

Investment Performance Review  
Period Ending September 30, 2023

# Town of Palm Beach Retirement System

Preliminary Results

---



## **3rd Quarter 2023 Market Environment**



## **The Economy**

- The US Federal Reserve Bank (the Fed) continued to increase interest rates during the quarter with an additional 0.25% increase in the Fed Funds rate in late July, followed by a pause at the September Federal Open Market Committee (FOMC) meeting. The Fed continues to prioritize fighting high inflation with the press release from the July meeting detailing the FOMC's commitment to returning inflation to its 2% target rate. In addition, the committee members have agreed to continue reducing the Fed's balance sheet by reducing holdings in Treasuries, agency debt and agency mortgage-backed securities.
- The US labor market continues to show signs of weakening. Private payroll growth for the month of September showed growth well below estimates, coming in at just 89,000 new jobs for the month.
- Capital market yields have risen to their highest levels in over a decade as market participants are demanding a greater premium on long-term Treasury securities. The 30-year Treasury yield jumped 0.88% during the quarter signaling that market participants are anticipating higher levels of both inflation and policy interest rates.
- The Atlanta Fed's GDPNow model's projected third-quarter GDP growth has been revised upward from the original estimates of 3.5% in July to 4.9% at the end of September. The main drivers of the upward revisions came in August upon the release of personal consumption and private domestic investment data from the US Bureau of Labor and Statistics.

## **Equity (Domestic and International)**

- US equities moved broadly lower during the third quarter. The selloff was agnostic to size and style as all major domestic equity benchmarks finished the quarter with losses in the mid to high single-digit territory. After its encouraging performance in the second quarter, the large-cap S&P 500 benchmark fell by -3.3% for the third quarter. Small-cap stocks faced a deeper drawdown over the period with the Russell 2000 returning -5.1%. Contributing factors to this quarter's performance were, unsurprisingly, related to interest rates and the overall level of inflation in the economy.
- International stocks also came under pressure during the third quarter, reversing their positive results from last quarter. China continues to show signs of weakness as the cost of debt increases globally. Given China's large weight in the MSCI Emerging Market Index and its economic influence in the region, future prospects of growth for southeast Asia will be largely dependent on the strength of future growth for the country.

## **Fixed Income**

- While the US economy continues to see signs of disinflation, many of the Fed's preferred gauges continue to show inflation above their long-term target. During the quarter, the Fed maintained its inflation-fighting policy stance, increasing interest rates by 0.25% in July but opting to pause in September. The additional rate hike in July along with the possibility that additional rate hikes could occur later in the year, drove capital market yields sharply higher during the quarter.
- The mortgage-backed sector was the worst-performing sector during the quarter as the 10-year Treasury yield hit its highest level in 16 years. US Government securities were the worst-performing sector during the previous 12 months. US Treasuries have lagged corporate and securitized sectors as yields at longer maturities rose significantly and credit availability has tightened since last year.
- High-yield corporate bonds have held up better than higher-quality issues, aided by narrowing credit spreads, higher coupons, and generally shorter maturities. High-yield bonds were the best-performing segment of the domestic bond market during the quarter and on a trailing 12-month basis.

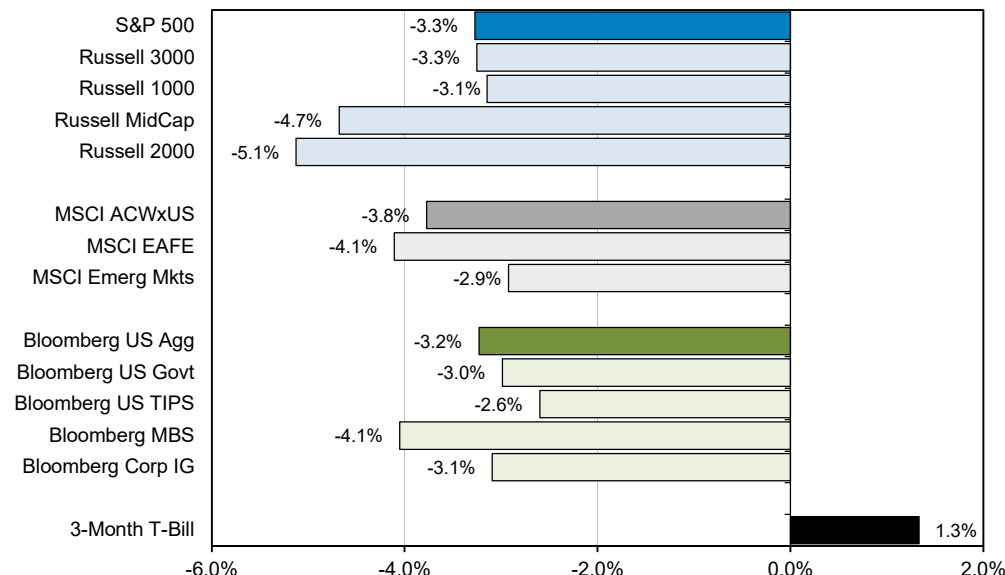
## **Market Themes**

- Economies around the globe continue to struggle with taming inflation. Markets are beginning to experience pressures brought on by higher costs of debt and pricing in expectations of higher interest rates for longer than originally anticipated. US Treasury yields on the long end of the par curve have risen sharply which threatens to undercut the economy by markedly raising borrowing costs.
- While energy costs have subsided from the initial shock of the Russian invasion in 2022, oil prices have been driven higher in recent months due to cuts in global production. This was soon followed by consumer-led demand destruction and expectations are that prices could soon subside.
- Despite concerns about slowing economic growth, lower-quality corporate bonds continue to outperform the government sector.
- US and international equity markets have struggled to maintain their recovery after last year's disappointment. Expectations that inflation would continue to moderate and central banks would slow the pace of their monetary tightening cycles have not taken shape as quickly as originally anticipated, leaving the consumer disadvantaged by higher price levels, higher interest rates, and weak availability of credit.

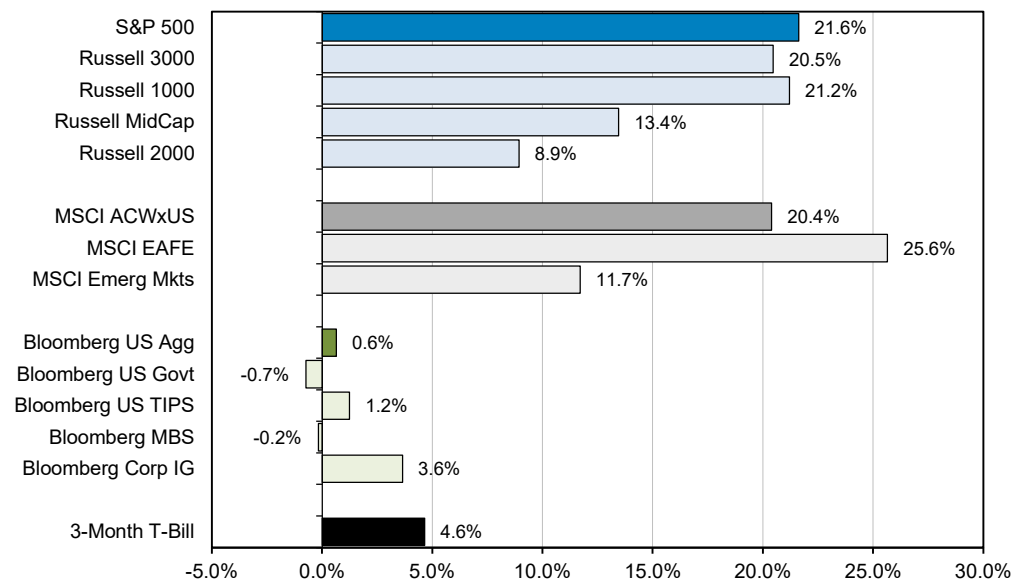


- Domestic equity markets struggled in the third quarter, reverting from the performance posted in the first half of 2023. Strong performance from domestic equities markets earlier in the year was enough to overshadow the third quarter's negative returns, leading to positive results for most domestic equity benchmarks on a trailing one-year basis. Macroeconomic challenges faced by the US economy for the past several quarters finally weighed on market participants, leading to dismal market returns. For the period, the Russell 1000 large-cap benchmark returned -3.1 % versus -4.7% for the Russell Mid Cap Index and -5.1% for the Russell 2000 small-cap index.
- International developed and emerging market equities also delivered disappointing results, in line with their domestic counterparts. Europe continues to face geopolitical risks related to the conflict in Ukraine and rising interest rates. However, inflation has eased somewhat due to higher rates and more manageable energy prices. The developed-market MSCI EAFE Index returned -4.1% for the quarter and the MSCI Emerging Markets Index fell by -2.9%.
- The domestic bond market continued its decline during the quarter due to the Fed's decision to hike policy rates an additional 0.25% and a re-shaping of the Treasury yield curve. The Bloomberg US Aggregate Index returned -3.2% for the quarter and investment-grade corporate bonds returned a similar -3.1%.
- Over the one-year trailing period, US equity markets were positive as the disappointing performance from much of 2022 rolled off. The S&P 500 Index climbed 21.6% for the trailing 12 months. The weakest relative performance for the year was the Russell 2000 Index, which still rose 8.9% over the last 12 months.
- International markets also shook off their poor 2022 performance. Over the trailing one-year period, the MSCI EAFE Index was the best-performing equity benchmark, returning 25.6% while the MSCI Emerging Markets Index posted a more modest 11.7%.
- Bond markets were generally flat over the previous 12 months. Investment-grade corporate bonds were the best-performing sector, posting a return of 3.6%. Meanwhile, Treasuries were negative, returning -0.7% over the previous 12 months. The bellwether fixed-income benchmark, the Bloomberg US Aggregate Index, returned a small, positive 0.6%.

### Quarter Performance



### 1-Year Performance

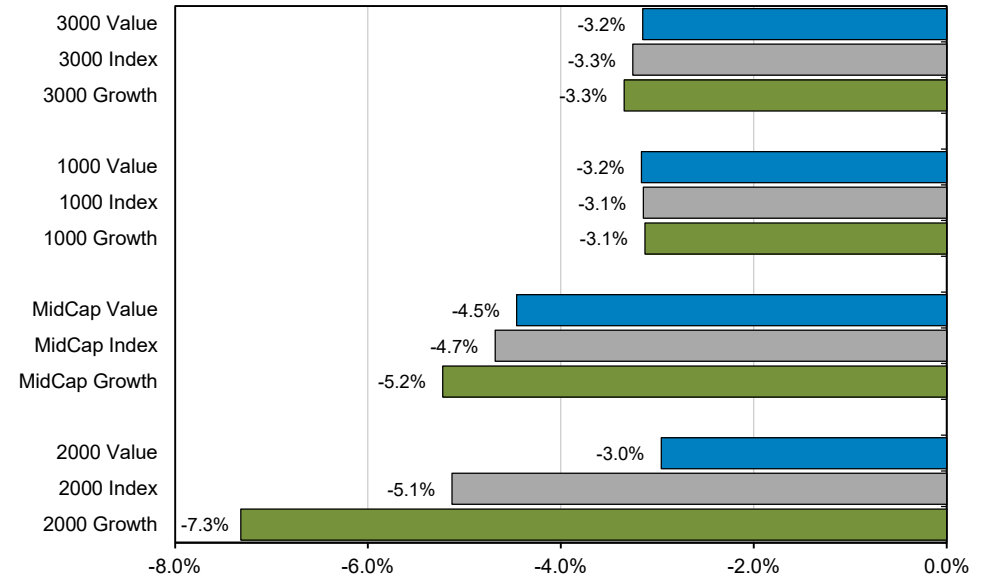


Source: Investment Metrics



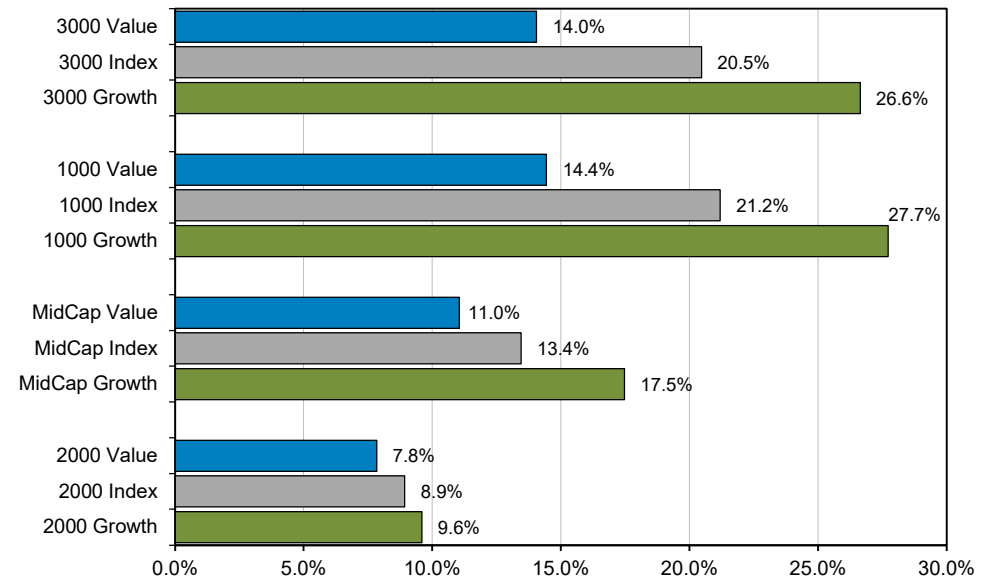
- During the third quarter, core domestic equity benchmarks reversed course from their encouraging first-half 2023 performance. The selloff was agnostic to style as growth and value were down -3.3% and -3.2% respectively for the Russell 3000 Index, the broad market benchmark.
- Large-cap stocks once again led results for the capitalization-based benchmarks, besting both the mid-cap and small-cap indices for the quarter. Russell 1000 Index fell by -3.1% while the Russell 2000 Index fell by -5.1%.
- Among large-cap stocks, performance was relatively uniform across the style spectrum as growth fell by -3.1% and value fell by -3.2%. However, among small-cap stocks, performance across the style spectrum was disparate as growth fell by -7.3% and value fell by just -3.0%.

#### Quarter Performance - Russell Style Series



- The third quarter's reversal for domestic equity markets did not eclipse the rebound seen in the asset class during the first half of 2023 as each of the Russell indices were positive on a trailing 12-month basis. Within large-cap stocks, the Russell 1000 Growth Index maintains sizable dominance, returning 27.7% and leading the way among style-and-market-capitalization classifications. The worst-performing sub-index was the Russell 2000 Value, which posted a modest 7.8% return for the trailing 12 months.
- Growth rebounded from disappointing results in early 2022 and continues to lead value-based benchmarks in all market capitalization ranges over the trailing year. The Russell 2000 Growth Index returned 9.6%, outpacing the Russell 2000 Value Index return of 7.8%. The Russell 1000 Growth and Russell Midcap Growth benchmarks gained 27.7% and 17.5%, respectively, while their corresponding value index counterparts returned solid, but lagging, performance of 14.4% and 11.0%, respectively.

#### 1-Year Performance - Russell Style Series

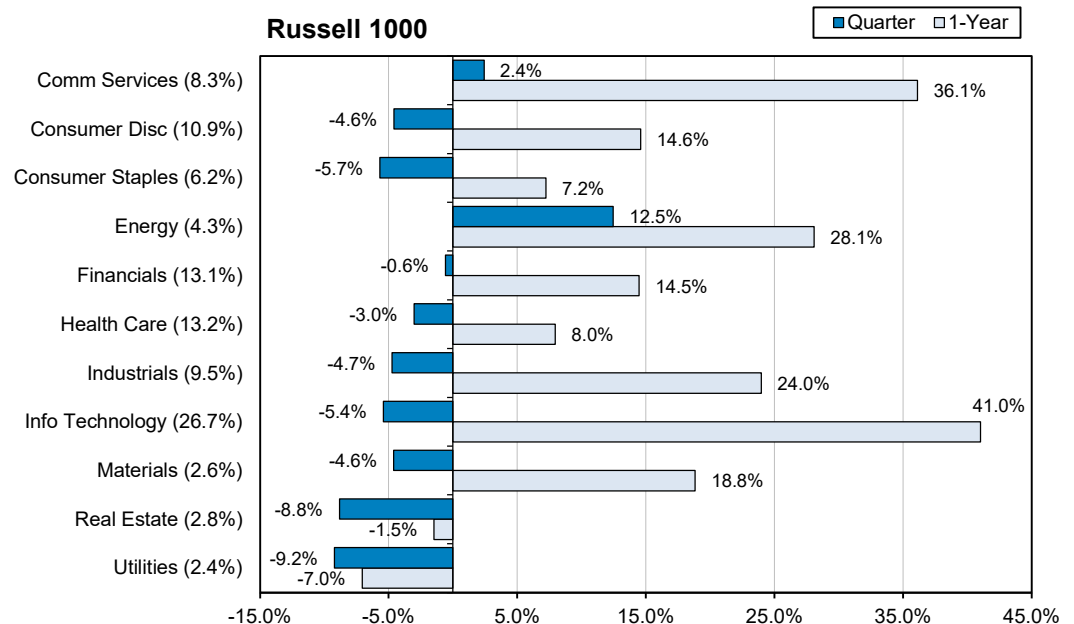


Source: Investment Metrics



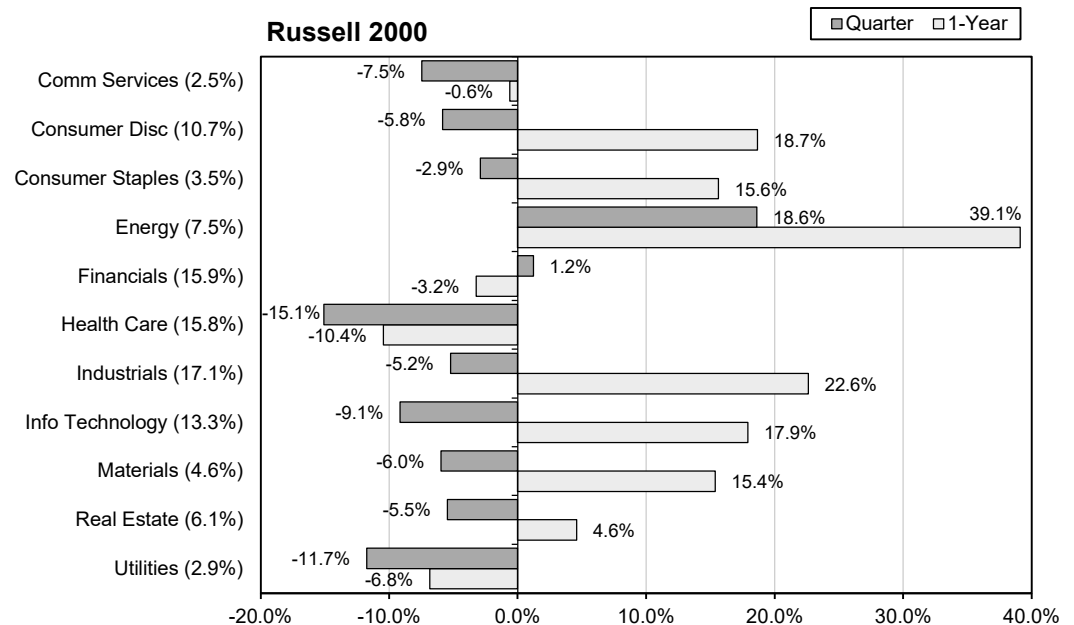
- Performance of the large-cap Russell 1000 Index was affected by negative performance in nine of 11 economic sectors during the quarter. However, four of the 11 sectors managed to outpace the core large-cap index.
- While domestic equities experienced challenges during the quarter, the energy sector managed a solid return of 12.5%. The other three sectors that outpaced the headline large-cap index's -3.1% return for the quarter were communication services (2.4%), financials (-0.6%) and health care (-3.0%). The worst-performing sectors during the quarter were utilities (-9.2%), and real estate (-8.8%).
- For the full year, four economic sectors exceeded the return of the broad large-cap index, and nine of the 11 sectors posted positive performance. The weakest economic sectors in the Russell 1000 for the year were utilities, and real estate which declined by -7.0% and -1.5%, respectively. Both sectors have been heavily impacted by rising energy costs and a market rotation away from defensive names.

**Russell 1000**



- Nine of 11 economic sectors in the small-cap benchmark posted negative results during the quarter while just three exceeded the -5.1% return of the Russell 2000 Index. The health care (-15.1%) and utilities (-11.7%) sectors detracted the most from small-cap performance, lagging the broad benchmark for the quarter. The two economic sectors that were positive for the quarter were energy (18.6%), and financials (1.2%).
- Similar to their large-cap peers, seven small-cap sectors were positive for the trailing 12 months. Energy posted the strongest sector result (39.1%) while the industrials sector also posting a return of more than 20% for the last 12 months. Just four of the 11 economic sectors fell short of the core small-cap benchmark's return of 8.9% over the trailing year. The worst-performing sector for the year was health care with a return of -10.4%. The utilities (-6.8%), financials (-3.2%), and communication services (-0.6%) sectors also posted negative results for the year.

**Russell 2000**



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



**The Market Environment**  
**Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000**  
As of September 30, 2023

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	6.4%	-11.6%	24.6%	Information Technology
Microsoft Corp	5.9%	-7.1%	36.9%	Information Technology
Amazon.com Inc	2.9%	-2.5%	12.5%	Consumer Discretionary
NVIDIA Corp	2.6%	2.8%	258.6%	Information Technology
Alphabet Inc Class A	2.0%	9.3%	36.8%	Communication Services
Tesla Inc	1.7%	-4.4%	-5.7%	Consumer Discretionary
Alphabet Inc Class C	1.7%	9.0%	37.1%	Communication Services
Meta Platforms Inc Class A	1.7%	4.6%	121.3%	Communication Services
Berkshire Hathaway Inc Class B	1.6%	2.7%	31.2%	Financials
Exxon Mobil Corp	1.2%	10.6%	39.1%	Energy

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
AppLovin Corp Ordinary Shares	0.0%	55.3%	105.0%	Information Technology
Vertiv Holdings Co Class A	0.0%	50.2%	283.0%	Industrials
Capri Holdings Ltd	0.0%	46.6%	36.9%	Consumer Discretionary
Rivian Automotive Inc Class A	0.0%	45.7%	-26.2%	Consumer Discretionary
Texas Pacific Land Corp	0.0%	38.8%	3.3%	Energy
Affirm Holdings Inc Ordinary Shares	0.0%	38.7%	13.4%	Financials
Splunk Inc	0.1%	37.9%	94.5%	Information Technology
H&R Block Inc	0.0%	36.2%	4.5%	Consumer Discretionary
Ollie's Bargain Outlet Holdings Inc	0.0%	33.2%	49.6%	Consumer Discretionary
Zions Bancorp NA	0.0%	31.4%	-28.4%	Financials

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
AMC Entertainment Holdings Inc	0.0%	-79.4%	-87.0%	Communication Services
Hawaiian Electric Industries Inc	0.0%	-65.0%	-62.4%	Utilities
NovoCure Ltd	0.0%	-61.1%	-78.7%	Health Care
Apellis Pharmaceuticals Inc	0.0%	-58.2%	-44.3%	Health Care
Viasat Inc	0.0%	-55.3%	-38.9%	Information Technology
Petco Health and Wellness Co Inc	0.0%	-54.0%	-63.4%	Consumer Discretionary
Driven Brands Holdings Inc	0.0%	-53.5%	-55.0%	Industrials
Olaplex Holdings Inc	0.0%	-47.6%	-79.6%	Consumer Staples
Masimo Corp	0.0%	-46.7%	-37.9%	Health Care
Spirit AeroSystems Holdings Inc	0.0%	-44.7%	-26.4%	Industrials

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Super Micro Computer Inc	0.6%	10.0%	397.9%	Information Technology
Chart Industries Inc	0.3%	5.8%	-8.3%	Industrials
ChampionX Corp	0.3%	15.1%	84.2%	Energy
Chord Energy Corp Ordinary Shares	0.3%	6.3%	29.3%	Energy
Murphy Oil Corp	0.3%	19.1%	32.3%	Energy
Matador Resources Co	0.3%	14.0%	22.8%	Energy
Light & Wonder Inc Ordinary Shares	0.3%	3.7%	66.3%	Consumer Discretionary
Weatherford International PLC	0.3%	36.0%	179.7%	Energy
Simpson Manufacturing Co Inc	0.3%	8.4%	93.1%	Industrials
SPS Commerce Inc	0.3%	-11.2%	37.3%	Information Technology

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Tango Therapeutics Inc	0.0%	239.2%	211.0%	Health Care
PolyMet Mining Corp	0.0%	166.3%	-22.3%	Materials
Cardlytics Inc	0.0%	161.1%	75.5%	Communication Services
Telephone and Data Systems Inc	0.1%	124.8%	41.3%	Communication Services
Thorne HealthTech Inc	0.0%	116.8%	115.4%	Consumer Staples
Immunovant Inc	0.1%	102.4%	588.0%	Health Care
Tetra Technologies Inc	0.0%	88.8%	77.7%	Energy
NextNav Inc	0.0%	74.8%	91.1%	Information Technology
Centrus Energy Corp Class A	0.0%	74.3%	38.5%	Energy
Hallador Energy Co	0.0%	68.3%	156.6%	Energy

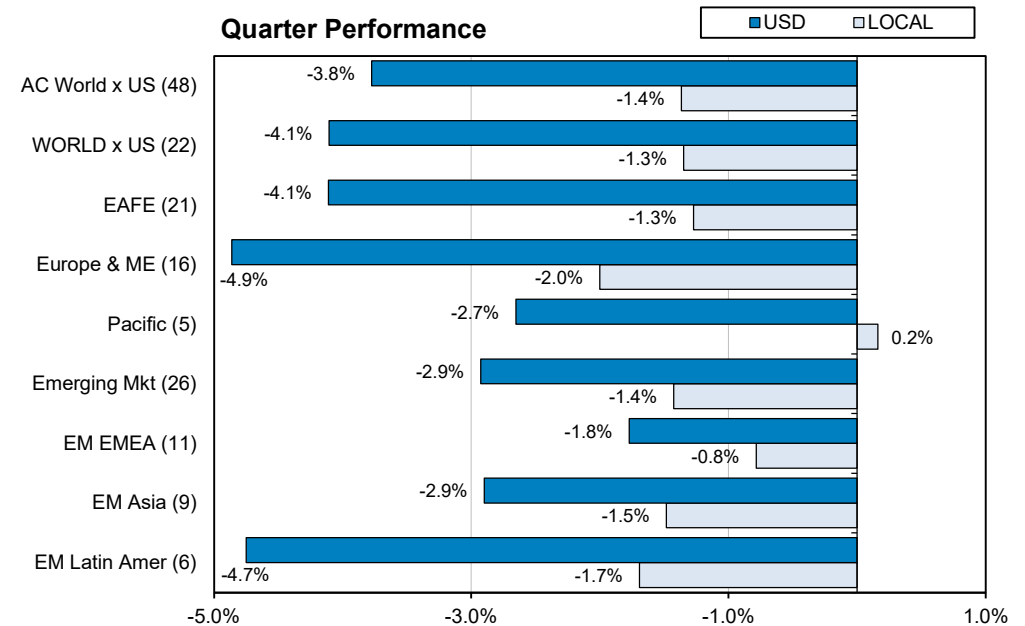
Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Outlook Therapeutics Inc	0.0%	-87.3%	-81.9%	Health Care
CXApp Inc Ordinary Shares	0.0%	-83.4%	-81.9%	Information Technology
Cano Health Inc Ordinary Shares	0.0%	-81.8%	-97.1%	Health Care
Loop Media Inc	0.0%	-79.2%	-88.9%	Communication Services
Akoustis Technologies Inc	0.0%	-76.3%	-74.6%	Information Technology
Benson Hill Inc	0.0%	-74.5%	-87.9%	Consumer Staples
TPI Composites Inc	0.0%	-74.4%	-76.5%	Industrials
Kodiak Sciences Inc	0.0%	-73.9%	-76.7%	Health Care
System1 Inc	0.0%	-73.1%	-80.8%	Communication Services
Presto Automation Inc	0.0%	-72.6%	-30.2%	Information Technology

Source: Morningstar Direct

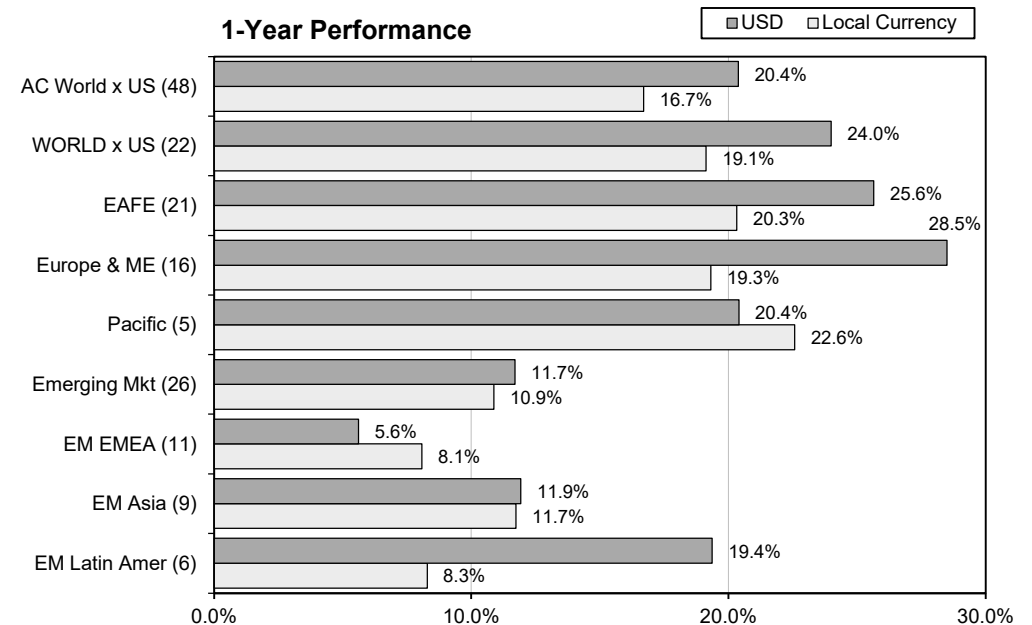


- International developed and emerging market benchmarks struggled in both US Dollar (USD) and local currency (LCL) terms. The strengthening USD contributed to weaker USD performance for non-US indices during the quarter. The developed-market MSCI EAFE Index struggled with a -4.1% return in USD and -1.3% in LCL terms for the period. The MSCI Emerging Markets Index fell by less than most developed market indices, returning -2.9% in USD and -1.4% in LCL terms.
- The EMEA index had the smallest drawdown for the quarter in USD terms, falling -1.8%. In local currency terms, the Pacific regional index exhibited a slight 0.2% gain during the quarter, the only positive return among its peers.
- Trailing one-year results were more appealing compared to the quarter's results. Much like domestic markets, trailing one-year performance for international developed and emerging markets rolled off their poor performance from 2022 resulting in strong returns for the trailing year. Additionally, LCL returns have outpaced USD returns for many developed markets due to the softening USD relative to many of the world's developed-market currencies over the year.
- Annual returns across emerging markets were broadly higher given their strong performance early in the year. Latin American results led the way with returns of 19.4% in USD and 8.3% in LCL terms. Performance in the EMEA regional benchmark detracted from emerging market index with the EMEA Index posting returns of 5.6% in USD and 8.1% in LCL terms. As a result, the broad MSCI Emerging Markets Index returned 11.7% in USD and 10.9% in LCL terms for the year.

### Quarter Performance



### 1-Year Performance



Source: MSCI Global Index Monitor (Returns are Net)





**The Market Environment**  
**US Dollar International Index Attribution & Country Detail**  
As of September 30, 2023

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.1%	-3.4%	14.4%
Consumer Discretionary	12.0%	-8.3%	32.8%
Consumer Staples	9.8%	-7.1%	9.9%
Energy	4.8%	11.6%	34.3%
Financials	19.1%	0.8%	33.9%
Health Care	13.4%	-3.1%	19.0%
Industrials	15.9%	-6.0%	32.9%
Information Technology	7.7%	-10.7%	29.2%
Materials	7.5%	-3.2%	23.7%
Real Estate	2.3%	-1.1%	5.4%
Utilities	3.4%	-8.8%	22.5%
<b>Total</b>	<b>100.0%</b>	<b>-4.1%</b>	<b>25.6%</b>

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.5%	-4.9%	13.0%
Consumer Discretionary	11.9%	-5.6%	22.3%
Consumer Staples	8.4%	-6.4%	9.0%
Energy	6.0%	9.0%	27.3%
Financials	21.2%	-0.7%	22.0%
Health Care	9.7%	-2.8%	17.2%
Industrials	13.1%	-5.8%	28.2%
Information Technology	11.3%	-8.7%	29.0%
Materials	7.9%	-3.3%	16.2%
Real Estate	2.0%	-1.1%	4.7%
Utilities	3.1%	-7.9%	11.4%
<b>Total</b>	<b>100.0%</b>	<b>-3.8%</b>	<b>20.4%</b>

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	9.6%	-5.9%	12.5%
Consumer Discretionary	13.7%	0.8%	5.1%
Consumer Staples	6.2%	-4.4%	4.6%
Energy	5.3%	6.3%	23.8%
Financials	22.3%	-1.7%	10.2%
Health Care	3.8%	-0.8%	4.1%
Industrials	6.7%	-4.6%	11.5%
Information Technology	20.2%	-6.8%	25.8%
Materials	8.0%	-3.1%	6.5%
Real Estate	1.7%	-0.6%	1.5%
Utilities	2.6%	-3.0%	-5.5%
<b>Total</b>	<b>100.0%</b>	<b>-2.9%</b>	<b>11.7%</b>

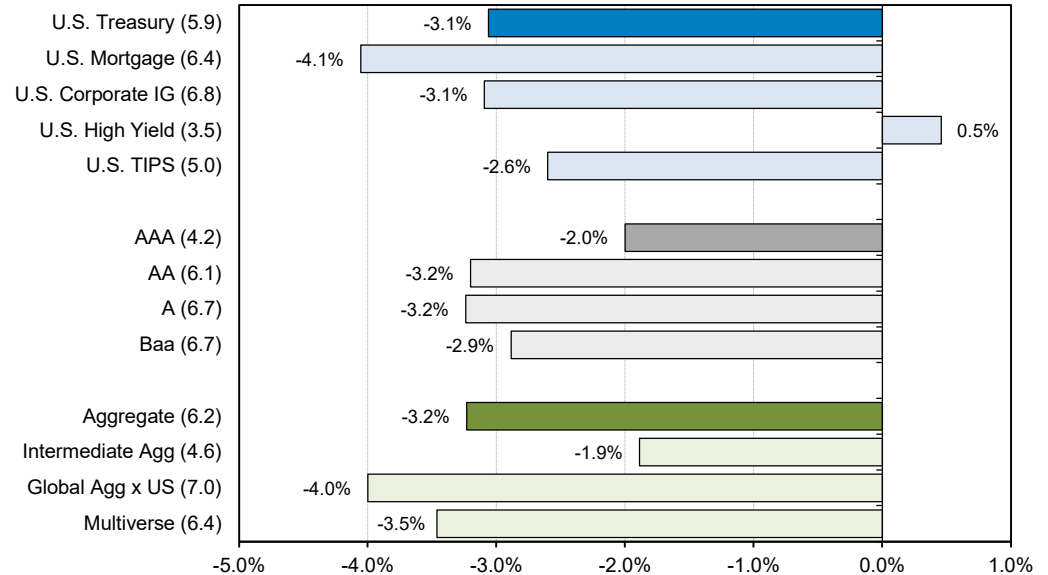
Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1-Year Return
Japan	22.9%	14.7%	-2.4%	23.3%
United Kingdom	15.3%	9.8%	-2.8%	20.0%
France	12.1%	7.7%	-7.1%	31.4%
Switzerland	9.9%	6.4%	-5.5%	13.7%
Germany	8.3%	5.3%	-7.7%	32.3%
Australia	7.4%	4.7%	-4.7%	10.4%
Netherlands	4.3%	2.7%	-14.1%	24.8%
Denmark	3.3%	2.1%	2.0%	52.0%
Sweden	3.1%	2.0%	-5.7%	17.9%
Spain	2.6%	1.7%	-4.1%	40.4%
Italy	2.6%	1.7%	-2.4%	47.8%
Hong Kong	2.3%	1.5%	-12.1%	-6.1%
Singapore	1.5%	0.9%	-2.1%	6.2%
Belgium	1.0%	0.6%	-0.2%	20.0%
Finland	0.9%	0.6%	-6.0%	-1.9%
Norway	0.7%	0.5%	10.7%	12.9%
Israel	0.7%	0.4%	4.5%	0.1%
Ireland	0.5%	0.4%	-7.7%	40.6%
Portugal	0.2%	0.1%	-8.9%	7.1%
New Zealand	0.2%	0.1%	-10.0%	12.2%
Austria	0.2%	0.1%	-0.6%	34.9%
<b>Total EAFE Countries</b>	<b>100.0%</b>	<b>64.1%</b>	<b>-4.1%</b>	<b>25.6%</b>
Canada		7.6%	-4.7%	8.7%
<b>Total Developed Countries</b>		<b>71.7%</b>	<b>-4.1%</b>	<b>24.0%</b>
China		8.5%	-1.9%	5.2%
India		4.5%	2.7%	10.1%
Taiwan		4.2%	-7.4%	21.8%
Korea		3.5%	-6.6%	26.2%
Brazil		1.5%	-3.6%	15.3%
Saudi Arabia		1.2%	-4.4%	-5.9%
South Africa		0.9%	-4.6%	6.7%
Mexico		0.7%	-6.5%	33.7%
Indonesia		0.6%	-3.4%	1.5%
Thailand		0.5%	-4.5%	0.1%
United Arab Emirates		0.4%	6.1%	2.2%
Malaysia		0.4%	4.5%	5.2%
Qatar		0.3%	0.1%	-17.8%
Kuwait		0.2%	-2.7%	-1.9%
Poland		0.2%	-12.7%	59.1%
Turkey		0.2%	32.7%	74.9%
Philippines		0.2%	-3.8%	17.7%
Chile		0.1%	-9.8%	3.3%
Greece		0.1%	-7.8%	70.6%
Peru		0.1%	-4.0%	29.9%
Hungary		0.1%	0.5%	75.9%
Czech Republic		0.0%	1.0%	35.7%
Colombia		0.0%	0.1%	15.9%
Egypt		0.0%	15.3%	48.4%
<b>Total Emerging Countries</b>		<b>28.3%</b>	<b>-2.9%</b>	<b>11.7%</b>
<b>Total ACWixUS Countries</b>		<b>100.0%</b>	<b>-3.8%</b>	<b>20.4%</b>

Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)  
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.

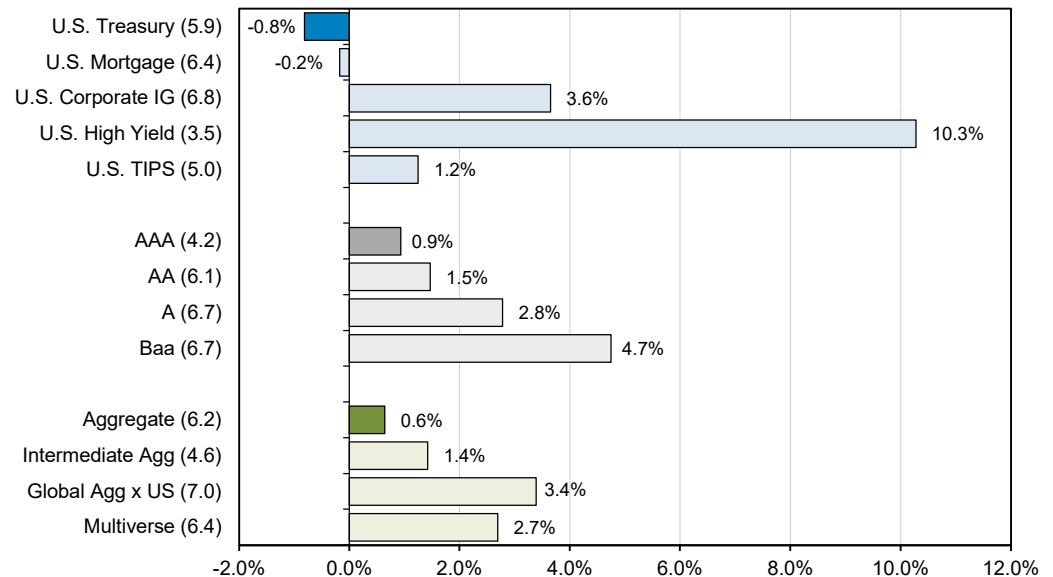


- Fixed income markets continued the decline that began in the second quarter. Yields remain elevated on the back of FOMC actions to hike policy rates throughout the year. After a challenging 2022 in fixed-income markets brought on by the largest and most rapid increase in interest rates since the early 1980s, higher yields and an expected slower pace of rate increases led investors to expect better outcomes in 2023. That expectation was challenged during the second and third quarters, as the additional 0.25% rate hike in July, and guidance toward potential future rate hikes weighed on the asset class and many of the major domestic fixed-income indices posted discouraging returns.
- The Bloomberg US Aggregate Bond Index, the bellwether US investment grade benchmark, declined -3.2% for the quarter. Beneath the headline benchmark, the Bloomberg US Corporate Investment Grade Index returned -3.1% and the US Mortgage Index posted a weaker -4.1%.
- Outside of the aggregate index's sub-components, high-yield bonds continued their rise with a return of 0.5% as credit spreads narrowed during the quarter. Additionally, US TIPS fell -2.6% for the quarter. The Bloomberg Global Aggregate ex-US Index lagged most domestic fixed-income indexes and the multiverse benchmark, posting a loss of -4.0% for the quarter.
- Over the trailing one-year period, the Bloomberg US Aggregate Bond Index gained just 0.6%. The benchmark's sub-components were highly dispersed with Treasuries falling -0.8% while corporate investment grade issues were up 3.6% over the previous 12 months. US TIPS, which are excluded from the aggregate index, increased by 1.2% for the year. High-yield corporate bonds, which have a much shorter duration, nearly tripled the returns of their investment grade counterparts with the Bloomberg US High Yield Index returning an impressive 10.3% for the trailing year.
- Performance for non-US bonds overcame the disappointing performance in 2022 with the Bloomberg Global Aggregate ex-US Index gaining 3.4%.

### Quarter Performance



### 1-Year Performance

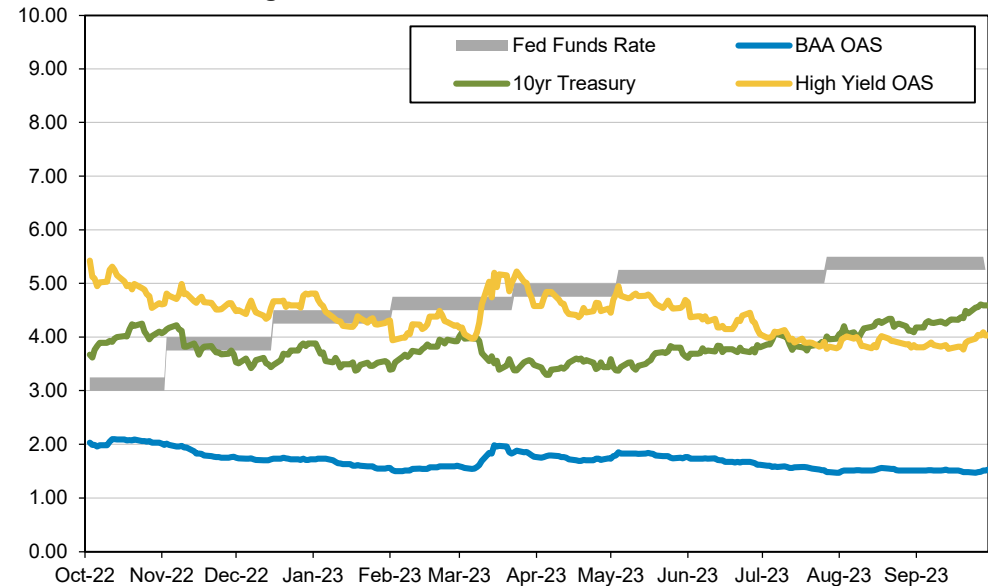


Source: Bloomberg

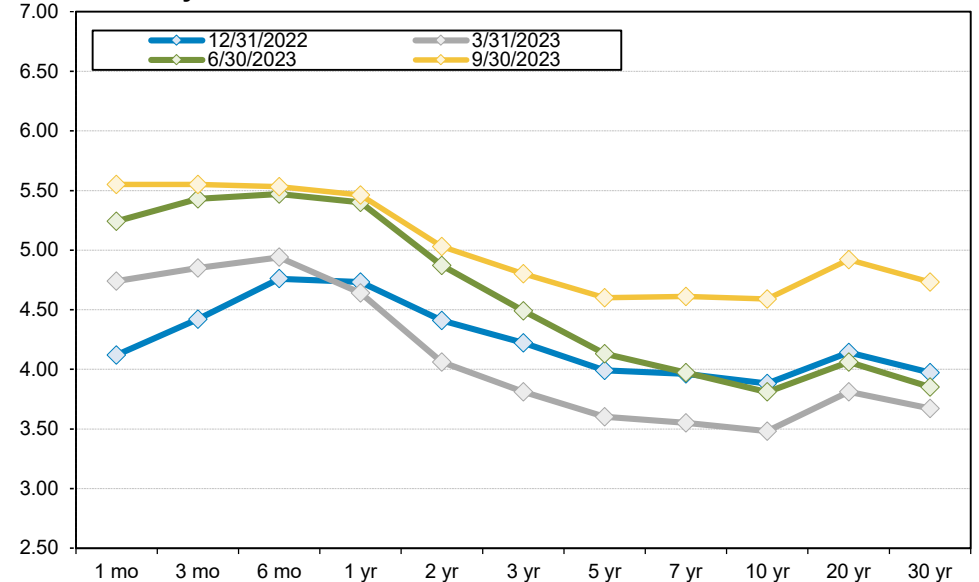


- The gray band across the graph illustrates the range of the current Fed Funds target rate. During the third quarter, the FOMC raised the lower end of its target rate range from 5.00% to 5.25% at their July meeting. While the FOMC paused further rate increases at their September meeting, several speeches and public comments since that meeting have made it clear that additional rate hikes should not be ruled out. While the overwhelming consensus has been that the Fed is moving towards the end of its rate hiking cycle, several statements and key macroeconomic statistics have shed doubt on timing of these expectations.
- The yield on the US 10-Year Treasury (green line) rose 0.78% largely due to increases in the policy rate and the potential for expected future inflationary pressure. The closing yield on the 10-Year Treasury was 4.59% as of September 29, 2023, and is up 71 basis points from its 3.88% yield at 2022 year-end. Capital market rates have now reached their highest levels in 16 years.
- The blue line illustrates changes in the BAA (Option Adjusted Spread) OAS for BAA-rated corporate bonds. This measure quantifies the additional yield premium that investors require to purchase and hold non-US Treasury investment grade issues with the lowest investment grade rating. For the full year, the spread narrowed from 2.05% to 1.53%, signaling a lower premium for credit risk than was the case a year prior. High-yield OAS spreads have narrowed from 5.92% in July 2022 to 4.03% as of the end of the quarter. Spikes in both the BAA OAS and High Yield spread measures were visible in the first quarter of 2023 following a short-lived crisis of confidence in the banking sector, which has since been addressed. Both spread measures traded lower on the news of the government's intervention, and as fears of possible contagion waned, credit spreads returned to their levels prior to February.
- 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 third quarter as the FOMC increased policy interest rates to continue combatting inflation. The Treasury yield curve has quickly exhibited a re-steepening with longer-term yields increasing at a faster pace than shorter-term yields. During the quarter, the 30-year yield jumped from 3.85% to 4.73% (an increase of 0.88%). Historically, a persistent inversion of the yield curve has been a precursor of an economic recession within six to 24 months.

