

Investment Performance Review  
Period Ending December 31, 2022

## **Southfield Employee Retirement System**

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On behalf of everyone at AndCo, we want to Thank You for the opportunity to serve you and for the trust you place in us! We take our role as your consultant and trusted advisor seriously and will continue working hard to maintain your confidence.

Looking back at the year, we would like to provide a brief update on where we stand as a firm. 2022 marked the 22nd straight year of revenue growth for the firm and we advise on approximately \$90 billion in client assets as of December 31st. We reinvested 100% of our net profits back into the organization so we can continue to evolve and adapt within a market environment that is constantly changing and challenging. As we have stated in previous updates, we do not believe the “status quo” is an effective strategy and we are convicted in our belief that a firm not focused on moving forward in our industry is moving backward.

To execute on our commitment to evolve and continue to enhance the organization, we made additional personnel and technology investments in 2022. Specifically, we hired a Chief Information Officer (Bharat Kumta) after a national search led by a specialized executive recruiting firm. We believe technology is going to drive successful firms in our industry and we plan to invest heavily within this business function to support digital transformation. We also integrated a new Chief Human Resources Officer (Stacie Runion) through a national search led by an executive recruiter. We believe our firm's most important asset is our people, so we need to ensure we have the right leadership team in HR to focus on that asset. We also hired team members in Finance, Human Resources, Consulting, Research, Solutions & Growth, Technology and Performance & Reporting. These personnel investments focused on further enhancing functional areas, departmental service levels, and narrowing potential gaps. We also continued to invest in our proprietary software system to compile and share information firmwide to better serve our clients more effectively and efficiently. Finally, we engaged several outside consulting firms to help us better assess and invest in areas within our firm we believe will drive value for our clients going forward. Some examples include working with an outside group to evaluate and enhance our Operational Due Diligence efforts with investment managers and a separate group to help us review and analyze our current Discretionary Services offerings and how to make this service stronger for our clients.

As we start 2023, we are 93 team members strong with plans to grow. We are targeting several new positions for the year as we thoughtfully continue to invest in our firm to provide the quality services you expect from AndCo. These talent enhancements cover multiple functions and departments at AndCo including Consulting, Research, Performance & Reporting, Marketing, Technology and Compliance. While adding additional resources to a firm our size is a significant investment, it is one we embrace due to the impact we believe it will have on our ability to continue serving our clients at a high level and will push us closer to our vision of being a transformational organization viewed as the leader in our industry. We thoughtfully grow while helping to ensure that service will not suffer at AndCo at the expense of growth. Rather, we utilize growth to enhance our value proposition and overall service to our valued clients.

At the beginning of each year, we also discuss the AndCo partnership and, when earned, announce new partners.

This year I am thrilled to share three new team members were named partners at AndCo – Jon Breth, Tyler Grumbles and Brooke Wilson. Jon has been with AndCo for 11-years and Tyler has been with AndCo for 15-years. Jon and Tyler are both members of our Consulting Department. Brooke was recently promoted to Executive Director of our Performance & Reporting Department and has been with AndCo 7-years. We could not be happier for Jon, Tyler, and Brooke or more grateful for the contributions they have made to AndCo since joining the firm. Jon, Tyler, and Brooke represent what it means to be an AndCo team member, and we are honored and fortunate to have them as partners at our firm.

While three new members will be added to the partnership in 2023, we will also be losing one valuable team member. Donna Sullivan retired on December 31, 2022. Donna joined AndCo at its inception in September of 2000. Donna has been integral in the success of the firm and for many years was the glue that held everything together. Her contributions and sacrifices are too many to reference in this letter. While we are extraordinarily excited for her and the next chapter of her life, she will be greatly missed as a partner and team member. We will be honoring Donna and her legacy with the Donna Sullivan Believe Award. This award will be given each year to the team member at AndCo that best demonstrates their belief in AndCo's Mission, Vision, and Values. Donna believed in what AndCo stood for before anyone else did, and she carried that belief for 23 years. Thank you, Donna!

With the addition of Jon, Tyler, and Brooke, and Donna's retirement, we now have 15 partners representing various functions and departments at AndCo. Our growing partnership group provides great perspective and insight which continues to strengthen AndCo and reaffirm our belief that 100% employee management is vital to the long-term success of our organization. We have great team members at AndCo and this partnership group will continue to expand as we move forward.

In closing, we know that 2022 was a dramatically different environment for investing as compared to 2021, with record high inflation and double-digit losses in both equity AND fixed income assets - all resulting in challenging client portfolio results. Please know our team works tirelessly to provide the advice and guidance you need regardless of the market environment. Our name, AndCo, reminds us of who we work for every day - “Our Client” &Co. You are first in our service model. As we continue to discuss strategic decisions and reinvestments regarding our firm, please know that our decisions are filtered through the following question: “How does this keep our clients' interests first?” If it doesn't meet this standard, we don't do it - it's that simple.

Thank you again for your valued partnership and the opportunity to serve you.  
Happy New Year!



Mike Welker, CFA®  
CEO



# Organizational Chart



## PARTNERSHIP

**Mike Welker, CFA®**  
**Brian Green**  
**Brooke Wilson, CIPM®**  
**Bryan Bakardjiev, CFA®**  
**Dan Johnson**  
**Dan Osika, CFA®**  
**Evan Scussel, CFA®, CAIA®**  
**Jacob Peacock, CPFA**

**Jason Purdy**  
**Jon Breth, CFP®**  
**Kerry Richardville, CFA®**  
**Kim Spurlin, CPA**  
**Steve Gordon**  
**Troy Brown, CFA®**  
**Tyler Grumbles, CFA®, CIPM®, CAIA®**

## LEADERSHIP & MANAGEMENT

**Mike Welker, CFA®**  
 CEO

**Bharat Kumta**  
 CIO

**Bryan Bakardjiev, CFA®**  
 COO

**Evan Scussel, CFA®, CAIA®**  
 Executive Director of Research

**Kim Spurlin, CPA**  
 CFO

**Sara Searle**  
 CCO

**Stacie Runion**  
 CHRO

**Steve Gordon**  
 Solutions & Growth Director

**Troy Brown, CFA®**  
 Executive Director of Consulting

**Brooke Wilson, CIPM®**  
 Executive Director of Performance Reporting

**Dan Johnson**  
 Consulting Director

**Jack Evatt**  
 Consulting Director

**Jacob Peacock, CPFA**  
 Consulting Director

**Jason Purdy**  
 I.T. Director

**Molly Halcom**  
 Solutions & Growth Director

**Philip Schmitt**  
 Research Director

**Rachel Brignoni, MHR**  
 People & Culture Director

## INVESTMENT POLICY COMMITTEE

**Bryan Bakardjiev, CFA®**  
**Mike Welker, CFA®**

**Sara Searle**  
**Troy Brown, CFA®**

## CONSULTING

**Annette Bidart**  
**Brad Hess, CFA®, CPFA**  
**Brendon Vavrica, CFP®**  
**Brian Green**  
**Chris Kuhn, CFA®, CAIA®**  
**Christiaan Brokaw, CFA®**  
**Dave West, CFA®**  
**Doug Anderson, CPFA**  
**Frank Burnette**  
**Gwelda Swilley**  
**Ian Jones**

**James Ross**  
**Jeff Kuchta, CFA®, CPFA**  
**Jennifer Brozstek**  
**Jennifer Gainfort, CFA®, CPFA**  
**John Mellinger**  
**John Thinnis, CFA®, CAIA®, CPFA**  
**Jon Breth, CFP®**  
**Jorge Friguls, CPFA**  
**Justin Lauver, Esq.**  
**Kerry Richardville, CFA®**

**Mary Nye**  
**Michael Fleiner**  
**Michael Holycross**  
**Mike Bostler**  
**Oleg Sydyak, CFA®, FSA, EA**  
**Paul Murray, CPFA**  
**Peter Brown**  
**Tim Walters**  
**Tony Kay**  
**Tyler Grumbles, CFA®, CIPM®, CAIA®**

## PERFORMANCE REPORTING

**Albert Sauerland**  
**Amy Steele**  
**Bob Bulas**  
**David Gough, CPFA**  
**Don Delaney**  
**Donnell Lehrer, CPFA**

**Edward Cha**  
**Grace Niebrzydowski**  
**James Culpepper**  
**James Reno**  
**Jeff Pruniski**  
**Joe Carter, CPFA**

**Julio Garcia Rengifo**  
**Kim Hummel**  
**Rotchild Dorson**  
**Yoon Lee-Choi**

## OPERATIONS

**FINANCE**  
**Kahjeelia Pope**  
**Michelle Boff**  
**Robert Marquetti**

**HUMAN RESOURCES**  
**Kelly Pearce**  
**Shelley Berthold**

**I.T. & OPERATIONS**  
**Geoffrey Granger**  
**Jerry Camel**  
**Kenneth Day**

**COMPLIANCE**  
**Allen Caldwell**  
**Thay Arroyo**

**MARKETING**  
**Lauren Kaufmann**

**SOLUTIONS & GROWTH**  
**Dan Osika, CFA®**  
**John Rodak, CIPM®**  
**Paola Gervasi**

## RESEARCH

**Andrew Mulhall**  
 Public Equity & Fixed Income

**Ben Baldrige, CFA®, CAIA®**  
 Private & Hedged Fixed Income

**Chester Wyche**  
 Real Estate & Real Assets

**Dan Lomelino, CFA®**  
 Fixed Income

**David Julier**  
 Real Estate & Real Assets

**Elizabeth Wolfe**  
 Capital Markets & Asset Allocation

**Evan Scussel, CFA®, CAIA®**  
 Private & Public Equity

**Joseph Ivaszuk**  
 Operational Due Diligence

**Josue Christiansen, CFA®, CIPM®**  
 Public Equity

**Julie Baker, CFA®, CAIA®**  
 Private & Hedged Equity

**Justin Ellsesser, CFA®, CAIA®**  
 Private Equity

**Kevin Laake, CFA®, CAIA®**  
 Private Equity

**Michael Kosoff**  
 Hedge Funds

**Philip Schmitt**  
 Fixed Income & Capital Markets

**Ryan McCuskey**  
 Real Estate & Real Assets

**Xinxin Liu, CFA®, FRM**  
 Private Equity and Private Debt

**Zac Chichinski, CFA®, CIPM®**  
 Public Equity



93  
EMPLOYEES

37 ADVANCED  
DEGREES

23 CFA®

8 CAIA®

11 CPFA 5 CIPM®

Employee counts are as of 1/1/2023 and reflect only full time employees and do not include any who are part time, temporary or independent contractors.



## 4th Quarter 2022 Market Environment



## The Economy

- US GDP growth is expected to remain strong in the 4th quarter. While the final measure of 3rd quarter GDP was revised upward to 3.2%, global GDP growth remains challenged with higher energy prices continuing to act as a headwind, especially in Europe. However, China is beginning the process of reopening its economy which should boost emerging markets.
- The US Federal Reserve Bank (the Fed) continued to increase interest rates during the quarter with a 0.75% increase in November and a 0.50% increase in December. Importantly, the Fed signaled it remains committed to fighting inflation through additional rate hikes if needed.
- The US labor market continued to show its resiliency by adding roughly 680 thousand jobs during the 4th quarter. As a result, the unemployment rate fell to 3.5% in December. Despite these gains, the number of announced layoffs during the quarter increased, which could impact labor markets in the future periods.
- Global markets were broadly positive during the 4th quarter. Despite persistent inflation, tighter central bank monetary policy, slowing GDP growth, and continuing geopolitical risks investors were focused on the potential of central banks slowing the pace of tightening as inflation moderated.

## Equity (Domestic and International)

- US equities moved higher during the 4th quarter despite concerns regarding inflation, the potential for higher interest rates, and a slowing global GDP growth. Large cap value was the best performing domestic segment of the equity market relative to other US market capitalizations and styles during the period while large cap growth performed the worst.
- International stocks also experienced strong returns during the 4th quarter. While local currency performance was solid, the primary catalyst for outsized returns was a weakening USD, which fell against most major and emerging market currencies. GDP growth, especially in Europe, remained under pressure as central bank policies remained restrictive and elevated energy prices acted as a headwind. Finally, China began to relax its zero-tolerance policy regarding Covid-19, which positively contributed to both global GDP growth and equity market performance.

## Fixed Income

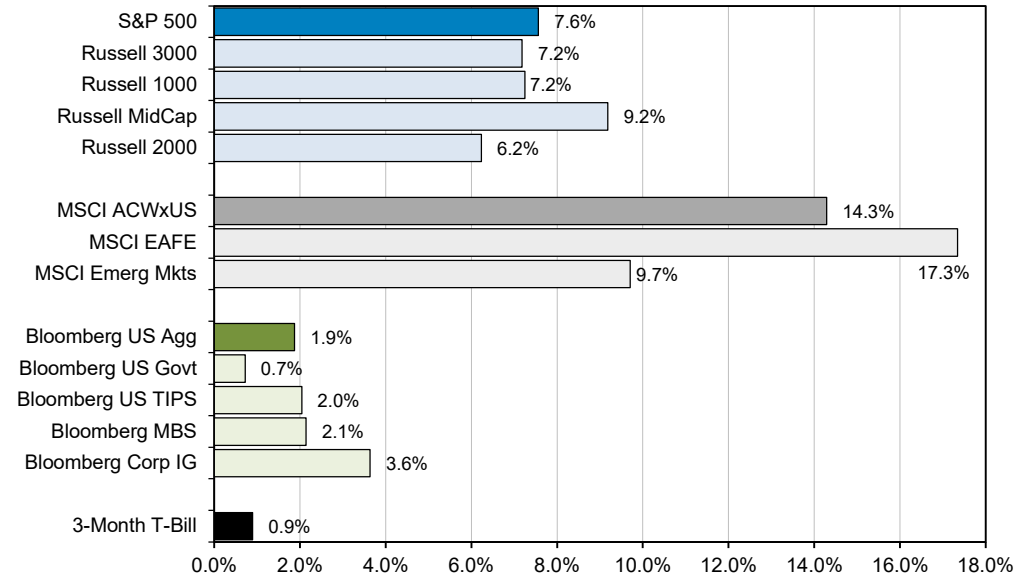
- While inflation declined during the 4th quarter, the Fed continued increasing interest rates with two increases totaling 1.25%. Despite the short-term increases, long-term interest rates remained relatively stable during the period. US interest rates moved slightly higher during the quarter with the US 10-Year Treasury bond rising 0.08% to close the year at a yield of 3.88%.
- Performance across domestic bond market sectors was positive during the quarter, led by US high yield and corporate investment grade bonds. Much like equities, global bonds outperformed their domestic peers mainly due to a weaker USD.
- The combination of higher coupons, a shorter maturity profile relative to high quality government bonds, and narrower credit spreads were the primary drivers of relative return during the period.
- US Treasury bonds lagged their corporate bond peers during the quarter as investors' concerns about rising interest rates and the need for safety subsided.

## Market Themes

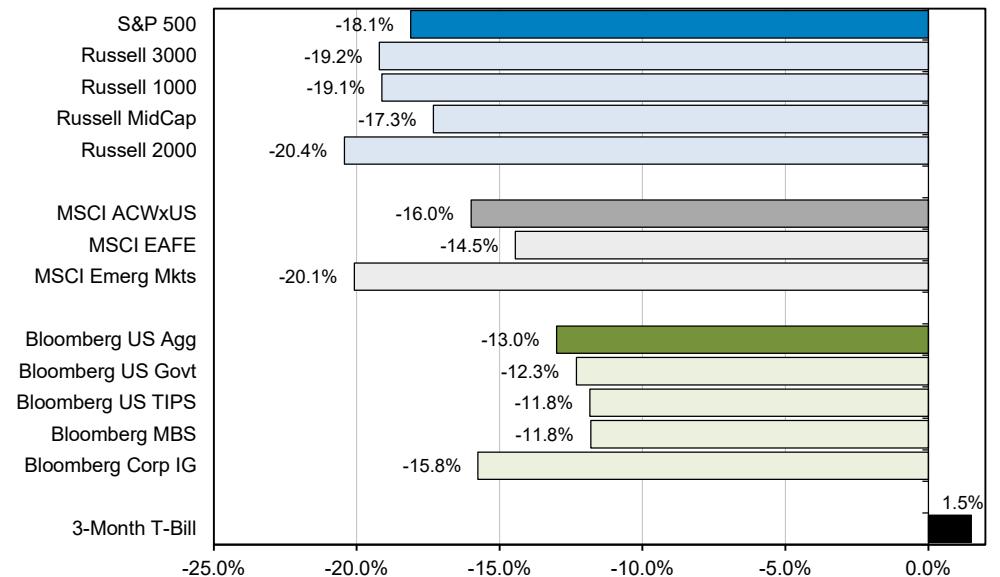
- Central banks remained vigilant in their fight against inflation with the Fed, the Bank of England, and the European Central Bank all raising interest rates during the quarter. Additionally, the Bank of Japan relaxed their targeting of interest rates, allowing the 10-Year Japanese Government Bond to float to 0.50%, above the previous 0.25% level.
- The conflict in Ukraine continues to disrupt global energy markets, in addition to the ongoing humanitarian crisis. Energy costs remain elevated which could further negatively impact economic growth.
- Both US and international equity markets rebounded during the quarter on expectations that inflation would continue to moderate, which could lead central banks to begin the process of slowing the pace of monetary tightening. Value-oriented stocks outperformed growth stocks as investors remained concerned about the pace of future growth.
- Short-term interest rates rose across most developed markets as central banks continued to tighten. Despite concerns about the potential for slowing economic growth, lower quality corporate bonds outperformed higher quality government bonds and USD weakness acted as a tailwind for global bonds during the quarter.

- Equity markets moved higher during the 4th quarter, but it was not sufficient to offset prior quarter pullbacks. Factors that contributed to performance included declining inflation, expectations that the Fed would slow the pace of future interest rate increases, and expectations that China would begin to open its economy. For the period, the S&P 500 large cap benchmark returned 7.6%, compared to 9.2% for mid-cap and 6.2% for small cap benchmarks.
- Like domestic equities, developed markets international and emerging market equities delivered positive results for the 4th quarter. Europe continues to face headwinds from higher-than-expected inflation, elevated energy prices, geopolitical risks related to the conflict in Ukraine, and rising interest rates. Emerging markets were positively impacted by China's decision to loosen restrictions related to the pandemic. Importantly, global equities were positively impacted by a decline in the USD. For the quarter, the MSCI EAFE Index returned 17.3% while the MSCI Emerging Markets Index rose by 9.7%.
- For the quarter, performance of the bond market was broadly positive due to lower inflation and lower interest rate volatility. The Bloomberg (BB) US Aggregate Index returned 1.9%, for the period while investment grade corporate bonds posted a return of 3.6%.
- Performance for developed equity markets was strongly negative over the trailing 1-year period. The bellwether S&P 500 Index dropped -18.1% for the year. The primary drivers of return during the period were concerns related to rising inflation, tighter monetary policy from global central banks, and slowing global economic growth. The weakest relative performance outlier was the Russell 2000 Index which declined by -20.4% for the year.
- Over the trailing 1-year period, international markets declined similarly to domestic markets. The MSCI EAFE Index returned -14.5% while the MSCI Emerging Markets Index fell by -20.1%. Continued concerns related to Ukraine, elevated inflation, and slowing global economic growth negatively impacted markets. However, a weakening USD acted as a tailwind to international performance in the second half of the year.
- Bond market returns were widely negative over the trailing 1-year period due primarily to concerns about persistently high inflation and the expectation of higher future interest rates. US TIPS and mortgage-backed bonds were the least negative sectors with both returning -11.6% for the year. Investment grade corporate bonds suffered the year's largest loss, falling -15.8%.

### Quarter Performance



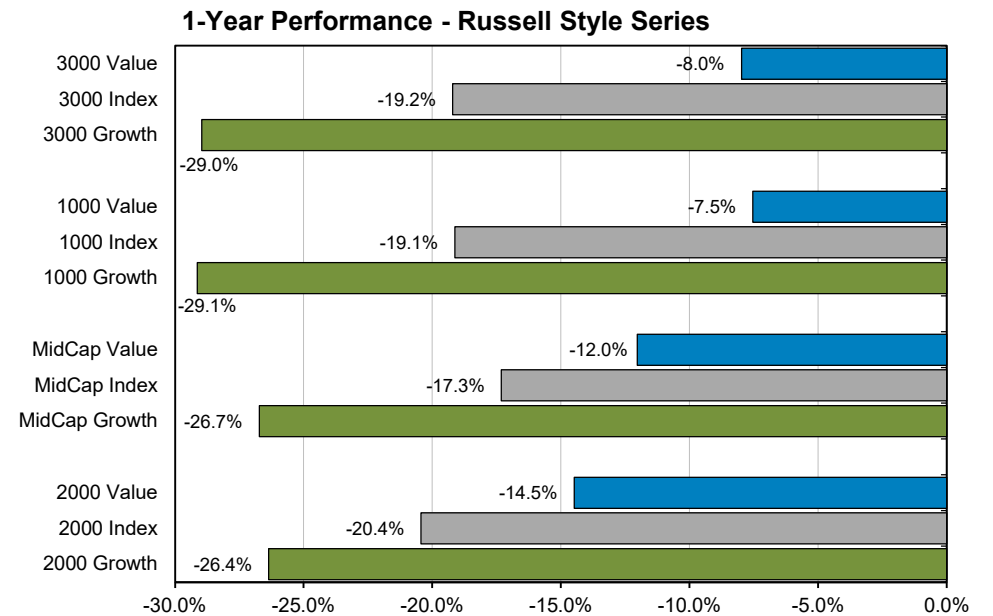
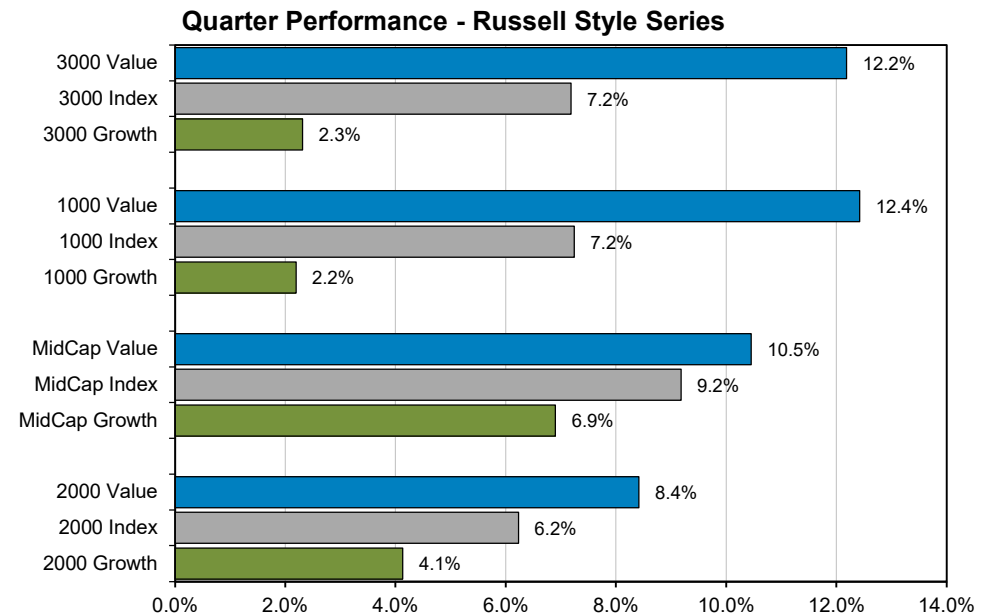
### 1-Year Performance



Source: Investment Metrics



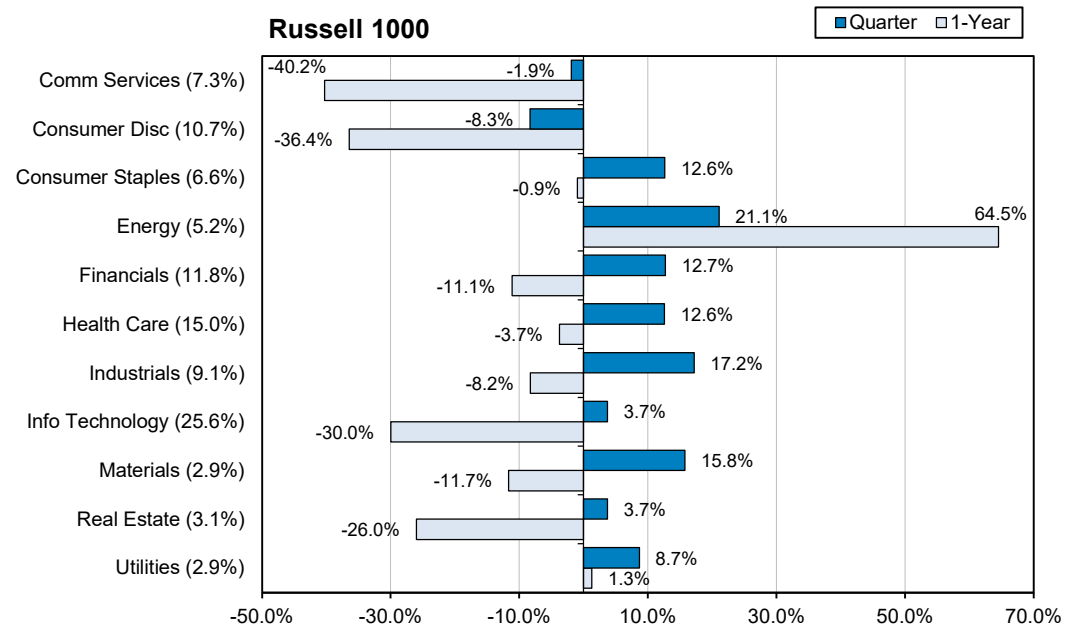
- Despite a pullback in December, equity markets broadly experienced strong absolute returns during the 4th quarter across both the style and market capitalization spectrums. With concerns about the potential for slowing economic conditions, large cap stocks resumed their leadership, followed by mid and small cap stocks. The Russell 1000 Value Index delivered 12.4% for the quarter, followed by while the Russell Mid Cap Value Index and the Russell 2000 Index, which rose by 10.5% and 8.4%, respectively.
- Performance across styles and market capitalizations was disparate during the quarter. Large, mid, and small cap value stocks all outperformed their growth counterparts. For the period, the Russell 1000 Value Index was the best relative performing style index, posting a return of 12.4%. Large and small cap growth stocks were the laggards during the period with the Russell Large Cap Growth Index and Russell 2000 Growth Index returning 2.2% and 4.1%, respectively.
- In contrast to the 4th quarter's positive performance, there was a wide range of negative results across market capitalizations over the trailing 1-year period. The Russell 2000 Index returned a disappointing -20.4% for the year, which underperformed both its large and mid cap index counterparts.
- There was also a wide performance dispersion across the style-based indexes for the year with growth stocks down significantly more than their value counterparts at all capitalization ranges. Within large cap stocks, the Russell 1000 Value Index returned -7.5% compared to much larger -29.1% decline for the Russell Large Cap Growth benchmark. The Russell Mid Cap Value Index returned -12.0% while the Russell 2000 Value Index returned -14.5% for the period. While these value benchmark results represented double-digit losses for the year, the Russell Mid Cap Growth Index fell a much larger -26.7% and the Russell 2000 Growth Index declined by a similar -26.4%.



