.16	(90)	2.02	(95)	3.77	(95)	4.95	(93)	
Difference	0.04		0.04		0.28		0.72		0.41		0.34		0.44		0.28		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	0.18		0.18		-0.74		1.84		2.61		2.66		4.60		5.36		
Templeton Global Bond R6 (FBNRX)	1.02	· · /	1.02	• •	-1.94	(67)	N/A		N/A		N/A		N/A		-1.52	(100)	04/01/2017
Blmbg. Barc. Global Multiverse	-0.80	(67)	-0.80	(67)	-1.32	(52)	2.34	(51)	0.95	(66)	1.13	(73)	3.12	(62)	2.12	(28)	
Difference	1.82		1.82		-0.62		N/A		N/A		N/A		N/A		-3.64		
IM Global Fixed Income (MF) Median	-0.39		-0.39		-1.19		2.36		1.39		1.73		3.57		1.48		
Total Real Estate	1.45	(100)	1.45	(100)	7.66	(85)	8.71	(72)	10.26	(81)	N/A		N/A		5.40	(100)	01/01/2012
Total Real Estate Policy	1.67	(85)	1.67	(85)	7.16	(96)	7.75	(88)	9.57	(93)	9.98	(93)	6.42	(16)	9.89	(93)	
Difference	-0.22		-0.22		0.50		0.96		0.69		N/A		N/A		-4.49		
IM U.S. Open End Private Real Estate (SA+CF) Median	2.19		2.19		9.63		9.72		11.25		11.80		6.05		11.56		
AEW Core Property Trust	1.65	(85)	1.65	(85)	8.01	(81)	8.64	(73)	10.10	(84)	N/A		N/A		10.33	(88)	10/01/2012
NCREIF Fund Index-ODCE (VW)	2.09	(60)	2.09	(60)	8.68	(67)	8.80	(70)	10.72	(64)	11.17	(78)	5.58	(66)	11.10	(65)	
Difference	-0.44		-0.44		-0.67		-0.16		-0.62		N/A		N/A		-0.77		
IM U.S. Open End Private Real Estate (SA+CF) Median	2.19		2.19		9.63		9.72		11.25		11.80		6.05		11.66		
Total Hedge Fund of Funds	0.79		0.79		7.30		3.15		N/A		N/A		N/A		2.58		08/01/2015
HFRI FOF: Diversified Index	0.63		0.63		3.49		3.01		3.16		3.55		2.61		1.73		
Difference	0.16		0.16		3.81		0.14		N/A		N/A		N/A		0.85		
Magnitude Institutional	1.05		1.05		5.94		3.56		N/A		N/A		N/A		3.37		08/01/2015
HFRI FOF: Diversified Index	0.63		0.63		3.49		3.01		3.16		3.55		2.61		1.73		
Difference	0.42		0.42		2.45		0.55		N/A		N/A		N/A		1.64		
Titan Masters Int'l Fund	0.52		0.52		8.79		2.72		N/A		N/A		N/A		1.46		08/01/2015
HFRI FOF: Diversified Index	0.63		0.63		3.49		3.01		3.16		3.55		2.61		1.73		
Difference	-0.11		-0.11		5.30		-0.29		N/A		N/A		N/A		-0.27		

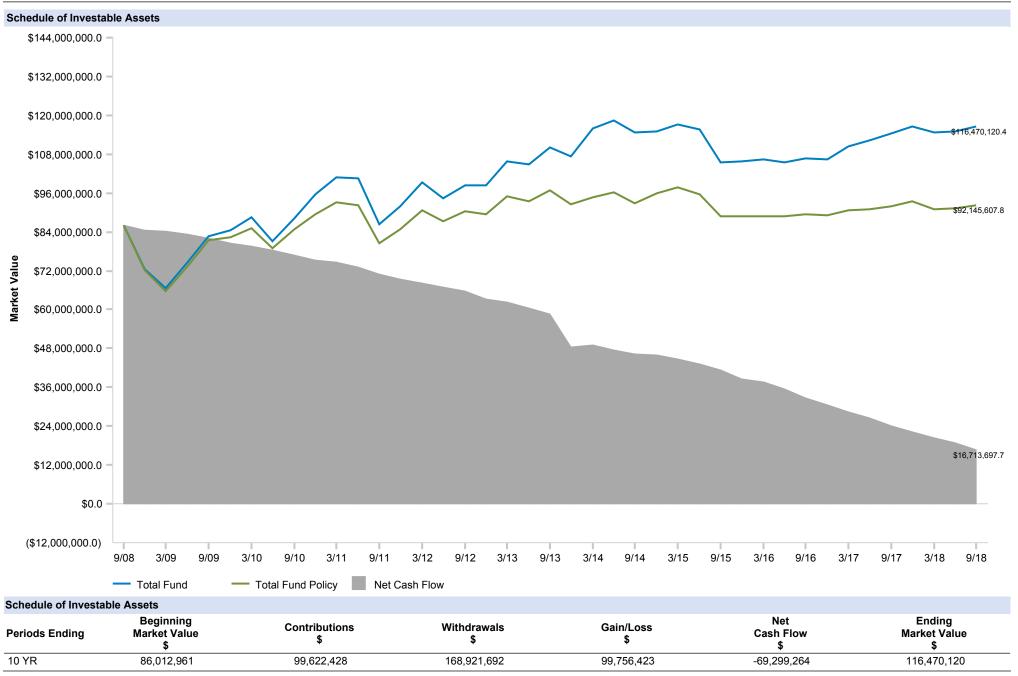


Comparative Performance - IRR

As of September 30, 2018

								,				
Comparative Performance - IRR												
	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	Since Inception Ending Sep-2018	Inception Date				
Bloomfield Capital Income Fund II	0.00	0.00	5.61	8.85	N/A	N/A	9.14	12/22/2014				
Bloomfield Capital Income Fund III	0.00	0.00	6.55	N/A	N/A	N/A	9.24	12/31/2016				
Metropolitan Real Estate V	0.00	0.00	5.33	9.22	11.14	N/A	9.25	11/30/2011				
RMK Timberland US Fund	0.00	0.00	5.21	0.82	1.24	N/A	2.96	10/31/2012				
RMK Timberland Intl Fund	0.00	0.00	-19.12	-5.89	-8.89	N/A	-8.32	11/21/2012				







Plan Sponsor Peer Group Analysis - All Public Plans-Total Fund 16.00 32.00 28.00 14.00 \circ 24.00 \circ 12.00 \circ \circ \circ \circ 20.00 10.00 0 16.00 • • • • \circ 0 8.00 Return Return \circ 12.00 0 6.00 \cap 8.00 0 4.00 0 4.00 0 0 • • 2.00 0 0.00 0 0.00 -4.00 -2.00 -8.00

QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2017	2016	2015	2014	2013
3.06 (54)	3.06 (54)	8.56 (41)	12.11 (8)	11.29 (13)	7.47 (41)	8.02 (43)	Total Fund	17.76 (10)	8.43 (24)	-1.58 (86)	4.92 (86)	24.38 (1)
3.13 (49)	3.13 (49)	8.52 (42)	10.72 (41)	10.74 (25)	8.13 (17)	8.28 (31)	Total Fund Policy	14.48 (68)	9.99 (5)	0.18 (48)	6.66 (53)	20.12 (13)
3.12	3.12	8.15	10.27	10.00	7.23	7.83	Median	15.41	7.31	0.07	6.77	17.01
ance												
	En	ding				1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017		Endin	g		1 Qtr Ending ar-2017
	1.79	(31)	-0	.19 (43)		3.68 (55)	4.02 (13)		3.36	(21)	5.	64 (4)
	2.06	(20)	-C	.56 (72)		3.68 (55)	3.47 (47)		2.78	(65)	3.	83 (80)
und Median	1.42		-C	.28		3.74	3.44		2.97		4.	39
	3.06 (54) 3.13 (49) 3.12 ance	3.06 (54) 3.06 (54) 3.13 (49) 3.13 (49) 3.12 3.12 3.12 ance 1 En Jun 1.79 2.06	3.06 (54) 3.06 (54) 8.56 (41) 3.13 (49) 3.13 (49) 8.52 (42) 3.12 3.12 8.15 ance 1 Qtr Ending Jun-2018 1.79 (31) 2.06 (20)	3.06 (54) 3.06 (54) 8.56 (41) 12.11 (8) 3.13 (49) 3.13 (49) 8.52 (42) 10.72 (41) 3.12 3.12 8.15 10.27 ance I Qtr Ending Jun-2018 1.79 (31) -0 2.06 (20) -0	3.06 (54) 3.06 (54) 8.56 (41) 12.11 (8) 11.29 (13) 3.13 (49) 3.13 (49) 8.52 (42) 10.72 (41) 10.74 (25) 3.12 3.12 8.15 10.27 10.00 ance I Qtr Ending Mar-2018 1.79 (31) -0.19 (43) 2.06 (20) -0.56 (72)	3.06 (54) 3.06 (54) 8.56 (41) 12.11 (8) 11.29 (13) 7.47 (41) 3.13 (49) 3.13 (49) 8.52 (42) 10.72 (41) 10.74 (25) 8.13 (17) 3.12 3.12 8.15 10.27 10.00 7.23 ance I Qtr Ending Mar-2018 Jun-2018 1.79 (31) -0.19 (43) 2.06 (20) -0.56 (72)	3.06 (54) 3.06 (54) 8.56 (41) 12.11 (8) 11.29 (13) 7.47 (41) 8.02 (43) 3.13 (49) 3.13 (49) 8.52 (42) 10.72 (41) 10.74 (25) 8.13 (17) 8.28 (31) 3.12 3.12 8.15 10.27 10.00 7.23 7.83 ance 1 Qtr 1 Qtr Ending Ending Dec-2017 Jun-2018 Mar-2018 Dec-2017 1.79 (31) -0.19 (43) 3.68 (55) 2.06 (20) -0.56 (72) 3.68 (55)	3.06 (54) 3.06 (54) 8.56 (41) 12.11 (8) 11.29 (13) 7.47 (41) 8.02 (43) Total Fund Total Fund Total Fund Total Fund Total Fund 3.13 (49) 3.13 (49) 8.52 (42) 10.72 (41) 10.74 (25) 8.13 (17) 8.28 (31) Total Fund Total Fund Total Fund Total Fund Total Fund Total Fund Total Fund Total Fund Total Fund Total Fund Total Fund Median	3.06 (54) 3.06 (54) 8.56 (41) 12.11 (8) 11.29 (13) 7.47 (41) 8.02 (43) Total Fund Total Fund Policy Total Fund	3.06 (54) 3.06 (54) 8.56 (41) 12.11 (8) 11.29 (13) 7.47 (41) 8.02 (43) 3.13 (49) 3.13 (49) 8.52 (42) 10.72 (41) 10.74 (25) 8.13 (17) 8.28 (31) ● Total Fund 17.76 (10) 8.43 (24) 3.12 3.12 8.15 10.27 10.00 7.23 7.83 Median 15.41 7.31 ance 1 Qtr 1 Qtr Ending Ending Ending Ending Ending Ending Ending Sep-2017 Jun-20 1.79 (31) -0.19 (43) 3.68 (55) 3.47 (47) 2.78	3.06 (54) 3.06 (54) 8.56 (41) 12.11 (8) 11.29 (13) 7.47 (41) 8.02 (43) 3.13 (49) 3.13 (49) 8.52 (42) 10.72 (41) 10.74 (25) 8.13 (17) 8.28 (31) Image: Transform of the text of t	3.06 (54) 3.06 (54) 8.56 (41) 12.11 (8) 11.29 (13) 7.47 (41) 8.02 (43) 3.13 (49) 3.13 (49) 8.52 (42) 10.72 (41) 10.74 (25) 8.13 (17) 8.28 (31) Total Fund T.76 (10) 8.52 (42) (10.27) (10.00) 7.23 7.83 Median 15.41 7.31 0.07 6.77 ance 1 Qtr Ending Jun-2018 1 Qtr Mar-2018 1 Qtr Mar-2018 1 Qtr Dec-2017 1 Qtr Ending Sep-2017 1 Qtr Jun-2017 1 Qtr Mar 1 Qtr Jun-2017 1 Qtr Mar 1.79 (31) -0.19 (43) 3.68 (55) 3.47 (47) 2.78 (65) 3. 2.06 (20) -0.56 (72) 3.68 (55) 3.47 (47) 2.78 (65) 3.

- - - -

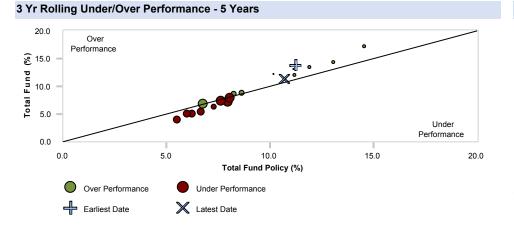
.

.

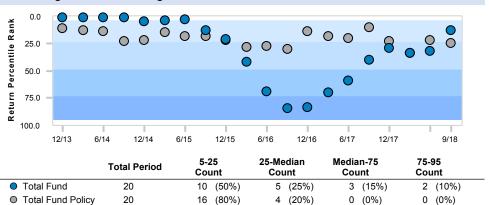
- - --

- - -----

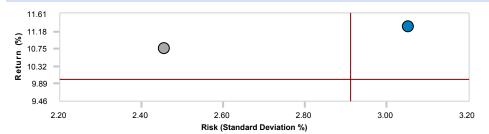




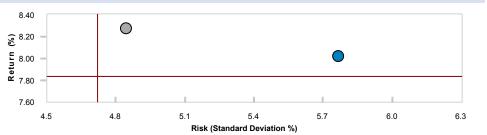
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



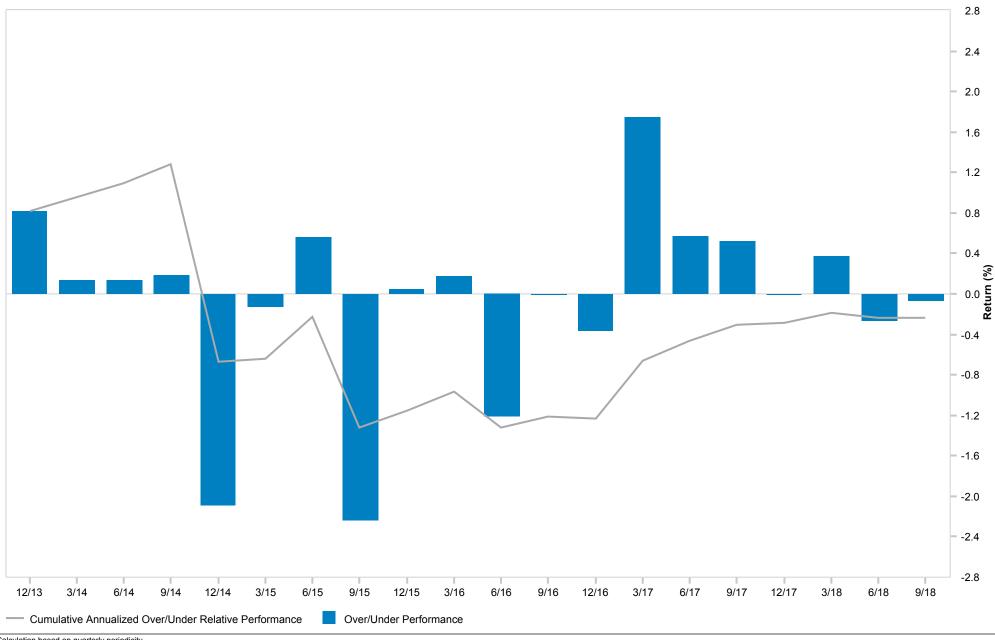
	Return	Standard Deviation		Return	Standard Deviation
Total Fund	11.29	3.05	Total Fund	8.02	5.77
Total Fund Policy	10.74	2.46	Total Fund Policy	8.28	4.85
Median	10.00	2.91	Median	7.84	4.72

