
Grand Rapids Police and Fire Retirement System

Investment Performance Review
Period Ending June 30, 2024

MARINER

2nd Quarter 2024 Market Environment

The Economy

- The US Federal Reserve (the Fed) continued on its stable trajectory, holding rates steady during the second quarter. Capital markets have struggled to accurately predict the pace and timing of future Fed actions, resulting in an up and down quarter. In its press release for the June meeting, the Fed continued to assert that “In considering any adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data, the evolving outlook, and the balance of risks.”
- The Fed’s prolonged pause in its rate-hiking cycle and the insertion of the word “any” in its December press release provided capital markets hope that the Fed may pivot in its stance and begin reducing rates to a less restrictive level in 2024. The Fed’s published June “Dot Plot” revised expectations from three quarter-point rate cuts during the year to just one quarter-point rate cut. If this projection were to materialize, it would result in the first rate cut since the COVID pandemic in 2020.
- Growth in the US labor market continued in June, as nonfarm payrolls increased by 206,000 while unemployment rose slightly from 3.8% at the end of the first quarter to 4.1% at the end of the second quarter. Federal Reserve Chair Jerome Powell has maintained that “an unexpected weakening in the labor market could also warrant a policy response,” later defining unexpected weakening as something that would occur outside of their general forecasts.

Equity (Domestic and International)

- US equity results were mixed for the quarter, with large-capitalization (cap) stocks strongly outpacing small-cap stocks. As market participants continue to revise projections of future Fed actions, they sought safety among large-cap stocks due to these companies lessened dependence on external financing. The S&P 500 Index rose a solid 4.3% for the quarter, but ended a two-quarter streak of double-digit gains.
- Large-cap equity benchmarks continue to experience top-heavy concentration among a limited number of stocks. The top 10 stocks in the S&P 500 Index make up nearly 36% of the index’s weight as of June 2024. Year-to-date, these 10 stocks have contributed to more than 60% of the benchmark’s total return.
- International stocks also continued to experience growth during the second quarter, but results were muted by a strengthening US Dollar (USD). USD performance of international stocks lagged local currency (LCL) returns in most regions for the quarter, albeit to varying degrees.

Fixed Income

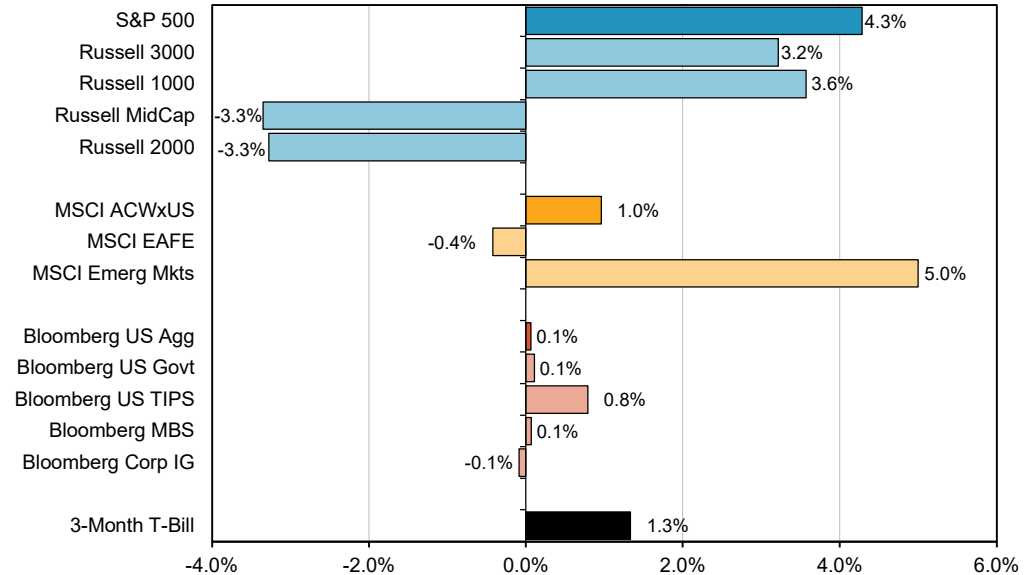
- Fixed-income markets remained largely steady during the quarter. While sticky inflation numbers and a robust job market prompted the Fed to keep the fed funds rate unchanged during the quarter, this lack of action also tempered expectations for the number of potential rate cuts in 2024.
- High-yield bonds outperformed investment-grade issues for the quarter, largely due to higher coupons. The high-yield index edged out the Bloomberg US Aggregate Bond Index, the bellwether bond benchmark, due to relative stability in both the yield curve and economic conditions.
- Global bonds continue to lag the domestic bond market, with the Bloomberg US Aggregate Bond Index outpacing the Global Aggregate ex-US Index by 2.2% for the quarter. The return gap between the two benchmarks continues to widen as the domestic index has outperformed the global index by 3.3% year-to-date.

Market Themes

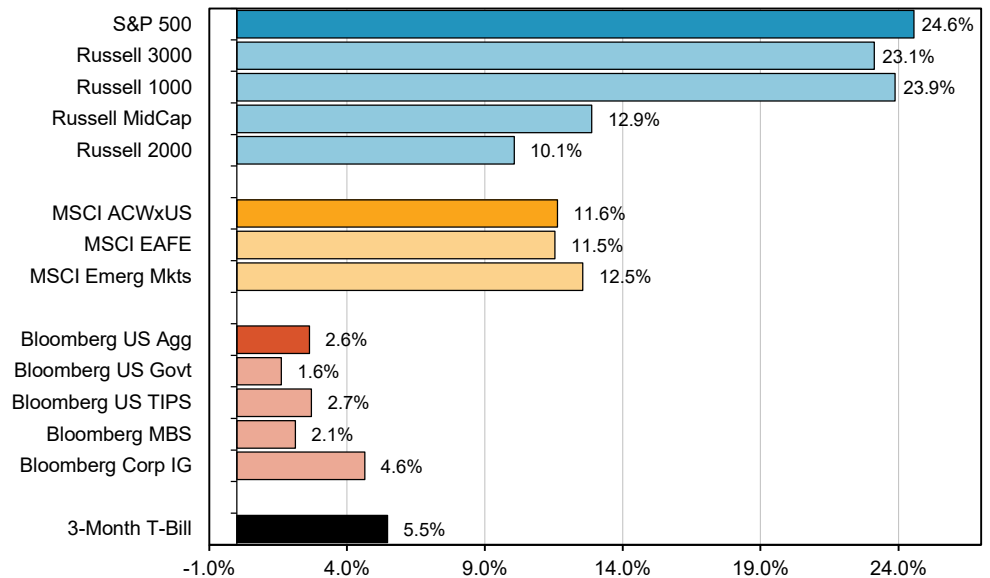
- Domestic and international equity markets posted strong results in the second quarter. Continuing their robust 2023 run, large-cap growth sectors continued to outpace their value counterparts in 2024, and by a wider margin than the prior year. The brief increased breadth markets experienced during of the first quarter did not continue during the second quarter, and so once again, large-cap growth stocks were the best-performing US asset category.
- Central banks remained vigilant in their stances to bring inflation under control. While inflation readings remain stubbornly elevated, signs of stable-to-cooling price pressures have shown up in most regions around the world. Domestically, job growth has slowed from a pace of 300,000+ month-over-month growth to just over 200,000 net new jobs.
- Policy rates were stable across most developed markets as central banks continued their tight monetary stances. Expectations of looser monetary policy have been frustrated by mixed economic data and central banks’ inaction so far this year.
- Ongoing military conflicts coupled with global economic uncertainty continue to act as headwinds to international market results. While global disruptions from the Russia-Ukraine conflict seemed to subside during the quarter, the proxy war in the Middle East has spread to other countries in the region and unsettled shipping channels globally.

- Performance in the domestic equity markets was disparate during the second quarter. After a more encouraging showing last quarter, where markets broadened out in terms of strength, large-cap stocks once again surged ahead while smaller-cap stocks weakened slightly. For the period, the large-cap S&P 500 and Russell 1000 indexes posted returns of 4.3% and 3.6%, respectively. The broad-cap Russell 3000 index lagged slightly, returning a more modest 3.2%. Outside of large-cap issues, the Russell Mid Cap and Russell 2000 indexes both experienced equivalent pullbacks during the quarter, with each benchmark returning -3.3%.
- International developed market equities were muted during the quarter. The MSCI ACWI ex US Index posted a modest 1.0% gain for the quarter, while the MSCI EAFE Index fell slightly, posting a return of -0.4% in USD terms. International emerging market (EM) equities posting a 5.0% return for the quarter, outpacing the performance of their developed market counterparts. Much of the solid performance in the EM region was attributed to a bounce back in China, Taiwan, and Singapore, each posting strong USD results during the quarter.
- Most broad fixed-income indexes rose slightly during the second quarter of 2024. The Bloomberg US Aggregate Index returned 0.1% for the quarter, while investment-grade corporate bonds slid -0.1%. The TIPS market was the best-performing sector during the quarter, outpacing the rest of the domestic fixed-income categories with a return of 0.8%.
- Large-cap US equity indexes have been a performance juggernaut over the trailing 12 months. The S&P 500 Index has gained 24.6% while the Russell 1000 Index was nearly as strong with a return of 23.9%. The weakest performing class of domestic equities for the year was the small-cap Russell 2000 Index, which still posted a double-digit return of 10.1% over the last 12 months.
- International markets also showcased healthy performance for the one-year trailing period. The MSCI EM Index was the best international performer, returning 12.5%, while the MSCI EAFE and MSCI ACWI ex US indexes posted returns of 11.5% and 11.6%, respectively.
- Bond markets posted positive but muted results for the trailing one-year period which substantially lagged equity benchmark results. Investment-grade corporate bonds led the way, up by 4.6% for the year. Meanwhile, Treasuries lagged, returning just 1.6% over the period. The bellwether fixed-income benchmark, the Bloomberg US Aggregate Bond Index, returned a mild 2.6% for the year.

Quarter Performance

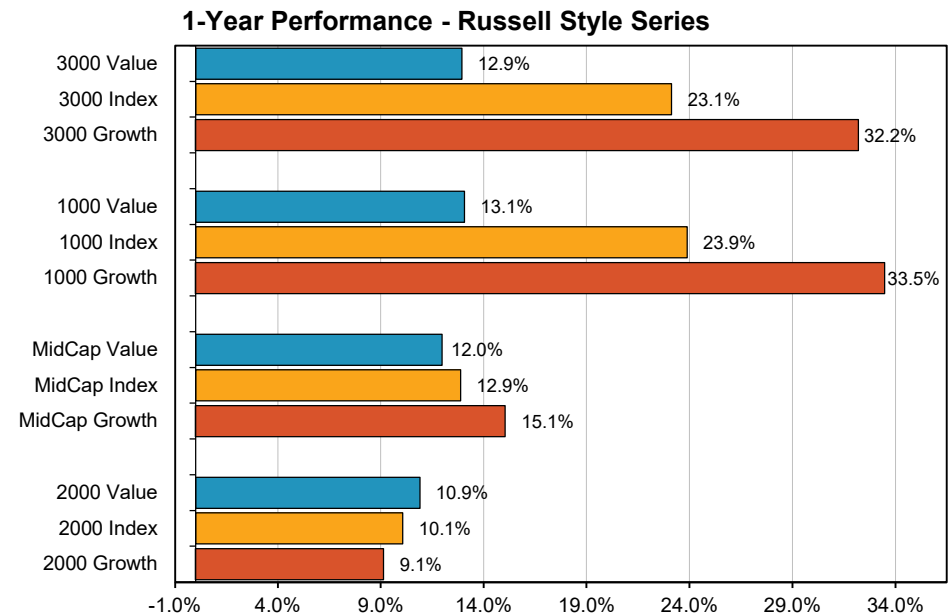
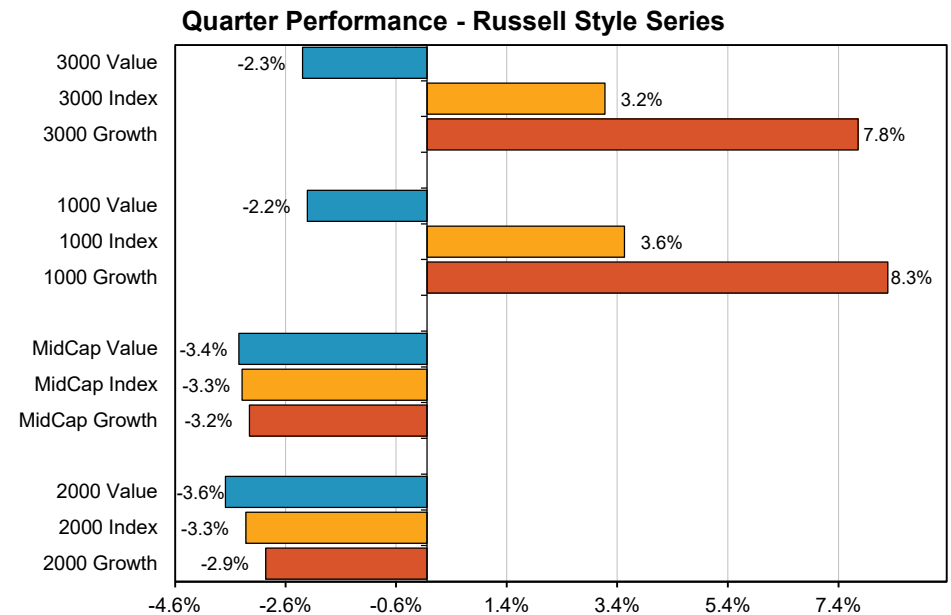


1-Year Performance



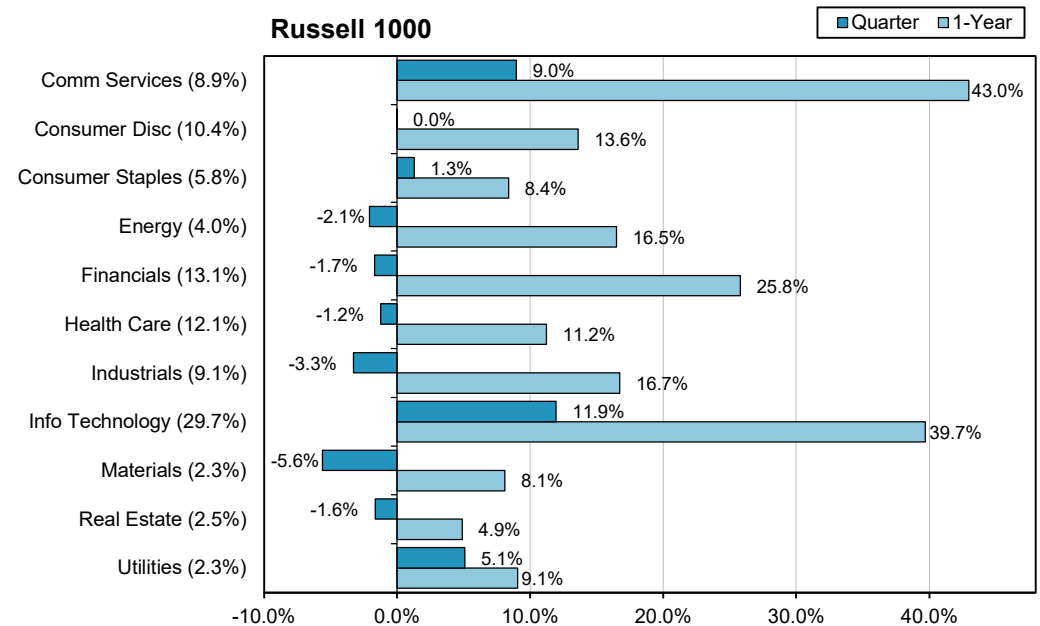
Source: Investment Metrics

- Domestic equity benchmarks posted mixed absolute results for the second quarter, but growth stocks outpaced their value counterparts at each capitalization level. The best-performing area of the equity market continues to be large-cap growth with the Russell 1000 Growth Index returning 8.3% for the quarter. The worst-performing segment of the domestic equity market for the second consecutive quarter was small-cap value with the Russell 2000 Value index falling -3.6% for the quarter. From a capitalization perspective, large-cap stocks once again led their small-cap counterparts, with the Russell 1000 Index returning 3.2% and the Russell 2000 Index falling by -3.3%.
- The market's growth-led rally continued during the quarter, and this disparity was most visible in large-cap style performance, with the Russell 1000 Growth Index outpacing the Russell 1000 Value Index by double digits (10.1%). While mid-cap and small-cap growth fell in absolute terms for the quarter, the mid- and small-cap growth indexes held up slightly better than their value counterparts. This quarter's results followed the theme of large-cap growth stocks being the best-performing segment of the domestic equity market over the past several years.
- For the year the Russell 1000 Growth Index returned an impressive 33.5%, leading the way among style and market capitalization classifications. Much of this strong performance has been attributable to the emergence of the "Magnificent 7" stocks, which have dominated the large-cap indexes over the past several years. The seven biggest stocks in the Russell 1000 Index contributed more than 70% of the index's total performance in the trailing 12-month period.
- The weakest performing index for the year was the Russell 2000 Growth, which still posted a solid return of 9.1%.
- The dominance of growth sectors is evident in the chart with the broad-cap, large-cap, and mid-cap benchmarks handily outperforming the core and value indexes for the trailing one-year period. The performance gap between the Russell 1000 Growth Index and the Russell 1000 Value Index was a staggering 20.4% for the year while the mid-cap growth index edged past the mid-cap value index by just 3.1%. Small-cap stocks bucked the growth-dominance trend with the Russell 2000 Value Index posting a return of 10.9% versus a return of 9.1% for the Russell 2000 Growth Index.

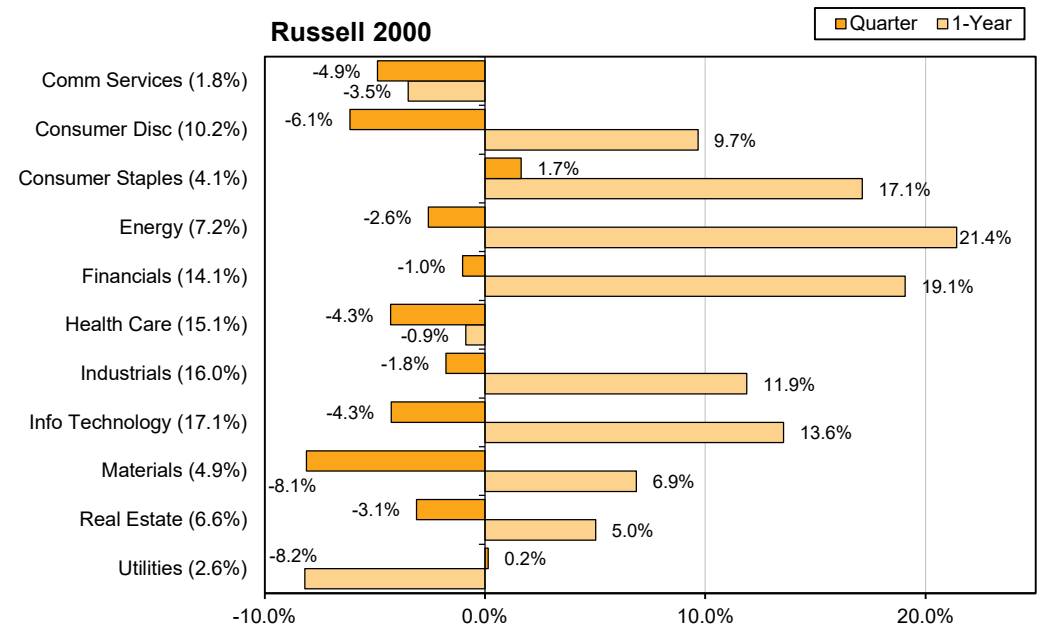


Source: Investment Metrics

- Economic sector performance was choppy during the second quarter. This quarter broke the preceding trend of broader participation in the equity market's rally. Only five of the 11 economic sectors posted positive absolute returns for the quarter, with information technology (11.9%), communication services (9.0%), and utilities (5.1%) leading the way.
- In contrast, full-year results were more consistent as all 11 economic sectors finished the year in positive territory. Of the 11 sectors, three (communication services, up 43.0%; information technology, up 39.7%; and financials, up 25.8%) were up by more than 25.0% for the past year. With their more than 40% combined weight in the benchmark, these three sectors were also the only ones to outpace the Russell 1000 Index's return of 23.9%. Despite solid positive performance, utilities (up 9.1%), consumer staples (8.4%), materials (8.1%), consumer staples (8.4%), and real estate (4.9%) were all relative detractors for the year with their single-digit returns.



- Nine of the 11 small-cap economic sectors lost value during the quarter. Consumer staples (up 1.7%), and utilities (0.2%) were the only two sectors to post gains for the quarter. Materials was the worst-performing sector posting a loss of -8.1% for the quarter. While not always the case, small-cap stocks generally have greater dependence on liquidity and access to capital which can lead to lagging performance relative to large-cap stocks during periods of restrictive monetary policy.
- Similar to large-cap sector performance, eight of the 11 small-cap sectors were positive over the trailing one-year period. Energy posted the strongest sector performance with a return of 21.4%, followed closely by the financials sector return of 19.1%. Consumer staples (up 17.1%), information technology (13.6%), and industrials (11.9%) each produced double-digit results for the period. Three sectors (communication services, health care, and utilities) posted negative results during the period.