### 1-Year Trailing Market Rates



### Treasury Yield Curve



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



Page Intentionally Left Blank

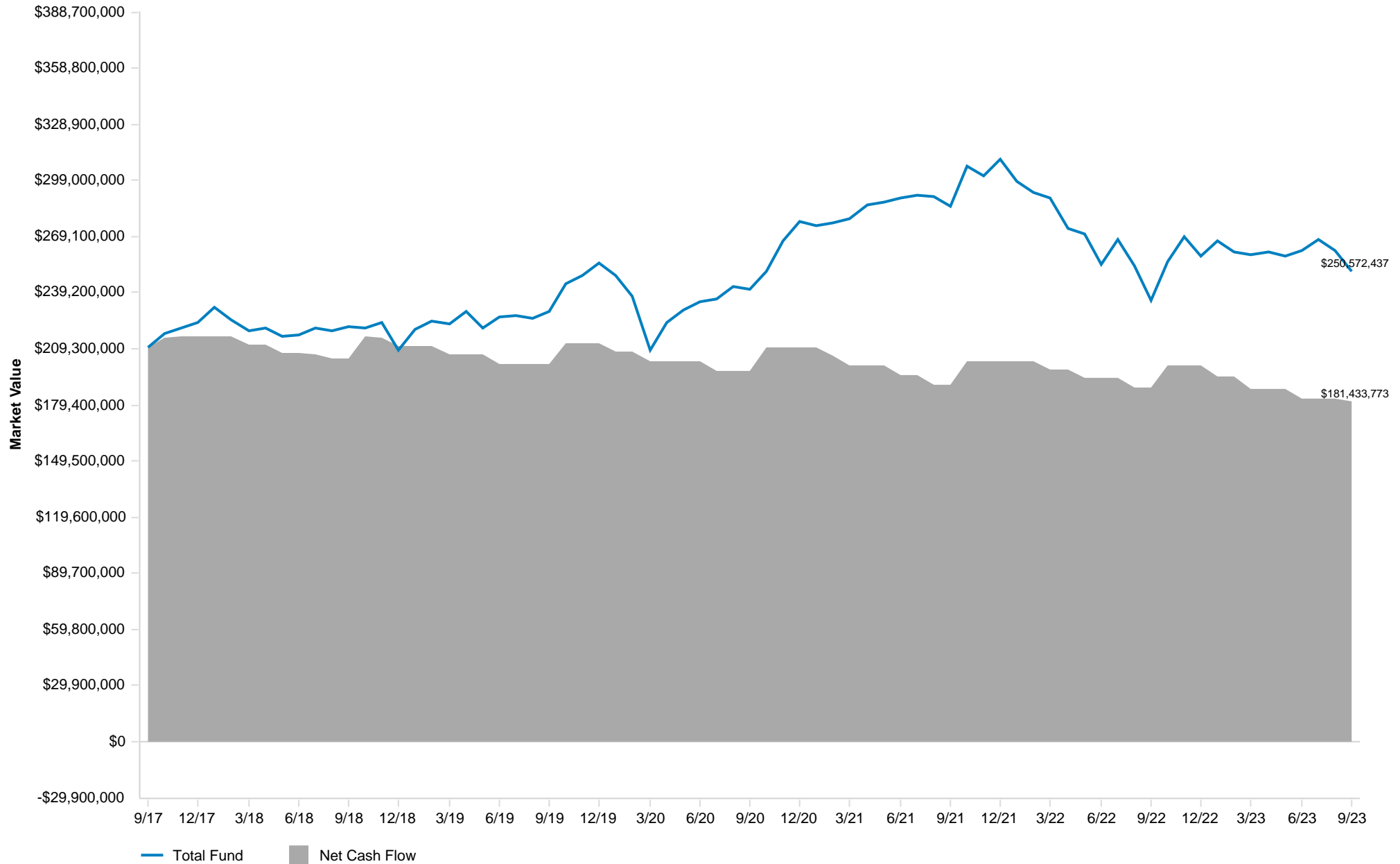


Private Investments Reporting Status  
Total Private Investments

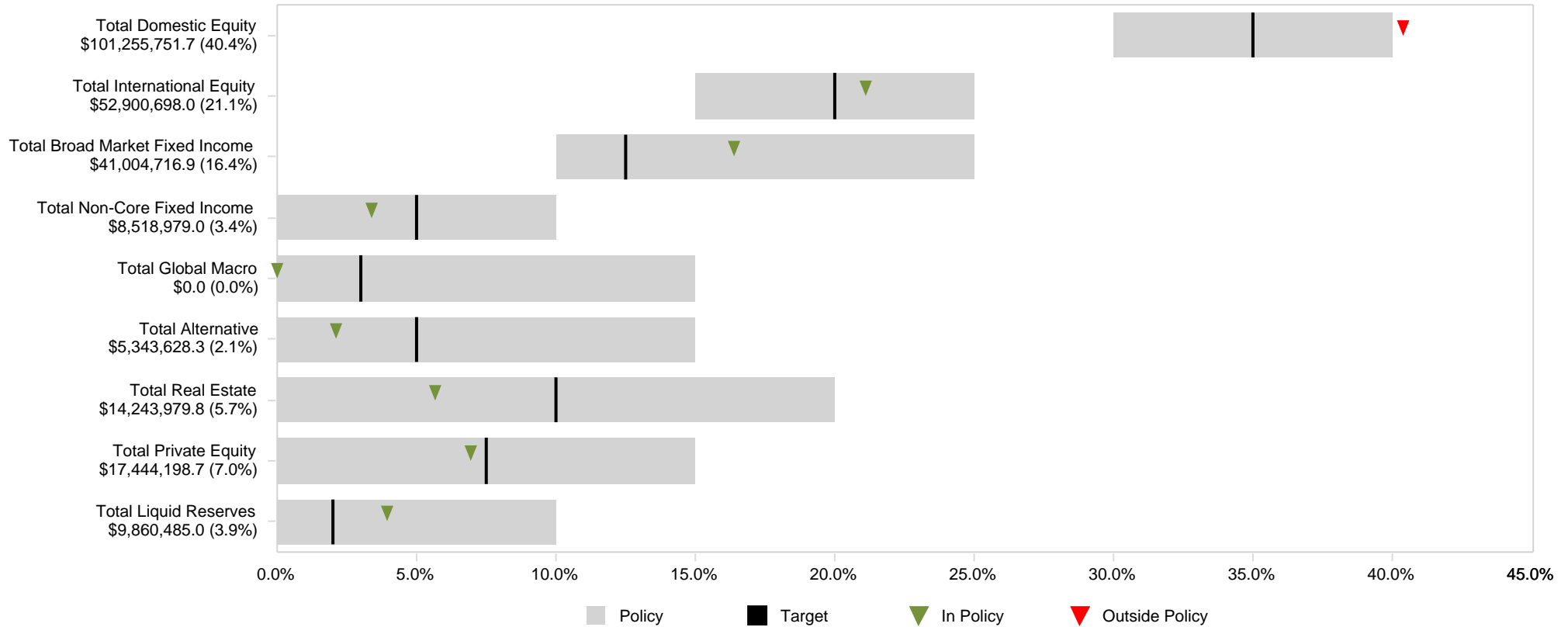
Manager	MV as of	Most Recent Statement Date
Private Equity		
HarbourVest Partners	08/30/2023 - Distrubiton	6/30/2023
JP Morgan Venture Cap V	07/31/2023 - Distribution	6/30/2023
Landmark XIV	08/18/2023 - Distribution	6/30/2023
Pomona Cap VIII	07/26/2023 - Distribution	6/30/2023
Private Equity Fund V	6/30/2023	6/30/2023
Real Estate		
Green Cities II	9/30/2023	9/30/2023
Green Cities III	9/30/2023	9/30/2023
Long Wharf Real Estate Fund V	9/30/2023	9/30/2023
Westport RE Fund IV	9/30/2023	9/30/2023
JP Morgan Strategic Property	9/30/2023	9/30/2023

Performance and valuations presented in this report are preliminary, with 93.0% of assets reporting finalized figures.  
NAVs for non-reporting investments are carried forward from the most recent valuation.

Schedule of Investable Assets



### Executive Summary



### Asset Allocation Compliance

	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
<b>Total Fund</b>	<b>250,572,437</b>	<b>100.0</b>	<b>N/A</b>	<b>N/A</b>	<b>100.0</b>
Total Domestic Equity	101,255,752	40.4	30.0	40.0	35.0
Total International Equity	52,900,698	21.1	15.0	25.0	20.0
Total Broad Market Fixed Income	41,004,717	16.4	10.0	25.0	12.5
Total Non-Core Fixed Income	8,518,979	3.4	0.0	10.0	5.0
Total Global Macro	-	0.0	0.0	15.0	3.0
Total Alternative	5,343,628	2.1	0.0	15.0	5.0
Total Real Estate	14,243,980	5.7	0.0	20.0	10.0
Total Private Equity	17,444,199	7.0	0.0	15.0	7.5
Total Liquid Reserves	9,860,485	3.9	0.0	10.0	2.0



Asset Allocation by Manager																		
	Domestic Equity		International Equity		Emerging Equity		Domestic Fixed Income		Real Estate		Hedge Fund		Private Equity		Cash Equivalent		Total Fund	
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
<b>Total Fund</b>	<b>105.43</b>	<b>42.1</b>	<b>44.09</b>	<b>17.6</b>	<b>8.81</b>	<b>3.5</b>	<b>40.69</b>	<b>16.2</b>	<b>14.24</b>	<b>5.7</b>	<b>8.52</b>	<b>3.4</b>	<b>17.44</b>	<b>7.0</b>	<b>11.34</b>	<b>4.5</b>	<b>250.57</b>	<b>100.0</b>
<b>Total Domestic Equity</b>	<b>100.09</b>	<b>98.8</b>	-	-	-	-	-	-	-	-	-	-	-	-	<b>1.17</b>	<b>1.2</b>	<b>101.26</b>	<b>40.4</b>
Vanguard Instl Index (VINIX)	76.48	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	76.48	30.5
Geneva Mid Cap Growth Equity	12.07	95.3	-	-	-	-	-	-	-	-	-	-	-	-	0.60	4.7	12.67	5.1
Cooke & Bieler Mid Cap Value Equity	11.53	95.3	-	-	-	-	-	-	-	-	-	-	-	-	0.57	4.7	12.10	4.8
<b>Total International Equity</b>	-	-	<b>44.09</b>	<b>83.4</b>	<b>8.81</b>	<b>16.6</b>	-	-	-	-	-	-	-	-	-	-	<b>52.90</b>	<b>21.1</b>
Pear Tree Polaris Foreign Value (QFVRX)	-	-	17.53	100.0	-	-	-	-	-	-	-	-	-	-	-	-	17.53	7.0
Fidelity International Index (FSPSX)	-	-	11.30	100.0	-	-	-	-	-	-	-	-	-	-	-	-	11.30	4.5
MFS International Growth R6 (MGRDX)	-	-	7.54	100.0	-	-	-	-	-	-	-	-	-	-	-	-	7.54	3.0
WCM Focused International Growth (WCMIX)	-	-	7.73	100.0	-	-	-	-	-	-	-	-	-	-	-	-	7.73	3.1
Allspring Emerging Markets	-	-	-	-	8.81	100.0	-	-	-	-	-	-	-	-	-	-	8.81	3.5
<b>Total Fixed Income</b>	-	-	-	-	-	-	<b>40.69</b>	<b>82.2</b>	-	-	<b>8.52</b>	<b>17.2</b>	-	-	<b>0.31</b>	<b>0.6</b>	<b>49.52</b>	<b>19.8</b>
Garcia Hamilton Fixed Income Agg.	-	-	-	-	-	-	40.69	99.2	-	-	-	-	-	-	0.31	0.8	41.00	16.4
Serenitas Credit Gamma	-	-	-	-	-	-	-	-	-	-	8.52	100.0	-	-	-	-	8.52	3.4
<b>Total Alternative</b>	<b>5.34</b>	<b>100.0</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>5.34</b>	<b>2.1</b>
Ark Innovation (ARKK)	5.34	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.34	2.1
<b>Total Real Estate</b>	-	-	-	-	-	-	-	-	<b>14.24</b>	<b>100.0</b>	-	-	-	-	-	-	<b>14.24</b>	<b>5.7</b>
Green Cities Company II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Green Cities Company III	-	-	-	-	-	-	-	-	1.94	100.0	-	-	-	-	-	-	1.94	0.8
Long Wharf Real Estate Partners Fund V	-	-	-	-	-	-	-	-	2.92	100.0	-	-	-	-	-	-	2.92	1.2
Westport Real Estate Fund IV	-	-	-	-	-	-	-	-	1.59	100.0	-	-	-	-	-	-	1.59	0.6
JP Morgan Strategic Property	-	-	-	-	-	-	-	-	7.80	100.0	-	-	-	-	-	-	7.80	3.1
<b>Total Private Equity</b>	-	-	-	-	-	-	-	-	-	-	-	-	<b>17.44</b>	<b>100.0</b>	-	-	<b>17.44</b>	<b>7.0</b>
Ares Landmark Equity Partners XIV LP	-	-	-	-	-	-	-	-	-	-	-	-	0.07	100.0	-	-	0.07	0.0
Private Equity Investment Fund V	-	-	-	-	-	-	-	-	-	-	-	-	0.52	100.0	-	-	0.52	0.2
HarbourVest Partners IX [Consolidated]	-	-	-	-	-	-	-	-	-	-	-	-	8.16	100.0	-	-	8.16	3.3
Pomona Capital VIII	-	-	-	-	-	-	-	-	-	-	-	-	0.49	100.0	-	-	0.49	0.2
JPMorgan Venture Capital Fund V	-	-	-	-	-	-	-	-	-	-	-	-	8.20	100.0	-	-	8.20	3.3
<b>Total Liquid Reserves</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>9.86</b>	<b>100.0</b>	<b>9.86</b>	<b>3.9</b>
Liquid Reserves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.86	100.0	9.86	3.9

Please see disclosures in back of the report for market value and return availability.





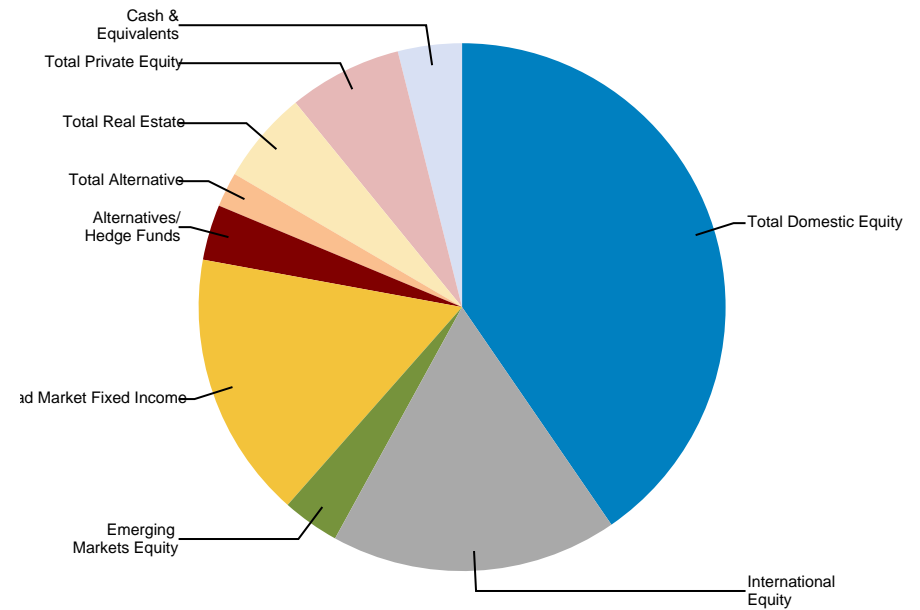
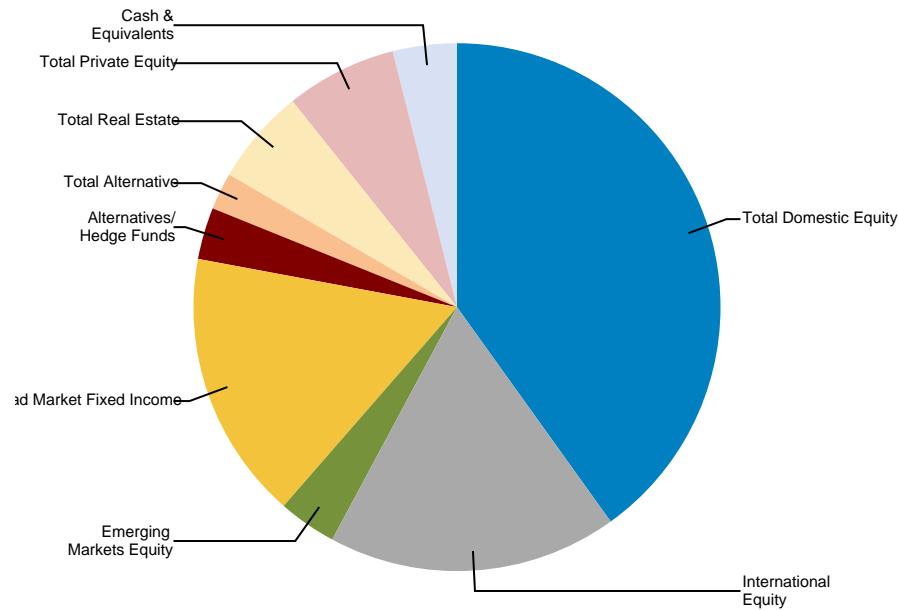
# Asset Allocation by Asset Class

## Total Fund

As of September 30, 2023

Jun-2023 : \$261,333,845.3

Sep-2023 : \$250,572,437.3



Allocation			Allocation		
	Market Value (\$)	Allocation (%)		Market Value (\$)	Allocation (%)
Total Domestic Equity	104,765,988	40.09	Total Domestic Equity	101,255,752	40.41
Total Developed Country Equity	46,433,351	17.77	Total Developed Country Equity	44,093,789	17.60
Total Emerging Markets Equity	9,339,869	3.57	Total Emerging Markets Equity	8,806,909	3.51
Total Broad Market Fixed Income	43,124,173	16.50	Total Broad Market Fixed Income	41,004,717	16.36
Total Non-Core Fixed Income	8,283,792	3.17	Total Non-Core Fixed Income	8,518,979	3.40
Total Global Macro	-	0.00	Total Global Macro	-	0.00
Total Alternative	5,945,746	2.28	Total Alternative	5,343,628	2.13
Total Real Estate	15,366,501	5.88	Total Real Estate	14,243,980	5.68
Total Private Equity	17,806,770	6.81	Total Private Equity	17,444,199	6.96
Cash & Equivalents	10,267,655	3.93	Cash & Equivalents	9,860,485	3.94



# Asset Allocation by Manager

Total Fund

As of September 30, 2023

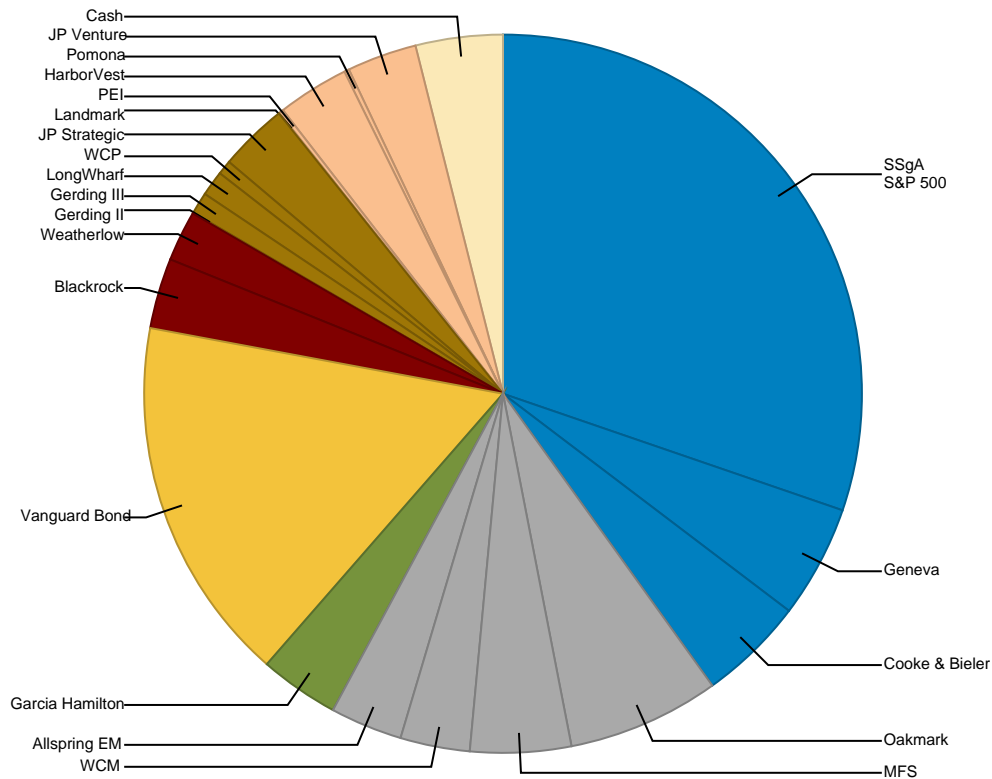
Jun-2023 : \$261,333,845.3

## Allocation

Market Value  
(\$)

Allocation  
(%)

Vanguard Instl Index (VINIX)	79,074,524	30.26
Geneva Mid Cap Growth Equity	13,243,355	5.07
Cooke & Bieler Mid Cap Value Equity	12,448,108	4.76
Pear Tree Polaris Foreign Value (QFVRX)	17,911,353	6.85
Fidelity International Index (FSPSX)	11,851,863	4.54
MFS International Growth R6 (MGRDX)	8,182,946	3.13
WCM Focused International Growth (WCMIX)	8,487,190	3.25
Allspring Emerging Markets	9,339,869	3.57
Garcia Hamilton Fixed Income Agg.	43,124,173	16.50
Serenitas Credit Gamma	8,283,792	3.17
Ark Innovation (ARKK)	5,945,746	2.28
Green Cities Company II	98,705	0.04
Green Cities Company III	2,546,872	0.97
Long Wharf Real Estate Partners Fund V	2,958,667	1.13
Westport Real Estate Fund IV	1,695,458	0.65
JP Morgan Strategic Property	8,066,799	3.09
Ares Landmark Equity Partners XIV LP	85,156	0.03
Private Equity Investment Fund V	519,658	0.20
HarbourVest Partners IX	8,419,046	3.22
Pomona Capital VIII	584,344	0.22
JPMorgan Venture Capital Fund V	8,198,566	3.14
Liquid Reserves	10,267,655	3.93



# Asset Allocation by Manager

Total Fund

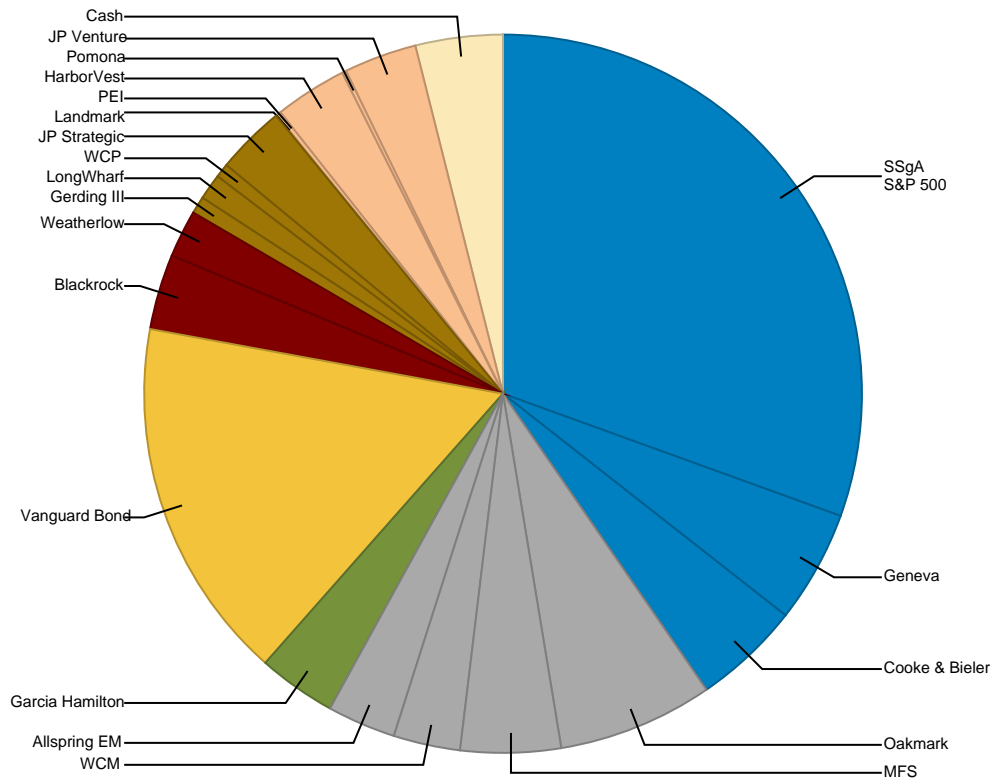
As of September 30, 2023

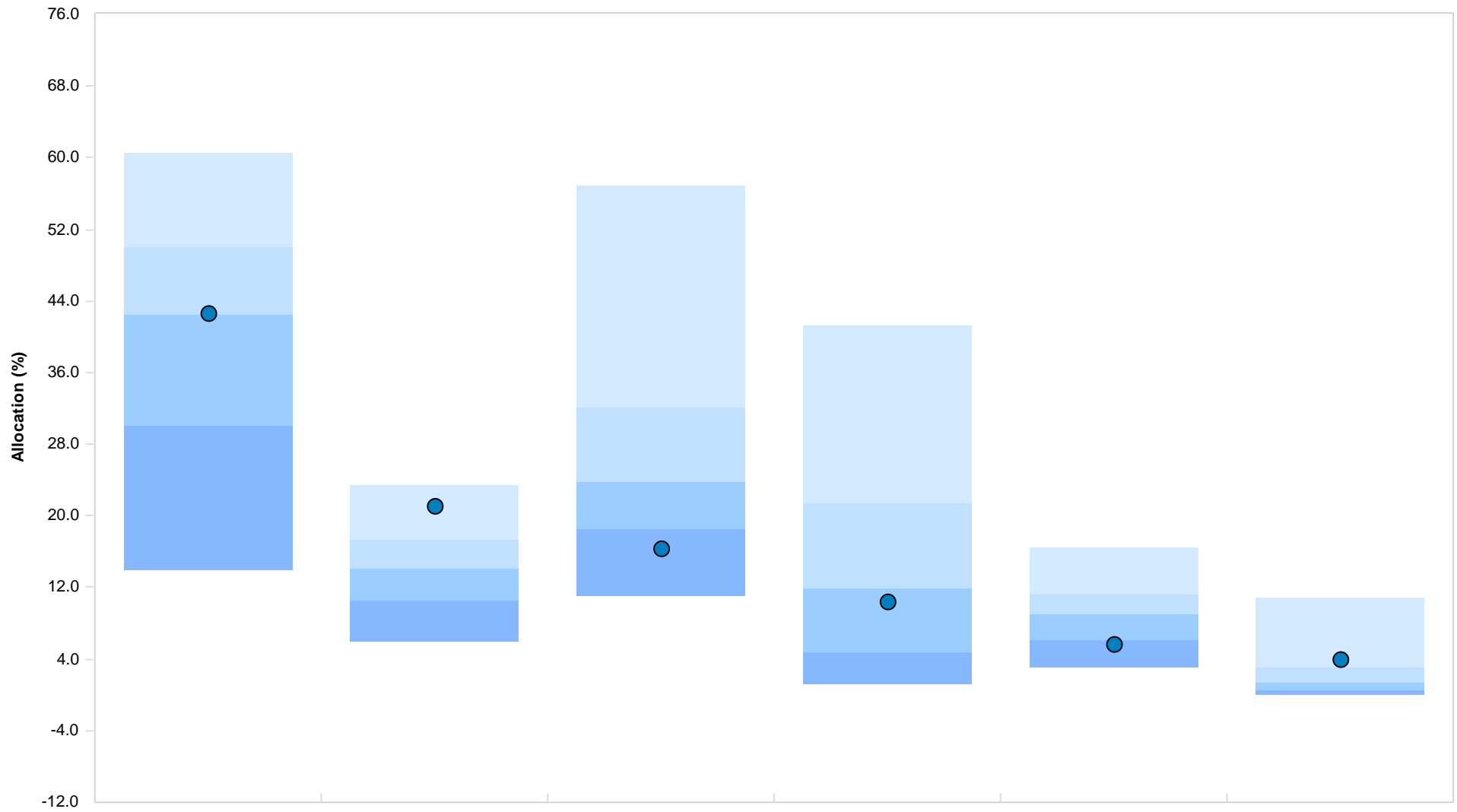
Sep-2023 : \$250,572,437.3

## Allocation

Market Value (\$)  
Allocation (%)

Vanguard Instl Index (VINIX)	76,482,014	30.52
Geneva Mid Cap Growth Equity	12,674,439	5.06
Cooke & Bieler Mid Cap Value Equity	12,099,298	4.83
Pear Tree Polaris Foreign Value (QFVRX)	17,525,982	6.99
Fidelity International Index (FSPSX)	11,297,270	4.51
MFS International Growth R6 (MGRDX)	7,544,632	3.01
WCM Focused International Growth (WCMIX)	7,725,905	3.08
Allspring Emerging Markets	8,806,909	3.51
Garcia Hamilton Fixed Income Agg.	41,004,717	16.36
Serenitas Credit Gamma	8,518,979	3.40
Ark Innovation (ARKK)	5,343,628	2.13
Green Cities Company II	-	0.00
Green Cities Company III	1,940,049	0.77
Long Wharf Real Estate Partners Fund V	2,922,015	1.17
Westport Real Estate Fund IV	1,585,752	0.63
JP Morgan Strategic Property	7,796,164	3.11
Ares Landmark Equity Partners XIV LP	74,905	0.03
Private Equity Investment Fund V	519,658	0.21
HarbourVest Partners IX	8,159,420	3.26
Pomona Capital VIII	491,650	0.20
JPMorgan Venture Capital Fund V	8,198,566	3.27
Liquid Reserves	9,860,485	3.94





	US Equity	Global ex-US Equity	US Fixed	Alternatives	Total Real Estate	Cash & Equivalents
● Total Fund	42.54 (50)	21.11 (10)	16.36 (83)	10.36 (56)	5.68 (79)	3.94 (20)
5th Percentile	60.55	23.51	56.88	41.17	16.57	10.81
1st Quartile	50.03	17.34	32.13	21.48	11.16	3.12
Median	42.35	14.03	23.81	11.96	8.98	1.44
3rd Quartile	30.08	10.48	18.44	4.87	6.16	0.61
95th Percentile	13.87	5.90	11.01	1.31	3.04	0.06

# Comparative Performance

## Total Fund

As of September 30, 2023

Comparative Performance									
	QTR	YTD	FYTD	1 YR	3 YR	5 YR	7 YR	Inception	Inception Date
<b>Total Fund (Net)</b>	<b>-3.80</b>	<b>4.14</b>	<b>9.05</b>	<b>9.05</b>	<b>2.89</b>	<b>4.05</b>	<b>5.55</b>	<b>5.79</b>	<b>09/01/2012</b>
Total Fund (Gross)	-3.67	4.41	9.37	9.37	3.10	4.29	5.81	6.06	
Total Fund Policy	-3.12	6.77	13.69	13.69	5.43	6.04	7.41	7.42	
Total Fund Policy x Pvt Invest	-2.92	5.76	11.96	11.96	4.15	4.76	5.93	6.48	
<b>Total Domestic Equity (Net)</b>	<b>-3.44</b>	<b>11.13</b>	<b>20.58</b>	<b>20.58</b>	<b>9.39</b>	<b>8.67</b>	<b>10.80</b>	<b>11.06</b>	<b>09/01/2012</b>
Total Domestic Equity (Gross)	-3.35	11.30	20.77	20.77	9.54	8.82	10.98	11.28	
Total Domestic Equity Policy	-3.25	12.39	20.46	20.46	9.38	9.14	11.58	12.31	
<b>Total International Equity (Net)</b>	<b>-5.04</b>	<b>6.22</b>	<b>23.67</b>	<b>23.67</b>	<b>3.32</b>	<b>2.71</b>	<b>5.10</b>	<b>5.92</b>	<b>09/01/2012</b>
Total International Equity (Gross)	-5.04	6.22	23.68	23.68	3.33	2.85	5.34	6.21	
Total International Equity Policy	-3.68	5.82	21.02	21.02	4.24	3.07	5.31	N/A	
<b>Total Broad Market Fixed Income (Net)</b>	<b>-5.02</b>	<b>-2.75</b>	<b>-0.60</b>	<b>-0.60</b>	<b>-5.04</b>	<b>-0.16</b>	<b>N/A</b>	<b>-0.13</b>	<b>07/01/2018</b>
Total Broad Market Fixed Income (Gross)	-4.91	-2.53	-0.37	-0.37	-4.87	0.01	N/A	0.03	
Total Fixed Income Policy	-3.23	-1.21	0.64	0.64	-5.21	-0.22	0.17	-0.13	
<b>Total Non-Core Fixed Income (Net)</b>	<b>2.84</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>03/01/2023</b>
Total Non-Core Fixed Income (Gross)	3.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Fixed Income Policy	-3.23	-1.21	0.64	0.64	-5.21	-0.22	0.17	-1.61	
<b>Total Global Macro (Net)</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>12/01/2020</b>
Total Global Macro (Gross)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Global Macro Policy	-3.28	5.08	11.30	11.30	1.72	4.25	5.07	0.08	
<b>Total Alternative (Net)</b>	<b>-10.13</b>	<b>26.98</b>	<b>5.14</b>	<b>5.14</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-35.70</b>	<b>06/01/2021</b>
Total Alternative (Gross)	-9.95	27.69	5.90	5.90	N/A	N/A	N/A	-35.21	
Total Alternative Policy	-5.05	22.16	32.41	32.41	6.01	7.16	10.03	-1.96	
<b>Total Real Estate (Net)*</b>	<b>-6.69</b>	<b>-16.47</b>	<b>-27.50</b>	<b>-27.50</b>	<b>-5.75</b>	<b>-1.89</b>	<b>0.65</b>	<b>4.39</b>	<b>08/01/2013</b>
Total Real Estate (Gross)	-5.98	-15.54	-26.57	-26.57	-4.98	-1.12	1.38	5.49	
Total Real Estate Policy	-1.93	-7.89	-12.40	-12.40	7.57	6.10	6.78	9.28	
<b>Total Private Equity (Net)*</b>	<b>-0.02</b>	<b>-4.61</b>	<b>-8.09</b>	<b>-8.09</b>	<b>14.21</b>	<b>15.58</b>	<b>15.59</b>	<b>16.24</b>	<b>09/01/2012</b>
Total Private Equity (Gross)	0.01	-4.53	-7.99	-7.99	14.33	15.73	15.75	16.37	
Total Private Equity Policy	-2.56	15.60	25.27	25.27	13.45	13.21	15.68	15.78	

\*Time weighted returns are for reference.

Please refer to IRR calculations on the following pages.

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



# Comparative Performance

## Total Fund

As of September 30, 2023

### Comparative Performance

	QTR		YTD		FYTD		1 YR		3 YR		4 YR		5 YR		Inception		Inception Date
Total Domestic Equity																	
Vanguard Instl Index (Net)	-3.28	(56)	13.04	(35)	21.58	(40)	21.58	(40)	10.12	(25)	11.36	(27)	N/A		11.62	(25)	09/01/2019
S&P 500 Index	-3.27	(56)	13.07	(34)	21.62	(39)	21.62	(39)	10.15	(25)	11.38	(27)	9.92	(23)	11.64	(25)	
IM U.S. Large Cap Core Equity (MF) Median	-3.17		11.65		20.90		20.90		8.94		10.43		9.02		10.64		
Geneva Mid Cap Growth Equity (Net)	-4.58	(32)	8.48	(66)	15.40	(56)	15.40	(56)	4.61	(28)	7.81	(61)	7.20	(59)	9.52	(67)	08/01/2005
Geneva Mid Cap Growth Equity (Gross)	-4.29	(25)	9.12	(51)	16.07	(49)	16.07	(49)	5.12	(19)	8.24	(55)	7.69	(50)	N/A		
Russell Midcap Growth Index	-5.22	(46)	9.88	(37)	17.47	(28)	17.47	(28)	2.61	(46)	7.42	(64)	6.97	(60)	9.11	(75)	
IM U.S. Mid Cap Growth Equity (SA+CF) Median	-5.57		9.15		16.00		16.00		2.20		8.45		7.66		10.09		
Cooke & Bieler Mid Cap Value Equity	-2.80	(32)	7.22	(17)	21.63	(15)	21.63	(15)	12.30	(71)	6.87	(70)	6.83	(42)	7.12	(37)	08/01/2018
Russell Midcap Value Index	-4.46	(84)	0.54	(71)	11.05	(85)	11.05	(85)	10.98	(82)	6.10	(83)	5.18	(83)	5.13	(80)	
IM U.S. Mid Cap Value Equity (SA+CF) Median	-3.55		3.52		15.45		15.45		14.25		7.91		6.45		6.47		
Total Developed Country Equity																	
Pear Tree Polaris Foreign Value (QFVRX) (Net)	-2.15	(52)	7.84	(61)	26.94	(66)	26.94	(66)	7.55	(70)	N/A		N/A		5.82	(73)	09/01/2020
MSCI EAFE (Net) Index	-4.11	(79)	7.08	(71)	25.65	(75)	25.65	(75)	5.75	(86)	4.41	(64)	3.24	(34)	4.70	(84)	
MSCI EAFE Value Index (Net)	0.59	(10)	9.92	(32)	31.51	(34)	31.51	(34)	11.11	(26)	4.84	(51)	2.81	(48)	9.12	(30)	
IM International Value Equity (MF) Median	-2.09		8.70		28.68		28.68		9.11		4.93		2.68		7.63		
Fidelity International Index (FSPSX) (Net)	-4.68	(53)	6.82	(27)	26.29	(18)	26.29	(18)	5.64	(26)	N/A		N/A		4.72	(26)	09/01/2020
MSCI EAFE Index (Net)	-4.11	(43)	7.08	(25)	25.65	(21)	25.65	(21)	5.75	(26)	4.41	(32)	3.24	(29)	4.70	(26)	
IM International Equity (MF) Median	-4.52		4.64		19.12		19.12		2.06		3.37		2.26		1.53		
MFS International Growth R6 (MGRDX) (Net)	-7.80	(66)	3.69	(64)	18.46	(56)	18.46	(56)	2.47	(28)	5.05	(27)	4.64	(26)	4.85	(23)	07/01/2018
MSCI AC World ex USA (Net)	-3.77	(4)	5.34	(26)	20.39	(41)	20.39	(41)	3.74	(14)	3.55	(63)	2.58	(72)	2.59	(68)	
MSCI AC World ex USA Growth (Net)	-7.31	(55)	2.61	(77)	15.84	(85)	15.84	(85)	-1.86	(79)	2.67	(79)	2.54	(73)	2.37	(75)	
IM International Large Cap Growth Equity (MF) Median	-7.10		4.42		18.88		18.88		0.89		3.93		3.23		3.10		
WCM Focused International Growth (WCMIX) (Net)	-8.97	(79)	4.27	(55)	18.21	(60)	18.21	(60)	0.46	(58)	6.01	(18)	6.42	(7)	6.71	(5)	07/01/2018
MSCI AC World ex USA (Net)	-3.77	(4)	5.34	(26)	20.39	(41)	20.39	(41)	3.74	(14)	3.55	(63)	2.58	(72)	2.59	(68)	
MSCI AC World ex USA Growth (Net)	-7.31	(55)	2.61	(77)	15.84	(85)	15.84	(85)	-1.86	(79)	2.67	(79)	2.54	(73)	2.37	(75)	
IM International Large Cap Growth Equity (MF) Median	-7.10		4.42		18.88		18.88		0.89		3.93		3.23		3.10		
Total Emerging Markets Equity																	
Allspring Emerging Markets (Net)	-5.85	(92)	-1.01	(85)	9.96	(78)	9.96	(78)	-5.08	(85)	-0.28	(89)	0.38	(89)	1.83	(95)	10/01/2013
Allspring Emerging Markets (Gross)	-5.71	(92)	-0.55	(83)	10.66	(73)	10.66	(73)	-4.48	(82)	0.34	(85)	1.01	(78)	2.47	(80)	
MSCI Emerging Markets (Net) Index	-2.93	(50)	1.82	(68)	11.70	(66)	11.70	(66)	-1.73	(63)	1.21	(72)	0.55	(84)	2.07	(90)	
IM Emerging Markets Equity (SA+CF) Median	-2.96		4.63		14.89		14.89		-0.16		2.95		2.60		3.47		

Returns for periods greater than one year are annualized.

Returns are expressed as percentages.

\*The Goldman Sachs Treasury Oblig (Yield) reported from the Salem Trust Statement,



# Comparative Performance

## Total Fund

As of September 30, 2023

	QTR		YTD		FYTD		1 YR		3 YR		4 YR		5 YR		Inception		Inception Date
Total Broad Market Fixed Income																	
Garcia Hamilton Fixed Income Agg.	-4.91	(100)	-2.53	(100)	-0.37	(97)	-0.37	(97)	-4.87	(55)	-2.00	(68)	-0.01	(97)	0.01	(98)	08/01/2018
Blmbg. U.S. Aggregate Index	-3.23	(71)	-1.21	(83)	0.64	(73)	0.64	(73)	-5.21	(86)	-2.30	(95)	0.10	(95)	0.10	(95)	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-3.14		-0.81		1.06		1.06		-4.84		-1.80		0.54		0.53		
Total Non-Core Fixed Income																	
Serenitas Credit Gamma (Net)	2.84		N/A		N/A		N/A		N/A		N/A		N/A		N/A		03/01/2023
Blmbg. U.S. Aggregate Index	-3.23		-1.21		0.64		0.64		-5.21		-2.30		0.10		-1.61		
Total Alternative																	
Ark Innovation (ARKK) (Net)	-10.13	(97)	26.98	(5)	5.14	(89)	5.14	(89)	N/A		N/A		N/A		-35.70	(100)	06/01/2021
MSCI ACWI IMI Disruptive Technology Index (Net)	-5.05	(73)	22.16	(9)	32.41	(4)	32.41	(4)	4.67	(71)	11.37	(15)	9.60	(13)	-1.96	(52)	
IM U.S. Equity (MF) Median	-3.67		5.25		15.07		15.07		8.34		7.62		6.08		-1.79		
Total Real Estate																	
JP Morgan Strategic Property (Net)	-3.35	(60)	-8.20	(59)	-12.99	(55)	-12.99	(55)	4.91	(75)	3.86	(76)	3.67	(92)	4.46	(N/A)	03/01/2017
JP Morgan Strategic Property (Gross)	-3.11	(54)	-7.49	(42)	-12.09	(35)	-12.09	(35)	6.02	(67)	4.94	(60)	4.73	(73)	5.47	(N/A)	
NCREIF Fund Index-ODCE (VW)	-1.90	(29)	-7.55	(47)	-12.14	(36)	-12.14	(36)	7.13	(35)	5.67	(39)	5.65	(57)	6.44	(N/A)	
IM U.S. Open End Private Real Estate (SA+CF) Median	-3.09		-7.88		-12.83		-12.83		6.81		5.36		5.72		N/A		

**Annualized Cash Yield: 4.99% (9/30/2023)**

Returns for periods greater than one year are annualized.

Returns are expressed as percentages.