Historical Statistics - 3 Years

	e l'eure							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.37	103.77	34.05	-0.68	0.38	3.24	1.12	0.11
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	3.78	1.00	0.33
Historical Statistics	- 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.80	100.09	112.01	-1.33	-0.11	1.30	1.14	3.45
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	1.59	1.00	2.59







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



Comerica S&P 500 - Portfol	lio Description	Comerica S&P 500 - Strategy Details
 Strategy: Vehicle: Objective: Annual fees: Benchmark: 	S&P 500 Index Fund Commingled Fund To replicate the S&P 500 .10% on first \$5M .08% on next \$20M .06% on next \$25M S&P 500 Index	The 500 IndexStrategy 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	Champlian MidCap Equity - Strategy Details

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

QMA Midcap Equity - I	Portfolio Description	QMA Midcap Equity - Strategy Details
Strategy:	US Mid Cap Fore Equity	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
Vehicle:	Commingled Account	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
Objective:	To outperform the Russell Midcap Index	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
Annual fees:	.45% on first \$50MM .40% over \$50M	maintain desired portfolio alpha exposures and risk limits and with careful attention to trading costs.
Benchmark:	Russell Midcap Index	



SouthernSun Smallca	ap Equity - Portfolio Description	SouthernSun Smallcap Equity - Strategy Details
Strategy:	Small Cap	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
Vehicle:	Separately Managed Account	Investment Team relies almost solely on internally conducted research for idea generation. This strategy
Objective:	To outperform the Russell 2000 Index	is generally closed to new investors.
Annual fees:	1.00% on first \$15M 0.85% over \$15M	
Benchmark:	Russell 2000 Index	
Walthausen SMID Va	lue Equity - Portfolio Description	Walthausen SMID Value Equity - Strategy Details
Strategy:	Select Value (SMID)	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
Vehicle:	Separately Managed Account	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
Objective:	To outperform the Russell 2500 Index	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

- Annual fees: 1.00% of Assets •
- Russell 2500 Index • Benchmark:

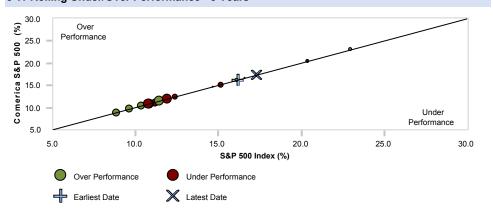
and thus have carried low valuations and lower volatility. The remaining 20% of the fund is invested in "Special Situations." For these stocks a focused approach is utilized to find 8-10 names with unusual potential returns. The goal is for both parts of the strategy to outperform over the market cycle, and to deliver annualized returns 200 basis points above the Russell 2500 Value index.





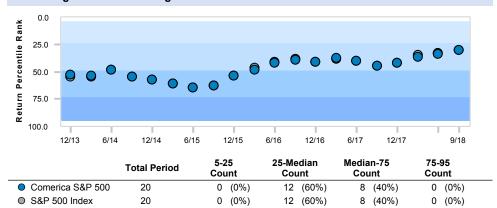
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2017	2016	2015	2014	2013
Comerica S&P 500	7.70 (35)	7.70 (35)	17.87 (42)	18.22 (44)	17.28 (30)	12.54 (41)	13.92 (43)	Comerica S&P 500	21.80 (51)	11.94 (34) 1.44 (50)	13.66 (45)	32.30 (61
S&P 500 Index	7.71 (34)	7.71 (34)	17.91 (39)	18.26 (42)	17.31 (30)	12.55 (40)	13.95 (41)	S&P 500 Index	21.83 (50)	11.96 (34) 1.38 (51)	13.69 (44)	32.39 (59
Median	7.13	7.13	17.25	17.93	16.23	12.23	13.55	Median	21.82	10.52	1.41	13.42	32.98
Comparative Perform	ance												
			1 Qtr Endin Jun-20	g	1 Qtr Endin Mar-20	ng	1 Qtr Ending Dec-2017	1 Qtr Endin Sep-20	g	E	Qtr nding n-2017		1 Qtr Ending Mar-2017
Comerica S&P 500			3.43 ((34)	-0.77	(67)	6.63 (53)	4.48 (58)	3.0	8 (45)	6	6.06 (44)
S&P 500 Index			3.43 ((33)	-0.76	(65)	6.64 (51)	4.48	58)	3.0	9 (44)	6	6.07 (44)
IM U.S. Large Cap Core	Equity (SA+CI	⁼) Median	2.90		-0.43		6.65	4.61		2.9	6	Ę	5.92



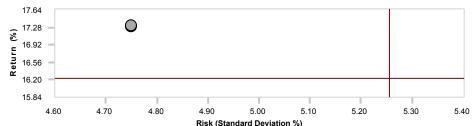


3 Yr Rolling Under/Over Performance - 5 Years

3 Yr Rolling Percentile Ranking - 5 Years

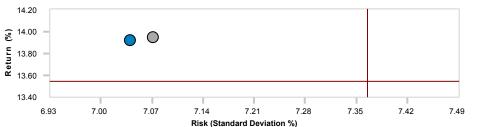


Peer Group Scattergram - 3 Years



	Risk (Standard Deviation %	%)	
	Return	Standard Deviation	
Comerica S&P 500	17.28	4.75	
S&P 500 Index	17.31	4.75	0 :
Median	16.23	5.26	I

Peer Group Scattergram - 5 Years

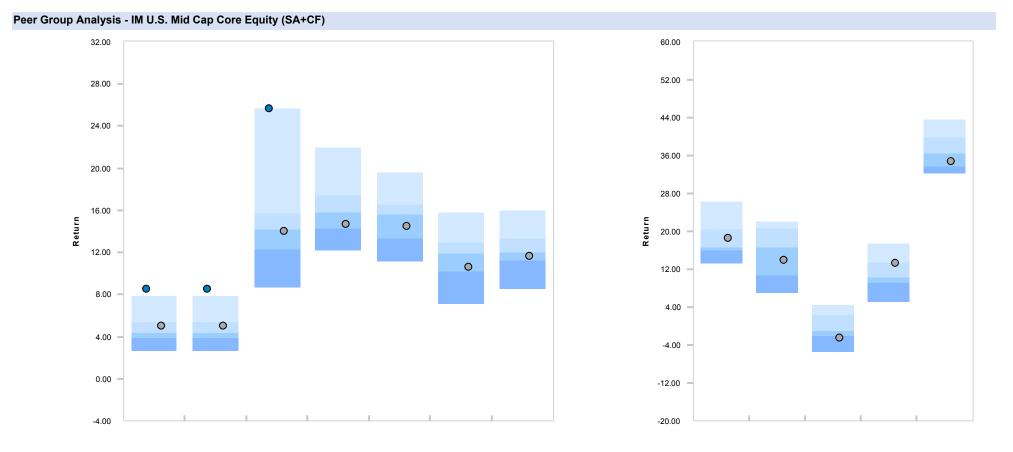


	Return	Standard Deviation
Comerica S&P 500	13.92	7.04
S&P 500 Index	13.95	7.07
Median	13.55	7.37

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Comerica S&P 500	0.02	99.92	100.10	-0.03	-1.45	1.73	1.00	4.11
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	1.73	1.00	4.10
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	99.87	100.03	-0.02	-0.78	1.38	1.00	4.98
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	1.38	1.00	4.98