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 June 30, 2024

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Microsoft Corp	6.7%	6.4%	32.3%	Information Technology
Apple Inc	6.2%	23.0%	9.2%	Information Technology
NVIDIA Corp	5.9%	36.7%	192.1%	Information Technology
Amazon.com Inc	3.5%	7.1%	48.2%	Consumer Discretionary
Meta Platforms Inc Class A	2.2%	3.9%	76.1%	Communication Services
Alphabet Inc Class A	2.2%	20.8%	52.3%	Communication Services
Alphabet Inc Class C	1.9%	20.6%	51.8%	Communication Services
Eli Lilly and Co	1.5%	16.6%	94.5%	Health Care
Berkshire Hathaway Inc Class B	1.5%	21.5%	88.4%	Financials
Broadcom Inc	1.4%	-3.3%	19.3%	Information Technology

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Super Micro Computer Inc	1.6%	-18.9%	228.7%	Information Technology
MicroStrategy Inc Class A	0.8%	-19.2%	302.3%	Information Technology
Carvana Co Class A	0.5%	46.4%	396.6%	Consumer Discretionary
e.l.f. Beauty Inc	0.4%	7.5%	84.5%	Consumer Staples
Comfort Systems USA Inc	0.4%	-4.2%	86.0%	Industrials
Onto Innovation Inc	0.4%	21.3%	88.5%	Information Technology
FTAI Aviation Ltd	0.4%	54.0%	234.2%	Industrials
Light & Wonder Inc Ordinary Shares	0.4%	2.7%	52.5%	Consumer Discretionary
Insmed Inc	0.4%	147.0%	217.5%	Health Care
Fabrinet	0.4%	29.5%	88.5%	Information Technology

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
GameStop Corp Class A	0.0%	97.2%	1.8%	Consumer Discretionary
Petco Health and Wellness Co	0.0%	65.8%	-57.5%	Consumer Discretionary
Alnylam Pharmaceuticals Inc	0.1%	62.6%	27.9%	Health Care
United Therapeutics Corp	0.0%	38.7%	44.3%	Health Care
Cirrus Logic Inc	0.0%	37.9%	57.6%	Information Technology
NCR Atleos Corp	0.0%	36.8%	N/A	Financials
NVIDIA Corp	5.9%	36.7%	192.1%	Information Technology
AMC Entertainment	0.0%	33.9%	-87.2%	Communication Services
First Solar Inc	0.0%	33.6%	18.6%	Information Technology
Cava Group Inc	0.0%	32.4%	126.5%	Consumer Discretionary

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
AST SpaceMobile Inc Ordinary Shares	0.1%	300.3%	147.0%	Communication Services
Emergent BioSolutions Inc	0.0%	169.6%	-7.2%	Health Care
Novavax Inc	0.1%	164.9%	70.4%	Health Care
Rent the Runway Inc Class A	0.0%	154.3%	-55.6%	Consumer Discretionary
Insmed Inc	0.4%	147.0%	217.5%	Health Care
Innodata Inc	0.0%	124.7%	30.9%	Industrials
NuScale Power Corp Class A	0.0%	120.2%	71.9%	Industrials
TransMedics Group Inc	0.2%	103.7%	79.4%	Health Care
Vital Farms Inc Ordinary Shares	0.1%	101.2%	290.1%	Consumer Staples
Matterport Inc Ordinary Shares	0.0%	97.8%	41.9%	Information Technology

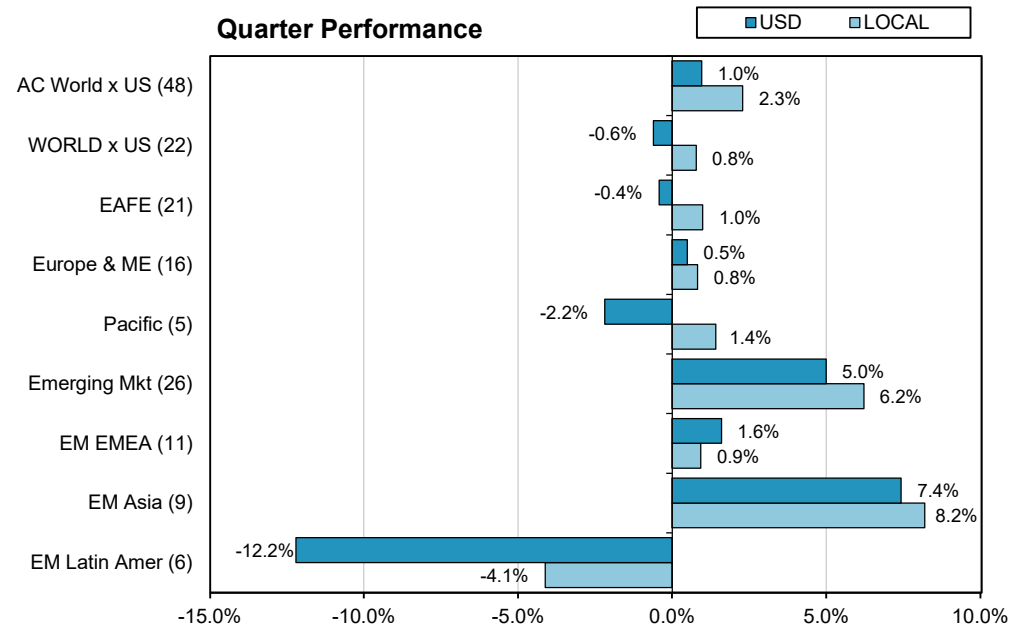
Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Ginkgo Bioworks Holdings Inc	0.0%	-71.2%	-82.0%	Materials
Hertz Global Holdings Inc	0.0%	-54.9%	-80.8%	Industrials
10x Genomics Inc	0.0%	-48.2%	-65.2%	Health Care
DoubleVerify Holdings Inc	0.0%	-44.6%	-50.0%	Information Technology
UiPath Inc Class A	0.0%	-44.1%	-23.5%	Information Technology
Walgreens Boots Alliance Inc	0.0%	-43.5%	-54.6%	Consumer Staples
Fortrea Holdings Inc	0.0%	-41.9%	-31.4%	Health Care
Five Below Inc	0.0%	-39.9%	-44.6%	Consumer Discretionary
Leggett & Platt Inc	0.0%	-39.9%	-58.8%	Consumer Discretionary
Unity Software Inc Ordinary Shares	0.0%	-39.1%	-62.6%	Information Technology

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Aerovate Therapeutics Inc	0.0%	-94.4%	-90.3%	Health Care
Marinus Pharmaceuticals Inc	0.0%	-87.1%	-89.2%	Health Care
Cerence Inc Ordinary Shares	0.0%	-82.0%	-90.3%	Information Technology
Velo3D Inc	0.0%	-79.2%	-95.6%	Industrials
Akoustis Technologies Inc	0.0%	-77.7%	-95.9%	Information Technology
Gritstone Bio Inc	0.0%	-76.0%	-68.3%	Health Care
Ovid Therapeutics Inc	0.0%	-74.8%	-76.5%	Health Care
Maxon Solar Technologies Ltd	0.0%	-74.4%	-97.0%	Information Technology
Zentalis Pharmaceuticals Inc	0.0%	-74.0%	-85.5%	Health Care
Nikola Corp	0.0%	-73.8%	-80.2%	Industrials

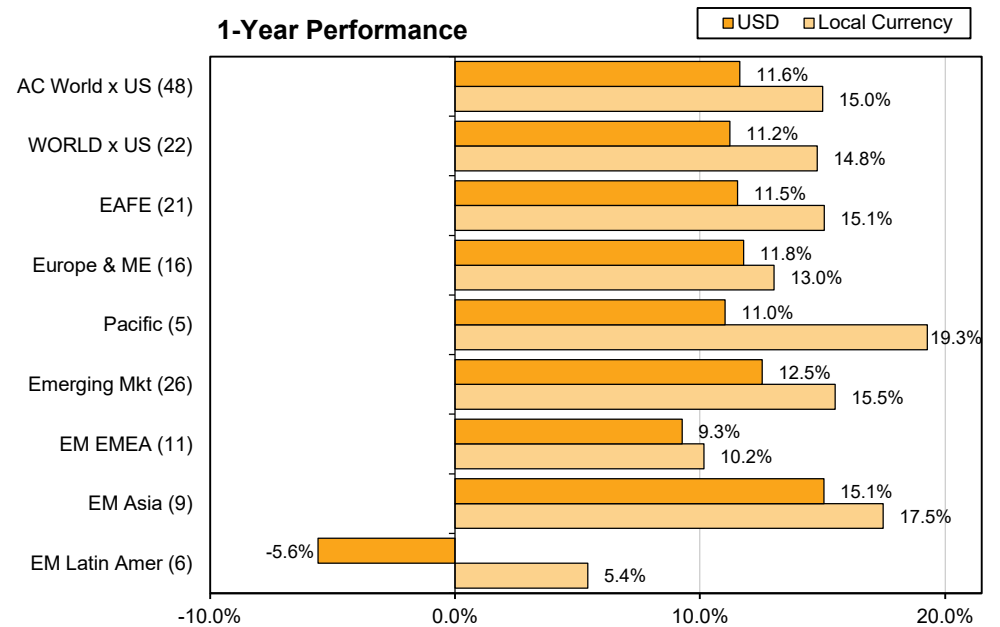
Source: Morningstar Direct

- Results among the broad international equity indexes were mixed during the quarter, echoing the performance of major domestic indexes. The strengthening USD relative to many major currencies during the quarter was a detractor to the USD performance of regional benchmark returns across most regions. The developed-market MSCI EAFE Index returned a muted 1.0% in LCL terms but fell -0.4% in USD terms. The MSCI Emerging Markets Index was the best-performing broad index and rose by 5.0% in USD and 6.2% in LCL terms for the quarter.
- Latin America continued to struggle during the quarter in both USD and LCL terms. The cyclical demand for commodity exports in the region has resulted in greater volatility due to ongoing uncertainty over central bank policies and future global demand.
- The heaviest-weighted country in the emerging market index (China) rebounded 7.1% during the quarter. The Chinese economy grew at a rate of 5.2% in 2023, lower than its pre-pandemic rate of 6.0% and has been a headwind for performance. Troubles in the commercial property and banking sectors have also created challenges for growth in the region. Despite the additive performance in the region, the Chinese banking sector underwent heavy consolidation during the second quarter amid regional bank failures across the country.
- Much like domestic markets, trailing one-year results for international developed and emerging markets benchmarks were strong. Higher LCL versus USD returns for most international benchmarks demonstrate the USD's strength over the trailing one-year period.
- Most broad and regional indexes were positive for the trailing 12 months in both USD and LCL terms. The sole exception was EM Latin America, where USD strength turned the region's positive LCL performance negative in USD terms. In LCL terms, the MSCI Pacific Index led the way with a return of 19.3% for the trailing year. USD returns for the region were still strong but returned a more muted 11.0%. The EM Asia regional index posted the strongest relative USD performance, returning 15.1% over the trailing 12 months.

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 June 30, 2024

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.1%	0.5%	10.1%
Consumer Discretionary	11.5%	-9.0%	0.1%
Consumer Staples	8.5%	-1.6%	-6.8%
Energy	4.1%	1.3%	15.9%
Financials	20.0%	3.3%	24.2%
Health Care	13.5%	4.7%	11.5%
Industrials	16.9%	-0.8%	15.0%
Information Technology	9.5%	0.2%	24.1%
Materials	6.7%	-3.2%	8.5%
Real Estate	2.0%	-6.7%	7.6%
Utilities	3.1%	0.8%	-0.6%
Total	100.0%	-0.4%	11.5%

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.3%	4.0%	5.7%
Consumer Discretionary	11.1%	-4.8%	1.9%
Consumer Staples	7.2%	-1.7%	-5.9%
Energy	5.5%	1.3%	18.9%
Financials	21.7%	2.6%	18.7%
Health Care	9.5%	3.8%	10.0%
Industrials	13.7%	-0.5%	13.1%
Information Technology	14.0%	5.2%	28.3%
Materials	7.1%	-1.9%	5.1%
Real Estate	1.8%	-4.7%	4.5%
Utilities	3.1%	2.2%	3.7%
Total	100.0%	1.0%	11.6%

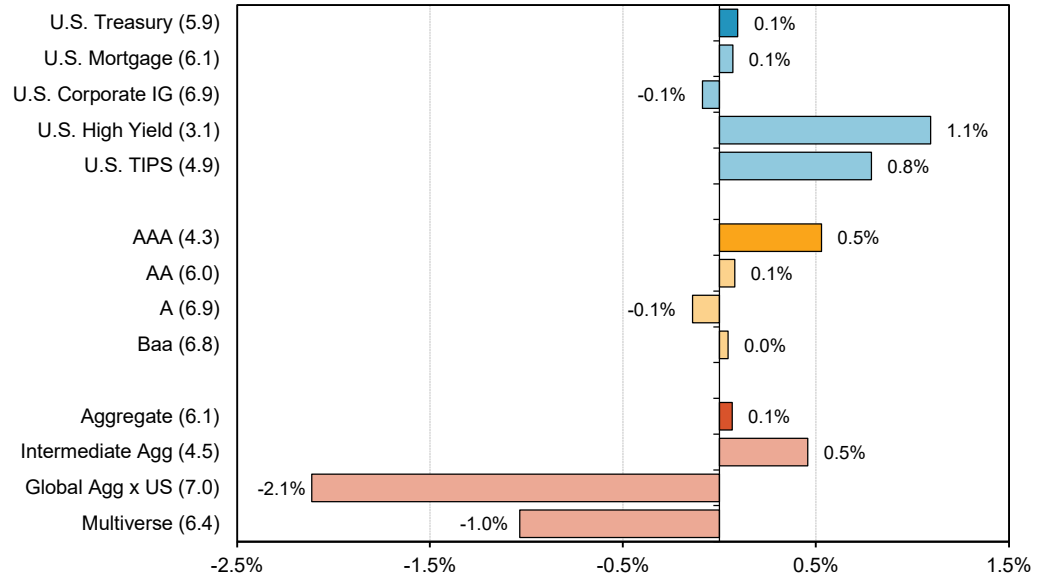
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	8.9%	8.2%	2.7%
Consumer Discretionary	12.3%	5.1%	6.3%
Consumer Staples	5.2%	-3.0%	-5.7%
Energy	5.2%	3.3%	25.2%
Financials	21.9%	3.5%	12.6%
Health Care	3.2%	-4.3%	-2.8%
Industrials	6.9%	4.0%	6.9%
Information Technology	25.1%	11.3%	34.2%
Materials	6.9%	-1.8%	-3.1%
Real Estate	1.5%	2.8%	-4.1%
Utilities	3.0%	6.2%	20.3%
Total	100.0%	5.0%	12.5%

Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1-Year Return
Japan	22.7%	14.4%	-4.3%	13.2%
United Kingdom	14.9%	9.5%	3.7%	12.5%
France	11.2%	7.1%	-7.5%	0.5%
Switzerland	9.7%	6.2%	3.1%	6.1%
Germany	8.7%	5.5%	-1.4%	10.1%
Australia	7.5%	4.8%	1.6%	14.1%
Netherlands	5.4%	3.4%	5.0%	25.6%
Denmark	4.0%	2.5%	7.5%	42.1%
Sweden	3.2%	2.1%	2.2%	18.2%
Italy	2.7%	1.7%	-3.4%	21.3%
Spain	2.7%	1.7%	-1.6%	15.0%
Hong Kong	1.8%	1.1%	1.0%	-18.0%
Singapore	1.4%	0.9%	8.9%	13.5%
Finland	1.0%	0.6%	3.0%	1.7%
Belgium	1.0%	0.6%	0.9%	9.0%
Israel	0.7%	0.5%	-4.2%	23.6%
Norway	0.6%	0.4%	6.6%	14.2%
Ireland	0.3%	0.2%	-0.8%	12.5%
Portugal	0.2%	0.1%	8.5%	-6.4%
Austria	0.2%	0.1%	7.1%	17.9%
New Zealand	0.2%	0.1%	3.2%	3.7%
Total EAFE Countries	100.0%	63.6%	-0.4%	11.5%
Canada		7.4%	-2.1%	8.6%
Total Developed Countries		71.0%	-0.6%	11.2%
China		7.3%	7.1%	-1.6%
Taiwan		5.6%	15.1%	40.7%
India		5.6%	10.2%	34.4%
Korea		3.5%	-1.2%	8.1%
Brazil		1.2%	-12.2%	-7.7%
Saudi Arabia		1.1%	-7.4%	0.9%
South Africa		0.9%	12.3%	12.3%
Mexico		0.6%	-16.1%	-6.5%
Indonesia		0.5%	-12.4%	-11.8%
Malaysia		0.4%	4.4%	17.5%
Thailand		0.4%	-4.8%	-13.3%
United Arab Emirates		0.3%	-2.3%	0.8%
Poland		0.3%	6.1%	32.4%
Turkey		0.2%	21.4%	62.1%
Qatar		0.2%	-0.3%	0.7%
Kuwait		0.2%	-2.8%	2.2%
Philippines		0.1%	-10.7%	-3.1%
Greece		0.1%	-1.2%	9.6%
Chile		0.1%	-1.3%	-9.3%
Peru		0.1%	2.0%	40.0%
Hungary		0.1%	9.2%	29.0%
Czech Republic		0.0%	6.3%	3.5%
Colombia		0.0%	-4.6%	26.7%
Egypt		0.0%	-4.2%	-4.8%
Total Emerging Countries		29.0%	5.0%	12.5%
Total ACWixUS Countries		100.0%	1.0%	11.6%

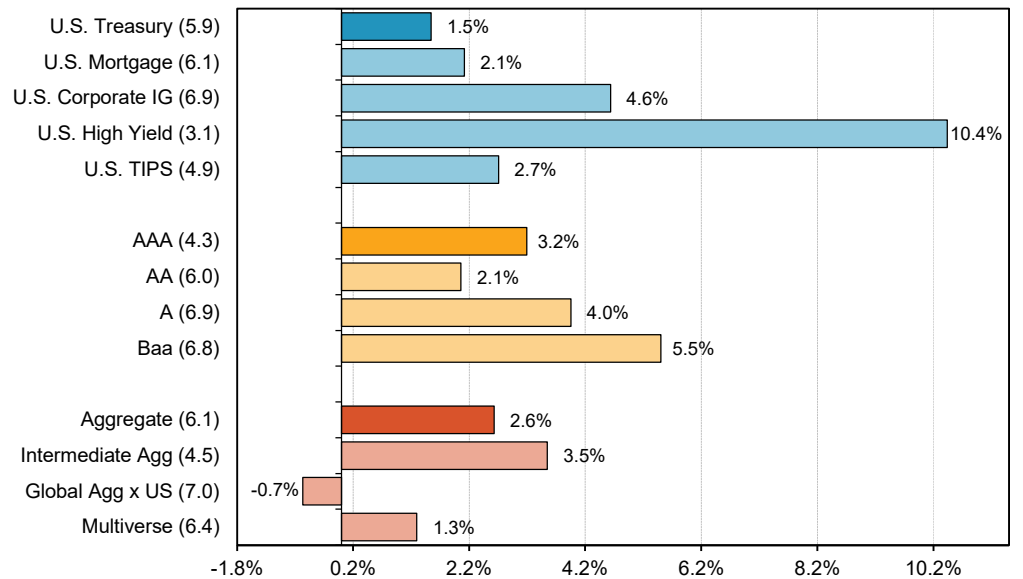
Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency,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

- Fixed-income markets fell in a relatively tight range for the quarter with many domestic sectors returning less than 0.5%. Yields remained at elevated levels as the Federal Reserve maintained its restrictive policy stance. If market expectations hold and the Fed begins to cut rates in 2024, to the extent any cuts lower yields across the curve, it will provide a jolt to bondholder performance since bond prices move in the opposite direction of yields.
- The Bloomberg US Aggregate Bond Index had a mixed quarter of performance made up of a large drawdown in April followed by smaller recoveries in May and June that combined for an index return of 0.1%. Performance across the investment-grade index's segments for the quarter was similarly muted with the Bloomberg US Corporate Investment Grade Index returning -0.1% and the US Mortgage Index gaining 0.1%.
- Outside of the Aggregate index's sub-components, high-yield bonds continued to rise, posting a return of 1.1%, boosted by the higher coupon income, and US TIPS climbed 0.8% for the quarter. The Bloomberg Global Aggregate ex-US Index returned -2.1% for the quarter with USD strength exerting downward pressure on performance. This global performance lagged domestic fixed-income indexes as well as the multiverse benchmark's return of -1.0%.
- Over the trailing one-year period, the Bloomberg US Aggregate Bond Index managed a 2.6% return. The benchmark's sub-components also posted positive performance over the trailing 12 months with the Bloomberg US Corporate Investment Grade Index rising 4.6% and the US Mortgage Index posting a more modest 2.1% return. US TIPS and high-yield corporate bonds, which are excluded from the aggregate index, each posted gains in the trailing year with returns of 2.7% and 10.4%, respectively. In addition to their higher coupons, high-yield bonds benefited from generally shorter duration than investment-grade corporate debt. This lower duration acted as a tailwind for high-yield bonds as interest rates rose during the trailing year.
- Among credit qualities, lower-quality bonds (both investment grade and non-investment grade) have outperformed higher-quality bonds due to both their higher yields, which contribute to higher interest payments, and narrowing credit spreads over the last year.
- Performance for non-US bonds was negative for the trailing year with the Bloomberg Global Aggregate ex-US Index falling -0.7%. With foreign central banks largely tracking the Fed's tight monetary stance, the negative performance of global bonds is largely attributable to USD strength over the last year.