\*The Goldman Sachs Treasury Oblig (Yield) reported from the Salem Trust Statement,



**Town of Palm Beach Retirement System Pension**  
**Comparative Performance - IRR**  
As of September 30, 2023

Comparative Performance - IRR								
	1 Quarter Ending Jun-2023	1 Year Ending Jun-2023	2 Years Ending Jun-2023	3 Years Ending Jun-2023	4 Years Ending Jun-2023	5 Years Ending Jun-2023	Since Inception Ending Jun-2023	Inception Date
<b>Total Real Estate</b>	<b>-6.47</b>	<b>-23.47</b>	<b>-6.78</b>	<b>-2.12</b>	<b>-0.70</b>	<b>1.47</b>	<b>148.78</b>	<b>09/07/2017</b>
ICM/PME (DJ US Select RE Securities Idx)	2.91	-1.11	-3.26	11.67	1.90	3.84	129.37	
<b>Green Cities Company III</b>	<b>-22.60</b>	<b>-42.91</b>	<b>-22.99</b>	<b>-15.63</b>	<b>-11.35</b>	<b>-7.07</b>	<b>-3.39</b>	<b>03/03/2016</b>
ICM/PME (DJ US Select RE Securities Idx)	2.97	-0.73	-2.19	10.84	2.79	4.22	4.43	
<b>Long Wharf Real Estate Partners Fund V</b>	<b>-0.94</b>	<b>-4.01</b>	<b>5.60</b>	<b>6.95</b>	<b>5.49</b>	<b>7.65</b>	<b>7.84</b>	<b>11/20/2015</b>
ICM/PME (DJ US Select RE Securities Idx)	2.96	-0.66	-2.78	12.07	2.06	4.20	4.99	
<b>Westport Real Estate Fund IV</b>	<b>-9.05</b>	<b>-37.12</b>	<b>-22.78</b>	<b>-9.26</b>	<b>-4.29</b>	<b>-0.26</b>	<b>4.06</b>	<b>03/24/2014</b>
ICM/PME (DJ US Select RE Securities Idx)	2.96	-1.92	-3.33	12.55	1.32	3.74	4.69	





**Town of Palm Beach Retirement System Pension**  
**Comparative Performance - IRR**  
As of September 30, 2023

Comparative Performance - IRR								
	1 Quarter Ending Jun-2023	1 Year Ending Jun-2023	2 Years Ending Jun-2023	3 Years Ending Jun-2023	4 Years Ending Jun-2023	5 Years Ending Jun-2023	Since Inception Ending Jun-2023	Inception Date
<b>Total Private Equity</b>	<b>-3.14</b>	<b>-13.46</b>	<b>1.12</b>	<b>25.14</b>	<b>20.00</b>	<b>19.18</b>	<b>19.53</b>	<b>09/14/2012</b>
ICM/PME (S&P 500 Index)	8.74	19.09	3.16	17.77	14.50	13.51	12.69	
ICM/PME (Russell 3000 Index)	8.39	18.48	0.86	17.46	13.99	12.75	12.26	
<b>Ares Landmark Equity Partners XIV LP</b>	<b>-3.72</b>	<b>-3.67</b>	<b>1.93</b>	<b>12.45</b>	<b>6.67</b>	<b>4.73</b>	<b>9.50</b>	<b>11/12/2009</b>
ICM/PME (S&P 500 Index)	8.65	19.77	4.07	19.72	15.12	13.21	14.24	
ICM/PME (Russell 3000 Index)	8.30	19.27	1.52	19.49	14.55	12.34	14.06	
<b>Private Equity Investment Fund V</b>	<b>-0.72</b>	<b>-5.08</b>	<b>-4.50</b>	<b>-3.57</b>	<b>-2.24</b>	<b>0.85</b>	<b>-1.74</b>	<b>01/21/2010</b>
ICM/PME (S&P 500 Index)	8.74	19.59	3.39	14.60	12.77	12.30	13.26	
ICM/PME (Russell 3000 Index)	8.39	18.95	1.22	13.89	11.99	11.38	12.88	
<b>HarbourVest Partners IX [Consolidated]</b>	<b>1.73</b>	<b>-2.97</b>	<b>2.22</b>	<b>28.92</b>	<b>23.83</b>	<b>23.38</b>	<b>20.16</b>	<b>07/29/2013</b>
ICM/PME (S&P 500 Index)	8.74	18.37	2.77	18.85	14.98	13.76	12.97	
ICM/PME (Russell 3000 Index)	8.39	17.81	0.44	18.73	14.60	13.10	12.67	
<b>Pomona Capital VIII</b>	<b>-20.67</b>	<b>-21.51</b>	<b>-16.87</b>	<b>17.45</b>	<b>11.13</b>	<b>9.91</b>	<b>19.65</b>	<b>03/25/2014</b>
ICM/PME (S&P 500 Index)	8.74	19.32	3.60	19.99	15.35	14.52	10.32	
ICM/PME (Russell 3000 Index)	8.39	18.69	1.26	19.91	14.93	13.63	9.39	
<b>JPMorgan Venture Capital Fund V</b>	<b>-6.42</b>	<b>-22.58</b>	<b>2.23</b>	<b>24.28</b>	<b>18.46</b>	<b>16.94</b>	<b>14.77</b>	<b>07/31/2015</b>
ICM/PME (S&P 500 Index)	8.74	19.66	3.52	16.49	13.97	13.16	12.87	
ICM/PME (Russell 3000 Index)	8.39	19.03	1.26	15.95	13.32	12.34	12.29	



Financial Reconciliation - 1 Quarter									
	Market Value 07/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 09/30/2023
<b>Total Domestic Equity</b>	<b>104,765,988</b>	-	<b>93,115</b>	-	<b>-92,416</b>	<b>-1,414</b>	<b>370,556</b>	<b>-3,880,077</b>	<b>101,255,752</b>
Vanguard Instl Index (VINIX)	79,074,524	-	-	-	-	-	286,886	-2,879,396	76,482,014
Geneva Mid Cap Growth Equity	13,243,355	-	39,520	-	-39,520	-745	20,922	-589,094	12,674,439
Cooke & Bieler Mid Cap Value Equity	12,448,108	-	53,596	-	-52,896	-670	62,747	-411,587	12,099,298
<b>Total Developed Country Equity</b>	<b>46,433,351</b>	-	-	-	-	-	-	<b>-2,339,562</b>	<b>44,093,789</b>
Pear Tree Polaris Foreign Value (QFVRX)	17,911,353	-	-	-	-	-	-	-385,371	17,525,982
Fidelity International Index (FSPSX)	11,851,863	-	-	-	-	-	-	-554,593	11,297,270
MFS International Growth R6 (MGRDX)	8,182,946	-	-	-	-	-	-	-638,314	7,544,632
WCM Focused International Growth (WCMIX)	8,487,190	-	-	-	-	-	-	-761,284	7,725,905
<b>Total Emerging Markets Equity</b>	<b>9,339,869</b>	<b>14,586</b>	-	-	<b>-14,586</b>	-	-	<b>-532,960</b>	<b>8,806,909</b>
Allspring Emerging Markets	9,339,869	14,586	-	-	-14,586	-	-	-532,960	8,806,909
<b>Total Fixed Income</b>	<b>51,407,965</b>	-	<b>50,712</b>	-	<b>-116,071</b>	<b>-2,410</b>	<b>343,813</b>	<b>-2,160,314</b>	<b>49,523,696</b>
Garcia Hamilton Fixed Income Agg.	43,124,173	-	50,712	-	-48,302	-2,410	343,813	-2,463,269	41,004,717
Serenitas Credit Gamma	8,283,792	-	-	-	-67,768	-	-	302,955	8,518,979
<b>Total Global Macro</b>	-	-	-	-	-	-	-	-	-
BlackRock Multi-Asset Income Fund (BKMIX)	-	-	-	-	-	-	-	-	-
<b>Total Alternative</b>	<b>5,945,746</b>	-	-	-	-	-	-	<b>-602,118</b>	<b>5,343,628</b>
Ark Innovation (ARKK)	5,945,746	-	-	-	-	-	-	-602,118	5,343,628
<b>Total Real Estate</b>	<b>15,366,501</b>	<b>-98,740</b>	-	-	<b>-108,864</b>	-	<b>46,615</b>	<b>-961,532</b>	<b>14,243,980</b>
Green Cities Company II	98,705	-98,710	-	-	-	-	-	5	-
Green Cities Company III	2,546,872	-	-	-	-	-	-	-606,823	1,940,049
Long Wharf Real Estate Partners Fund V	2,958,667	-	-	-	-	-	-	-36,652	2,922,015
Westport Real Estate Fund IV	1,695,458	-	-	-	-88,416	-	-	-21,290	1,585,752
JP Morgan Strategic Property	8,066,799	-30	-	-	-20,448	-	46,615	-296,772	7,796,164
<b>Total Private Equity</b>	<b>17,806,770</b>	<b>-359,049</b>	-	-	<b>-5,267</b>	-	-	<b>1,745</b>	<b>17,444,199</b>
Ares Landmark Equity Partners XIV LP	85,156	-11,996	-	-	-	-	-	1,745	74,905
Private Equity Investment Fund V	519,658	-	-	-	-	-	-	-	519,658
HarbourVest Partners IX [Consolidated]	8,419,046	-259,626	-	-	-	-	-	-	8,159,420
Pomona Capital VIII	584,344	-92,694	-	-	-	-	-	-	491,650
JPMorgan Venture Capital Fund V	8,198,566	5,267	-	-	-5,267	-	-	-	8,198,566
<b>Total Liquid Reserves</b>	<b>10,267,655</b>	<b>463,057</b>	<b>10,990</b>	<b>-1,000,000</b>	-	<b>-10,990</b>	<b>127,658</b>	<b>2,114</b>	<b>9,860,485</b>
Liquid Reserves	10,267,655	463,057	10,990	-1,000,000	-	-10,990	127,658	2,114	9,860,485
<b>Total Fund</b>	<b>261,333,845</b>	<b>19,853</b>	<b>154,817</b>	<b>-1,000,000</b>	<b>-337,203</b>	<b>-14,814</b>	<b>888,642</b>	<b>-10,472,703</b>	<b>250,572,437</b>
<b>Receipts &amp; Disbursements (From Town)</b>	-	<b>-19,853</b>	<b>190,567</b>	<b>-4,531,804</b>	-	<b>-57,932</b>	-	<b>4,419,022</b>	-
<b>Total Fund including Town Flows</b>	<b>261,333,845</b>	-	<b>345,384</b>	<b>-5,531,804</b>	<b>-337,203</b>	<b>-72,746</b>	<b>888,642</b>	<b>-6,053,681</b>	<b>250,572,437</b>

Receipts &amp; Disbursements (From Town) data provided by the Town of Palm Beach.



## Financial Reconciliation - Fiscal Year To Date

	Market Value 10/01/2022	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 09/30/2023
<b>Total Domestic Equity</b>	<b>90,718,775</b>	<b>-7,852,932</b>	<b>148,560</b>	<b>-</b>	<b>-161,968</b>	<b>-6,074</b>	<b>2,525,896</b>	<b>15,883,495</b>	<b>101,255,752</b>
Vanguard Instl Index (VINIX)	62,908,987	-	-	-	-	-	2,145,188	11,427,839	76,482,014
Geneva Mid Cap Growth Equity	10,919,781	18,767	59,234	-	-76,027	-2,719	78,151	1,677,251	12,674,439
Cooke & Bieler Mid Cap Value Equity	16,890,006	-7,871,699	89,326	-	-85,941	-3,355	302,557	2,778,404	12,099,298
<b>Total Developed Country Equity</b>	<b>35,887,607</b>	<b>-276,270</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,402,530</b>	<b>7,079,922</b>	<b>44,093,789</b>
Pear Tree Polaris Foreign Value (QFVRX)	13,806,392	-	-	-	-	-	620,642	3,098,948	17,525,982
Fidelity International Index (FSPSX)	9,176,464	-276,270	-	-	-	-	557,674	1,839,401	11,297,270
MFS International Growth R6 (MGRDX)	6,368,890	-	-	-	-	-	216,438	959,303	7,544,632
WCM Focused International Growth (WCMIX)	6,535,861	-	-	-	-	-	7,775	1,182,270	7,725,905
<b>Total Emerging Markets Equity</b>	<b>7,958,765</b>	<b>56,950</b>	<b>-</b>	<b>-</b>	<b>-56,950</b>	<b>-</b>	<b>-</b>	<b>848,144</b>	<b>8,806,909</b>
Allspring Emerging Markets	7,958,765	56,950	-	-	-56,950	-	-	848,144	8,806,909
<b>Total Fixed Income</b>	<b>41,156,489</b>	<b>8,024,945</b>	<b>81,901</b>	<b>-</b>	<b>-266,498</b>	<b>-9,504</b>	<b>1,450,143</b>	<b>-913,779</b>	<b>49,523,696</b>
Garcia Hamilton Fixed Income Agg.	41,156,489	24,945	81,901	-	-97,342	-9,504	1,450,143	-1,601,915	41,004,717
Serenitas Credit Gamma	-	8,000,000	-	-	-169,156	-	-	688,135	8,518,979
<b>Total Global Macro</b>	<b>14,158,863</b>	<b>-15,361,410</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>364,697</b>	<b>837,850</b>	<b>-</b>
BlackRock Multi-Asset Income Fund (BKMIX)	14,158,863	-15,361,410	-	-	-	-	364,697	837,850	-
<b>Total Alternative</b>	<b>2,125,444</b>	<b>2,995,686</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>222,498</b>	<b>5,343,628</b>
Ark Innovation (ARKK)	2,125,444	2,995,686	-	-	-	-	-	222,498	5,343,628
<b>Total Real Estate</b>	<b>21,378,781</b>	<b>-1,428,808</b>	<b>-</b>	<b>-</b>	<b>-206,171</b>	<b>-</b>	<b>217,655</b>	<b>-5,717,476</b>	<b>14,243,980</b>
Green Cities Company II	2,508,194	-1,504,323	-	-	-	-	-	-1,003,871	-
Green Cities Company III	4,326,007	75,620	-	-	-	-	-	-2,461,578	1,940,049
Long Wharf Real Estate Partners Fund V	3,094,899	-	-	-	-	-	-	-172,884	2,922,015
Westport Real Estate Fund IV	2,489,702	-	-	-	-119,349	-	-	-784,602	1,585,752
JP Morgan Strategic Property	8,959,979	-105	-	-	-86,822	-	217,655	-1,294,542	7,796,164
<b>Total Private Equity</b>	<b>20,188,343</b>	<b>-1,142,074</b>	<b>-</b>	<b>-</b>	<b>-20,934</b>	<b>-1,166</b>	<b>-</b>	<b>-1,579,970</b>	<b>17,444,199</b>
Ares Landmark Equity Partners XIV LP	104,257	-30,410	-	-	-	-	-	1,058	74,905
Private Equity Investment Fund V	525,567	-	-	-	-	-	-	-5,909	519,658
HarbourVest Partners IX [Consolidated]	9,243,912	-1,005,997	-	-	-	-	-	-78,495	8,159,420
Pomona Capital VIII	759,867	-126,601	-	-	-	-1,166	-	-140,450	491,650
JPMorgan Venture Capital Fund V	9,554,740	20,934	-	-	-20,934	-	-	-1,356,174	8,198,566
<b>Total Liquid Reserves</b>	<b>1,296,024</b>	<b>9,105,513</b>	<b>11,919,324</b>	<b>-13,000,000</b>	<b>-9,589</b>	<b>-29,638</b>	<b>495,665</b>	<b>83,184</b>	<b>9,860,485</b>
Liquid Reserves	1,296,024	9,105,513	11,919,324	-13,000,000	-9,589	-29,638	495,665	83,184	9,860,485
<b>Total Fund</b>	<b>234,869,090</b>	<b>-5,878,399</b>	<b>12,149,785</b>	<b>-13,000,000</b>	<b>-722,110</b>	<b>-46,382</b>	<b>6,456,586</b>	<b>16,743,868</b>	<b>250,572,437</b>
<b>Receipts &amp; Disbursements (From Town)</b>	<b>-</b>	<b>5,878,400</b>	<b>-5,680,977</b>	<b>-11,418,138</b>	<b>36,462</b>	<b>-166,038</b>	<b>-</b>	<b>11,350,290</b>	<b>-</b>
<b>Total Fund including Town Flows</b>	<b>234,869,090</b>	<b>1</b>	<b>6,468,808</b>	<b>-24,418,138</b>	<b>-685,648</b>	<b>-212,419</b>	<b>6,456,586</b>	<b>28,094,158</b>	<b>250,572,437</b>

Receipts &amp; Disbursements (From Town) data provided by the Town of Palm Beach.



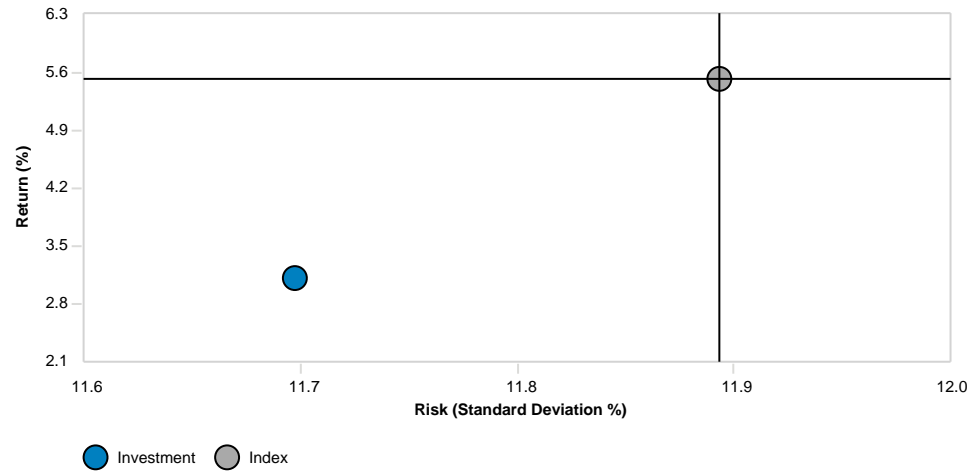
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	3.10	11.70	0.18	92.28	8	105.28	4
Index	5.52	11.89	0.37	100.00	8	100.00	4

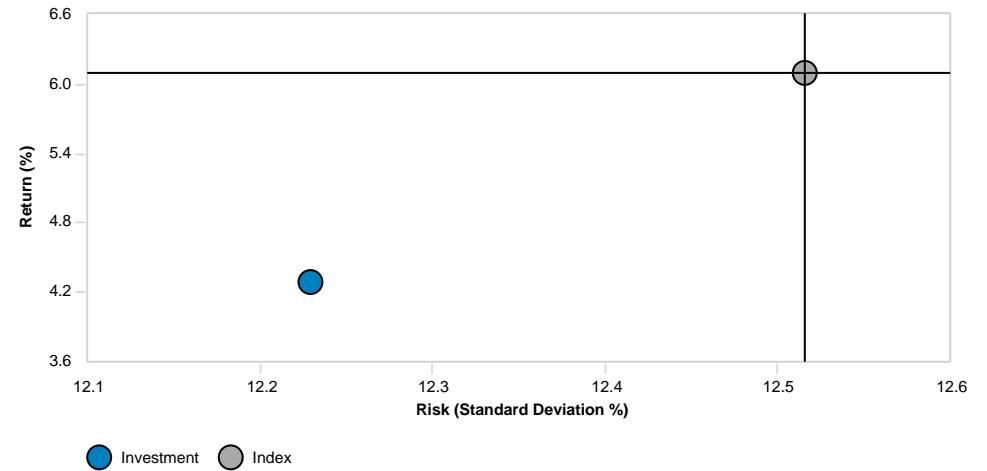
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	4.29	12.23	0.26	93.14	14	101.86	6
Index	6.09	12.52	0.40	100.00	14	100.00	6

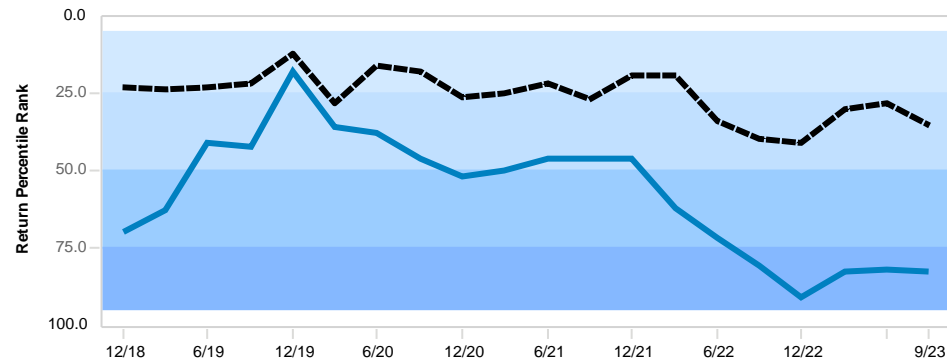
### Risk and Return 3 Years



### Risk and Return 5 Years

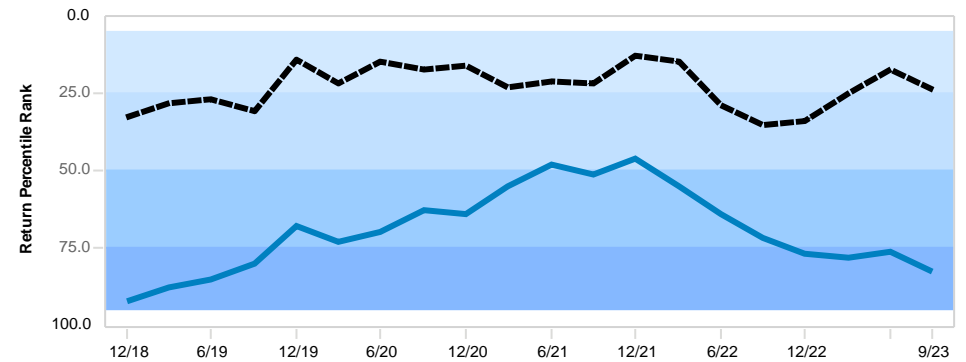


### 3 Year Rolling Percentile Rank All Public Plans-Total Fund



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	1 (5%)	9 (45%)	5 (25%)	5 (25%)
Index	20	11 (55%)	9 (45%)	0 (0%)	0 (0%)

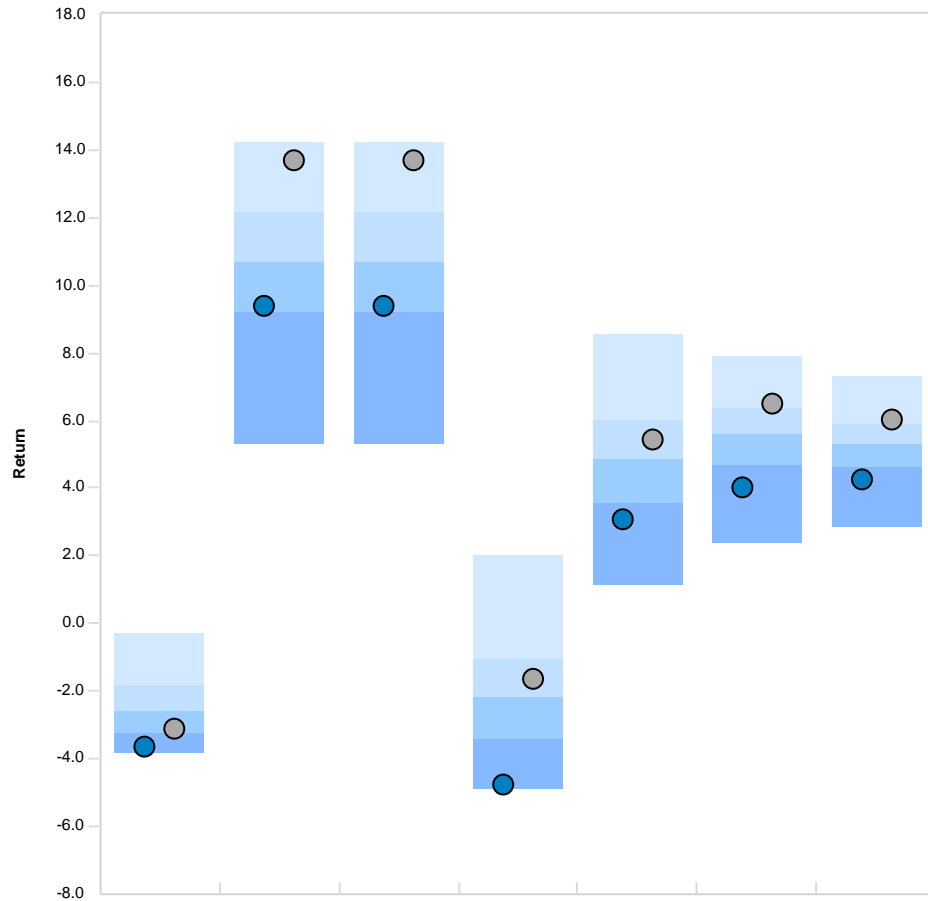
### 5 Year Rolling Percentile Rank All Public Plans-Total Fund



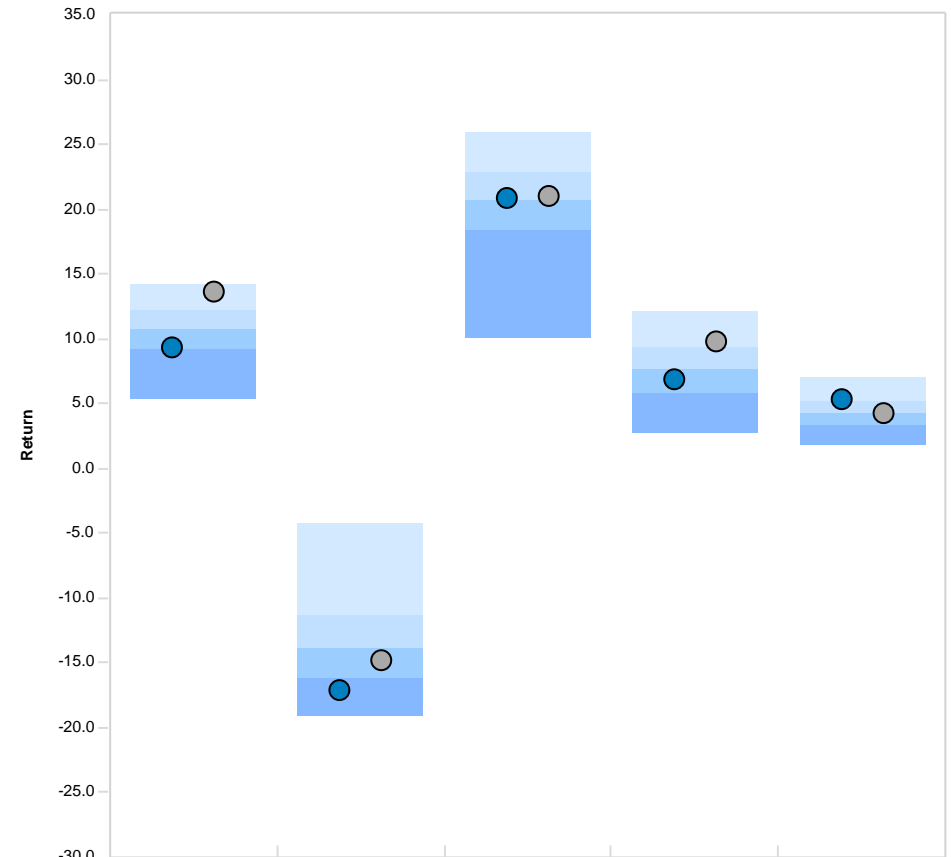
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	2 (10%)	10 (50%)	8 (40%)
Index	20	13 (65%)	7 (35%)	0 (0%)	0 (0%)



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



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



Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	3.11 (49)	5.12 (17)	4.75 (75)	-5.82 (94)	-10.78 (70)	-5.38 (78)
Index	3.89 (17)	4.88 (24)	6.24 (33)	-4.66 (64)	-10.84 (70)	-3.70 (33)
Median	3.08	4.17	5.63	-4.32	-9.95	-4.31



## **Domestic Equity**

### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	10.12	17.60	0.54	99.95	8	100.06	4
Index	10.15	17.60	0.54	100.00	8	100.00	4

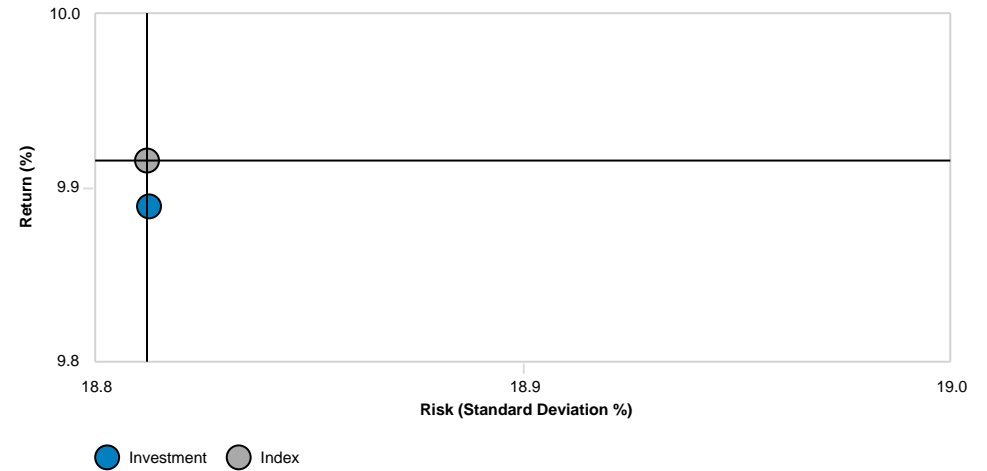
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.89	18.81	0.51	99.96	14	100.05	6
Index	9.92	18.81	0.51	100.00	14	100.00	6

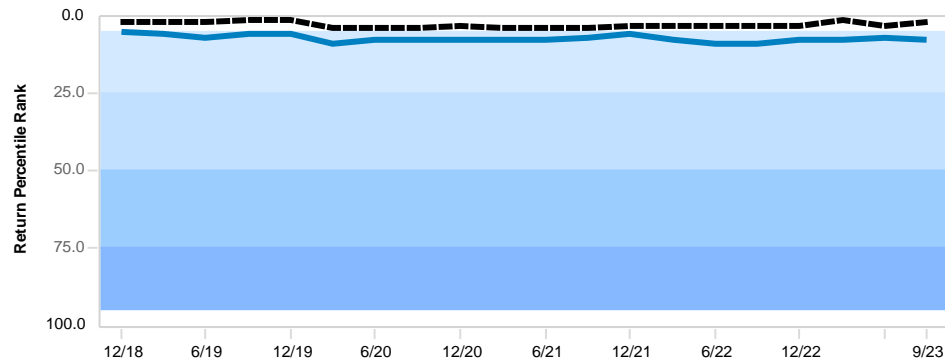
### Risk and Return 3 Years



### Risk and Return 5 Years

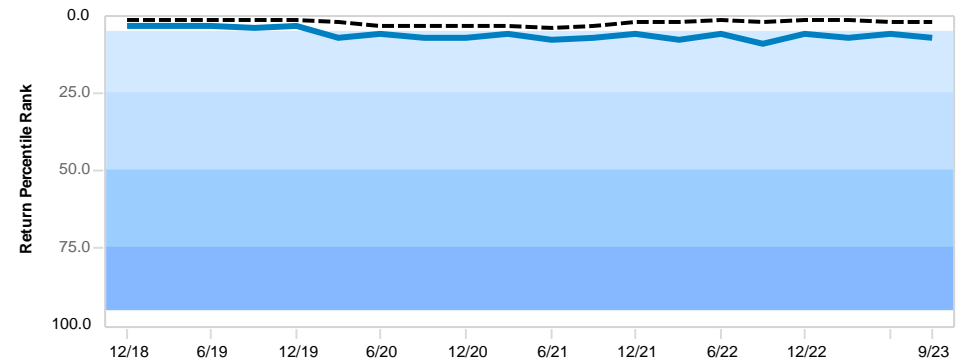


### 3 Year Rolling Percentile Rank IM S&P 500 Index (MF)



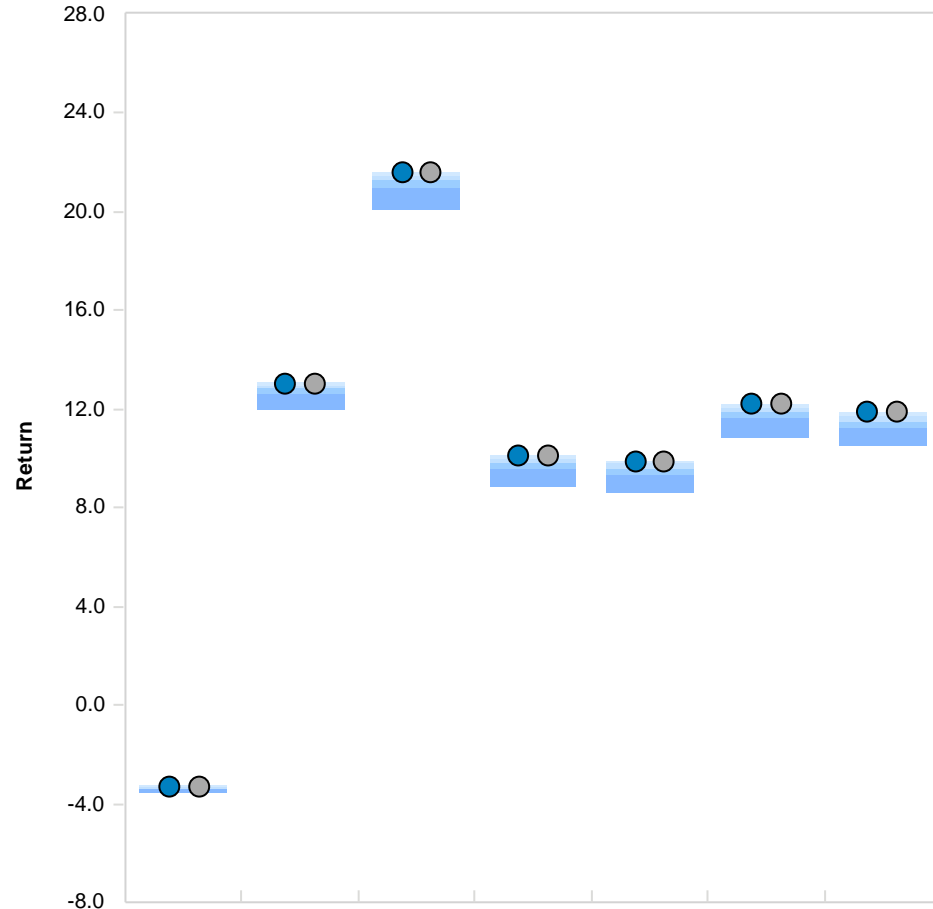
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)

### 5 Year Rolling Percentile Rank IM S&P 500 Index (MF)

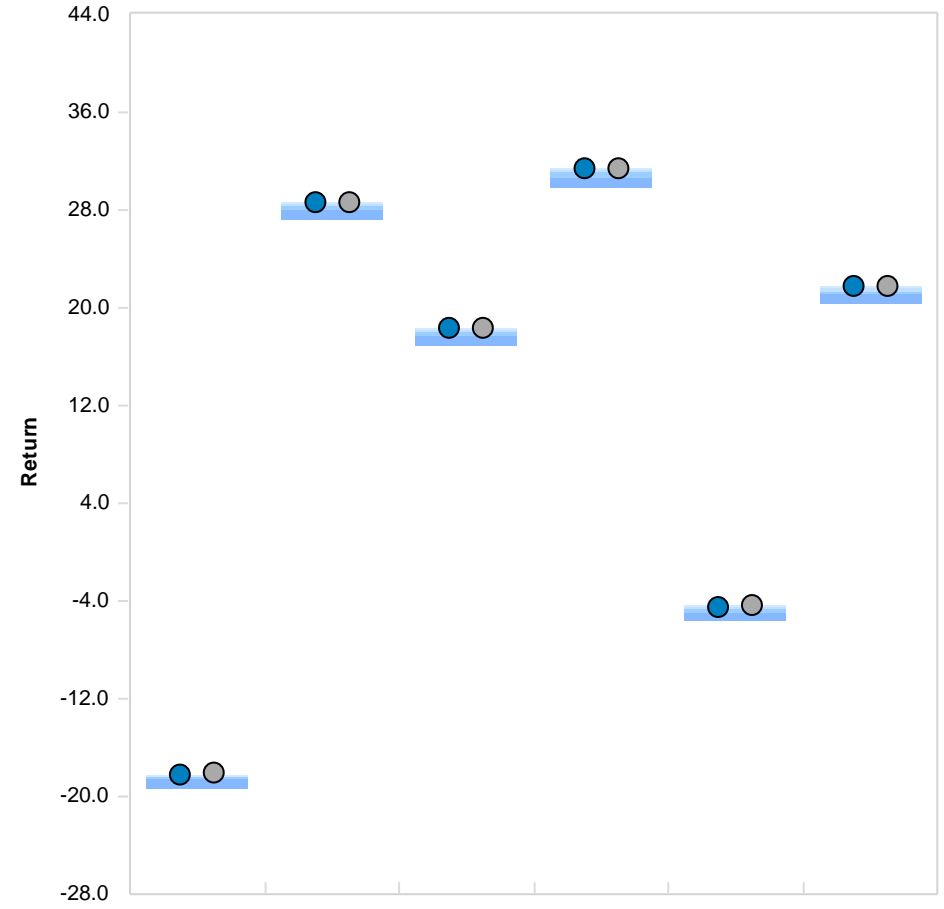


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)

**Peer Group Analysis - IM S&P 500 Index (MF)**



**Peer Group Analysis - IM S&P 500 Index (MF)**



**Comparative Performance**

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	8.73	7.49	7.55	-4.89	-16.11	-4.60
Index	8.74	7.50	7.56	-4.88	-16.10	-4.60





**Portfolio Characteristics (Benchmark: S&P 500 Index (Net))**

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	623,133,376,337	622,871,009,324
Median Mkt. Cap (\$)	30,561,390,000	30,357,883,340
Price/Earnings ratio	21.85	21.85
Price/Book ratio	4.28	4.27
5 Yr. EPS Growth Rate (%)	18.26	18.25
Current Yield (%)	1.65	1.65
Beta (3 Years, Monthly)	1.00	1.00
Number of Stocks	503	503

**Top Ten Equity Holdings (Benchmark: S&P 500 Index (Net))**

	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Apple Inc	7.00	7.00	0.00	-11.61
Microsoft Corp	6.53	6.53	0.00	-7.08
Amazon.com Inc	3.21	3.21	0.00	-2.49
NVIDIA Corporation	2.99	2.99	0.00	2.84
Alphabet Inc	2.16	2.16	0.00	9.32
Tesla Inc	1.92	1.92	0.00	-4.41
Meta Platforms Inc	1.86	1.86	0.00	4.61
Alphabet Inc	1.85	1.85	0.00	8.99
Berkshire Hathaway Inc	1.78	1.78	0.00	2.73
Exxon Mobil Corp	1.31	1.31	0.00	10.55

**Ten Best Performers (Benchmark: S&P 500 Index (Net))**

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Zions Bancorporation	0.01	0.01	0.00	31.43
Marathon Petroleum Corp	0.17	0.17	0.00	30.48
Phillips 66	0.15	0.15	0.00	27.13
CF Industries Holdings Inc	0.05	0.05	0.00	24.14
WestRock Company	0.03	0.03	0.00	24.14
Halliburton Co	0.10	0.10	0.00	23.25
Amgen Inc	0.40	0.40	0.00	22.03
Valero Energy Corp	0.14	0.14	0.00	21.79
APA Corporation	0.04	0.04	0.00	21.07
Western Digital Corp	0.04	0.04	0.00	20.30

**Ten Worst Performers (Benchmark: S&P 500 Index (Net))**

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
SolarEdge Technologies Inc	0.02	0.02	0.00	-51.86
Insulet Corporation	0.03	0.03	0.00	-44.69
Dollar General Corporation	0.06	0.06	0.00	-37.47
FMC Corp.	0.02	0.02	0.00	-35.25
Resmed Inc	0.06	0.06	0.00	-32.14
Tapestry Inc	0.02	0.02	0.00	-32.09
Alaska Air Group Inc	0.01	0.01	0.00	-30.27
American Airlines Group Inc	0.02	0.02	0.00	-28.60
Enphase Energy Inc	0.05	0.05	0.00	-28.26
DexCom Inc	0.10	0.10	0.00	-27.40

**Buy and Hold Sector Attribution (Benchmark: S&P 500 Index (Net))**

	Allocation		Performance		Stock	Attribution	
	Portfolio	Benchmark	Portfolio	Benchmark		Sector	Total
Communication Services	8.6	8.6	3.05	3.05	0.00	0.00	0.00
Consumer Discretionary	10.6	10.6	-4.82	-4.82	0.00	0.00	0.00
Consumer Staples	6.6	6.6	-5.89	-5.92	0.00	0.00	0.00
Energy	4.3	4.3	12.25	12.25	0.00	0.00	0.00
Financials	12.5	12.5	-1.11	-1.11	0.00	0.00	0.00
Health Care	13.2	13.2	-2.66	-2.66	0.00	0.00	0.00
Industrials	8.5	8.5	-5.25	-5.25	0.00	0.00	0.00
Information Technology	28.2	28.2	-5.64	-5.64	0.00	0.00	0.00
Materials	2.5	2.5	-4.75	-4.75	0.00	0.00	0.00
Real Estate	2.4	2.4	-8.62	-8.62	0.00	0.00	0.00
Utilities	2.5	2.5	-9.26	-9.26	0.00	0.00	0.00
Total	100.0	100.0	-3.26	-3.26	0.00	0.00	0.00

**Portfolio Comparison**

	Vanguard Instl Index (VINIX)	S&P 500 Index (Net)
<b>Market Capitalization (%)</b>		
Greater than 25000M	91.03	91.02
16000M To 25000M	5.26	5.27
12000M To 16000M	2.01	2.01
8000M To 12000M	1.31	1.31
5000M To 8000M	0.32	0.32
3000M To 5000M	0.06	0.06



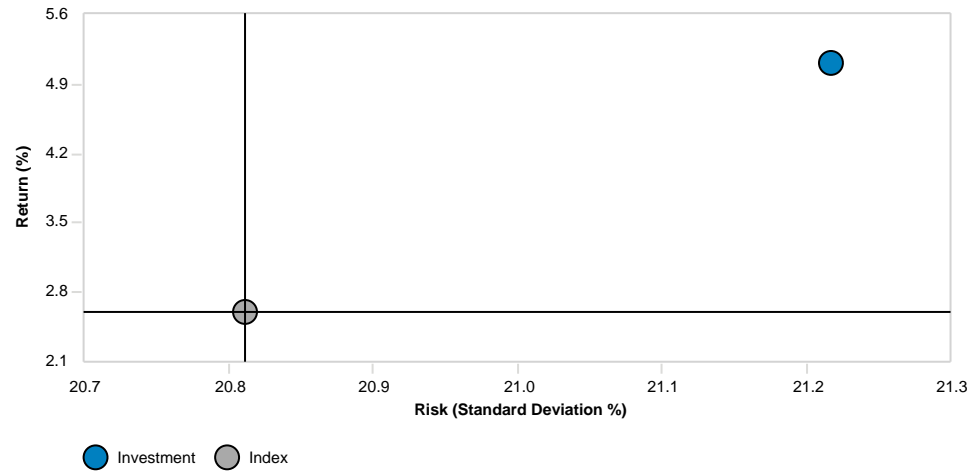
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.12	21.22	0.26	105.54	9	96.90	3
Index	2.61	20.81	0.15	100.00	6	100.00	6

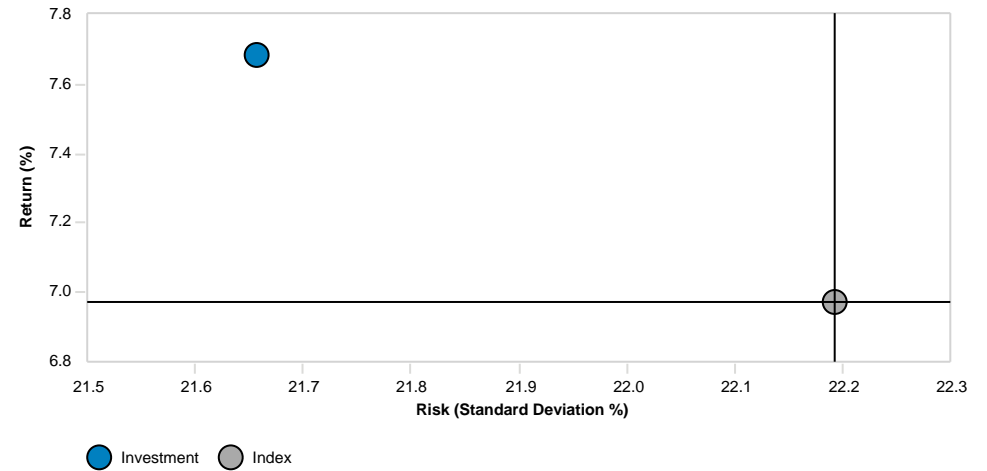
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.69	21.66	0.37	98.32	14	95.54	6
Index	6.97	22.19	0.34	100.00	11	100.00	9

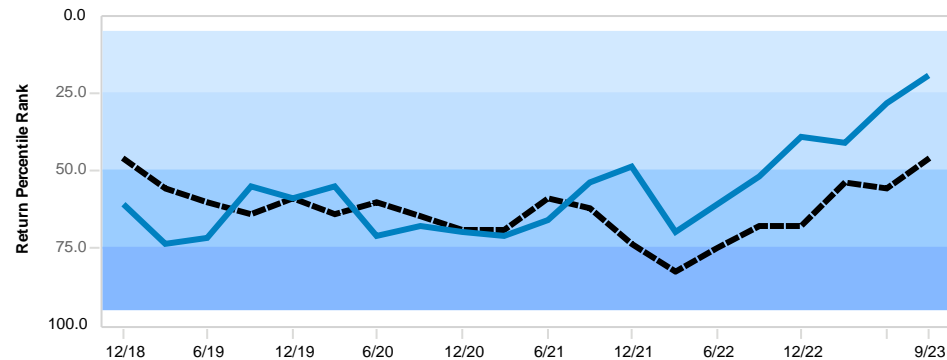
### Risk and Return 3 Years



### Risk and Return 5 Years

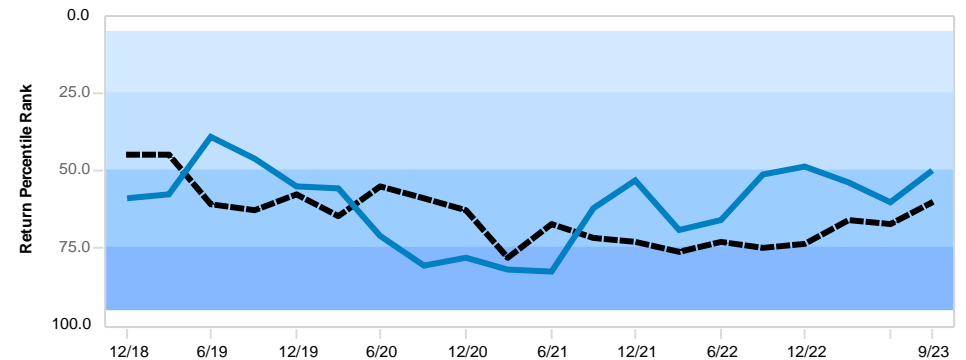


### 3 Year Rolling Percentile Rank IM U.S. Mid Cap Growth Equity (SA+CF)



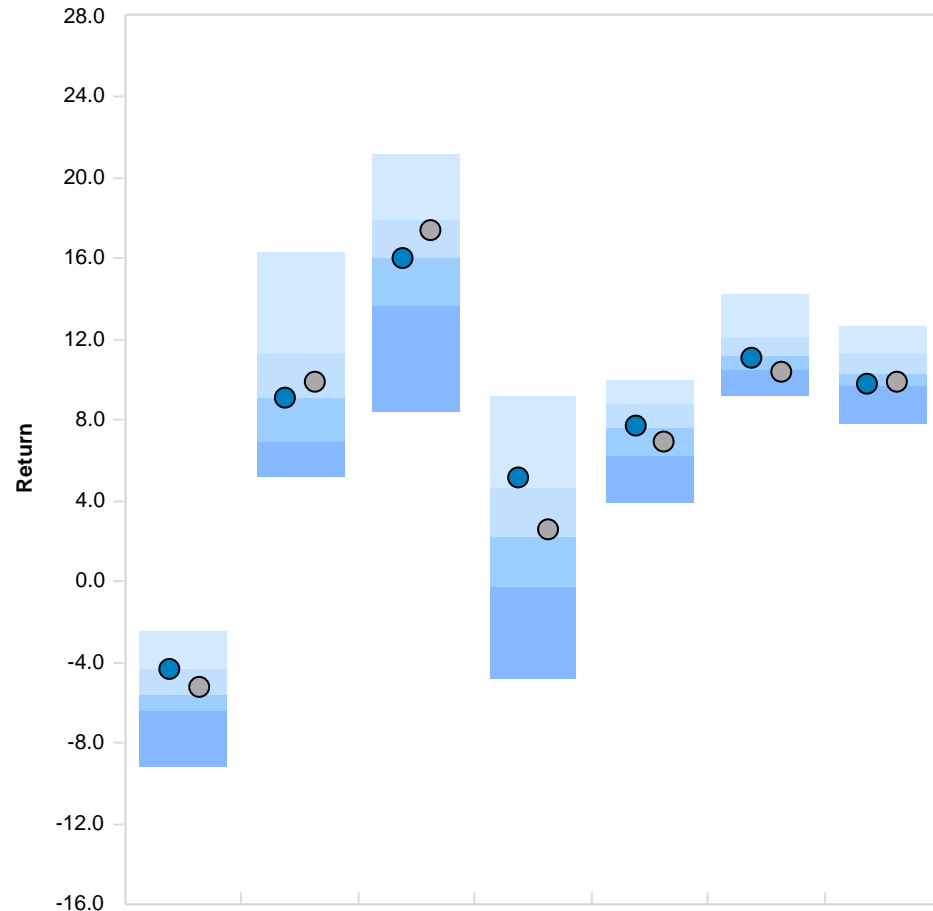
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	1 (5%)	4 (20%)	15 (75%)	0 (0%)
Index	20	0 (0%)	2 (10%)	17 (85%)	1 (5%)