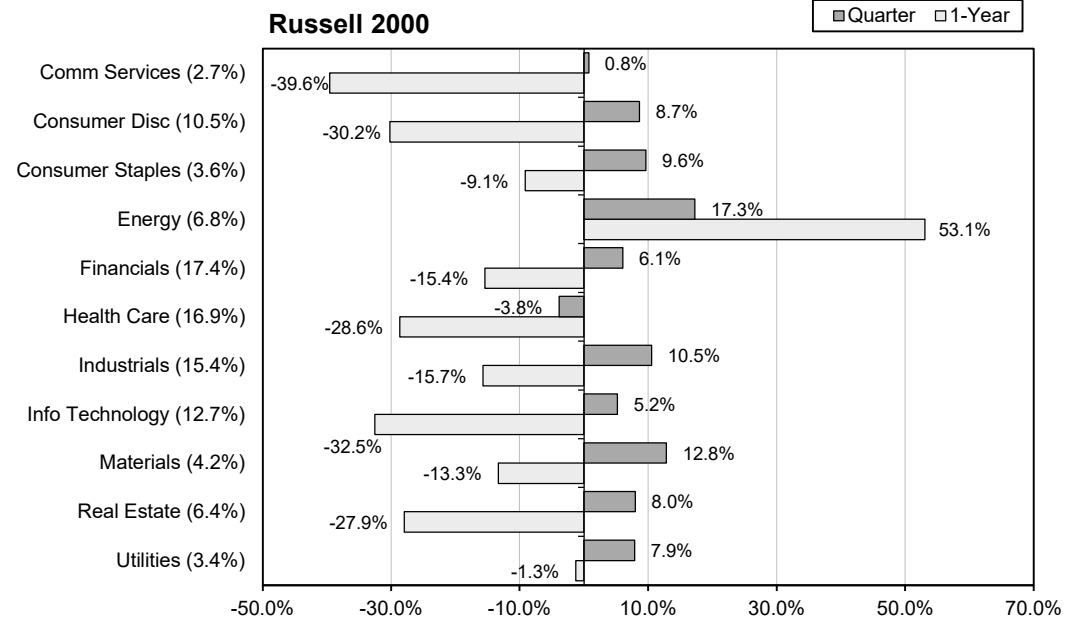
Source: Investment Metrics



- Economic sector performance was positive for nine of the eleven large cap economic sectors for the 4th quarter. Seven sectors outpaced the return of the broad index on a relative basis during the period.
- Energy continued its strong 2022 performance with a 4th quarter return of 21.1%. Other sectors that outpaced the headline index's return for the quarter included industrials (17.2%), materials (15.8%), financials (12.7%), healthcare (12.6%), consumer staples (12.6%), and utilities (8.7%). The real estate (3.7%), information technology (3.7%), communication services (-1.9%), and consumer discretionary (-8.3%) sectors all trailed the Russell 1000 Index return for the period.
- For the full year, seven economic sectors exceeded the return of the broad large cap benchmark but only the energy (64.5%) and utilities (1.3%) sectors managed to post positive, albeit vastly different, results. The weakest economic sector performance in the Russell 1000 for the year was communication services which declined by a staggering -40.2%.



- Ten small cap economic sectors posted positive returns during the quarter and seven exceeded the 6.2% return of the broader Russell 2000 Index. The energy (17.3%), materials (12.8%), and industrials (10.5%) sectors each posted double-digit positive results for the quarter. The only small cap economic sector that posted negative performance for the quarter was health care which fell by -3.8%.
- For the trailing 1-year period, six of the eleven economic sectors were down less than the broad small cap benchmark's return of -20.4%. Energy was the best performing and only positive economic sector for the year with a strong return of 53.1%. The utilities (-1.3%) and consumer staples (-9.1%) sectors were only small cap index segments to fall less than double-digit amounts for the year. The worst performing sector for the full year was communication services with a return of -39.6%. In addition, the information technology (-32.5%), consumer discretionary (-30.2%), health care (28.6%), and real estate (-27.9%) sectors all were down significantly for the year.



Source: Morningstar Direct





**The Market Environment**  
**Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000**  
As of December 31, 2022

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	5.5%	-5.8%	-26.4%	Information Technology
Microsoft Corp	5.1%	3.3%	-28.0%	Information Technology
Amazon.com Inc	2.1%	-25.7%	-49.6%	Consumer Discretionary
Berkshire Hathaway Inc Class B	1.6%	15.7%	3.3%	Financials
Alphabet Inc Class A	1.5%	-7.8%	-39.1%	Communication Services
UnitedHealth Group Inc	1.4%	5.3%	7.0%	Health Care
Alphabet Inc Class C	1.3%	-7.7%	-38.7%	Communication Services
Johnson & Johnson	1.3%	8.8%	6.0%	Health Care
Exxon Mobil Corp	1.3%	27.4%	87.4%	Energy
JPMorgan Chase & Co	1.1%	29.5%	-12.6%	Financials

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Horizon Therapeutics PLC	0.1%	83.9%	5.6%	Health Care
Burlington Stores Inc	0.0%	81.2%	-30.4%	Consumer Discretionary
Halliburton Co	0.1%	60.4%	74.5%	Energy
Universal Health Services Inc Class B	0.0%	60.0%	9.4%	Health Care
PVH Corp	0.0%	57.7%	-33.7%	Consumer Discretionary
Spectrum Brands Holdings Inc	0.0%	57.4%	-38.6%	Consumer Staples
Boeing Co	0.3%	57.3%	-5.4%	Industrials
Under Armour Inc A	0.0%	52.8%	-52.1%	Consumer Discretionary
Exact Sciences Corp	0.0%	52.4%	-36.4%	Health Care
Moderna Inc	0.2%	51.9%	-29.3%	Health Care

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Carvana Co Class A	0.0%	-76.7%	-98.0%	Consumer Discretionary
Opendoor Technologies Inc Class A	0.0%	-62.7%	-92.1%	Real Estate
Tesla Inc	0.9%	-53.6%	-65.0%	Consumer Discretionary
Lucid Group Inc Shs	0.0%	-51.1%	-82.1%	Consumer Discretionary
Guardant Health Inc	0.0%	-49.5%	-72.8%	Health Care
Affirm Holdings Inc - Class A	0.0%	-48.5%	-90.4%	Information Technology
WeWork Inc	0.0%	-46.0%	-83.4%	Real Estate
AppLovin Corp - Class A	0.0%	-46.0%	-88.8%	Information Technology
Ginkgo Bioworks Holdings Inc	0.0%	-45.8%	-79.7%	Materials
Olaplex Holdings Inc	0.0%	-45.5%	-82.1%	Consumer Staples

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Halozyme Therapeutics Inc	0.3%	43.9%	41.5%	Health Care
ShockWave Medical Inc	0.3%	-26.1%	15.3%	Health Care
Inspire Medical Systems Inc	0.3%	42.0%	9.5%	Health Care
EMCOR Group Inc	0.3%	28.4%	16.8%	Industrials
Crocs Inc	0.3%	57.9%	-15.4%	Consumer Discretionary
Matador Resources Co	0.3%	17.2%	55.9%	Energy
Iridium Communications Inc	0.3%	15.8%	24.5%	Communication Services
Murphy Oil Corp	0.3%	22.9%	68.3%	Energy
Agree Realty Corp	0.3%	6.0%	3.5%	Real Estate
Texas Roadhouse Inc	0.3%	4.7%	4.1%	Consumer Discretionary

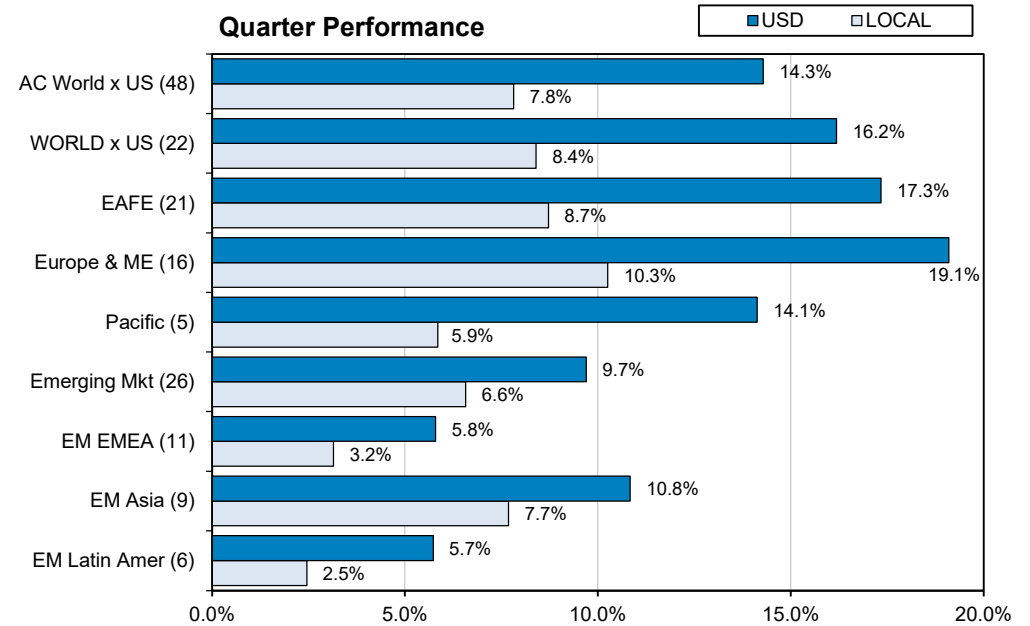
Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Madrigal Pharmaceuticals Inc	0.2%	346.6%	242.5%	Health Care
Immunovant Inc	0.0%	218.1%	108.3%	Health Care
Rayonier Advanced Materials Inc	0.0%	204.8%	68.1%	Materials
Maxar Technologies Inc	0.2%	176.5%	75.5%	Industrials
4D Molecular Therapeutics Inc	0.0%	176.2%	1.2%	Health Care
Icosavax Inc	0.0%	151.3%	-65.3%	Health Care
Imago BioSciences Inc	0.0%	138.9%	51.6%	Health Care
Provention Bio Inc	0.0%	134.9%	88.1%	Health Care
Biohaven Ltd	0.0%	120.3%	N/A	Health Care
Oceaneering International Inc	0.1%	119.7%	54.6%	Energy

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Tricida Inc	0.0%	-98.5%	-98.4%	Health Care
Relmada Therapeutics Inc	0.0%	-90.6%	-84.5%	Health Care
Avaya Holdings Corp	0.0%	-87.7%	-99.0%	Information Technology
Instil Bio Inc	0.0%	-87.0%	-96.3%	Health Care
Greenidge Generation Holdings Inc.	0.0%	-85.5%	-98.2%	Information Technology
Eiger BioPharmaceuticals Inc	0.0%	-84.3%	-77.3%	Health Care
Cano Health Inc - Class A	0.0%	-84.2%	-84.6%	Health Care
Gossamer Bio Inc	0.0%	-81.9%	-80.8%	Health Care
Rockley Photonics Holdings Ltd	0.0%	-80.3%	-96.8%	Information Technology
Boxed Inc	0.0%	-78.9%	-98.6%	Consumer Discretionary

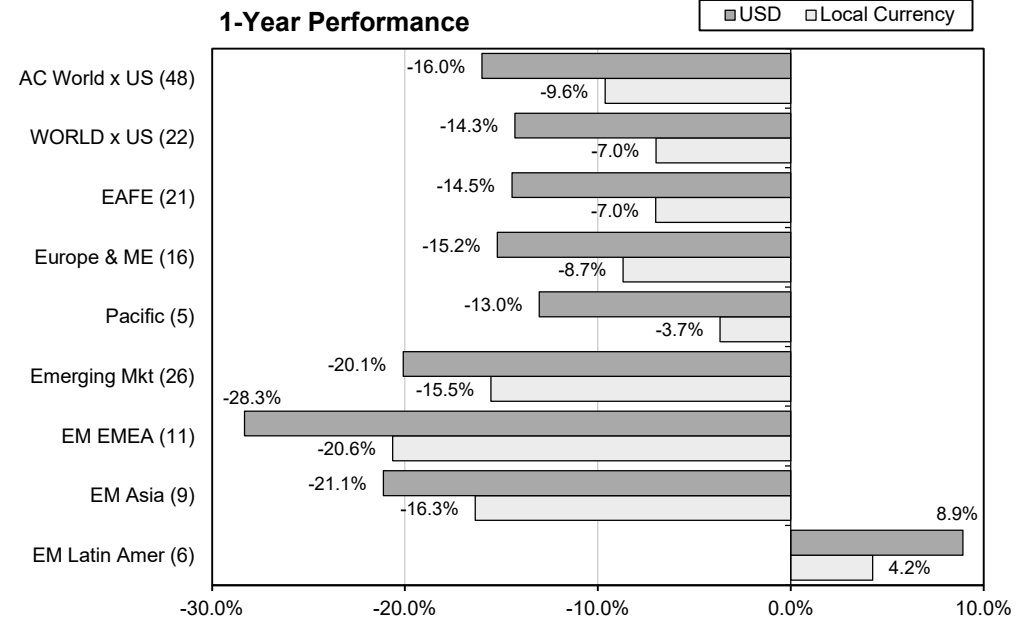
Source: Morningstar Direct



- Each of the developed and emerging market international equity indexes tracked in the chart posted positive returns in both US dollar (USD) and local currency (LC) terms for the 4th quarter. A weaker USD acted as a tailwind for non-US index performance during the quarter. Higher energy prices and the reopening of China also drove performance, especially in emerging markets. The developed market MSCI EAFE Index returned a strong 17.3% in USD and 8.7% in LC terms for the period, and the MSCI Emerging Markets Index rose by 9.7% in USD and 6.6% in LC terms.



- The trailing 1-year results for international developed and emerging markets were negative across most regions and currencies. The MSCI EAFE Index returned -14.5% in USD for the year and -7.0% in LC terms. Similarly, returns across emerging markets were broadly lower except for Latin America which returned 8.9% in USD and 4.2% in LC terms. The MSCI Emerging Markets Index declined by -20.1% in USD and -15.5% in LC terms for the year. Performance in the EMEA regional benchmark significantly detracted from emerging market index performance with the EMEA Index posting returns of -28.3% in USD and -20.6% in LC terms.



Source: MSCI Global Index Monitor (Returns are Net)



**The Market Environment**  
**US Dollar International Index Attribution & Country Detail**  
As of December 31, 2022

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	7.8%	10.1%	-16.8%
Consumer Discretionary	5.0%	17.8%	-22.4%
Consumer Staples	18.7%	10.6%	-13.0%
Energy	4.5%	19.8%	27.7%
Financials	15.1%	23.9%	-4.6%
Health Care	13.6%	14.2%	-11.0%
Industrials	10.5%	19.0%	-20.6%
Information Technology	7.8%	14.9%	-32.4%
Materials	11.1%	20.7%	-10.3%
Real Estate	3.5%	11.0%	-20.9%
Utilities	2.6%	19.4%	-12.4%
<b>Total</b>	<b>100.0%</b>	<b>17.3%</b>	<b>-14.5%</b>

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	8.4%	12.0%	-21.6%
Consumer Discretionary	6.0%	14.7%	-21.7%
Consumer Staples	21.0%	9.8%	-11.9%
Energy	5.9%	13.3%	8.1%
Financials	12.3%	15.6%	-7.3%
Health Care	9.8%	14.1%	-12.9%
Industrials	8.9%	17.3%	-18.4%
Information Technology	10.8%	13.5%	-34.5%
Materials	11.4%	16.6%	-11.2%
Real Estate	3.4%	10.4%	-20.6%
Utilities	2.3%	13.0%	-11.1%
<b>Total</b>	<b>100.0%</b>	<b>14.3%</b>	<b>-16.0%</b>

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	8.9%	58.8%	1.8%
Consumer Discretionary	4.9%	46.2%	5.6%
Consumer Staples	22.1%	77.4%	48.9%
Energy	9.9%	92.9%	40.2%
Financials	6.1%	44.6%	24.5%
Health Care	4.1%	53.5%	3.8%
Industrials	6.4%	49.7%	18.8%
Information Technology	18.6%	9.8%	-34.7%
Materials	14.1%	45.6%	10.6%
Real Estate	3.0%	13.8%	-15.4%
Utilities	1.9%	38.8%	26.8%
<b>Total</b>	<b>100.0%</b>	<b>9.7%</b>	<b>-20.1%</b>

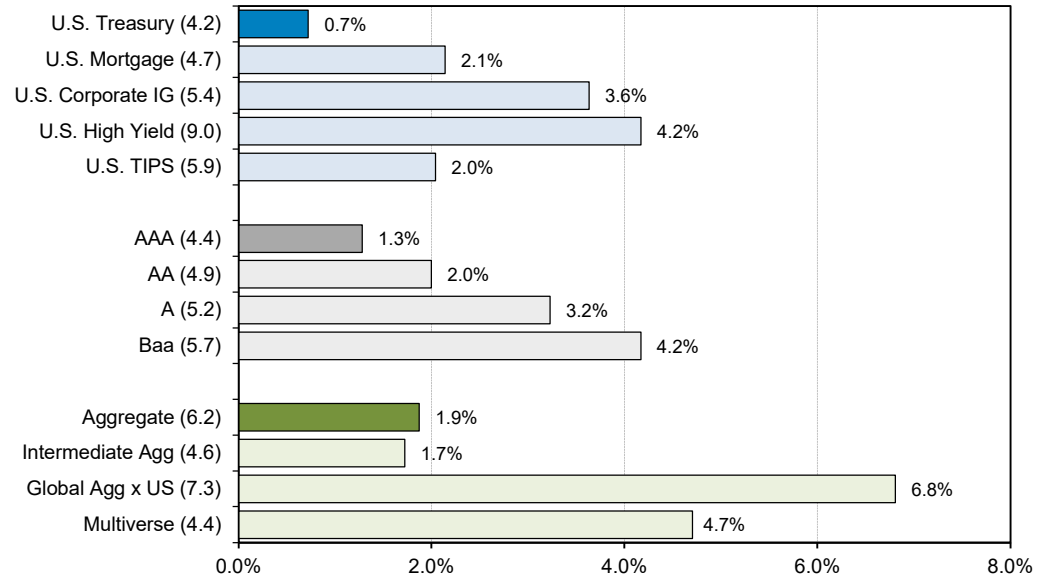
Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1-Year Return
Japan	21.9%	14.0%	13.2%	-16.6%
United Kingdom	15.3%	9.8%	17.0%	-4.8%
France	11.8%	7.6%	22.2%	-13.3%
Switzerland	10.1%	6.5%	10.4%	-18.3%
Australia	7.9%	5.1%	15.7%	-5.3%
Germany	8.2%	5.2%	24.6%	-22.3%
Netherlands	4.3%	2.7%	21.0%	-27.7%
Sweden	3.3%	2.1%	18.1%	-28.4%
Hong Kong	3.0%	1.9%	18.2%	-4.7%
Denmark	3.0%	1.9%	31.6%	-4.8%
Spain	2.4%	1.5%	22.9%	-7.3%
Italy	2.3%	1.5%	26.4%	-14.4%
Singapore	1.5%	1.0%	10.5%	-11.0%
Belgium	1.0%	0.7%	22.6%	-12.5%
Finland	1.0%	0.7%	16.3%	-15.3%
Norway	0.8%	0.5%	16.9%	-7.0%
Israel	0.7%	0.5%	0.4%	-26.7%
Ireland	0.7%	0.4%	21.5%	-26.2%
Portugal	0.2%	0.1%	17.2%	0.2%
Austria	0.2%	0.1%	31.1%	-26.4%
New Zealand	0.2%	0.1%	24.5%	-13.6%
<b>Total EAFE Countries</b>	<b>100.0%</b>	<b>63.9%</b>	<b>17.3%</b>	<b>-14.5%</b>
Canada		7.7%	7.4%	-12.9%
<b>Total Developed Countries</b>		<b>71.6%</b>	<b>16.2%</b>	<b>-14.3%</b>
China		9.2%	13.5%	-21.9%
Taiwan		3.9%	9.6%	-29.8%
India		4.1%	2.0%	-8.0%
Korea		3.2%	18.1%	-29.4%
Brazil		1.5%	2.4%	14.2%
Saudi Arabia		1.2%	-7.4%	-5.1%
South Africa		1.0%	18.3%	-3.9%
Mexico		0.6%	12.5%	-2.0%
Thailand		0.6%	16.1%	5.0%
Indonesia		0.5%	-3.6%	3.6%
Malaysia		0.4%	14.0%	-5.8%
United Arab Emirates		0.4%	-1.5%	-6.2%
Qatar		0.3%	-15.3%	-6.9%
Kuwait		0.3%	5.7%	10.1%
Philippines		0.2%	21.1%	-13.9%
Poland		0.2%	47.7%	-27.2%
Chile		0.2%	6.2%	19.4%
Turkey		0.2%	62.9%	90.4%
Peru		0.1%	17.4%	9.4%
Greece		0.1%	29.1%	0.3%
Colombia		0.0%	19.7%	-6.0%
Czech Republic		0.0%	6.5%	-14.4%
Hungary		0.1%	36.3%	-31.1%
Egypt		0.0%	28.5%	-22.6%
<b>Total Emerging Countries</b>		<b>28.4%</b>	<b>9.7%</b>	<b>-20.1%</b>
<b>Total ACWixUS Countries</b>		<b>100.0%</b>	<b>14.3%</b>	<b>-16.0%</b>

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

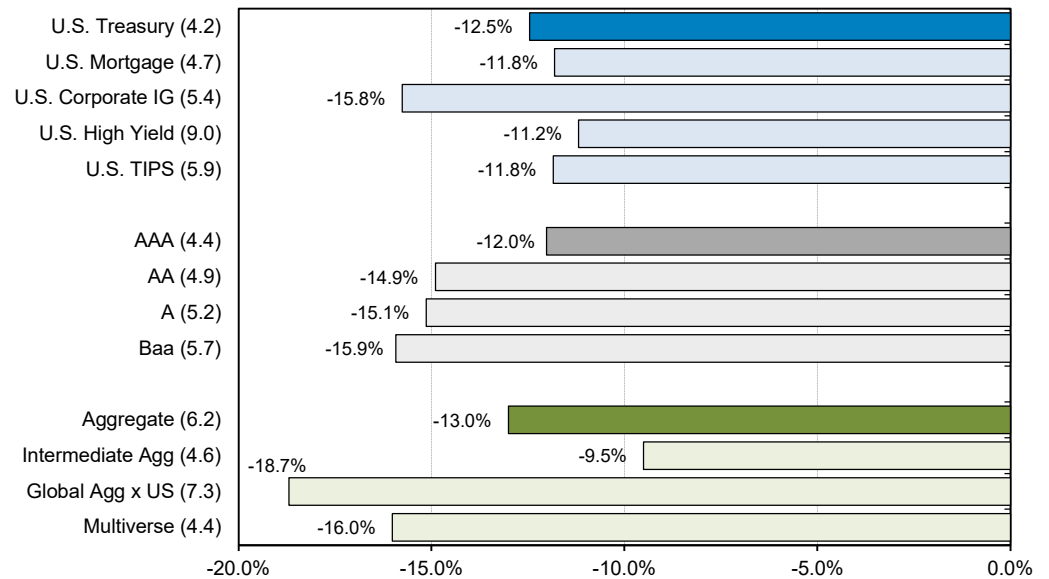


- After an extremely challenging year in fixed income markets, the 4th quarter's positive bond benchmark results were a welcome relief. Despite two rate increases during the quarter, bond performance was aided by lower investor concerns about rising inflation as US CPI declined. This was reflected in both intermediate and long-term interest rates which remained relatively stable during the quarter.
- The return for the BB US Aggregate Bond Index, the bellwether US investment grade benchmark, rose by 1.9% for the period.
- Performance across the investment grade index's segments was also positive during the period with the US Corporate Investment Grade Index returning 3.6% and the US Mortgage Index component posting a return of 2.1%.
- High yield bonds outperformed their investment grade counterparts, surging 4.2% during the quarter. US TIPS, which have delivered strong performance in recent periods, rose by 2.0% as investors' expectations of future inflation declined.
- Outside of domestic markets, the Bloomberg Global Aggregate ex US Index posted a strong return of 6.8% for the quarter. Like domestic bonds, global bond index performance was positively impacted declining inflation, but the benchmark also received a boost from the decline in the USD for the quarter.
- Over the trailing 1-year period, the bellwether BB US Aggregate Bond Index declined by -13.0% and each of the benchmark's components fell by more than -10%. US TIPS, which are excluded from the bellwether index, dropped by -11.8% for the year.
- Lower quality high yield corporate bonds were down less than their investment grade counterparts on a relative basis with the Bloomberg US High Yield Index posting still discouraging return of -11.2% for the period.
- Performance for non-US bonds was also strongly negative for the year with the developed market Bloomberg Global Aggregate ex US Index falling by -18.7%. The combination of rising interest rates overseas, elevated inflation, geopolitical risks, and USD strength earlier in the year hindered non-US index performance.