Quarter Performance



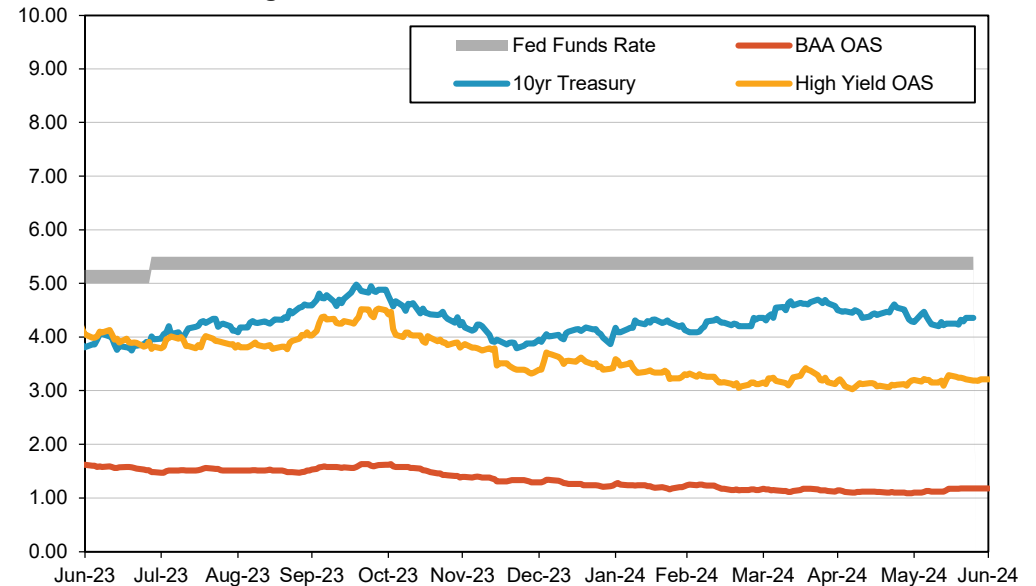
1-Year Performance



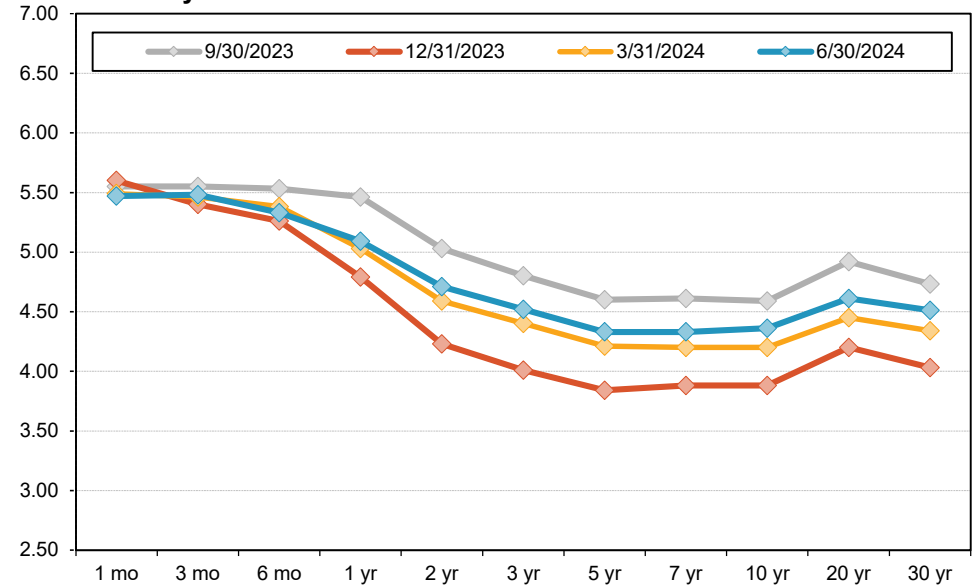
Source: Bloomberg

- The gray band across the graph illustrates the current fed funds target rate range over the last 12 months. During the second quarter, the Federal Open Market Committee (FOMC) continued to hold fed funds rates steady in the 5.25%-5.50% target range. The last rate increase in the current cycle occurred at the FOMC's July 2023 meeting. While the FOMC's press releases have continued to push economic data-dependent outcomes, the language used to describe economic conditions in these releases has also softened, resulting in market expectations that the next rate action by the FOMC will likely be a cut. The CME FedWatch tool, which forecasts rates based on Fed Fund futures pricing, currently shows a greater than 90% probability of a 0.25% rate decrease at the FOMC September meeting. Fed officials and market participants continue to express concern that leaving rates at their current levels for an extended period could tip the US economy into a recession. However, inflation remains above the FOMC's long-term 2.0% target level. Additionally, the FOMC continues to remove liquidity from the market by allowing bonds held on its balance sheet to mature without reinvesting principal payments.
- The yield on the US 10-year Treasury (blue line of the top chart) remained stable, opening the quarter at 4.33% and finishing June at a yield of 4.36%. The stability of the benchmark rate reflects the stability of the Federal Reserve's policy stance and the persistently high level of inflation throughout the economy. The 10-year Treasury benchmark's rate peaked in October 2023, cresting at a yield of just under 5.00% before pulling back in the remainder of the year.
- The red line in the top chart shows the 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 issues with the lowest investment grade rating. During the quarter, the yield spread was relatively unchanged, beginning the quarter at 1.18% and finishing June at 1.17%. The spread measure narrowed over the trailing 12-month period after concerns about the regional banking sector during March 2023 caused credit spreads to spike. High-yield OAS spreads (represented by the orange line in the top chart) have also remained relatively unchanged, rising by just 0.07%. The spread measures' stability results from steady economic growth, stable monetary policy, and falling inflation readings.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. The yield curve has been inverted for each of the last four quarter-end readings on the graph and for most of last two years. Historically, a persistent yield curve inversion 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)

[CME FedWatch Tool - CME Group](#)

[Effective Federal Funds Rate - FEDERAL RESERVE BANK of NEW YORK \(newyorkfed.org\)](#)

[ICE BofA US High Yield Index Option-Adjusted Spread \(BAMLH0A0HYM2\) | FRED | St. Louis Fed \(stlouisfed.org\)](#)

[When will the Federal Reserve start cutting interest rates? | J.P. Morgan Asset Management \(jpmorgan.com\)](#)

[Resource Center | U.S. Department of the Treasury](#)

[China's Economy Limpes Into 2024 – WSJ](#)

[Support Site - Global Index Lens: Index Returns – MSCI](#)

[Federal Reserve issues FOMC statement](#)

[Transcript of Chair Powell's Press Conference -- June 12, 2024 \(federalreserve.gov\)](#)

[U.S. Treasurys: investors look to inflation data due in week ahead \(cnbc.com\)](#)

[Yen drops to 38-year low, U.S. dollar slumps after weak data \(cnbc.com\)](#)

[Jobs report June 2024: \(cnbc.com\)](#)

[The Fed - June 12, 2024: FOMC Projections materials, accessible version \(federalreserve.gov\)](#)

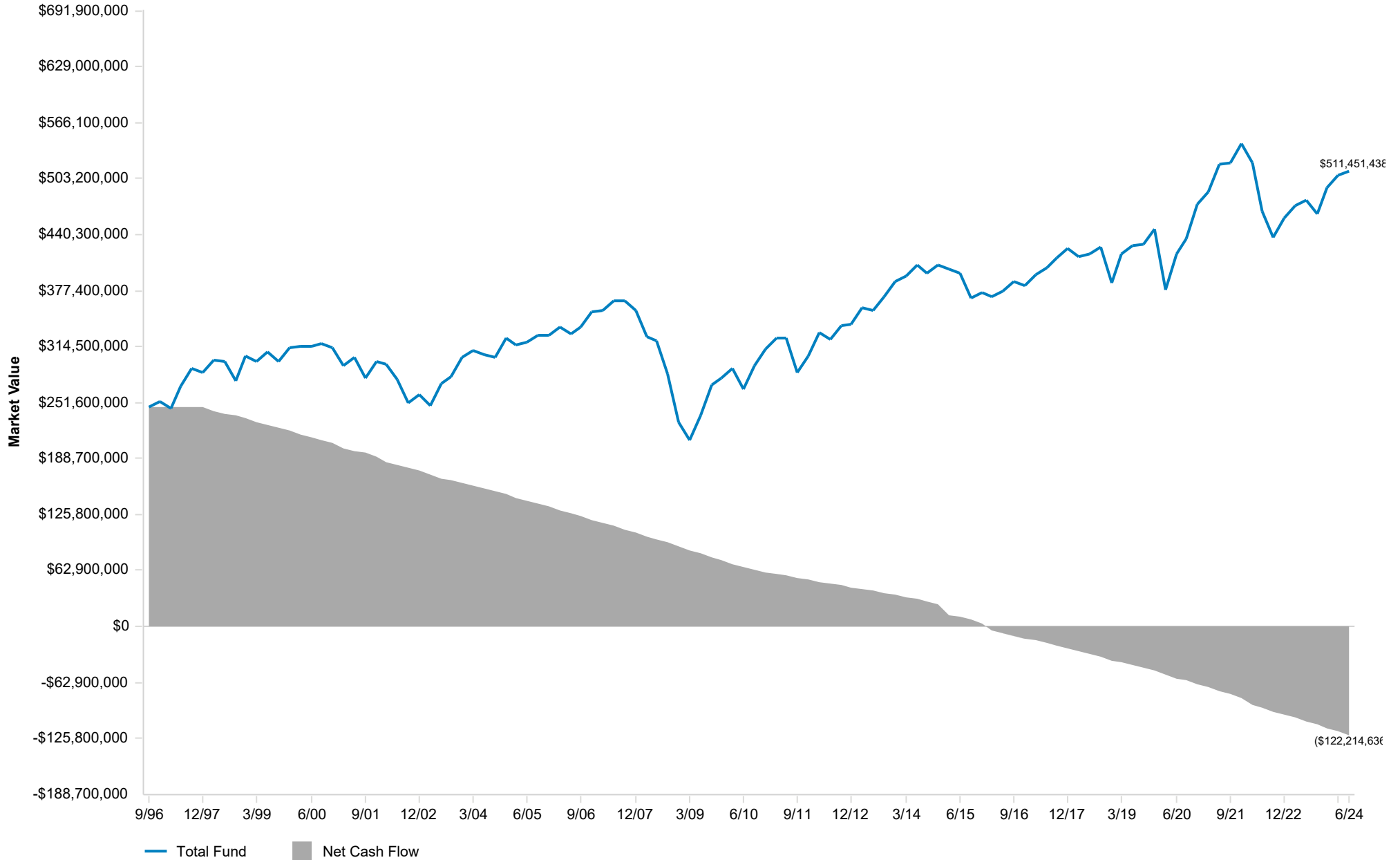
[The Federal Reserve's latest dot plot, explained – and what it says about interest rates | Bankrate](#)

[Top 25 Stocks in the S&P 500 By Index Weight for July 2024 \(investopedia.com\)](#)

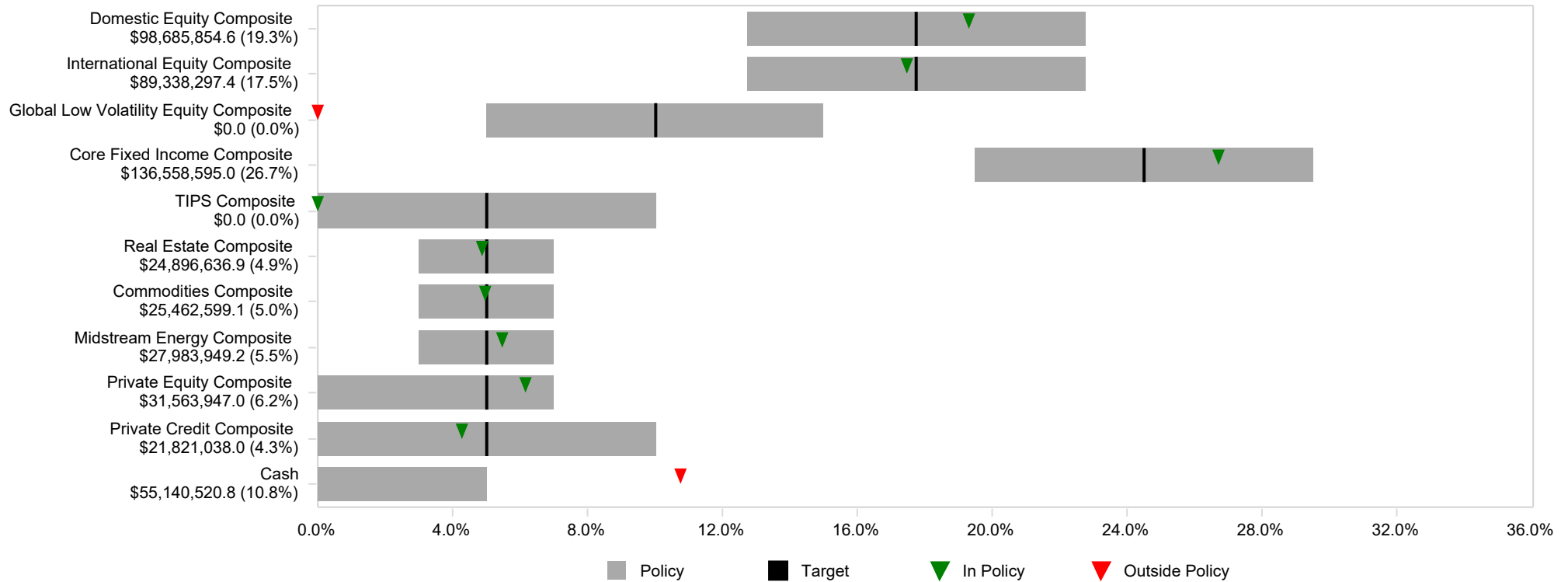
[Will Small-Cap Stocks Ever Catch Up? | Morningstar](#)

[Why Chinese banks are now vanishing \(economist.com\)](#)

Schedule of Investable Assets



Executive Summary



Asset Allocation Compliance

	Asset Allocation \$	Current Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)
Total Fund	511,451,438	100.0	100.0	N/A	N/A
Domestic Equity Composite	98,685,855	19.3	17.8	12.8	22.8
International Equity Composite	89,338,297	17.5	17.8	12.8	22.8
Global Low Volatility Equity Composite	-	0.0	10.0	5.0	15.0
Core Fixed Income Composite	136,558,595	26.7	24.5	19.5	29.5
TIPS Composite	-	0.0	5.0	0.0	10.0
Real Estate Composite	24,896,637	4.9	5.0	3.0	7.0
Commodities Composite	25,462,599	5.0	5.0	3.0	7.0
Midstream Energy Composite	27,983,949	5.5	5.0	3.0	7.0
Private Equity Composite	31,563,947	6.2	5.0	0.0	7.0
Private Credit Composite	21,821,038	4.3	5.0	0.0	10.0
Cash	55,140,521	10.8	0.0	0.0	5.0

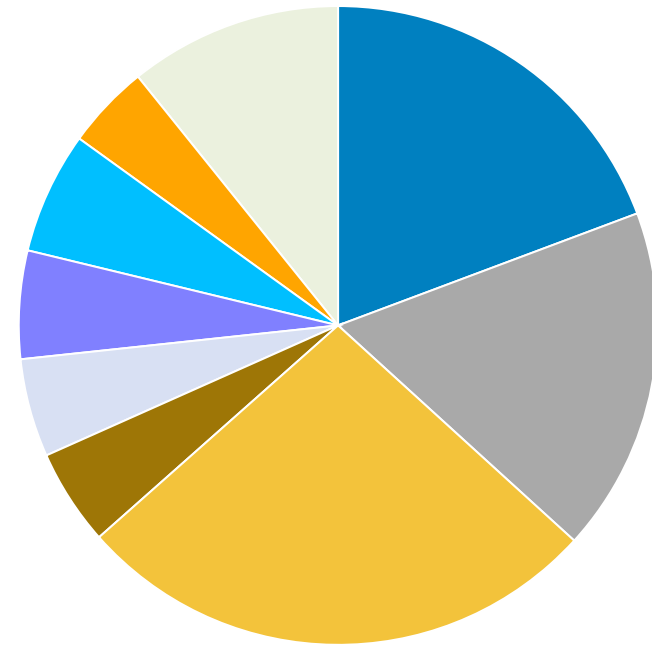
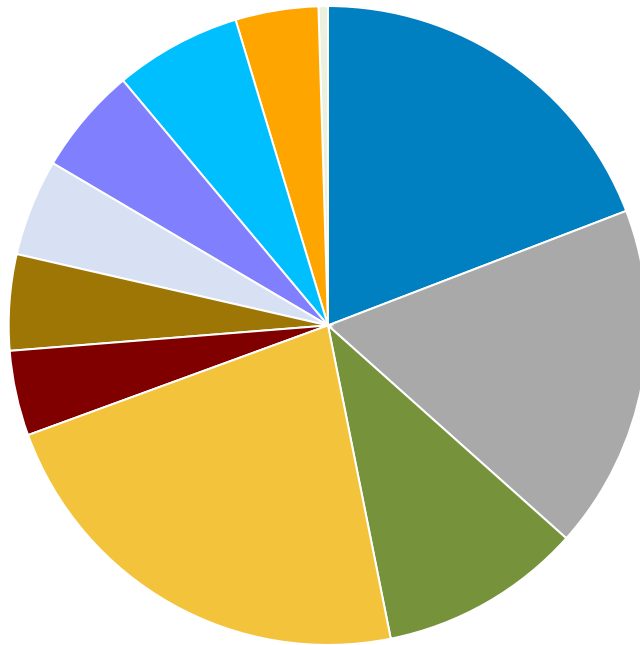
Asset Allocation By Asset Class

Total Fund

As of June 30, 2024

Mar-2024 : \$507,666,566

Jun-2024 : \$511,451,438



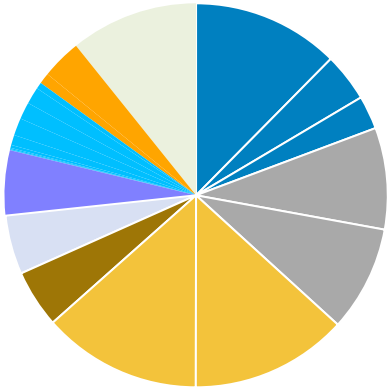
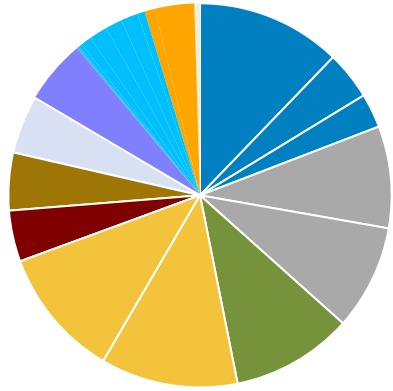
Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ Domestic Equity Composite	97,276,797	19.2	■ Domestic Equity Composite	98,685,855	19.3
■ International Equity Composite	88,532,569	17.4	■ International Equity Composite	89,338,297	17.5
■ Global Low Volatility Equity Composite	52,064,396	10.3	■ Global Low Volatility Equity Composite	-	0.0
■ Core Fixed Income Composite	114,571,317	22.6	■ Core Fixed Income Composite	136,558,595	26.7
■ TIPS Composite	21,862,700	4.3	■ TIPS Composite	-	0.0
■ Real Estate Composite	24,669,464	4.9	■ Real Estate Composite	24,896,637	4.9
■ Commodities Composite	24,812,953	4.9	■ Commodities Composite	25,462,599	5.0
■ Midstream Energy Composite	27,565,322	5.4	■ Midstream Energy Composite	27,983,949	5.5
■ Private Equity Composite	32,572,047	6.4	■ Private Equity Composite	31,563,947	6.2
■ Private Credit Composite	21,299,604	4.2	■ Private Credit Composite	21,821,038	4.3
■ Cash	2,439,397	0.5	■ Cash	55,140,521	10.8

**Asset Allocation by Manager
Total Fund**

As of June 30, 2024

Mar-2024 : \$507,666,566

Jun-2024 : \$511,451,438



Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ NTAM S&P 500	62,033,948	12.2	■ NTAM S&P 500	63,443,771	12.4
■ PIMCO Stock Plus	20,670,730	4.1	■ PIMCO Stock Plus	20,840,180	4.1
■ Wellington Small Cap	14,572,119	2.9	■ Wellington Small Cap	14,401,904	2.8
■ Harding Loevner	43,631,414	8.6	■ Harding Loevner	43,819,386	8.6
■ Neuberger Berman CIT	44,901,155	8.8	■ Neuberger Berman CIT	45,518,912	8.9
■ BlackRock MSCI ACWI Min Vol	52,064,396	10.3	■ BlackRock MSCI ACWI Min Vol	-	0.0
■ Baird Advisors	58,776,367	11.6	■ Baird Advisors	67,843,219	13.3
■ Western Asset Management	55,794,951	11.0	■ Western Asset Management	68,715,376	13.4
■ Brown Brothers Harriman	21,862,700	4.3	■ Brown Brothers Harriman	-	0.0
■ Centersquare	24,669,464	4.9	■ Centersquare	24,896,637	4.9
■ Wellington Commodities	24,812,953	4.9	■ Wellington Commodities	25,462,599	5.0
■ Harvest MLP	27,565,322	5.4	■ Harvest MLP	27,983,949	5.5
■ Adams Street 2010 Direct Fund	157,077	0.0	■ Adams Street 2010 Direct Fund	163,161	0.0
■ Adams Street 2010 EM Fund	387,243	0.1	■ Adams Street 2010 EM Fund	341,802	0.1
■ Adams Street 2010 Non-US Fund	565,576	0.1	■ Adams Street 2010 Non-US Fund	516,797	0.1
■ Adams Street 2010 US Fund	1,341,806	0.3	■ Adams Street 2010 US Fund	1,265,520	0.2
■ Adams Street 2013 Global Fund	4,651,872	0.9	■ Adams Street 2013 Global Fund	4,411,868	0.9
■ Adams Street 2015 Global	7,721,794	1.5	■ Adams Street 2015 Global	7,460,560	1.5
■ Adams Street 2017 Global Fund	7,288,159	1.4	■ Adams Street 2017 Global Fund	7,317,570	1.4
■ Adams Street 2019 Global	7,351,303	1.4	■ Adams Street 2019 Global	7,329,079	1.4
■ Aberdeen Global	3,107,217	0.6	■ Aberdeen Global	2,757,590	0.5
■ 50 South Capital Private Credit	4,465,020	0.9	■ 50 South Capital Private Credit	4,698,570	0.9
■ Grosvenor PC	16,834,584	3.3	■ Grosvenor PC	17,122,468	3.3
■ Cash	2,439,397	0.5	■ Cash	55,140,521	10.8