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

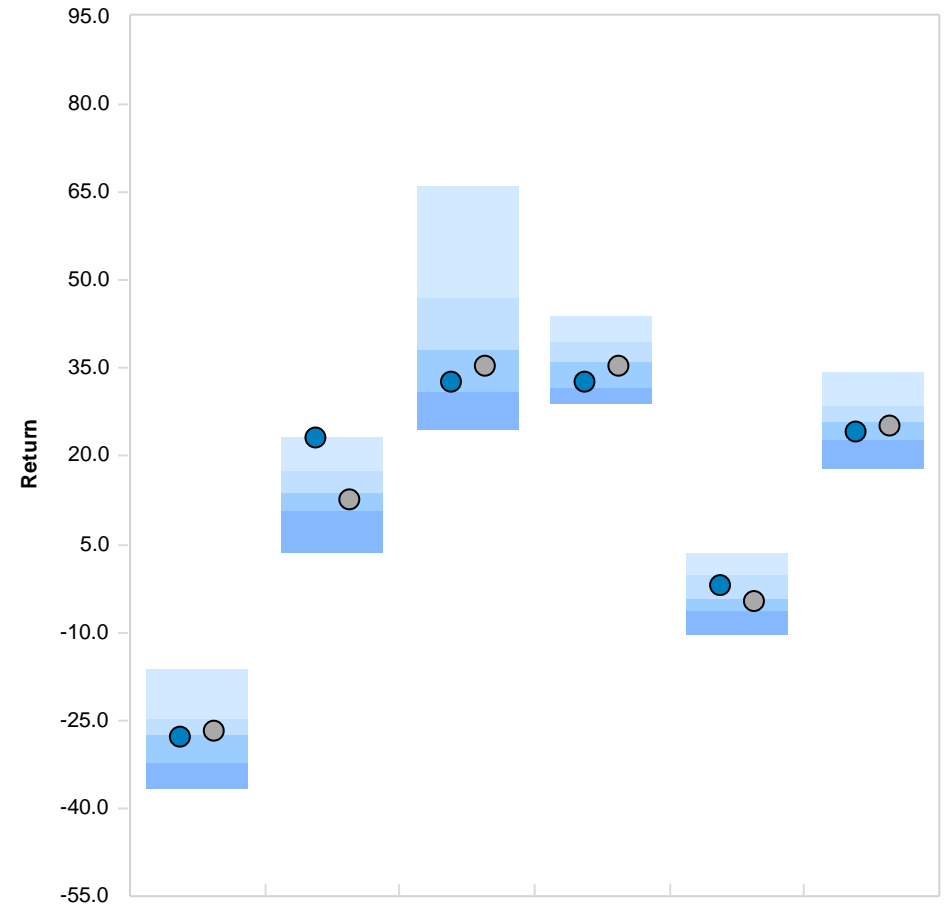


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	4 (20%)	12 (60%)	4 (20%)
Index	20	0 (0%)	2 (10%)	16 (80%)	2 (10%)

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



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



**Comparative Performance**

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	5.25 (80)	8.32 (54)	6.38 (44)	0.95 (11)	-19.51 (27)	-16.62 (96)
Index	6.23 (57)	9.14 (38)	6.90 (39)	-0.65 (29)	-21.07 (53)	-12.58 (47)
Median	6.49	8.40	6.25	-1.71	-20.82	-13.05



**Holdings Based Analysis**  
**Geneva Mid Cap Growth Equity**  
As of September 30, 2023

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

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	31,407,440,763	24,051,013,833
Median Mkt. Cap (\$)	19,564,457,495	10,600,778,010
Price/Earnings ratio	34.63	25.26
Price/Book ratio	5.33	7.52
5 Yr. EPS Growth Rate (%)	15.81	20.55
Current Yield (%)	0.46	0.80
Beta (5 Years, Monthly)	0.95	1.00
Number of Stocks	52	335

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

	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Copart Inc	4.69	1.33	3.36	-5.51
O'Reilly Automotive Inc	4.51	0.00	4.51	-4.86
Axon Enterprise Inc	3.99	0.50	3.49	1.98
VERISK ANALYTICS INC	3.64	1.21	2.43	4.66
Intuit Inc.	3.57	0.00	3.57	11.71
Amphenol Corp	3.40	0.89	2.51	-0.89
Steris Plc	3.17	0.00	3.17	-2.24
CoStar Group Inc	3.17	0.48	2.69	-13.61
Gartner Inc	3.14	0.95	2.19	-1.91
Tyler Technologies Inc	3.00	0.44	2.56	-7.28

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

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
GLOBAL PAYMENTS INC	1.73	0.00	1.73	17.36
HealthEquity Inc	0.44	0.00	0.44	15.70
EPAM Systems Inc	1.63	0.51	1.12	13.77
Repligen Corp	1.76	0.14	1.62	12.41
Intuit Inc.	3.57	0.00	3.57	11.71
Broadridge Fin. Solutions	2.35	0.63	1.72	8.56
Ryan Specialty Holdings Inc	1.64	0.16	1.48	7.82
VERISK ANALYTICS INC	3.64	1.21	2.43	4.66
JB Hunt Transport	0.60	0.11	0.49	4.35
BlackLine Inc	0.44	0.00	0.44	3.07

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

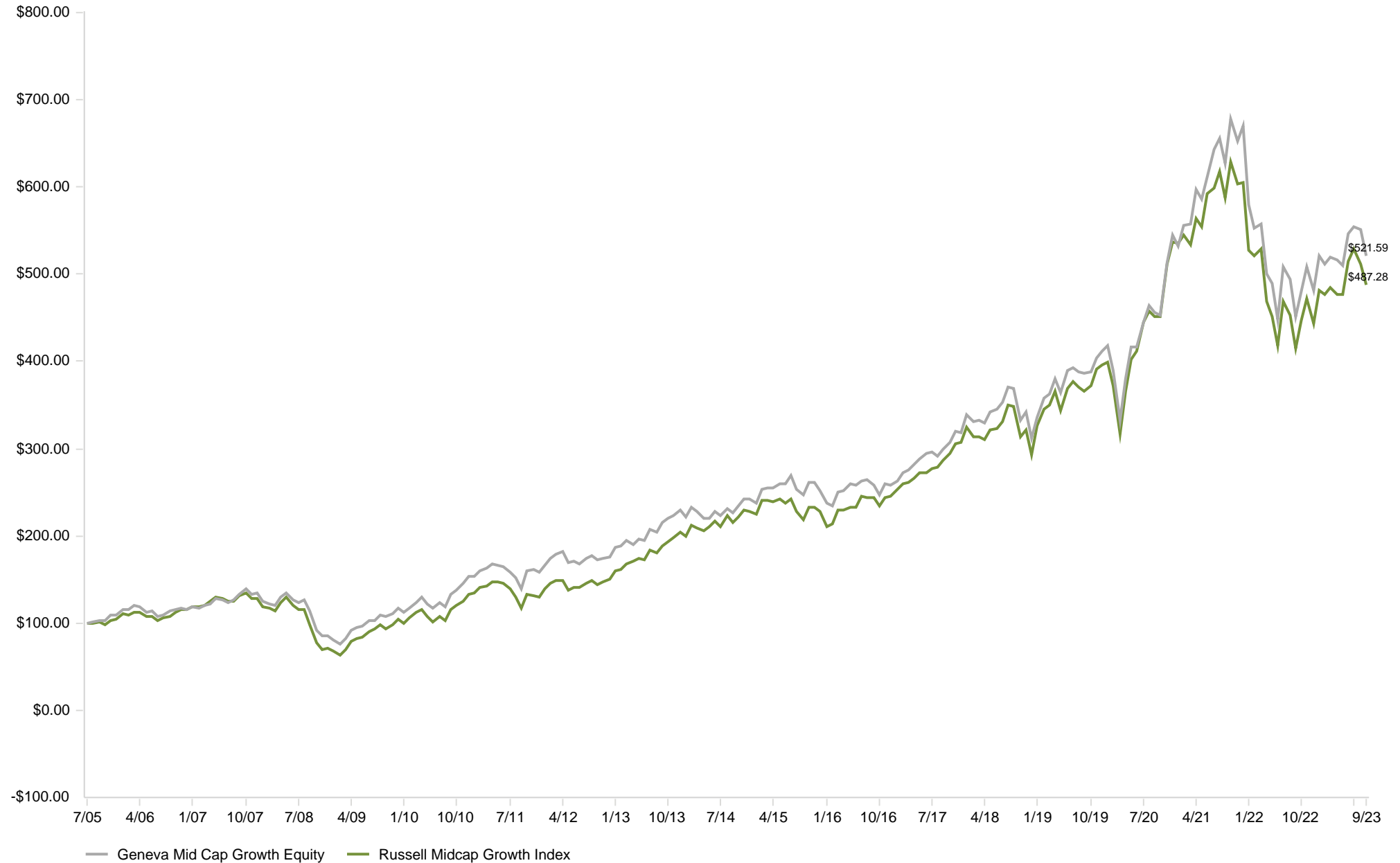
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
ShockWave Medical Inc	0.88	0.26	0.62	-30.24
Generac Holdings Inc	0.31	0.00	0.31	-26.94
Cognex Corporation	0.39	0.00	0.39	-24.13
Etsy Inc	0.49	0.16	0.33	-23.67
Keysight Technologies Inc	2.70	0.22	2.48	-20.99
Paycom Software Inc	0.62	0.48	0.14	-19.18
Cooper Cos Inc (The)	0.95	0.00	0.95	-17.06
Ultra Salon Cosmetics	1.92	0.72	1.20	-15.12
Monolithic Power Systems Inc	0.49	0.75	-0.26	-14.29
Burlington Stores Inc	1.52	0.31	1.21	-14.04

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

	Allocation		Performance		Stock	Attribution		Portfolio Comparison		
	Portfolio	Benchmark	Portfolio	Benchmark		Sector	Total		Geneva Mid Cap Growth Equity	Russell Midcap Growth Index
Communication Services	0.0	4.3	0.00	-8.63	0.00	0.14	0.14	<b>Market Capitalization (%)</b> Greater than 25000M 44.90 44.06 16000M To 25000M 23.10 22.95 12000M To 16000M 16.17 10.20 8000M To 12000M 5.73 11.98 5000M To 8000M 4.71 7.57 3000M To 5000M 0.69 2.45 1000M To 3000M 0.00 0.78 200M To 500M 0.00 0.01 Cash 4.70 0.00		
Consumer Discretionary	14.0	12.9	-7.53	-5.55	-0.28	-0.01	-0.29			
Consumer Staples	2.3	3.0	-7.48	-8.26	0.02	0.03	0.05			
Energy	0.0	3.9	0.00	15.25	0.00	-0.75	-0.75			
Financials	9.3	10.0	0.03	2.51	-0.21	-0.05	-0.26			
Health Care	11.6	21.2	-7.12	-12.64	0.63	0.77	1.40			
Industrials	28.9	19.6	-2.77	-4.93	0.59	0.01	0.60			
Information Technology	30.2	21.9	-3.23	-3.13	-0.05	0.19	0.13			
Materials	0.0	1.3	0.00	-9.84	0.00	0.06	0.06			
Real Estate	2.3	1.5	-8.43	-5.54	0.02	-0.02	-0.01			
Utilities	0.0	0.4	0.00	-12.55	0.00	0.03	0.03			
Cash	1.4	0.0	1.31	0.00	0.00	-0.10	-0.10			
Total	100.0	100.0	-4.20	-5.22	0.73	0.30	1.02			



**Growth of \$100: Since Inception**



Calculation based on monthly periodicity.



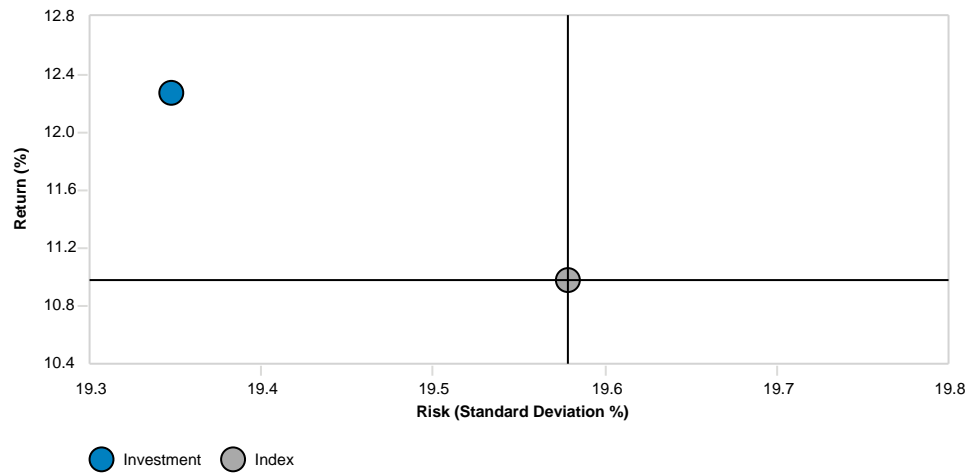
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	12.28	19.35	0.61	97.73	7	91.57	5
Index	10.98	19.58	0.54	100.00	7	100.00	5

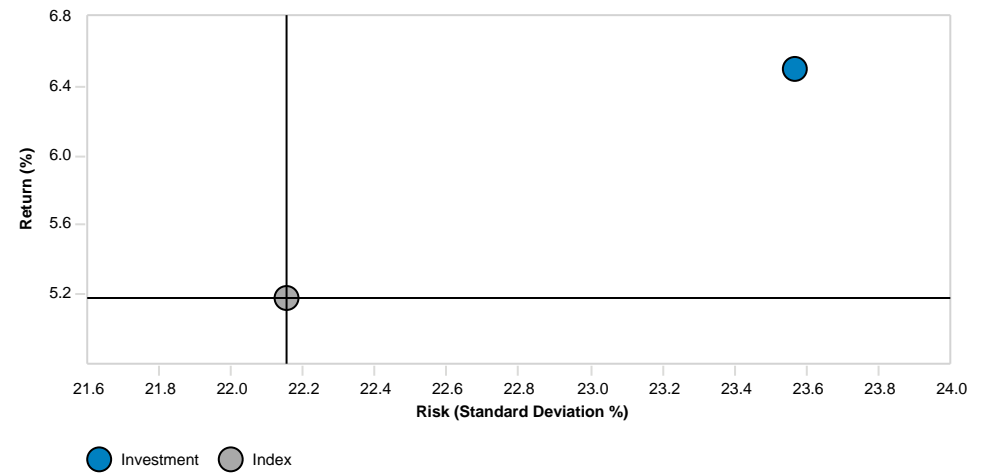
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.50	23.57	0.32	105.81	13	101.41	7
Index	5.18	22.15	0.26	100.00	13	100.00	7

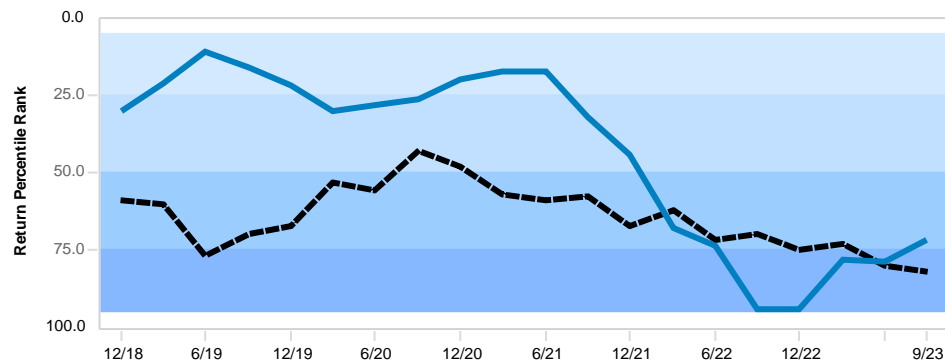
### Risk and Return 3 Years



### Risk and Return 5 Years

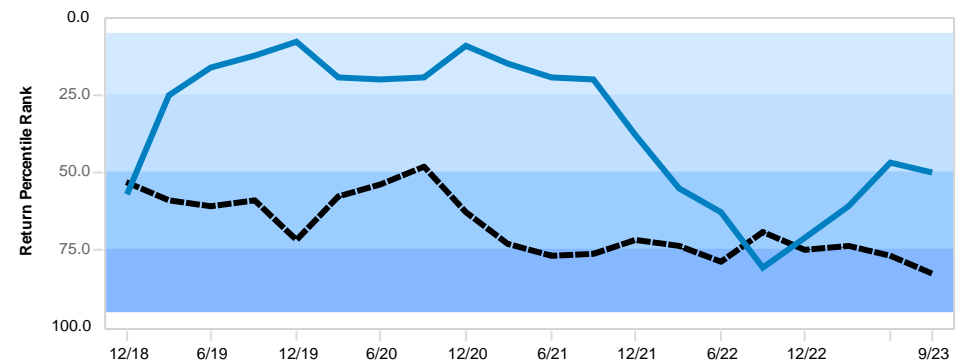


### 3 Year Rolling Percentile Rank IM U.S. Mid Cap Value Equity (SA+CF)



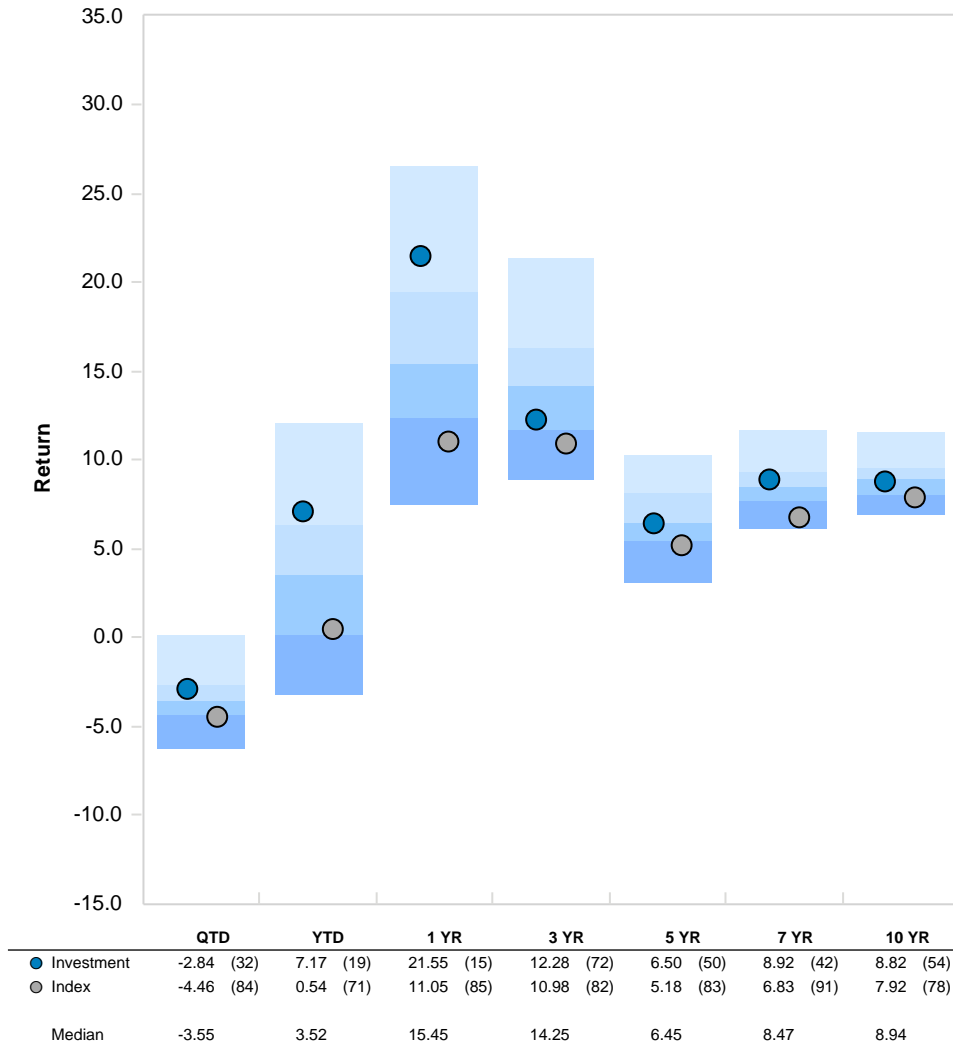
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	7 (35%)	6 (30%)	3 (15%)	4 (20%)
Index	20	0 (0%)	2 (10%)	15 (75%)	3 (15%)

### 5 Year Rolling Percentile Rank IM U.S. Mid Cap Value Equity (SA+CF)

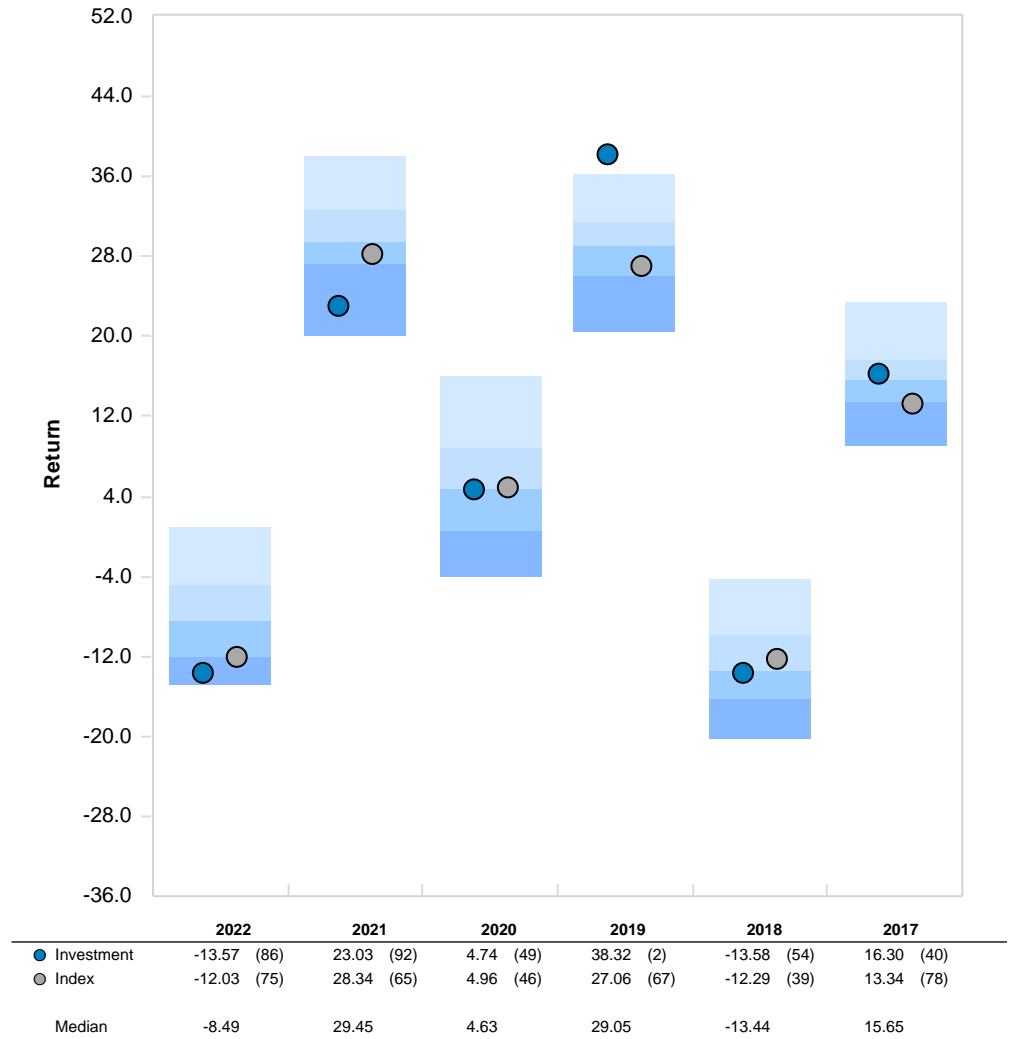


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	11 (55%)	3 (15%)	5 (25%)	1 (5%)
Index	20	0 (0%)	1 (5%)	14 (70%)	5 (25%)

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



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



**Comparative Performance**

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	5.93 (18)	4.12 (23)	13.42 (27)	-9.77 (96)	-11.61 (31)	-4.46 (84)
Index	3.86 (79)	1.32 (60)	10.45 (76)	-4.93 (58)	-14.68 (82)	-1.82 (57)
Median	4.62	1.68	12.09	-4.63	-13.04	-0.73



**Holdings Based Analysis**  
**Cooke & Bieler Mid Cap Value Equity**  
As of September 30, 2023

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

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	13,352,363,523	20,505,146,013
Median Mkt. Cap (\$)	10,601,835,020	9,062,711,360
Price/Earnings ratio	14.84	15.02
Price/Book ratio	2.30	2.30
5 Yr. EPS Growth Rate (%)	6.56	11.13
Current Yield (%)	1.94	2.23
Beta (5 Years, Monthly)	1.03	1.00
Number of Stocks	51	699

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

	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
AerCap Holdings NV	3.83	0.00	3.83	-1.34
Helen of Troy Ltd	3.09	0.00	3.09	7.91
Gentex Corporation	3.02	0.11	2.91	11.66
Open Text Corp	2.62	0.00	2.62	-14.99
State Street Corporation	2.60	0.32	2.28	-7.56
Globe Life Inc	2.60	0.14	2.46	-0.61
Fidelity Nat. Financial Inc	2.59	0.16	2.43	15.94
Woodward Inc	2.48	0.11	2.37	4.68
Omnicom Group Inc	2.46	0.22	2.24	-20.99
Arrow Electronics Inc	2.35	0.11	2.24	-12.56

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

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
American Eagle Outfitters Inc.	1.90	0.00	1.90	41.94
Warner Music Group Corp	1.76	0.00	1.76	20.98
Fidelity Nat. Financial Inc	2.59	0.16	2.43	15.94
Cboe Global Markets Inc	1.52	0.24	1.28	13.60
Activision Blizzard Inc	1.32	0.00	1.32	12.26
Gentex Corporation	3.02	0.11	2.91	11.66
Helen of Troy Ltd	3.09	0.00	3.09	7.91
Arch Capital Group Ltd	1.05	0.36	0.69	6.49
Markel Group Inc	2.03	0.29	1.74	6.46
RenaissanceRe Holdings Ltd	1.70	0.11	1.59	6.31

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

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Discover Financial Services	1.41	0.32	1.09	-25.28
Omnicom Group Inc	2.46	0.22	2.24	-20.99
MKS Instruments Inc	1.50	0.09	1.41	-19.76
Teleflex Inc	2.06	0.14	1.92	-18.73
Baxter International Inc	2.09	0.28	1.81	-16.59
CarMax Inc	2.09	0.16	1.93	-15.50
Open Text Corp	2.62	0.00	2.62	-14.99
LKQ Corporation	0.87	0.20	0.67	-14.59
DENTSPLY SIRONA Inc	2.10	0.11	1.99	-14.29
Gates Industrial Corp PLC	1.19	0.02	1.17	-13.87

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

	Allocation		Performance		Stock	Attribution		Portfolio Comparison		
	Portfolio	Benchmark	Portfolio	Benchmark		Sector	Total	Cooke & Bieler Mid Cap Value Equity		Russell Midcap Value Index
Communication Services	5.5	3.4	-2.55	-9.84	0.43	-0.12	0.31	<b>Market Capitalization (%)</b>		
Consumer Discretionary	18.0	9.4	0.60	-7.75	1.53	-0.31	1.21	Greater than 25000M	11.03	31.76
Consumer Staples	1.2	4.1	-6.39	-8.82	0.03	0.13	0.16	16000M To 25000M	15.17	23.69
Energy	2.2	5.3	4.61	12.50	-0.16	-0.49	-0.65	12000M To 16000M	12.88	12.77
Financials	24.2	16.3	1.47	1.03	0.14	0.41	0.55	8000M To 12000M	18.04	13.70
Health Care	12.2	7.4	-11.27	-9.88	-0.19	-0.25	-0.45	5000M To 8000M	19.90	11.25
Industrials	20.5	18.9	-0.57	-4.68	0.83	0.01	0.84	3000M To 5000M	14.52	5.72
Information Technology	9.7	9.7	-14.41	-4.74	-0.97	0.00	-0.97	1000M To 3000M	3.74	1.11
Materials	0.0	7.8	0.00	-4.45	0.00	0.00	0.00	500M To 1000M	0.00	0.00
Real Estate	2.2	10.3	-8.49	-7.58	-0.01	0.26	0.25	200M To 500M	0.00	0.00
Utilities	1.5	7.4	-8.37	-7.20	-0.01	0.17	0.15	Cash	4.72	0.00
Cash	2.7	0.0	1.31	0.00	0.00	0.11	0.11			
Total	100.0	100.0	-2.92	-4.43	1.61	-0.10	1.51			





**Growth of \$100: Since Inception**



Calculation based on monthly periodicity.



## **International Equity**



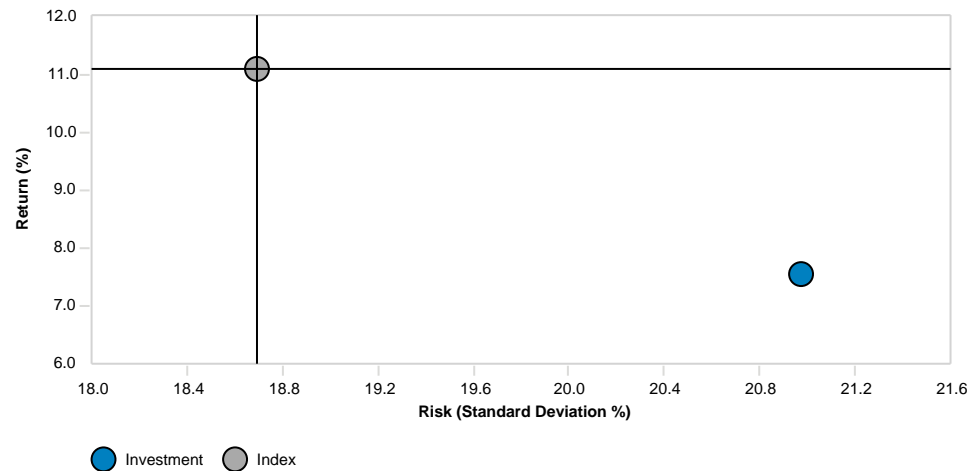
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.55	20.97	0.37	97.82	7	111.92	5
Index	11.11	18.69	0.57	100.00	9	100.00	3

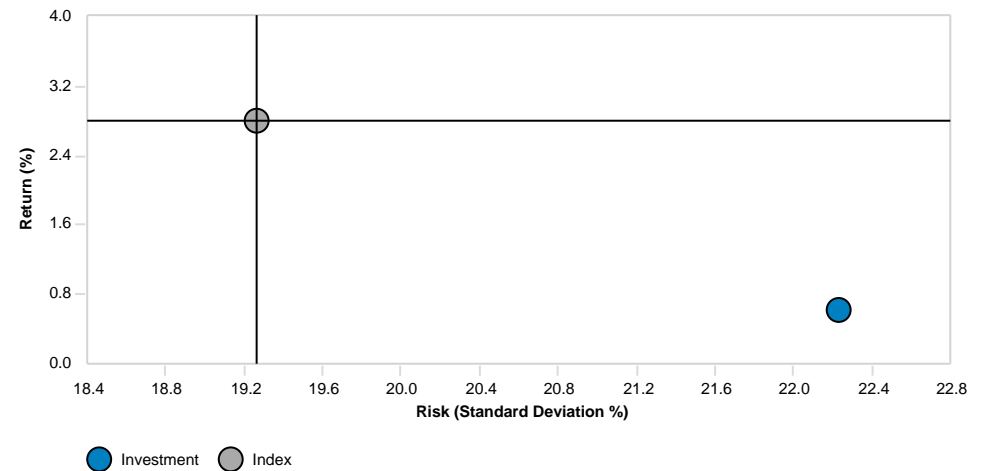
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	0.62	22.23	0.06	106.97	12	114.95	8
Index	2.81	19.26	0.15	100.00	14	100.00	6

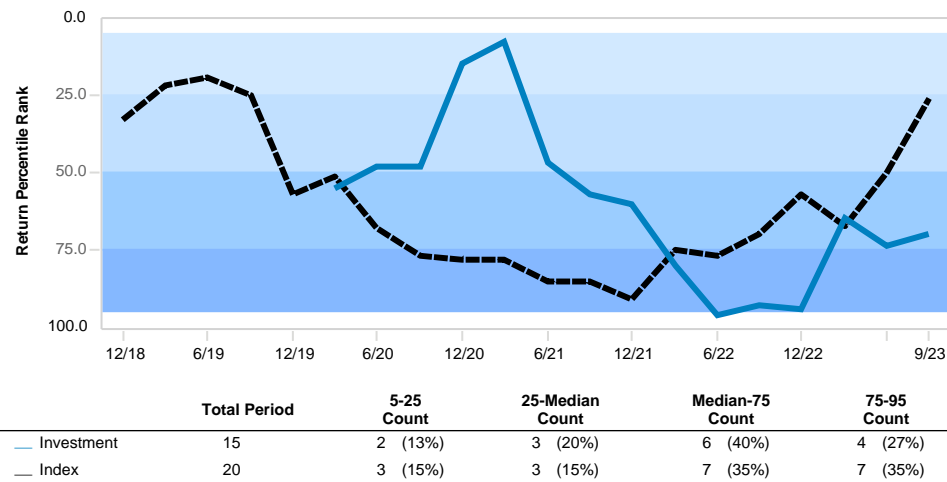
### Risk and Return 3 Years



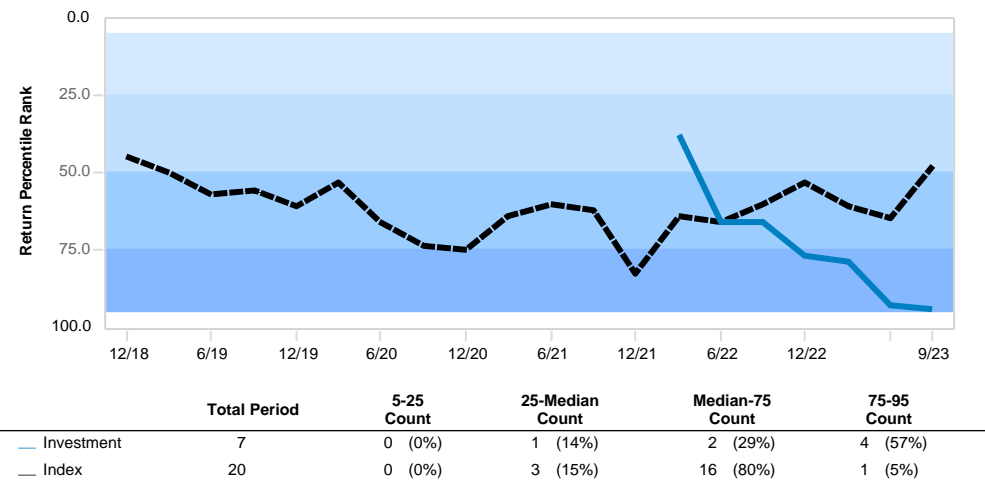
### Risk and Return 5 Years



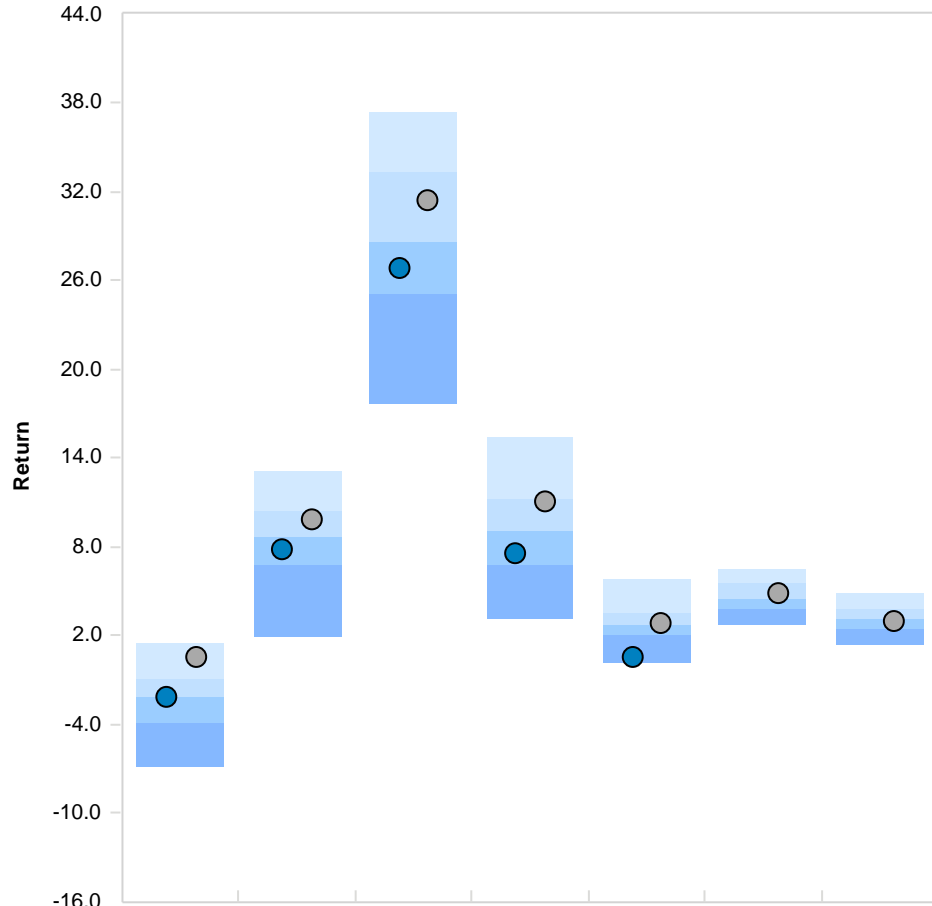
### 3 Year Rolling Percentile Rank IM International Value Equity (MF)



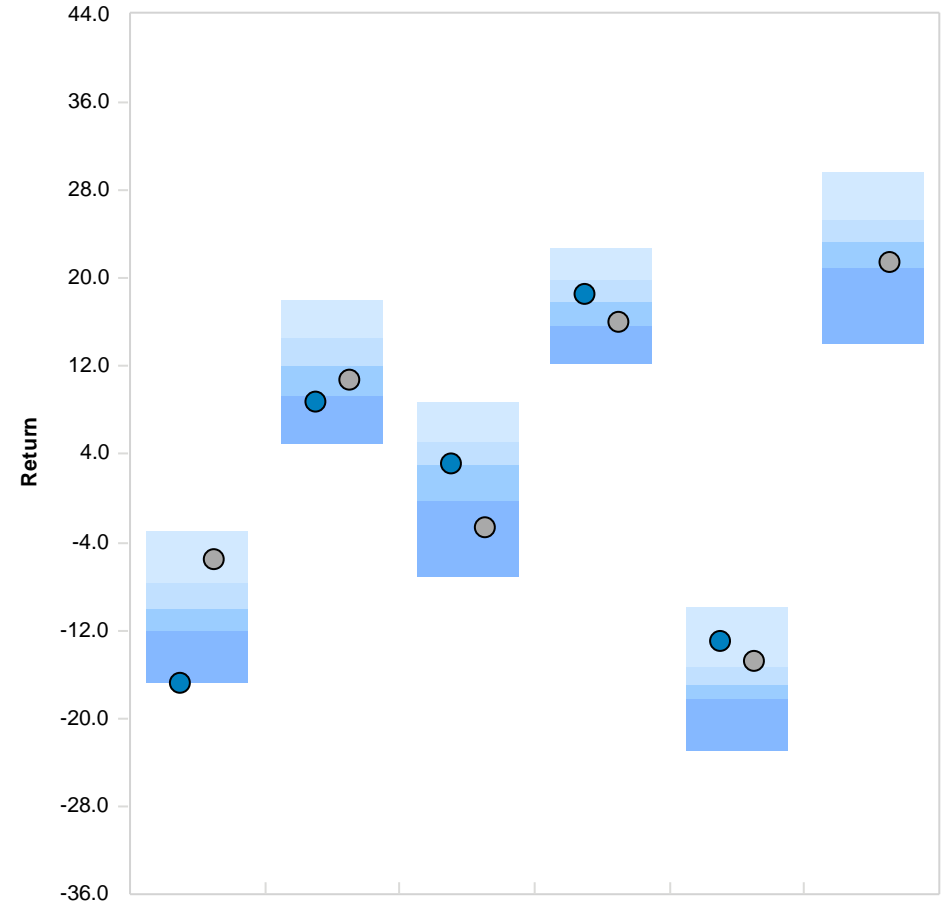
### 5 Year Rolling Percentile Rank IM International Value Equity (MF)



**Peer Group Analysis - IM International Value Equity (MF)**



**Peer Group Analysis - IM International Value Equity (MF)**



**Comparative Performance**

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	1.91 (82)	8.14 (35)	17.72 (70)	-11.84 (69)	-14.97 (98)	-5.62 (76)
Index	3.15 (39)	5.93 (84)	19.64 (39)	-10.20 (31)	-12.41 (68)	0.33 (5)
Median	2.90	7.28	18.65	-10.98	-11.64	-3.66

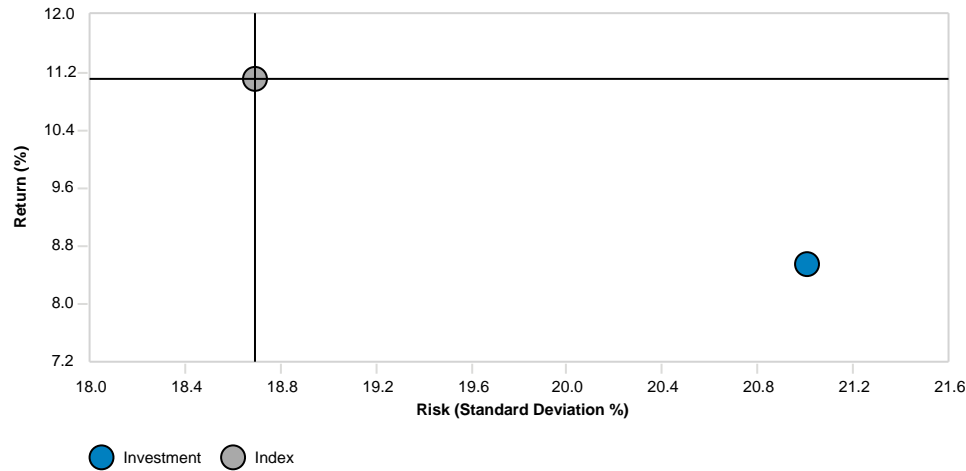
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.57	21.01	0.41	99.78	7	110.02	5
Index	11.11	18.69	0.57	100.00	9	100.00	3

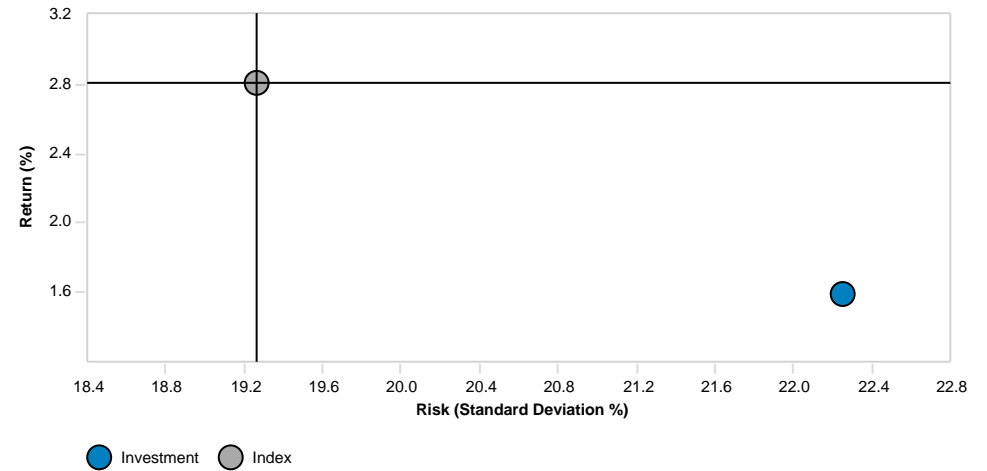
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	1.59	22.25	0.11	108.95	12	113.17	8
Index	2.81	19.26	0.15	100.00	14	100.00	6

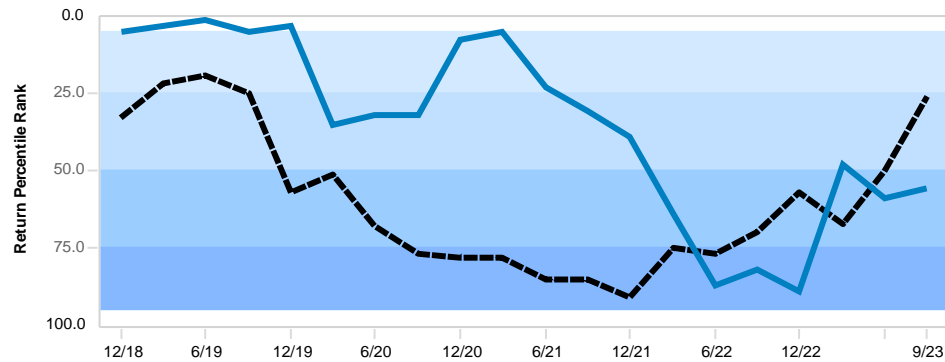
### Risk and Return 3 Years



### Risk and Return 5 Years

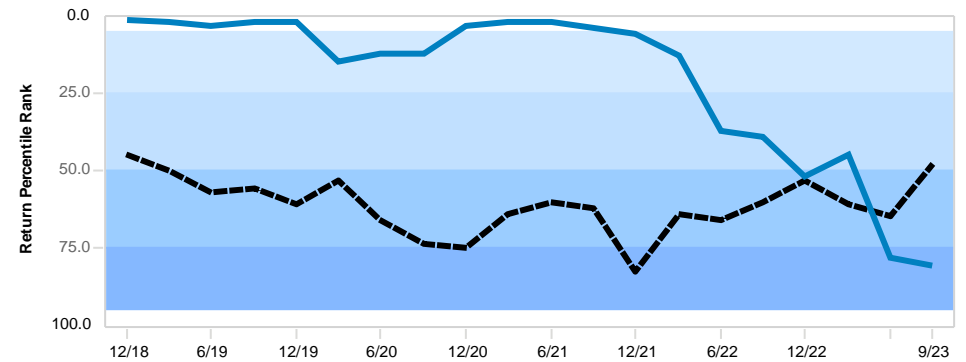


### 3 Year Rolling Percentile Rank IM International Value Equity (MF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	8 (40%)	6 (30%)	3 (15%)	3 (15%)
Index	20	3 (15%)	3 (15%)	7 (35%)	7 (35%)

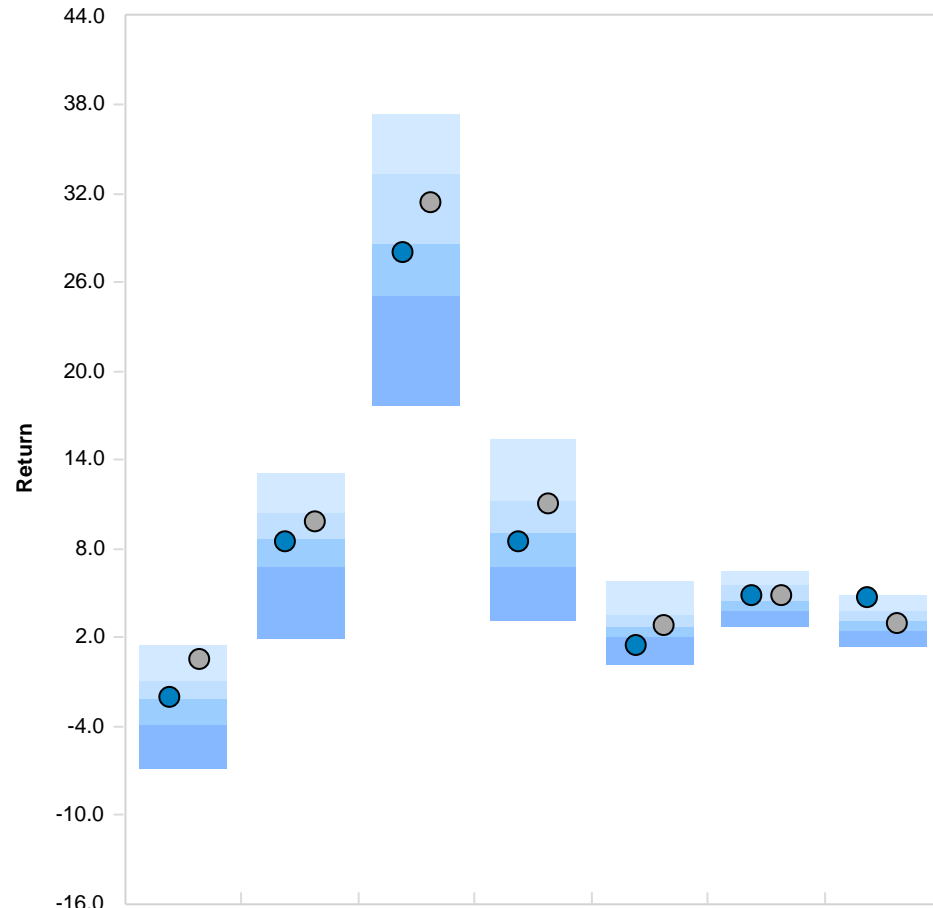
### 5 Year Rolling Percentile Rank IM International Value Equity (MF)