**Quarter Performance**



**1-Year Performance**

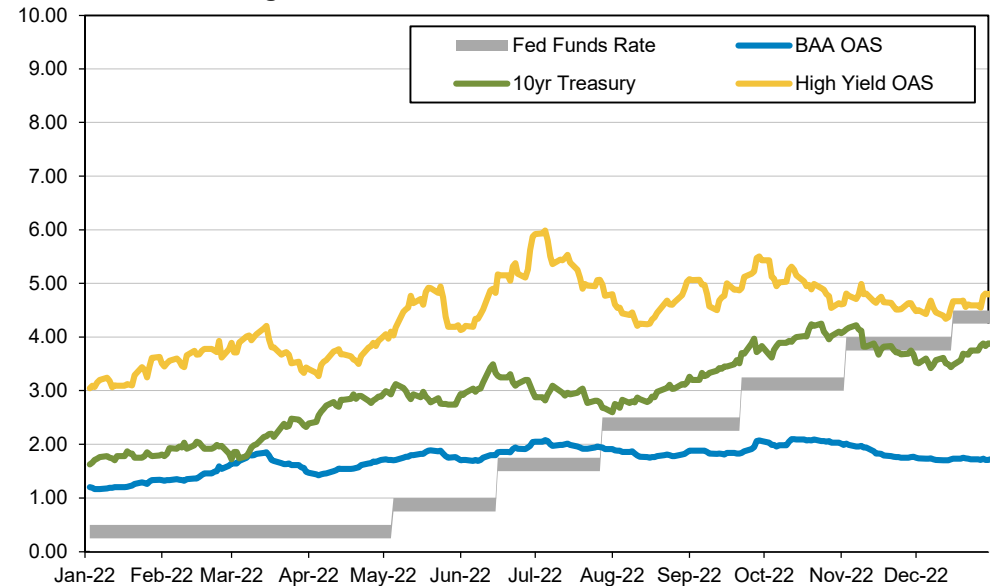


Source: Bloomberg

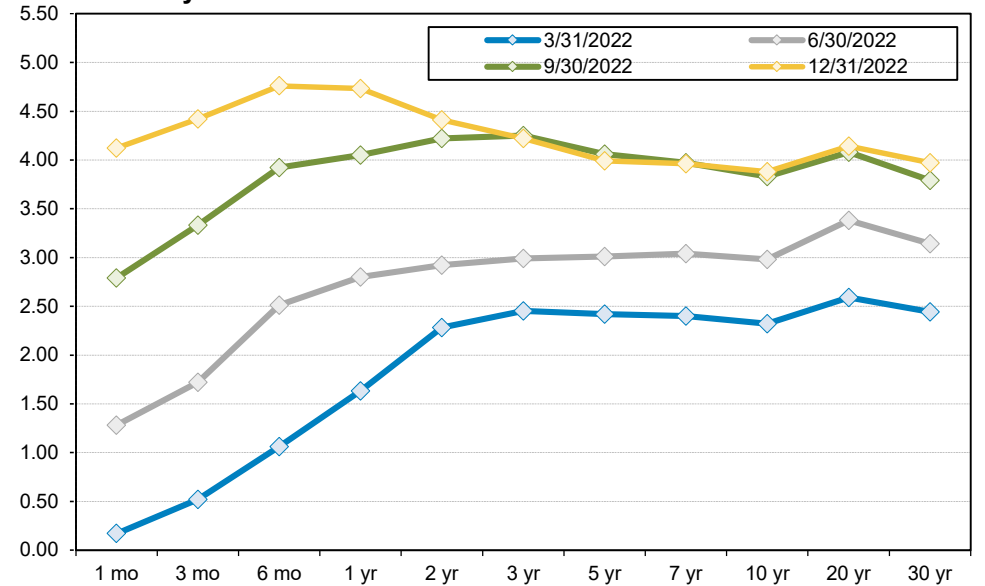


- The gray band across the graph illustrates the range of the current Fed Funds Rate. In the 4th quarter this year, the Fed raised the lower end of its target rate range from 3.00% to 4.25% through a 0.75% increase in November and a 0.50% increase in December. During its December meeting, the Federal Open Market Committee (FOMC) stated it intends to monitor economic growth closely and will continue to raise interest rates to fight inflation if needed. The FOMC also stated that it would continue its policy of removing liquidity from the market by allowing bonds held on its balance sheet to mature without reinvesting those proceeds.
- The yield on the US 10-year Treasury (green line) ended the period slightly higher as concerns over the pace of inflation, combined with the Fed's announced rate increase, drove yields. The closing yield on the 10-Year Treasury was 3.88% at year-end, an increase of 0.08% from its 3rd quarter closing yield. The benchmark's rate peaked in October, reaching a high of roughly 4.25% before declining to end the quarter.
- 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-US Treasury investment grade issues. For the full year, the spread widened slightly from 1.17% to 1.72%. High Yield OAS spreads rose from roughly 3.05% at the beginning of the year to 4.81% at year-end. During 2022, high yield spreads reached a level of 5.80% in early July before trading lower the remainder of the year.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. Short-term rates continued to rise during the 4th quarter as the FOMC increased interest rates twice to combat elevated inflation. Despite these short-term rate increases, both intermediate and longer-term rates remained largely unchanged during the quarter. The yield curve remained inverted between 2-year and 10-year rates. Said differently, the short-term rate was higher than the long-term rate. Historically, a persistent inversion of these two key rates has been an indication of a future recession withing 6- to 24-months.

1-Year Trailing Market Rates



Treasury Yield Curve



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



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

December 31, 2022

Total Portfolio Compliance Summary							
	December 31, 2022 Market Value \$	Current Allocation %	Target Allocation %	Range Allocation %	Act 314 Limit %	Compliance within Ranges	Compliance w/314 Limits
<b>Total Portfolio (excluding Unfunded Commitments)</b>							
<b>Total Equity (14)</b>	74,640,799.01	66.3%	65.0%	40.0% - 80.0%	70.0%	YES	YES
Domestic Equity (14)	55,862,583.59	49.6%	50.0%	40.0% - 60.0%	70.0%	YES	YES
International Equity (14)	18,778,215.42	16.7%	15.0%	0.0% - 20.0%	70.0%	YES	YES
<b>Total US Fixed Income (17 &amp; 17.1.a.iii)</b>							
US Investment Grade Fixed Income (17)	13,263,222.35	11.8%	17.0%	7.0% - 27.0%	100.0%	YES	YES
US Non-Investment Grade Fixed Income (17.1.a.iii)	5,306,318.04	4.7%	0.0%	0.0% - 10.0%	100.0%	YES	YES
<b>Total Real Estate (18 &amp; 19)</b>							
Alternative Investments (20d)	8,442,167.28	7.5%	10.0%	0.0% - 15.0%	20.0%	YES	YES
Short Term/Cash Reserves	527,961.86	0.5%	0.0%	0.0% - 10.0%	N/A	YES	YES





## 4Q 2022 EXECUTIVE SUMMARY

### Market Summary:

Inflation statistics improved during the quarter around the world. In anticipation that central banks are nearing the end of the current interest rate hiking cycle – the Federal Reserve and European Central Bank reduced the magnitude of their rate increases during the quarter – the stock and bond markets posted impressive gains during the first half of the quarter. However, the rally was relatively short-lived as recession fears replaced inflation concerns and markets trended lower to finish the year. The S&P 500 gained 7.6% in the 4th quarter, trailing only mid cap and value stocks in the US. The Bloomberg US Aggregate generated its first positive quarter in 2022, advancing 1.9%. The international markets benefited from a depreciating dollar this quarter; the developed equity markets rose over 17% and the emerging equity markets returned just under 10%. Real estate had avoided the losses experienced by the public markets during the first three quarters but posted a negative return to end the year. 2022 was a painful year for investors; stocks declined almost 20% and bonds fell over 13% (worst year in fixed income in over 100 years). We look forward to a new year.

### Conclusions/Recommendations:

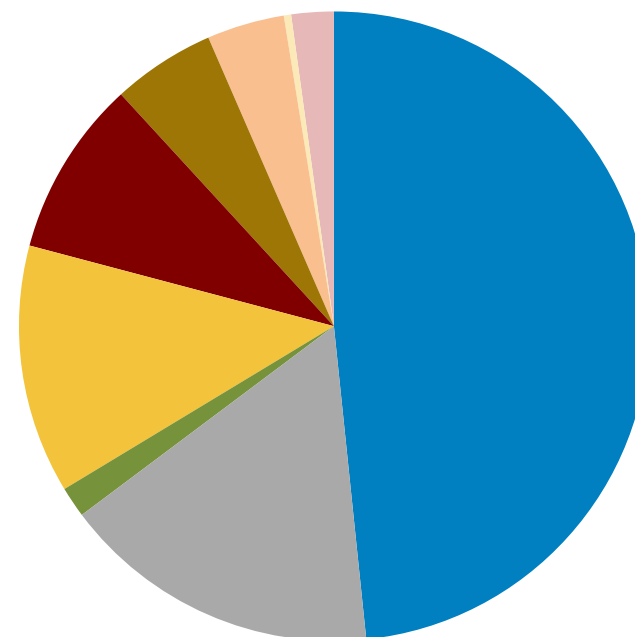
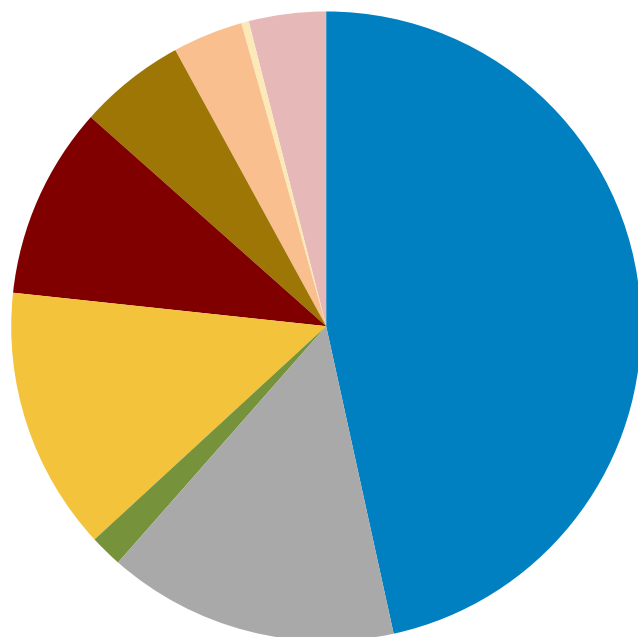
1. The Total Fund gained 7.48% for the quarter, out performing the Policy Index by 1.05% and ranking near the top of the Public Fund universe. The Fund benefited from relatively strong results from the domestic and international equity allocations. Note: Marathon, Metropolitan, TerraCap, and PA/Apogem have not yet reported their 4Q 2022 results (about 5% of the portfolio); these strategies will have a minor effect on the Total Fund's results.
2. The Total Fund returned -10.06% over the past year, exceeding the Policy Index by 330 basis points and ranking in the top quartile of the peer group. Longer-term, the Fund has performed very well, exceeding return and peer group expectations.
3. Reinhart (small/mid cap) handily out performed the Russell 2500 Index and ranked near the top of their peer group this quarter. The manager benefited from strong stock selection as three holdings received take over bids during the quarter. Reinhart exceeds performance expectations after 2 years.
4. AEW suffered losses this quarter as the real estate markets started to weigh the impact of higher interest rates. Longer-term, the manager meets performance expectations.
5. Southfield's initial investment of approximately \$955,000 into the PA/Apogem Secondary Fund VI occurred in August of 2022. The manager reported a gain of over \$500,000 or a return of over 60% during the third quarter.
6. As of 12/31/22, the Plan has outstanding investment commitments with Bloomfield Capital V, Marathon, PA/Apogem, PCCP, and Sturbridge.
7. At quarter end, the Fund was overweight to real estate and underweight to fixed income – all allocations are within policy ranges (target allocations were updated in October 2022). We did not detect any violations of investment policies. (See additional comments and recommendations on the Asset/Manager Summary handout.)





Asset Allocation By Segment as of  
September 30, 2022 : \$106,655,649

Asset Allocation By Segment as of  
December 31, 2022 : \$112,625,046



Allocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	49,663,432	46.6	Domestic Equity	54,471,451	48.4
International Equity	15,914,557	14.9	International Equity	18,473,052	16.4
Canadian Equity	1,782,943	1.7	Canadian Equity	1,782,943	1.6
Domestic Fixed Income	14,445,635	13.5	Domestic Fixed Income	14,393,619	12.8
Real Estate	10,520,512	9.9	Real Estate	10,197,260	9.1
Hedge Fund	5,844,995	5.5	Hedge Fund	5,950,225	5.3
Private Equity	3,851,039	3.6	Private Equity	4,481,497	4.0
Other Illiquid Asset	411,239	0.4	Other Illiquid Asset	426,313	0.4
Cash Equivalent	4,221,296	4.0	Cash Equivalent	2,448,685	2.2



**Financial Reconciliation**  
**Total Fund**  
**1 Quarter Ending December 31, 2022**

<b>Financial Reconciliation</b>								
	<b>Market Value 10/01/2022</b>	<b>Net Transfers</b>	<b>Contributions</b>	<b>Distributions</b>	<b>Management Fees</b>	<b>Other Expenses</b>	<b>Return On Investment</b>	<b>Market Value 12/31/2022</b>
<b>Total Domestic Equity</b>	<b>50,834,822</b>	-	-	-	<b>-61,088</b>	<b>-5,637</b>	<b>5,094,487</b>	<b>55,862,584</b>
Comerica S&P 500 Index Fund	21,757,346	-	-	-	-	-1,535	1,641,671	23,397,482
Champlain MC Equity	9,182,533	-	-	-	-19,512	-1,295	685,502	9,847,227
Walhausen & Co. SMID Value	10,090,872	-	-	-	-23,196	-1,402	1,168,538	11,234,813
Reinhart Sm/Mid Cap PMV	9,804,071	-	-	-	-18,381	-1,405	1,598,776	11,383,062
<b>Total International Equity</b>	<b>16,136,715</b>	<b>16,947</b>	-	-	<b>-31,918</b>	<b>-1,060</b>	<b>2,657,532</b>	<b>18,778,215</b>
LSV International LCV	8,887,731	16,947	-	-	-16,947	-	1,703,370	10,591,102
WCM Focused Growth International	7,248,984	-	-	-	-14,971	-1,060	954,161	8,187,114
<b>Total Fixed Income</b>	<b>18,706,964</b>	<b>-442,866</b>	-	-	<b>-10,406</b>	<b>-1,717</b>	<b>317,565</b>	<b>18,569,540</b>
Pacific Fixed Income	13,012,647	-	-	-	-10,406	-1,717	262,698	13,263,222
Bloomfield Capital Income Fund II	76,679	-	-	-	-	-	-8,517	68,162
Bloomfield Capital Income Fund III	1,598,825	-413,612	-	-	-	-	28,158	1,213,370
Bloomfield Fund V Series A	389,915	-6,151	-	-	-	-	6,670	390,434
Bloomfield Fund V Series B	1,213,030	-23,102	-	-	-	-	28,555	1,218,483
Marathon Distressed Credit Fund LP	2,415,868	-	-	-	-	-	-	2,415,868
<b>Total Real Estate</b>	<b>10,788,132</b>	-	-	-	<b>-16,969</b>	-	<b>-326,586</b>	<b>10,444,577</b>
AEW Core Property Trust	6,497,941	-	-	-	-16,969	-	-326,055	6,154,917
Metropolitan Real Estate V	637,284	-	-	-	-	-	-	637,284
PCCP Equity VIII	1,869,964	-	-	-	-	-	-531	1,869,433
TerraCap Partners IV	1,782,943	-	-	-	-	-	-	1,782,943
<b>Total Timber Funds</b>	<b>411,239</b>	-	-	-	-	-	<b>15,074</b>	<b>426,313</b>
RMK Timberland Intl Fund	411,239	-	-	-	-	-	15,074	426,313
<b>Total Hedge Fund of Funds</b>	<b>6,844,995</b>	<b>-1,000,000</b>	-	-	-	-	<b>105,231</b>	<b>5,950,225</b>
Magnitude Institutional	3,693,229	-	-	-	-	-	54,632	3,747,861
Titan Masters Int'l Fund	3,151,766	-1,000,000	-	-	-	-	50,599	2,202,364
<b>Total Other Assets</b>	<b>1,532,395</b>	<b>533,234</b>	-	-	-	-	-	<b>2,065,629</b>
PA/Apogem Sec Fund VI	1,532,395	-199,815	-	-	-	-	-	1,332,580
Sturbridge Diversified III	-	733,049	-	-	-	-	-	733,049
<b>Cash Account</b>	<b>1,400,387</b>	<b>892,685</b>	<b>1,315,850</b>	<b>-3,127,216</b>	-	<b>-60,191</b>	<b>106,447</b>	<b>527,962</b>
<b>Total Fund</b>	<b>106,655,650</b>	-	<b>1,315,850</b>	<b>-3,127,216</b>	<b>-120,381</b>	<b>-68,605</b>	<b>7,969,749</b>	<b>112,625,046</b>

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



**Asset Allocation & Performance**  
**Southfield Employees Retirement System**  
As of December 31, 2022

Asset Allocation & Performance	Allocation		Performance(%)				
	Market Value \$	%	QTR	1 YR	3 YR	5 YR	10 YR
<b>Total Fund</b>	<b>112,625,046</b>	<b>100.0</b>	<b>7.48 (5)</b>	<b>-10.06 (12)</b>	<b>5.77 (6)</b>	<b>6.23 (8)</b>	<b>8.30 (5)</b>
Total Fund Policy			6.43	-13.36	3.86	4.98	7.50
Difference			1.05	3.30	1.91	1.25	0.80
All Public Plans-Total Fund Median			5.69	-13.84	3.56	4.91	6.86
Total Domestic Equity	55,862,584	49.6	10.02 (40)	-14.52 (44)	7.02 (48)	7.44 (57)	10.57 (68)
Total Domestic Equity Policy			8.10	-17.23	6.35	7.15	11.08
Difference			1.92	2.71	0.67	0.29	-0.51
IM U.S. Equity (SA+CF+MF) Median			8.63	-16.44	6.82	7.86	11.44
Total International Equity	18,778,215	16.7	16.47 (36)	-17.21 (48)	2.93 (22)	4.72 (10)	7.76 (12)
Total International Equity Policy			14.37	-16.62	0.01	1.02	4.40
Difference			2.10	-0.59	2.92	3.70	3.36
IM International Equity (SA+CF+MF) Median			14.79	-17.73	1.00	1.62	5.25
Total Fixed Income	18,569,540	16.5	1.74 (57)	-8.99 (3)	-0.11 (3)	1.48 (4)	2.79 (3)
Total Fixed Income Policy			1.87	-13.01	-2.71	0.02	1.06
Difference			-0.13	4.02	2.60	1.46	1.73
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.82	-12.95	-2.20	0.45	1.50
Total Real Estate	10,444,577	9.3	-3.03 (23)	8.80 (25)	11.24 (29)	9.78 (33)	10.29 (58)
Total Real Estate Policy			-4.97	3.92	7.51	7.13	8.65
Difference			1.94	4.88	3.73	2.65	1.64
IM U.S. Open End Private Real Estate (SA+CF) Median			-5.18	6.78	9.72	9.01	10.56
Total Hedge Fund of Funds	5,950,225	5.3	1.80	7.23	7.52	6.45	N/A
HFRI FOF: Diversified Index			1.33	-3.09	4.33	3.50	3.68
Difference			0.47	10.32	3.19	2.95	N/A
Total Timber Funds	426,313	0.4	-4.84	12.48	-10.68	-3.17	-1.53
Total Timber Policy			-3.72	20.31	9.32	7.89	8.06
Difference			-1.12	-7.83	-20.00	-11.06	-9.59



**Asset Allocation & Performance**  
**Southfield Employees Retirement System**  
As of December 31, 2022

	Allocation		Performance(%)					
	Market Value \$	%	QTR	1 YR	3 YR	5 YR	10 YR	
<b>Total Domestic Equity</b>	<b>55,862,584</b>	<b>49.6</b>	<b>10.02 (40)</b>	<b>-14.52 (44)</b>	<b>7.02 (48)</b>	<b>7.44 (57)</b>	<b>10.57 (68)</b>	
Total Domestic Equity Policy			8.10	-17.23	6.35	7.15	11.08	
Difference			1.92	2.71	0.67	0.29	-0.51	
IM U.S. Equity (SA+CF+MF) Median			8.63	-16.44	6.82	7.86	11.44	
Comerica S&P 500 Index Fund	23,397,482	20.8	7.55 (67)	-18.18 (66)	7.63 (47)	9.40 (38)	12.54 (50)	
S&P 500 Index			7.56	-18.11	7.66	9.42	12.56	
Difference			-0.01	-0.07	-0.03	-0.02	-0.02	
IM U.S. Large Cap Core Equity (SA+CF) Median			8.08	-16.86	7.47	9.08	12.54	
Champlain MC Equity	9,847,227	8.7	7.46 (91)	-25.57 (94)	6.65 (66)	10.23 (14)	N/A	
Russell Midcap Index			9.18	-17.32	5.88	7.10	10.96	
Difference			-1.72	-8.25	0.77	3.13	N/A	
IM U.S. Mid Cap Core Equity (SA+CF) Median			9.99	-13.10	7.14	6.93	10.92	
Walhausen & Co. SMID Value	11,234,813	10.0	11.59 (38)	-5.53 (14)	7.16 (48)	7.08 (45)	N/A	
Russell 2500 Value Index			9.21	-13.08	5.22	4.75	8.93	
Difference			2.38	7.55	1.94	2.33	N/A	
IM U.S. SMID Cap Value Equity (SA+CF) Median			10.45	-10.53	7.08	6.75	10.50	
Reinhart Sm/Mid Cap PMV	11,383,062	10.1	16.32 (1)	-2.25 (3)	N/A	N/A	N/A	
Russell 2500 Index			7.43	-18.37	5.00	5.89	10.03	
Difference			8.89	16.12	N/A	N/A	N/A	
IM U.S. SMID Cap Equity (SA+CF) Median			9.13	-17.35	6.65	7.38	10.96	
<b>Total International Equity</b>	<b>18,778,215</b>	<b>16.7</b>	<b>16.47 (36)</b>	<b>-17.21 (48)</b>	<b>2.93 (22)</b>	<b>4.72 (10)</b>	<b>7.76 (12)</b>	
Total International Equity Policy			14.37	-16.62	0.01	1.02	4.40	
Difference			2.10	-0.59	2.92	3.70	3.36	
IM International Equity (SA+CF+MF) Median			14.79	-17.73	1.00	1.62	5.25	
LSV International LCV	10,591,102	9.4	19.17 (28)	-6.82 (25)	0.76 (63)	0.73 (70)	5.34 (45)	
MSCI EAFE Index			17.40	-14.01	1.34	2.03	5.16	
Difference			1.77	7.19	-0.58	-1.30	0.18	
IM International Large Cap Value Equity (SA+CF) Median			17.70	-8.99	1.47	1.78	5.19	
WCM Focused Growth International	8,187,114	7.3	13.16 (61)	-27.59 (65)	4.38 (18)	8.77 (1)	10.37 (4)	
MSCI EAFE (Net) Index			17.34	-14.45	0.87	1.54	4.67	
Difference			-4.18	-13.14	3.51	7.23	5.70	
IM International Growth Equity (SA+CF) Median			13.82	-24.58	1.84	3.15	6.53	



**Asset Allocation & Performance**  
**Southfield Employees Retirement System**  
As of December 31, 2022

	Allocation		Performance(%)				
	Market Value \$	%	QTR	1 YR	3 YR	5 YR	10 YR
<b>Total Fixed Income</b>	<b>18,569,540</b>	<b>16.5</b>	<b>1.74 (57)</b>	<b>-8.99 (3)</b>	<b>-0.11 (3)</b>	<b>1.48 (4)</b>	<b>2.79 (3)</b>
Total Fixed Income Policy			1.87	-13.01	-2.71	0.02	1.06
Difference			-0.13	4.02	2.60	1.46	1.73
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.82	-12.95	-2.20	0.45	1.50
Pacific Fixed Income	13,263,222	11.8	2.02 (28)	-12.69 (35)	-2.23 (53)	0.32 (67)	1.39 (67)
Blmbg. U.S. Aggregate Index			1.87	-13.01	-2.71	0.02	1.06
Difference			0.15	0.32	0.48	0.30	0.33
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.82	-12.95	-2.20	0.45	1.50
<b>Total Real Estate</b>	<b>10,444,577</b>	<b>9.3</b>	<b>-3.03 (23)</b>	<b>8.80 (25)</b>	<b>11.24 (29)</b>	<b>9.78 (33)</b>	<b>10.29 (58)</b>
Total Real Estate Policy			-4.97	3.92	7.51	7.13	8.65
Difference			1.94	4.88	3.73	2.65	1.64
IM U.S. Open End Private Real Estate (SA+CF) Median			-5.18	6.78	9.72	9.01	10.56
AEW Core Property Trust	6,154,917	5.5	-5.02 (45)	8.94 (23)	10.51 (37)	9.08 (43)	9.90 (63)
NCREIF Fund Index-ODCE (VW)			-4.97	7.47	9.93	8.68	10.10
Difference			-0.05	1.47	0.58	0.40	-0.20
IM U.S. Open End Private Real Estate (SA+CF) Median			-5.18	6.78	9.72	9.01	10.56
<b>Total Hedge Fund of Funds</b>	<b>5,950,225</b>	<b>5.3</b>	<b>1.80</b>	<b>7.23</b>	<b>7.52</b>	<b>6.45</b>	<b>N/A</b>
HFRI FOF: Diversified Index			1.33	-3.09	4.33	3.50	3.68
Difference			0.47	10.32	3.19	2.95	N/A
Magnitude Institutional	3,747,861	3.3	1.48	7.59	9.03	7.03	N/A
HFRI FOF: Diversified Index			1.33	-3.09	4.33	3.50	3.68
Difference			0.15	10.68	4.70	3.53	N/A
Titan Masters Int'l Fund	2,202,364	2.0	2.35	6.99	5.92	5.82	N/A
HFRI FOF: Diversified Index			1.33	-3.09	4.33	3.50	3.68
Difference			1.02	10.08	1.59	2.32	N/A
Cash/Sec Lit	527,962	0.5					