Financial Reconciliation
Total Fund
1 Quarter Ending June 30, 2024

Financial Reconciliation Quarter to Date								
	Market Value 04/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Return On Investment	Market Value 06/30/2024
Total Fund	507,666,566	-	5,404,189	-9,113,585	-274,526	-245,111	8,013,903	511,451,438
Domestic Equity Composite	97,276,797	-1,826,099	-	-	-23,901	-	3,259,058	98,685,855
NTAM S&P 500	62,033,948	-1,172,057	-	-	-2,943	-	2,584,823	63,443,771
PIMCO Stock Plus	20,670,730	-675,000	-	-	-	-	844,450	20,840,180
Wellington Small Cap	14,572,119	20,958	-	-	-20,958	-	-170,215	14,401,904
International Equity Composite	88,532,569	53,983	-	-	-53,983	-1,509	807,237	89,338,297
Harding Loevner	43,631,414	53,983	-	-	-53,983	-1,509	189,481	43,819,386
Neuberger Berman CIT	44,901,155	-	-	-	-	-	617,757	45,518,912
Global Low Volatility Equity Composite	52,064,396	-52,488,863	-	-	-7,633	-	432,100	-
BlackRock MSCI ACWI Min Vol	52,064,396	-52,488,863	-	-	-7,633	-	432,100	-
Core Fixed Income Composite	114,571,317	22,182,293	-	-	-71,330	-287	-123,399	136,558,595
Baird Advisors	58,776,367	8,977,932	-	-	-31,016	-287	120,222	67,843,219
Western Asset Management	55,794,951	13,204,361	-	-	-40,314	-	-243,621	68,715,376
Total Real Assets Composite	98,910,439	-23,293,284	-	-	-117,679	-390	2,844,100	78,343,185
TIPS Composite	21,862,700	-22,110,963	-	-	-	-	248,264	-
Brown Brothers Harriman	21,862,700	-22,110,963	-	-	-	-	248,264	-
Real Estate Composite	24,669,464	30,256	-	-	-30,256	-43	227,216	24,896,637
Centersquare	24,669,464	30,256	-	-	-30,256	-43	227,216	24,896,637
Commodities Composite	24,812,953	39,112	-	-	-39,112	-	649,646	25,462,599
Wellington Commodities	24,812,953	39,112	-	-	-39,112	-	649,646	25,462,599
Midstream Energy Composite	27,565,322	-1,251,689	-	-	-48,311	-347	1,718,974	27,983,949
Harvest MLP	27,565,322	-1,251,689	-	-	-48,311	-347	1,718,974	27,983,949

Financial Reconciliation
Total Fund
1 Quarter Ending June 30, 2024

	Market Value 04/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Return On Investment	Market Value 06/30/2024
Private Equity Composite	32,572,047	-974,606	-	-	-	-	-33,494	31,563,947
Adams Street 2010 Direct Fund	157,077	-3,303	-	-	-	-	9,387	163,161
Adams Street 2010 EM Fund	387,243	-37,211	-	-	-	-	-8,230	341,802
Adams Street 2010 Non-US Fund	565,576	-30,063	-	-	-	-	-18,716	516,797
Adams Street 2010 US Fund	1,341,806	-71,243	-	-	-	-	-5,043	1,265,520
Adams Street 2013 Global Fund	4,651,872	-185,548	-	-	-	-	-54,456	4,411,868
Adams Street 2015 Global	7,721,794	-262,686	-	-	-	-	1,452	7,460,560
Adams Street 2017 Global Fund	7,288,159	-106,141	-	-	-	-	135,552	7,317,570
Adams Street 2019 Global	7,351,303	-	-	-	-	-	-22,224	7,329,079
Aberdeen Global	3,107,217	-278,411	-	-	-	-	-71,216	2,757,590
Private Credit Composite	21,299,604	-143,815	-	-	-	-	665,249	21,821,038
50 South Capital Private Credit	4,465,020	-143,815	-	-	-	-	377,365	4,698,570
Grosvenor PC	16,834,584	-	-	-	-	-	287,884	17,122,468
Cash	2,439,397	56,490,392	5,404,189	-9,113,585	-	-242,925	163,052	55,140,521

Financial Reconciliation
Total Fund
January 1, 2024 To June 30, 2024

Financial Reconciliation Fiscal Year to Date								
	Market Value 01/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Return On Investment	Market Value 06/30/2024
Total Fund	492,446,000	-	11,377,041	-18,207,424	-539,648	-420,211	26,795,681	511,451,438
Domestic Equity Composite	91,240,272	-4,629,710	-	-	-45,290	-	12,120,582	98,685,855
NTAM S&P 500	58,857,051	-3,994,397	-	-	-5,603	-	8,586,720	63,443,771
PIMCO Stock Plus	18,615,110	-675,000	-	-	-	-	2,900,070	20,840,180
Wellington Small Cap	13,768,112	39,687	-	-	-39,687	-	633,792	14,401,904
International Equity Composite	85,679,303	107,033	-	-	-107,033	-3,129	3,662,123	89,338,297
Harding Loevner	42,728,959	107,033	-	-	-107,033	-3,129	1,093,556	43,819,386
Neuberger Berman CIT	42,950,345	-	-	-	-	-	2,568,567	45,518,912
Global Low Volatility Equity Composite	49,715,107	-52,481,621	-	-	-14,875	-	2,781,389	-
BlackRock MSCI ACWI Min Vol	49,715,107	-52,481,621	-	-	-14,875	-	2,781,389	-
Core Fixed Income Composite	115,447,798	22,252,983	-	-	-142,019	-762	-999,404	136,558,595
Baird Advisors	59,060,771	9,009,091	-	-	-62,175	-762	-163,707	67,843,219
Western Asset Management	56,387,027	13,243,892	-	-	-79,845	-	-835,698	68,715,376
Total Real Assets Composite	94,191,871	-23,180,532	-	-	-230,432	-571	7,562,848	78,343,185
TIPS Composite	21,862,700	-22,110,963	-	-	-	-	248,264	-
Brown Brothers Harriman	21,862,700	-22,110,963	-	-	-	-	248,264	-
Real Estate Composite	24,732,801	58,390	-	-	-58,390	-93	163,930	24,896,637
Centersquare	24,732,801	58,390	-	-	-58,390	-93	163,930	24,896,637
Commodities Composite	23,469,682	77,400	-	-	-77,400	-	1,992,918	25,462,599
Wellington Commodities	23,469,682	77,400	-	-	-77,400	-	1,992,918	25,462,599
Midstream Energy Composite	24,126,689	-1,205,359	-	-	-94,641	-478	5,157,737	27,983,949
Harvest MLP	24,126,689	-1,205,359	-	-	-94,641	-478	5,157,737	27,983,949

Financial Reconciliation
Total Fund
January 1, 2024 To June 30, 2024

	Market Value 01/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Return On Investment	Market Value 06/30/2024
Private Equity Composite	33,280,710	-2,118,688	-	-	-	-4,464	406,389	31,563,947
Adams Street 2010 Direct Fund	161,473	-3,303	-	-	-	-	4,991	163,161
Adams Street 2010 EM Fund	401,961	-49,598	-	-	-	-	-10,561	341,802
Adams Street 2010 Non-US Fund	575,019	-60,611	-	-	-	-	2,389	516,797
Adams Street 2010 US Fund	1,398,036	-122,175	-	-	-	-	-10,341	1,265,520
Adams Street 2013 Global Fund	4,710,766	-306,385	-	-	-	-	7,487	4,411,868
Adams Street 2015 Global	7,732,564	-488,924	-	-	-	-	216,920	7,460,560
Adams Street 2017 Global Fund	7,478,679	-296,661	-	-	-	-	135,552	7,317,570
Adams Street 2019 Global	7,197,911	-	-	-	-	-	131,168	7,329,079
Aberdeen Global	3,624,301	-791,031	-	-	-	-4,464	-71,216	2,757,590
Private Credit Composite	21,126,480	-287,629	-	-	-	-	982,187	21,821,038
50 South Capital Private Credit	4,608,835	-287,629	-	-	-	-	377,364	4,698,570
Grosvenor PC	16,517,645	-	-	-	-	-	604,823	17,122,468
Cash	1,764,457	60,338,164	11,377,041	-18,207,424	-	-411,284	279,567	55,140,521

Asset Allocation & Performance	Allocation		Performance(%)									Inception Date
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception		
Total Fund (Gross)	511,451,438	100.0	1.59 (19)	5.47 (63)	10.66 (61)	3.41 (31)	7.50 (43)	7.22 (53)	6.39 (61)	8.16 (31)	Oct-1987	
Total Fund Composite Policy			1.37	5.05	10.16	2.97	6.47	6.32	5.33	7.72		
All Public Plans-Total Fund Median			1.04	5.98	11.32	2.75	7.32	7.29	6.62	7.90		
Total Fund (Net)	511,451,438	100.0	1.53	5.35	10.42	3.18	7.26	6.97	6.14	7.96	Oct-1987	
Total Fund Composite Policy			1.37	5.05	10.16	2.97	6.47	6.32	5.33	7.72		
Domestic Equity Composite	98,685,855	19.3	3.44 (22)	13.71 (26)	23.22 (27)	8.47 (29)	14.46 (25)	13.74 (28)	12.58 (26)	10.42 (76)	Oct-1987	
Russell 3000 Index			3.22	13.56	23.12	8.05	14.14	13.48	12.15	10.26		
IM U.S. Equity (SA+CF) Median			-1.26	7.28	15.67	5.85	11.33	10.98	10.03	11.13		
NTAM S&P 500	63,443,771	12.4	4.28 (35)	15.27 (48)	24.53 (54)	10.01 (39)	15.05 (37)	14.30 (39)	12.90 (38)	9.35 (26)	Apr-1998	
NTAM Policy			4.28	15.29	24.56	10.01	15.05	14.28	12.86	8.40		
IM U.S. Large Cap Core Equity (SA+CF) Median			3.44	15.15	24.63	9.44	14.68	13.80	12.65	8.87		
PIMCO Stock Plus	20,840,180	4.1	4.23 (28)	15.75 (36)	25.54 (32)	9.17 (45)	14.71 (28)	14.08 (22)	12.59 (24)	7.83 (66)	Jun-2000	
S&P 500 Index			4.28	15.29	24.56	10.01	15.05	14.28	12.86	7.77		
IM U.S. Large Cap Core Equity (SA+CF) Median			3.21	14.69	23.92	8.58	13.65	12.94	11.85	8.10		
Wellington Small Cap	14,401,904	2.8	-1.17 (23)	4.60 (29)	14.76 (25)	1.18 (60)	10.58 (35)	10.59 (18)	10.60 (13)	11.62 (31)	Sep-1999	
Russell 2000 Index			-3.28	1.73	10.06	-2.58	6.94	6.85	7.00	7.94		
IM U.S. Small Cap Core Equity (SA+CF) Median			-2.73	2.87	11.28	1.82	9.69	9.25	8.86	11.09		
International Equity Composite	89,338,297	17.5	0.91 (39)	4.27 (65)	8.53 (71)	-0.29 (71)	6.95 (51)	6.18 (52)	5.43 (46)	7.65 (41)	Jan-1990	
International Equity Composite Policy			0.96	5.69	11.62	0.46	5.55	5.17	3.84	4.65		
IM International Equity (SA+CF) Median			0.35	5.34	11.44	1.83	6.99	6.27	5.27	7.49		
Harding Loevner	43,819,386	8.6	0.43 (45)	2.56 (87)	6.39 (87)	-0.19 (79)	6.71 (62)	6.14 (61)	-	6.25 (46)	Apr-2015	
MSCI AC World ex USA (Net)			0.96	5.69	11.62	0.46	5.55	5.17	-	4.83		
IM International Large Cap Equity (SA+CF) Median			0.33	5.32	11.15	2.15	7.17	6.49	-	6.14		
Neuberger Berman CIT	45,518,912	8.9	1.38 (21)	5.98 (40)	10.67 (48)	-0.38 (74)	7.11 (36)	-	-	5.77 (39)	Jul-2018	
MSCI AC World ex USA (Net)			0.96	5.69	11.62	0.46	5.55	-	-	4.83		
IM International Large Cap Equity (SA+CF) Median			0.12	5.03	10.44	1.28	6.45	-	-	5.42		

See the disclosure page at the end of the report.

	Allocation		Performance(%)									
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date	
Core Fixed Income Composite	136,558,595	26.7	-0.13 (100)	-0.89 (98)	3.02 (66)	-3.56 (99)	0.07 (76)	1.30 (61)	2.04 (25)	6.02 (39)	Oct-1987	
Blmbg. U.S. Aggregate Index			0.07	-0.71	2.63	-3.02	-0.23	0.86	1.35	5.46		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			0.26	-0.19	3.21	-2.63	0.31	1.38	1.82	5.98		
Baird Advisors	67,843,219	13.3	0.18 (67)	-0.30 (57)	3.65 (35)	-2.50 (34)	0.42 (40)	1.50 (36)	2.06 (22)	3.64 (52)	Dec-2002	
Blmbg. U.S. Aggregate Index			0.07	-0.71	2.63	-3.02	-0.23	0.86	1.35	3.19		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			0.26	-0.19	3.21	-2.63	0.31	1.38	1.82	3.66		
Western Asset Management	68,715,376	13.4	-0.46 (100)	-1.50 (100)	2.37 (97)	-4.64 (100)	-0.31 (100)	1.09 (99)	2.01 (72)	4.04 (51)	Jan-2004	
Blmbg. U.S. Aggregate Index			0.07	-0.71	2.63	-3.02	-0.23	0.86	1.35	3.05		
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			0.42	0.33	4.34	-2.32	0.92	1.88	2.24	4.08		
Total Real Assets Composite	78,343,185	15.3	3.02	8.18	16.36	8.70	8.72	7.27	-	4.99	Apr-2015	
Real Assets Composite Policy			1.81	5.71	12.53	7.05	7.48	6.23	-	4.13		
Real Estate Composite	24,896,637	4.9	0.92	0.66	8.74	1.16	4.84	5.48	4.63	8.37	Jun-2009	
Real Estate Policy Index			-0.16	-0.55	7.15	-0.14	2.36	3.57	3.60	7.71		
Centersquare	24,896,637	4.9	0.92 (25)	0.66 (16)	8.74 (11)	1.15 (7)	-	-	-	4.20 (22)	Oct-2019	
Dow Jones U.S. Select REIT			-0.16	-0.55	7.15	-0.14	-	-	-	1.51		
IM U.S. REIT (SA+CF) Median			-0.15	-0.59	7.10	-0.15	-	-	-	3.53		
Commodities Composite	25,462,599	5.0	2.62	8.49	16.37	9.54	11.66	9.55	2.36	1.29	Feb-2013	
Bloomberg Commodity Index Total Return			2.89	5.14	5.00	5.65	7.25	5.14	-1.29	-1.61		
Wellington Commodities	25,462,599	5.0	2.62	8.49	16.37	9.54	11.66	9.55	2.36	1.29	Feb-2013	
Bloomberg Commodity Index Total Return			2.89	5.14	5.00	5.65	7.25	5.14	-1.29	-1.61		
Midstream Energy Composite	27,983,949	5.5	6.57	21.76	36.52	24.32	13.62	9.88	-	5.07	Mar-2015	
Alerian Midstream Energy Index			5.42	16.12	26.68	16.55	11.33	9.04	-	4.67		
Harvest MLP	27,983,949	5.5	6.57 (19)	21.76 (19)	36.52 (34)	24.32 (32)	13.62 (47)	9.88 (36)	-	4.94 (40)	Jan-2015	
Alerian Midstream Energy Index			5.42	16.12	26.68	16.55	11.33	9.04	-	4.38		
IM Energy MLP (MF) Median			5.55	19.13	32.28	21.70	12.88	8.79	-	3.99		
Total Cash Equivalents Composite	55,140,521	10.8										

See the disclosure page at the end of the report.

Comparative Performance - IRR
Private Investments
As of June 30, 2024

Comparative Performance - IRR

	Market Value \$ (\$)	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
Private Equity Composite	31,563,947	6.2	-0.10	1.24	-2.95	6.34	18.00	17.70	16.04	15.16	04/30/2010
Adams Street 2010 Direct Fund	163,161	0.0	5.98	3.09	3.65	-5.56	5.68	10.30	9.96	11.60	04/30/2010
Adams Street 2010 EM Fund	341,802	0.1	-2.28	-2.80	-5.10	-6.44	6.88	10.10	11.25	9.55	01/03/2011
Adams Street 2010 Non-US Fund	516,797	0.1	-3.39	0.43	-2.90	2.92	18.39	19.00	13.68	12.44	04/30/2010
Adams Street 2010 US Fund	1,265,520	0.2	-0.39	-0.77	-6.59	4.16	22.55	19.75	17.00	15.92	04/30/2010
Adams Street 2013 Global Fund	4,411,868	0.9	-1.17	0.16	-4.46	1.49	14.28	15.05	12.84	12.59	07/03/2013
Adams Street 2015 Global	7,460,560	1.5	0.02	2.87	0.18	5.92	18.23	18.17	N/A	19.33	09/15/2015
Adams Street 2017 Global Fund	7,317,570	1.4	1.86	1.84	0.68	12.17	17.72	16.71	N/A	16.71	06/22/2017
Adams Street 2019 Global	7,329,079	1.4	-0.30	1.82	0.73	6.34	N/A	N/A	N/A	15.33	12/30/2019
Aberdeen Global	2,757,590	0.5	-2.30	-2.33	-18.98	8.46	23.65	21.17	17.43	15.24	01/17/2012
Private Credit Composite	21,821,038	4.3	3.12	4.67	8.99	5.83	6.05	N/A	N/A	5.81	09/30/2018
50 South Capital Private Credit	4,698,570	0.9	8.46	8.32	17.35	9.67	9.28	N/A	N/A	8.27	11/05/2018
Grosvenor PC	17,122,468	3.3	1.71	3.66	6.73	4.63	5.03	N/A	N/A	5.03	09/27/2018

Comparative Performance Fiscal Year Returns

	Performance(%)									
	Dec 2023	Dec 2022	Dec 2021	Dec 2020	Dec 2019	Dec 2018	Dec 2017	Dec 2016	Dec 2015	Dec 2014
Total Fund (Gross)	11.38 (77)	-11.58 (23)	18.37 (6)	10.67 (79)	18.80 (56)	-5.76 (85)	14.49 (62)	7.41 (44)	-2.26 (88)	7.94 (10)
Total Fund Composite Policy	11.07	-10.94	16.44	7.98	16.68	-5.24	12.32	7.24	-3.86	6.73
All Public Plans-Total Fund Median	13.28	-13.87	13.80	12.97	19.20	-4.40	15.01	7.15	-0.23	6.14
Total Fund (Net)	11.13	-11.79	18.12	10.42	18.50	-5.99	14.21	7.14	-2.50	7.67
Total Fund Composite Policy	11.07	-10.94	16.44	7.98	16.68	-5.24	12.32	7.24	-3.86	6.73
Domestic Equity Composite	25.86 (28)	-19.10 (64)	26.79 (45)	21.12 (37)	32.34 (26)	-5.92 (44)	21.74 (38)	14.23 (46)	0.60 (41)	13.35 (25)
FT Wilshire 5000 Total Market TR Index	26.14	-19.04	26.70	20.82	31.02	-5.27	20.99	13.37	0.67	12.71
IM U.S. Equity (SA+CF) Median	19.37	-16.40	26.09	16.71	28.64	-7.07	19.43	13.21	-0.50	9.99
NTAM S&P 500	26.28 (38)	-18.09 (65)	28.69 (37)	18.45 (45)	31.56 (33)	-4.34 (39)	21.83 (56)	12.04 (30)	1.53 (49)	13.75 (42)
NTAM Policy	26.29	-18.11	28.71	18.40	31.49	-4.38	21.83	11.96	1.38	13.69
IM U.S. Large Cap Core Equity (SA+CF) Median	24.67	-16.49	27.71	17.65	30.11	-5.04	22.10	10.52	1.47	13.42
PIMCO Stock Plus	27.16 (24)	-20.69 (87)	28.30 (34)	19.44 (35)	32.77 (13)	-5.32 (46)	22.80 (36)	12.65 (19)	-0.29 (67)	14.39 (27)
S&P 500 Index	26.29	-18.11	28.71	18.40	31.49	-4.38	21.83	11.96	1.38	13.69
IM U.S. Large Cap Core Equity (SA+CF) Median	23.76	-16.91	26.87	15.94	29.49	-5.67	21.54	9.88	0.96	12.59
Wellington Small Cap	22.19 (14)	-21.41 (83)	16.56 (87)	29.54 (16)	34.14 (8)	-9.98 (50)	21.09 (12)	20.64 (51)	-1.70 (53)	10.34 (11)
Russell 2000 Index	16.93	-20.44	14.82	19.96	25.53	-11.01	14.65	21.31	-4.41	4.89
IM U.S. Small Cap Core Equity (SA+CF) Median	17.23	-16.09	24.24	18.89	25.88	-10.11	15.13	20.66	-1.37	6.63
International Equity Composite	15.60 (68)	-19.53 (68)	11.32 (54)	18.83 (29)	26.38 (34)	-14.91 (54)	27.84 (56)	0.66 (68)	0.74 (53)	-1.91 (36)
International Equity Composite Policy	15.62	-16.00	7.82	10.65	21.51	-14.20	27.19	4.50	-5.66	-3.87
IM International Equity (SA+CF) Median	17.72	-16.31	11.76	11.60	23.57	-14.57	28.71	2.41	1.17	-3.36
Harding Loevner	16.65 (67)	-19.07 (70)	10.23 (63)	21.17 (21)	23.17 (55)	-13.43 (41)	29.31 (37)	4.24 (30)	-	-
MSCI AC World ex USA (Net)	15.62	-16.00	7.82	10.65	21.51	-14.20	27.19	4.50	-	-
IM International Large Cap Equity (SA+CF) Median	18.13	-15.76	11.72	11.10	23.95	-14.23	27.76	1.83	-	-
Neuberger Berman CIT	14.57 (80)	-19.99 (72)	12.39 (35)	16.23 (35)	29.50 (17)	-	-	-	-	-
MSCI AC World ex USA (Net)	15.62	-16.00	7.82	10.65	21.51	-	-	-	-	-
IM International Large Cap Equity (SA+CF) Median	17.36	-16.62	11.08	10.97	23.46	-	-	-	-	-

See the disclosure page at the end of the report.