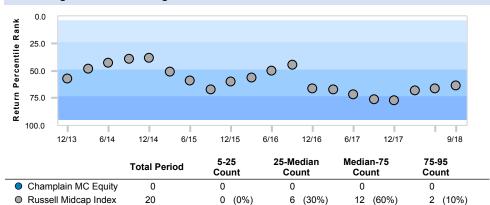
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2017	2016	2015	2014	2013
Champlain MC Equity	8.46 (2)	8.46 (2)	25.62 (6)	N/A	N/A	N/A	N/A	Champlain MC Equity	N/A	N/A	N/A	N/A	N/A
Russell Midcap Index	5.00 (36)	5.00 (36)	13.98 (55)	14.65 (69)	14.52 (64)	10.63 (62)	11.65 (72)	Russell Midcap Index	18.52 (35)	13.80 (61)	-2.44 (82)	13.22 (28)	34.76 (67)
Median	4.37	4.37	14.18	15.79	15.61	11.92	11.98	Median	16.66	16.68	-0.97	10.25	36.49
Comparative Performa	nce												
			1 Qtr Ending Jun-2018		1 Qtr Ending Mar-2018		1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017		1 Qt Endir Jun-20	ıg		1 Qtr Ending ar-2017
Champlain MC Equity			3.95 (43))	4.77 (6)	6.35 (44)	N/A		N/A		١	I/A
Russell Midcap Index			2.82 (59))	-0.46 (4	0)	6.07 (68)	3.47 (49))	2.70	(35)	5.	15 (36)
IM U.S. Mid Cap Core Equ	ity (SA+CF) M	ledian	3.64		-0.76		6.27	3.42		1.98		4.	72



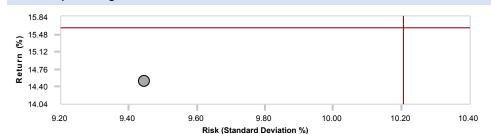
3 Yr Rolling Under/Over Performance - 5 Years

No data found.

3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years

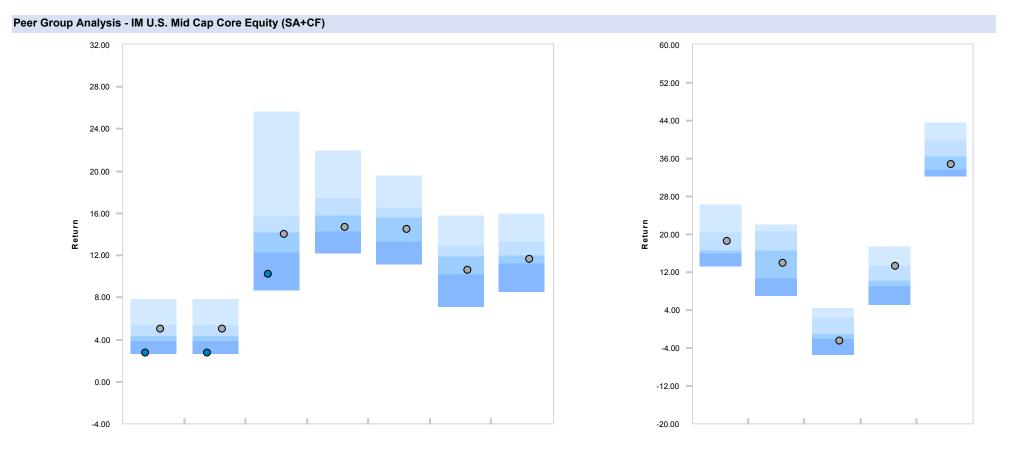


	Return	Standard Deviation		Return	Standard Deviation
Champlain MC Equity	N/A	N/A	Champlain MC Equity	N/A	N/A
Russell Midcap Index	14.52	9.45	Russell Midcap Index	11.65	9.81
Median	15.61	10.21	Median	11.98	10.47

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	1.41	1.00	5.11
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	1.13	1.00	5.49





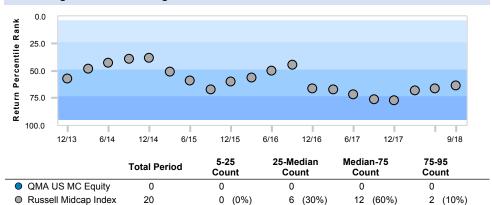
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR			2017	2016	2015	2014	2013
QMA US MC Equity	2.69 (95)	2.69 (95)	10.18 (87)	N/A	N/A	N/A	N/A		QMA US MC Equity	N/A	N/A	N/A	N/A	N/A
Russell Midcap Index	5.00 (36)	5.00 (36)	13.98 (55)	14.65 (69)	14.52 (64)	10.63 (62)	11.65 (72)		Russell Midcap Index	18.52 (35)	13.80 (61) -2.44 (82)	13.22 (28)	34.76 (67)
Median	4.37	4.37	14.18	15.79	15.61	11.92	11.98		Median	16.66	16.68	-0.97	10.25	36.49
Comparative Performa	nce													
			1 Qtr Ending Jun-2018		1 Qtr Ending Mar-2018		1 Qtr Endin Dec-20	g	1 Qtr Ending Sep-2017		1 (Enc Jun-			1 Qtr Ending lar-2017
QMA US MC Equity			2.16 (78))	-1.08 (6	8)	6.18	(65)	N/A		N/A		Ν	I/A
Russell Midcap Index			2.82 (59))	-0.46 (4	0)	6.07	(68)	3.47 (49))	2.70	(35)	5.	15 (36)
IM U.S. Mid Cap Core Equ	uity (SA+CF) N	ledian	3.64		-0.76		6.27		3.42		1.98		4.	72



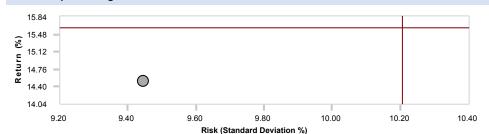
3 Yr Rolling Under/Over Performance - 5 Years

No data found.

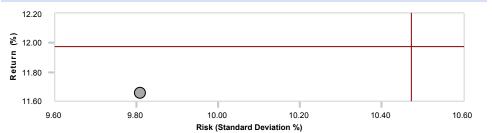
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years

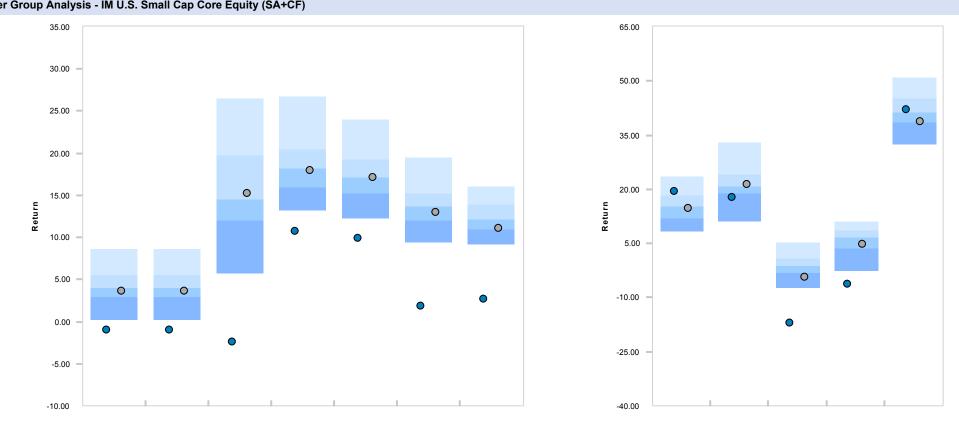


	Return	Standard Deviation		Return	Standard Deviation
QMA US MC Equity	N/A	N/A	QMA US MC Equity	N/A	N/A
Russell Midcap Index	14.52	9.45	Russell Midcap Index	11.65	9.81
Median	15.61	10.21	Median	11.98	10.47

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
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	1.41	1.00	5.11
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
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	1.13	1.00	5.49