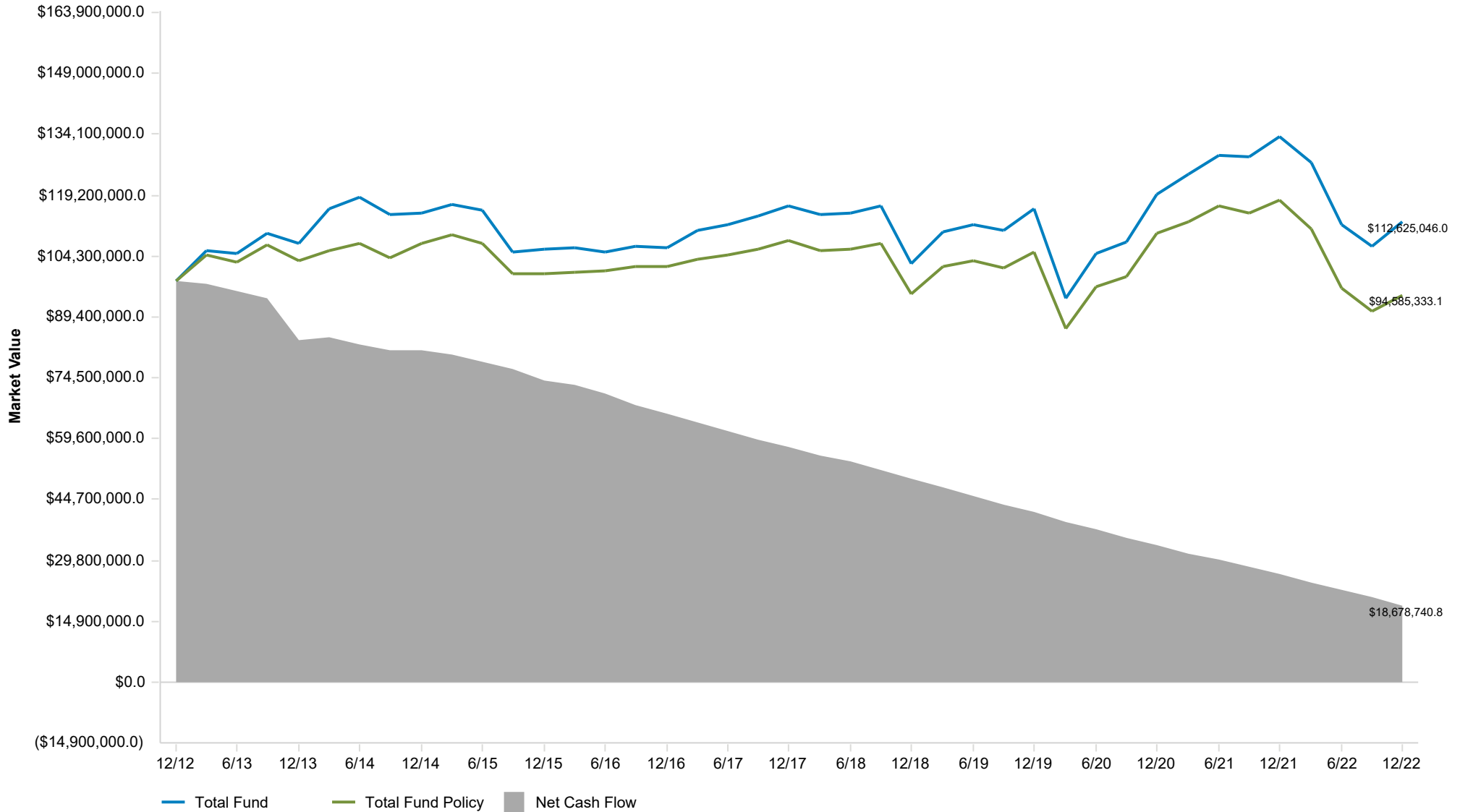
As of December 31, 2022

## Comparative Performance - IRR

	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	Since Inception Ending Dec-2022	Inception Date
Bloomfield Capital Income Fund II	-11.11	-17.06	-12.20	-0.95	-4.68	4.22	5.67	12/22/2014
Bloomfield Capital Income Fund III	2.19	5.45	9.97	7.27	6.82	N/A	8.02	12/31/2016
Bloomfield Fund V Series A	1.74	3.80	7.01	11.38	N/A	N/A	10.79	02/14/2019
Bloomfield Fund V Series B	2.40	4.78	8.69	N/A	N/A	N/A	8.06	04/22/2021
Marathon Distressed Credit Fund LP	0.00	-0.26	-7.86	N/A	N/A	N/A	8.98	01/04/2021
Metropolitan Real Estate V	0.00	-3.51	1.99	2.42	2.85	4.80	7.55	11/30/2011
PCCP Equity VIII	-0.03	-0.35	17.38	21.16	N/A	N/A	18.50	07/23/2019
RMK Timberland Intl Fund	3.67	8.58	5.57	-16.42	-11.44	-7.70	-9.86	11/21/2012
TerraCap Partners IV	0.00	0.93	1.48	7.80	N/A	N/A	11.31	07/03/2019
PA/Apogem Sec Fund VI	0.00	N/A	N/A	N/A	N/A	N/A	64.04	08/02/2022
Sturbridge Diversified III	N/A	N/A	N/A	N/A	N/A	N/A	0.00	12/27/2022



**Schedule of Investable Assets**

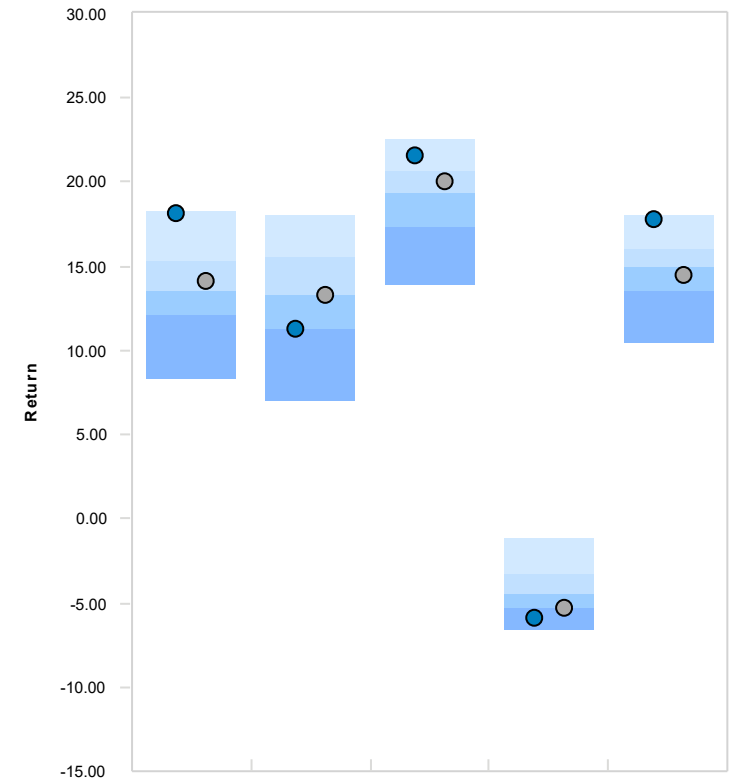
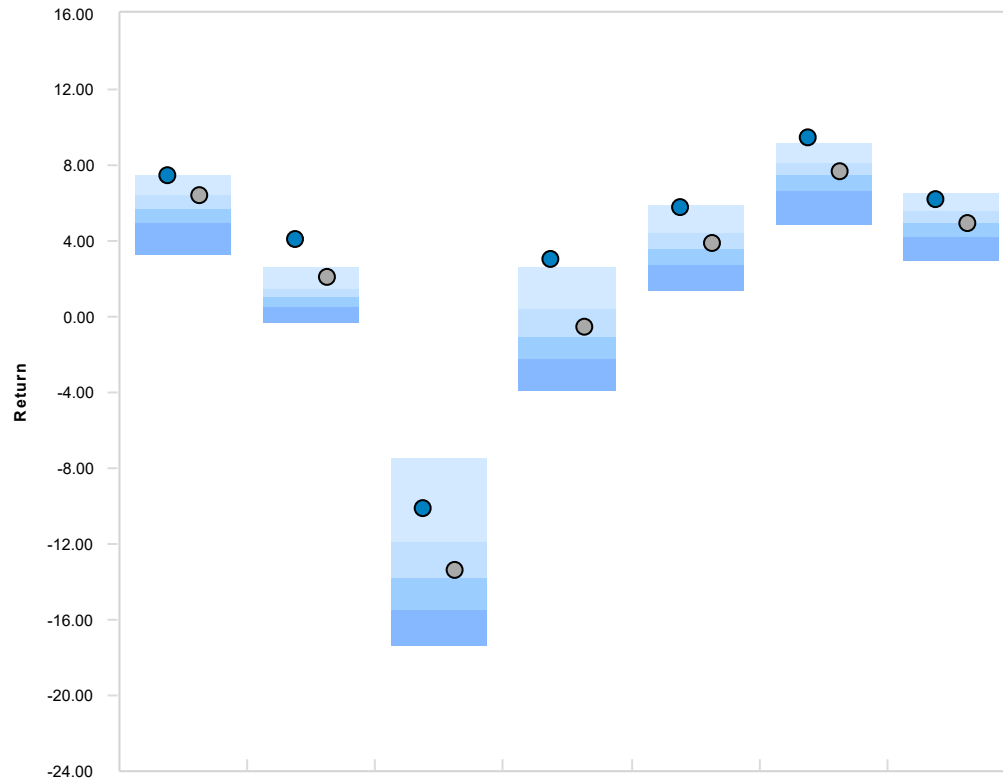


**Schedule of Investable Assets**

Periods Ending	Beginning Market Value \$	Contributions \$	Withdrawals \$	Gain/Loss \$	Net Cash Flow \$	Ending Market Value \$
10 YR	98,401,912	226,112,786	305,835,957	93,946,305	-79,723,171	112,625,046



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Fund	7.48 (5)	4.09 (1)	-10.06 (12)	3.10 (4)	5.77 (6)	9.51 (4)	6.23 (8)
● Total Fund Policy	6.43 (26)	2.15 (10)	-13.36 (44)	-0.57 (41)	3.86 (42)	7.70 (41)	4.98 (48)
Median	5.69	1.01	-13.84	-1.03	3.56	7.45	4.91

	2021	2020	2019	2018	2017
● Total Fund	18.20 (6)	11.31 (75)	21.54 (13)	-5.93 (88)	17.76 (7)
● Total Fund Policy	14.10 (42)	13.32 (50)	20.11 (38)	-5.25 (74)	14.49 (59)
Median	13.58	13.28	19.35	-4.45	14.95

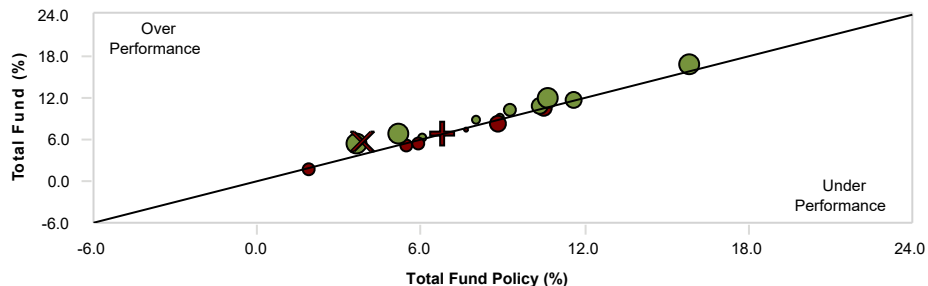
**Comparative Performance**

	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021
<b>Total Fund</b>	<b>-3.15 (11)</b>	<b>-10.54 (47)</b>	<b>-3.43 (15)</b>	<b>5.41 (17)</b>	<b>0.93 (10)</b>	<b>5.07 (72)</b>
Total Fund Policy	-4.03 (36)	-11.19 (64)	-4.49 (37)	4.49 (51)	-0.13 (50)	4.99 (76)
All Public Plans-Total Fund Median	-4.31	-10.64	-4.93	4.50	-0.13	5.46



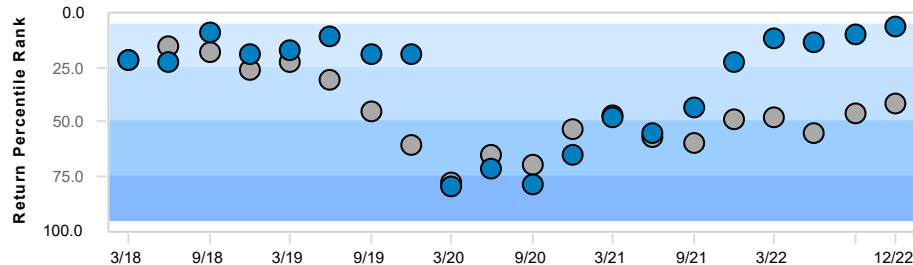


### 3 Yr Rolling Under/Over Performance - 5 Years



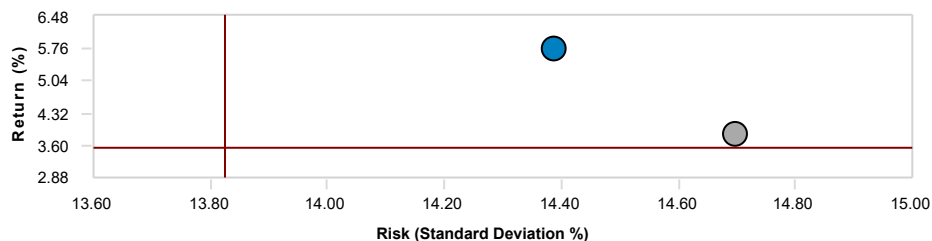
- Over Performance
- Under Performance
- + Earliest Date
- X Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



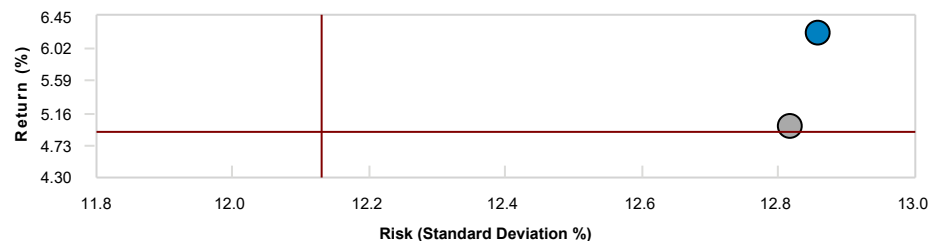
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<span style="color: blue;">●</span> Total Fund	20	13 (65%)	2 (10%)	3 (15%)	2 (10%)
<span style="color: grey;">●</span> Total Fund Policy	20	4 (20%)	8 (40%)	7 (35%)	1 (5%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Fund	5.77	14.39
<span style="color: grey;">●</span> Total Fund Policy	3.86	14.70
— Median	3.56	13.82

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Fund	6.23	12.86
<span style="color: grey;">●</span> Total Fund Policy	4.98	12.82
— Median	4.91	12.13

### Historical Statistics - 3 Years

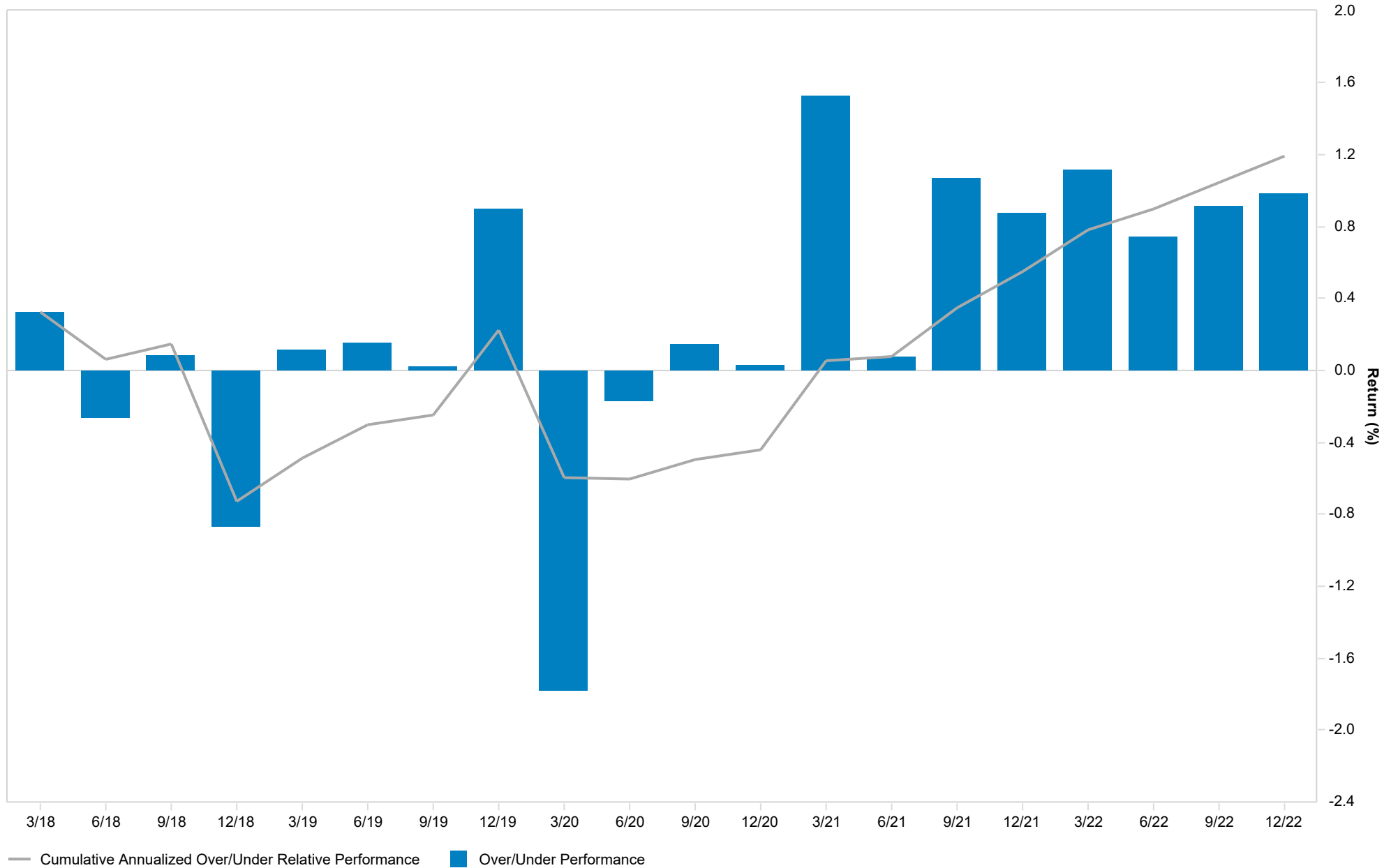
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.87	103.78	94.84	1.95	0.96	0.41	0.97	9.91
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.28	1.00	10.25

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.64	104.66	98.26	1.23	0.73	0.44	0.99	8.87
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.34	1.00	8.90



Relative Performance



Calculation based on quarterly periodicity



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

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

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

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

**Champlain MidCap Equity - Portfolio Description**

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

**Champlain MidCap Equity - Strategy Details**

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

**Reinhart Sm/Mid Equity - Portfolio Description**

- Strategy: Small / Mid Cap Equity
- Vehicle: Separately Managed Account
- Objective: To outperform the Russell 2000 Index
- Annual fees: 75 bps
- Benchmark: Russell 2000 Index

**Reinhart Sm/Mid Equity Equity - Strategy Details**

The Genesis Private Market Value (PMV) investment strategy seeks long-term capital appreciation by investing in stocks of small-to-medium capitalization companies (\$750 million to \$5 billion). The team utilizes PMV methodology for determining a company's true intrinsic value. It is calculated by observing actual M&A transactions and applying corresponding and industry-specific valuation multiples to stocks we analyze. Stock prices can be driven by emotion and other behavioral patterns that cause market prices to diverge from true intrinsic value. The manager's research has shown that companies with a durable competitive advantage tend to bottom at a 30%-40% discount to PMV. Reinhart Partners has found that owning such companies at a significant discount to PMV can offer attractive downside mitigation and a positive risk/reward that enables the portfolio to potentially outperform over the full market cycle.



Walthausen SMID Value Equity - Portfolio Description

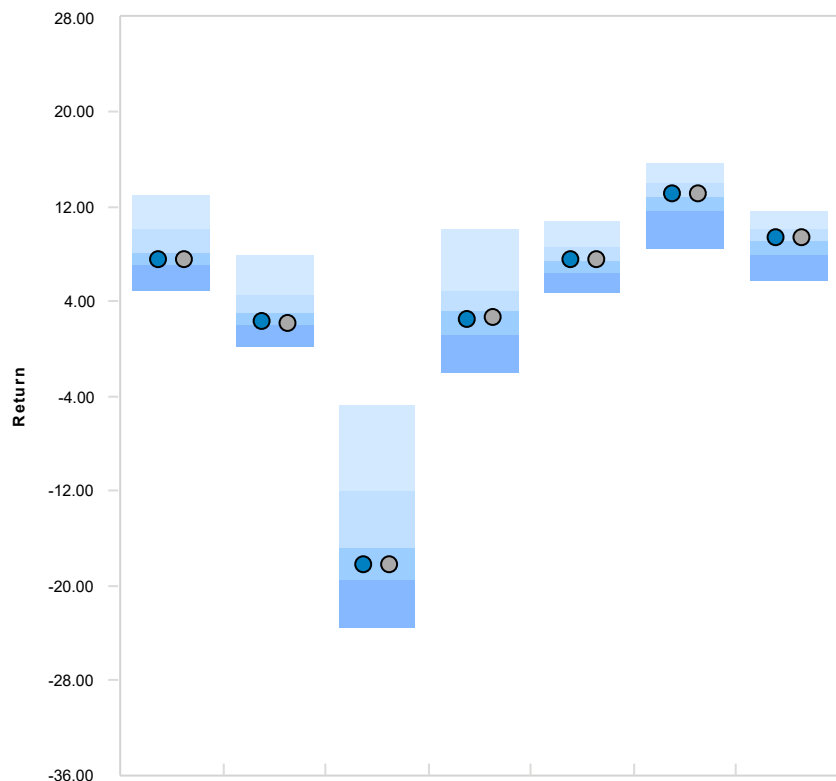
- Strategy: Select Value (SMID)
- Vehicle: Separately Managed Account
- Objective: To outperform the Russell 2500 Index
- Annual fees: 1.00% of Assets
- Benchmark: Russell 2500 Index

Walthausen SMID Value Equity - Strategy Details

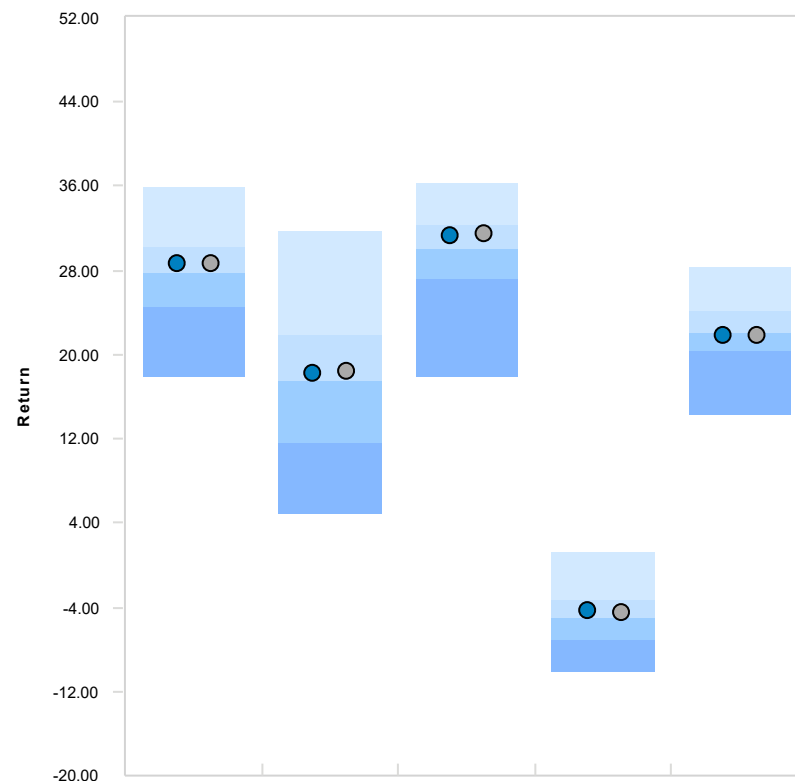
This portfolio is constructed to provide strong returns with moderate volatility. It incorporates 40-50 equally weighted holdings, broadly diversified across industry sectors. Positions are reduced when they begin to exceed 3.0% of the portfolio. Companies included in the portfolio have a market capitalization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



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Comerica S&P 500	7.55 (67)	2.32 (68)	18.18 (66)	2.64 (57)	7.63 (47)	13.14 (44)	9.40 (38)
○ S&P 500 Index	7.56 (64)	2.31 (69)	18.11 (64)	2.66 (55)	7.66 (43)	13.18 (41)	9.42 (37)
Median	8.08	3.12	16.86	3.23	7.47	12.91	9.08



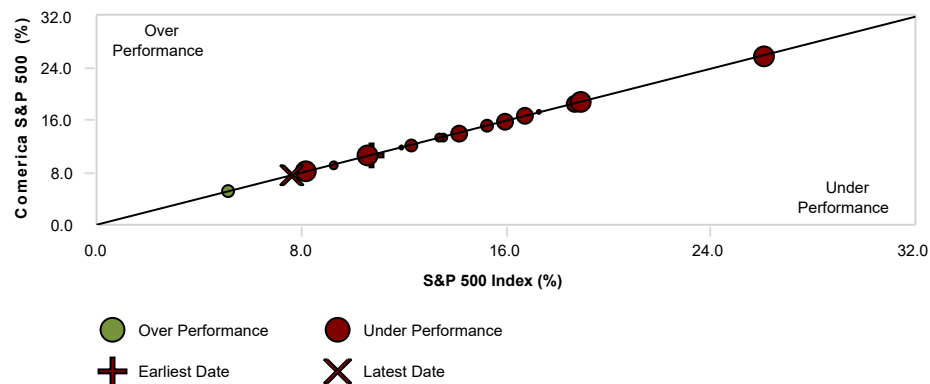
	2021	2020	2019	2018	2017
● Comerica S&P 500	28.75 (37)	18.35 (47)	31.41 (34)	-4.35 (39)	21.80 (56)
○ S&P 500 Index	28.71 (37)	18.40 (46)	31.49 (33)	-4.38 (40)	21.83 (55)
Median	27.77	17.54	30.03	-5.07	22.09