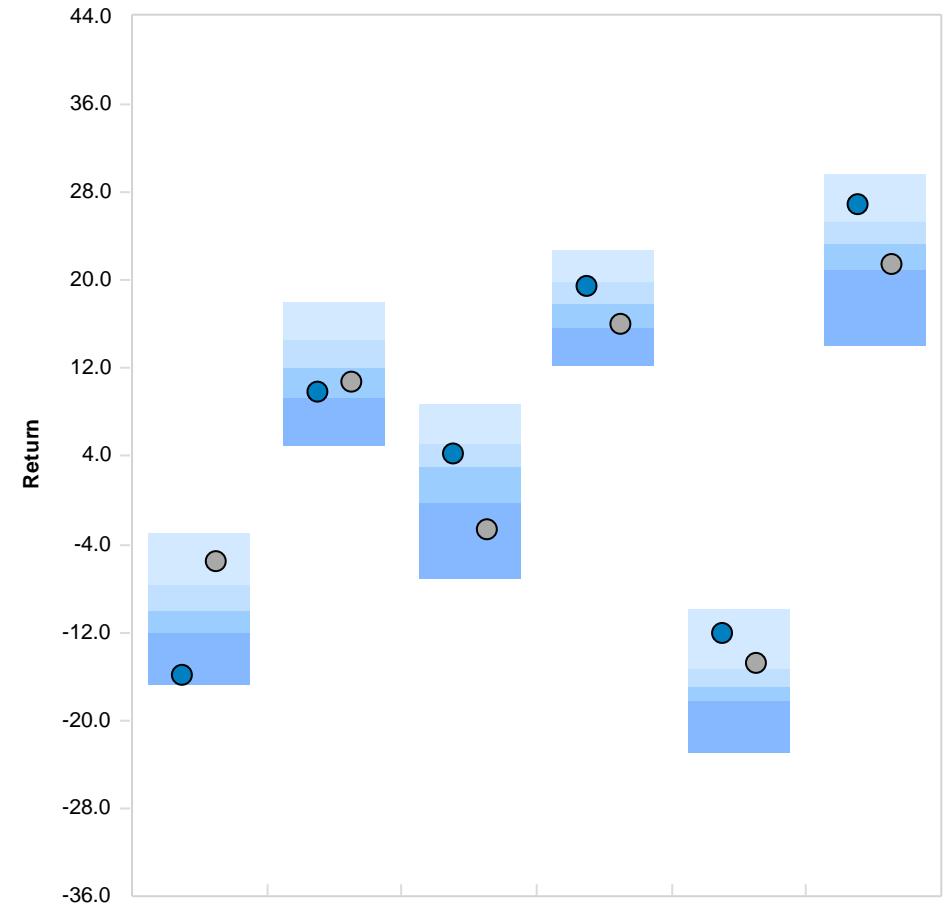
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	14 (70%)	3 (15%)	1 (5%)	2 (10%)
Index	20	0 (0%)	3 (15%)	16 (80%)	1 (5%)



**Peer Group Analysis - IM International Value Equity (MF)**



**Peer Group Analysis - IM International Value Equity (MF)**



**Comparative Performance**

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	2.16 (75)	8.36 (34)	17.95 (67)	-11.63 (63)	-14.77 (97)	-5.35 (74)
Index	3.15 (39)	5.93 (84)	19.64 (39)	-10.20 (31)	-12.41 (68)	0.33 (5)
Median	2.90	7.28	18.65	-10.98	-11.64	-3.66

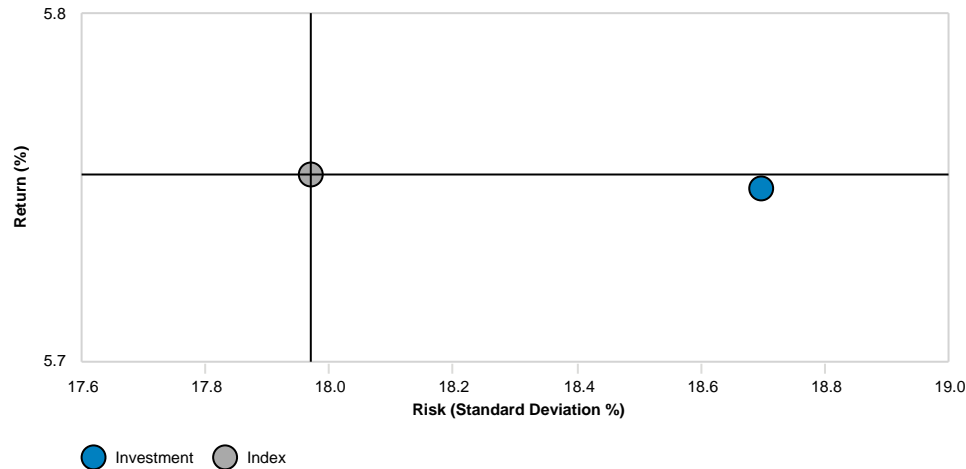
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.75	18.70	0.30	103.35	7	103.92	5
Index	5.75	17.97	0.31	100.00	7	100.00	5

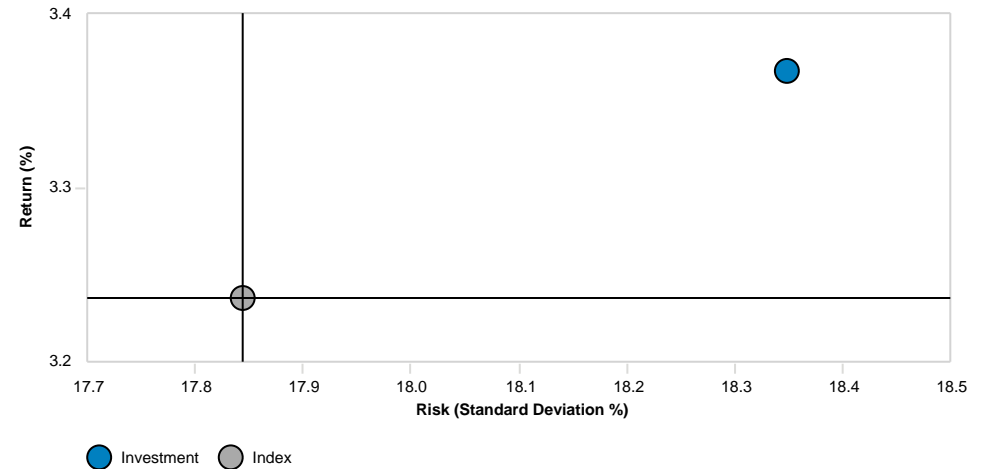
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	3.37	18.35	0.18	102.42	12	101.98	8
Index	3.24	17.84	0.17	100.00	12	100.00	8

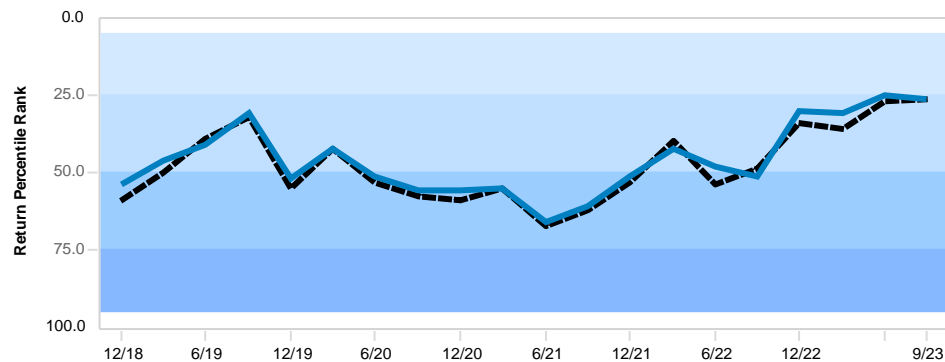
### Risk and Return 3 Years



### Risk and Return 5 Years

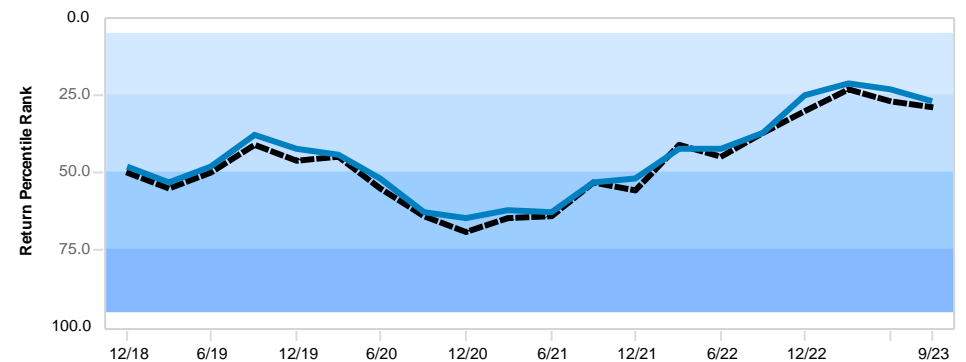


### 3 Year Rolling Percentile Rank IM International Equity (MF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	1 (5%)	9 (45%)	10 (50%)	0 (0%)
Index	20	0 (0%)	10 (50%)	10 (50%)	0 (0%)

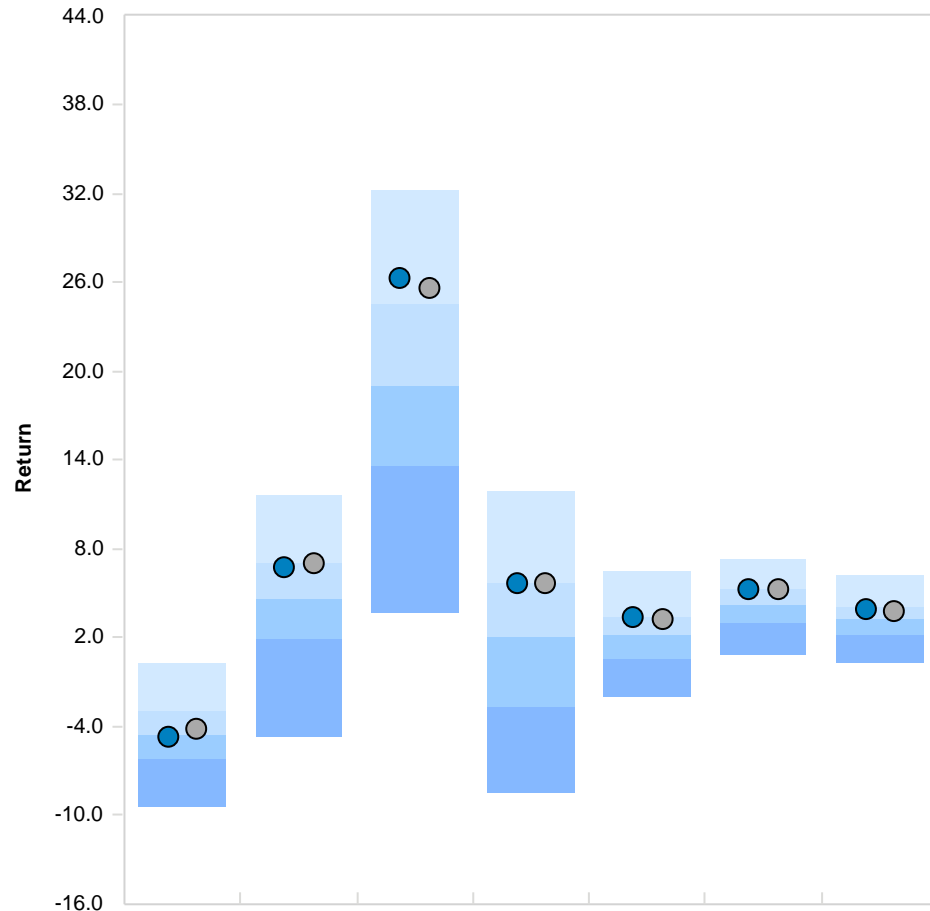
### 5 Year Rolling Percentile Rank IM International Equity (MF)



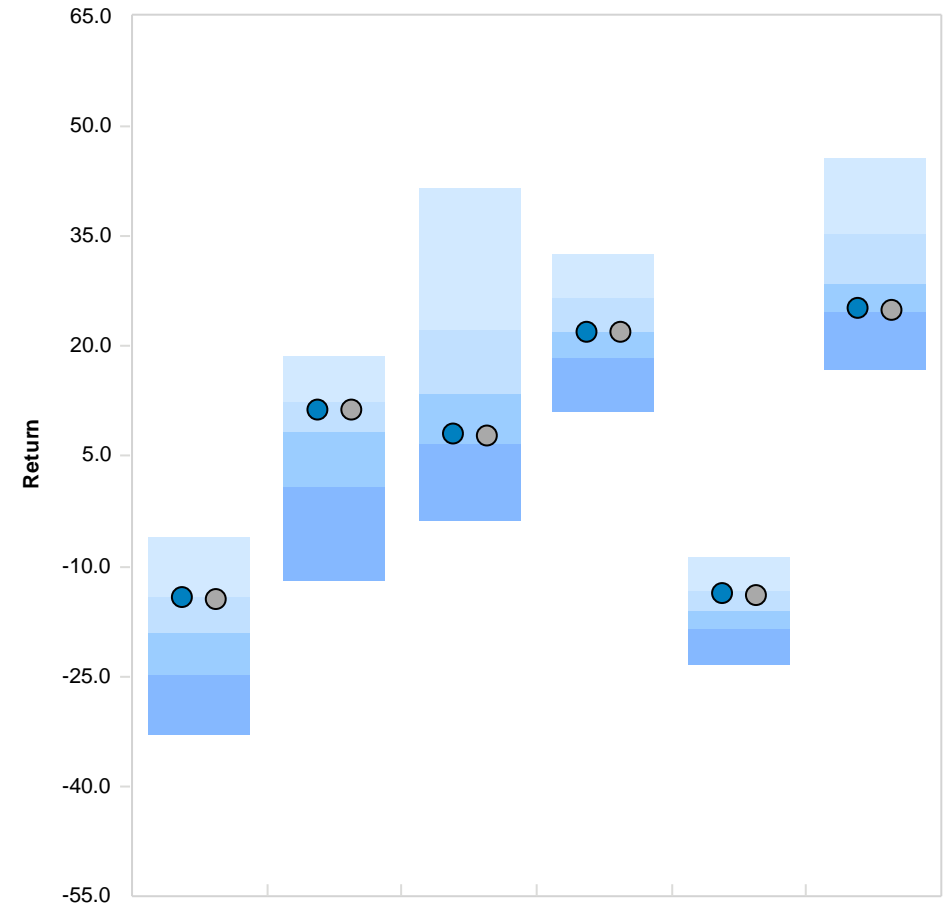
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	3 (15%)	9 (45%)	8 (40%)	0 (0%)
Index	20	1 (5%)	11 (55%)	8 (40%)	0 (0%)



**Peer Group Analysis - IM International Equity (MF)**



**Peer Group Analysis - IM International Equity (MF)**



**Comparative Performance**

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	3.20 (30)	8.59 (27)	18.28 (15)	-10.27 (48)	-13.39 (55)	-6.70 (35)
Index	2.95 (37)	8.47 (28)	17.34 (24)	-9.36 (30)	-14.51 (69)	-5.91 (27)
Median	2.45	6.91	14.28	-10.39	-13.08	-8.77





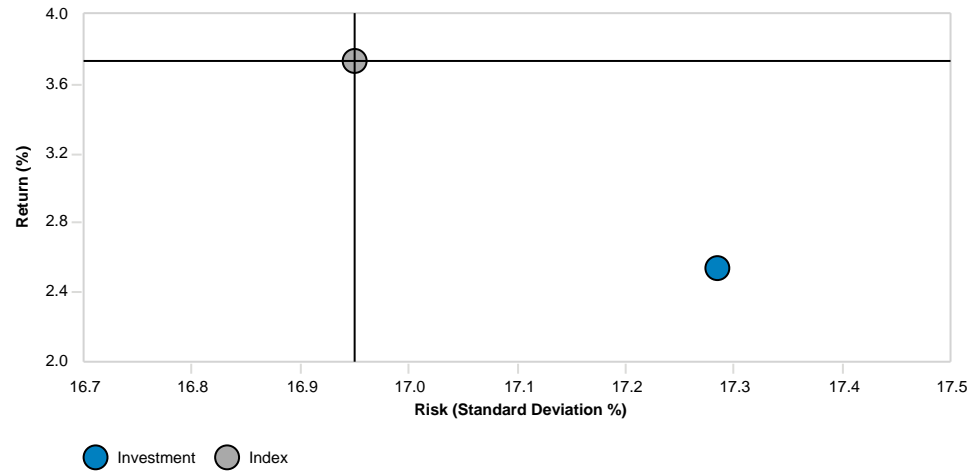
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	2.54	17.28	0.13	102.88	7	109.03	5
Index	3.74	16.95	0.20	100.00	7	100.00	5

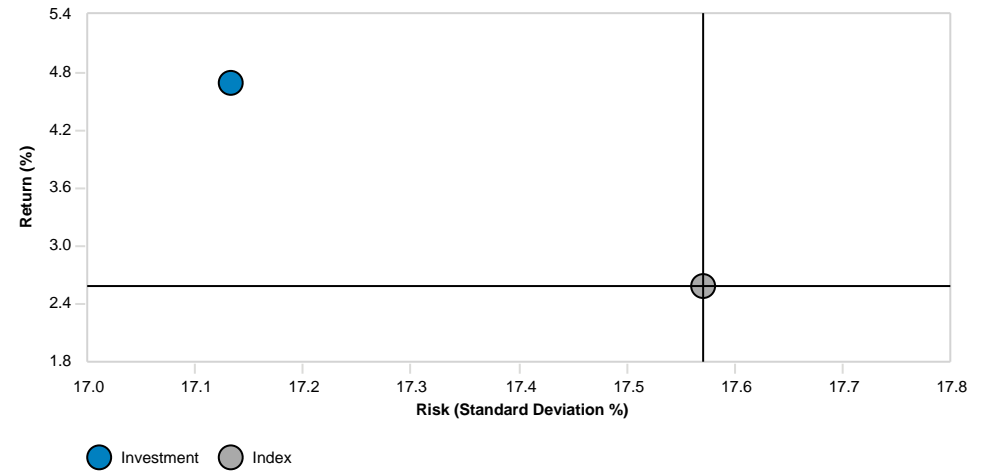
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	4.69	17.13	0.25	105.15	12	97.33	8
Index	2.58	17.57	0.14	100.00	12	100.00	8

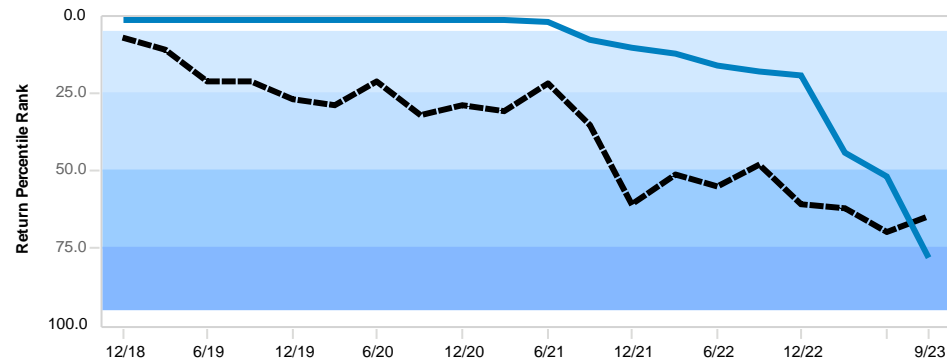
### Risk and Return 3 Years



### Risk and Return 5 Years

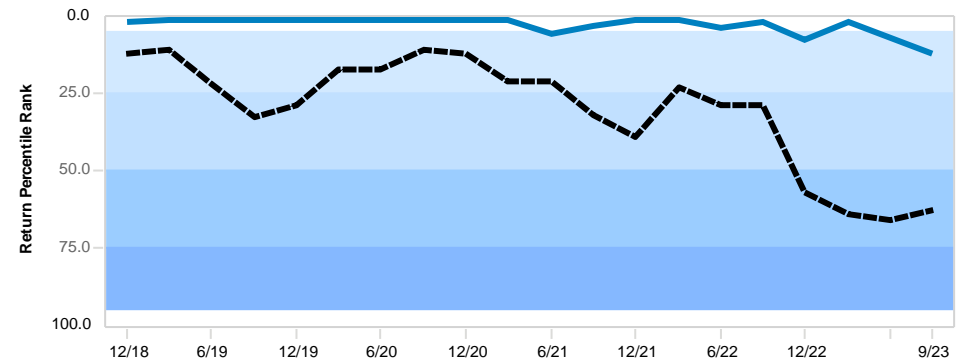


### 3 Year Rolling Percentile Rank IM International Large Cap Core Equity (MF)



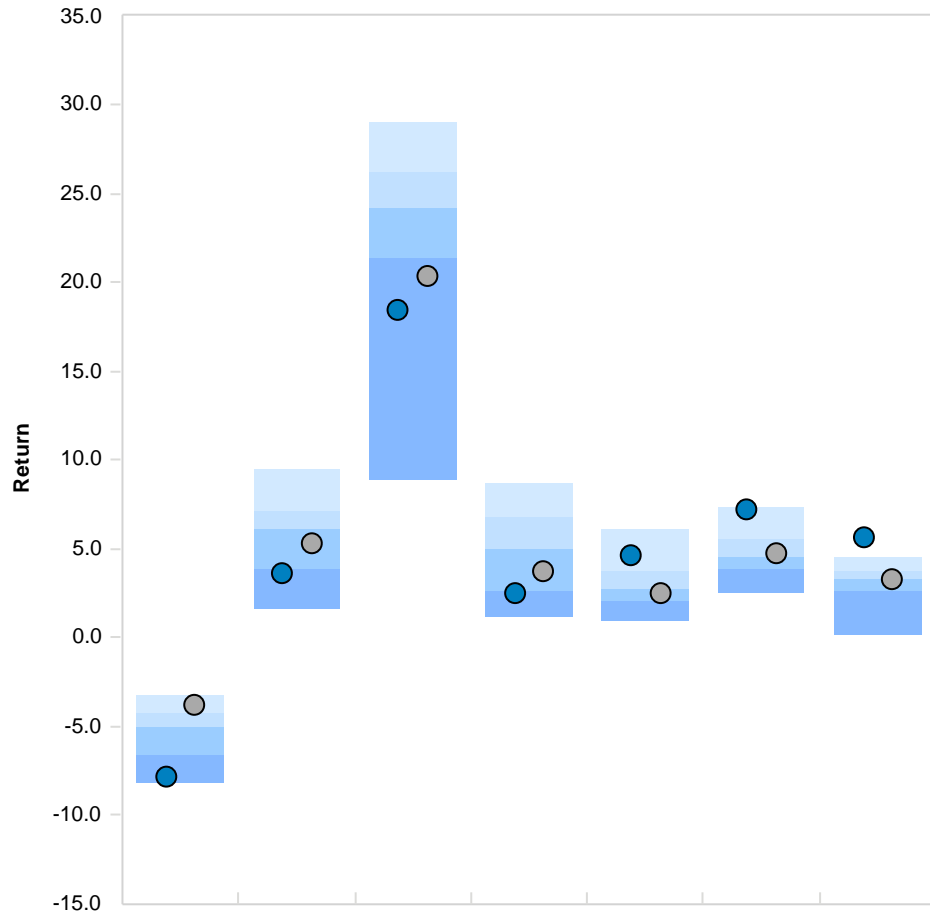
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	17 (85%)	1 (5%)	1 (5%)	1 (5%)
Index	20	6 (30%)	7 (35%)	7 (35%)	0 (0%)

### 5 Year Rolling Percentile Rank IM International Large Cap Core Equity (MF)

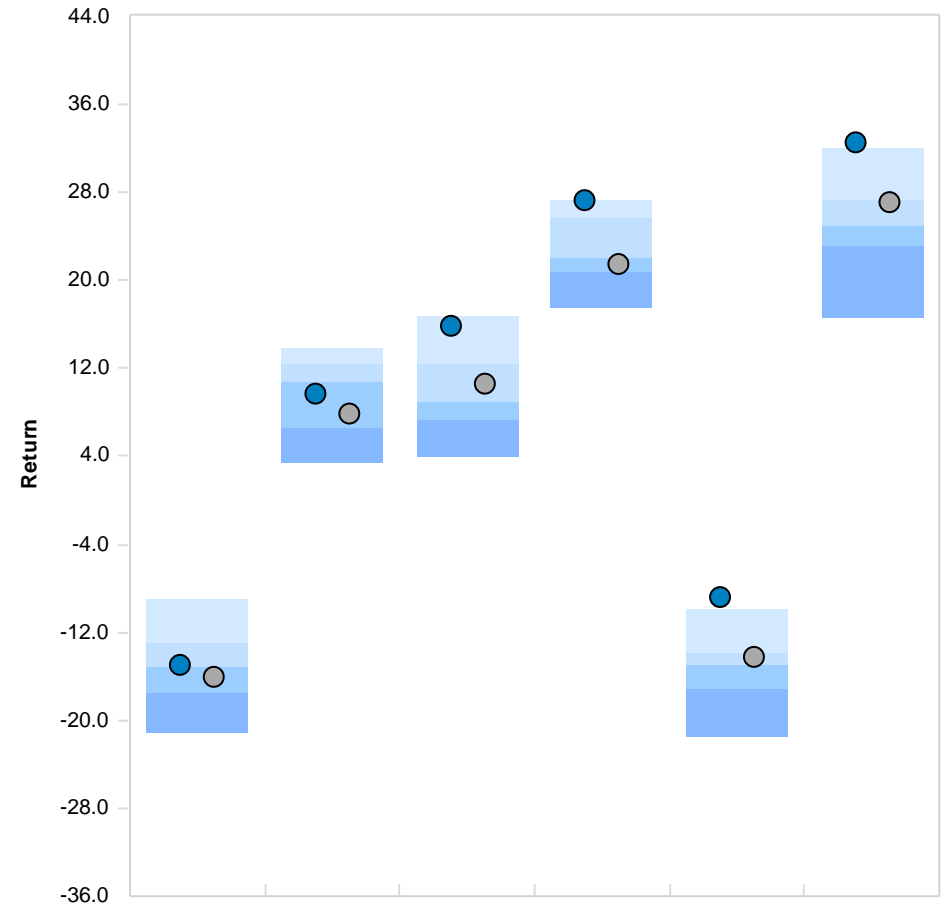


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	10 (50%)	6 (30%)	4 (20%)	0 (0%)

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



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



**Comparative Performance**

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	2.97 (68)	9.22 (35)	14.24 (83)	-7.73 (9)	-12.24 (26)	-8.13 (80)
Index	2.44 (83)	6.87 (79)	14.28 (83)	-9.91 (44)	-13.73 (69)	-5.44 (24)
Median	3.20	8.47	17.19	-10.19	-13.27	-6.90



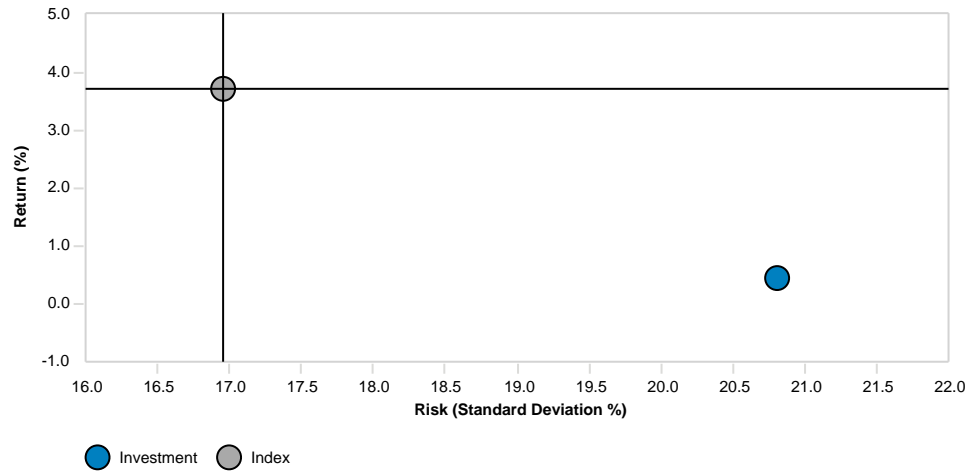
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	0.46	20.80	0.05	108.84	7	123.04	5
Index	3.74	16.95	0.20	100.00	7	100.00	5

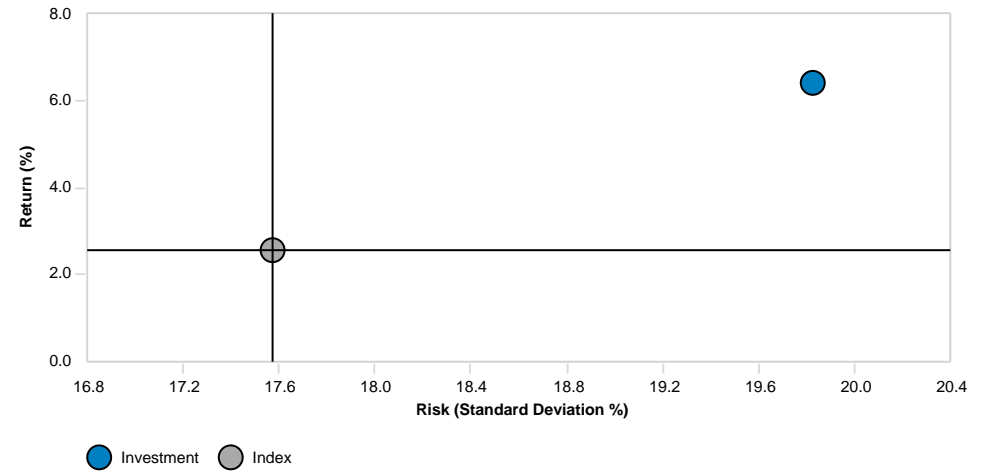
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.42	19.83	0.33	114.54	12	98.72	8
Index	2.58	17.57	0.14	100.00	12	100.00	8

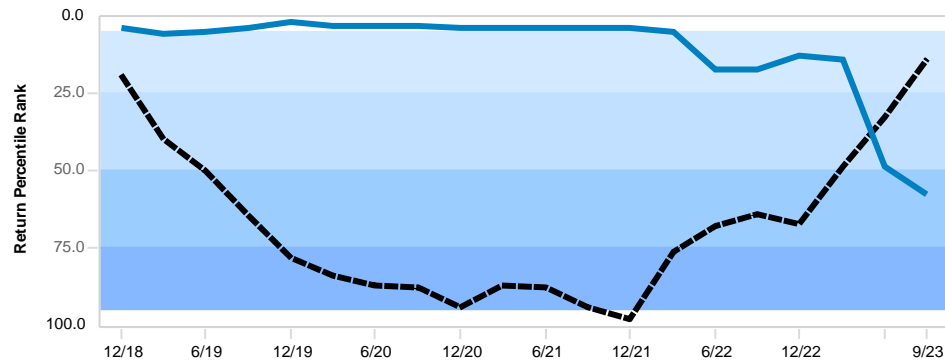
### Risk and Return 3 Years



### Risk and Return 5 Years

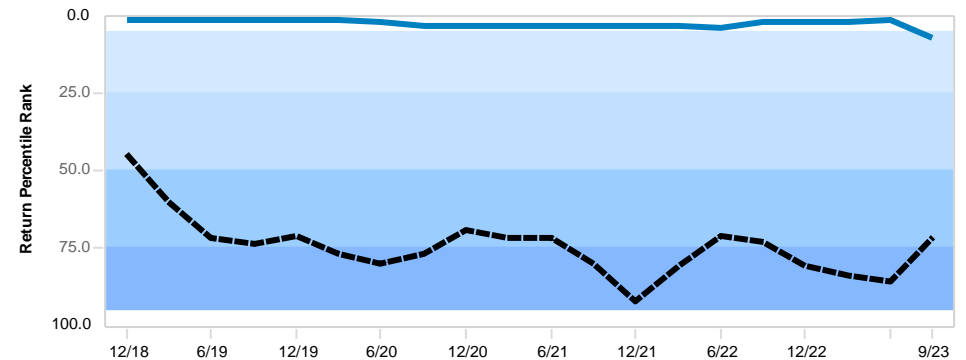


### 3 Year Rolling Percentile Rank IM International Large Cap Growth Equity (MF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	18 (90%)	1 (5%)	1 (5%)	0 (0%)
Index	20	2 (10%)	4 (20%)	4 (20%)	10 (50%)

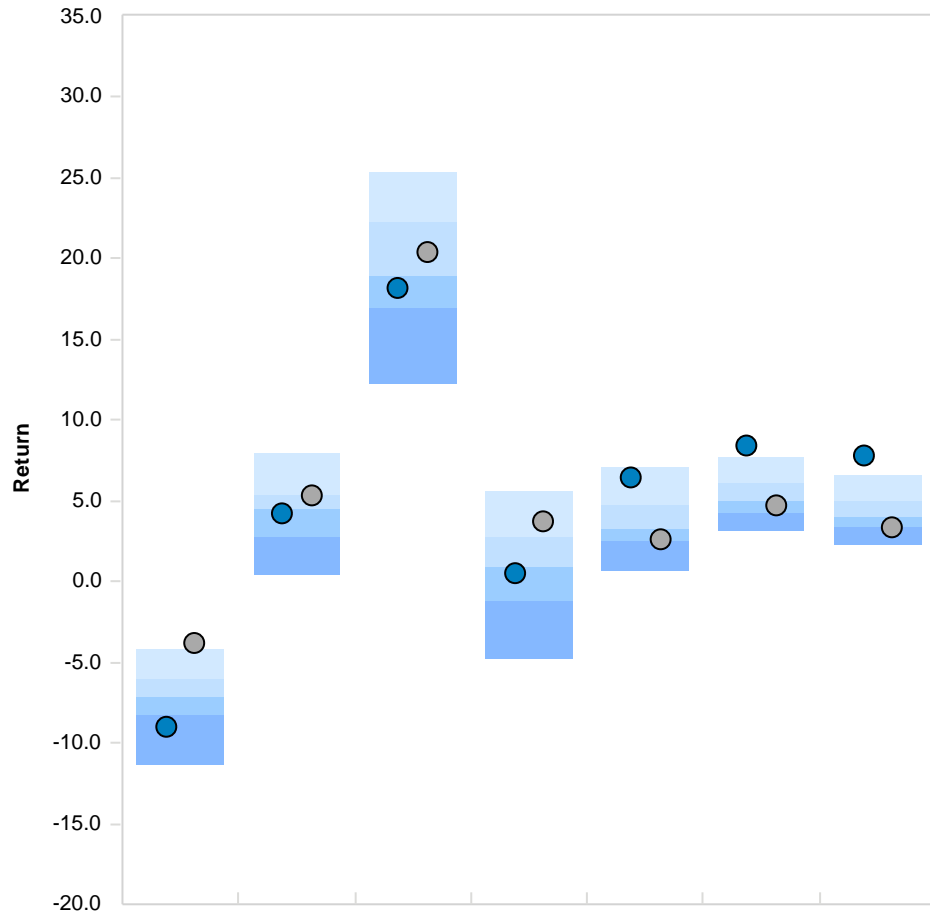
### 5 Year Rolling Percentile Rank IM International Large Cap Growth Equity (MF)



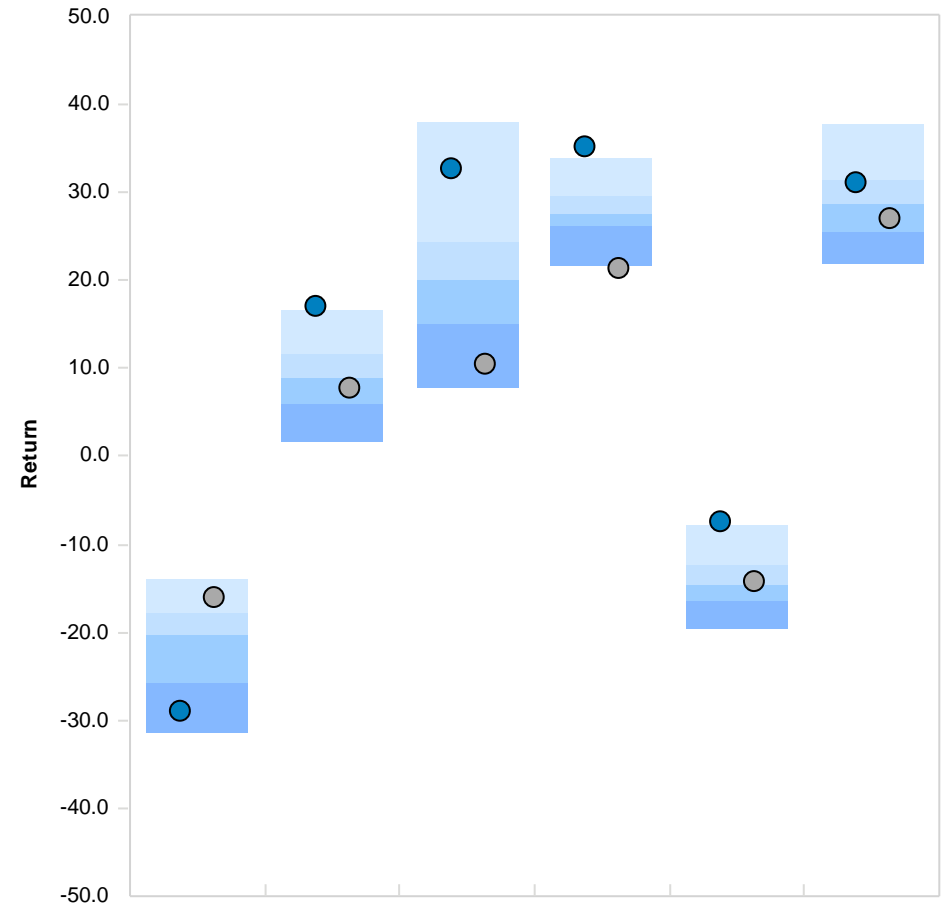
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	0 (0%)	1 (5%)	10 (50%)	9 (45%)



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



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



**Comparative Performance**

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	3.59 (18)	10.58 (31)	13.36 (77)	-8.10 (12)	-17.44 (84)	-17.34 (95)
Index	2.44 (52)	6.87 (87)	14.28 (53)	-9.91 (67)	-13.73 (32)	-5.44 (5)
Median	2.45	9.63	14.64	-9.57	-14.68	-10.99



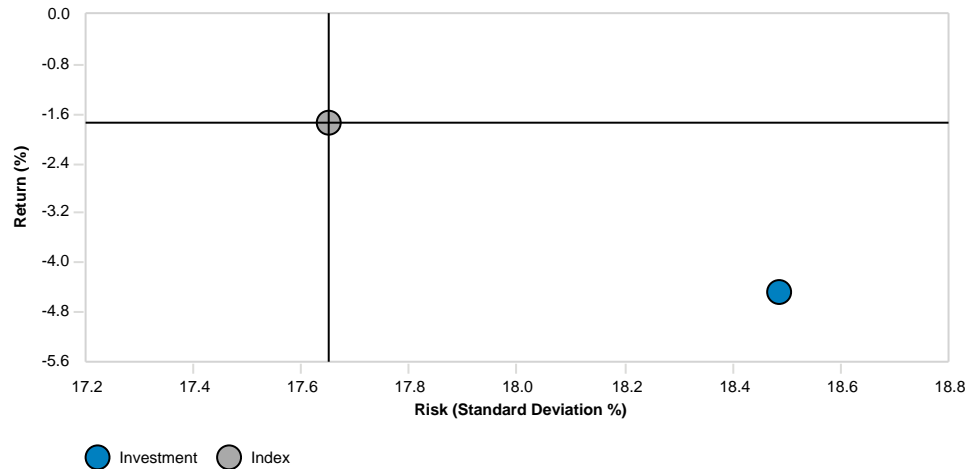
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-4.48	18.49	-0.25	99.71	6	111.15	6
Index	-1.73	17.65	-0.11	100.00	6	100.00	6

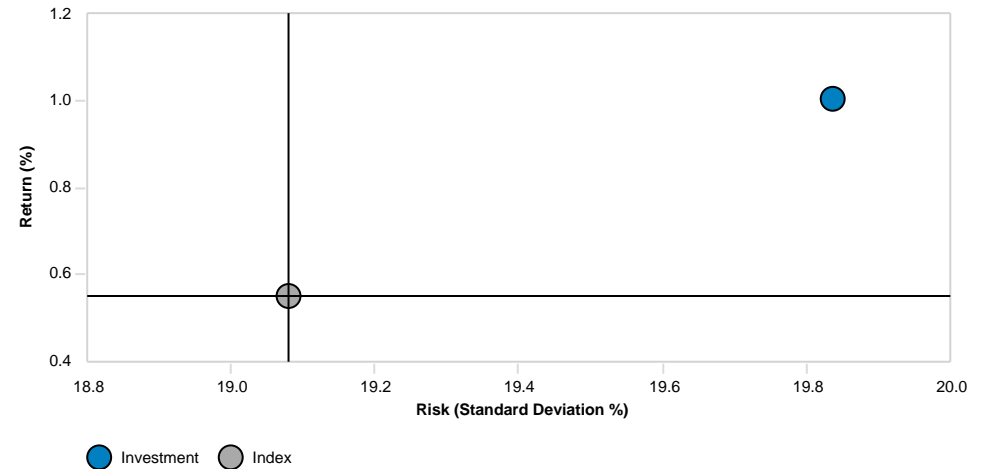
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	1.01	19.84	0.06	105.45	11	103.56	9
Index	0.55	19.08	0.04	100.00	11	100.00	9

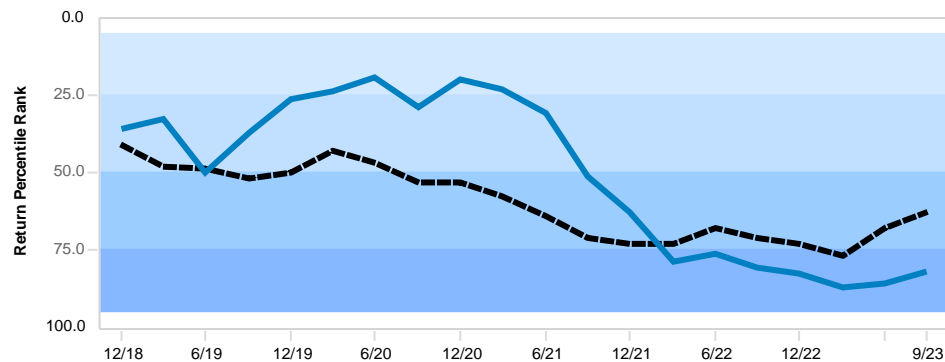
### Risk and Return 3 Years



### Risk and Return 5 Years

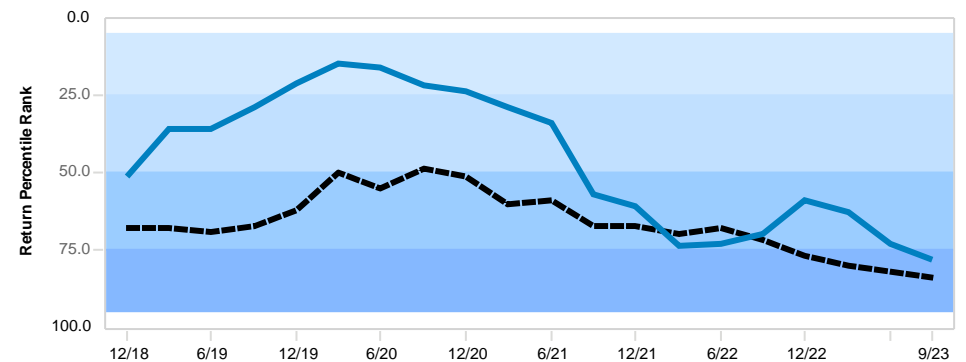


### 3 Year Rolling Percentile Rank IM Emerging Markets Equity (SA+CF)



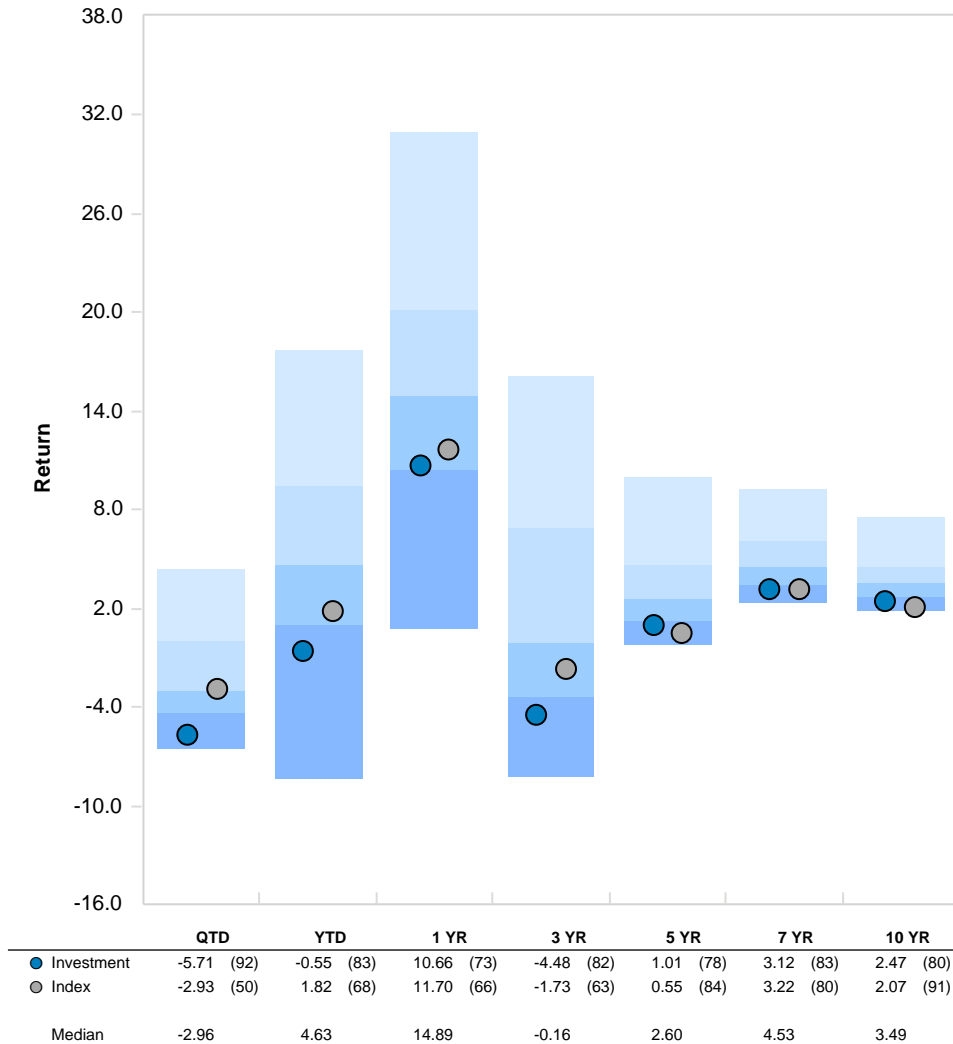
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	4 (20%)	7 (35%)	2 (10%)	7 (35%)
Index	20	0 (0%)	6 (30%)	13 (65%)	1 (5%)