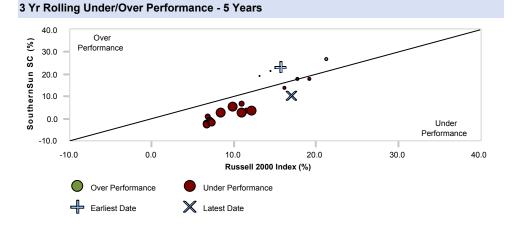




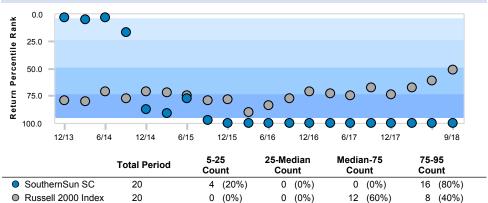
Peer Group Analysis - IM U.S. Small Cap Core Equity (SA+CF)

	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2017	2016	2015	2014	2013
SouthernSun SC	-0.99 (99)	-0.99 (99)	-2.43 (100)	10.69 (99)	9.93 (100)	1.78 (100)	2.66 (100)	SouthernSun SC	19.53 (21)	17.63 (82)	-17.16 (100)	-6.30 (99)	42.13 (45)
Russell 2000 Index	3.58 (61)	3.58 (61)	15.24 (47)	17.96 (54)	17.12 (51)	12.93 (61)	11.07 (75)	Russell 2000 Index	14.65 (57)	21.31 (46)	-4.41 (82)	4.89 (65)	38.82 (73)
Median	3.97	3.97	14.54	18.19	17.17	13.66	12.20	Median	15.13	20.73	-1.35	6.65	41.28
Comparative Performa	ance												
			1 Qtr Ending Jun-201	g	1 Qtr Endin Mar-20	g	1 Qtr Ending Dec-2017	1 Qt Endir Sep-20	g	En	Qtr ding -2017		1 Qtr Ending Iar-2017
SouthernSun SC			3.41 (96)	-6.14 (100)	1.52 (94)	6.67	(27)	1.93	3 (56)	8	.29 (1)
Russell 2000 Index			7.75 ((29)	-0.08 (50)	3.34 (59)	5.67	(47)	2.46	õ (47)	2	.47 (57)
IM U.S. Small Cap Core	Equity (SA+C	F) Median	6.62		-0.13		3.56	5.54		2.28	3	2	.82

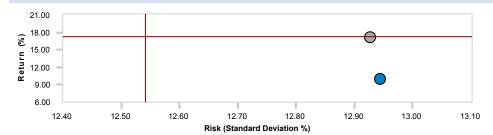




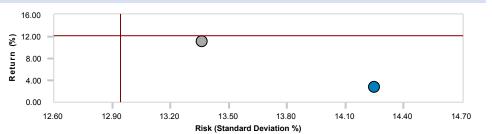
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years

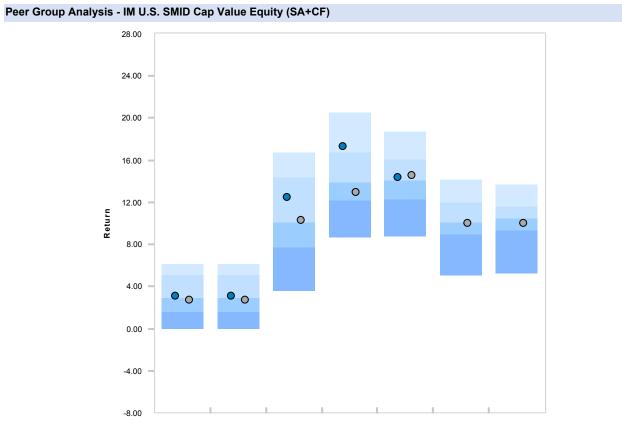


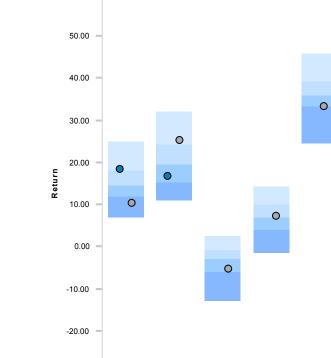
	Return	Standard Deviation		Return	Standard Deviation
SouthernSun SC	9.93	12.94	SouthernSun SC	2.66	14.25
Russell 2000 Index	17.12	12.93	Russell 2000 Index	11.07	13.36
Median	17.17	12.54	Median	12.20	12.94

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
SouthernSun SC	7.33	76.40	102.13	-3.67	-0.87	0.74	0.84	7.05
Russell 2000 Index	0.00	100.00	100.00	0.00	N/A	1.23	1.00	7.11
Historical Statistics -	5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
SouthernSun SC	8.45	72.51	107.68	-6.12	-0.92	0.22	0.87	9.48
Russell 2000 Index	0.00	100.00	100.00	0.00	N/A	0.82	1.00	8.12







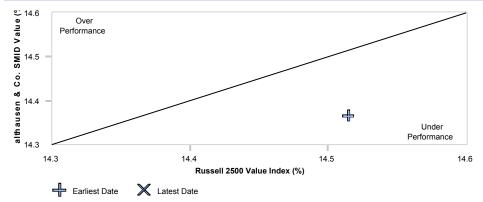
60.00

-30.00

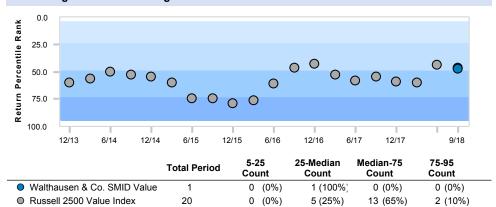
	QTR	FYTD	1 YR	2 YR	3 YR	4 Y	R	5 YF	ર		201	17	2016	2015	2014	4 2013
Walthausen & Co. SMID Value	3.05 (48)	3.05 (48)	12.44 (31)	17.29 (20) 14.36 (4	17) N/A		N/A		Walthausen & Co. SMID Value	18.43	(21) 16	6.63 (68)	N/A	N/A	N/A
Russell 2500 Value Index	2.67 (55)	2.67 (55)	10.24 (48)	12.96 (65	5) 14.51 (4	46) 10.02	(53)	9.99	(62)	Russell 2500 Value Index	10.36	(85) 25	5.20 (24)	-5.49 (69)	7.11 (50) 33.32 (74
Median	2.91	2.91	10.09	13.89	14.04	10.09	1	0.48		Median	14.63	19	0.40	-3.01	7.06	35.78
Comparative Performance																
			1 Qtr Ending Jun-2018		1 Q Endi Mar-2	ng			1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017		E	1 Qtr Inding In-2017			1 Qtr Ending Mar-2017
Walthausen & Co. SMID Value			4.62 (22)		-0.75	(35)		5	.08 (51)	4.35 (40)		3.	74 (10)			4.11 (37)
Russell 2500 Value Index			5.80 (12)		-2.65	(82)		4	.25 (67)	3.83 (59)		0.3	32 (71)			1.62 (80)
IM U.S. SMID Cap Value Equity (SA	+CF) Mediar	n :	3.06		-1.36			5	.14	3.97		1.0	61			3.79



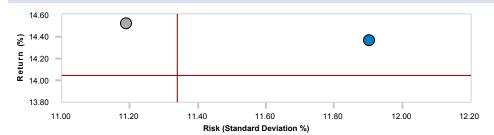




3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



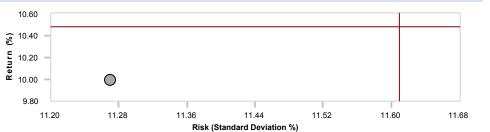
Return

14.36

14.51

14.04

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Walthausen & Co. SMID Value	N/A	N/A
Russell 2500 Value Index	9.99	11.27
Median	10.48	11.61

Historical Statistics - 3 Years

Russell 2500 Value Index

___ Median

Walthausen & Co. SMID Value

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Walthausen & Co. SMID Value	3.85	96.26	90.52	-0.15	-0.01	1.13	1.01	5.86
Russell 2500 Value Index	0.00	100.00	100.00	0.00	N/A	1.20	1.00	5.84