Comparative Performance

Total Fund

As of June 30, 2024

	Performance(%)									
	Dec 2023	Dec 2022	Dec 2021	Dec 2020	Dec 2019	Dec 2018	Dec 2017	Dec 2016	Dec 2015	Dec 2014
Global Low Volatility Equity Composite	8.41 (88)	-10.02 (28)	14.24 (79)	3.17 (83)	-	-	-	-	-	-
MSCI ACWI Minimum Volatility Index (Net)	7.74	-10.31	13.94	2.69	-	-	-	-	-	-
IM Global Equity (SA+CF) Median	20.24	-16.57	19.10	15.78	-	-	-	-	-	-
BlackRock MSCI ACWI Min Vol	8.41 (88)	-10.02 (28)	14.24 (79)	3.17 (83)	-	-	-	-	-	-
MSCI ACWI Minimum Volatility Index (Net)	7.74	-10.31	13.94	2.69	-	-	-	-	-	-
IM Global Equity (SA+CF) Median	20.24	-16.57	19.10	15.78	-	-	-	-	-	-
Core Fixed Income Composite	6.40 (27)	-15.03 (98)	-1.20 (48)	9.74 (14)	10.98 (5)	-0.32 (85)	5.66 (4)	4.84 (8)	0.71 (60)	7.60 (7)
Blmbg. U.S. Aggregate Index	5.53	-13.01	-1.55	7.51	8.72	0.01	3.54	2.65	0.55	5.97
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	5.99	-12.95	-1.24	8.34	9.17	0.06	3.99	3.07	0.81	6.13
Baird Advisors	6.49 (25)	-12.78 (39)	-1.16 (46)	8.65 (43)	9.40 (38)	0.39 (22)	4.47 (28)	3.90 (23)	1.05 (26)	6.95 (16)
Blmbg. U.S. Aggregate Index	5.53	-13.01	-1.55	7.51	8.72	0.01	3.54	2.65	0.55	5.97
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	5.99	-12.95	-1.24	8.34	9.17	0.06	3.99	3.07	0.81	6.13
Western Asset Management	6.30 (74)	-17.28 (100)	-1.24 (91)	10.79 (13)	12.56 (9)	-1.03 (81)	6.85 (11)	5.77 (30)	0.38 (50)	8.25 (4)
Blmbg. U.S. Aggregate Index	5.53	-13.01	-1.55	7.51	8.72	0.01	3.54	2.65	0.55	5.97
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median	6.86	-12.91	-0.24	8.98	9.95	-0.26	4.79	4.68	0.38	6.18
Total Real Assets Composite	10.44	0.62	28.16	-2.18	13.01	-7.61	3.97	9.31	-	-
Real Assets Composite Policy	8.96	0.79	29.57	-4.50	9.85	-5.93	2.49	9.76	-	-
TIPS Composite	3.53 (62)	-12.08 (66)	5.74 (43)	10.41 (64)	8.42 (32)	-1.63 (65)	2.81 (61)	4.90 (24)	-	-
Bloomberg U.S. TIPS Index	3.90	-11.85	5.96	10.99	8.43	-1.26	3.01	4.68	-	-
IM U.S. TIPS (SA+CF) Median	3.81	-11.94	5.68	10.61	8.34	-1.42	2.96	4.62	-	-
Brown Brothers Harriman	3.53 (62)	-12.08 (66)	5.74 (43)	10.41 (64)	8.42 (32)	-1.63 (65)	2.81 (61)	4.90 (24)	-	-
Bloomberg U.S. TIPS Index	3.90	-11.85	5.96	10.99	8.43	-1.26	3.01	4.68	-	-
IM U.S. TIPS (SA+CF) Median	3.81	-11.94	5.68	10.61	8.34	-1.42	2.96	4.62	-	-
Real Estate Composite	14.78 (11)	-23.42 (5)	42.75 (34)	-3.74 (38)	21.50 (95)	-7.93 (84)	11.50 (8)	1.47 (100)	-0.60 (89)	14.87 (98)
Real Estate Policy Index	13.96	-25.96	45.91	-11.20	18.34	-5.63	10.36	4.06	-0.79	15.02
Real Estate Median	12.06	-26.29	41.44	-4.86	27.78	-5.81	5.37	6.07	2.98	29.82
Centersquare	14.78 (24)	-23.42 (13)	42.75 (56)	-3.74 (49)	-	-	-	-	-	-
Dow Jones U.S. Select REIT	13.96	-25.96	45.91	-11.20	-	-	-	-	-	-
IM U.S. REIT (SA+CF) Median	13.85	-25.48	42.97	-3.90	-	-	-	-	-	-
Commodities Composite	3.76	11.23	25.50	7.00	12.39	-11.85	9.86	15.89	-25.94	-13.57
Bloomberg Commodity Index Total Return	-7.91	16.09	27.11	-3.12	7.69	-11.25	1.70	11.77	-24.66	-17.01
Wellington Commodities	3.76 (1)	11.23 (75)	25.50 (87)	7.00 (9)	12.39 (18)	-11.85 (36)	9.86 (7)	15.89 (15)	-25.94 (70)	-13.57 (14)
Bloomberg Commodity Index Total Return	-7.91	16.09	27.11	-3.12	7.69	-11.25	1.70	11.77	-24.66	-17.01
Commodities Broad Basket Median	-6.86	15.14	30.52	-1.36	8.18	-12.48	3.16	12.19	-25.00	-17.67

See the disclosure page at the end of the report.

Comparative Performance

Total Fund

As of June 30, 2024

	Performance(%)									
	Dec 2023	Dec 2022	Dec 2021	Dec 2020	Dec 2019	Dec 2018	Dec 2017	Dec 2016	Dec 2015	Dec 2014
Midstream Energy Composite	19.25	30.63	41.85	-25.18	13.40	-13.16	-5.01	20.84	-	-
Alerian Midstream Energy Index	14.02	21.53	38.42	-23.36	24.04	-13.29	-2.41	33.83	-	-
Harvest MLP	19.25 (42)	30.63 (35)	41.85 (51)	-25.18 (50)	13.40 (55)	-13.16 (42)	-5.01 (61)	20.84 (78)	-30.54 (31)	-
Alerian Midstream Energy Index	14.02	21.53	38.42	-23.36	24.04	-13.29	-2.41	33.83	-37.31	-
IM Energy MLP (MF) Median	16.84	28.46	42.00	-25.55	13.68	-14.15	-4.47	29.67	-33.94	-

See the disclosure page at the end of the report.

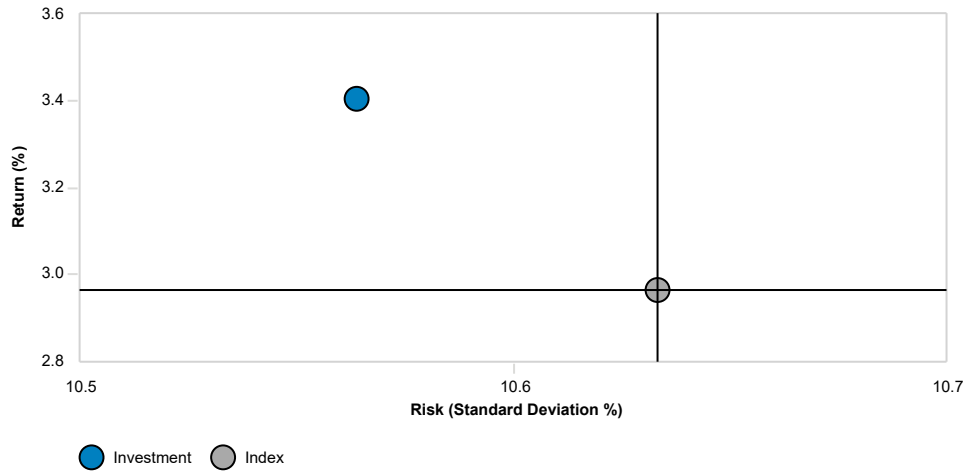
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	3.41	10.56	0.09	102.58	8	100.23	4
Index	2.97	10.63	0.05	100.00	8	100.00	4

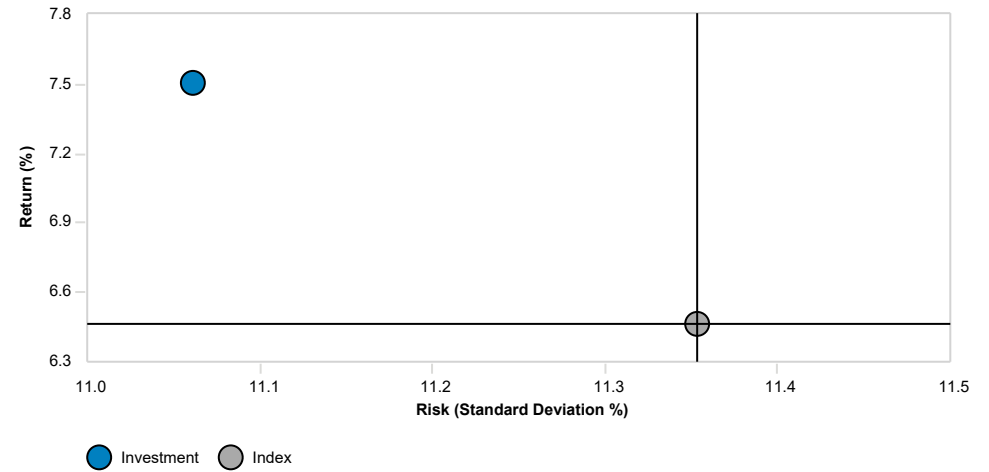
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.50	11.06	0.52	102.91	15	96.80	5
Index	6.47	11.35	0.42	100.00	15	100.00	5

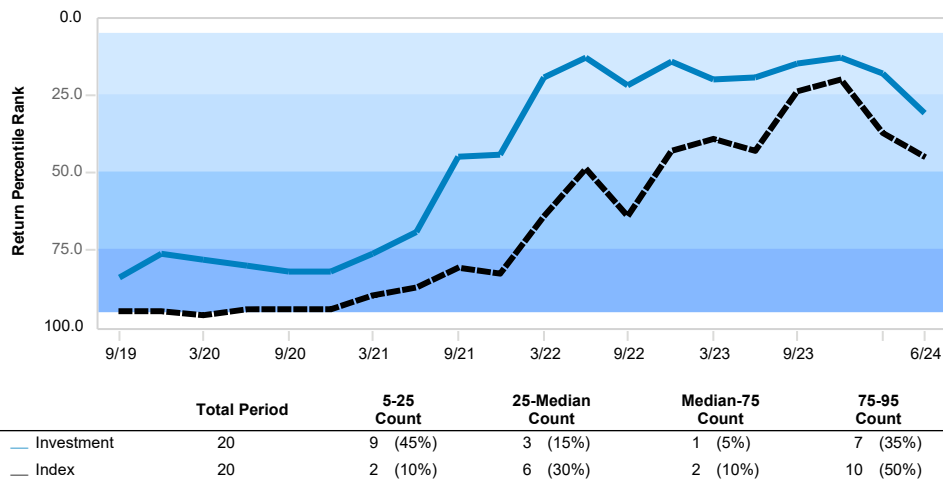
Risk and Return 3 Years



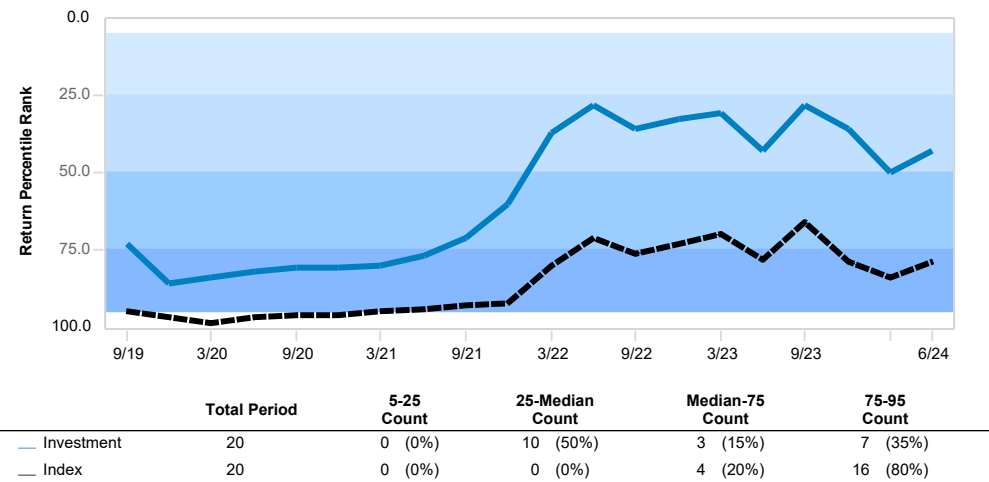
Risk and Return 5 Years



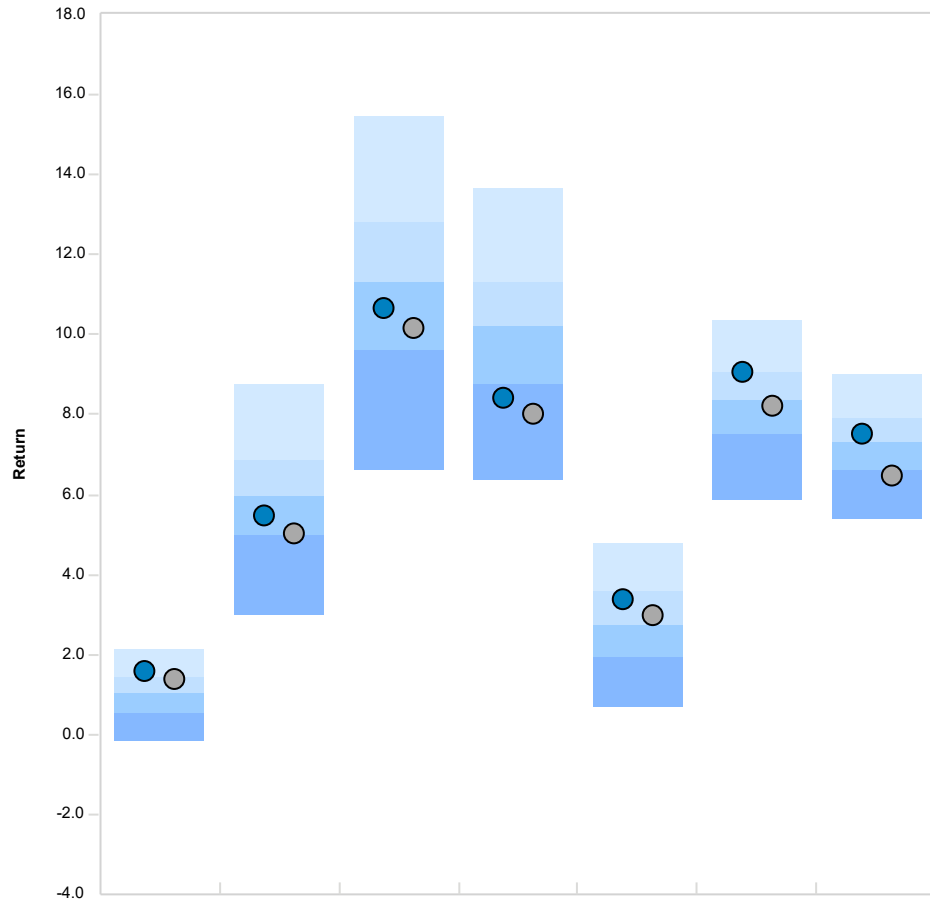
3 Year Rolling Percentile Rank All Public Plans-Total Fund



5 Year Rolling Percentile Rank All Public Plans-Total Fund

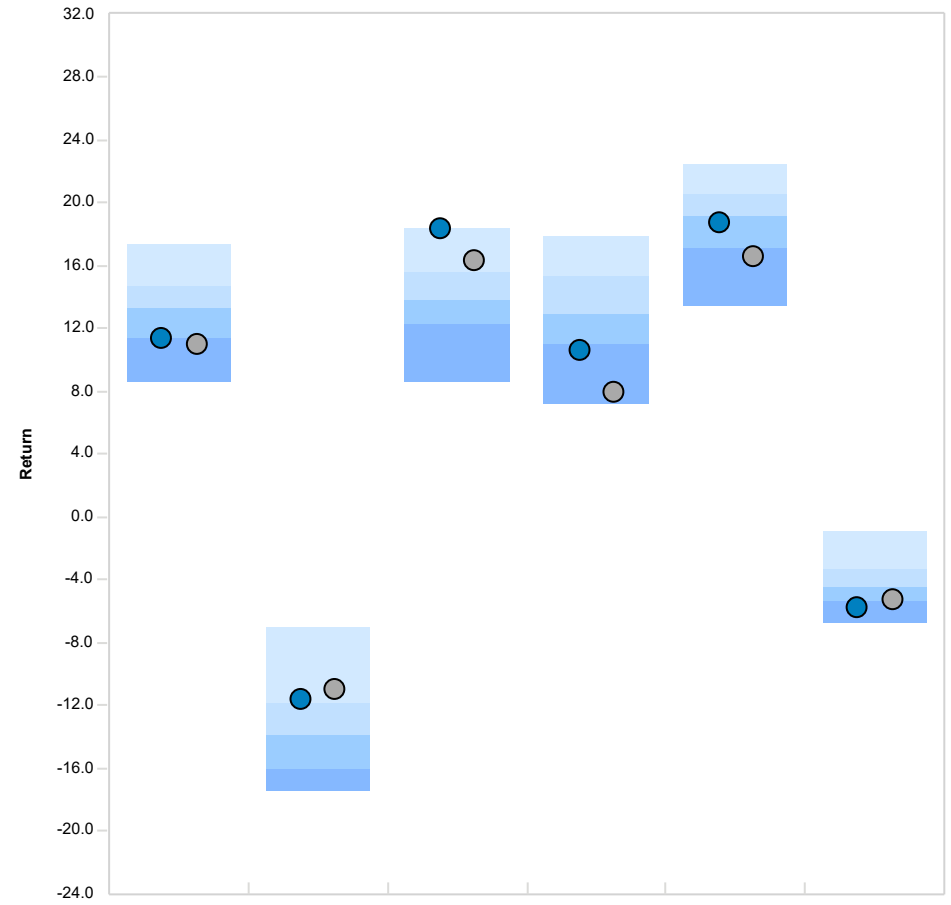


Plan Sponsor Peer Group Analysis vs. All Public Plans-Total Fund



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	1.59 (19)	5.47 (63)	10.66 (61)	8.42 (79)	3.41 (31)	9.06 (25)	7.50 (43)
● Index	1.37 (29)	5.05 (74)	10.16 (69)	8.01 (84)	2.97 (45)	8.24 (55)	6.47 (79)
Median	1.04	5.98	11.32	10.22	2.75	8.37	7.32

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



	2023	2022	2021	2020	2019	2018
● Investment	11.38 (77)	-11.58 (23)	18.37 (6)	10.67 (79)	18.80 (56)	-5.76 (85)
● Index	11.07 (81)	-10.94 (18)	16.44 (17)	7.98 (94)	16.68 (81)	-5.24 (74)
Median	13.28	-13.87	13.80	12.97	19.20	-4.40

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	3.82 (83)	7.40 (70)	-2.31 (26)	2.30 (90)	3.77 (75)	5.76 (52)
Index	3.63 (86)	7.24 (73)	-2.22 (24)	2.26 (90)	3.59 (81)	5.99 (44)
Median	4.88	8.20	-2.98	3.28	4.37	5.80

Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	10.01	17.60	0.47	99.94	8	99.93	4
Index	10.01	17.61	0.47	100.00	8	100.00	4

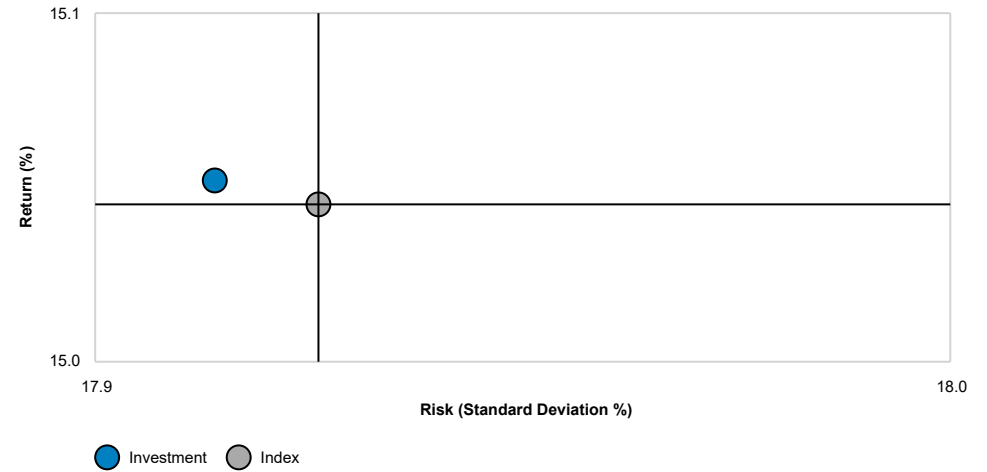
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	15.05	17.91	0.76	99.96	15	99.90	5
Index	15.05	17.93	0.76	100.00	15	100.00	5