### 5 Year Rolling Percentile Rank IM Emerging Markets Equity (SA+CF)

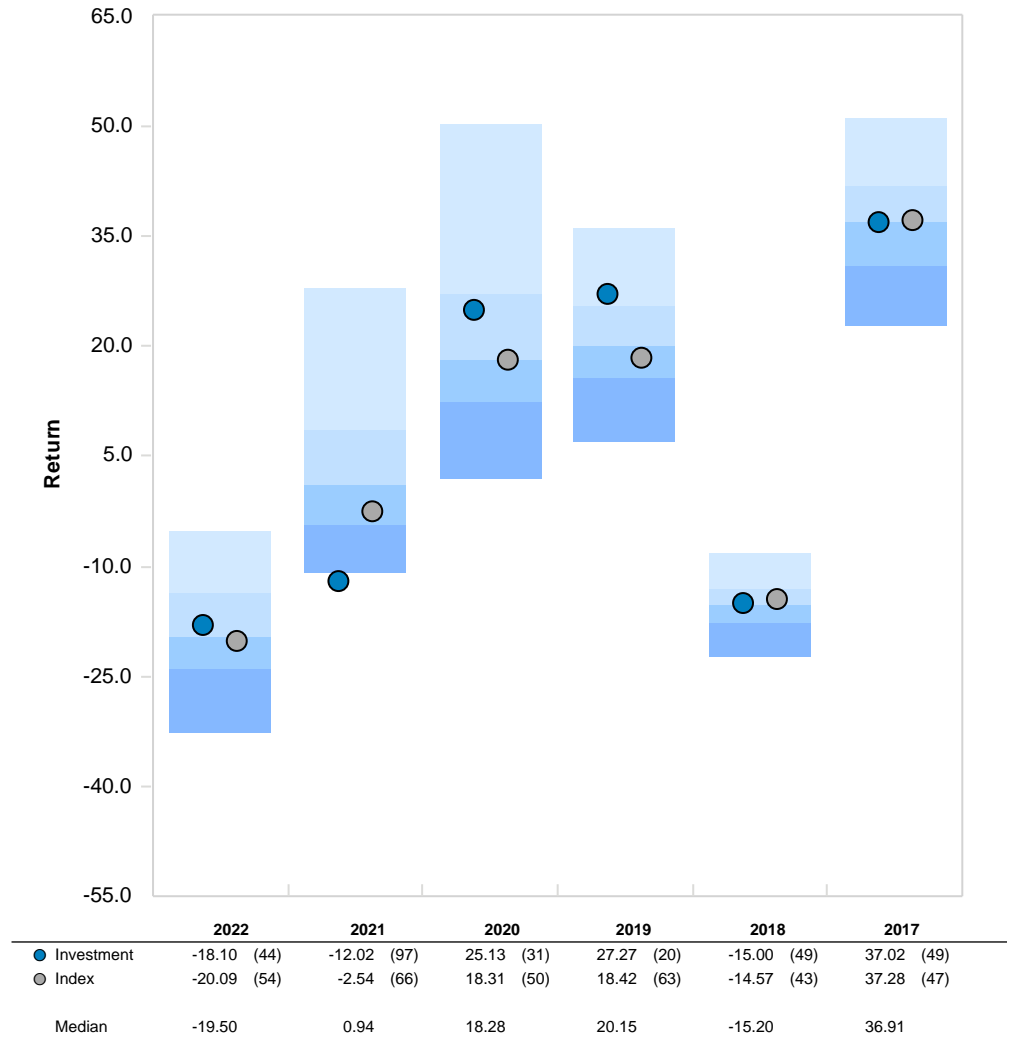


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	5 (25%)	5 (25%)	9 (45%)	1 (5%)
Index	20	0 (0%)	2 (10%)	14 (70%)	4 (20%)

**Peer Group Analysis - IM Emerging Markets Equity (SA+CF)**



**Peer Group Analysis - IM Emerging Markets Equity (SA+CF)**



**Comparative Performance**

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	0.63 (76)	4.82 (53)	11.26 (38)	-9.93 (47)	-11.17 (38)	-8.00 (53)
Index	0.90 (72)	3.96 (71)	9.70 (62)	-11.57 (68)	-11.45 (45)	-6.97 (47)
Median	2.36	4.94	10.57	-10.31	-11.71	-7.33



## **Fixed Income**



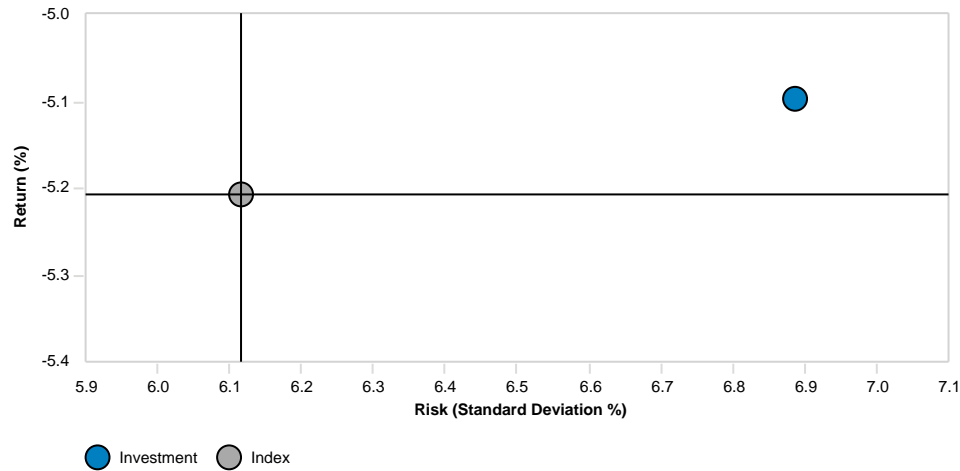
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-5.10	6.89	-0.97	113.66	4	105.72	8
Index	-5.21	6.12	-1.12	100.00	6	100.00	6

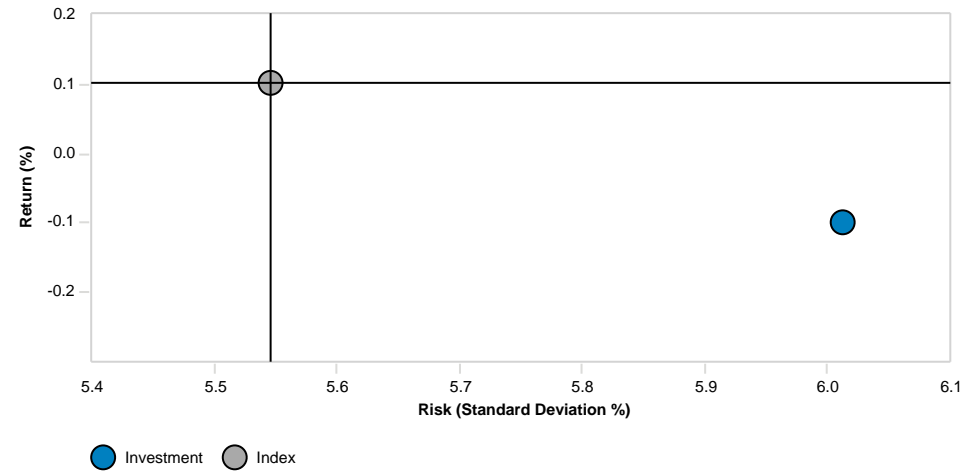
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-0.10	6.01	-0.27	103.01	11	105.55	9
Index	0.10	5.55	-0.26	100.00	14	100.00	6

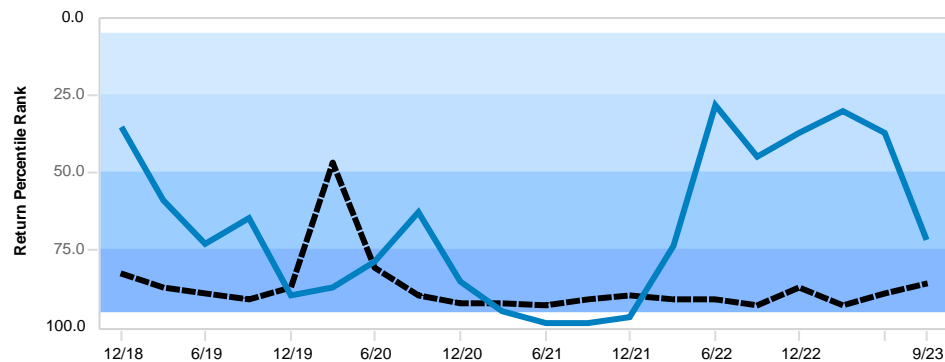
### Risk and Return 3 Years



### Risk and Return 5 Years

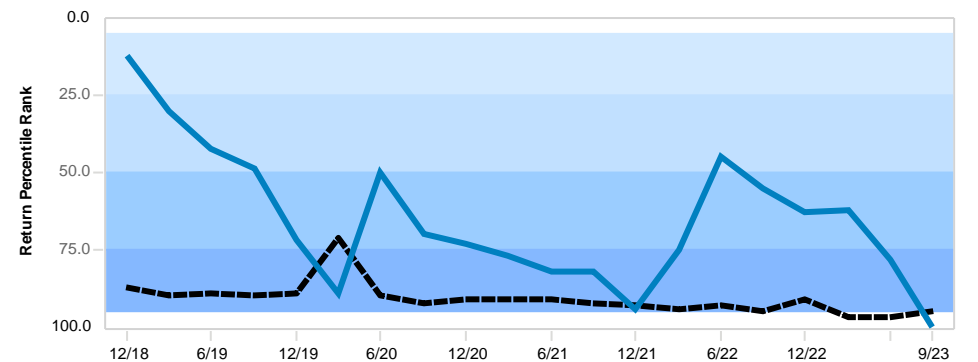


### 3 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	6 (30%)	6 (30%)	8 (40%)
Index	20	0 (0%)	1 (5%)	0 (0%)	19 (95%)

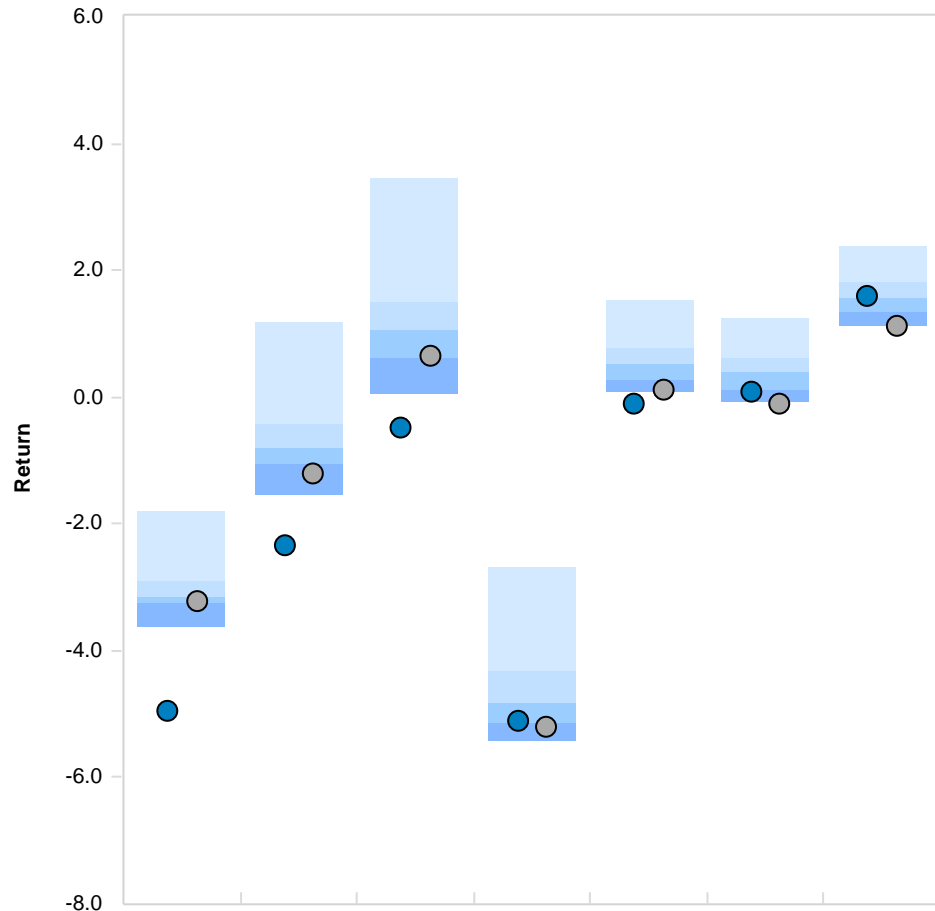
### 5 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	1 (5%)	5 (25%)	7 (35%)	7 (35%)
Index	20	0 (0%)	0 (0%)	1 (5%)	19 (95%)

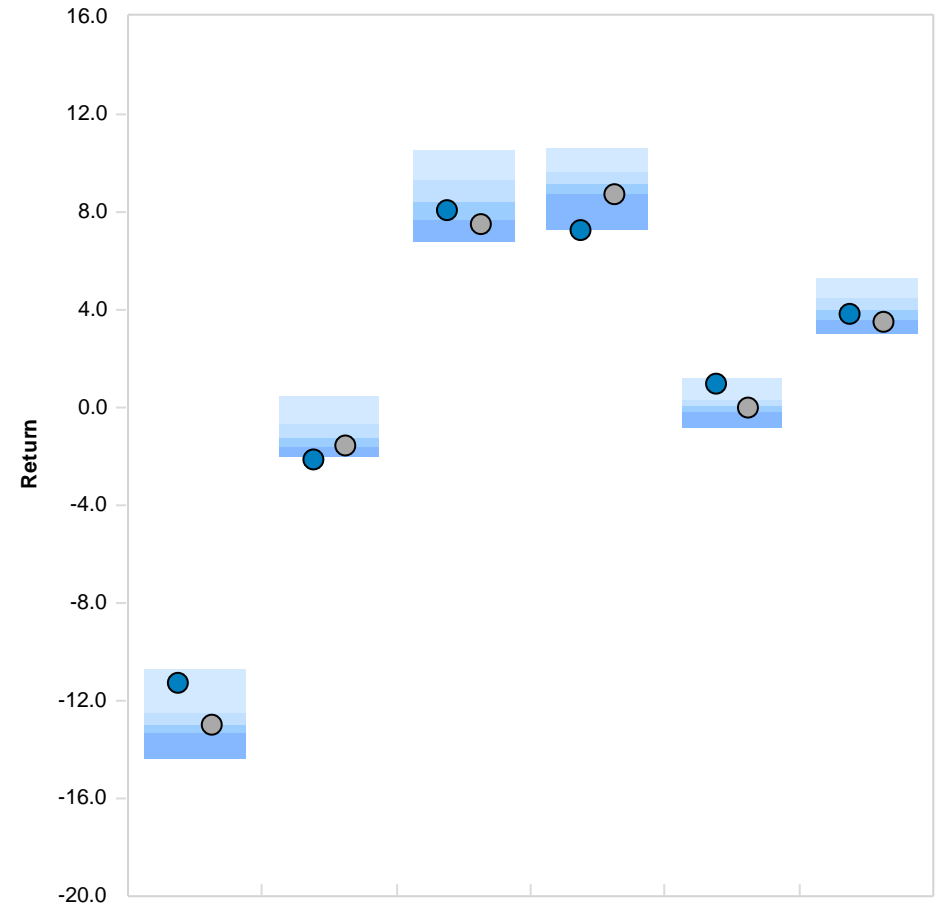


Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)



	QTD	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
● Investment	-4.95 (100)	-2.34 (100)	-0.49 (98)	-5.10 (72)	-0.10 (100)	0.08 (79)	1.58 (49)
● Index	-3.23 (71)	-1.21 (83)	0.64 (73)	-5.21 (86)	0.10 (95)	-0.09 (97)	1.13 (95)
Median	-3.14	-0.81	1.06	-4.84	0.54	0.39	1.58

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



	2022	2021	2020	2019	2018	2017
● Investment	-11.25 (8)	-2.11 (97)	8.10 (59)	7.25 (96)	0.97 (8)	3.81 (62)
● Index	-13.01 (53)	-1.55 (66)	7.51 (86)	8.72 (79)	0.01 (61)	3.54 (84)
Median	-12.97	-1.24	8.43	9.18	0.06	4.01

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	-1.24 (99)	4.04 (3)	1.90 (37)	-5.20 (98)	-3.92 (7)	-4.38 (3)
Index	-0.84 (80)	2.96 (77)	1.87 (42)	-4.75 (78)	-4.69 (38)	-5.93 (71)
Median	-0.72	3.16	1.80	-4.59	-4.73	-5.82

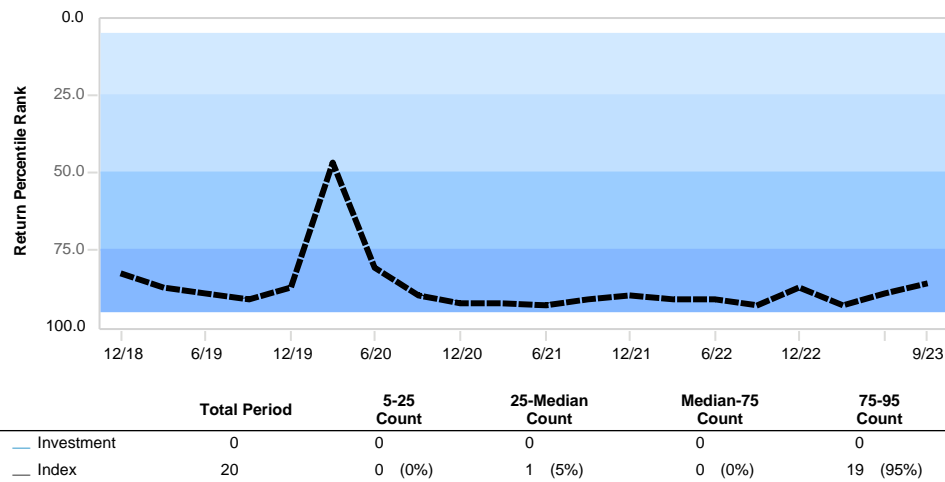
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	-5.21	6.12	-1.12	100.00	6	100.00	6

### Risk and Return 3 Years



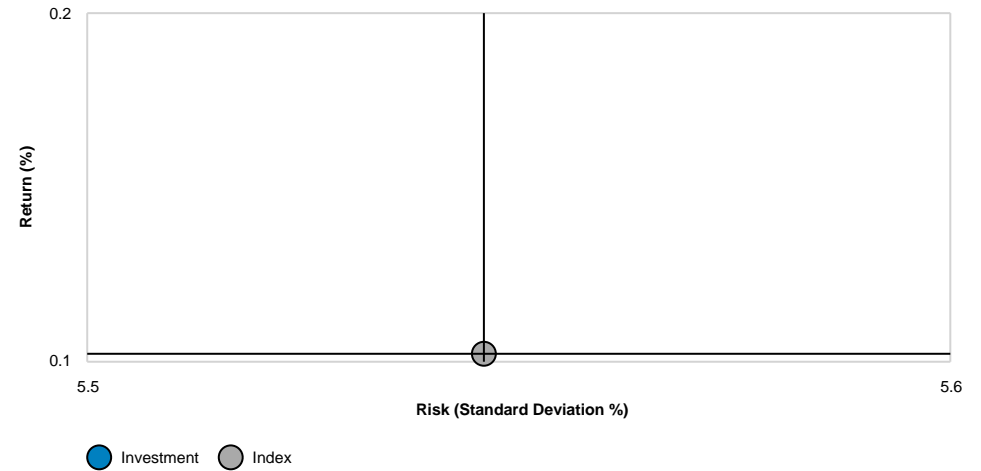
### 3 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



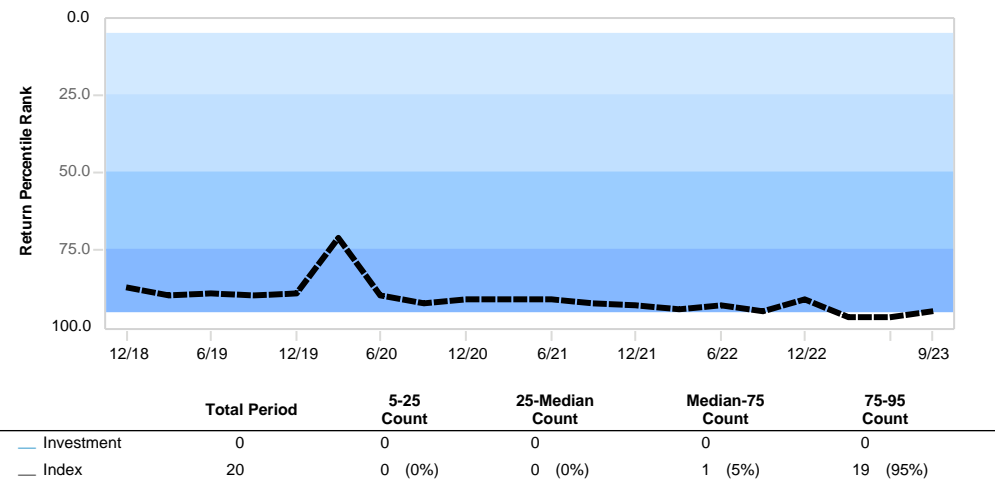
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	0.10	5.55	-0.26	100.00	14	100.00	6

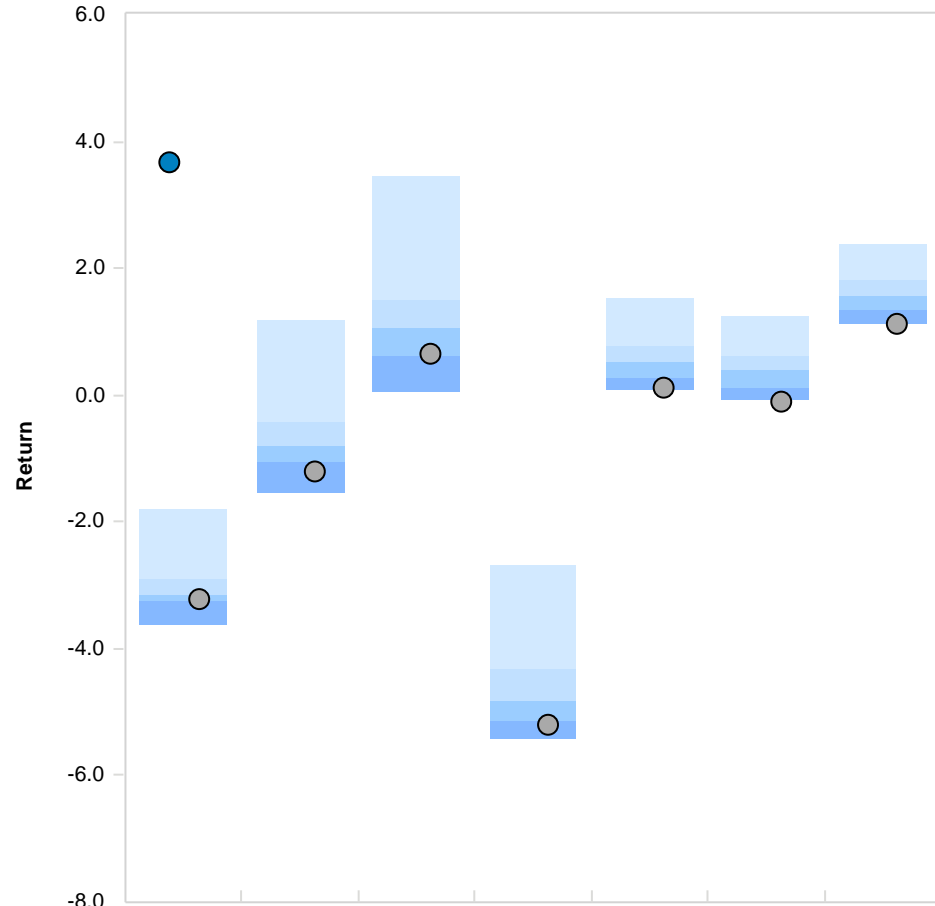
### Risk and Return 5 Years



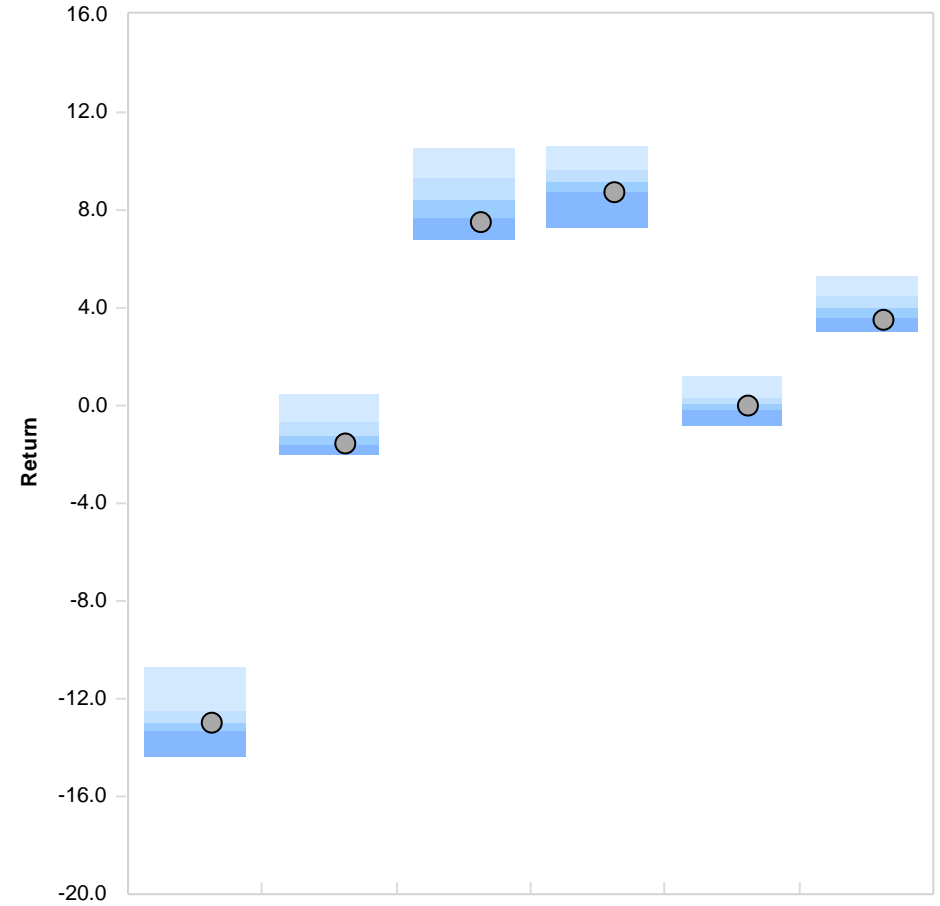
### 5 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



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



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



**Comparative Performance**

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	4.91 (1)	N/A	N/A	N/A	N/A	N/A
Index	-0.84 (80)	2.96 (77)	1.87 (42)	-4.75 (78)	-4.69 (38)	-5.93 (71)
Median	-0.72	3.16	1.80	-4.59	-4.73	-5.82



## **Alternative**

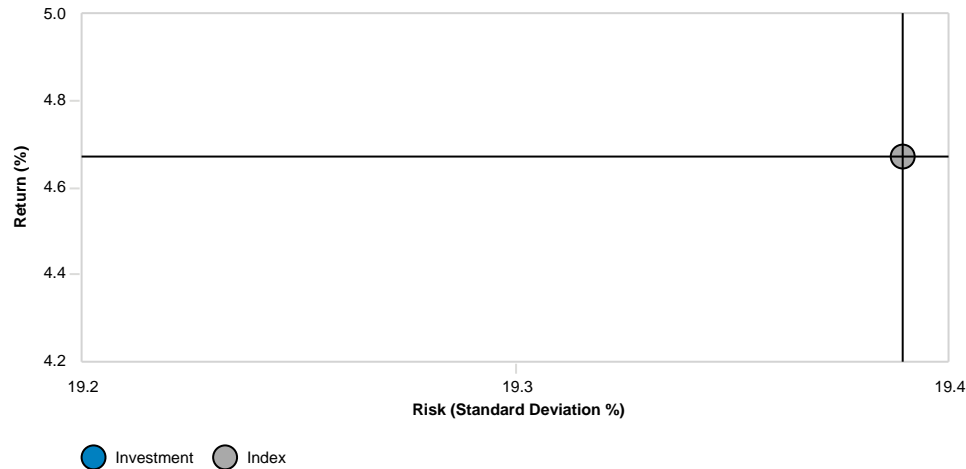
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	4.67	19.39	0.25	100.00	7	100.00	5

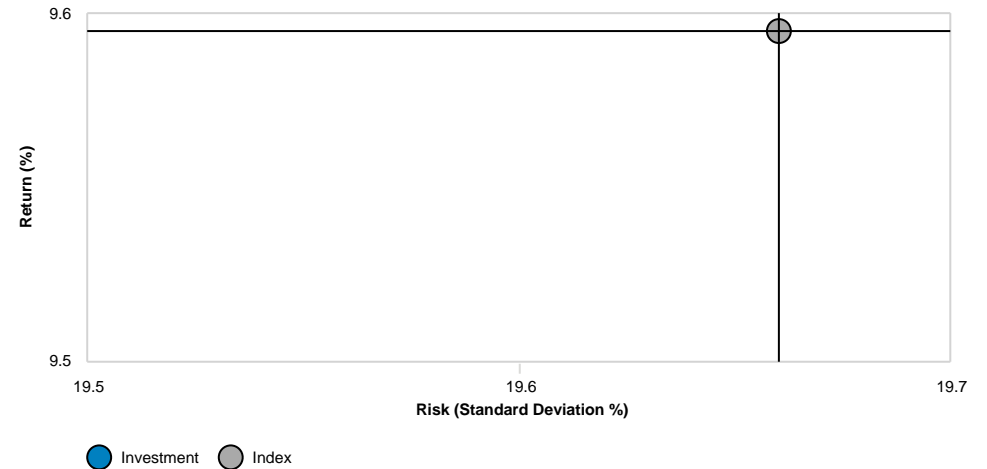
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	9.60	19.66	0.48	100.00	13	100.00	7

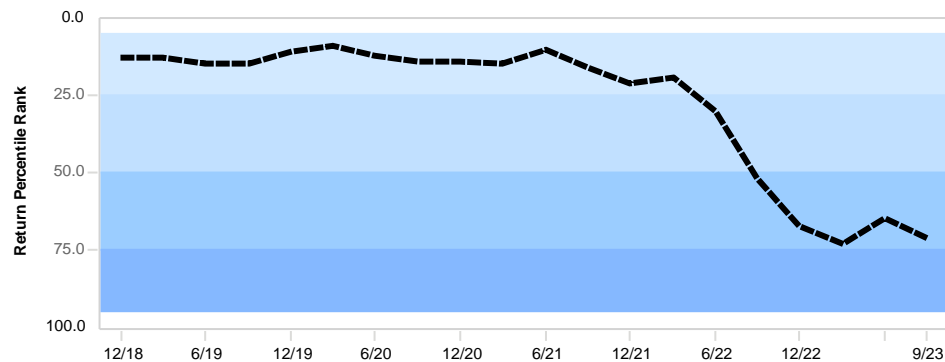
### Risk and Return 3 Years



### Risk and Return 5 Years

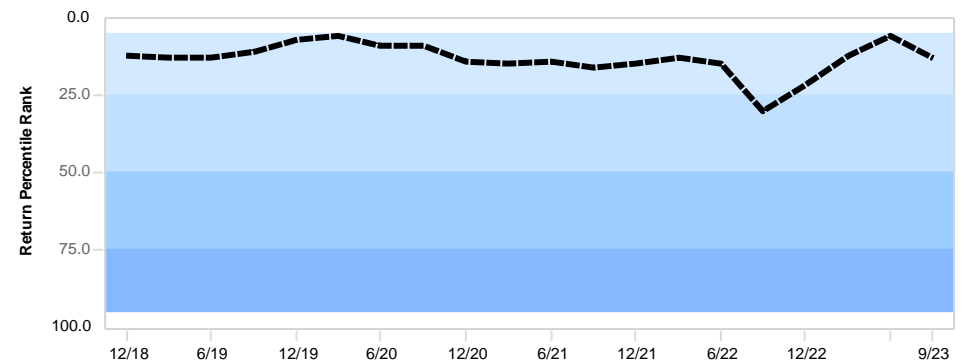


### 3 Year Rolling Percentile Rank IM U.S. Equity (MF)



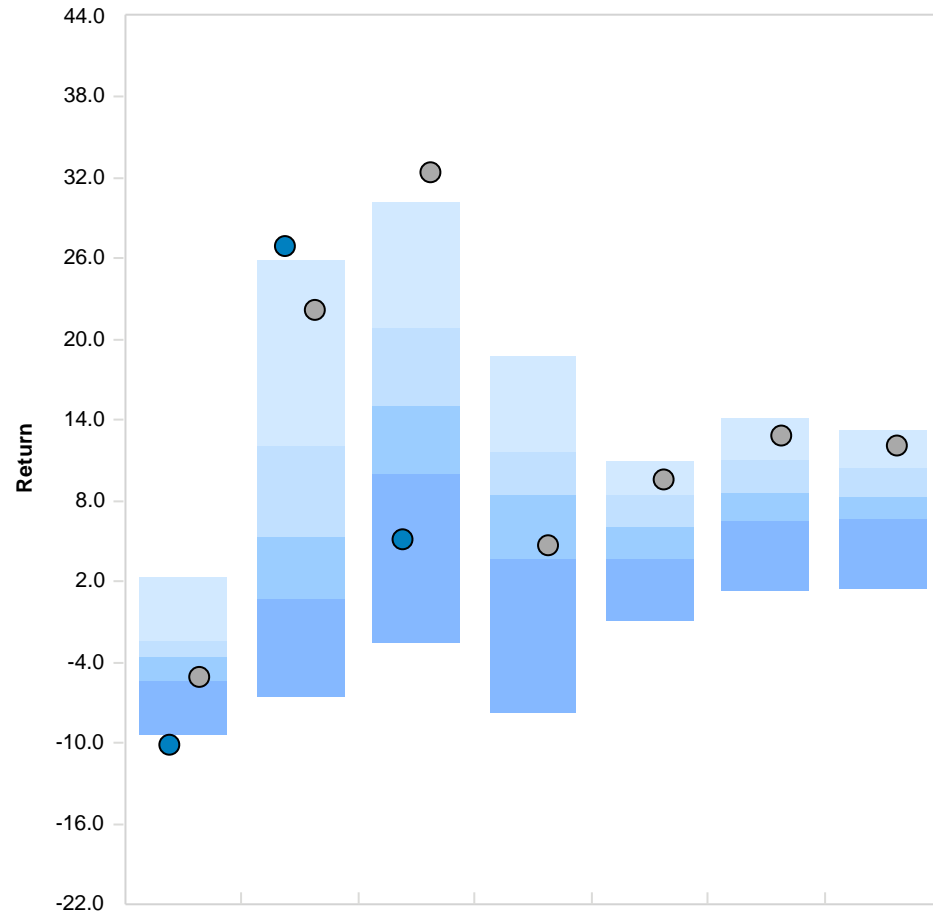
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	14 (70%)	1 (5%)	5 (25%)	0 (0%)

### 5 Year Rolling Percentile Rank IM U.S. Equity (MF)

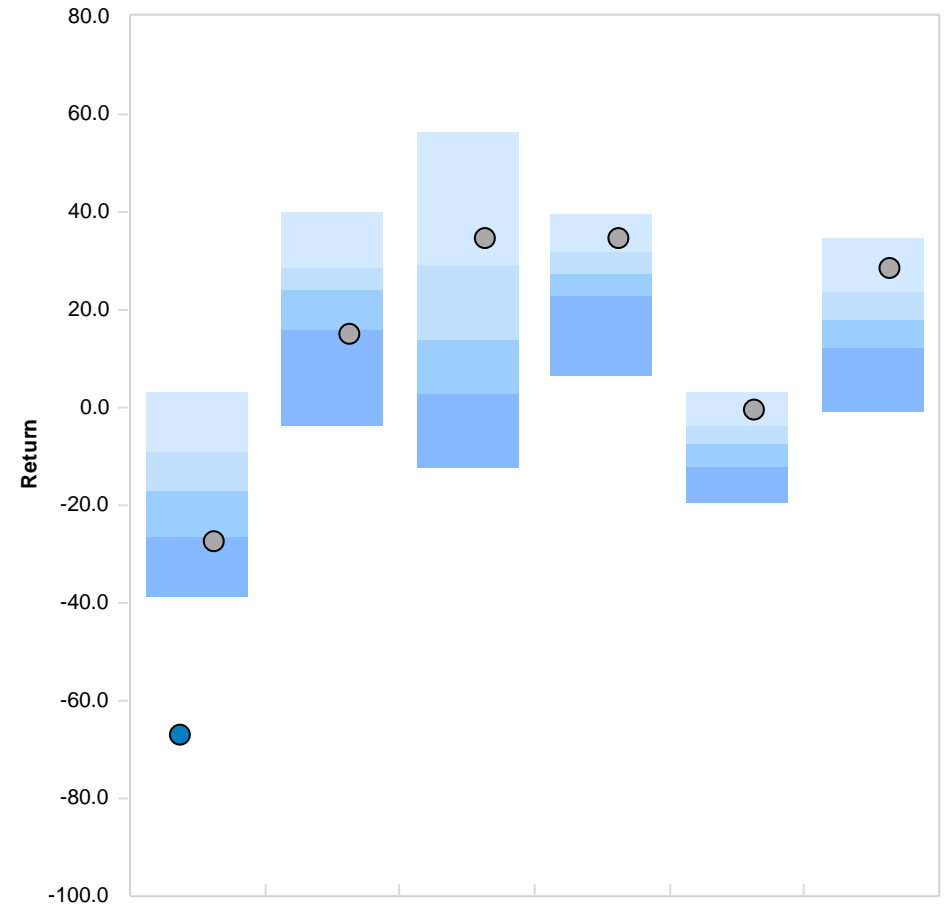


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	19 (95%)	1 (5%)	0 (0%)	0 (0%)

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



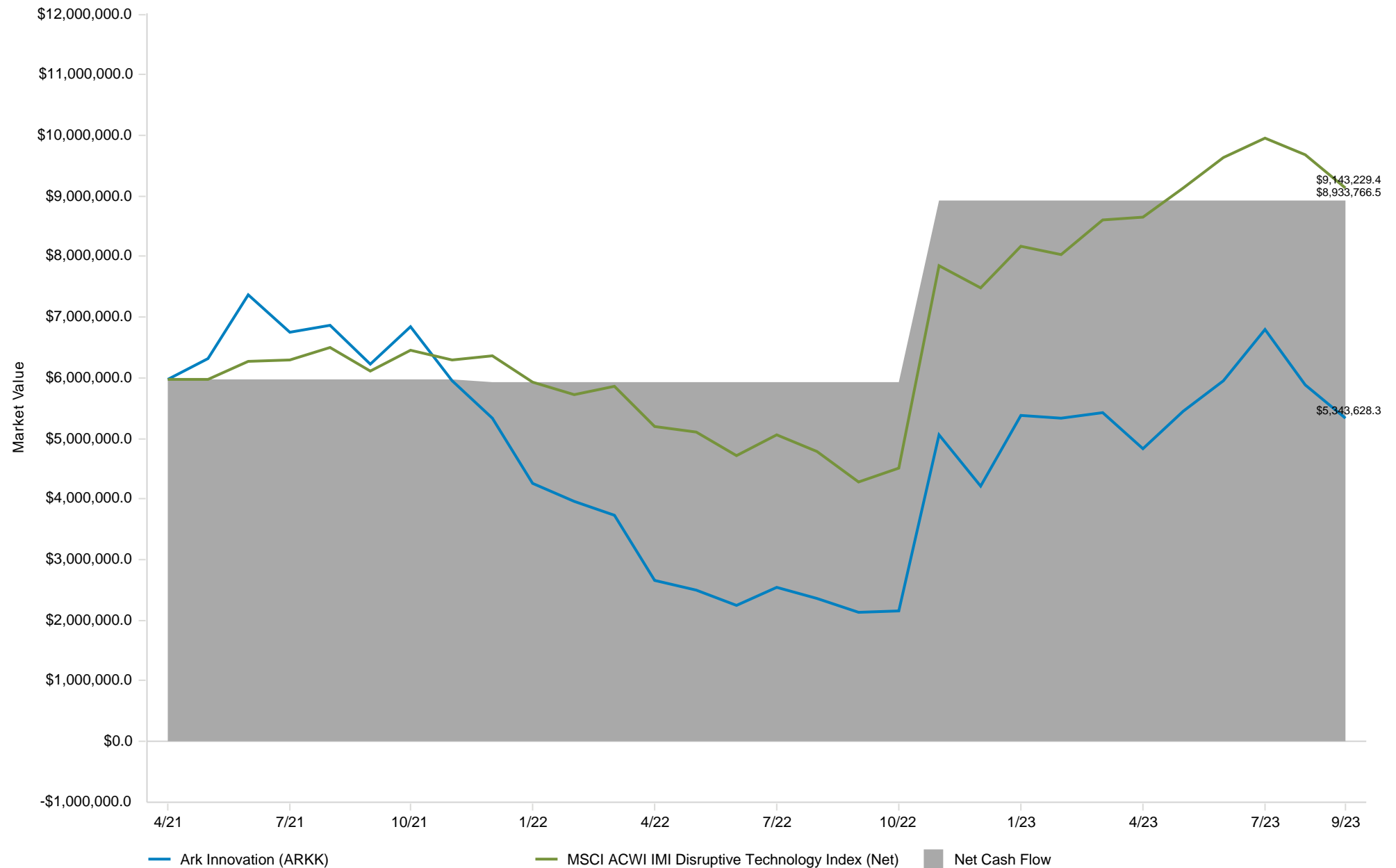
**Peer Group Analysis - IM U.S. Equity (MF)**



**Comparative Performance**

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Investment	9.42 (17)	29.13 (1)	-17.20 (99)	-5.39 (66)	-39.84 (99)	-29.92 (100)
Index	11.81 (10)	15.07 (7)	8.38 (50)	-9.42 (94)	-19.60 (77)	-7.91 (66)
Median	5.16	4.30	8.34	-4.64	-15.44	-5.53

Schedule of Investable Assets



Ark - Original cost basis 5/18/2021: \$5,982,165



## **Private Equity and Real Estate**





**Private Equity Summary of Partnership  
Private Investments  
As of September 30, 2023**

<b>Private Equity Summary of Partnership</b>										
<b>Partnerships</b>	<b>Valuation Date</b>	<b>Vintage Year</b>	<b>Investment Strategy</b>	<b>Capital Commitment \$</b>	<b>Drawn Down \$</b>	<b>Market Value \$</b>	<b>Distributed \$</b>	<b>IRR (%)</b>	<b>TVPI Multiple</b>	<b>Remaining Commitment</b>
<b>Real Estate</b>										
Green Cities Company II	09/30/2023	2012	Real Estate	4,670,000	4,903,486	-	6,557,445	6.66	1.34	-
Green Cities Company III	09/30/2023	2015	Value-Add Real Estate	5,000,000	5,013,560	1,940,049	1,666,225	-6.33	0.71	101,017
Westport Real Estate Fund IV	09/30/2023	2014	Real Estate	5,000,000	8,202,862	1,585,752	7,701,357	3.69	1.13	25,000
Long Wharf Real Estate Partners Fund V	09/30/2023	2015	Value-Add Real Estate	5,000,000	4,971,526	2,922,015	3,724,395	7.51	1.34	-
<b>Private Equity</b>										
Ares Landmark Equity Partners XIV LP	09/30/2023	2008	Secondaries	1,250,000	1,217,517	74,905	1,563,430	9.50	1.35	32,596
Private Equity Investment Fund V	09/30/2023	2009	Secondaries	1,250,000	1,253,016	519,658	601,766	-1.71	0.90	-
HarbourVest Partners IX	09/30/2023	2010	Hybrid	10,000,000	9,105,065	8,159,420	14,825,577	19.91	2.54	950,000
Pomona Capital VIII	09/30/2023	2012	Secondaries	5,944,157	6,343,483	491,650	8,882,906	19.60	1.50	1,252,519
JPMorgan Venture Capital Fund V	09/30/2023	2014	Venture Capital	5,000,000	6,869,297	8,198,566	4,596,134	14.30	1.87	6,946
<b>Total</b>				<b>43,114,157</b>	<b>47,879,811</b>	<b>23,892,015</b>	<b>50,119,236</b>	<b>-</b>	<b>-</b>	<b>2,368,078</b>



**Comparative Performance - IRR**  
**Private Investments**  
As of September 30, 2023

Comparative Performance - IRR						
	QTD	1 YR	3 YR	5 YR	Inception	Inception Date
<b>Real Estate</b>						
Green Cities Company III	-23.83	-56.50	-21.87	-11.58	-6.33	03/03/2016
Westport Real Estate Fund IV	-6.47	-36.31	-12.59	-1.46	3.69	03/24/2014
Long Wharf Real Estate Partners Fund V	-1.24	-5.59	6.30	6.62	7.51	11/20/2015
<b>Private Equity</b>						
Ares Landmark Equity Partners XIV LP	2.19	1.16	8.56	5.12	9.50	11/12/2009
Private Equity Investment Fund V	0.00	-1.12	-1.36	1.21	-1.71	01/21/2010
HarbourVest Partners IX [Consolidated]	0.00	-0.90	19.99	22.75	19.91	07/29/2013
Pomona Capital VIII	0.00	-19.57	10.73	7.61	19.60	03/25/2014
JPMorgan Venture Capital Fund V	-0.06	-14.40	22.27	16.36	14.30	07/31/2015



## Real Estate



## Fund Information

<b>Type of Fund:</b>	Partnership	<b>Vintage Year:</b>	2015
<b>Strategy Type:</b>	Value-Add Real Estate	<b>Management Fee:</b>	1.50% management fee; 8% hurdle with no catch up, 80%/20% split to LP/GP until 14% IRR
<b>Size of Fund:</b>	313,503,293	<b>Preferred Return:</b>	8% to LP
<b>Inception:</b>	02/18/2015	<b>General Partner:</b>	Gerding Edlen Fund Management III
<b>Final Close:</b>	02/01/2022	<b>Number of Funds:</b>	
<b>Investment Strategy:</b>	The strategy of Gerding Edlen Green Cities III is to execute the Firm's niche expertise in the acquisition, investment, management, retrofit and/or development of urban, modern, green apartment and/or office properties in the Firm's key targeted markets for value-add returns.		