Standard

Deviation

11.90

11.19

11.34

Historical Statistics - 5 Years

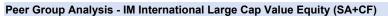
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Walthausen & Co. SMID Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Value Index	0.00	100.00	100.00	0.00	N/A	0.86	1.00	6.57

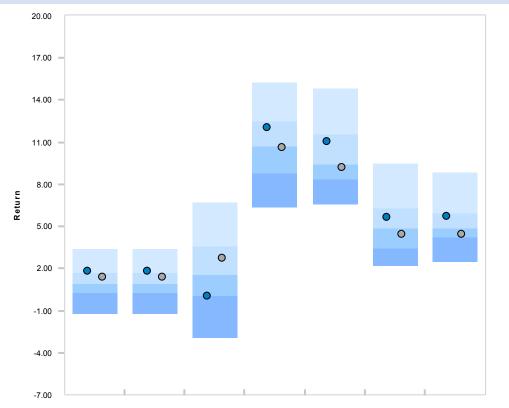


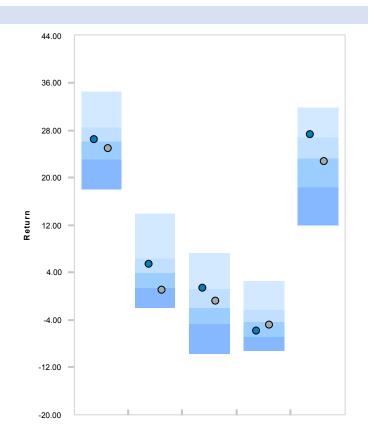
LSV International - Portfolio Description LSV International - Strategy Details The International Large Cap Value Equity strategy's primary emphasis is the use of quantitative International Large Cap Value Equity Strategy: • techniques to select individual securities in what would be considered a bottom-up approach. A risk control discipline limits the over- or under-exposure of the portfolio to industry concentrations. Value Vehicle: Commingled Fund 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 Objective: To outperform the MSCI EAFE Index 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 Annual fees: .75% on first \$25M to a high degree of consistency in the practical application of our investment philosophy. .65% on next \$25M Benchmark: MSCI EAFE Index

WCM Intl Growth - Portfo	lio Description	WCM Intl Growth - Strategy Details				
Strategy:	Focused Growth International	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				
Vehicle:	Separately Managed Account	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				
Objective:	To outperform the MSCI EAFE Index	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				
Annual fees:	1.00% on all assets	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%,				
Benchmark:	MSCI EAFE Index	suggesting tax efficiency for tax-sensitive clients.				



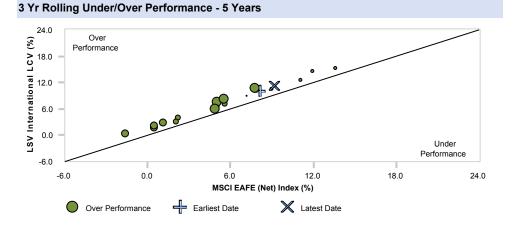




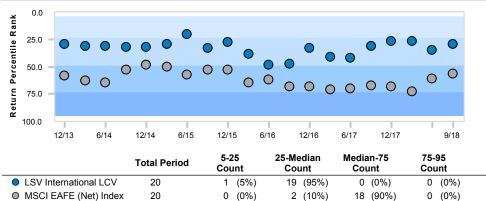


	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2017	2016	2015	2014	2013
LSV International LCV	1.80 (21)	1.80 (21)	0.02 (75)	12.03 (30)	11.04 (29)	5.62 (33)	5.70 (31)	LSV International LCV	26.52 (44)	5.49 (33)	1.32 (24)	-5.80 (6	6) 27.30 (20
MSCI EAFE (Net) Index	1.35 (34)	1.35 (34)	2.74 (32)	10.62 (53)	9.23 (56)	4.46 (60)	4.42 (69)	MSCI EAFE (Net) Index	25.03 (58)	1.00 (80)	-0.81 (39)	-4.90 (6	0) 22.78 (55
Median	0.89	0.89	1.51	10.72	9.45	4.85	4.85	Median	26.13	3.92	-1.91	-4.28	23.25
Comparative Performanc	e												
				1 Qtr Ending un-2018		1 Qtr Ending lar-2018	1 Qt Endi Dec-2	ng Ending		1 Q Endi Jun-2	ing		1 Qtr Ending Mar-2017
LSV International LCV			-3	.84 (85)	-1	.16 (48)	3.38	(74) 7.29 (1	8)	6.70	(33)		6.92 (76)
MSCI EAFE (Net) Index			-1	.24 (21)	-1	.53 (62)	4.23	(50) 5.40 (5	59)	6.12	(47)		7.25 (68)
IM International Large Cap V	alue Equity (S	A+CF) Mediar	ם -2	.21	-1	.26	4.22	5.65		6.01			7.73

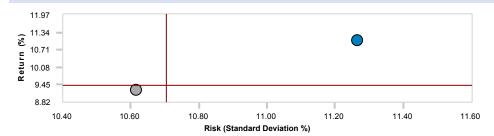




3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



	Return	Standard Deviation		Return	Standard Deviation
LSV International LCV	11.04	11.27	LSV International LCV	5.70	11.66
MSCI EAFE (Net) Index	9.23	10.62	MSCI EAFE (Net) Index	4.42	10.95
Median	9.45	10.70	Median	4.85	11.08

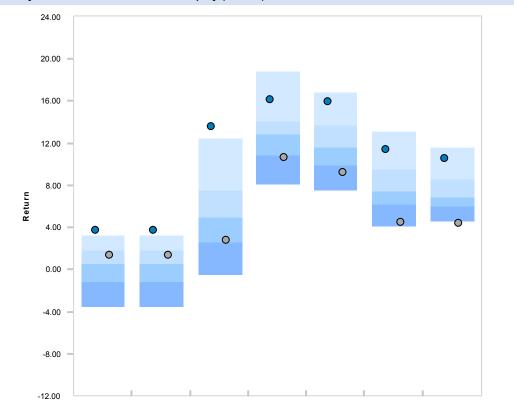
Historical Statistics - 3 Years

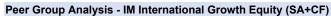
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
LSV International LCV	2.53	107.98	98.88	1.41	0.68	0.92	1.03	6.68
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.81	1.00	6.17

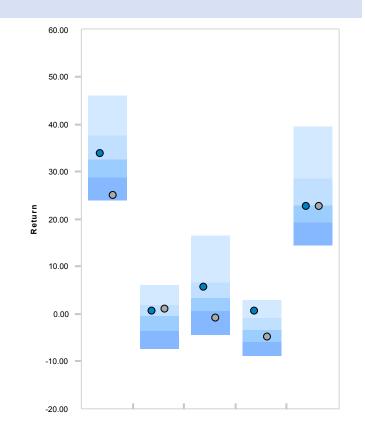
Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
LSV International LCV	2.45	106.64	99.15	1.10	0.53	0.49	1.04	7.41
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.41	1.00	7.13









	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2017	2016	2015	2014	1 20 1	13
WCM Focused Growth Int'l	3.68 (4)	3.68 (4)	13.54 (4)	16.12 (11)	15.95 (8)	11.42 (11)	10.51 (11)	WCM Focused Growth Int'l	33.97 (42	2) 0.70 (40)	5.67 (31) 0.67 ((17) 22.74	(51)
MSCI EAFE (Net) Index	1.35 (35)	1.35 (35)	2.74 (72)	10.62 (79)	9.23 (83)	4.46 (94)	4.42 (97)	MSCI EAFE (Net) Index	25.03 (93	3) 1.00 (34)	-0.81 (86) -4.90 ((66) 22.78	(51)
Median	0.49	0.49	5.00	12.78	11.57	7.41	6.84	Median	32.55	-0.40	3.28	-3.37	22.87	
Comparative Performance														
			1 Qtr Ending Jun-2018		1 Qtr Ending Mar-2018		1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017		1 Qtr Ending Jun-2017			1 Qtr Ending Mar-2017	
WCM Focused Growth Int'l			2.70 (8)		1.35 (2	7)	5.20 (55)	5.26 (81)		9.08 (29	9)		10.91 (13	3)
MSCI EAFE (Net) Index			-1.24 (59)		-1.53 (8	5)	4.23 (74)	5.40 (79)		6.12 (89	9)		7.25 (86	i)
IM International Growth Equity	(SA+CF) Med	ian	-0.96		0.16		5.27	7.29		7.83			8.86	