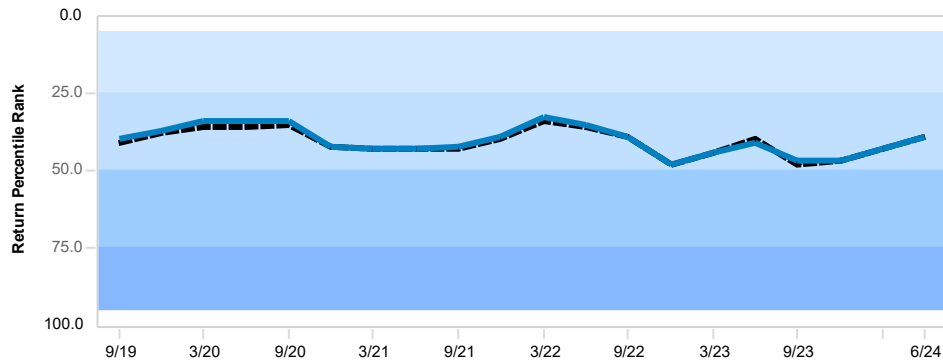
Risk and Return 3 Years



Risk and Return 5 Years

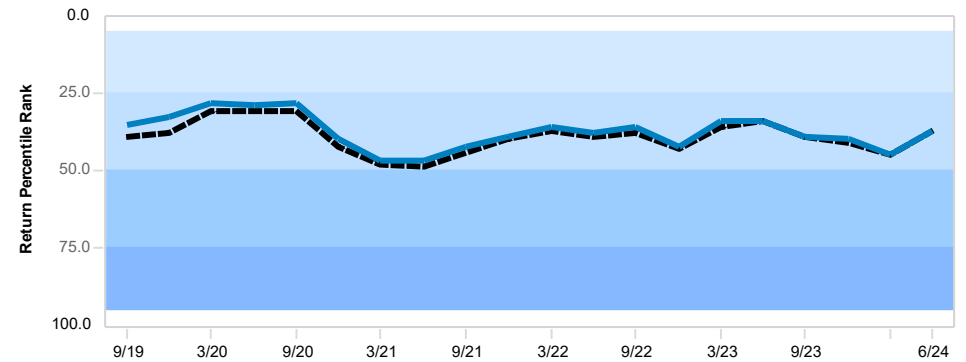


3 Year Rolling Percentile Rank IM U.S. Large Cap Core Equity (SA+CF)



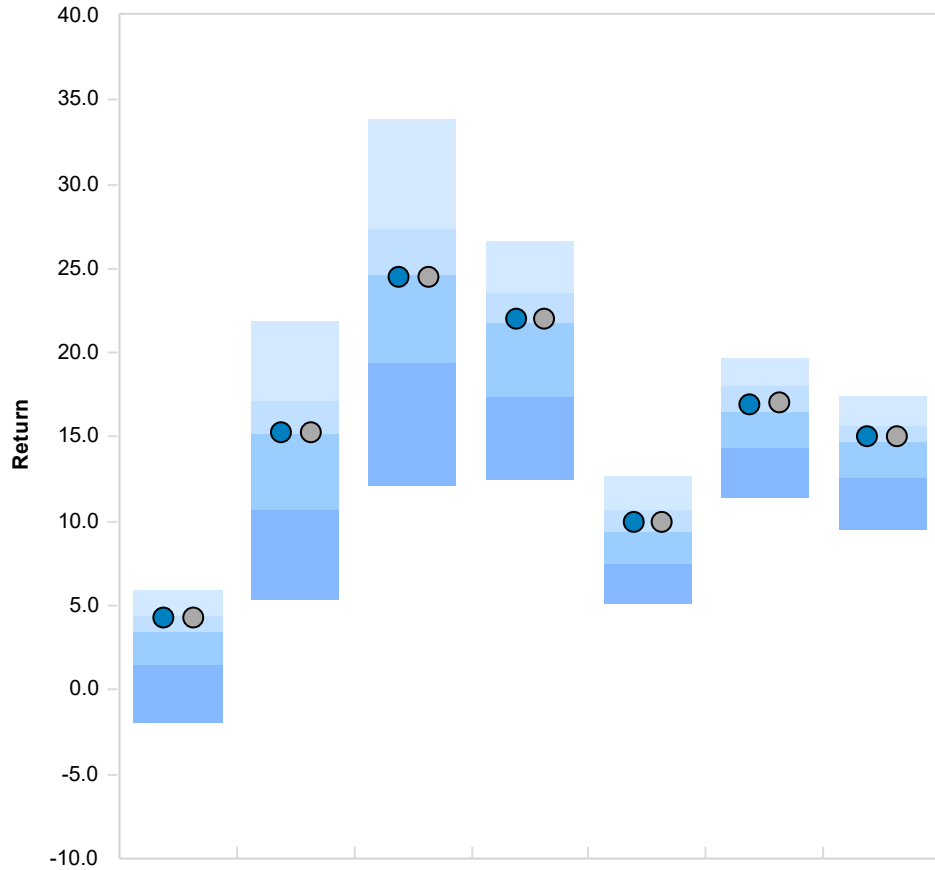
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)
Index	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)

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



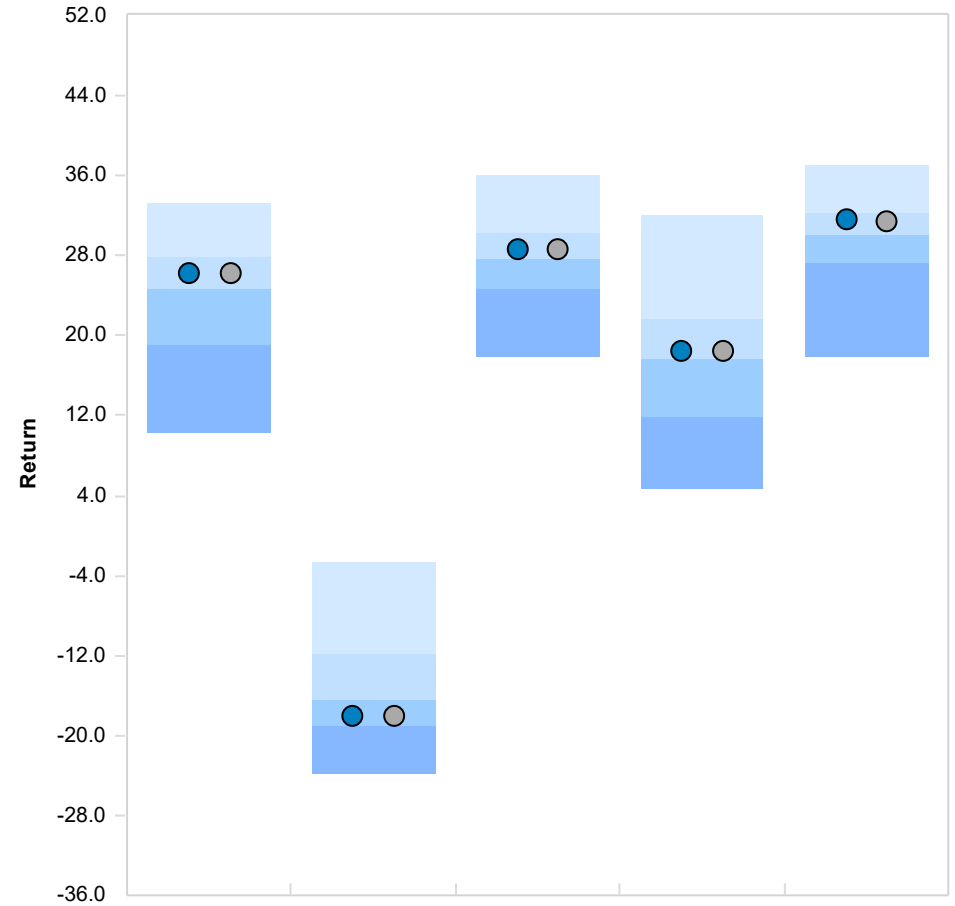
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)
Index	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)

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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	4.28 (35)	15.27 (48)	24.53 (54)	22.04 (46)	10.01 (39)	17.00 (39)	15.05 (37)
● Index	4.28 (35)	15.29 (47)	24.56 (53)	22.05 (45)	10.01 (39)	17.01 (38)	15.05 (37)
Median	3.44	15.15	24.63	21.82	9.44	16.50	14.68

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



	2023	2022	2021	2020	2019
● Investment	26.28 (38)	-18.09 (65)	28.69 (37)	18.45 (45)	31.56 (33)
● Index	26.29 (37)	-18.11 (67)	28.71 (37)	18.40 (45)	31.49 (34)
Median	24.67	-16.49	27.71	17.65	30.11

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	10.54 (55)	11.69 (46)	-3.27 (74)	8.74 (30)	7.49 (26)	7.56 (63)
Index	10.56 (54)	11.69 (46)	-3.27 (74)	8.74 (30)	7.50 (26)	7.56 (62)
Median	10.84	11.61	-2.80	7.88	6.40	7.94

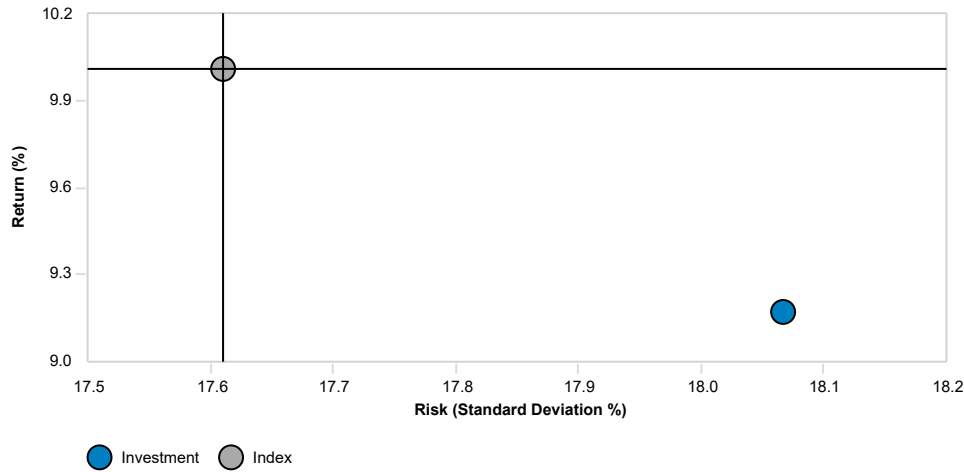
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.17	18.07	0.42	100.64	8	104.17	4
Index	10.01	17.61	0.47	100.00	8	100.00	4

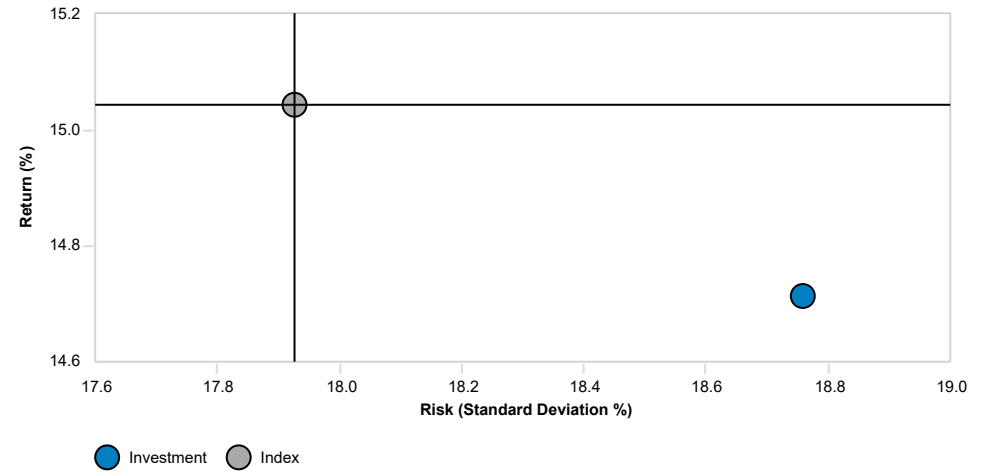
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	14.71	18.76	0.72	102.20	15	104.75	5
Index	15.05	17.93	0.76	100.00	15	100.00	5

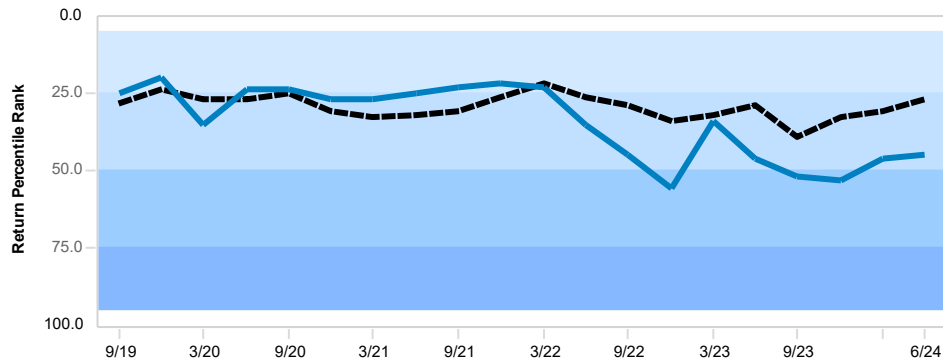
Risk and Return 3 Years



Risk and Return 5 Years

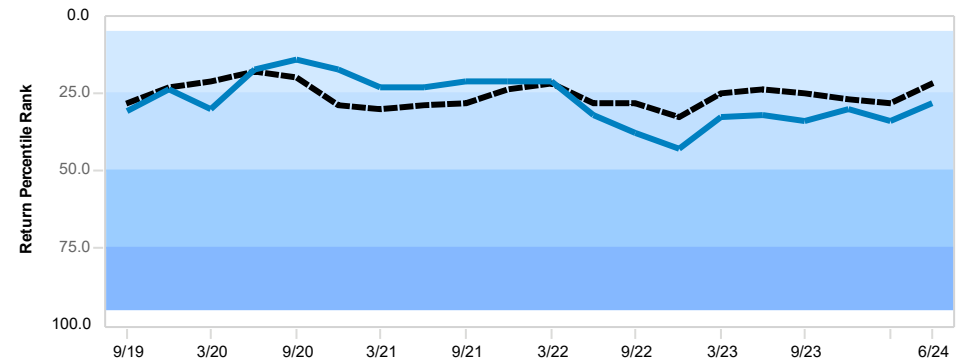


3 Year Rolling Percentile Rank IM U.S. Large Cap Core Equity (SA+CF)



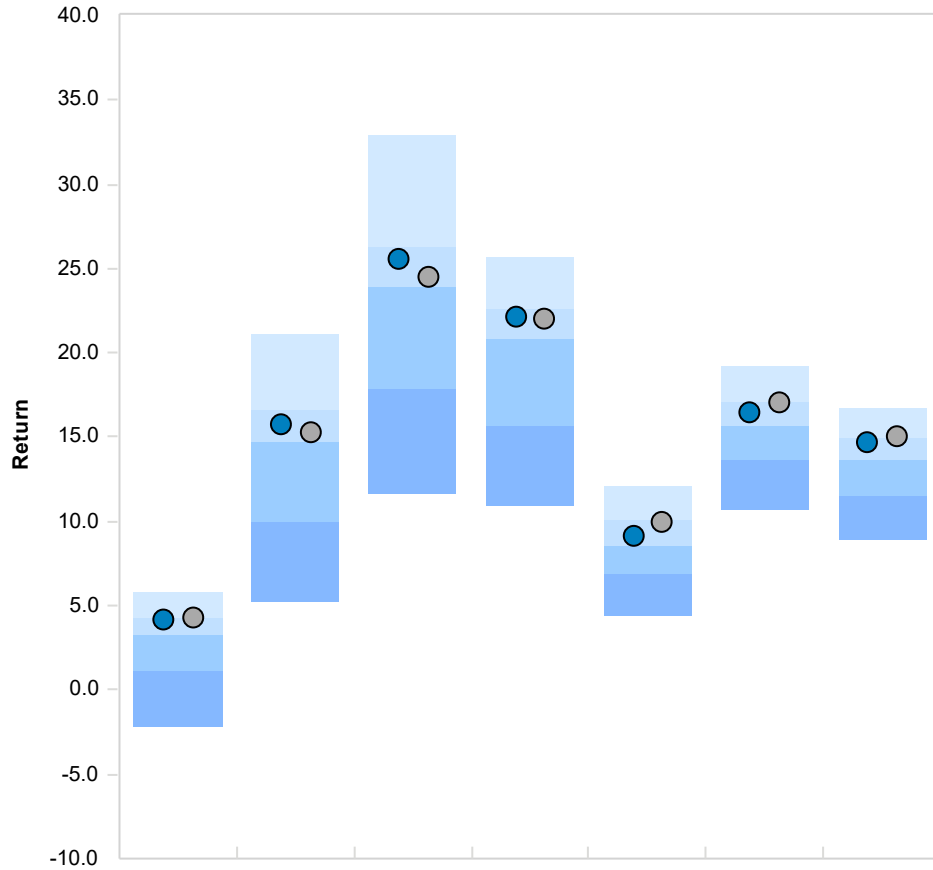
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	8 (40%)	9 (45%)	3 (15%)	0 (0%)
Index	20	3 (15%)	17 (85%)	0 (0%)	0 (0%)

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



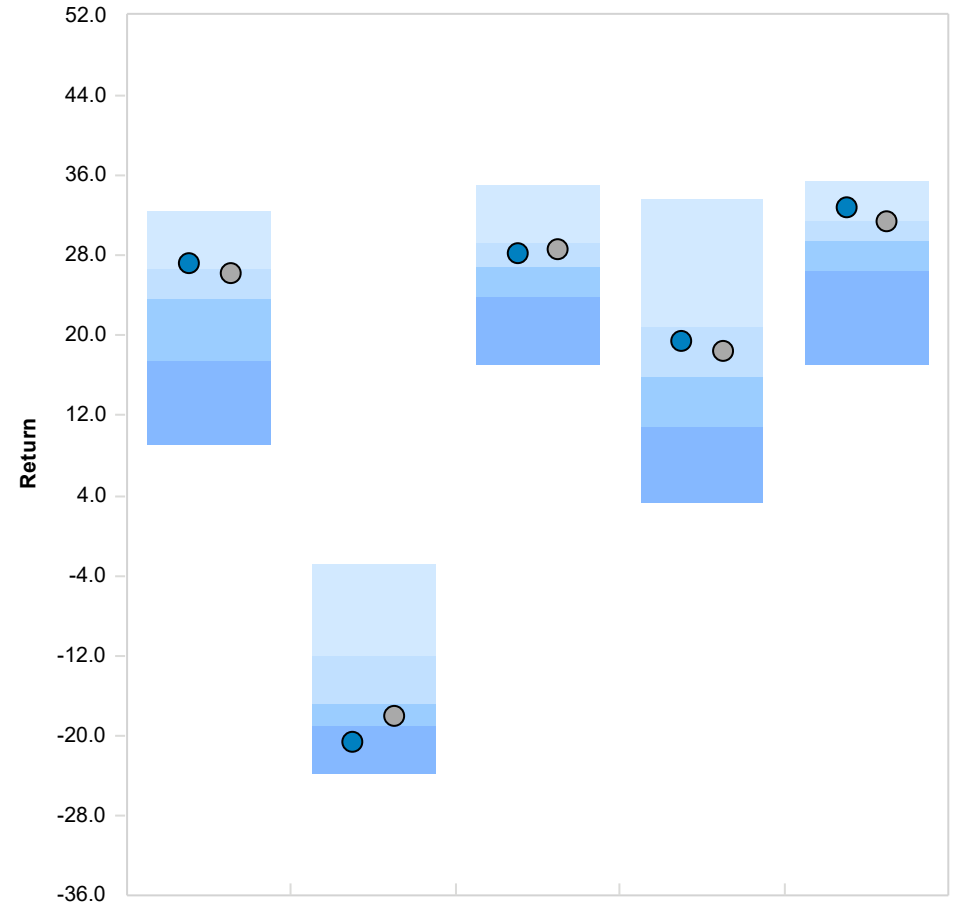
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	9 (45%)	11 (55%)	0 (0%)	0 (0%)
Index	20	10 (50%)	10 (50%)	0 (0%)	0 (0%)

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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	4.23 (28)	15.75 (36)	25.54 (32)	22.14 (30)	9.17 (45)	16.51 (34)	14.71 (28)
● Index	4.28 (25)	15.29 (40)	24.56 (41)	22.05 (31)	10.01 (27)	17.01 (27)	15.05 (22)
Median	3.21	14.69	23.92	20.86	8.58	15.68	13.65

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



	2023	2022	2021	2020	2019
● Investment	27.16 (24)	-20.69 (87)	28.30 (34)	19.44 (35)	32.77 (13)
● Index	26.29 (29)	-18.11 (61)	28.71 (29)	18.40 (41)	31.49 (26)
Median	23.76	-16.91	26.87	15.94	29.49

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	11.04 (42)	11.91 (35)	-3.08 (54)	8.83 (23)	7.73 (19)	7.35 (68)
Index	10.56 (51)	11.69 (43)	-3.27 (66)	8.74 (24)	7.50 (22)	7.56 (58)
Median	10.56	11.49	-2.99	7.62	6.21	7.88

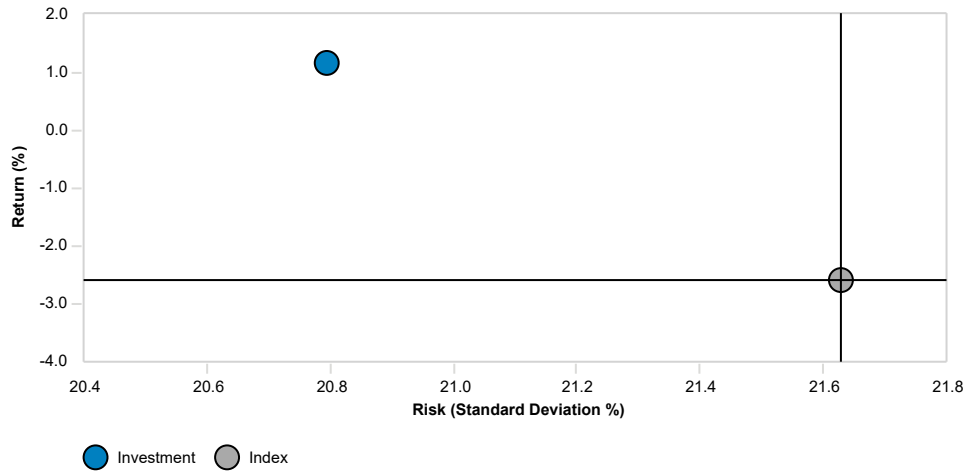
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	1.18	20.79	0.02	100.37	6	88.98	6
Index	-2.58	21.63	-0.15	100.00	6	100.00	6