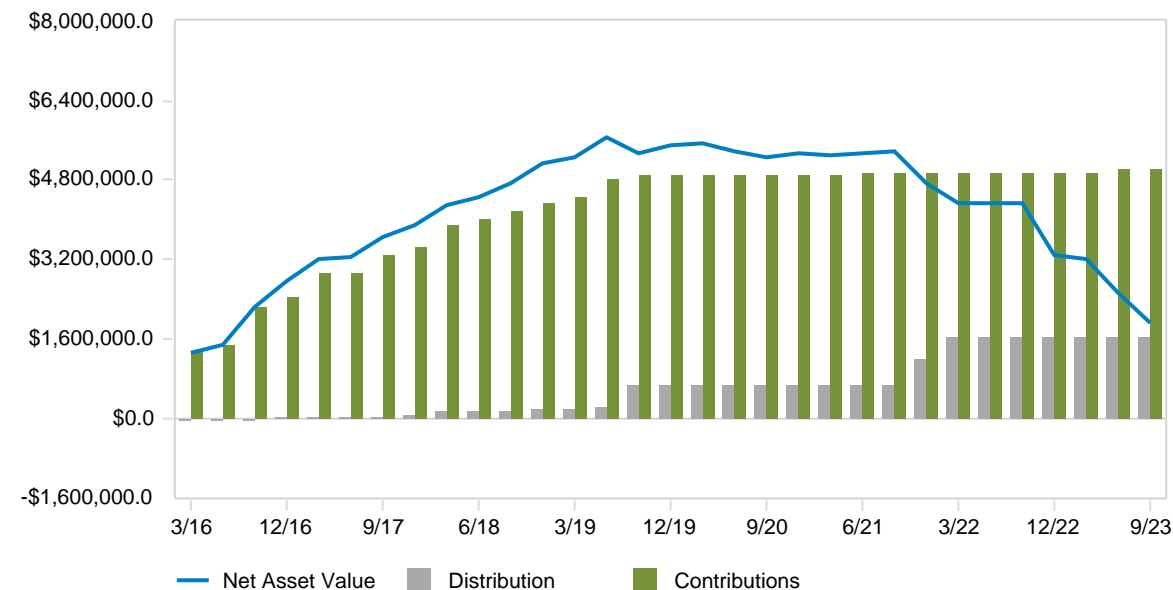
## Cash Flow Summary

<b>Capital Committed:</b>	\$5,000,000
<b>Capital Invested:</b>	\$4,653,325
<b>Management Fees:</b>	\$331,626
<b>Expenses:</b>	\$2,121
<b>Interest:</b>	\$26,487
<b>Total Contributions:</b>	\$5,013,560
<b>Remaining Capital Commitment:</b>	\$101,017

<b>Total Distributions:</b>	\$1,666,225
<b>Market Value:</b>	\$1,940,049

<b>Inception Date:</b>	03/03/2016
<b>Inception IRR:</b>	-6.3
<b>TVPI:</b>	0.7

## Cash Flow Analysis



## Fund Information

<b>Type of Fund:</b>	Partnership	<b>Vintage Year:</b>	2014
<b>Strategy Type:</b>	Real Estate	<b>Management Fee:</b>	Investment Period: 1.50% per annum of aggregate capital commitments of LP each quarter; Liquidation Period: 1.50% per annum of cost basis of investments
<b>Size of Fund:</b>	314,000,000	<b>Preferred Return:</b>	8%
<b>Inception:</b>	05/01/2013	<b>General Partner:</b>	WCP Real Estate Fund IV GP, LLC
<b>Final Close:</b>	12/31/2015	<b>Number of Funds:</b>	
<b>Investment Strategy:</b>	Primarily invests in distressed and opportunistic real estate and debt with potential for significant capital appreciation. The Fund makes direct and indirect investments in real estate. The Fund may also invest in equity securities of real estate-related companies, real estate mortgage loans, real estate mezzanine loans, and other debt instruments.		

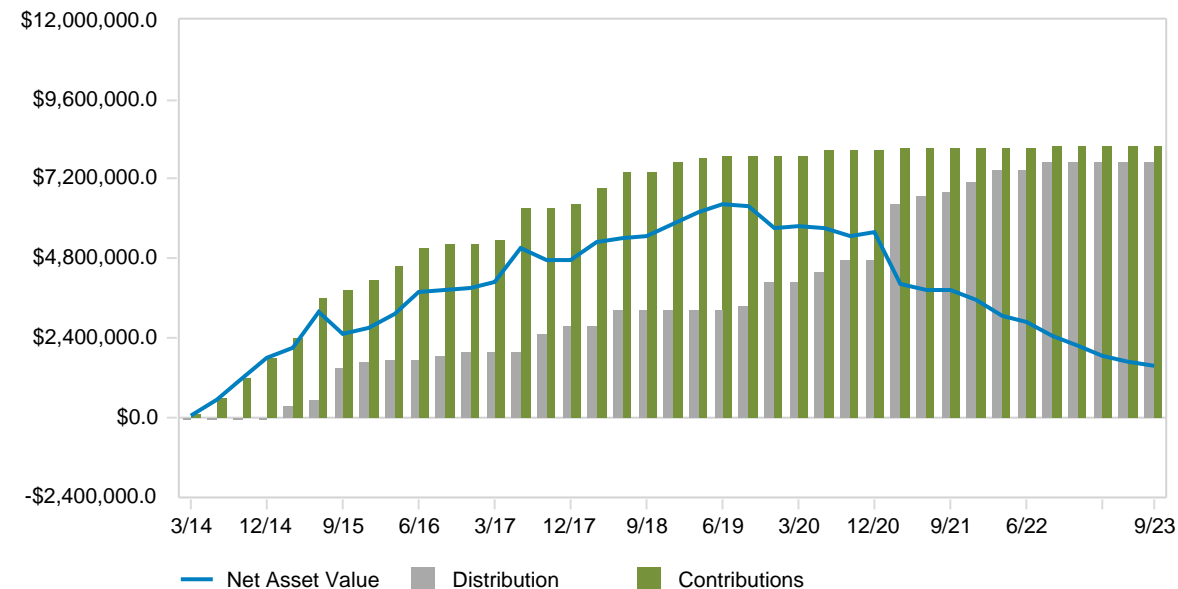
Incentive fee: 50% to GP and 50% to LPs until GP receives 20% carried interest over 8% preferred return; 20% to GP and 80% to LPs, thereafter.

## Cash Flow Summary

<b>Capital Committed:</b>	\$5,000,000
<b>Capital Invested:</b>	\$8,181,500
<b>Management Fees:</b>	-
<b>Expenses:</b>	\$21,362
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$8,202,862
<b>Remaining Capital Commitment:</b>	\$25,000

<b>Total Distributions:</b>	\$7,701,357
<b>Market Value:</b>	\$1,585,752
<b>Inception Date:</b>	03/24/2014
<b>Inception IRR:</b>	3.7
<b>TVPI:</b>	1.1

## Cash Flow Analysis



#### Fund Information

<b>Type of Fund:</b>	Partnership	<b>Vintage Year:</b>	2015
<b>Strategy Type:</b>	Value-Add Real Estate	<b>Management Fee:</b>	1.5% per annum on committed capital during investment period; 1.5% per annum on invested equity thereafter. Incentive fee: 20%.
<b>Size of Fund:</b>	350,000,000	<b>Preferred Return:</b>	9%
<b>Inception:</b>	11/20/2015	<b>General Partner:</b>	LREP V, LLC
<b>Final Close:</b>	09/30/2016	<b>Number of Funds:</b>	
<b>Investment Strategy:</b> Long Wharf employs a diversified value-added strategy targeting opportunities across an array of U.S. markets and sectors. Long Wharf's value-added approach to real estate investing focuses principally on cost basis relative to asset quality, location and competing properties. We analyze acquisition price and all-in cost basis compared to replacement cost, the basis of the prior owner, and the cost basis of other properties in the submarket against which it will compete for tenants. Rather than basing investment decisions on forecasted capital flows, pricing momentum, and outsized rent growth assumptions, our analysis is centered on cost basis relative to the intrinsic long-term value of the property.			

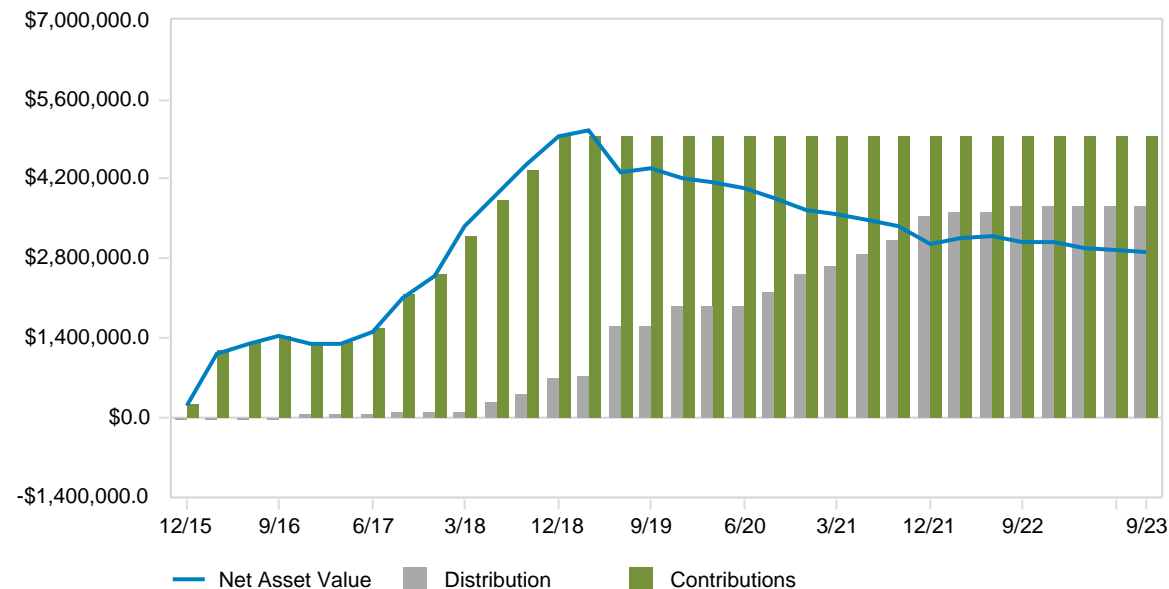
Our focus on cost basis is closely tied to the importance we place on projected stabilized yield-on-cost in analyzing prospective investments. By focusing on stabilizing and improving a property's operations – facets of an investment over which we have substantially more control – we reduce our reliance on capital flows, debt markets, and timing to achieve our return objectives. Generating an attractive unlevered income stream upon stabilization also serves to protect the investment in the event of a market downturn or a material increase in cap rates.

We believe the current market environment is providing a number of attractive relative value opportunities for value-added investors. Long Wharf is experienced in executing a variety of value-added investment strategies including distress, rehabilitation, management turnaround, and development.

#### Cash Flow Summary

<b>Capital Committed:</b>	\$5,000,000
<b>Capital Invested:</b>	\$5,000,000
<b>Management Fees:</b>	-
<b>Expenses:</b>	-\$28,474
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$4,971,526
<b>Remaining Capital Commitment:</b>	-
<b>Total Distributions:</b>	\$3,724,395
<b>Market Value:</b>	\$2,922,015
<b>Inception Date:</b>	11/20/2015
<b>Inception IRR:</b>	7.5
<b>TVPI:</b>	1.3

#### Cash Flow Analysis



**Town of Palm Beach Retirement System**  
**Comparative Performance**  
As of September 30, 2023

Comparative Performance					
	QTD	FYTD	1 YR	3 YR	5 YR
Town of Palm Beach Retirement System Combined (Gross)**	-3.67	9.37	9.37	3.10	4.29
Estimated Quarterly Return over 5 Years - (Gross): 1.09%					
Town of Palm Beach Retirement System Combined (Net)**	-3.80	9.05	9.05	2.89	4.05
Estimated Quarterly Return over 5 Years - (Net): 1.03%					

Returns for periods greater than one year are annualized.

Returns are expressed as percentages.

Performance shown is not GIPS compliant and is an estimation. Historical data and calculations prior to March 31, 2016 provided by former consultant.

\*October 2009-September 2012 represents each Plan's unique performance. October 2012-present represents performance for the combined Plan.

\*\*From October 2012, performance is a theoretical weighted average of the each Plan's composite given a static weighting between the Plans. October 2012-present represents performance for the combined Plan.



**Total Fund Policy**

Allocation Mandate	Weight (%)
<b>Jan-1979</b>	
Russell 3000 Index	30.00
MSCI EAFE (Net) Index	13.00
Blmbg. U.S. Aggregate Index	24.00
CPI + 5%	9.00
90 Day T-Bill + 3.75%	22.00
S&P 500 + 5%	2.00
<b>Jul-2013</b>	
S&P 500 Index	7.50
MSCI EAFE (Net) Index	15.00
Blmbg. U.S. Aggregate Index	17.50
Bloomberg Commodity Index Total Return	2.50
90 Day T-Bills + 5%	15.00
S&P 500 + 5%	10.00
Russell Midcap Value Index	3.75
Russell Midcap Growth Index	3.75
MSCI Emerging Markets (Net) Index	10.00
Bloomberg U.S. TIPS Index	2.50
Blmbg. U.S. Corp High Yield	2.50
NCREIF Property Index	10.00
<b>Jan-2017</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Blmbg. U.S. Aggregate Index	12.50
Blmbg. Global Multiverse	5.00
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
S&P 500 + 3%	7.50
Total GTAA/Hedge Fund Policy	10.00
<b>Oct-2020</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Total Fixed Income Policy	17.50
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
S&P 500 + 3%	7.50
Total GTAA/Hedge Fund Policy	10.00

Allocation Mandate	Weight (%)
<b>May-2021</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Total Fixed Income Policy	17.50
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
Total Global Macro Policy	3.00
Total Alternative Policy	5.00
Total Private Equity Policy	7.50
90 Day U.S. Treasury Bill	2.00
<b>Mar-2023</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Total Fixed Income Policy	20.50
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
Total Alternative Policy	5.00
Total Private Equity Policy	7.50
90 Day U.S. Treasury Bill	2.00





**Total Fund Policy x Private Investments**

Allocation Mandate	Weight (%)
<b>Jan-1979</b>	
Russell 3000 Index	30.00
MSCI EAFE (Net) Index	13.00
Blmbg. U.S. Aggregate Index	24.00
CPI + 5%	9.00
90 Day T-Bill + 3.75%	22.00
S&P 500 + 5%	2.00
<b>Jul-2013</b>	
S&P 500 Index	7.50
MSCI EAFE (Net) Index	15.00
Blmbg. U.S. Aggregate Index	17.50
Bloomberg Commodity Index Total Return	2.50
90 Day T-Bills + 5%	15.00
S&P 500 + 5%	10.00
Russell Midcap Value Index	3.75
Russell Midcap Growth Index	3.75
MSCI Emerging Markets (Net) Index	10.00
Bloomberg U.S. TIPS Index	2.50
Blmbg. U.S. Corp High Yield	2.50
NCREIF Property Index	10.00
<b>Jan-2017</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Blmbg. U.S. Aggregate Index	12.50
Blmbg. Global Multiverse	5.00
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
0%	17.50
<b>Oct-2020</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Total Fixed Income Policy	17.50
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
0%	17.50

Allocation Mandate	Weight (%)
<b>May-2021</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Total Fixed Income Policy	17.50
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
Total Global Macro Policy	3.00
Total Alternative Policy	5.00
0%	7.50
90 Day U.S. Treasury Bill	2.00



**Benchmark History**  
**Investment Policy Benchmarks**  
As of September 30, 2023

Total Domestic Equity Policy		Total Alternative Policy	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
<b>Jan-1926</b>		<b>Jan-1999</b>	
S&P 500 Index	100.00	S&P 500 Index (Net)	100.00
<b>Jan-2017</b>		<b>May-2021</b>	
Russell 3000 Index	100.00	MSCI ACWI IMI Disruptive Technology Index (Net)	100.00
Total International Equity Policy		Total Real Estate Policy	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
<b>Oct-2012</b>		<b>Sep-2013</b>	
MSCI EAFE (Net) Index	100.00	NCREIF Property + 3%	100.00
<b>Jan-2017</b>		<b>Jan-2017</b>	
MSCI AC World ex USA	100.00	NCREIF Fund Index-Open End Diversified Core (EW)	100.00
Total Fixed Income Policy		Total Private Equity Policy	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
<b>Mar-1997</b>		<b>Jan-1926</b>	
Bloomberg U.S. Aggregate Index	50.00	CPI + 5%	82.00
Bloomberg U.S. Corp High Yield	25.00	S&P 500 + 5%	18.00
Bloomberg U.S. TIPS Index	25.00	<b>Jul-2013</b>	
<b>Oct-2020</b>		S&P 500 + 5%	100.00
Bloomberg U.S. Aggregate Index	100.00	<b>Jan-2017</b>	
		S&P 500 + 3%	100.00



## Private Equity



### Fund Information

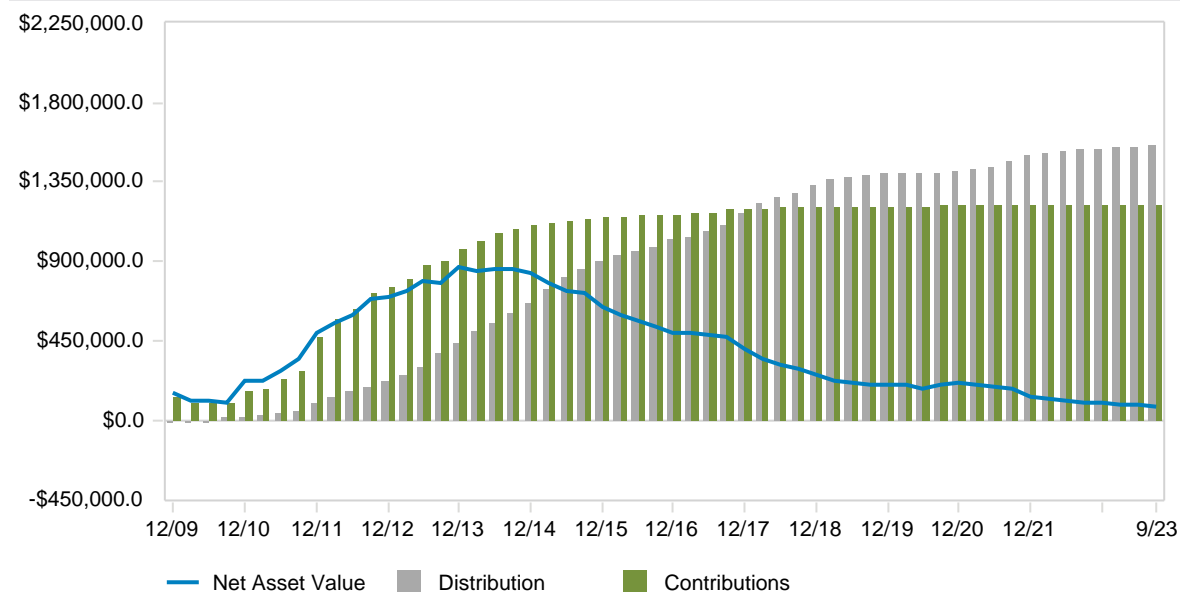
<b>Type of Fund:</b>	Fund Of Funds	<b>Vintage Year:</b>	2008
<b>Strategy Type:</b>	Secondaries	<b>Management Fee:</b>	Class A [Class B] Basis, Years 1-4: 1.0% [0.85%] Committed Capital; Years 5-8: 1.0% [0.85%] Invested Capital (Invested capital for advisory fees includes contributed capital plus amounts callable for obligations to existing deals.)
<b>Size of Fund:</b>	1,997,242,424	<b>Preferred Return:</b>	8%; Incentive Fee: 10%
<b>Inception:</b>	12/27/2007	<b>General Partner:</b>	Landmark Partners XIV, LLC
<b>Final Close:</b>	7/30/2010	<b>Number of Funds:</b>	0
<b>Investment Strategy:</b>	Landmark strives to execute transactions primarily on a negotiated basis and acquire portfolios of interests in private equity funds and direct investments through secondary market transactions that are unique, may require structuring, and where the opportunity for value creation exists. Landmark has developed the capability to execute a differentiated strategy generally focused on sourcing exclusive secondary transactions where the Firm's aptitude and expertise are highly valued. The Firm has developed strong deal sourcing competencies through sharing research and portfolio management tools which assist limited partners and general partners in identifying opportunities to improve investment performance and that allow Landmark's investment team to establish close relationships with potential sellers. Through these proprietary transactions, Landmark believes it benefits from minimal price competition and extended due diligence periods and it enables the Firm to create preferred structures which mitigate risk while providing the potential for upside in many transactions.		

In addition, Landmark has developed strong deal sourcing competencies focused on establishing close institutional relationships with sellers through sharing research and portfolio management tools which assists limited partners in identifying opportunities to improve investment performance and allows the investment team to establish close relationships with sellers. This differentiated relationship with sellers, based on value-add services and customized transaction solutions, establishes Landmark's credibility as a thought-leader and problem solver and often results in opportunities for unique and proprietary transactions.

### Cash Flow Summary

<b>Capital Committed:</b>	\$1,250,000
<b>Capital Invested:</b>	\$1,217,404
<b>Management Fees:</b>	-
<b>Expenses:</b>	\$113
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$1,217,517
<b>Remaining Capital Commitment:</b>	\$32,596
<b>Total Distributions:</b>	\$1,563,430
<b>Market Value:</b>	\$74,905
<b>Inception Date:</b>	11/12/2009
<b>Inception IRR:</b>	9.5
<b>TVPI:</b>	1.3

### Cash Flow Analysis



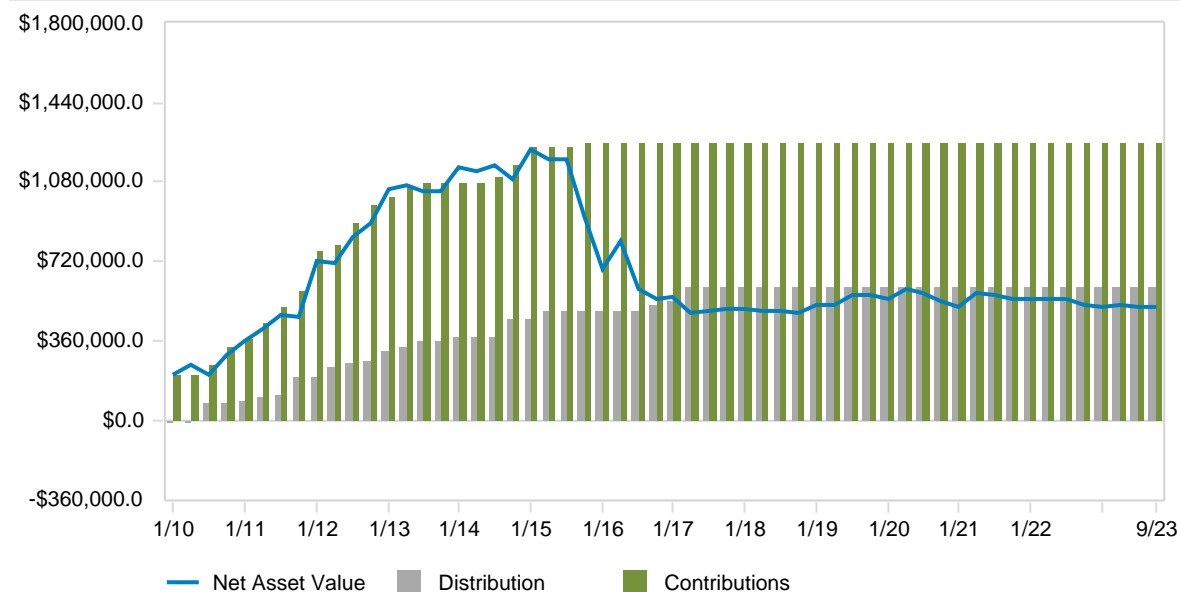
#### Fund Information

<b>Type of Fund:</b>	Secondary	<b>Vintage Year:</b>	2009
<b>Strategy Type:</b>	Secondaries	<b>Management Fee:</b>	1.75%; Incentive fee: 12.5% carry
<b>Size of Fund:</b>	109,248,367	<b>Preferred Return:</b>	8%
<b>Inception:</b>	06/24/2008	<b>General Partner:</b>	PEI Managing Partners V, L.L.C.
<b>Final Close:</b>	04/15/2010	<b>Number of Funds:</b>	
<b>Investment Strategy:</b>	The purpose of PEIF V is to purchase, invest in, or otherwise acquire investment in venture capital funds, leveraged buyout funds, and private companies on a 'secondary' basis (i.e., existing limited partnership interests or company shares) and to see and liquidate such investments, and to engage in any other activities incident and/or ancillary thereto or in furtherance of the foregoing.		

#### Cash Flow Summary

<b>Capital Committed:</b>	\$1,250,000
<b>Capital Invested:</b>	\$1,250,000
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	\$3,016
<b>Total Contributions:</b>	\$1,253,016
<b>Remaining Capital Commitment:</b>	-
<b>Total Distributions:</b>	\$601,766
<b>Market Value:</b>	\$519,658
<b>Inception Date:</b>	01/21/2010
<b>Inception IRR:</b>	-1.7
<b>TVPI:</b>	0.9

#### Cash Flow Analysis



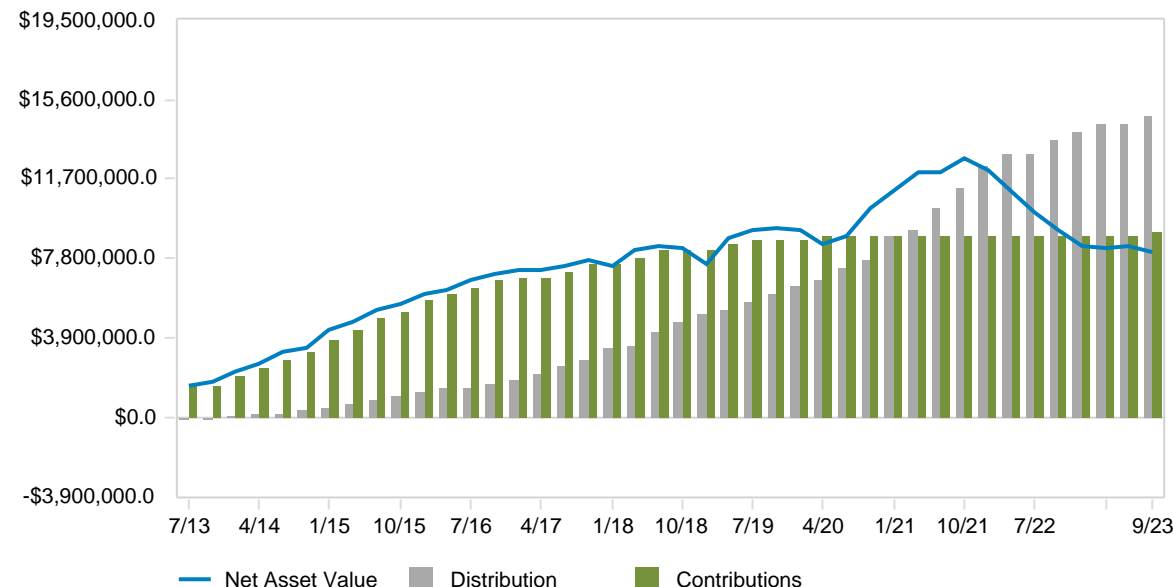
### Fund Information

<b>Type of Fund:</b>	Fund Of Funds	<b>Vintage Year:</b>	2010
<b>Strategy Type:</b>	Hybrid	<b>Management Fee:</b>	1% of LP committed capital. Incentive fee: 10% on cumulative gain of secondary and direct investments.
<b>Size of Fund:</b>	3,000,000,000	<b>Preferred Return:</b>	N/A
<b>Inception:</b>	03/01/2010	<b>General Partner:</b>	HarbourVest IX
<b>Final Close:</b>		<b>Number of Funds:</b>	0
<b>Investment Strategy:</b>	HarbourVest Partners IX is a continuation of the private equity investment strategy successfully employed in eight previous funds which consist of over \$16 billion in committed capital since 1982. The Investment Program will be structured as four separate LP vehicles, collectively known as the 'Funds'; one for venture investment (HarbourVest Partners IX-Venture Fund LP); one for buyout investments (HarbourVest Partners IX-Buyout Fund LP); and one for mezzanine and distressed debt investments (HarbourVest Partners IX-Credit Opportunities Fund LP), and a core fund, which includes allocations to the three specialized funds. The core fund will be allocated 60% to Fund IX Buyout, 30% to Fund IX Venture, and 10% to Fund IX Credit Opportunities. LPs may invest up to 100% of their commitment to any of the four funds. Geographically, the core fund is to be 60-75% US, 10-25% Europe, and 0-25% Other.		

### Cash Flow Summary

<b>Capital Committed:</b>	\$10,000,000
<b>Capital Invested:</b>	\$9,050,000
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	\$55,065
<b>Total Contributions:</b>	\$9,105,065
<b>Remaining Capital Commitment:</b>	\$950,000
<b>Total Distributions:</b>	\$14,825,577
<b>Market Value:</b>	\$8,159,420
<b>Inception Date:</b>	07/29/2013
<b>Inception IRR:</b>	19.9
<b>TVPI:</b>	2.5

### Cash Flow Analysis



## Fund Information

<b>Type of Fund:</b>	Secondary	<b>Vintage Year:</b>	2012
<b>Strategy Type:</b>	Secondaries	<b>Management Fee:</b>	On commitments, Yr 1-3: 1.50%; Yr 4-5: 1.25%; Yr 6: 1.00%; Yr 7-8: 0.75%; Yr 9: 0.50%; Yr 10: 0.50% on remaining NAV
<b>Size of Fund:</b>	1,750,000,000	<b>Preferred Return:</b>	8%, incentive is 12.5%
<b>Inception:</b>	10/26/2012	<b>General Partner:</b>	Pomona Associates VIII
<b>Final Close:</b>	04/10/2014	<b>Number of Funds:</b>	
<b>Investment Strategy:</b>	Pomona Capital executes a differentiated secondaries strategy that is focused on acquiring high-quality, mature assets with identifiable near-term liquidity at attractive pricing that meet our risk and return criteria.		

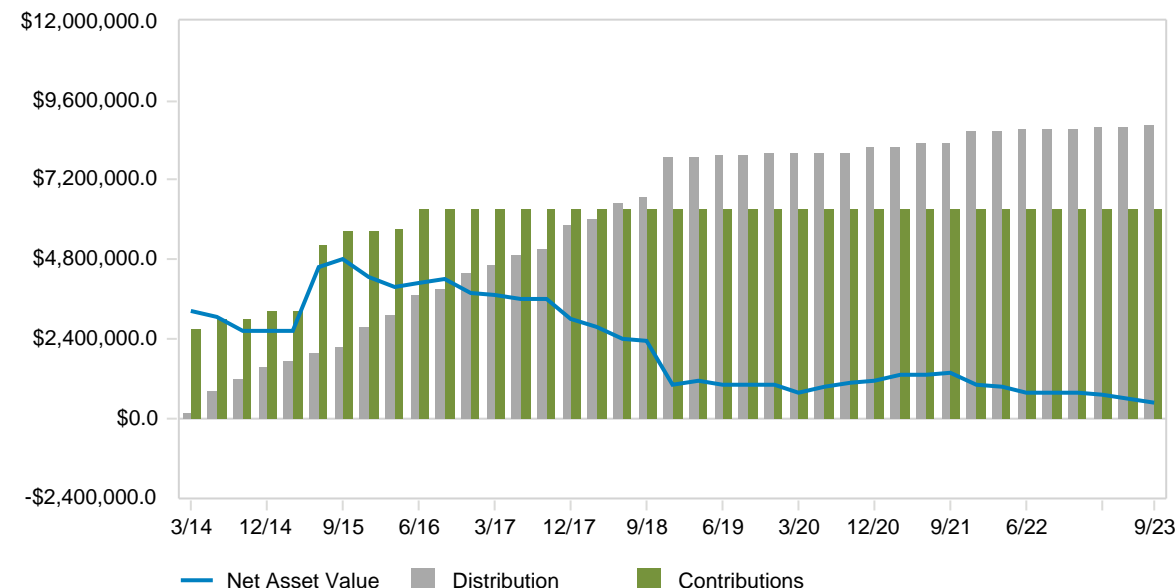
Pomona pursues a disciplined investment strategy based on: (i) proactively sourcing transactions where Pomona believes it has and can create a competitive advantage; (ii) developing a granular understanding of target assets using both fund-level information and detailed, company-level analysis along with established general partner relationships; (iii) focusing on buying the highest quality assets; (iv) maintaining a middle-market focus and pricing discipline over investment volume; (v) diversifying investments to mitigate risk; and (vi) fostering transactional creativity in an evolving market environment.

## Cash Flow Summary

<b>Capital Committed:</b>	\$5,944,157
<b>Capital Invested:</b>	\$6,234,695
<b>Management Fees:</b>	-
<b>Expenses:</b>	\$6,832
<b>Interest:</b>	\$101,956
<b>Total Contributions:</b>	\$6,343,483
<b>Remaining Capital Commitment:</b>	\$1,252,519

<b>Total Distributions:</b>	\$8,882,906
<b>Market Value:</b>	\$491,650
<b>Inception Date:</b>	03/25/2014
<b>Inception IRR:</b>	19.6
<b>TVPI:</b>	1.5

## Cash Flow Analysis



#### Fund Information

<b>Type of Fund:</b>	Fund Of Funds	<b>Vintage Year:</b>	2014
<b>Strategy Type:</b>	Venture Capital	<b>Management Fee:</b>	Based on Committed Capital (Option 1: 0.72% annual average; Option 2: 0.44% annual average)
<b>Size of Fund:</b>	159,721,789	<b>Preferred Return:</b>	8%
<b>Inception:</b>	03/24/2014	<b>General Partner:</b>	J.P. Morgan Investment Management Inc.
<b>Final Close:</b>	11/20/2015	<b>Number of Funds:</b>	0
<b>Investment Strategy:</b> PEG Venture Capital Institutional Investors V LLC(the 'Fund') is a Delaware limited liability company, which commenced operations on June 27, 2014. The investment objective of the Fund is to generate capital returns through investing in limited partnerships and other pooled and direct vehicles which, in turn, make equity-oriented investments in venture capital companies. The Fund is expected to terminate on March 31, 2029, unless terminated earlier or extended in accordance with Agreement provisions.			

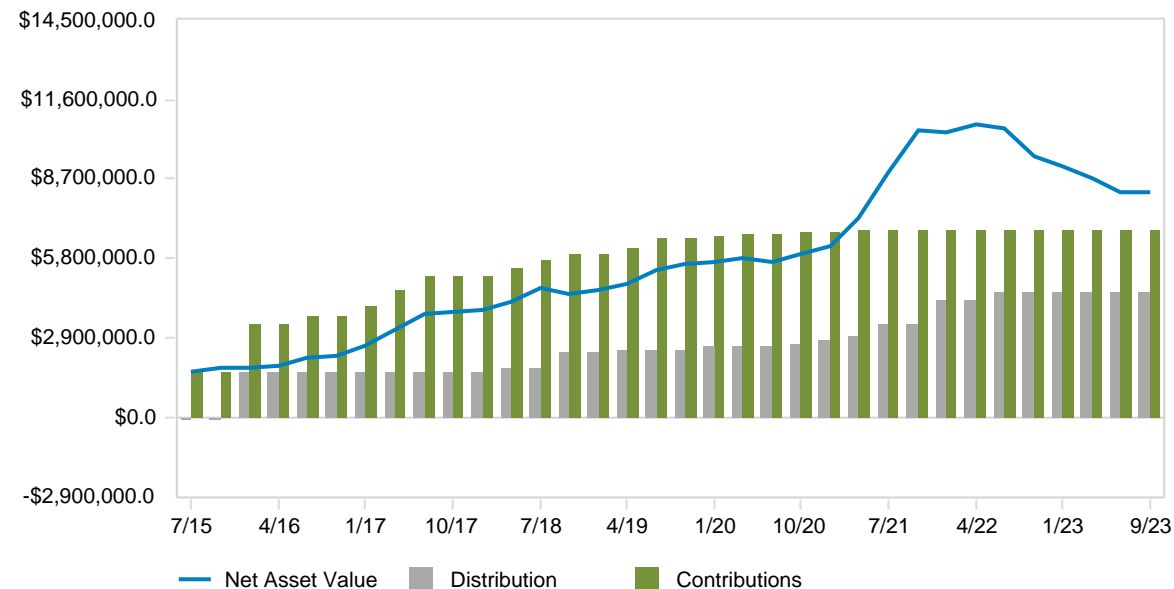
Venture capital investments may include early-stage investments in businesses still in the conceptual stage, businesses where products may not be fully developed and revenues and/or profits may be several years away, and later-stage venture capital investments in more mature companies in need of expansion or growth capital, including capital for growth buyouts. The Fund is the first in a planned series of annual fund of funds, which provides exposure to corporate finance and venture capital on a global basis. The portfolio construction seeks to create appropriate diversification by geography, stage, sector, and vintage year, so there are no predetermined allocations. Investments are expected to be predominately in existing companies in buyout, growth capital, and build-up strategies, as well as special situations with opportunistic mezzanine, distressed equity, and venture capital.

#### Cash Flow Summary

<b>Capital Committed:</b>	\$5,000,000
<b>Capital Invested:</b>	\$6,636,747
<b>Management Fees:</b>	\$208,324
<b>Expenses:</b>	-
<b>Interest:</b>	\$24,226
<b>Total Contributions:</b>	\$6,869,297
<b>Remaining Capital Commitment:</b>	\$6,946

<b>Total Distributions:</b>	\$4,596,134
<b>Market Value:</b>	\$8,198,566
<b>Inception Date:</b>	07/31/2015
<b>Inception IRR:</b>	14.3
<b>TVPI:</b>	1.9

#### Cash Flow Analysis





## **Updated Results from Prior Quarter**



# Comparative Performance

## Total Fund

As of September 30, 2023

Comparative Performance										
	1 Quarter Ending Jun-2023	1 Year Ending Jun-2023	2 Years Ending Jun-2023	3 Years Ending Jun-2023	4 Years Ending Jun-2023	5 Years Ending Jun-2023	7 Years Ending Jun-2023	Inception Ending Jun-2023	Inception Date	
<b>Total Fund (Net)</b>	<b>3.03 (53)</b>	<b>6.71 (81)</b>	<b>-3.05 (91)</b>	<b>5.87 (86)</b>	<b>5.11 (89)</b>	<b>5.47 (86)</b>	<b>6.69 (85)</b>	<b>6.30 (82)</b>	<b>09/01/2012</b>	
Total Fund (Gross)	3.11 (49)	6.92 (79)	-2.86 (89)	6.05 (83)	5.32 (86)	5.70 (79)	6.95 (79)	6.57 (72)		
Total Fund Policy	4.32 (7)	11.35 (9)	0.02 (32)	8.62 (31)	7.54 (22)	7.46 (18)	8.43 (21)	7.91 (21)		
All Public Plans-Total Fund Median	3.08	8.82	-0.83	7.77	6.63	6.63	7.66	7.20		
<b>Total Domestic Equity (Net)</b>	<b>7.92</b>	<b>18.34</b>	<b>1.38</b>	<b>13.64</b>	<b>11.21</b>	<b>10.88</b>	<b>11.92</b>	<b>11.69</b>	<b>09/01/2012</b>	
Total Domestic Equity (Gross)	7.94	18.48	1.52	13.76	11.34	11.02	12.10	11.90		
Total Domestic Equity Policy	8.39	18.95	1.22	13.89	12.00	11.39	12.72	12.96		
<b>Total International Equity (Net)</b>	<b>2.73</b>	<b>17.13</b>	<b>-3.69</b>	<b>7.59</b>	<b>4.75</b>	<b>3.90</b>	<b>7.09</b>	<b>6.57</b>	<b>09/01/2012</b>	
Total International Equity (Gross)	2.73	17.14	-3.69	7.60	4.85	4.07	7.35	6.86		
Total International Equity Policy	2.67	13.33	-4.20	7.75	4.57	4.01	6.82	N/A		
<b>Total Broad Market Fixed Income (Net)</b>	<b>-1.26</b>	<b>-1.02</b>	<b>-4.63</b>	<b>-3.14</b>	<b>-0.35</b>	<b>0.90</b>	<b>N/A</b>	<b>0.90</b>	<b>07/01/2018</b>	
Total Broad Market Fixed Income (Gross)	-1.20	-0.86	-4.46	-3.01	-0.18	1.05	N/A	1.05		
Total Fixed Income Policy	-0.84	-0.94	-5.73	-3.46	-1.05	0.52	0.90	0.52		
<b>Total Non-Core Fixed Income (Net)</b>	<b>3.60</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>3.60</b>	<b>04/01/2023</b>	
Total Non-Core Fixed Income (Gross)	4.91	N/A	N/A	N/A	N/A	N/A	N/A	4.91		
Total Fixed Income Policy	-0.84	-0.94	-5.73	-3.46	-1.05	0.52	0.90	-0.84		
<b>Total Alternative (Net)</b>	<b>9.42</b>	<b>10.68</b>	<b>-41.66</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-35.82</b>	<b>06/01/2021</b>	
Total Alternative (Gross)	9.62	11.47	-41.21	N/A	N/A	N/A	N/A	-35.32		
Total Alternative Policy	11.81	26.31	-2.21	10.92	9.90	9.87	11.43	0.27		
<b>Total Real Estate (Net)*</b>	<b>-6.52</b>	<b>-23.55</b>	<b>-7.60</b>	<b>-3.50</b>	<b>-2.08</b>	<b>-0.13</b>	<b>1.86</b>	<b>5.24</b>	<b>08/01/2013</b>	
Total Real Estate (Gross)	-6.34	-23.06	-7.05	-2.89	-1.42	0.55	2.51	6.29		
Total Real Estate Policy	-2.86	-9.82	8.30	8.48	6.97	6.96	7.46	9.74		
<b>Total Private Equity (Net)*</b>	<b>-3.14</b>	<b>-13.36</b>	<b>-0.73</b>	<b>18.93</b>	<b>16.53</b>	<b>16.59</b>	<b>16.12</b>	<b>16.65</b>	<b>09/01/2012</b>	
Total Private Equity (Gross)	-3.12	-13.27	-0.62	19.05	16.68	16.74	16.28	16.78		
Total Private Equity Policy	9.55	23.18	6.49	18.04	16.17	15.68	16.95	16.45		

\*Time weighted returns are for reference.  
Please refer to IRR calculations on the following pages.