Standard

Deviation

10.62

10.95

10.97

3 Yr Rolling Under/Over Performance - 5 Years **NCM Focused Growth Int'l (%)** 18.0 0.0 0.0 0.0 0.0 Over Performance • * ┛ ô 8^{0 8} 0 Under Performance 12.0 0.0 6.0 18.0 -6.0 24.0 MSCI EAFE (Net) Index (%) 🗙 Latest Date \bigcirc 4 Earliest Date Over Performance

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
WCM Focused Growth Int'l	15.95	9.81
MSCI EAFE (Net) Index	9.23	10.62
Median	11.57	10.92

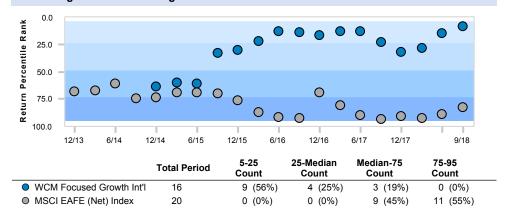
Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
WCM Focused Growth Int'l	6.15	91.76	29.19	8.53	0.97	1.49	0.76	5.27
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.81	1.00	6.17

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	5.51	94.49	48.83	6.63	1.03	0.95	0.84	6.32
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.41	1.00	7.13

3 Yr Rolling Percentile Ranking - 5 Years





Risk (Standard Deviation %)

Return

10.51

4.42

6.84

Peer Group Scattergram - 5 Years

WCM Focused Growth Int'l

MSCI EAFE (Net) Index

___ Median

	C
X	V C

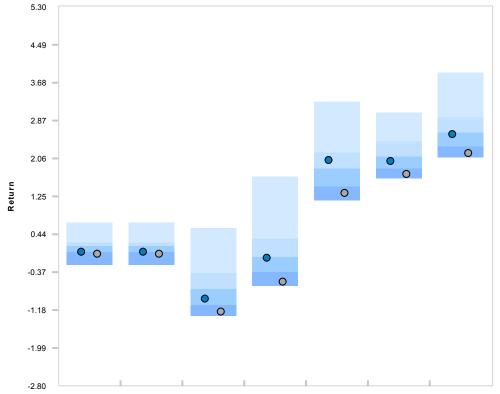
Page Intentionally Left Blank

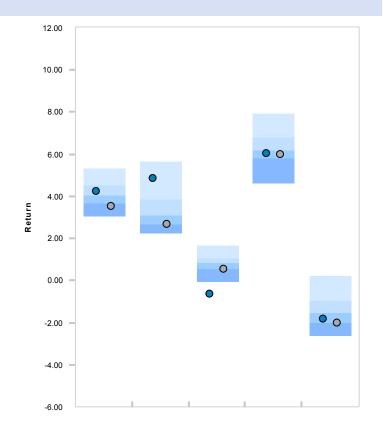


Pacific Moderate Duration	- Portfolio Description	Pacific Moderate Duration - Strategy Details
Strategy:	Moderate Duration	The Moderate Duration product is a core bond strategy that seeks to outperform the Barclays Capital Aggregate Index on both an absolute and risk-adjusted basis over a full market cycle. The Moderate Duration product invests in U.S. Government securities, mortgage-backed securities, corporate debt
Vehicle:	Separately Managed Account	securities and asset-backed securities. The product maintains duration of between 3.0 to 7.0 years and is
Objective:	To outperform the Bloomberg Barclays US Aggregate Index	generally within one year of the index.
Annual fees:	.30% on all assets	
Benchmark:	Bloomberg Barclays US Aggregate Index	





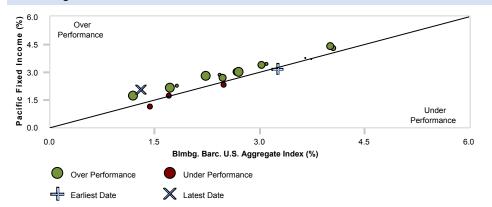




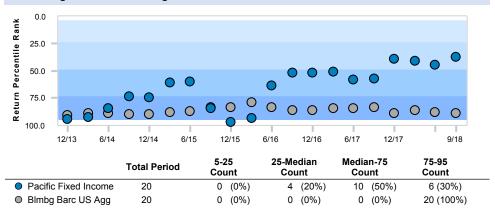
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2017	2016	2015	2014	2013
Pacific Fixed Income	0.06 (74)	0.06 (74)	-0.94 (64)	-0.07 (51)	2.03 (37)	2.00 (58)	2.57 (53)	Pacific Fixed Income	4.24 (35)	4.86 (9)	-0.65 (98)	6.02 (64)	-1.84 (65)
Blmbg Barc US Agg	0.02 (83)	0.02 (83)	-1.22 (90)	-0.57 (92)	1.31 (89)	1.72 (90)	2.16 (90)	Blmbg Barc US Agg	3.54 (84)	2.65 (76)	0.55 (74)	5.97 (68)	-2.02 (74)
Median	0.18	0.18	-0.74	-0.06	1.84	2.10	2.61	Median	4.06	3.10	0.82	6.17	-1.56
Comparative Performa	ince												
				1 Qtr Ending Jun-2018		1 Qtr Ending Mar-2018	1 (End Dec-	ling End	Qtr ling 2017	E	1 Qtr nding n-2017		1 Qtr Ending Mar-2017
Pacific Fixed Income				-0.22 (90)		-1.42 (60)	0.64	(20) 1.00	(99)	1.4	5 (76)	1	1.08 (32)
Blmbg. Barc. U.S. Aggreg	ate Index			-0.16 (74)		-1.46 (68)	0.39	(80) 0.85	(99)	1.4	5 (76)	().82 (78)
IM U.S. Broad Market Co	re Fixed Incom	e (SA+CF) Me	dian	-0.09		-1.37	0.51	1.54		1.5	4	().94



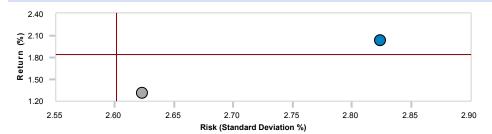
3 Yr Rolling Under/Over Performance - 5 Years



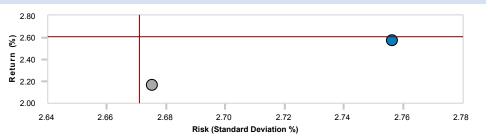
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



	Return	Standard Deviation		Return	Standard Deviation
Pacific Fixed Income	2.03	2.82	Pacific Fixed Income	2.57	2.76
Blmbg Barc US Agg	1.31	2.62	Blmbg Barc US Agg	2.16	2.68
Median	1.84	2.60	Median	2.61	2.67

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Pacific Fixed Income	1.12	117.02	99.52	0.73	0.64	0.44	0.99	1.79
Blmbg. Barc. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	0.20	1.00	1.81
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	106.58	96.69	0.47	0.42	0.75	0.97	1.60
Blmbg. Barc. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	0.62	1.00	1.62



AEW Core Property - Portfolio Description

AEW Core Property - Strategy Details

Strategy:Core Property TrustVehicle:Open Ended Commingled Real Estate FundObjective:To outperform the NCREIF ODCE IndexAnnual fees:1.10% on all assetsBenchmark:NCREIF ODCE Index

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.







Bloomfield Income Fund - Portfolio Description		Bloomfield Income Fund - Strategy Details
Strategy:	Bloomfield Capital Income Fund II	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
Objective:	To provide an absolute return in excess of 9%	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,
Annual fees:	2.00% on Committed Capital	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 porfolio management team implements conservative underwriting techniques to provide a margin of safety.