Comparative Performance

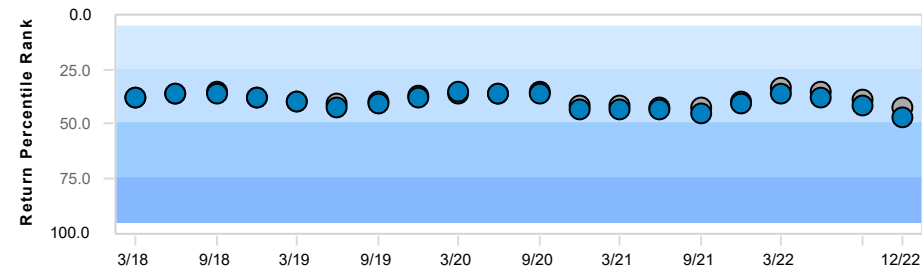
	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021
Comerica S&P 500	-4.86 (55)	-16.07 (67)	-4.72 (54)	11.10 (30)	0.59 (31)	8.52 (34)
S&P 500 Index	-4.88 (57)	-16.10 (68)	-4.60 (51)	11.03 (32)	0.58 (32)	8.55 (33)
IM U.S. Large Cap Core Equity (SA+CF) Median	-4.75	-15.21	-4.59	10.20	0.19	8.09



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

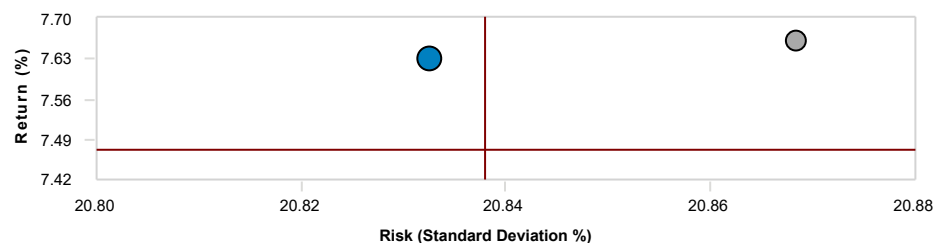


### 3 Yr Rolling Percentile Ranking - 5 Years



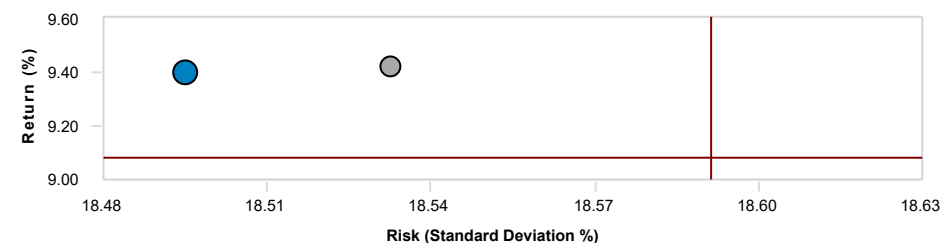
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Comerica S&P 500	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)
S&P 500 Index	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Comerica S&P 500	7.63	20.83
S&P 500 Index	7.66	20.87
Median	7.47	20.84

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Comerica S&P 500	9.40	18.49
S&P 500 Index	9.42	18.53
Median	9.08	18.59

### Historical Statistics - 3 Years

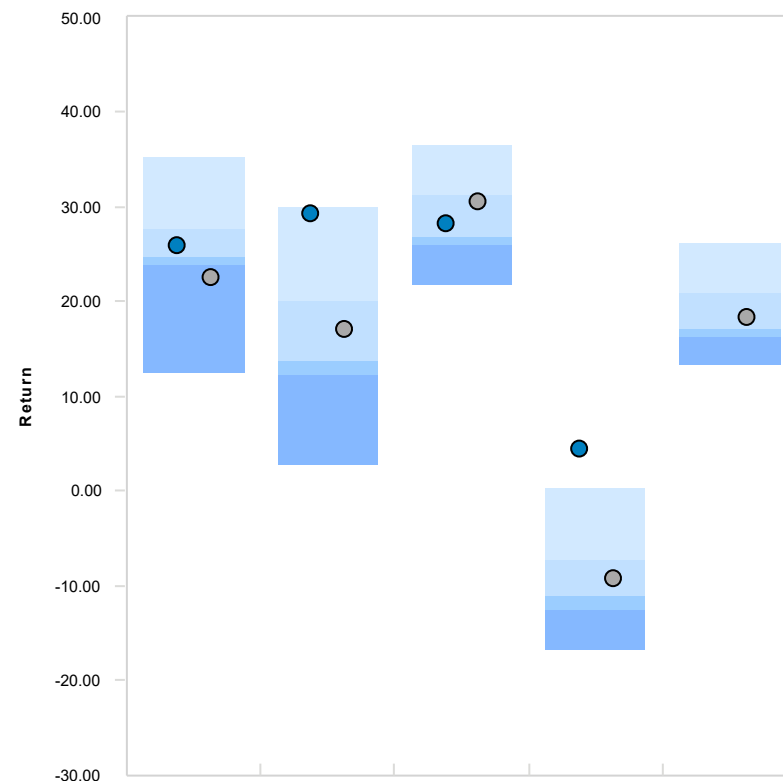
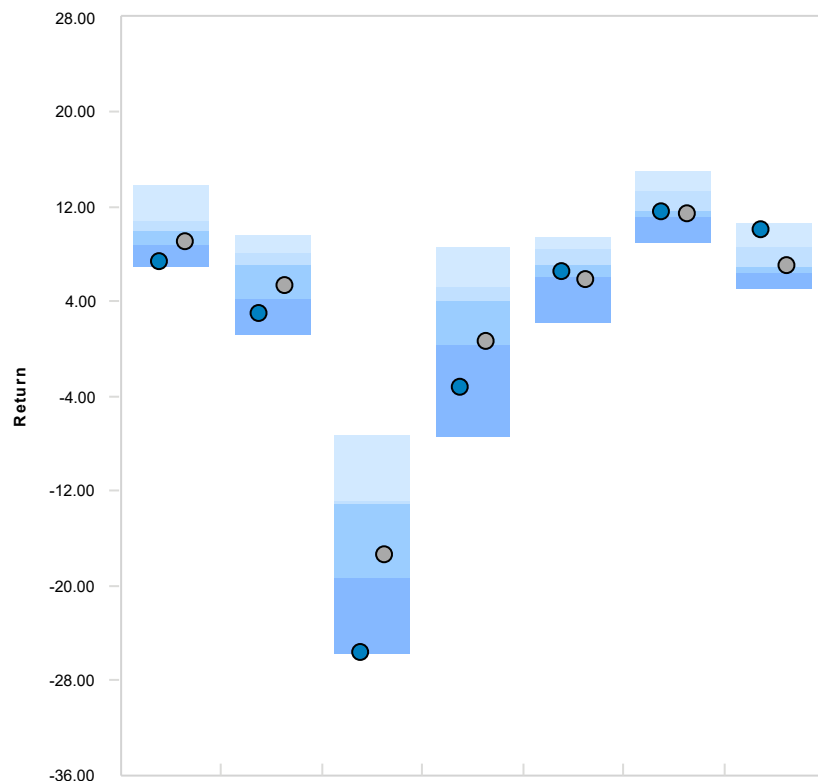
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Comerica S&P 500	0.08	99.80	99.86	-0.02	-0.46	0.42	1.00	13.88
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	0.42	1.00	13.90

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Comerica S&P 500	0.07	99.80	99.82	-0.01	-0.40	0.51	1.00	12.39
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	0.51	1.00	12.42



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Champlain MC Equity	7.46 (91)	3.05 (89)	25.57 (94)	-3.19 (90)	6.65 (66)	11.70 (55)	10.23 (14)
○ Russell Midcap Index	9.18 (66)	5.43 (67)	17.32 (67)	0.68 (75)	5.88 (81)	11.57 (69)	7.10 (44)
Median	9.99	7.04	13.10	4.12	7.14	11.73	6.93

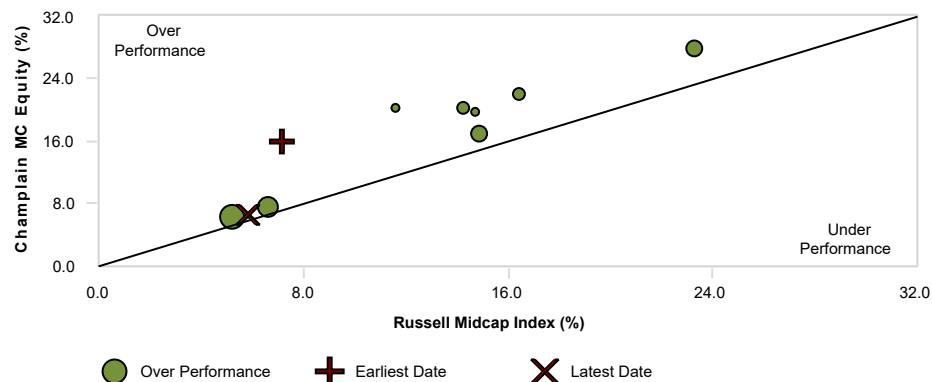
	2021	2020	2019	2018	2017
● Champlain MC Equity	25.92 (44)	29.41 (6)	28.35 (38)	4.54 (3)	N/A
○ Russell Midcap Index	22.58 (78)	17.10 (36)	30.54 (26)	-9.06 (35)	18.52 (40)
Median	24.80	13.80	26.89	-11.03	17.24

Comparative Performance

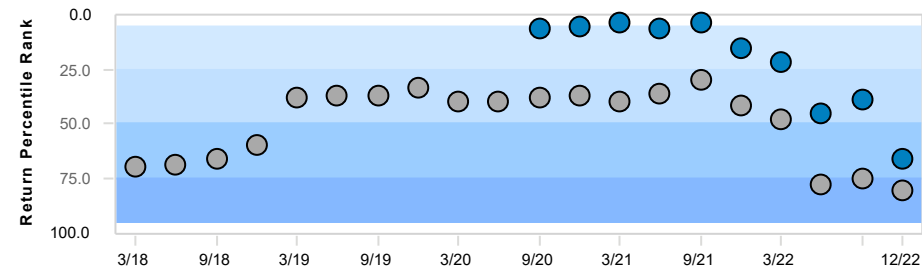
	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021
Champlain MC Equity	-4.11 (79)	-19.21 (91)	-10.59 (86)	6.48 (83)	3.29 (4)	10.12 (7)
Russell Midcap Index	-3.44 (65)	-16.85 (80)	-5.68 (57)	6.44 (85)	-0.93 (52)	7.50 (16)
IM U.S. Mid Cap Core Equity (SA+CF) Median	-3.10	-15.40	-4.94	8.00	-0.90	4.98



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

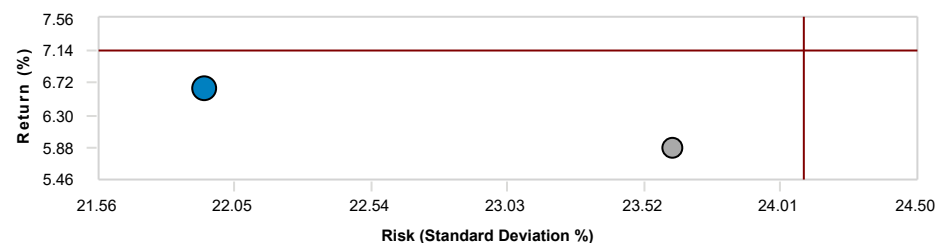


### 3 Yr Rolling Percentile Ranking - 5 Years



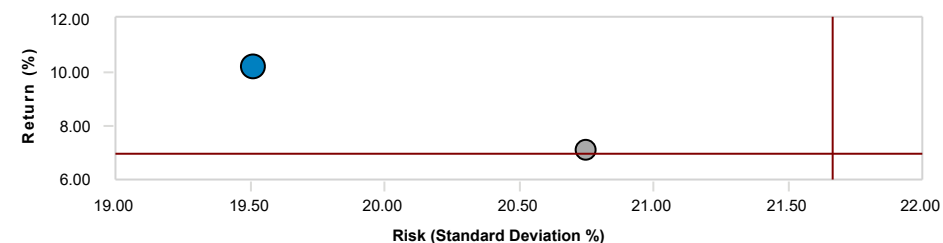
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Champlain MC Equity	10	7 (70%)	2 (20%)	1 (10%)	0 (0%)
● Russell Midcap Index	20	0 (0%)	13 (65%)	5 (25%)	2 (10%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Champlain MC Equity	6.65	21.94
● Russell Midcap Index	5.88	23.62
— Median	7.14	24.09

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Champlain MC Equity	10.23	19.51
● Russell Midcap Index	7.10	20.75
— Median	6.93	21.67

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Champlain MC Equity	7.91	92.19	88.76	1.35	0.03	0.37	0.88	14.23
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	0.33	1.00	16.61

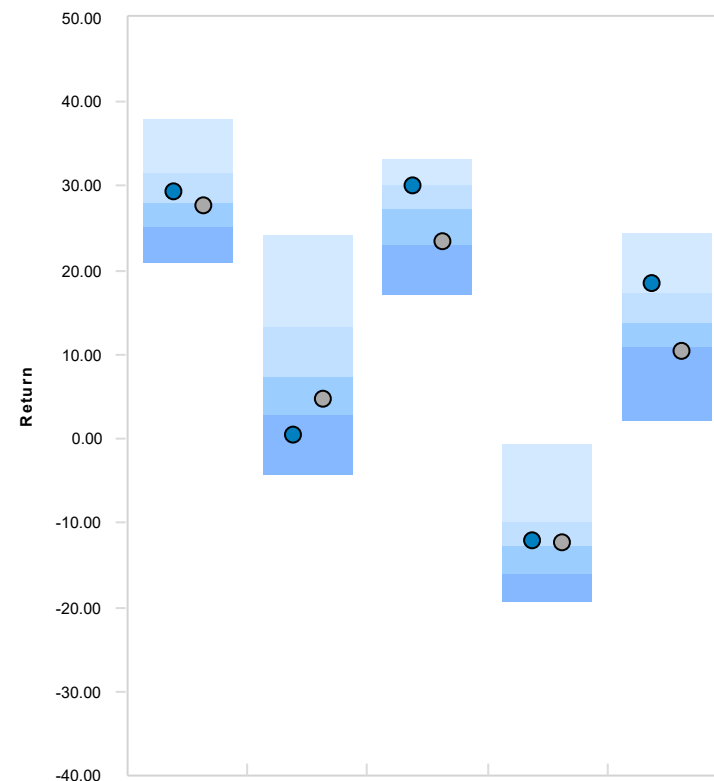
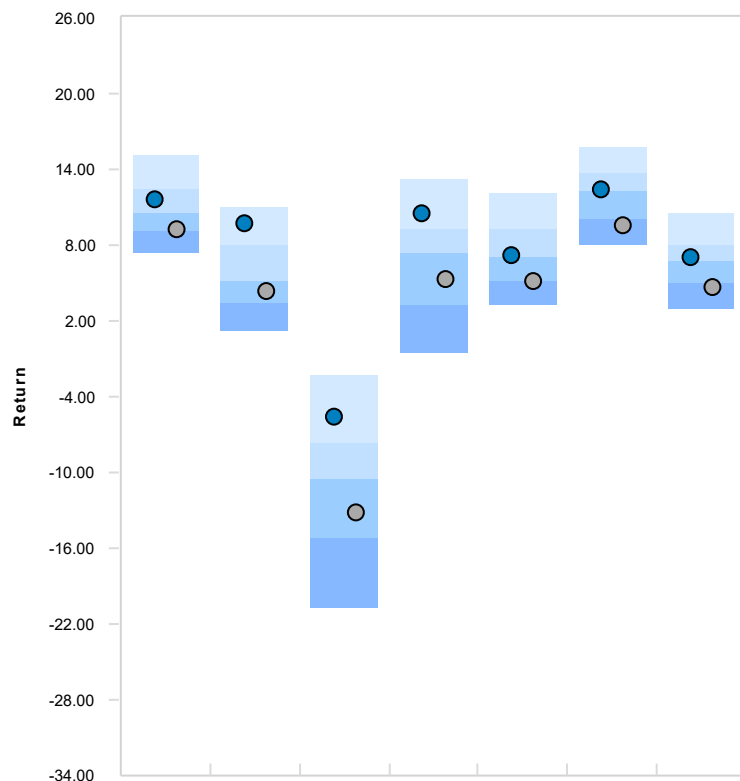
### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Champlain MC Equity	6.79	97.84	85.59	3.68	0.38	0.53	0.89	12.62
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	0.38	1.00	14.55





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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Walthausen & Co. SMID Value	1.59 (38)	9.74 (11)	-5.53 (14)	0.59 (15)	7.16 (48)	2.48 (49)	7.08 (45)
○ Russell 2500 Value Index	9.21 (75)	4.29 (68)	3.08 (66)	5.39 (64)	5.22 (74)	9.53 (82)	4.75 (82)
Median	0.45	5.21	0.53	7.43	7.08	2.24	6.75

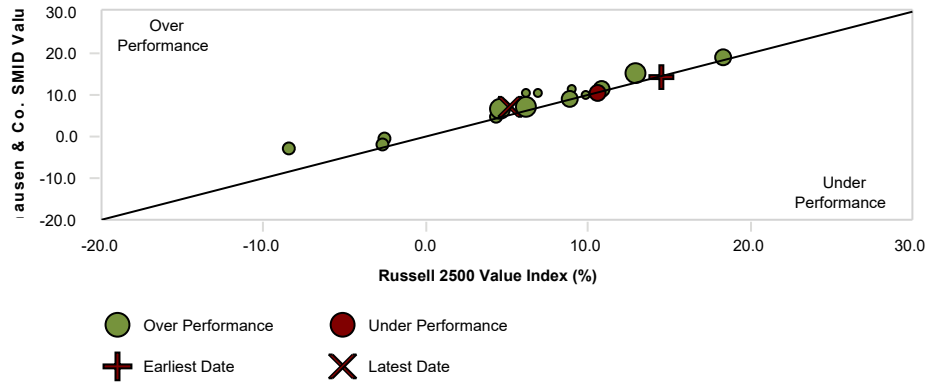
	2021	2020	2019	2018	2017
● Walthausen & Co. SMID Value	29.47 (38)	0.60 (89)	30.09 (25)	-12.04 (42)	18.43 (15)
○ Russell 2500 Value Index	27.78 (51)	4.88 (63)	23.56 (69)	-12.36 (45)	10.36 (78)
Median	27.91	7.39	27.18	-12.86	13.70

Comparative Performance

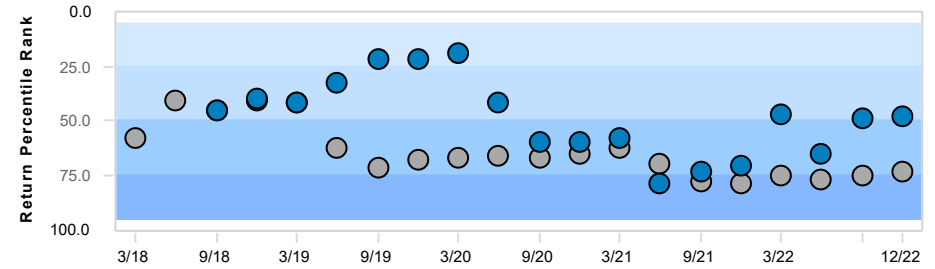
	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021
Walthausen & Co. SMID Value	-1.66 (8)	-14.46 (69)	0.65 (13)	6.83 (55)	0.23 (16)	1.58 (97)
Russell 2500 Value Index	-4.50 (44)	-15.39 (80)	-1.50 (38)	6.36 (62)	-2.07 (56)	5.00 (41)
IM U.S. SMID Cap Value Equity (SA+CF) Median	-4.66	-13.46	-2.47	7.11	-1.85	4.70



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

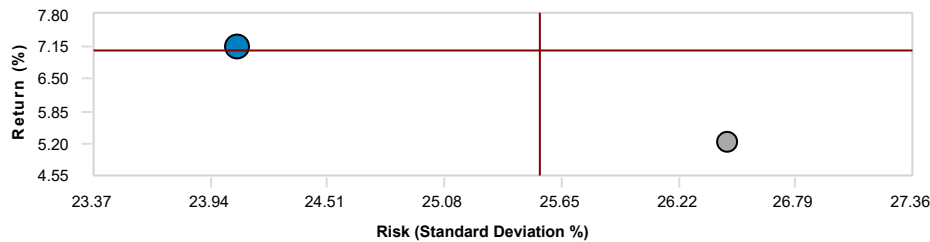


### 3 Yr Rolling Percentile Ranking - 5 Years



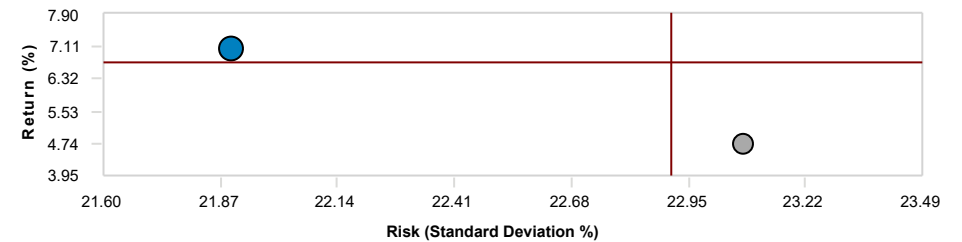
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Walthausen & Co. SMID Value	18	3 (17%)	8 (44%)	6 (33%)	1 (6%)
● Russell 2500 Value Index	20	0 (0%)	4 (20%)	13 (65%)	3 (15%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Walthausen & Co. SMID Value	7.16	24.07
● Russell 2500 Value Index	5.22	26.46
— Median	7.08	25.55

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Walthausen & Co. SMID Value	7.08	21.89
● Russell 2500 Value Index	4.75	23.07
— Median	6.75	22.91

### Historical Statistics - 3 Years

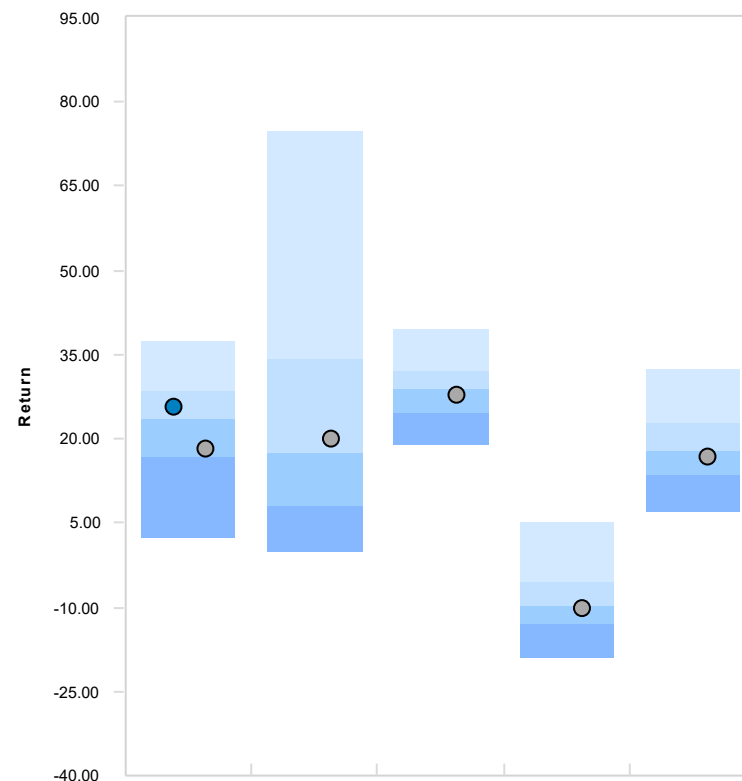
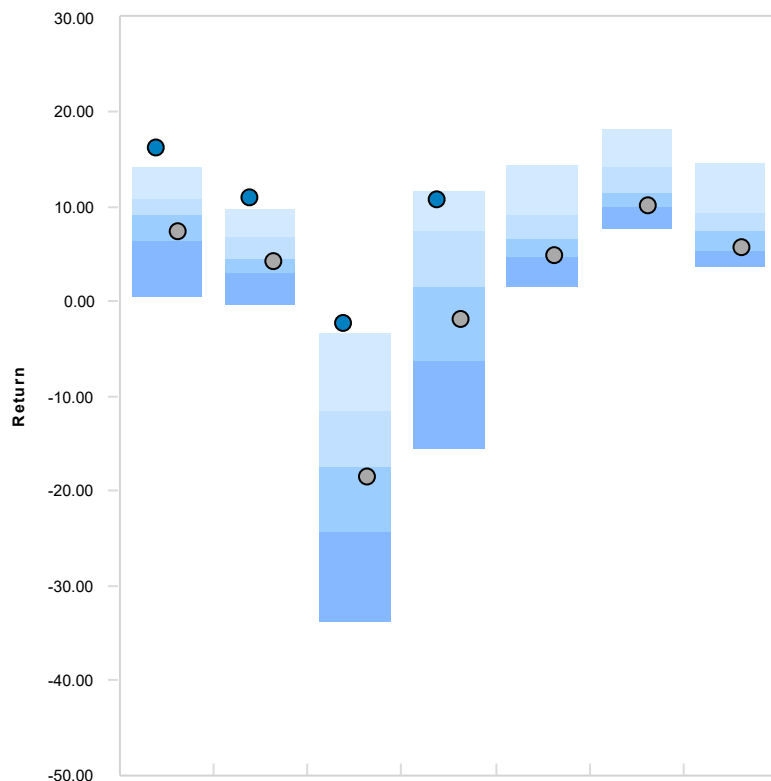
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Walthausen & Co. SMID Value	6.19	94.82	89.66	2.16	0.19	0.38	0.89	16.80
Russell 2500 Value Index	0.00	100.00	100.00	0.00	N/A	0.30	1.00	19.19

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Walthausen & Co. SMID Value	5.58	100.21	93.13	2.51	0.34	0.37	0.92	15.34
Russell 2500 Value Index	0.00	100.00	100.00	0.00	N/A	0.27	1.00	16.79



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Reinhart Sm/Mid Cap PMV	16.32 (1)	10.96 (3)	-2.25 (3)	10.79 (7)	N/A	N/A	N/A
○ Russell 2500 Index	7.43 (68)	4.40 (55)	18.37 (57)	-1.78 (65)	5.00 (70)	10.28 (71)	5.89 (69)
Median	9.13	4.62	17.35	1.67	6.65	11.55	7.38

	2021	2020	2019	2018	2017
● Reinhart Sm/Mid Cap PMV	25.57 (40)	N/A	N/A	N/A	N/A
○ Russell 2500 Index	18.18 (71)	19.99 (46)	27.77 (60)	-10.00 (52)	16.81 (59)
Median	23.52	17.56	28.92	-9.84	18.00

Comparative Performance

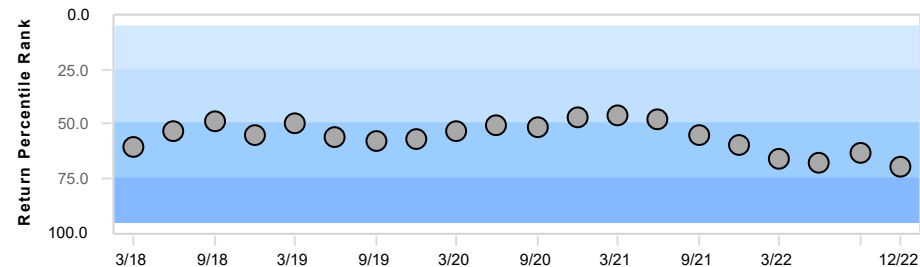
	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021
Reinhart Sm/Mid Cap PMV	-4.61 (71)	-11.31 (16)	-0.68 (13)	4.61 (66)	1.99 (13)	2.68 (94)
Russell 2500 Index	-2.82 (40)	-16.98 (62)	-5.82 (44)	3.82 (73)	-2.68 (80)	5.44 (45)
IM U.S. SMID Cap Equity (SA+CF) Median	-3.73	-15.23	-6.58	5.89	-1.20	5.35



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

No data found.