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



## Comparative Performance

	1 Quarter Ending Jun-2023		1 Year Ending Jun-2023		2 Years Ending Jun-2023		3 Years Ending Jun-2023		4 Years Ending Jun-2023		5 Years Ending Jun-2023		7 Years Ending Jun-2023		Inception Ending Jun-2023		Inception Date	
Total Domestic Equity																		
Vanguard Instl Index (VINIX) (Net)	8.73	(34)	19.55	(34)	3.35	(25)	14.57	(21)	N/A		N/A		N/A		13.41	(2)	09/01/2019	
S&P 500 Index	8.74	(34)	19.59	(34)	3.39	(24)	14.60	(20)	12.78	(23)	12.31	(21)	13.38	(21)	13.43	(2)		
IM U.S. Large Cap Core Equity (MF) Median	8.23		18.44		1.86		13.41		11.61		11.37		12.45		10.64			
Geneva Mid Cap Growth Equity (Net)	5.10	(80)	21.91	(33)	-5.51	(43)	9.47	(36)	8.82	(64)	9.67	(68)	11.31	(92)	9.94	(53)	08/01/2005	
Geneva Mid Cap Growth Equity (Gross)	5.25	(80)	22.43	(30)	-5.08	(38)	9.89	(28)	9.27	(56)	10.13	(60)	11.82	(83)	N/A			
Russell Midcap Growth Index	6.23	(57)	23.13	(24)	-6.88	(54)	7.63	(56)	8.68	(66)	9.71	(67)	11.96	(76)	9.57	(64)		
IM U.S. Mid Cap Growth Equity (SA+CF) Median	6.49		20.67		-6.63		8.20		9.41		10.53		13.05		10.09			
Cooke & Bieler Mid Cap Value Equity	5.90	(21)	12.46	(62)	-0.46	(87)	14.67	(81)	8.14	(72)	N/A		N/A		7.66	(29)	08/01/2018	
Russell Midcap Value Index	3.86	(79)	10.50	(77)	-0.27	(86)	15.04	(80)	7.64	(76)	6.84	(77)	8.20	(88)	6.38	(53)		
IM U.S. Mid Cap Value Equity (SA+CF) Median	4.62		14.23		2.89		17.82		9.90		8.06		10.06		6.47			
Total International Equity																		
Pear Tree Polaris Foreign Value (QFVRX)	1.91	(82)	14.37	(74)	-4.81	(96)	N/A		N/A		N/A		N/A		7.17	(57)	09/01/2020	
MSCI EAFE (Net) Index	2.95	(47)	18.77	(40)	-1.17	(65)	8.93	(82)	5.23	(47)	4.39	(20)	6.88	(24)	6.69	(66)		
IM International Value Equity (MF) Median	2.90		17.51		-0.16		11.25		5.14		3.24		5.91		7.63			
Fidelity International Index (FSPSX)	3.20	(30)	18.89	(18)	-0.89	(17)	N/A		N/A		N/A		N/A		6.94	(14)	09/01/2020	
MSCI EAFE (Net) Index	2.95	(37)	18.77	(18)	-1.17	(19)	8.93	(27)	5.23	(32)	4.39	(27)	6.88	(28)	6.69	(15)		
IM International Equity (MF) Median	2.45		13.34		-5.94		6.28		4.16		3.11		5.94		1.53			
MFS International Growth R6 (MGRDX) (Net)	2.97	(28)	18.55	(31)	-1.39	(9)	8.36	(15)	6.88	(24)	6.82	(23)	N/A		6.82	(23)	07/01/2018	
MSCI AC World ex USA Growth (Net)	1.94	(74)	13.26	(80)	-8.33	(70)	3.96	(81)	4.41	(78)	4.06	(72)	6.69	(58)	4.06	(72)		
IM International Large Cap Growth Equity (MF) Median	2.45		16.77		-4.70		6.51		5.53		4.72		7.01		4.72			
WCM Focused International Growth (WCMIX) (Net)	3.59	(18)	19.34	(24)	-7.18	(66)	6.58	(49)	8.38	(12)	9.09	(1)	N/A		9.09	(1)	07/01/2018	
MSCI AC World ex USA (Net)	2.44	(52)	12.72	(84)	-4.70	(50)	7.22	(33)	4.08	(83)	3.52	(86)	6.32	(70)	3.52	(86)		
IM International Large Cap Growth Equity (MF) Median	2.45		16.77		-4.70		6.51		5.53		4.72		7.01		4.72			
Total Emerging Markets Equity																		
Allspring Emerging Markets (Net)	0.47	(78)	5.03	(58)	-16.25	(86)	-1.02	(90)	0.83	(79)	0.85	(85)	4.64	(85)	2.51	(90)	10/01/2013	
Allspring Emerging Markets (Gross)	0.63	(76)	5.70	(54)	-15.72	(83)	-0.40	(86)	1.46	(72)	1.48	(73)	5.30	(72)	3.16	(72)		
MSCI Emerging Markets (Net) Index	0.90	(72)	1.75	(80)	-12.81	(64)	2.32	(68)	0.86	(78)	0.93	(82)	4.95	(76)	2.44	(90)		
IM Emerging Markets Equity (SA+CF) Median	2.36		6.71		-10.78		4.37		2.73		2.91		6.12		3.97			

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



# Comparative Performance

## Total Fund

As of September 30, 2023

	1 Quarter Ending Jun-2023	1 Year Ending Jun-2023	2 Years Ending Jun-2023	3 Years Ending Jun-2023	4 Years Ending Jun-2023	5 Years Ending Jun-2023	7 Years Ending Jun-2023	Inception Ending Jun-2023	Inception Date
<b>Total Broad Market Fixed Income</b>									
Garcia Hamilton Fixed Income Agg.	-1.26 (99)	-1.02 (88)	-4.63 (10)	-3.14 (33)	-0.35 (37)	N/A	N/A	0.88 (18)	08/01/2018
Blmbg. U.S. Aggregate Index	-0.84 (80)	-0.94 (83)	-5.73 (77)	-3.97 (89)	-0.94 (96)	0.77 (97)	0.44 (98)	0.77 (26)	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-0.72	-0.43	-5.54	-3.43	-0.43	1.22	0.95	0.53	
<b>Total Non-Core Fixed Income</b>									
Serenitas Credit Gamma	3.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03/01/2023
Blmbg. U.S. Aggregate Index	-0.84	-0.94	-5.73	-3.97	-0.94	0.77	0.44	1.67	
<b>Total Alternative</b>									
Ark Innovation (ARKK)	9.42 (17)	10.68 (70)	-41.66 (100)	N/A	N/A	N/A	N/A	-35.82 (100)	06/01/2021
MSCI ACWI IMI Disruptive Technology Index (Net)	11.81 (10)	26.31 (8)	-2.21 (59)	10.17 (65)	12.93 (11)	13.08 (6)	14.88 (9)	0.27 (32)	
IM U.S. Equity (MF) Median	5.16	14.51	-0.81	12.39	8.59	7.90	9.98	-1.79	
<b>Total Real Estate</b>									
JP Morgan Strategic Property (Net)	-1.83 (45)	-11.32 (73)	6.26 (64)	6.01 (84)	4.80 (90)	4.70 (93)	N/A	5.21 (N/A)	03/01/2017
JP Morgan Strategic Property (Gross)	-1.57 (28)	-10.42 (65)	7.37 (49)	7.13 (73)	5.89 (66)	5.78 (76)	N/A	6.22 (N/A)	
NCREIF Fund Index-ODCE (VW)	-2.68 (70)	-9.97 (56)	7.98 (41)	7.99 (54)	6.52 (59)	6.50 (56)	6.97 (59)	7.03 (N/A)	
IM U.S. Open End Private Real Estate (SA+CF) Median	-1.98	-9.78	7.17	8.20	6.84	6.81	7.32	N/A	

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



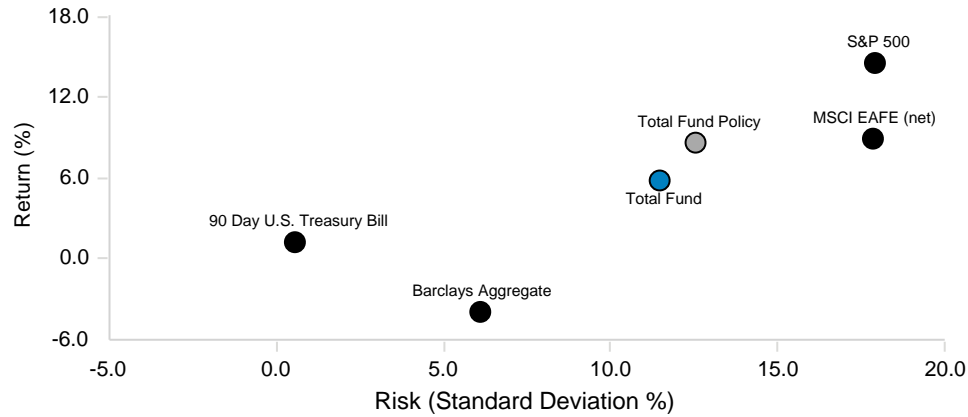
**Comparative Performance - IRR**  
**Private Investments**  
As of September 30, 2023

Comparative Performance - IRR						
	1 Quarter Ending Jun-2023	1 Year Ending Jun-2023	3 Years Ending Jun-2023	5 Years Ending Jun-2023	Since Inception Ending Jun-2023	Inception Date
<b>Real Estate</b>						
Green Cities Company II	1.10	-47.06	-10.64	-2.85	6.66	08/28/2013
Green Cities Company III	-22.60	-42.91	-15.63	-7.07	-3.39	03/03/2016
Westport Real Estate Fund IV	-9.05	-37.12	-9.26	-0.26	4.06	03/24/2014
Long Wharf Real Estate Partners Fund V	-0.94	-4.01	6.95	7.65	7.84	11/20/2015
<b>Private Equity</b>						
Ares Landmark Equity Partners XIV LP	-3.72	-3.67	12.45	4.73	9.50	11/12/2009
Private Equity Investment Fund V	-0.72	-5.08	-3.57	0.85	-1.74	01/21/2010
HarbourVest Partners IX [Consolidated]	1.73	-2.97	28.92	23.38	20.16	07/29/2013
Pomona Capital VIII	-20.67	-21.51	17.45	9.91	19.65	03/25/2014
JPMorgan Venture Capital Fund V	-6.42	-22.58	24.28	16.94	14.77	07/31/2015



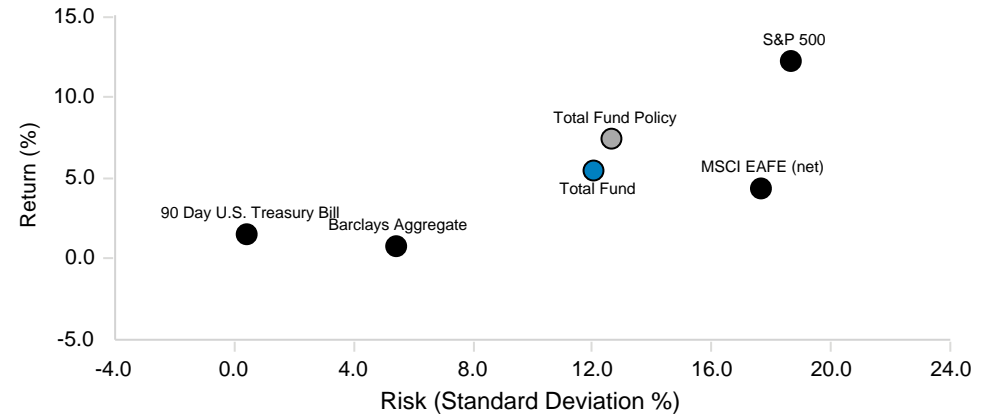
**Town of Palm Beach Retirement System Pension**  
**Total Plan Risk / Return Analysis**  
As of September 30, 2023

**3 Years Ending June 30, 2023**



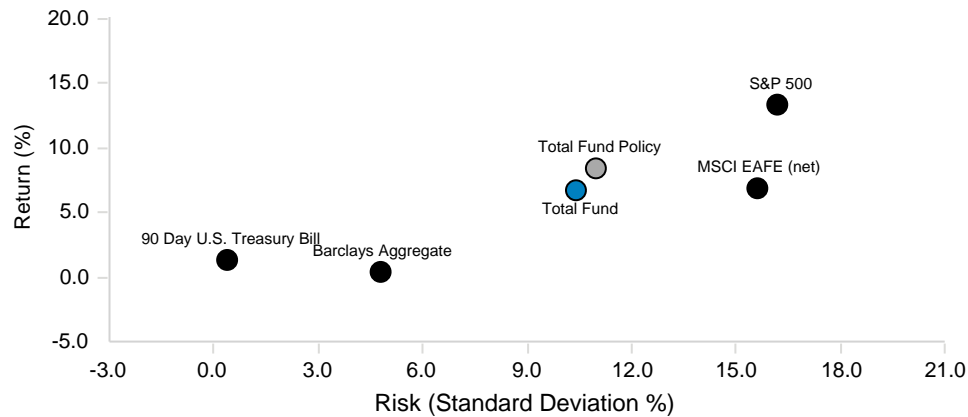
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Down Market Capture
Total Fund	5.87	11.49	0.44	85.87	95.93
Total Fund Policy	8.62	12.53	0.62	100.00	100.00

**5 Years Ending June 30, 2023**



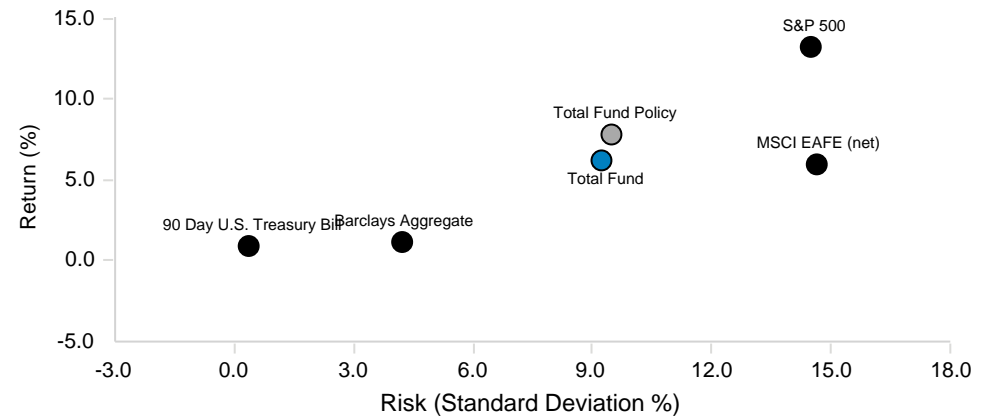
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Down Market Capture
Total Fund	5.47	12.01	0.37	90.03	98.19
Total Fund Policy	7.46	12.67	0.51	100.00	100.00

**7 Years Ending June 30, 2023**



	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Down Market Capture
Total Fund	6.69	10.40	0.54	90.53	98.47
Total Fund Policy	8.43	10.96	0.67	100.00	100.00

**October 1, 2012 To June 30, 2023**



	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Down Market Capture	Inception Date
Total Fund	6.19	9.22	0.60	93.23	104.96	10/01/2012
Total Fund Policy	7.83	9.47	0.75	100.00	100.00	10/01/2012



**Town of Palm Beach Retirement System Pension  
Fee Analysis**

As of September 30, 2023

	Market Value (\$)	Estimated Annual Fee (%)	Estimated Annual Fee (\$)
<b>Total Domestic Equity</b>			
Vanguard Instl Index (VINIX)	76,482,014	0.04	26,769
Geneva Mid Cap Growth Equity	12,674,439	0.60	76,047
Cooke & Bieler Mid Cap Value Equity	12,099,298	0.69	83,485
<b>Total International Equity</b>			
Pear Tree Polaris Foreign Value (QFVRX)	17,525,982	1.01	177,012
Fidelity International Index (FSPSX)	11,297,270	0.04	3,954
MFS International Growth R6 (MGRDX)	7,544,632	0.79	59,603
WCM Focused International Growth (WCMIX)	7,725,905	1.05	81,122
<b>Total Emerging Markets</b>			
Allspring Emerging Markets	8,806,909	0.63	55,484
<b>Total Fixed Income</b>			
Garcia Hamilton Fixed Income Agg.	41,004,717	0.25	102,512
Serenitas Credit Gamma	8,518,979	1.50	127,785
<b>Total Alternative</b>			
Ark Innovation (ARKK)	5,343,628	0.75	40,077
<b>Total Real Estate</b>			
Westport Real Estate Fund IV	1,585,752	1.50	23,786
Long Wharf Real Estate Partners Fund V	2,922,015	1.50	43,830
Green Cities Company III	1,940,049	1.50	29,101
JP Morgan Strategic Property	7,796,164	1.00	77,962
<b>Total Private Equity</b>			
Ares Landmark Equity Partners XIV LP	74,905	1.00	749
Private Equity Investment Fund V	519,658	1.75	9,094
HarbourVest Partners IX [Consolidated]	8,159,420	1.00	81,594
Pomona Capital VIII	491,650	1.00	4,917
JPMorgan Venture Capital Fund V	8,198,566	0.55	45,092
<b>Cash</b>			
Liquid Reserves	9,860,485	0.45	44,372
<b>Total Fund</b>	<b>250,572,437</b>	<b>0.48</b>	<b>1,194,346</b>

Fee information on this page is an illustrative estimate of management fees based on current reported portfolio values. Fee estimates do not reflect actual calculation methodologies or applicable carried interest.



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



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

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

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

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

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

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

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

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

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

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

---

**Clients first.**



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

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

Investment Performance Review  
Period Ending October 31, 2023

**Town of Palm Beach  
Retirement System**  
Monthly Preliminary Returns

---





<u>Equities</u>	<u>Index Returns (%)</u>					
	<u>Month</u>	<u>3 M</u>	<u>YTD</u>	<u>1 Year</u>	<u>3 Yr Ann</u>	<u>5 Yr Ann</u>
S&P 500 Total Return	(2.10)	(8.25)	10.68	10.14	10.36	11.01
Russell Midcap Index	(5.00)	(12.90)	(1.28)	(1.01)	6.04	7.14
Russell 2000 Index	(6.82)	(16.69)	(4.45)	(8.56)	3.95	3.31
Russell 1000 Growth Index	(1.42)	(7.62)	23.20	18.95	8.70	14.22
Russell 1000 Value Index	(3.53)	(9.75)	(1.80)	0.13	10.21	6.60
Russell 3000 Index	(2.65)	(9.08)	9.41	8.38	9.19	10.23
MSCI EAFE NR	(4.05)	(10.88)	2.74	14.40	5.73	4.10
MSCI EM NR	(3.89)	(12.16)	(2.14)	10.80	(3.67)	1.59

<u>Fixed Income</u>	<u>Index Returns (%)</u>					
	<u>Month</u>	<u>3 M</u>	<u>YTD</u>	<u>1 Year</u>	<u>Mod. Adj. Duration</u>	<u>Yield to Worst</u>
U.S. Aggregate	(1.58)	(4.69)	(2.77)	0.36	6.04	5.65
U.S. Corporate Investment Grade	(1.87)	(5.23)	(1.86)	2.77	6.56	6.35
U.S. Corporate High Yield	(1.16)	(2.06)	4.63	6.23	3.55	9.49
Global Aggregate	(1.20)	(5.39)	(3.38)	1.72	6.46	4.35

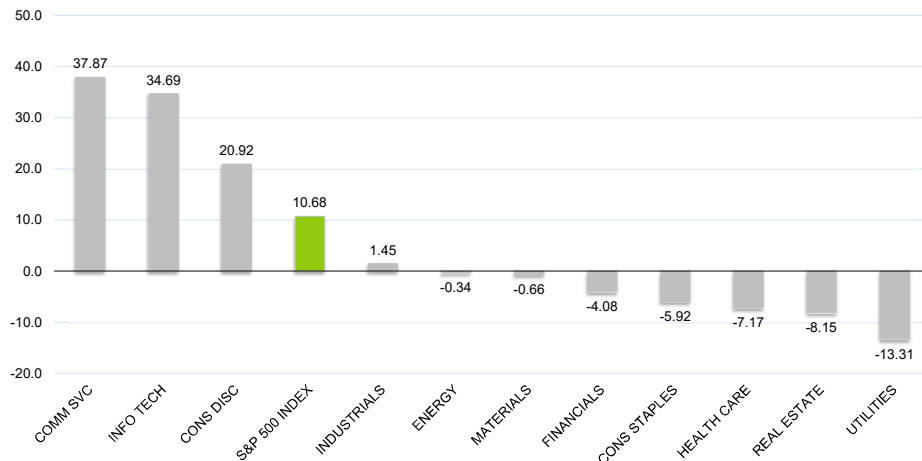
<u>Key Rates</u>	<u>Levels (%)</u>				
	<u>10/31/23</u>	<u>12/31/22</u>	<u>12/31/21</u>	<u>12/31/20</u>	<u>12/31/19</u>
US Generic Govt 3 Mth	5.46	4.34	0.03	0.06	1.54
US Generic Govt 2 Yr	5.09	4.43	0.73	0.12	1.57
US Generic Govt 10 Yr	4.93	3.87	1.51	0.91	1.92
US Generic Govt 30 Yr	5.09	3.96	1.90	1.64	2.39
ICE LIBOR USD 3M	5.64	4.77	0.21	0.24	1.91
Euribor 3 Month ACT/360	3.97	2.13	(0.57)	(0.55)	(0.38)
Bankrate 30Y Mortgage Rates Na	7.74	6.66	3.27	2.87	3.86
Prime	8.50	7.50	3.25	3.25	4.75

Russell Indices Style Returns							
YTD			2022				
	V	B	G		V	B	G
L	-1.8	10.3	23.2	L	-7.6	-19.1	-29.1
M	-4.5	-1.3	4.3	M	-12.1	-17.3	-26.7
S	-6.5	-4.5	-2.9	S	-14.5	-20.5	-26.4

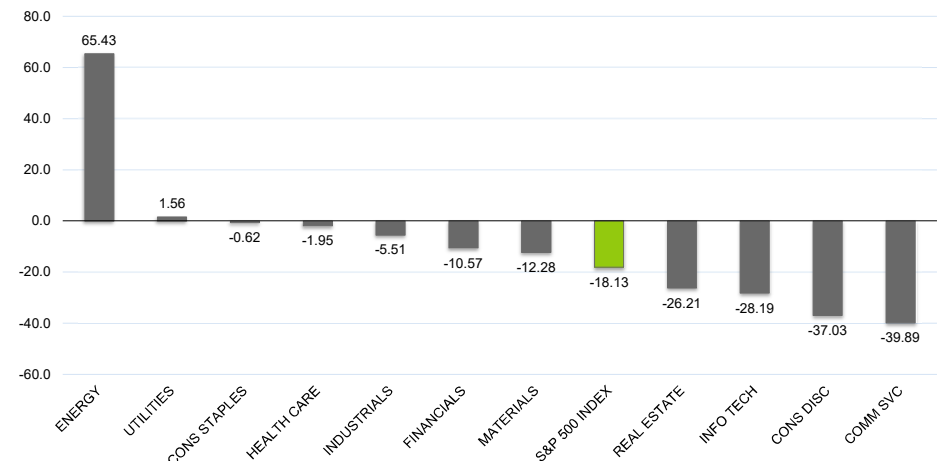
<u>Currencies</u>	<u>Levels</u>		
	<u>10/31/23</u>	<u>12/31/22</u>	<u>12/31/21</u>
Euro Spot	1.06	1.07	1.14
British Pound Spot	1.22	1.21	1.35
Japanese Yen Spot	151.75	131.12	115.08
Swiss Franc Spot	0.91	0.92	0.91

<u>Commodities</u>	<u>Levels</u>		
	<u>10/31/23</u>	<u>12/31/22</u>	<u>12/31/21</u>
Oil	81.02	80.45	67.42
Gasoline	3.46	3.21	3.29
Natural Gas	3.58	3.93	3.04
Gold	1,994.30	1,857.70	1,187.30
Silver	22.95	24.21	16.50
Copper	364.90	381.45	437.85
Corn	478.75	678.00	556.50
BBG Commodity TR Idx	238.05	245.89	211.80

YTD Sector Returns



2022 Sector Returns



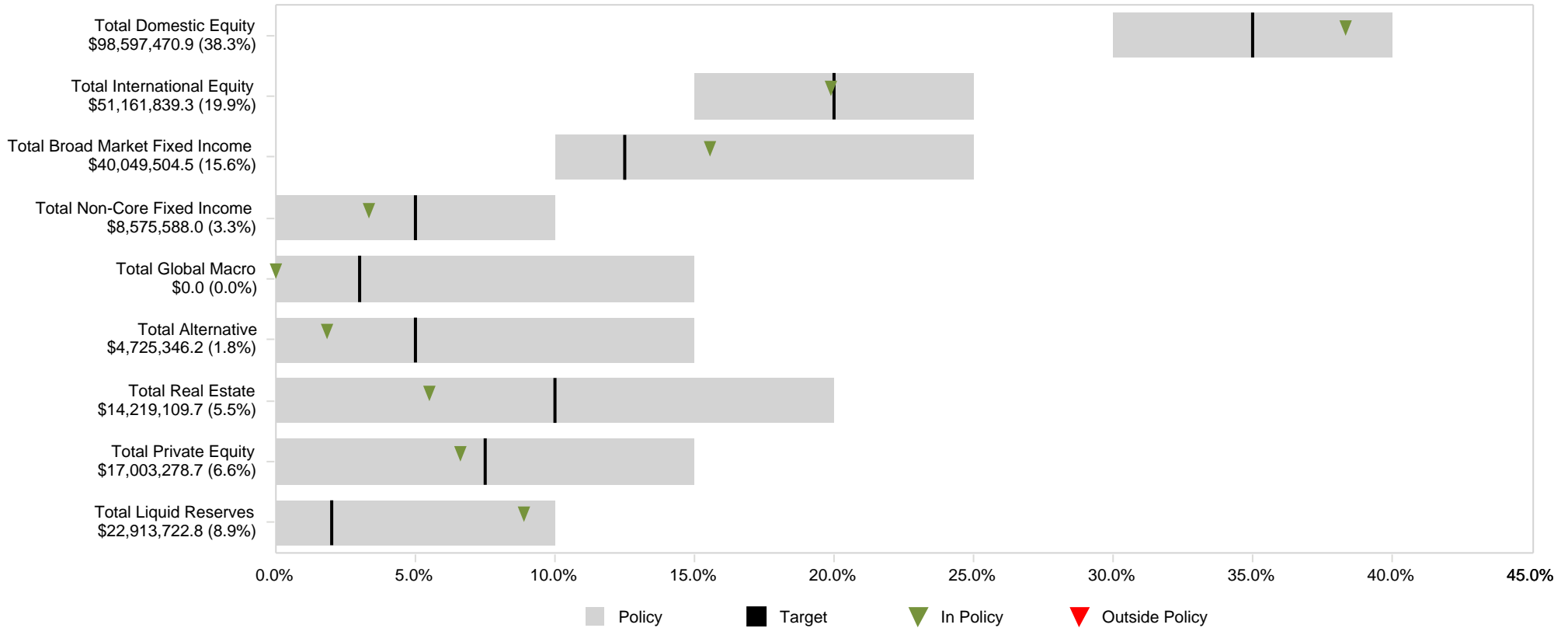
Source: Bloomberg & Investment Metrics. For informational purposes only and should not be regarded as investment advice. Information is based on sources and data believed to be reliable, but AndCo Consulting cannot guarantee the accuracy, adequacy or completeness of the information. The material provided herein is valid only as of the date of distribution and not as of any future date.  
\*Heat maps are displayed utilizing a 9-color scale, with green as the highest return for the time period noted and red as the lowest return for the time period noted. Color scales within each time period are mutually exclusive.

Manager	MV as of	Most Recent Statement Date
<b>Private Equity</b>		
HarbourVest Partners	08/30/2023 - Distrubiton	6/30/2023
JP Morgan Venture Cap V	07/31/2023 - Distribution	6/30/2023
Landmark XIV	9/30/2023	9/30/2023
Pomona Cap VIII	07/26/2023 - Distribution	6/30/2023
Private Equity Fund V	6/30/2023	6/30/2023
<b>Real Estate</b>		
Green Cities III	9/30/2023	9/30/2023
Long Wharf Real Estate Fund V	10/31/2023	10/31/2023
Westport RE Fund IV	9/30/2023	9/30/2023
JP Morgan Strategic Property	10/31/2023	10/31/2023

Performance and valuations presented in this report are preliminary, with 85.4% of assets reporting finalized figures.  
NAVs for non-reporting investments are carried forward from the most recent valuation.



**Executive Summary**



**Asset Allocation Compliance**

	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
<b>Total Fund</b>	<b>257,245,860</b>	<b>100.0</b>	<b>N/A</b>	<b>N/A</b>	<b>100.0</b>
Total Domestic Equity	98,597,471	38.3	30.0	40.0	35.0
Total International Equity	51,161,839	19.9	15.0	25.0	20.0
Total Broad Market Fixed Income	40,049,504	15.6	10.0	25.0	12.5
Total Non-Core Fixed Income	8,575,588	3.3	0.0	10.0	5.0
Total Global Macro	-	0.0	0.0	15.0	3.0
Total Alternative	4,725,346	1.8	0.0	15.0	5.0
Total Real Estate	14,219,110	5.5	0.0	20.0	10.0
Total Private Equity	17,003,279	6.6	0.0	15.0	7.5
Total Liquid Reserves	22,913,723	8.9	0.0	10.0	2.0



**Financial Reconciliation**  
**Total Fund**  
**1 Month Ending October 31, 2023**

<b>Financial Reconciliation - 1 Month</b>									
	<b>Market Value 10/01/2023</b>	<b>Net Transfers</b>	<b>Contributions</b>	<b>Distributions</b>	<b>Management Fees</b>	<b>Other Expenses</b>	<b>Income</b>	<b>Apprec./ Deprec.</b>	<b>Market Value 10/31/2023</b>
<b>Total Domestic Equity</b>	<b>101,255,752</b>	-	-	-	-	-	<b>12,785</b>	<b>-2,671,066</b>	<b>98,597,471</b>
Vanguard Instl Index (VINIX)	76,482,014	-	-	-	-	-	-	-1,611,227	74,870,787
Geneva Mid Cap Growth Equity	12,674,439	-	-	-	-	-	4,055	-546,552	12,131,943
Cooke & Bieler Mid Cap Value Equity	12,099,298	-	-	-	-	-	8,730	-513,287	11,594,741
<b>Total Developed Country Equity</b>	<b>44,093,789</b>	-	-	-	-	-	-	<b>-1,473,268</b>	<b>42,620,521</b>
Pear Tree Polaris Foreign Value (QFVRX)	17,525,982	-	-	-	-	-	-	-670,210	16,855,773
Fidelity International Index (FSPSX)	11,297,270	-	-	-	-	-	-	-364,594	10,932,676
MFS International Growth R6 (MGRDX)	7,544,632	-	-	-	-	-	-	-159,579	7,385,053
WCM Focused International Growth (WCMIX)	7,725,905	-	-	-	-	-	-	-278,886	7,447,019
<b>Total Emerging Markets Equity</b>	<b>8,806,909</b>	<b>4,484</b>	-	-	<b>-4,484</b>	-	-	<b>-265,590</b>	<b>8,541,319</b>
Allspring Emerging Markets	8,806,909	4,484	-	-	-4,484	-	-	-265,590	8,541,319
<b>Total Fixed Income</b>	<b>49,523,696</b>	-	-	-	<b>-24,801</b>	-	<b>115,022</b>	<b>-988,824</b>	<b>48,625,092</b>
Garcia Hamilton Fixed Income Agg.	41,004,717	-	-	-	-	-	115,022	-1,070,234	40,049,504
Serenitas Credit Gamma	8,518,979	-	-	-	-24,801	-	-	81,410	8,575,588
<b>Total Alternative</b>	<b>5,343,628</b>	-	-	-	-	-	-	<b>-618,282</b>	<b>4,725,346</b>
Ark Innovation (ARKK)	5,343,628	-	-	-	-	-	-	-618,282	4,725,346
<b>Total Real Estate</b>	<b>14,243,980</b>	<b>-28</b>	-	-	<b>-20,167</b>	-	<b>23,000</b>	<b>-27,675</b>	<b>14,219,110</b>
Green Cities Company III	1,940,049	-	-	-	-	-	-	-	1,940,049
Long Wharf Real Estate Partners Fund V	2,922,015	-	-	-	-	-	-	225	2,922,240
Westport Real Estate Fund IV	1,585,752	-	-	-	-	-	-	-	1,585,752
JP Morgan Strategic Property	7,796,164	-28	-	-	-20,167	-	23,000	-27,900	7,771,069
<b>Total Private Equity</b>	<b>17,444,199</b>	<b>-435,738</b>	-	-	<b>-5,182</b>	-	-	-	<b>17,003,279</b>
Ares Landmark Equity Partners XIV LP	74,905	-	-	-	-	-	-	-	74,905
Private Equity Investment Fund V	519,658	-	-	-	-	-	-	-	519,658
HarbourVest Partners IX (Consolidated)	8,159,420	-	-	-	-	-	-	-	8,159,420
Pomona Capital VIII	491,650	-440,920	-	-	-	-	-	-	50,730
JPMorgan Venture Capital Fund V	8,198,566	5,182	-	-	-5,182	-	-	-	8,198,566
<b>Total Liquid Reserves</b>	<b>9,860,485</b>	-	<b>13,057,244</b>	-	-	-	<b>41,412</b>	<b>-45,418</b>	<b>22,913,723</b>
Liquid Reserves	9,860,485	-	13,057,244	-	-	-	41,412	-45,418	22,913,723
<b>Total Fund</b>	<b>250,572,437</b>	<b>-431,282</b>	<b>13,057,244</b>	-	<b>-54,634</b>	-	<b>192,219</b>	<b>-6,090,124</b>	<b>257,245,860</b>

All figures are preliminary and subject to change.



## Financial Reconciliation - Fiscal Year To Date

	Market Value 10/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 10/31/2023
<b>Total Domestic Equity</b>	<b>101,255,752</b>	-	-	-	-	-	<b>12,785</b>	<b>-2,671,066</b>	<b>98,597,471</b>
Vanguard Instl Index (VINIX)	76,482,014	-	-	-	-	-	-	-1,611,227	74,870,787
Geneva Mid Cap Growth Equity	12,674,439	-	-	-	-	-	4,055	-546,552	12,131,943
Cooke & Bieler Mid Cap Value Equity	12,099,298	-	-	-	-	-	8,730	-513,287	11,594,741
<b>Total Developed Country Equity</b>	<b>44,093,789</b>	-	-	-	-	-	-	<b>-1,473,268</b>	<b>42,620,521</b>
Pear Tree Polaris Foreign Value (QFVRX)	17,525,982	-	-	-	-	-	-	-670,210	16,855,773
Fidelity International Index (FSPSX)	11,297,270	-	-	-	-	-	-	-364,594	10,932,676
MFS International Growth R6 (MGRDX)	7,544,632	-	-	-	-	-	-	-159,579	7,385,053
WCM Focused International Growth (WCMIX)	7,725,905	-	-	-	-	-	-	-278,886	7,447,019
<b>Total Emerging Markets Equity</b>	<b>8,806,909</b>	<b>4,484</b>	-	-	<b>-4,484</b>	-	-	<b>-265,590</b>	<b>8,541,319</b>
Allspring Emerging Markets	8,806,909	4,484	-	-	-4,484	-	-	-265,590	8,541,319
<b>Total Fixed Income</b>	<b>49,523,696</b>	-	-	-	<b>-24,801</b>	-	<b>115,022</b>	<b>-988,824</b>	<b>48,625,092</b>
Garcia Hamilton Fixed Income Agg.	41,004,717	-	-	-	-	-	115,022	-1,070,234	40,049,504
Serenitas Credit Gamma	8,518,979	-	-	-	-24,801	-	-	81,410	8,575,588
<b>Total Alternative</b>	<b>5,343,628</b>	-	-	-	-	-	-	<b>-618,282</b>	<b>4,725,346</b>
Ark Innovation (ARKK)	5,343,628	-	-	-	-	-	-	-618,282	4,725,346
<b>Total Real Estate</b>	<b>14,243,980</b>	<b>-28</b>	-	-	<b>-20,167</b>	-	<b>23,000</b>	<b>-27,675</b>	<b>14,219,110</b>
Green Cities Company III	1,940,049	-	-	-	-	-	-	-	1,940,049
Long Wharf Real Estate Partners Fund V	2,922,015	-	-	-	-	-	-	225	2,922,240
Westport Real Estate Fund IV	1,585,752	-	-	-	-	-	-	-	1,585,752
JP Morgan Strategic Property	7,796,164	-28	-	-	-20,167	-	23,000	-27,900	7,771,069
<b>Total Private Equity</b>	<b>17,444,199</b>	<b>-435,738</b>	-	-	<b>-5,182</b>	-	-	-	<b>17,003,279</b>
Ares Landmark Equity Partners XIV LP	74,905	-	-	-	-	-	-	-	74,905
Private Equity Investment Fund V	519,658	-	-	-	-	-	-	-	519,658
HarbourVest Partners IX (Consolidated)	8,159,420	-	-	-	-	-	-	-	8,159,420
Pomona Capital VIII	491,650	-440,920	-	-	-	-	-	-	50,730
JPMorgan Venture Capital Fund V	8,198,566	5,182	-	-	-5,182	-	-	-	8,198,566
<b>Total Liquid Reserves</b>	<b>9,860,485</b>	-	<b>13,057,244</b>	-	-	-	<b>41,412</b>	<b>-45,418</b>	<b>22,913,723</b>
Liquid Reserves	9,860,485	-	13,057,244	-	-	-	41,412	-45,418	22,913,723
<b>Total Fund</b>	<b>250,572,437</b>	<b>-431,282</b>	<b>13,057,244</b>	-	<b>-54,634</b>	-	<b>192,219</b>	<b>-6,090,124</b>	<b>257,245,860</b>

All figures are preliminary and subject to change.





**Asset Allocation & Performance**  
**Program Composite Performance**

As of October 31, 2023

Asset Allocation & Performance												
	Allocation		Performance(%)									
	Market Value \$	%	MTH	QTD	YTD	FYTD	1 YR	3 YR	5 YR	7 YR	Inception	Inception Date
<b>Total Fund (Net)</b>	<b>257,245,860</b>	<b>100.0</b>	<b>-2.38</b>	<b>-2.38</b>	<b>1.66</b>	<b>-2.38</b>	<b>2.68</b>	<b>2.40</b>	<b>4.62</b>	<b>5.36</b>	<b>5.52</b>	<b>09/01/2012</b>
Total Fund (Gross)			-2.36	-2.36	1.95	-2.36	2.99	2.62	4.86	5.62	5.78	
Total Fund Policy			-2.38	-2.38	4.22	-2.38	6.47	5.11	6.65	7.18	7.13	
Total Fund Policy x Pvt Invest			-2.26	-2.26	3.37	-2.26	5.61	3.79	5.21	5.72	6.21	
<b>Total Domestic Equity (Net)</b>	<b>98,597,471</b>	<b>38.3</b>	<b>-2.63</b>	<b>-2.63</b>	<b>8.21</b>	<b>-2.63</b>	<b>8.42</b>	<b>9.14</b>	<b>9.82</b>	<b>10.77</b>	<b>10.71</b>	<b>09/01/2012</b>
Total Domestic Equity (Gross)			-2.63	-2.63	8.38	-2.63	8.59	9.29	9.97	10.94	10.92	
Total Domestic Equity Policy			-2.65	-2.65	9.41	-2.65	8.38	9.19	10.23	11.45	11.95	
<b>Total International Equity (Net)</b>	<b>42,620,521</b>	<b>16.6</b>	<b>-3.34</b>	<b>-3.34</b>	<b>2.67</b>	<b>-3.34</b>	<b>12.66</b>	<b>3.09</b>	<b>4.13</b>	<b>4.81</b>	<b>5.55</b>	<b>09/01/2012</b>
Total International Equity (Gross)			-3.34	-3.34	2.67	-3.34	12.67	3.09	4.27	5.05	5.84	
Total International Equity Policy			-4.11	-4.11	1.47	-4.11	12.66	3.54	3.96	4.99	N/A	
<b>Total Broad Market Fixed Income (Net)</b>	<b>40,049,504</b>	<b>15.6</b>	<b>-2.33</b>	<b>-2.33</b>	<b>-5.02</b>	<b>-2.33</b>	<b>-1.17</b>	<b>-5.69</b>	<b>-0.53</b>	<b>N/A</b>	<b>-0.57</b>	<b>07/01/2018</b>
Total Broad Market Fixed Income (Gross)			-2.33	-2.33	-4.80	-2.33	-0.95	-5.53	-0.35	N/A	-0.41	
Total Fixed Income Policy			-1.58	-1.58	-2.77	-1.58	0.36	-5.57	-0.30	-0.01	-0.43	
<b>Total Non-Core Fixed Income (Net)</b>	<b>8,575,588</b>	<b>3.3</b>	<b>0.66</b>	<b>0.66</b>	<b>N/A</b>	<b>0.66</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>7.25</b>	<b>04/01/2023</b>
Total Non-Core Fixed Income (Gross)			0.96	0.96	N/A	0.96	N/A	N/A	N/A	N/A	9.79	
Total Fixed Income Policy			-1.58	-1.58	-2.77	-1.58	0.36	-5.57	-0.30	-0.01	-5.56	
<b>Total Alternative (Net)</b>	<b>4,725,346</b>	<b>1.8</b>	<b>-11.57</b>	<b>-11.57</b>	<b>12.29</b>	<b>-11.57</b>	<b>-8.36</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-37.96</b>	<b>06/01/2021</b>
Total Alternative (Gross)			-11.51	-11.51	12.99	-11.51	-7.69	N/A	N/A	N/A	-37.48	
Total Alternative Policy			-3.52	-3.52	17.87	-3.52	21.06	5.71	7.92	9.77	-3.33	
<b>Total Real Estate (Net)*</b>	<b>14,219,110</b>	<b>5.5</b>	<b>-0.17</b>	<b>-0.17</b>	<b>-16.62</b>	<b>-0.17</b>	<b>-27.41</b>	<b>-5.85</b>	<b>-1.96</b>	<b>0.63</b>	<b>4.34</b>	<b>08/01/2013</b>
Total Real Estate (Gross)			-0.03	-0.03	-15.57	-0.03	-26.45	-5.07	-1.18	1.39	5.44	
Total Real Estate Policy			0.00	0.00	-7.89	0.00	-12.40	7.57	6.10	N/A	9.20	
<b>Total Private Equity (Net)*</b>	<b>17,003,279</b>	<b>6.6</b>	<b>-0.03</b>	<b>-0.03</b>	<b>-4.64</b>	<b>-0.03</b>	<b>-8.10</b>	<b>14.21</b>	<b>15.58</b>	<b>15.58</b>	<b>16.11</b>	<b>09/01/2012</b>
Total Private Equity (Gross)			0.00	0.00	-4.53	0.00	-7.99	14.33	15.73	15.74	16.24	
Total Private Equity Policy			-1.86	-1.86	13.45	-1.86	13.45	13.67	14.34	15.61	15.46	
<b>Total Liquid Reserves</b>	<b>22,913,723</b>	<b>8.9</b>										

All returns and valuations presented in this report are preliminary and subject to change  
 \*Time weighted returns are for reference. Please refer to IRR calculations in quarterly report.



Asset Allocation & Performance											
	Allocation	Performance(%)									
	Market Value \$	MTH	QTD	YTD	FYTD	1 YR	3 YR	5 YR	7 YR	Inception	Inception Date
<b>Total Domestic Equity</b>											
Vanguard Instl Index (Net)	74,870,787	-2.11	-2.11	10.66	-2.11	10.10	10.33	N/A	N/A	10.81	09/01/2019
S&P 500 Index (Net)		-2.13	-2.13	10.25	-2.13	9.59	9.84	10.44	11.59	10.28	
Geneva Mid Cap Growth Equity (Net)	12,131,943	-4.28	-4.28	3.84	-4.28	4.10	3.32	8.48	10.53	9.21	08/01/2005
Geneva Mid Cap Growth Equity (Gross)		-4.28	-4.28	4.45	-4.28	4.71	3.82	8.97	11.04	N/A	
Russell Midcap Growth Index		-5.10	-5.10	4.28	-5.10	3.35	0.79	8.09	10.22	8.75	
Cooke & Bieler Mid Cap Value Equity (Net)	11,594,741	-4.17	-4.17	2.04	-4.17	4.78	9.82	7.48	N/A	5.63	08/01/2018
Cooke & Bieler Mid Cap Value Equity (Gross)		-4.17	-4.17	2.75	-4.17	5.51	10.39	8.03	N/A	6.14	
Russell Midcap Value Index		-4.95	-4.95	-4.44	-4.95	-3.56	8.78	5.69	6.43	4.03	
<b>Total International Equity</b>											
Pear Tree Polaris Foreign Value (QFVRX)(Net)	16,855,773	-3.82	-3.82	3.71	-3.82	14.09	7.09	N/A	N/A	4.37	09/01/2020
MSCI EAFE Index (Net)		-4.05	-4.05	2.74	-4.05	14.40	5.73	4.10	4.98	3.21	
MSCI EAFE Value Index (Net)		-4.40	-4.40	5.08	-4.40	18.11	10.97	3.30	4.24	7.34	
Fidelity International Index (FSPSX)(Net)	10,932,676	-3.23	-3.23	3.37	-3.23	15.37	5.93	N/A	N/A	3.51	09/01/2020
MSCI EAFE (Net) Index		-4.05	-4.05	2.74	-4.05	14.40	5.73	4.10	4.98	3.21	
MFS International Growth (MGRDX) (Net)	7,385,053	-2.12	-2.12	1.50	-2.12	11.13	3.10	6.17	N/A	4.35	07/01/2018
MSCI AC World ex USA (Net)		-4.13	-4.13	0.99	-4.13	12.07	3.03	3.46	4.32	1.74	
MSCI AC World ex USA Growth (Net)		-3.89	-3.89	-1.38	-3.89	9.19	-2.57	3.75	4.58	1.57	
WCM Focused International Growth (WCMIX) (Net)	7,447,019	-3.61	-3.61	0.51	-3.61	7.33	-0.51	7.87	N/A	5.87	07/01/2018
MSCI AC World ex USA (Net)		-4.13	-4.13	0.99	-4.13	12.07	3.03	3.46	4.32	1.74	
MSCI AC World ex USA Growth (Net)		-3.89	-3.89	-1.38	-3.89	9.19	-2.57	3.75	4.58	1.57	
<b>Total Emerging Markets Equity</b>											
Allspring Emerging Markets (Net)	8,541,319	-3.07	-3.07	-4.05	-3.07	9.31	-6.69	1.49	2.02	1.50	10/01/2013
Allspringl Emerging Markets (Gross)		-3.02	-3.02	-3.54	-3.02	10.00	-6.10	2.13	2.66	2.14	
MSCI Emerging Markets (Net) Index		-3.89	-3.89	-2.14	-3.89	10.80	-3.67	1.59	2.61	1.65	

All returns and valuations presented in this report are preliminary and subject to change



**Asset Allocation & Performance**  
**Investment Performance**  
As of October 31, 2023

	Allocation	Performance(%)									
	Market Value \$	MTH	QTD	YTD	FYTD	1 YR	3 YR	5 YR	7 YR	Inception	Inception Date
Total Broad Market Fixed Income											
Garcia Hamilton Fixed Income Agg (Net)	40,049,504	-2.33	-2.33	-5.02	-2.33	-1.17	-5.69	-0.56	N/A	-0.60	08/01/2018
Garcia Hamilton Fixed Income Agg. (Gross)		-2.33	-2.33	-4.80	-2.33	-0.95	-5.53	-0.39	N/A	-0.44	
Blmbg. U.S. Aggregate Index		-1.58	-1.58	-2.77	-1.58	0.36	-5.57	-0.06	-0.21	-0.21	
Total Non-Core Fixed Income											
Serenitas Credit Gamma (Net)	8,575,588	0.66	0.66	N/A	0.66	N/A	N/A	N/A	N/A	N/A	03/01/2023
Blmbg. U.S. Aggregate Index		-1.58	-1.58	-2.77	-1.58	0.36	-5.57	-0.06	-0.21	-3.16	
Total Alternative											
Ark Innovation (ARKK) (Net)	4,725,346	-11.57	-11.57	12.29	-11.57	-8.36	N/A	N/A	N/A	-37.96	06/01/2021
MSCI ACWI IMI Disruptive Technology Index (Net)		-3.52	-3.52	17.87	-3.52	21.06	4.91	11.21	12.91	-3.33	
Total Real Estate											
JP Morgan Strategic Property (Net)	7,771,069	-0.32	-0.32	-8.50	-0.32	-12.63	4.67	3.52	N/A	4.36	03/01/2017
JP Morgan Strategic Property (Gross)		-0.06	-0.06	-7.54	-0.06	-11.72	5.77	4.59	N/A	5.39	
NCREIF Fund Index-Open End Diversified Core (EW)		0.00	0.00	-7.89	0.00	-12.40	7.57	6.10	6.73	6.73	
Total Liquid Reserves	22,913,723										
Annualized Cash Yield: 5.02% (10/31/2023)											

All returns and valuations presented in this report are preliminary and subject to change



**Total Fund Policy**

Allocation Mandate	Weight (%)
<b>Jan-1979</b>	
Russell 3000 Index	30.00
MSCI EAFE (Net) Index	13.00
Blmbg. U.S. Aggregate Index	24.00
CPI + 5%	9.00
90 Day T-Bill + 3.75%	22.00
S&P 500 + 5%	2.00
<b>Jul-2013</b>	
S&P 500 Index	7.50
MSCI EAFE (Net) Index	15.00
Blmbg. U.S. Aggregate Index	17.50
Bloomberg Commodity Index Total Return	2.50
90 Day T-Bills + 5%	15.00
S&P 500 + 5%	10.00
Russell Midcap Value Index	3.75
Russell Midcap Growth Index	3.75
MSCI Emerging Markets (Net) Index	10.00
Bloomberg U.S. TIPS Index	2.50
Blmbg. U.S. Corp High Yield	2.50
NCREIF Property Index	10.00
<b>Jan-2017</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Blmbg. U.S. Aggregate Index	12.50
Blmbg. Global Multiverse	5.00
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
S&P 500 + 3%	7.50
Total GTAA/Hedge Fund Policy	10.00
<b>Oct-2020</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Total Fixed Income Policy	17.50
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
S&P 500 + 3%	7.50
Total GTAA/Hedge Fund Policy	10.00

Allocation Mandate	Weight (%)
<b>May-2021</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Total Fixed Income Policy	17.50
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
Total Global Macro Policy	3.00
Total Alternative Policy	5.00
Total Private Equity Policy	7.50
90 Day U.S. Treasury Bill	2.00
<b>Mar-2023</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Total Fixed Income Policy	20.50
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
Total Alternative Policy	5.00
Total Private Equity Policy	7.50
90 Day U.S. Treasury Bill	2.00



**Total Fund Policy x Private Investments**

Allocation Mandate	Weight (%)
<b>Jan-1979</b>	
Russell 3000 Index	30.00
MSCI EAFE (Net) Index	13.00
Blmbg. U.S. Aggregate Index	24.00
CPI + 5%	9.00
90 Day T-Bill + 3.75%	22.00
S&P 500 + 5%	2.00
<b>Jul-2013</b>	
S&P 500 Index	7.50
MSCI EAFE (Net) Index	15.00
Blmbg. U.S. Aggregate Index	17.50
Bloomberg Commodity Index Total Return	2.50
90 Day T-Bills + 5%	15.00
S&P 500 + 5%	10.00
Russell Midcap Value Index	3.75
Russell Midcap Growth Index	3.75
MSCI Emerging Markets (Net) Index	10.00
Bloomberg U.S. TIPS Index	2.50
Blmbg. U.S. Corp High Yield	2.50
NCREIF Property Index	10.00
<b>Jan-2017</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Blmbg. U.S. Aggregate Index	12.50
Blmbg. Global Multiverse	5.00
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
0%	17.50
<b>Oct-2020</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Total Fixed Income Policy	17.50
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
0%	17.50

Allocation Mandate	Weight (%)
<b>May-2021</b>	
Russell 3000 Index	35.00
MSCI AC World ex USA	20.00
Total Fixed Income Policy	17.50
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
Total Global Macro Policy	3.00
Total Alternative Policy	5.00
0%	7.50
90 Day U.S. Treasury Bill	2.00



Total Domestic Equity Policy		Total Alternative Policy	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
<b>Jan-1926</b>		<b>Jan-1999</b>	
S&P 500 Index	100.00	S&P 500 Index (Net)	100.00
<b>Jan-2017</b>		<b>May-2021</b>	
Russell 3000 Index	100.00	MSCI ACWI IMI Disruptive Technology Index (Net)	100.00
Total International Equity Policy		Total Real Estate Policy	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
<b>Oct-2012</b>		<b>Sep-2013</b>	
MSCI EAFE (Net) Index	100.00	NCREIF Property + 3%	100.00
<b>Jan-2017</b>		<b>Jan-2017</b>	
MSCI AC World ex USA	100.00	NCREIF Fund Index-Open End Diversified Core (EW)	100.00
Total Fixed Income Policy		Total Private Equity Policy	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
<b>Mar-1997</b>		<b>Jan-1926</b>	
Bimbg. U.S. Aggregate Index	50.00	CPI + 5%	82.00
Bimbg. U.S. Corp High Yield	25.00	S&P 500 + 5%	18.00
Bloomberg U.S. TIPS Index	25.00	<b>Jul-2013</b>	
<b>Oct-2020</b>		S&P 500 + 5%	100.00
Bimbg. U.S. Aggregate Index	100.00	<b>Jan-2017</b>	
		S&P 500 + 3%	100.00



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

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

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

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

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

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

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

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

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

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

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

---



**Clients first.**



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

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