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

RMK Timber - Portfolio Description

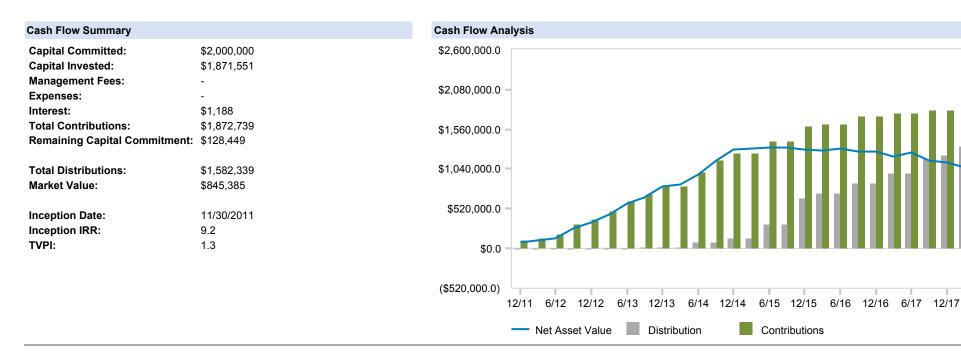
•	Strategy:	RMK Global Timberland Resources US Fund RMK Global Timberland Resources Intl Alternative Investment
•	Objective:	To outperform the NCREIF Timberland Index
•	Management fees:	US Fund: 1.00% Intl Fund: 1.25%
•	Performance Fee:	US Fund: 20% (6% Hurdle) Intl Fund: 20% (10% Hurdle)

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 diversity the portfolio by growth stage/maturity of the forests, geographic locations (50% US exposure / 50% International exposure), and species.



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		



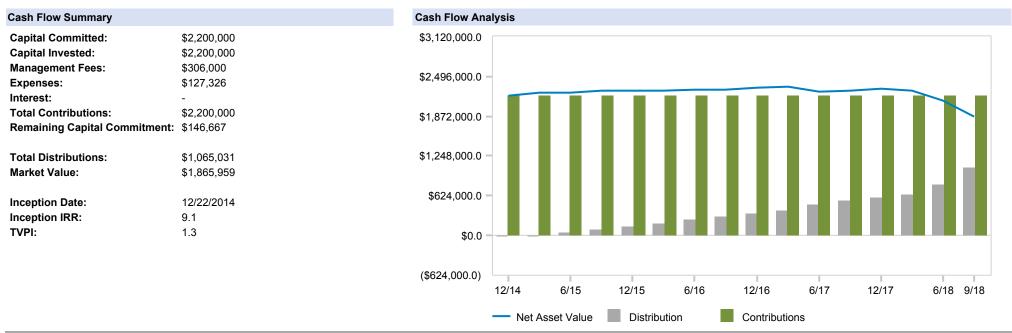


9/18

Fund Information			
Type of Fund:	Direct	Vintage Year:	2011
Strategy Type:	Other	Management Fee:	2.00%
Target IRR:	9.00%	Inception:	11/13/2011
General Partner:	Bloomfield Capital Partners, LLC		

Investment Strategy: 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.

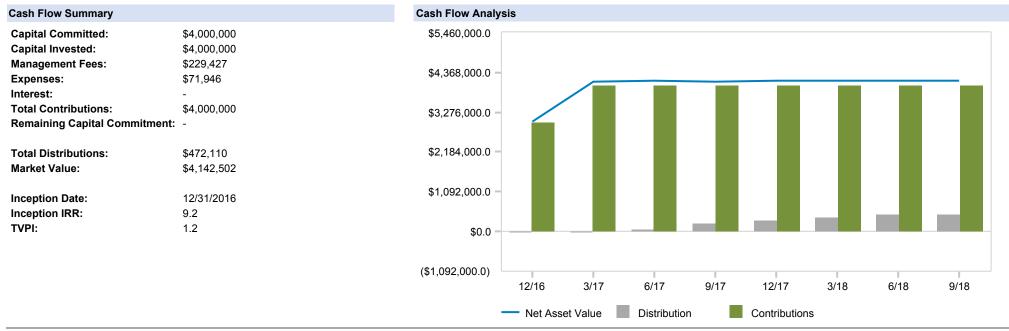




Fund Information			
Type of Fund:	Direct	Vintage Year:	2015
Strategy Type:	Other	Management Fee:	2.00%
Target IRR:	8.00%	Inception:	11/01/2015
General Partner:	Bloomfield Capital Partners, LLC		

Investment Strategy: 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.





Benchmark History Investment Policy Benchmarks As of September 30, 2018

Total Fund Policy		Total Domestic Equity Policy	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-1985		Jan-1985	
S&P 500 Index	20.50	S&P 500 Index	40.00
S&P MidCap 400 Index	16.00	S&P MidCap 400 Index	32.00
Russell 2000 Index	14.00	Russell 2000 Index	28.00
MSCI EAFE (Net) Index	15.00		
Blmbg. Barc. U.S. Aggregate Index	30.00		
NCREIF Fund Index-ODCE (VW)	4.50		
Jan-2017			
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	Total International Equity Policy	
Blmbg. Barc. Global Multiverse	2.00	Allocation Mandate	Weight (%)
NCREIF Fund Index-ODCE (VW)	6.00	Jan-1970	
HFRI FOF: Diversified Index	5.00	MSCI EAFE (Net) Index	100.00
NCREIF Timberland Index	3.50		

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

Total Real Estate Policy		Total Timber Policy	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-1978		Apr-1987	
NCREIF Property Index	100.00	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.



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Comerica S&P 500 Index Fund	0.08	25,610,824	21,766	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	8,616,335	73,239	0.85 % of Assets
QMA US MC Equity	0.00	7,745,397	349	0.00 % of Assets
SouthernSun SC	1.00	12,161,447	121,614	1.00 % of First \$15 M 0.85 % Thereafter
Walthausen & Co. SMID Value	0.93	6,234,003	57,989	0.95 % of First \$5 M 0.85 % of Next \$20 M 0.75 % of Next \$25 M 0.65 % Thereafter
Total Domestic Equity	0.46	60,368,006	274,957	
WCM Focused Growth International	0.75	9,847,645	73,857	0.75 % of Assets
LSV International LCV	0.75	9,880,807	74,106	0.75 % of First \$25 M 0.65 % of Next \$25 M 0.55 % of Next \$50 M 0.45 % Thereafter
Total International Equity	0.75	19,728,452	147,963	
Pacific Fixed Income	0.30	9,958,682	29,876	0.30 % of Assets
Templeton Global Bond R6 (FBNRX)	0.51	3,217,690	16,410	0.51 % of Assets
Bloomfield Capital Income Fund II	2.00	1,865,959	37,319	2.00 % of Assets
Bloomfield Capital Income Fund III	2.00	4,142,502	82,850	2.00 % of Assets
Total Fixed Income	0.87	19,184,833	166,455	
AEW Core Property Trust	1.25	6,747,827	84,348	1.25 % of Assets
Metropolitan Real Estate V	1.00	845,385	8,454	1.00 % of Assets
Total Real Estate	1.22	7,593,212	92,802	
Magnitude Institutional	1.00	2,776,336	27,763	1.00 % of Assets
Titan Masters Int'l Fund	0.75	2,617,309	19,630	0.75 % of Assets
Total Hedge Fund of Funds	0.88	5,393,645	47,393	
RMK Timberland US Fund	1.00	1,974,043	19,740	1.00 % of Assets
RMK Timberland Intl Fund	1.25	931,448	11,643	1.25 % of Assets
Total Timber Funds	1.08	2,905,491	31,384	
Cash		1,296,480	-	



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Fund	0.65	116,470,120	760,955	



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



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

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

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

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

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

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

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

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

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

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





Putting clients first.

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

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