### 3 Yr Rolling Percentile Ranking - 5 Years



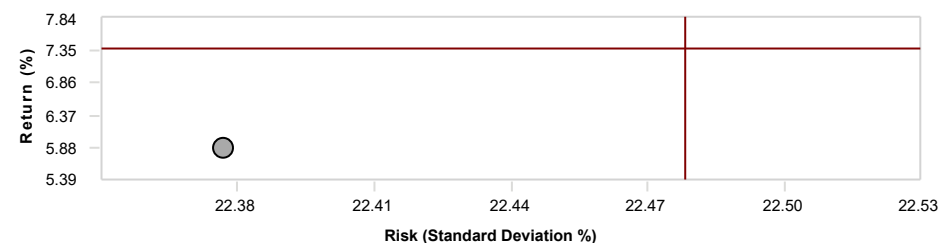
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Reinhart Sm/Mid Cap PMV	0	0	0	0	0
● Russell 2500 Index	20	0 (0%)	5 (25%)	15 (75%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Reinhart Sm/Mid Cap PMV	N/A	N/A
● Russell 2500 Index	5.00	25.16
— Median	6.65	25.18

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Reinhart Sm/Mid Cap PMV	N/A	N/A
● Russell 2500 Index	5.89	22.38
— Median	7.38	22.48

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Reinhart Sm/Mid Cap PMV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Index	0.00	100.00	100.00	0.00	N/A	0.29	1.00	17.78

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Reinhart Sm/Mid Cap PMV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Index	0.00	100.00	100.00	0.00	N/A	0.31	1.00	15.86



**LSV International - Portfolio Description**

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

**LSV International - Strategy Details**

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

**WCM Intl Growth - Portfolio Description**

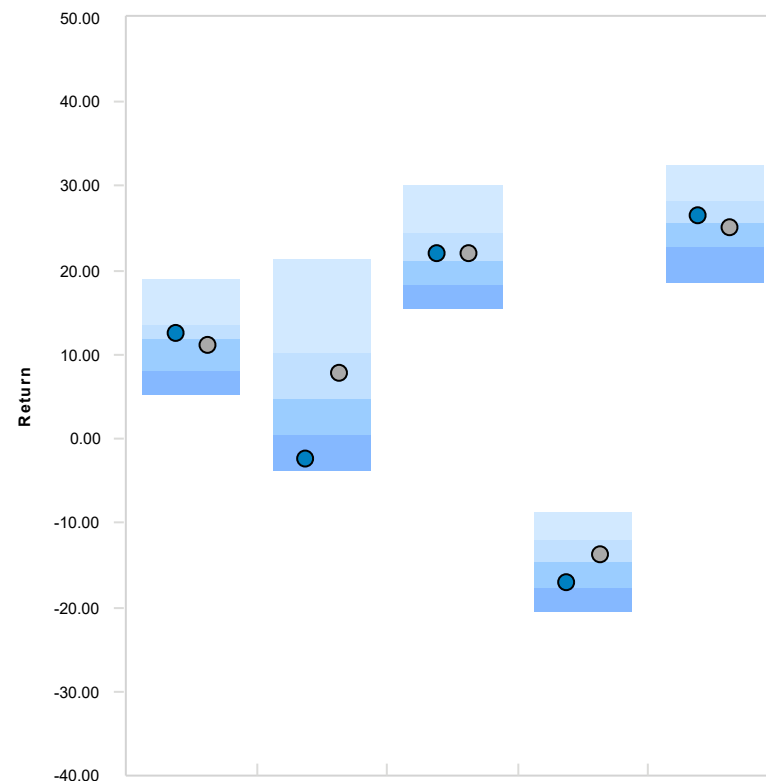
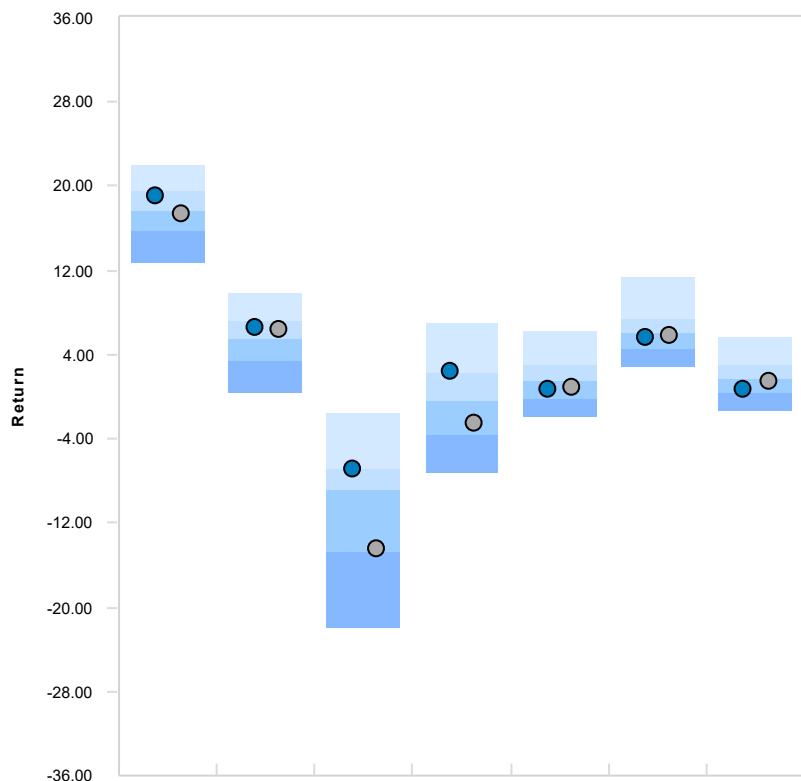
- Strategy: Focused Growth International
- Vehicle: Separately Managed Account
- Objective: To outperform the MSCI EAFE Index
- Annual fees: 1.00% on all assets
- Benchmark: MSCI EAFE Index

**WCM Intl Growth - Strategy Details**

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



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● LSV International LCV	19.17 (28)	6.55 (33)	-6.82 (25)	2.38 (23)	0.76 (63)	5.72 (59)	0.73 (70)
○ MSCI EAFE (Net) Index	17.34 (55)	6.36 (38)	14.45 (74)	-2.44 (70)	0.87 (62)	5.78 (58)	1.54 (57)
Median	17.70	5.48	-8.99	-0.30	1.47	6.02	1.78

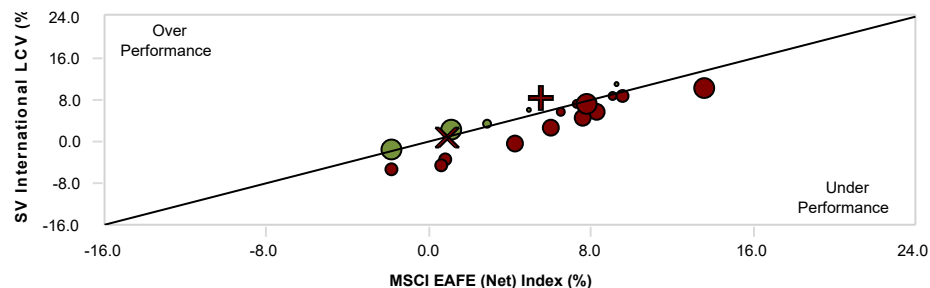
	2021	2020	2019	2018	2017
● LSV International LCV	12.48 (41)	-2.39 (89)	22.10 (41)	-16.98 (68)	26.52 (42)
○ MSCI EAFE (Net) Index	11.26 (54)	7.82 (31)	22.01 (43)	-13.79 (41)	25.03 (54)
Median	11.76	4.84	21.15	-14.75	25.58

Comparative Performance

	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021
LSV International LCV	-10.58 (57)	-12.25 (57)	-0.34 (13)	1.00 (64)	-1.45 (47)	4.01 (66)
MSCI EAFE (Net) Index	-9.36 (28)	-14.51 (88)	-5.91 (72)	2.69 (30)	-0.45 (19)	5.17 (29)
IM International Large Cap Value Equity (SA+CF) Median	-10.32	-11.85	-3.93	1.59	-1.53	4.52

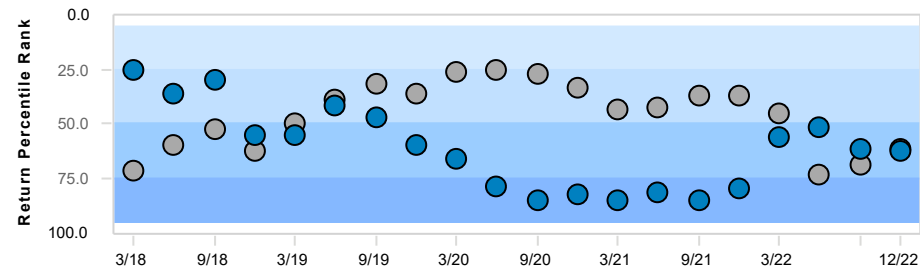


### 3 Yr Rolling Under/Over Performance - 5 Years



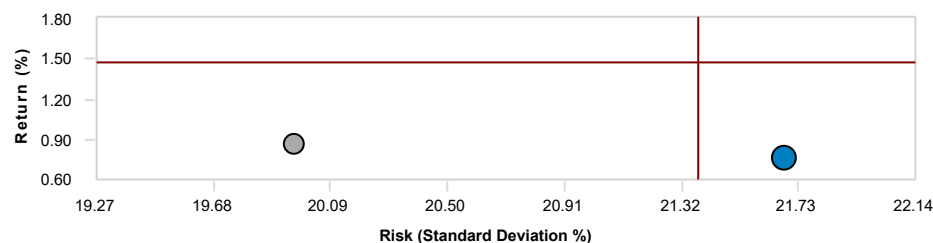
- Over Performance
- Under Performance
- +** Earliest Date
- X** Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



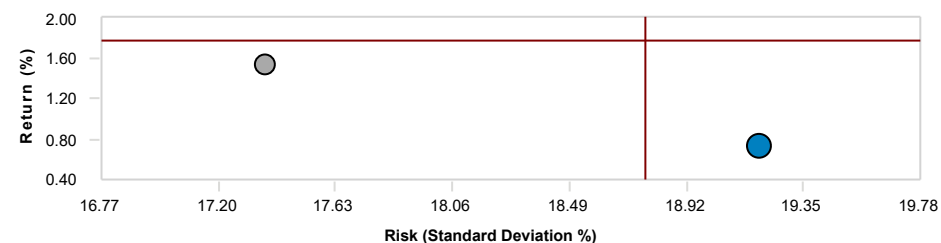
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● LSV International LCV	20	1 (5%)	4 (20%)	8 (40%)	7 (35%)
● MSCI EAFE (Net) Index	20	1 (5%)	12 (60%)	7 (35%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● LSV International LCV	0.76	21.68
● MSCI EAFE (Net) Index	0.87	19.96
— Median	1.47	21.38

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● LSV International LCV	0.73	19.19
● MSCI EAFE (Net) Index	1.54	17.37
— Median	1.78	18.77

### Historical Statistics - 3 Years

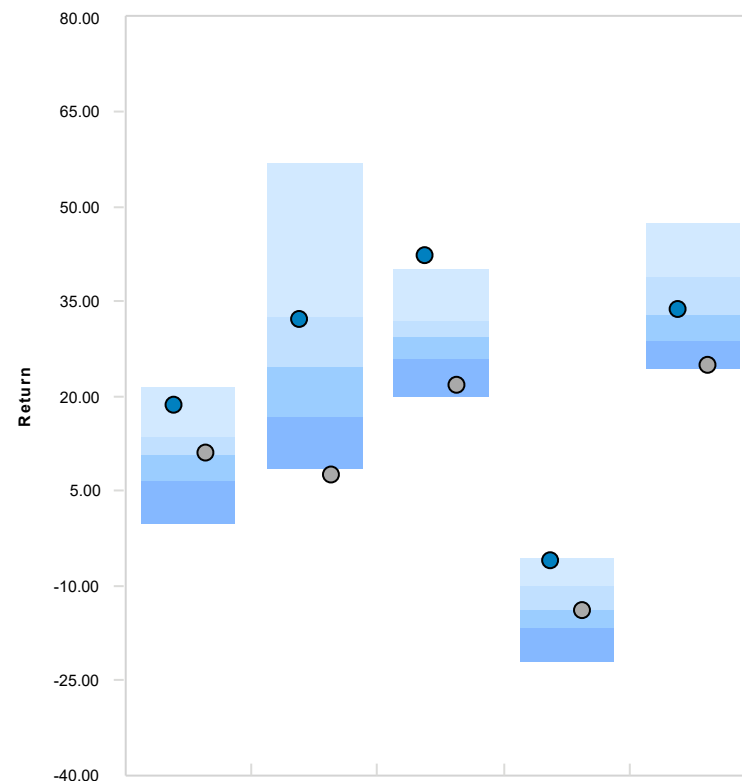
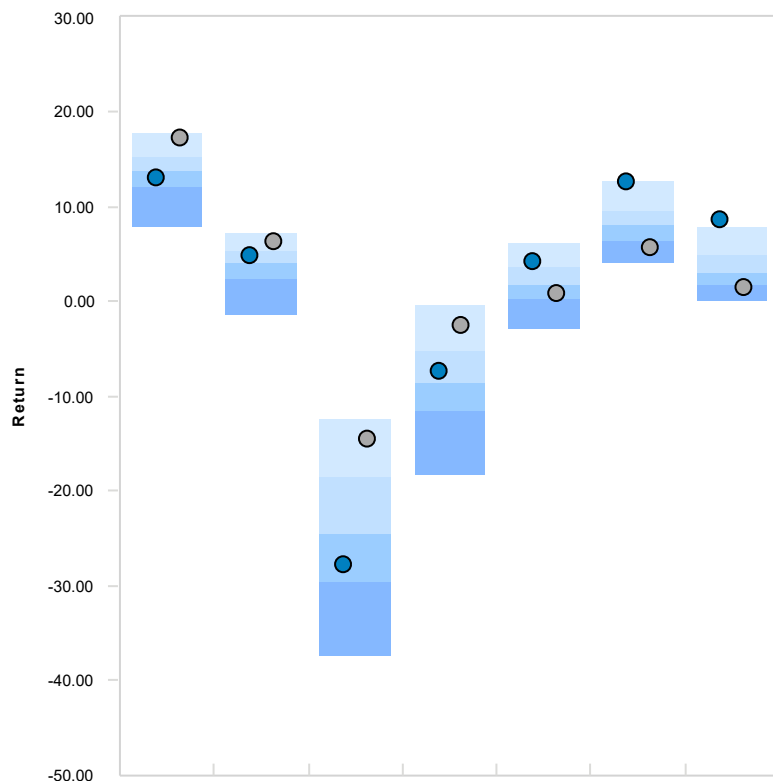
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
LSV International LCV	5.69	102.79	102.00	0.14	0.05	0.11	1.05	15.54
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.11	1.00	13.95

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
LSV International LCV	4.98	105.54	108.35	-0.66	-0.09	0.07	1.07	13.65
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.10	1.00	12.13



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● WCM Focused Growth Int'l	13.16 (61)	4.92 (33)	27.59 (65)	-7.23 (44)	4.38 (18)	12.80 (5)	8.77 (1)
○ MSCI EAFE (Net) Index	17.34 (8)	6.36 (12)	14.45 (9)	-2.44 (10)	0.87 (64)	5.78 (84)	1.54 (78)
Median	13.82	4.05	24.58	-8.57	1.84	8.08	3.15

	2021	2020	2019	2018	2017
● WCM Focused Growth Int'l	18.85 (12)	32.17 (28)	42.33 (4)	-5.96 (7)	33.97 (47)
○ MSCI EAFE (Net) Index	11.26 (47)	7.82 (97)	22.01 (89)	-13.79 (50)	25.03 (94)
Median	10.96	24.71	29.53	-13.90	33.06

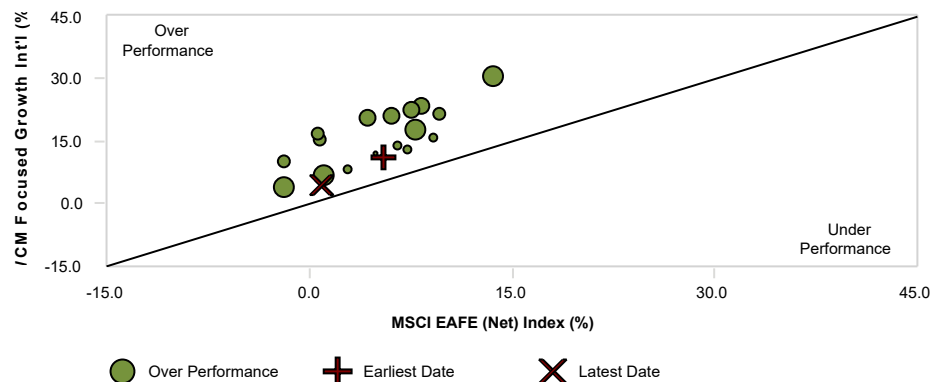
Comparative Performance

	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021
WCM Focused Growth Int'l	-7.28 (20)	-17.70 (64)	-16.15 (78)	5.89 (7)	0.83 (39)	9.72 (18)
MSCI EAFE (Net) Index	-9.36 (70)	-14.51 (27)	-5.91 (10)	2.69 (45)	-0.45 (60)	5.17 (81)
IM International Growth Equity (SA+CF) Median	-8.68	-16.95	-12.47	2.36	0.15	7.18

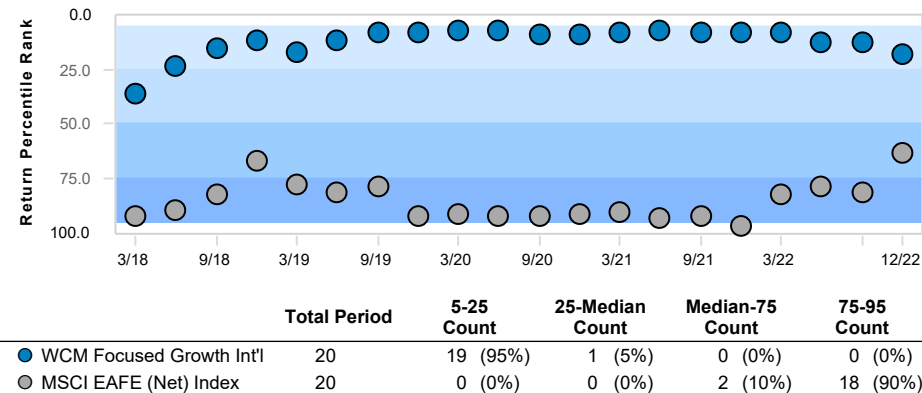




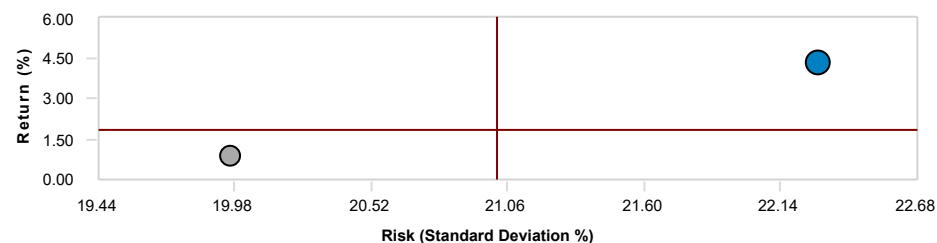
### 3 Yr Rolling Under/Over Performance - 5 Years



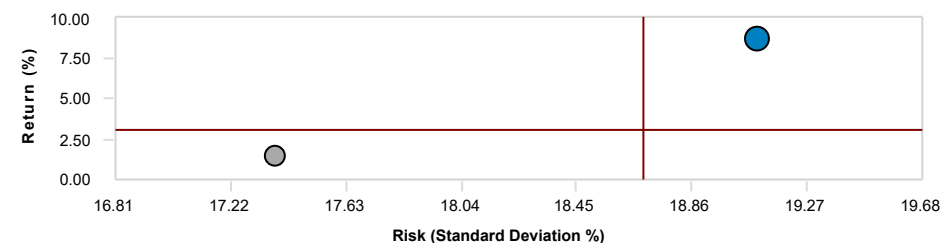
### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
WCM Focused Growth Int'l	9.54	115.13	101.48	3.99	0.41	0.27	1.01	15.43
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.11	1.00	13.95

### 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	8.55	113.36	82.48	7.54	0.85	0.47	0.98	13.05
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.10	1.00	12.13



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**Pacific Moderate Duration - Portfolio Description**

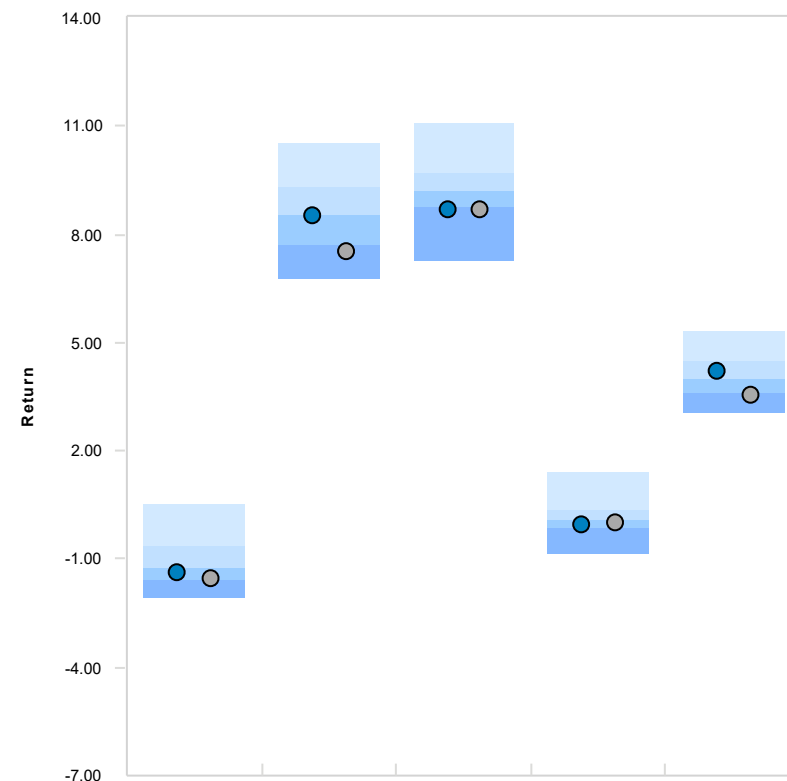
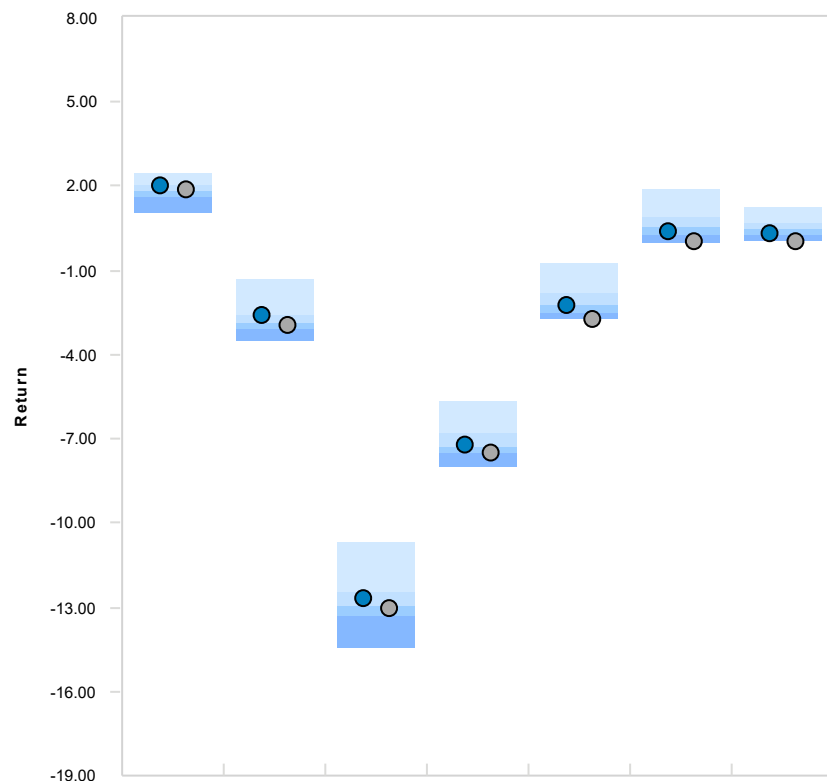
- Strategy: Moderate Duration
- Vehicle: Separately Managed Account
- Objective: To outperform the Bloomberg US Aggregate Index
- Annual fees: .30% on all assets
- Benchmark: Bloomberg US Aggregate Index