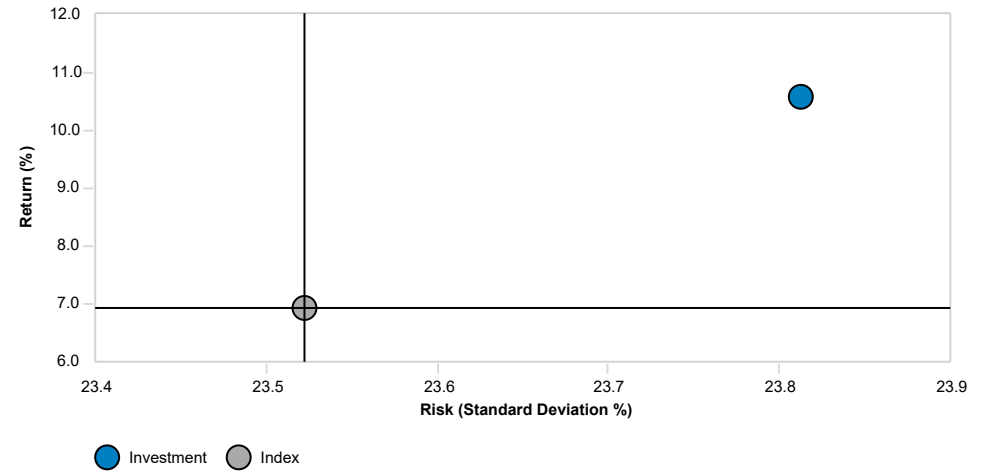
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	10.58	23.81	0.45	102.48	12	90.69	8
Index	6.94	23.52	0.31	100.00	12	100.00	8

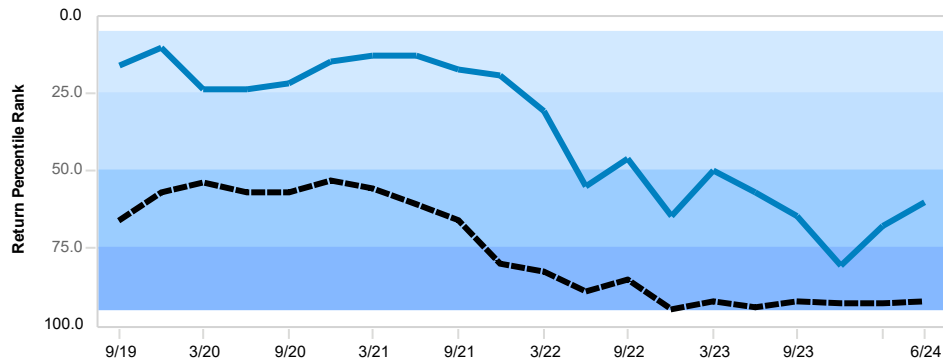
Risk and Return 3 Years



Risk and Return 5 Years

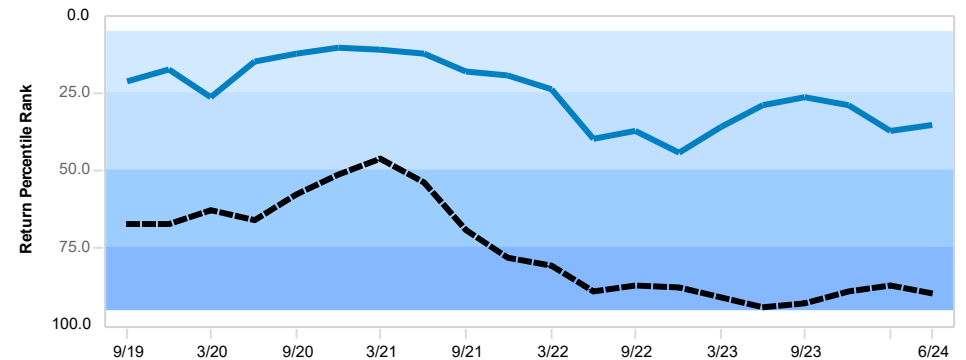


3 Year Rolling Percentile Rank IM U.S. Small Cap Core Equity (SA+CF)



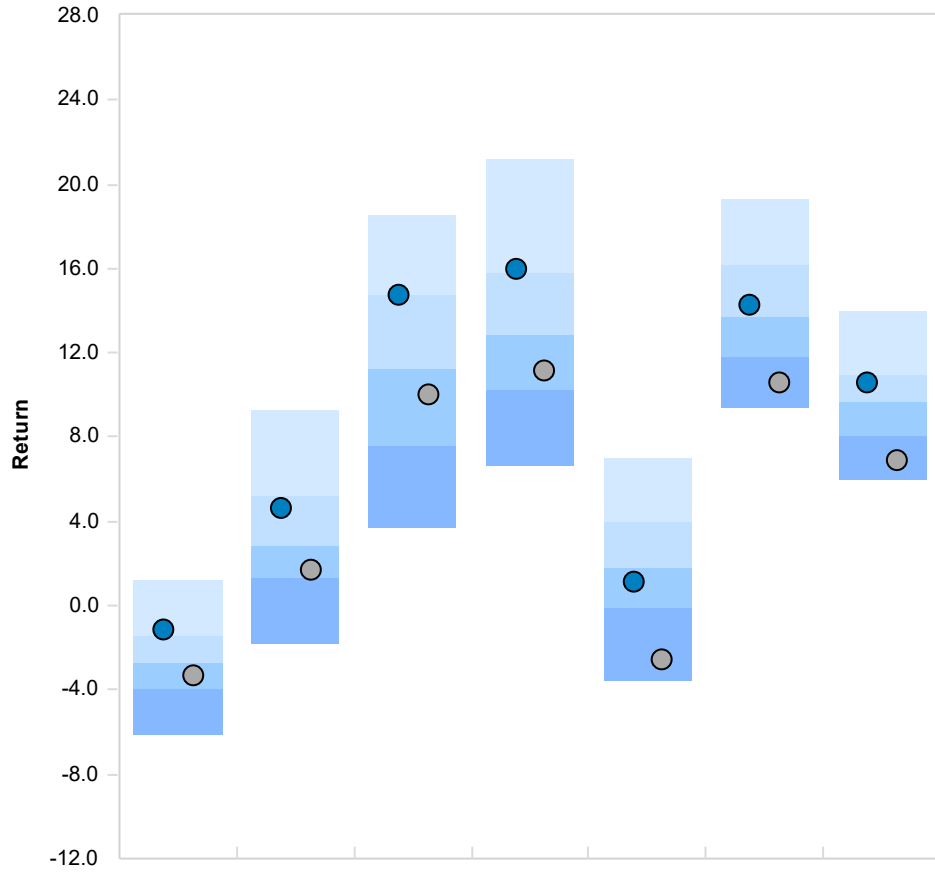
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	10 (50%)	3 (15%)	6 (30%)	1 (5%)
Index	20	0 (0%)	0 (0%)	9 (45%)	11 (55%)

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



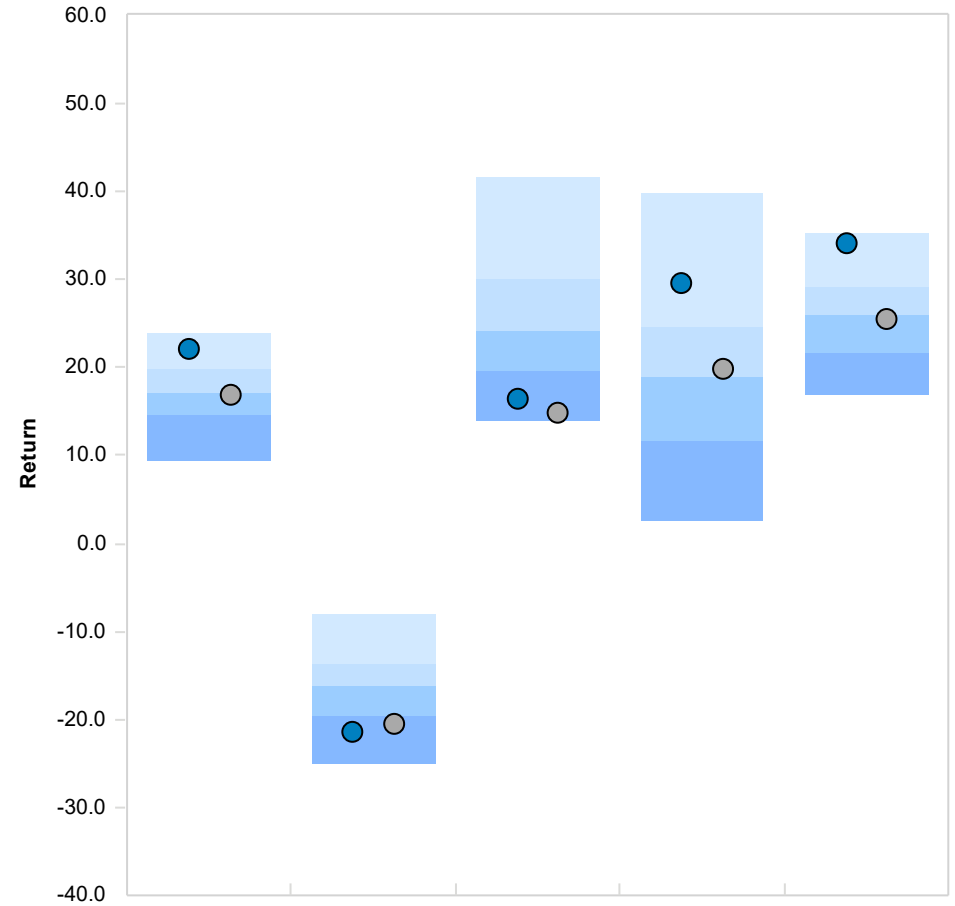
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	10 (50%)	10 (50%)	0 (0%)	0 (0%)
Index	20	0 (0%)	1 (5%)	8 (40%)	11 (55%)

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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	-1.17 (23)	4.60 (29)	14.76 (25)	15.97 (22)	1.18 (60)	14.33 (41)	10.58 (35)
● Index	-3.28 (63)	1.73 (71)	10.06 (59)	11.18 (68)	-2.58 (92)	10.63 (88)	6.94 (90)
Median	-2.73	2.87	11.28	12.85	1.82	13.72	9.69

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



	2023	2022	2021	2020	2019
● Investment	22.19 (14)	-21.41 (83)	16.56 (87)	29.54 (16)	34.14 (8)
● Index	16.93 (54)	-20.44 (81)	14.82 (93)	19.96 (40)	25.53 (52)
Median	17.23	-16.09	24.24	18.89	25.88

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	5.84 (51)	13.66 (36)	-3.48 (29)	6.13 (20)	4.94 (31)	6.83 (83)
Index	5.18 (64)	14.03 (29)	-5.13 (69)	5.21 (38)	2.74 (71)	6.23 (89)
Median	5.85	12.75	-4.56	4.70	3.85	9.03

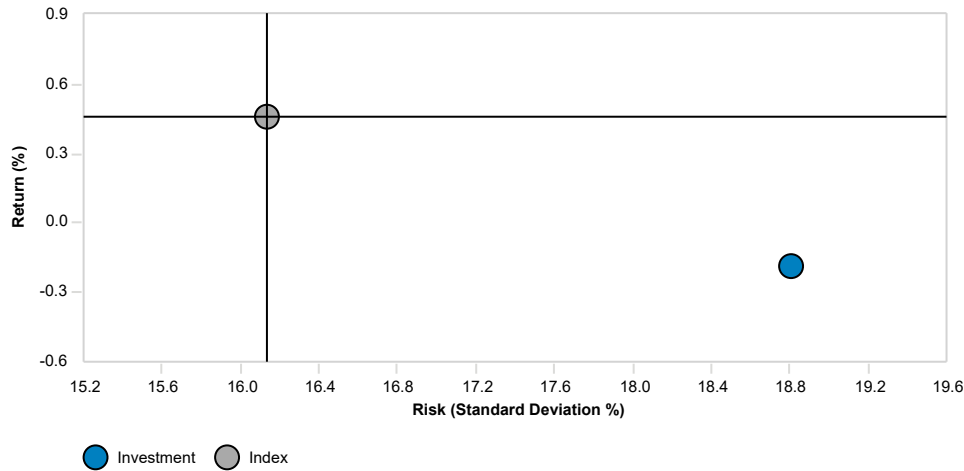
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-0.19	18.81	-0.08	115.91	7	118.14	5
Index	0.46	16.13	-0.08	100.00	7	100.00	5

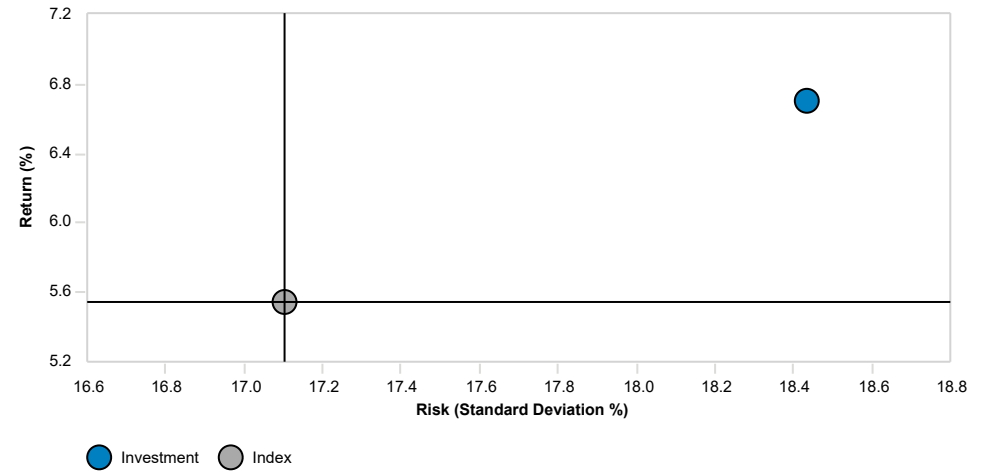
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.71	18.43	0.33	110.75	13	107.92	7
Index	5.55	17.10	0.28	100.00	13	100.00	7

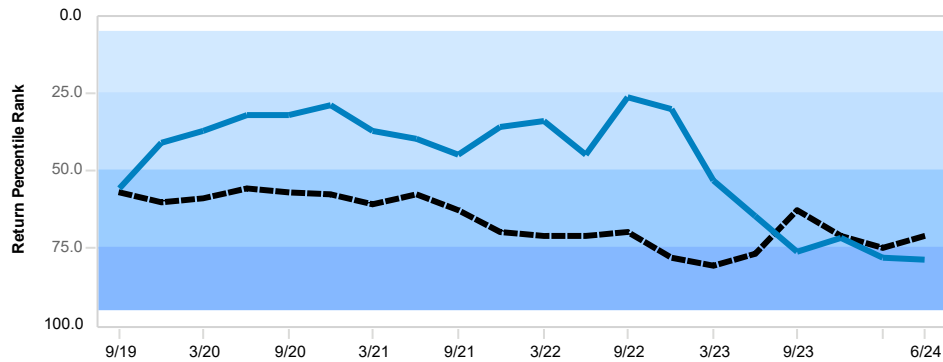
Risk and Return 3 Years



Risk and Return 5 Years

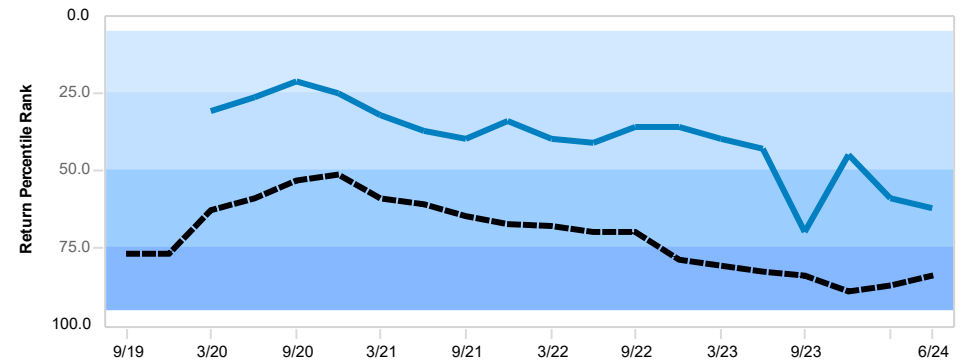


3 Year Rolling Percentile Rank IM International Large Cap Equity (SA+CF)



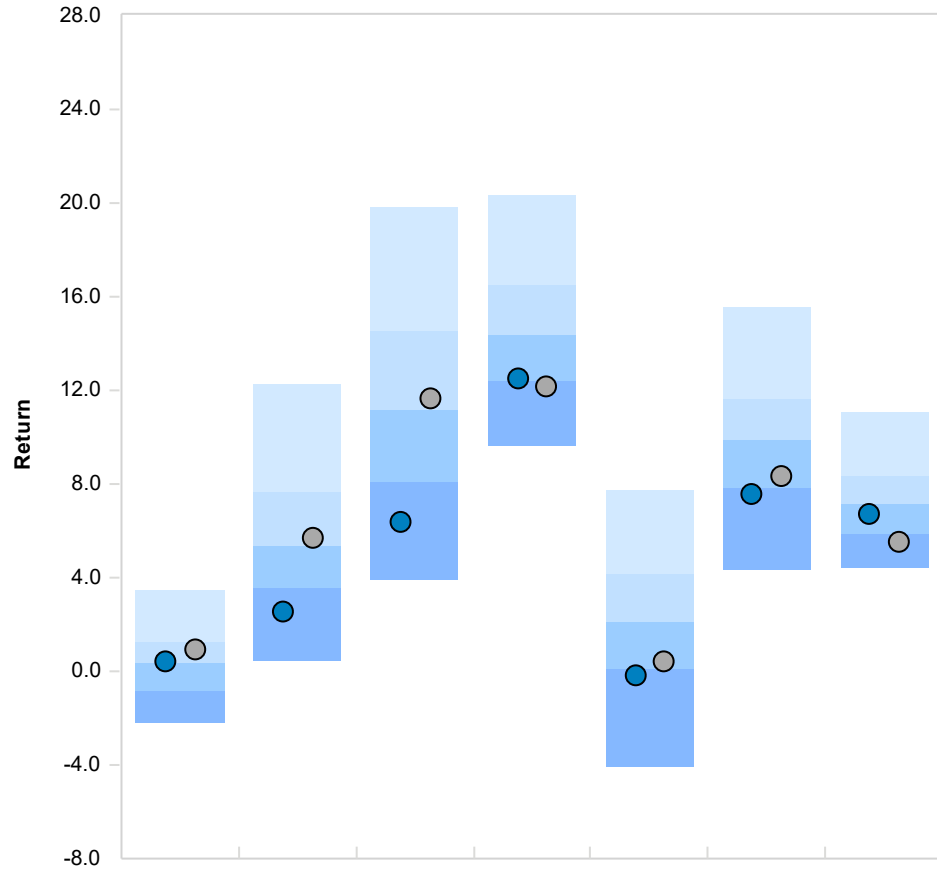
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	13 (65%)	4 (20%)	3 (15%)
Index	20	0 (0%)	0 (0%)	17 (85%)	3 (15%)

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



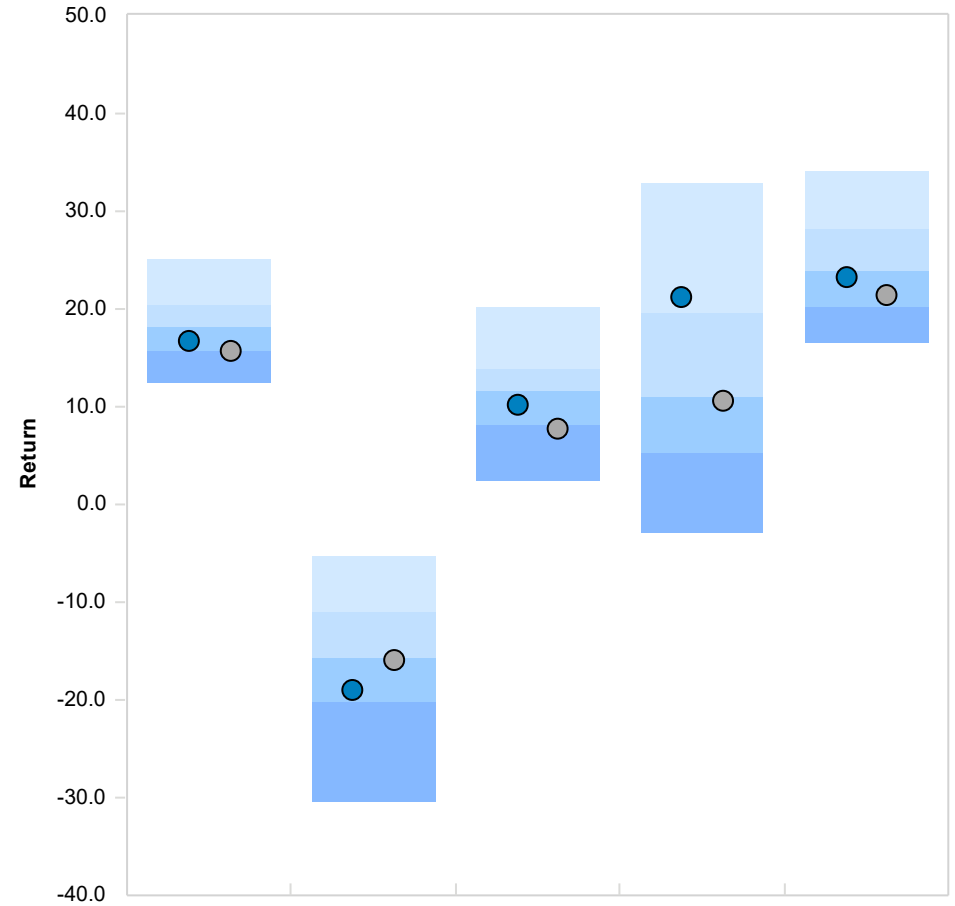
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	18	2 (11%)	13 (72%)	3 (17%)	0 (0%)
Index	20	0 (0%)	0 (0%)	11 (55%)	9 (45%)

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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	0.43 (45)	2.56 (87)	6.39 (87)	12.52 (74)	-0.19 (79)	7.57 (78)	6.71 (62)
● Index	0.96 (34)	5.69 (45)	11.62 (45)	12.17 (80)	0.46 (71)	8.31 (70)	5.55 (84)
Median	0.33	5.32	11.15	14.39	2.15	9.88	7.17