**Pacific Moderate Duration - Strategy Details**

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



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Pacific Fixed Income	2.02 (28)	-2.62 (29)	12.69 (35)	-7.21 (49)	-2.23 (53)	0.40 (64)	0.32 (67)
○ Blmbg US Agg	1.87 (42)	-2.97 (63)	13.01 (55)	-7.45 (67)	-2.71 (90)	0.03 (90)	0.02 (92)
Median	1.82	-2.89	12.95	-7.27	-2.20	0.53	0.45

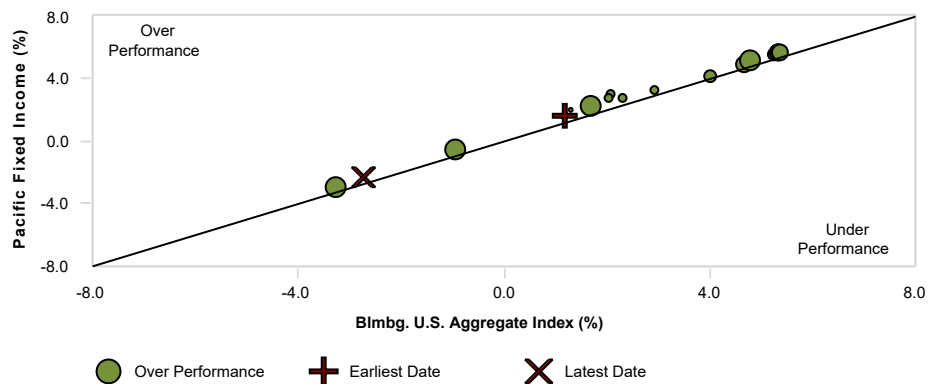
	2021	2020	2019	2018	2017
● Pacific Fixed Income	-1.37 (60)	8.55 (49)	8.70 (80)	-0.01 (65)	4.24 (35)
○ Blmbg US Agg	-1.55 (68)	7.51 (87)	8.72 (78)	0.01 (61)	3.54 (83)
Median	-1.23	8.51	9.19	0.06	4.01

Comparative Performance

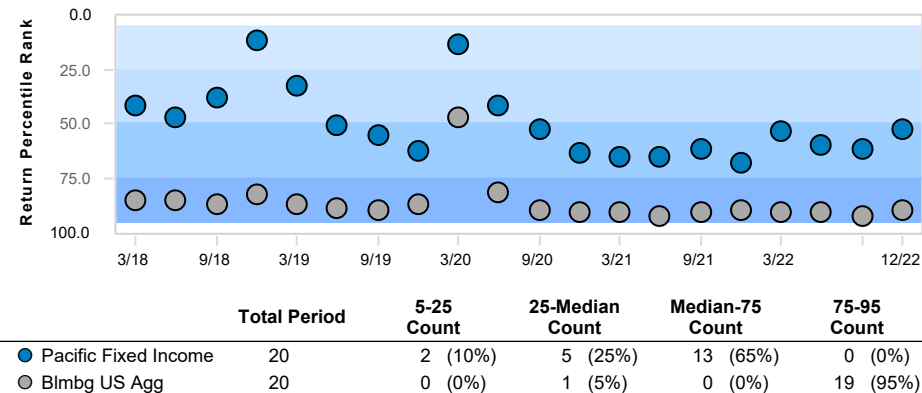
	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021
Pacific Fixed Income	-4.55 (48)	-5.07 (70)	-5.55 (22)	-0.06 (56)	0.03 (78)	1.95 (59)
Blmbg. U.S. Aggregate Index	-4.75 (77)	-4.69 (38)	-5.93 (70)	0.01 (32)	0.05 (69)	1.83 (86)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-4.56	-4.76	-5.81	-0.04	0.10	1.98



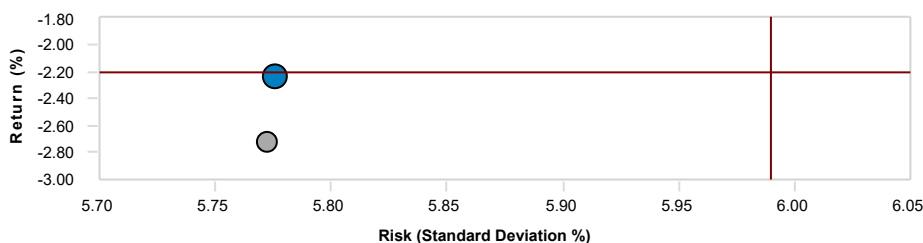
### 3 Yr Rolling Under/Over Performance - 5 Years



### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Pacific Fixed Income	0.60	100.51	94.80	0.49	0.83	-0.49	1.00	4.63
Blmbg US Agg	0.00	100.00	100.00	0.00	N/A	-0.57	1.00	4.66

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Pacific Fixed Income	0.50	99.53	94.99	0.29	0.58	-0.16	0.99	3.69
Blmbg US Agg	0.00	100.00	100.00	0.00	N/A	-0.22	1.00	3.72



**AEW Core Property - Portfolio Description**

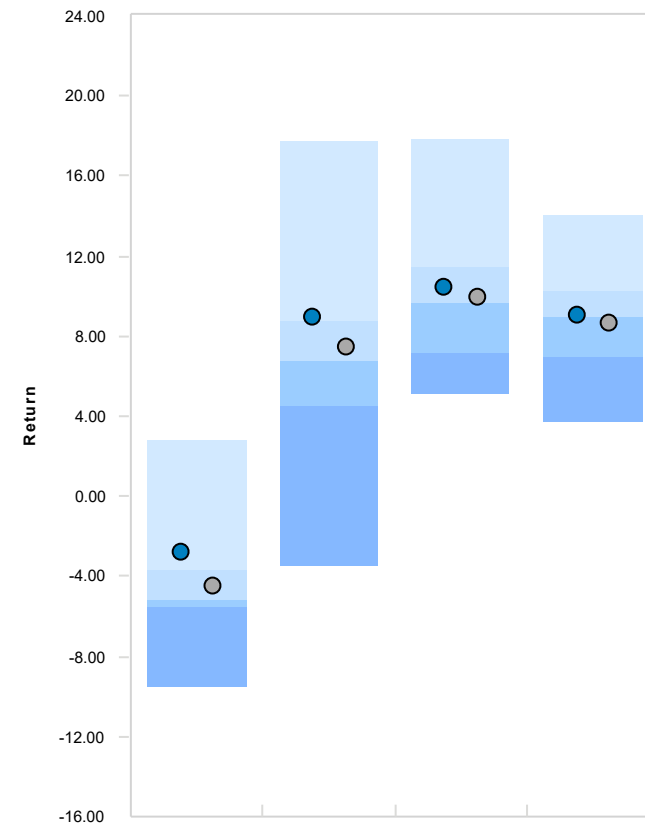
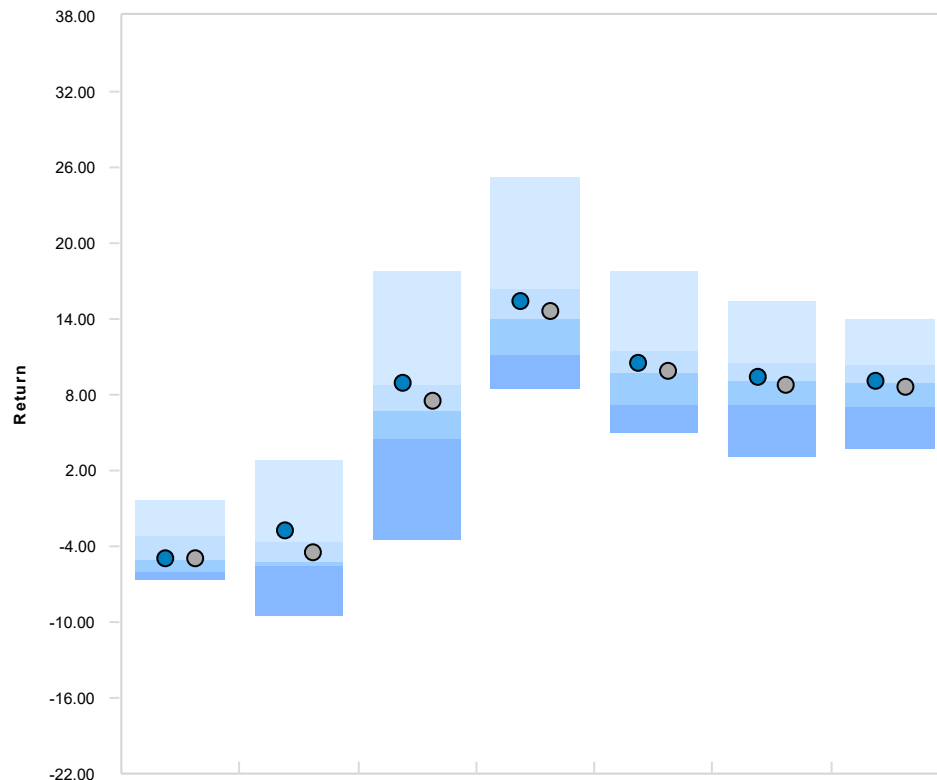
- Strategy: Core Property Trust
- Vehicle: Open Ended Commingled Real Estate Fund
- Objective: To outperform the NCREIF ODCE Index
- Annual fees: 1.10% on all assets
- Benchmark: NCREIF ODCE Index

**AEW Core Property - Strategy Details**

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



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● AEW Core Property Trust	-5.02 (45)	-2.77 (23)	8.94 (23)	15.34 (37)	10.51 (37)	9.43 (37)	9.08 (43)
● NCREIF-ODCE (VW)	-4.97 (40)	-4.47 (38)	7.47 (41)	14.58 (42)	9.93 (45)	8.76 (54)	8.68 (58)
Median	-5.18	-5.19	6.78	14.03	9.72	9.03	9.01

	FYTD	1 YR	3 YR	5 YR
● AEW Core Property Trust	-2.77 (23)	8.94 (23)	10.51 (37)	9.08 (43)
● NCREIF-ODCE (VW)	-4.47 (38)	7.47 (41)	9.93 (45)	8.68 (58)
Median	-5.19	6.78	9.72	9.01

**Comparative Performance**

	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021
AEW Core Property Trust	2.37 (8)	3.29 (64)	8.47 (12)	9.08 (30)	5.06 (90)	4.33 (43)
NCREIF Fund Index-ODCE (VW)	0.52 (58)	4.77 (36)	7.37 (34)	7.97 (40)	6.63 (40)	3.93 (64)
IM U.S. Open End Private Real Estate (SA+CF) Median	0.60	4.39	6.86	7.58	6.33	4.17



**Bloomfield Income Fund - Portfolio Description**

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

**Bloomfield Income Fund - Strategy Details**

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

**Metropolitan MREP VI - Portfolio Description**

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

**Metropolitan MREP VI - Strategy Details**

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

**RMK Timber - Portfolio Description**

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

**RMK Timber - Strategy Details**

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





**PCCP - Portfolio Description**

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

**PCCP - Strategy Details**

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

**Terracap - Portfolio Description**

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

**Terracap - Strategy Details**

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

**Marathon - Portfolio Description**

- Strategy: Marathon Distressed Credit Fund
- Preferred Return: -
- Annual fees: 1.75% for Subscription Size <\$10 million  
1.50% for Subscription Size >\$10 million to <\$25 million  
1.25% for Subscription Size >\$25 million to <\$100 million  
1.00% for Subscription Size >\$100 million

**Marathon - Strategy Details**

Marathon will look to construct a portfolio of distressed, dislocated, and restructuring corporate credit opportunities in complex situations with attractive risk-adjusted return characteristics. Core holdings of the Fund will include bankruptcy reorganizations, liquidations, rescue lending, distressed exchanges, debtor-in-possession financings, and dislocated credit



**PA/Apogem Sec Fund VI - Portfolio Description**

- Strategy: PASF VII
- Preferred Return: 10.00%
- Annual fees: During the investment period, 1.25% per annum, based on the value of closed investments.

**PA/Apogem Sec Fund VI - Strategy Details**

PASF IV seeks to create a diversified portfolio of private equity limited partnership interests purchased on the secondary market and a limited number of direct private equity co-investments that generate attractive risk adjusted returns.

**Sturbridge Diversified III - Portfolio Description**

- Strategy: Sturbridge Diversified III
- Preferred Return: 7.00%
- Annual fees: During the investment period, 1.25% per annum, based on the value of closed investments.

**Sturbridge Diversified III - Strategy Details**

Sturbridge Diversified III seeks to provide investors with attractive risk-adjusted returns through the construction of a highly diversified portfolio of secondary investments by participating in segments of the secondary market deemed less competitive.

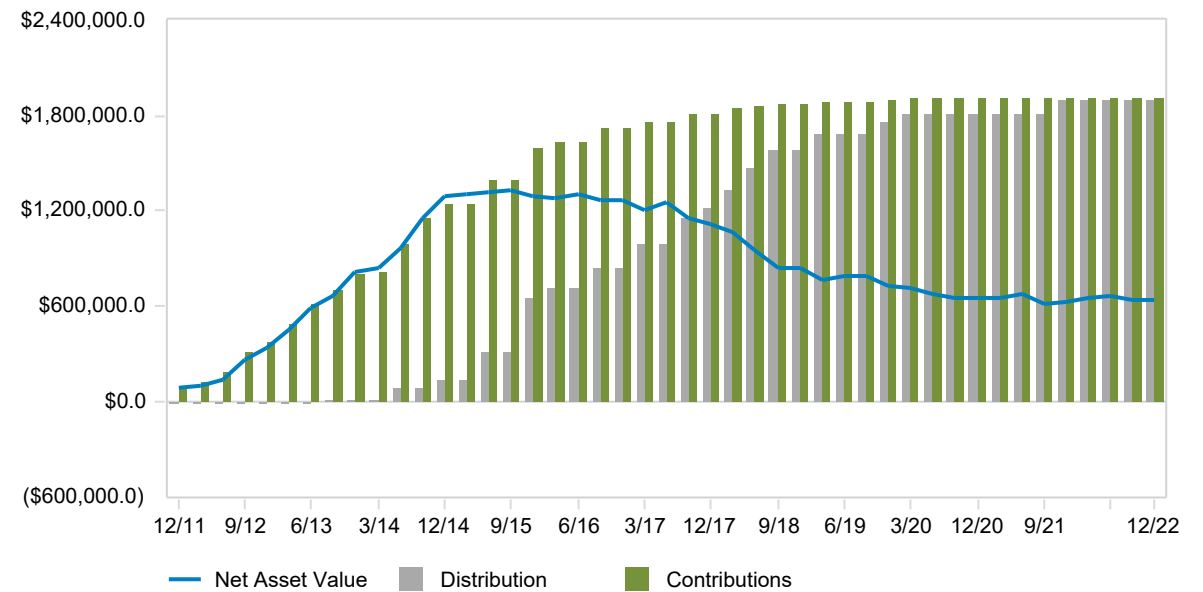
**Fund Information**

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

**Cash Flow Summary**

<b>Capital Committed:</b>	\$2,000,000
<b>Capital Invested:</b>	\$1,901,855
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	\$1,188
<b>Total Contributions:</b>	\$1,903,043
<b>Remaining Capital Commitment:</b>	\$98,145
<b>Total Distributions:</b>	\$1,899,107
<b>Market Value:</b>	\$637,284
<b>Inception Date:</b>	11/30/2011
<b>Inception IRR:</b>	7.5
<b>TVPI:</b>	1.3

**Cash Flow Analysis**



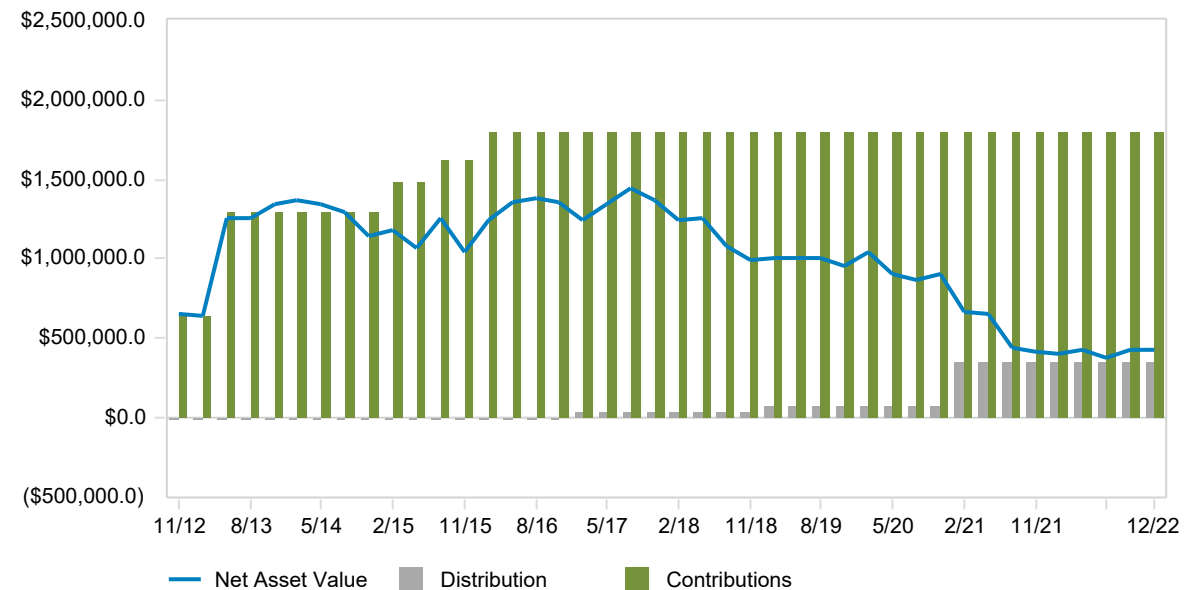
**Fund Information**

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

**Cash Flow Summary**

<b>Capital Committed:</b>	\$1,360,744
<b>Capital Invested:</b>	\$1,799,414
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$1,799,414
<b>Remaining Capital Commitment:</b>	-\$199,424
<b>Total Distributions:</b>	\$349,764
<b>Market Value:</b>	\$426,313
<b>Inception Date:</b>	11/21/2012
<b>Inception IRR:</b>	-9.9
<b>TVPI:</b>	0.4

**Cash Flow Analysis**



**Fund Information**

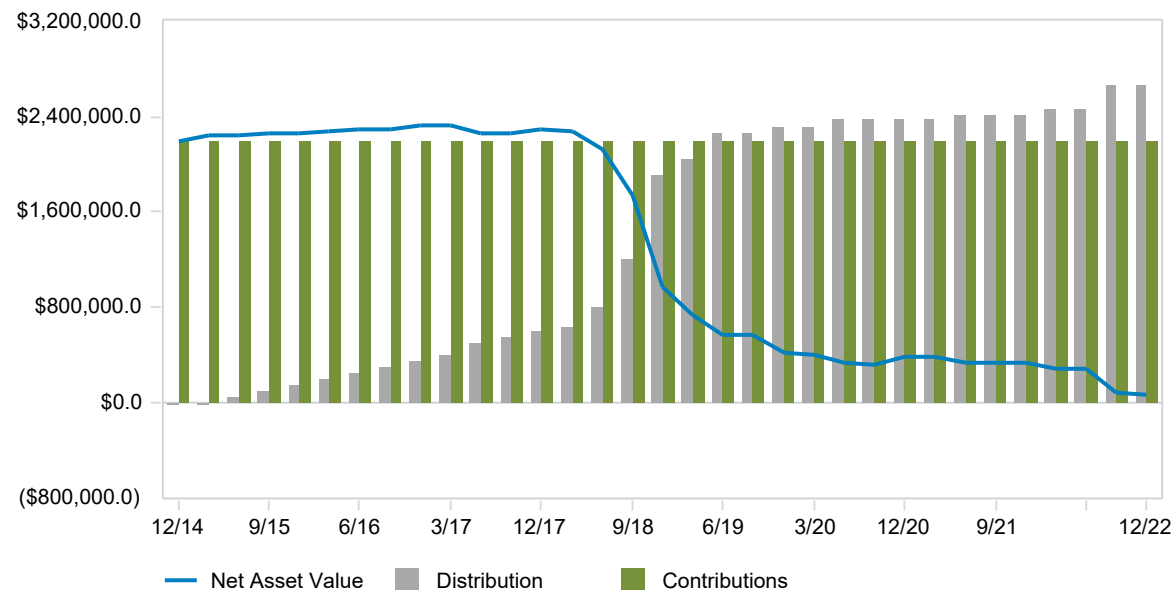
<b>Type of Fund:</b>	Direct	<b>Vintage Year:</b>	2011
<b>Strategy Type:</b>	Other	<b>Management Fee:</b>	2.00%
<b>Target IRR:</b>	9.00%	<b>Inception:</b>	11/13/2011
<b>General Partner:</b>	Bloomfield Capital Partners, LLC		
<b>Investment Strategy:</b>	Bloomfield Capital Income Fund II invests primarily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

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

**Cash Flow Summary**

<b>Capital Committed:</b>	\$480,590
<b>Capital Invested:</b>	\$2,200,000
<b>Management Fees:</b>	\$317,000
<b>Expenses:</b>	\$135,239
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$2,200,000
<b>Remaining Capital Commitment:</b>	-
<b>Total Distributions:</b>	\$2,654,490
<b>Market Value:</b>	\$68,162
<b>Inception Date:</b>	12/22/2014
<b>Inception IRR:</b>	5.7
<b>TVPI:</b>	1.2

**Cash Flow Analysis**



**Fund Information**

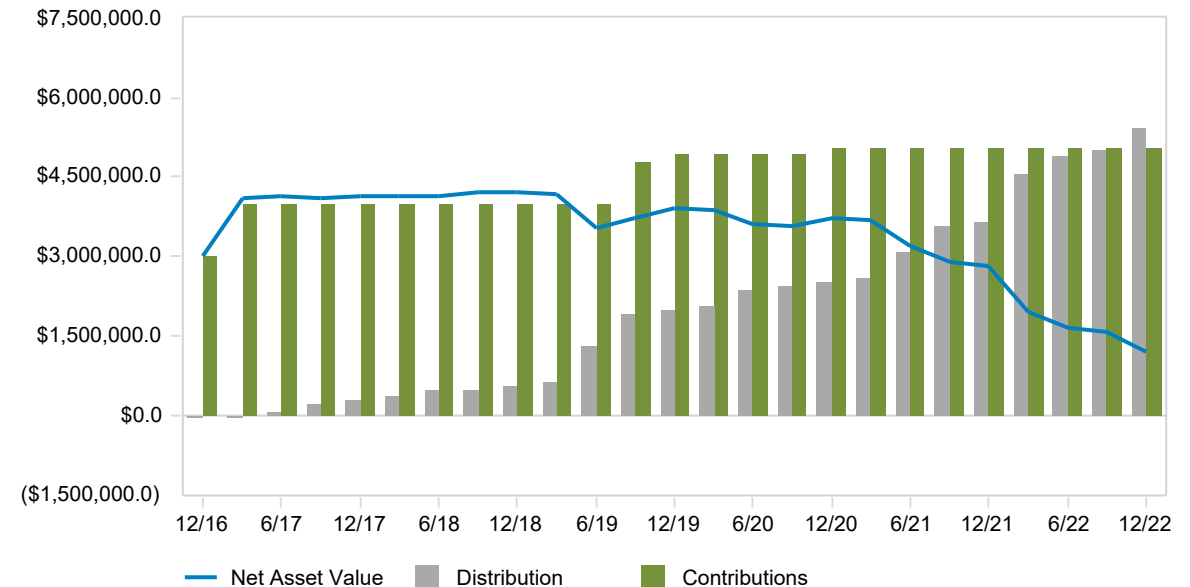
<b>Type of Fund:</b>	Direct	<b>Vintage Year:</b>	2015
<b>Strategy Type:</b>	Other	<b>Management Fee:</b>	2.00%
<b>Target IRR:</b>	8.00%	<b>Inception:</b>	11/01/2015
<b>General Partner:</b>	Bloomfield Capital Partners, LLC		
<b>Investment Strategy:</b>	Bloomfield Capital Income Fund III invests primarily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

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

**Cash Flow Summary**

<b>Capital Committed:</b>	\$2,852,458
<b>Capital Invested:</b>	\$5,060,000
<b>Management Fees:</b>	\$248,970
<b>Expenses:</b>	\$85,895
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$5,060,000
<b>Remaining Capital Commitment:</b>	-
<b>Total Distributions:</b>	\$5,417,443
<b>Market Value:</b>	\$1,213,370
<b>Inception Date:</b>	12/31/2016
<b>Inception IRR:</b>	8.0
<b>TVPI:</b>	1.3

**Cash Flow Analysis**



**Fund Information**

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

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

**Cash Flow Summary**

<b>Capital Committed:</b>	\$856,851
<b>Capital Invested:</b>	\$1,559,410
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$1,559,410
<b>Remaining Capital Commitment:</b>	-
<b>Total Distributions:</b>	\$1,602,512
<b>Market Value:</b>	\$390,434
<b>Inception Date:</b>	02/14/2019
<b>Inception IRR:</b>	10.8
<b>TVPI:</b>	1.3

**Cash Flow Analysis**



**Fund Information**

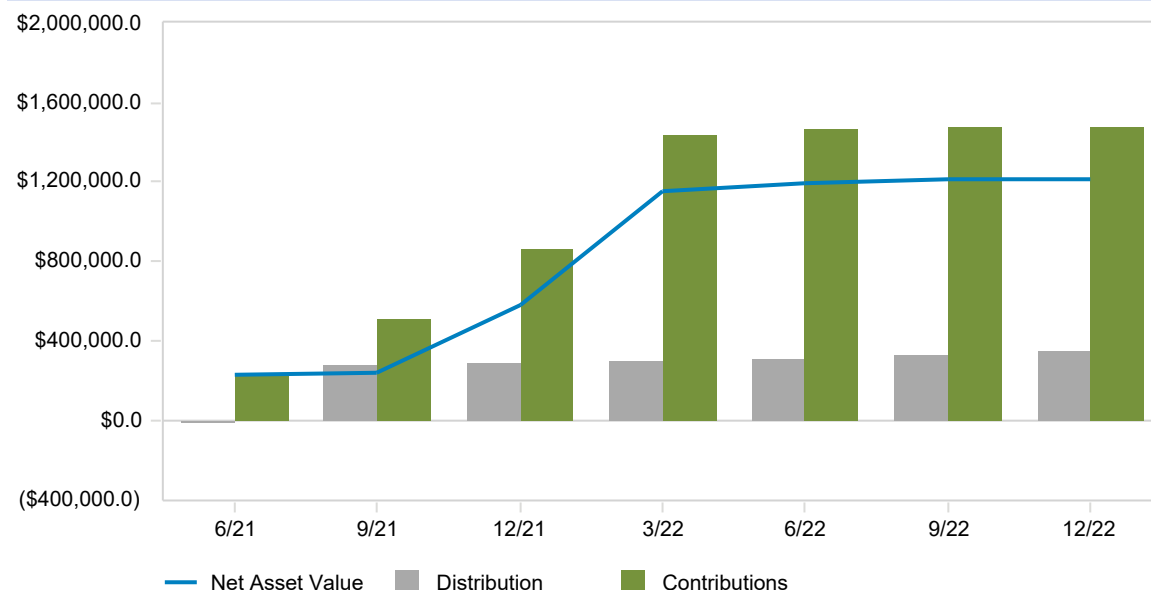
<b>Type of Fund:</b>	Direct	<b>Vintage Year:</b>	2018
<b>Strategy Type:</b>	Other	<b>Management Fee:</b>	1.5%
<b>Target IRR:</b>	8.5% (Series A only)	<b>Inception:</b>	11/16/2018
<b>General Partner:</b>	Bloomfield Capital Partners V, LLC		

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

**Cash Flow Summary**

<b>Capital Committed:</b>	\$862,558
<b>Capital Invested:</b>	\$1,477,895
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$1,477,895
<b>Remaining Capital Commitment:</b>	-\$334,041
<b>Total Distributions:</b>	\$355,429
<b>Market Value:</b>	\$1,218,483
<b>Inception Date:</b>	04/22/2021
<b>Inception IRR:</b>	8.1
<b>TVPI:</b>	1.1

**Cash Flow Analysis**





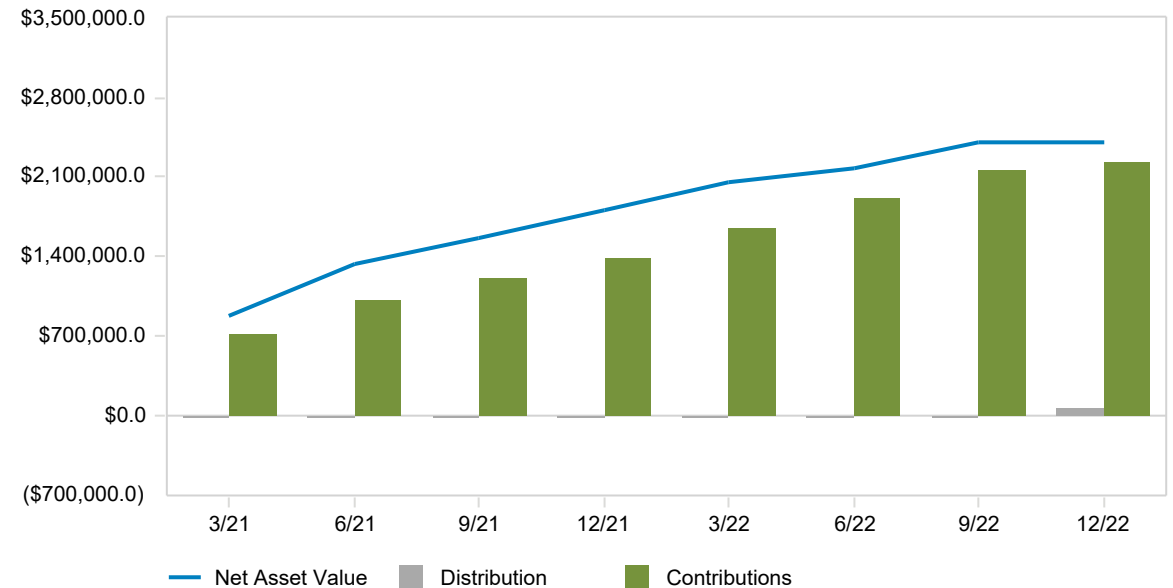
**Fund Information**

<b>Type of Fund:</b>	Fund Of Funds	<b>Vintage Year:</b>	2019
<b>Strategy Type:</b>	Distressed	<b>Management Fee:</b>	1.75% for Subscription Size <\$10 million; 1.50% for Subscription Size >\$10 million to <\$25 million; 1.25% for Subscription Size >\$25 million to <\$100 million; 1.00% for Subscription Size >\$100 million
<b>Target IRR:</b>	Incentive Fee 20% with 8% hurdle	<b>Inception:</b>	12/03/2019
<b>General Partner:</b>	Marathon Asset Management, LP		
<b>Investment Strategy:</b>	Marathon will look to construct a portfolio of distressed, dislocated, and restructuring corporate credit opportunities in complex situations with attractive risk-adjusted return characteristics. Core holdings of the Fund will include bankruptcy reorganizations, liquidations, rescue lending, distressed exchanges, debtor-in-possession financings, and dislocated credit.		

**Cash Flow Summary**

<b>Capital Committed:</b>	\$3,000,000
<b>Capital Invested:</b>	\$2,235,000
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	\$3,822
<b>Total Contributions:</b>	\$2,238,822
<b>Remaining Capital Commitment:</b>	\$840,000
<b>Total Distributions:</b>	\$75,000
<b>Market Value:</b>	\$2,415,868
<b>Inception Date:</b>	01/04/2021
<b>Inception IRR:</b>	9.0
<b>TVPI:</b>	1.1

**Cash Flow Analysis**



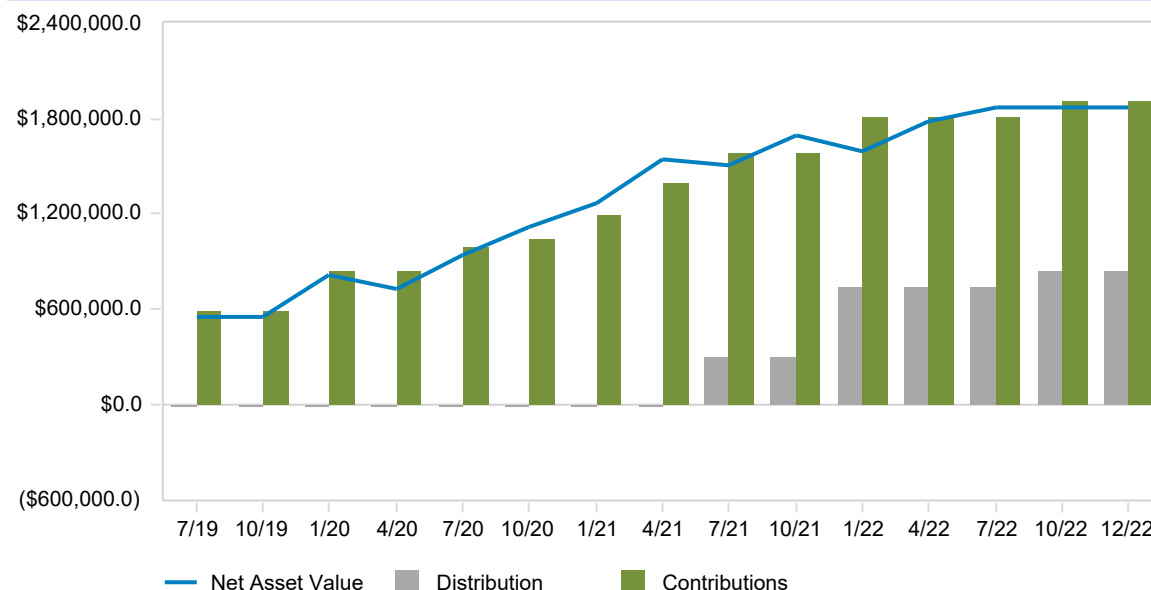
**Fund Information**

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

**Cash Flow Summary**

<b>Capital Committed:</b>	\$2,000,000
<b>Capital Invested:</b>	\$1,867,720
<b>Management Fees:</b>	-
<b>Expenses:</b>	\$24,000
<b>Interest:</b>	\$22,420
<b>Total Contributions:</b>	\$1,914,140
<b>Remaining Capital Commitment:</b>	\$605,421
<b>Total Distributions:</b>	\$841,643
<b>Market Value:</b>	\$1,869,433
<b>Inception Date:</b>	07/23/2019
<b>Inception IRR:</b>	18.5
<b>TVPI:</b>	1.4

**Cash Flow Analysis**



### Fund Information

<b>Type of Fund:</b>	Partnership	<b>Vintage Year:</b>	2017
<b>Strategy Type:</b>	Value-Add Real Estate	<b>Management Fee:</b>	1.50%
<b>Target IRR:</b>	8.00% + carried interest 30% to GP, 70% to investor after gross return of 15%	<b>Inception:</b>	11/01/2016
<b>General Partner:</b>	TerraCap GP IV, LLC		

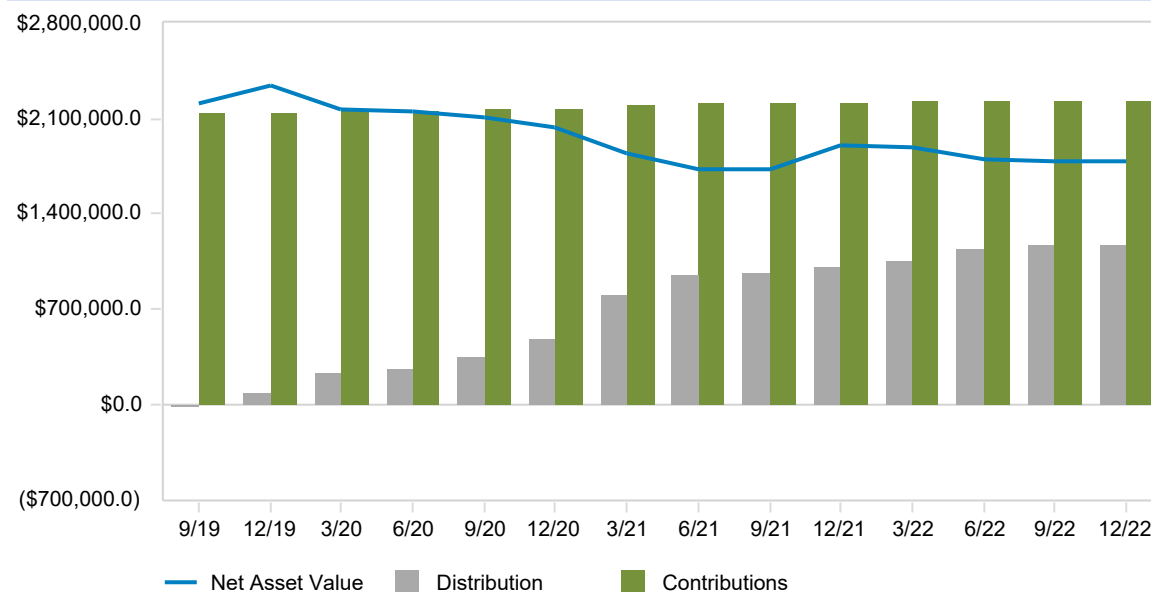
**Investment Strategy:** TerraCap Management, LLC is a commercial real estate investment management company focused on value-add real estate acquisitions in the Southern United States. TerraCap considers thematic factors such as business formation, employment growth and population growth on a market-by-market basis, as most metros and sub-markets have different economic-based industries and therefore move through their economic cycles differently. TerraCap's principals aim to diversify the firm's real estate portfolio across geographies and asset classes, including office, flex, multifamily, and hospitality.

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

### Cash Flow Summary

<b>Capital Committed:</b>	\$2,000,000
<b>Capital Invested:</b>	\$2,000,000
<b>Management Fees:</b>	\$78,526
<b>Expenses:</b>	\$11,165
<b>Interest:</b>	\$141,451
<b>Total Contributions:</b>	\$2,231,142
<b>Remaining Capital Commitment:</b>	-\$11,165
<b>Total Distributions:</b>	\$1,169,708
<b>Market Value:</b>	\$1,782,943
<b>Inception Date:</b>	07/03/2019
<b>Inception IRR:</b>	11.3
<b>TVPI:</b>	1.4

### Cash Flow Analysis



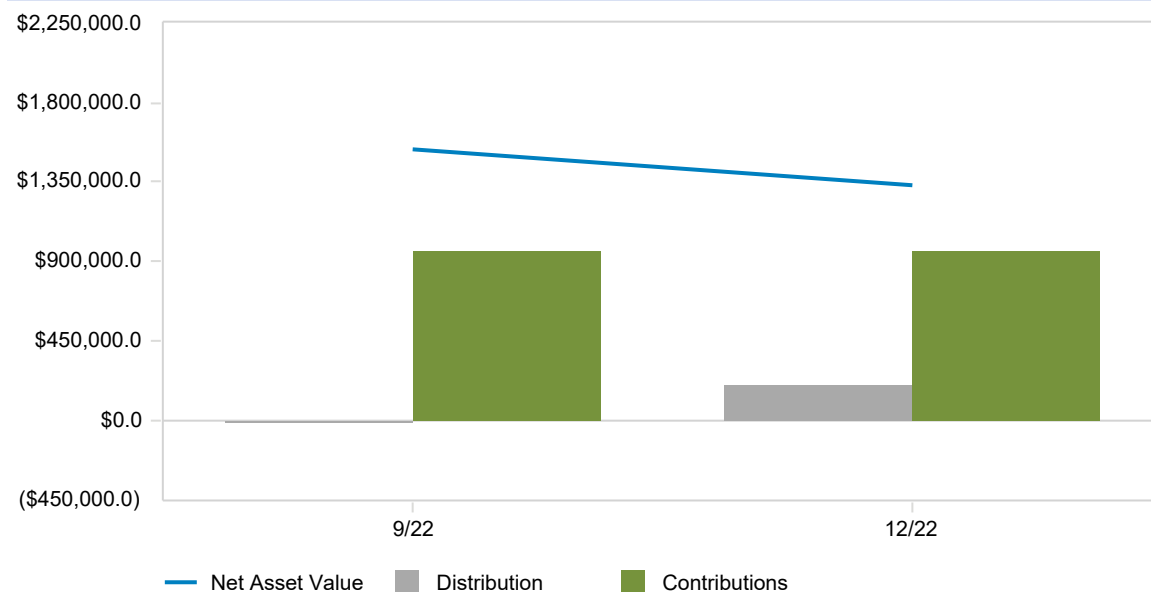
**Fund Information**

<b>Type of Fund:</b>	Secondary	<b>Vintage Year:</b>	2020
<b>Strategy Type:</b>	Secondaries	<b>Management Fee:</b>	Investment Period: 1.25% per annum, based on the value of closed investments
<b>Target IRR:</b>	10%; incentive: 10% on net gains in excess of the 10% preferred return, payable o	<b>Inception:</b>	12/31/2019
<b>General Partner:</b>	PASF IV (GP), LLC		
<b>Investment Strategy:</b>	PASF IV seeks to create a diversified portfolio of (i) private equity limited partnership interests purchased on the secondary market and (ii) a limited number of direct private equity co-investments that generate attractive risk adjusted returns. PA, through PASF IV, will leverage its extensive private markets experience, proprietary resources and long-standing industry relationships to source, underwrite and execute attractive secondary investments and co-investments. It is expected that the Fund will be diversified across vintage year, investment strategy, industry, geography and fund sponsor.		

**Cash Flow Summary**

<b>Capital Committed:</b>	\$3,000,000
<b>Capital Invested:</b>	\$918,211
<b>Management Fees:</b>	-
<b>Expenses:</b>	\$36,843
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$955,055
<b>Remaining Capital Commitment:</b>	\$2,281,604
<b>Total Distributions:</b>	\$199,815
<b>Market Value:</b>	\$1,332,580
<b>Inception Date:</b>	08/02/2022
<b>Inception IRR:</b>	64.0
<b>TVPI:</b>	1.6

**Cash Flow Analysis**



**Fund Information**

<b>Type of Fund:</b>	Secondary	<b>Vintage Year:</b>	2021
<b>Strategy Type:</b>	Secondaries	<b>Management Fee:</b>	1.25%
<b>Target IRR:</b>	7.00%	<b>Inception:</b>	12/03/2021
<b>General Partner:</b>	SDPE III GP, LP		
<b>Investment Strategy:</b>	The investment strategy provides investors with attractive risk-adjusted returns through the construction of a highly diversified portfolio of secondary investments by participating in segments of the secondary market deemed less competitive.		

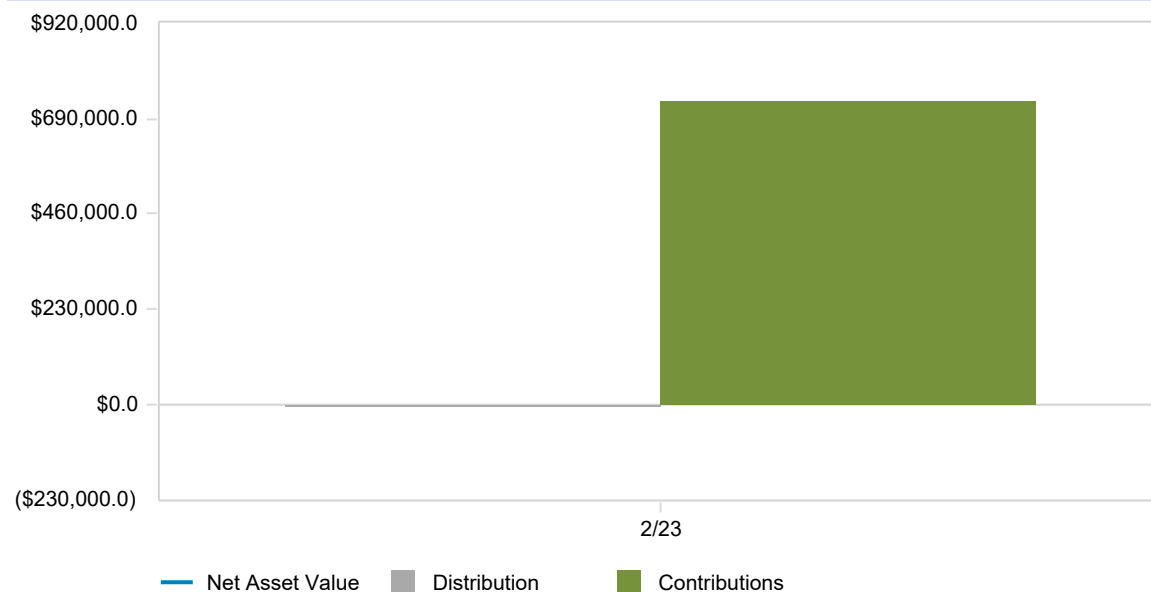
The primary focus is on the purchase of Fund-of-Funds and Secondary Funds (“Pooled Funds”). Each Pooled Fund typically owns diversified portfolios of underlying private equity funds. In addition, they pursue “Tail-End” transactions, which involves the purchase of private equity fund interests toward the end of their fund lives and close to their liquidation point. Pooled Funds and Tail-End transactions together comprise our Niche Fund transactions.

Management seeks to provide investors with a highly diversified private equity portfolio, acquired at a discount to Net Asset Value and expect the portfolio to be diversified across underlying funds, geographies, vintages, strategies, industries, and portfolio companies.

**Cash Flow Summary**

<b>Capital Committed:</b>	\$2,000,000
<b>Capital Invested:</b>	\$733,049
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$733,049
<b>Remaining Capital Commitment:</b>	\$1,266,951
<b>Total Distributions:</b>	-
<b>Market Value:</b>	\$733,049
<b>Inception Date:</b>	12/27/2022
<b>Inception IRR:</b>	0.0
<b>TVPI:</b>	1.0

**Cash Flow Analysis**



<b>Total Fund Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1985</b>	
S&P 500 Index	20.50
S&P MidCap 400 Index	16.00
Russell 2000 Index	14.00
MSCI EAFE (Net) Index	15.00
Blmbg. U.S. Aggregate Index	30.00
NCREIF Fund Index-ODCE (VW)	4.50
<b>Jan-2017</b>	
S&P 500 Index	20.00
Russell Midcap Index	14.00
Russell 2000 Index	14.00
MSCI EAFE (Net) Index	15.50
Blmbg. U.S. Aggregate Index	20.00
Blmbg. Global Multiverse	2.00
NCREIF Fund Index-ODCE (VW)	6.00
HFRI FOF: Diversified Index	5.00
NCREIF Timberland Index (Monthly)	3.50
<b>Nov-2020</b>	
S&P 500 Index	20.00
Russell Midcap Index	14.00
Russell 2000 Index	14.00
MSCI EAFE (Net) Index	15.50
Blmbg. U.S. Aggregate Index	22.00
NCREIF Fund Index-ODCE (VW)	6.00
HFRI FOF: Diversified Index	5.00
NCREIF Timberland Index (Monthly)	3.50
<b>Oct-2022</b>	
S&P 500 Index	22.00
Russell Midcap Index	14.00
Russell 2000 Index	14.00
MSCI AC World ex USA	15.00
Blmbg. U.S. Aggregate Index	17.00
NCREIF Fund Index-ODCE (VW)	8.00
HFRI FOF: Diversified Index	4.00
Blmbg. Global High Yield	4.00
Russell Microcap Index	2.00

<b>Total Domestic Equity Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1985</b>	
S&P 500 Index	40.00
S&P MidCap 400 Index	32.00
Russell 2000 Index	28.00
<b>Oct-2022</b>	
S&P 500 Index	44.00
S&P MidCap 400 Index	28.00
Russell 2000 Index	28.00

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

<b>Total Real Estate Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1978</b>	
NCREIF Property Index	100.00
<b>Oct-2022</b>	
NCREIF Fund Index-ODCE (VW)	100.00

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

<b>Total International Equity Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1970</b>	
MSCI EAFE (Net) Index	100.00
<b>Oct-2022</b>	
MSCI AC World ex USA	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.
- After rebuilding history for all Real Estate Funds and all Timber funds, recalculated composite returns for each composite.

Southfield Employees Retirement System

Fee Analysis

As of December 31, 2022

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Comerica S&P 500 Index Fund	0.09	23,397,482	20,118	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	9,847,227	83,701	0.85 % of Assets
Walthausen & Co. SMID Value	0.89	11,234,813	100,496	0.95 % of First \$5 M 0.85 % of Next \$20 M 0.75 % of Next \$25 M 0.65 % Thereafter
Reinhart Sm/Mid Cap PMV	0.75	11,383,062	85,373	0.75 % of Assets
<b>Total Domestic Equity</b>	<b>0.52</b>	<b>55,862,584</b>	<b>289,688</b>	
WCM Focused Growth International	0.75	8,187,114	61,403	0.75 % of Assets
LSV International LCV	0.75	10,591,102	79,433	0.75 % of First \$25 M 0.65 % of Next \$25 M 0.55 % of Next \$50 M 0.45 % Thereafter
<b>Total International Equity</b>	<b>0.75</b>	<b>18,778,215</b>	<b>140,837</b>	
Pacific Fixed Income	0.30	13,263,222	39,790	0.30 % of Assets
Bloomfield Capital Income Fund II	2.00	68,162	1,363	2.00 % of Assets
Bloomfield Capital Income Fund III	2.00	1,213,370	24,267	2.00 % of Assets
Bloomfield Fund V Series A	1.50	390,434	5,857	1.50 % of Assets
Bloomfield Fund V Series B	1.50	1,218,483	18,277	1.50 % of Assets
Marathon Distressed Credit Fund LP	1.00	2,415,868	24,159	1.00 % of Assets
<b>Total Fixed Income</b>	<b>0.61</b>	<b>18,569,540</b>	<b>113,713</b>	
AEW Core Property Trust	1.25	6,154,917	76,936	1.25 % of Assets
Metropolitan Real Estate V	1.00	637,284	6,373	1.00 % of Assets
PCCP Equity VIII	1.00	1,869,433	18,694	1.00 % of Assets
TerraCap Partners IV	1.50	1,782,943	26,744	1.50 % of Assets
<b>Total Real Estate</b>	<b>1.23</b>	<b>10,444,577</b>	<b>128,748</b>	
Magnitude Institutional	1.00	3,747,861	37,479	1.00 % of Assets
Titan Masters Int'l Fund	0.70	2,202,364	15,417	0.70 % of Assets
<b>Total Hedge Fund of Funds</b>	<b>0.89</b>	<b>5,950,225</b>	<b>52,895</b>	
RMK Timberland Intl Fund	1.25	426,313	5,329	1.25 % of Assets
<b>Total Timber Funds</b>	<b>1.25</b>	<b>426,313</b>	<b>5,329</b>	





	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
PA/Apogem Sec Fund VI	1.25	1,332,580	16,657	1.25 % of Assets
Sturbridge Diversified III	1.25	733,049	9,163	1.25 % of Assets
<b>Total Other Assets</b>	<b>1.25</b>	<b>2,065,629</b>	<b>25,820</b>	
<b>Cash/Sec Lit</b>		<b>527,962</b>	<b>-</b>	
<b>Total Fund</b>	<b>0.67</b>	<b>112,625,046</b>	<b>757,030</b>	



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



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