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



	2023	2022	2021	2020	2019
● Investment	16.65 (67)	-19.07 (70)	10.23 (63)	21.17 (21)	23.17 (55)
● Index	15.62 (77)	-16.00 (52)	7.82 (78)	10.65 (52)	21.51 (67)
Median	18.13	-15.76	11.72	11.11	23.94

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	2.12 (91)	12.64 (16)	-7.91 (86)	3.68 (34)	8.46 (54)	15.21 (57)
Index	4.69 (63)	9.75 (61)	-3.77 (44)	2.44 (74)	6.87 (81)	14.28 (74)
Median	5.39	10.14	-4.15	3.18	8.66	15.83

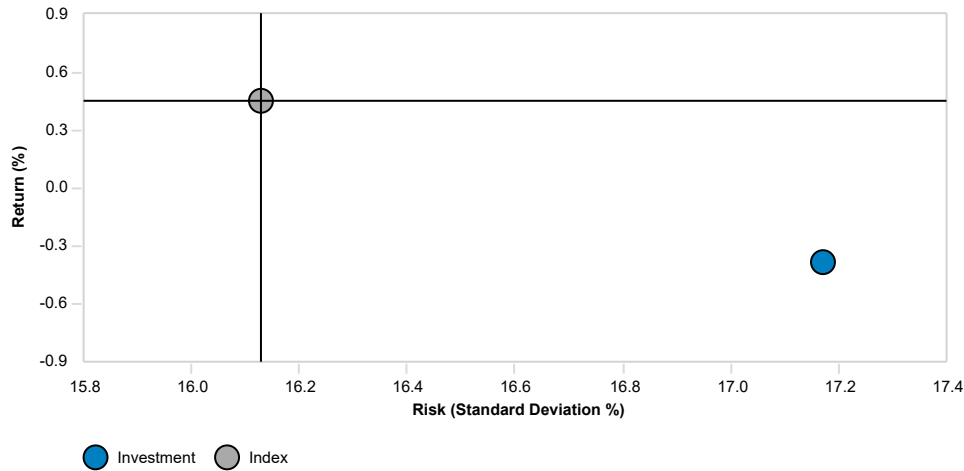
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-0.38	17.17	-0.11	107.37	7	111.02	5
Index	0.46	16.13	-0.08	100.00	7	100.00	5

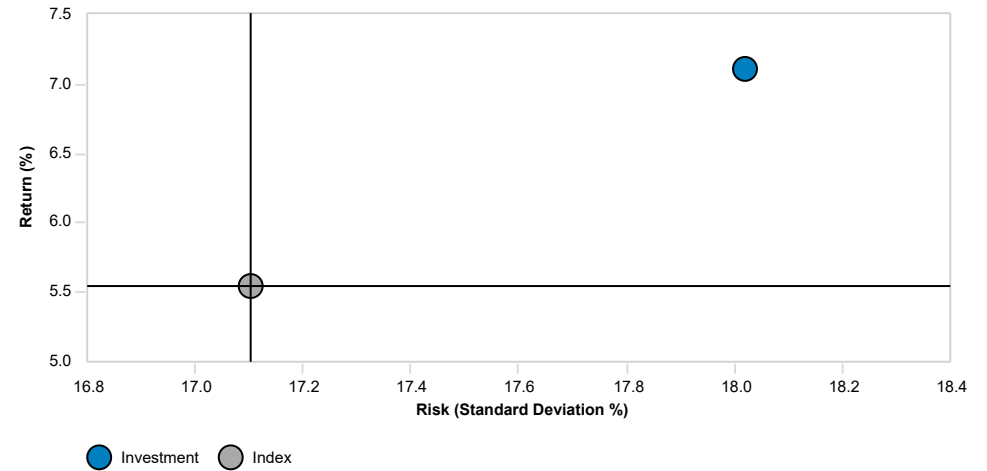
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.11	18.02	0.35	108.89	14	103.73	6
Index	5.55	17.10	0.28	100.00	13	100.00	7

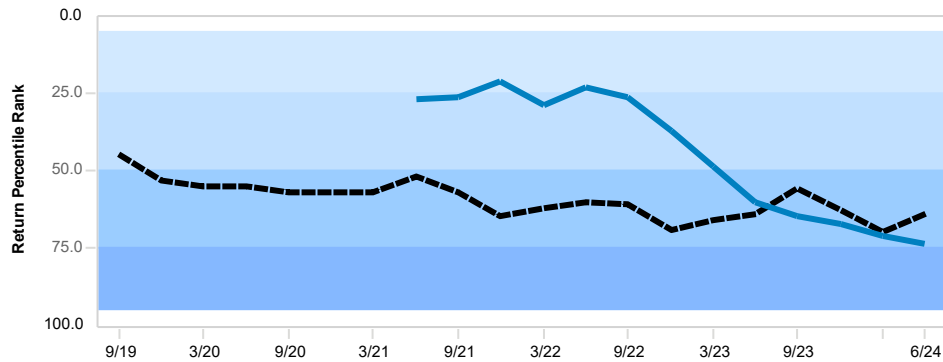
Risk and Return 3 Years



Risk and Return 5 Years

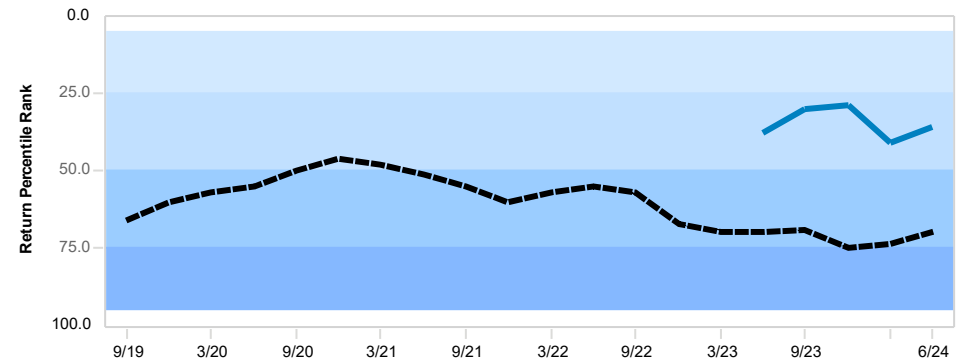


3 Year Rolling Percentile Rank IM International Large Cap Equity (SA+CF)



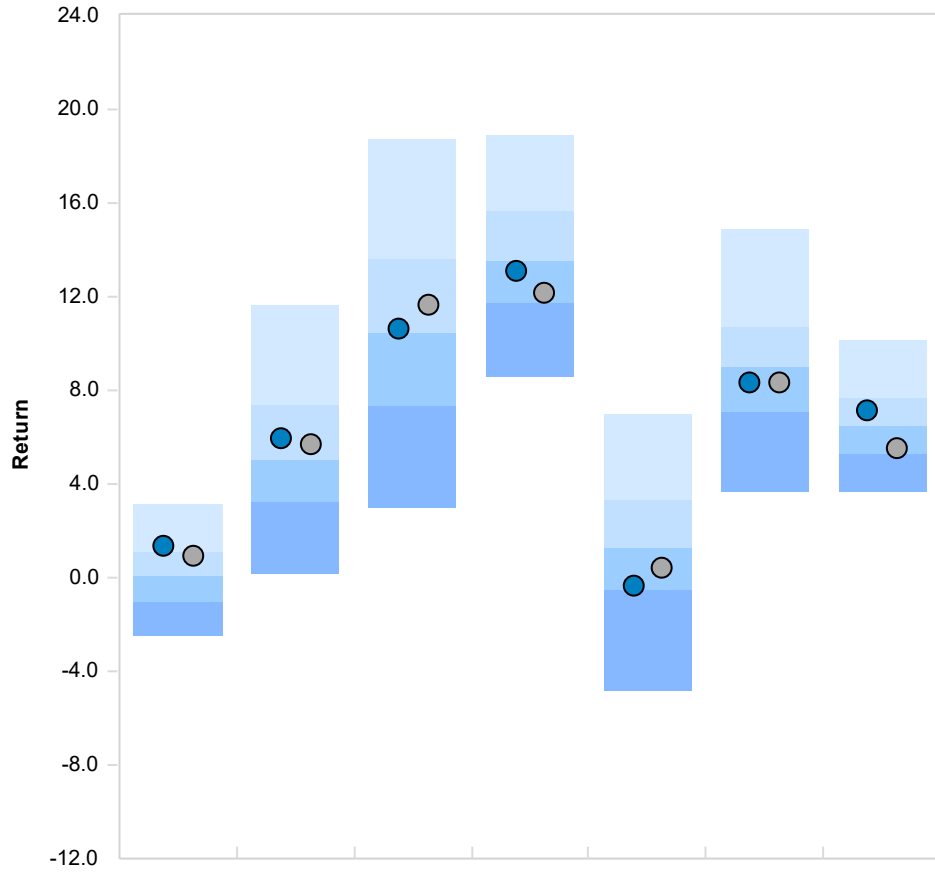
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	13	2 (15%)	6 (46%)	5 (38%)	0 (0%)
Index	20	0 (0%)	1 (5%)	19 (95%)	0 (0%)

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



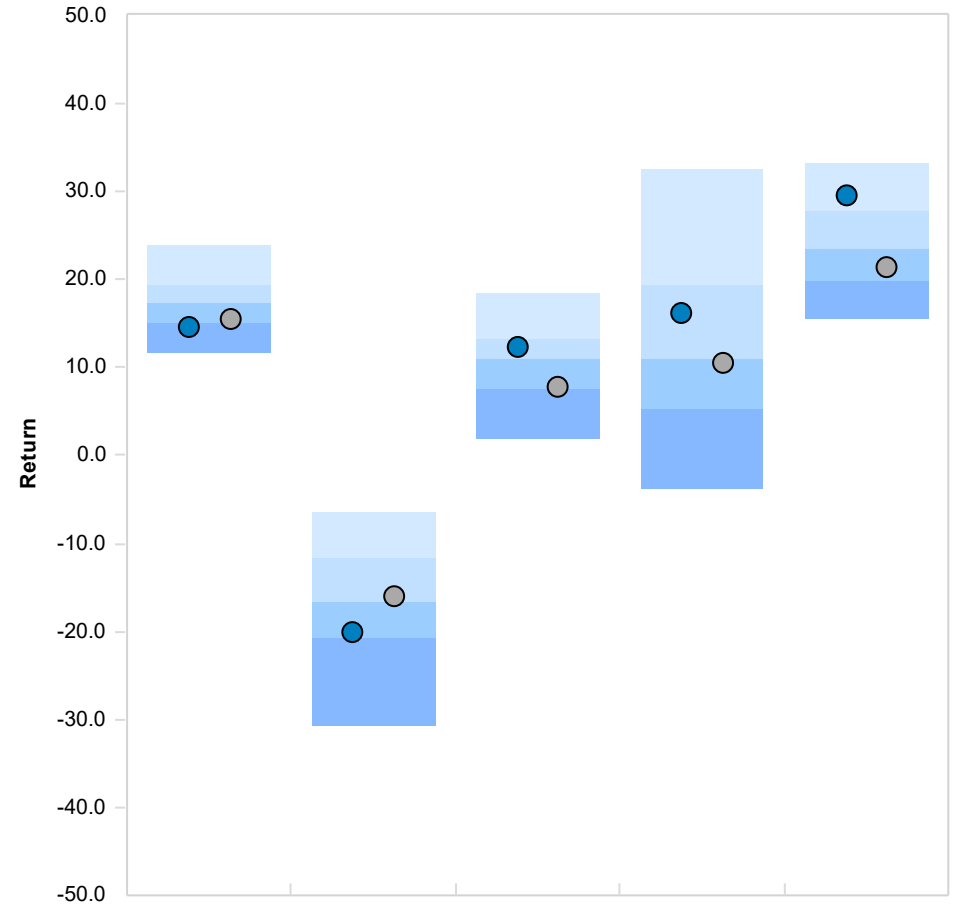
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	5	0 (0%)	5 (100%)	0 (0%)	0 (0%)
Index	20	0 (0%)	3 (15%)	17 (85%)	0 (0%)

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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	1.38 (21)	5.98 (40)	10.67 (48)	13.07 (57)	-0.38 (74)	8.34 (60)	7.11 (36)
● Index	0.96 (28)	5.69 (42)	11.62 (38)	12.17 (70)	0.46 (64)	8.31 (60)	5.55 (70)
Median	0.12	5.03	10.44	13.53	1.28	8.98	6.45

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



	2023	2022	2021	2020	2019
● Investment	14.57 (80)	-19.99 (72)	12.39 (35)	16.23 (35)	29.50 (17)
● Index	15.62 (70)	-16.00 (48)	7.82 (73)	10.65 (52)	21.51 (65)
Median	17.36	-16.62	11.08	10.98	23.43

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	4.54 (64)	9.63 (60)	-4.74 (52)	3.01 (53)	6.50 (83)	15.18 (56)
Index	4.69 (62)	9.75 (57)	-3.77 (40)	2.44 (70)	6.87 (79)	14.28 (72)
Median	5.31	10.11	-4.66	3.06	8.52	15.65

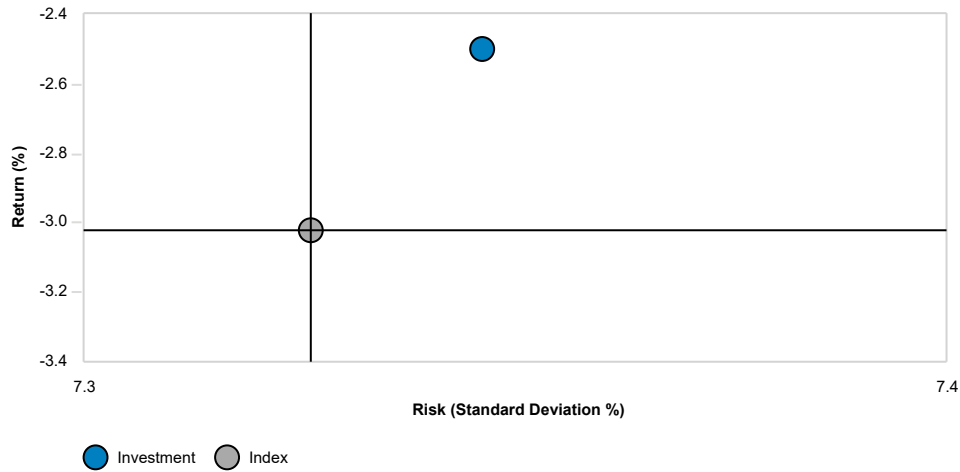
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-2.50	7.35	-0.73	101.80	5	96.70	7
Index	-3.02	7.33	-0.81	100.00	6	100.00	6

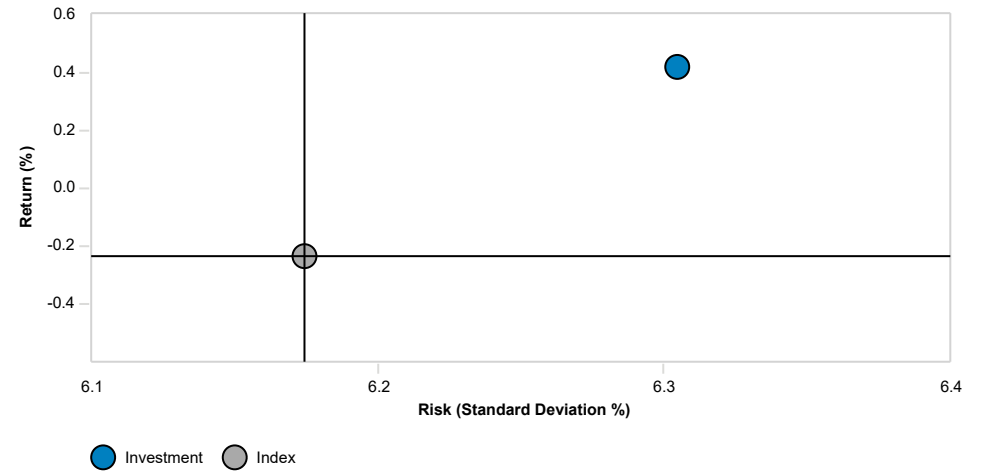
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	0.42	6.30	-0.24	106.66	12	98.51	8
Index	-0.23	6.17	-0.36	100.00	13	100.00	7

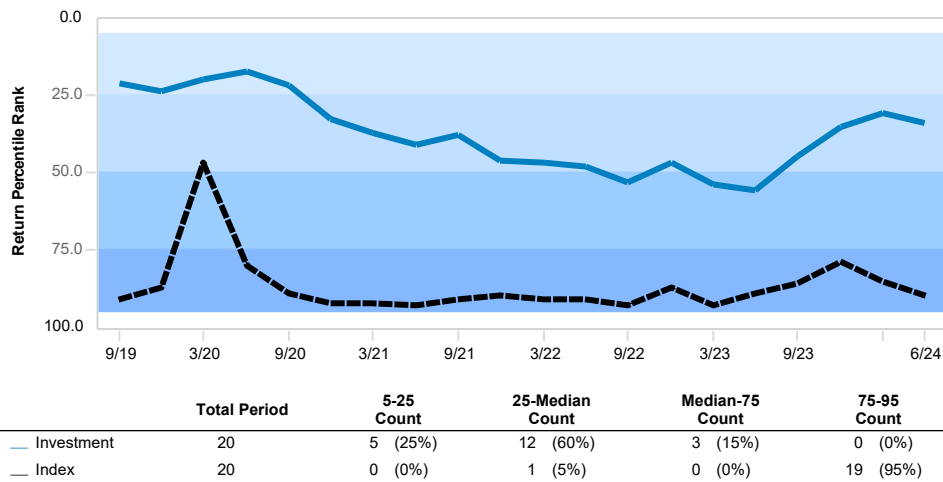
Risk and Return 3 Years



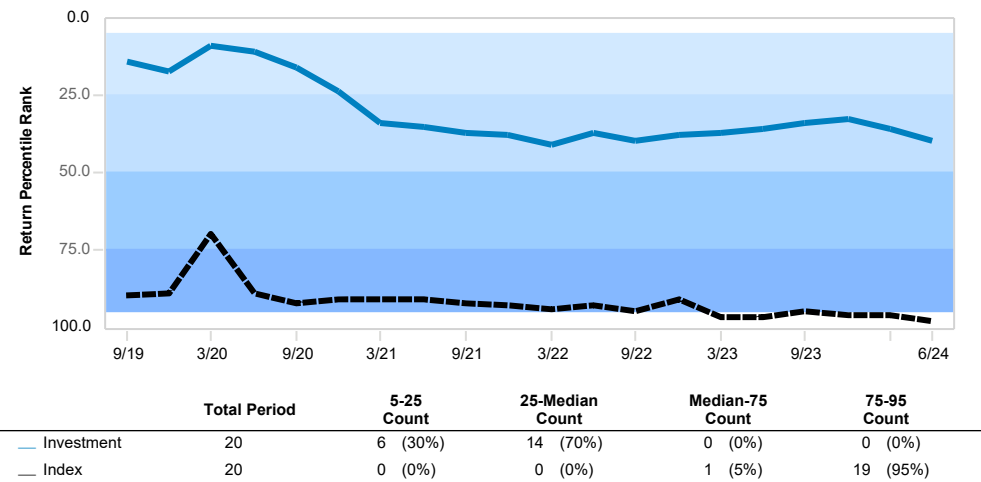
Risk and Return 5 Years



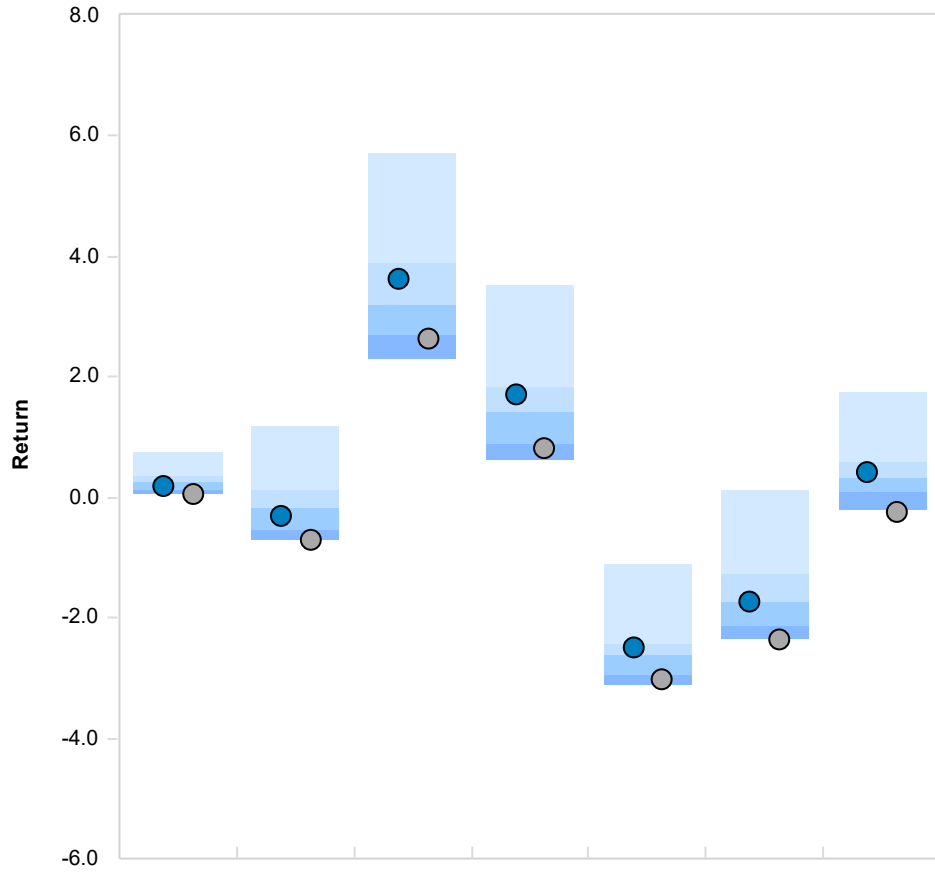
3 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



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

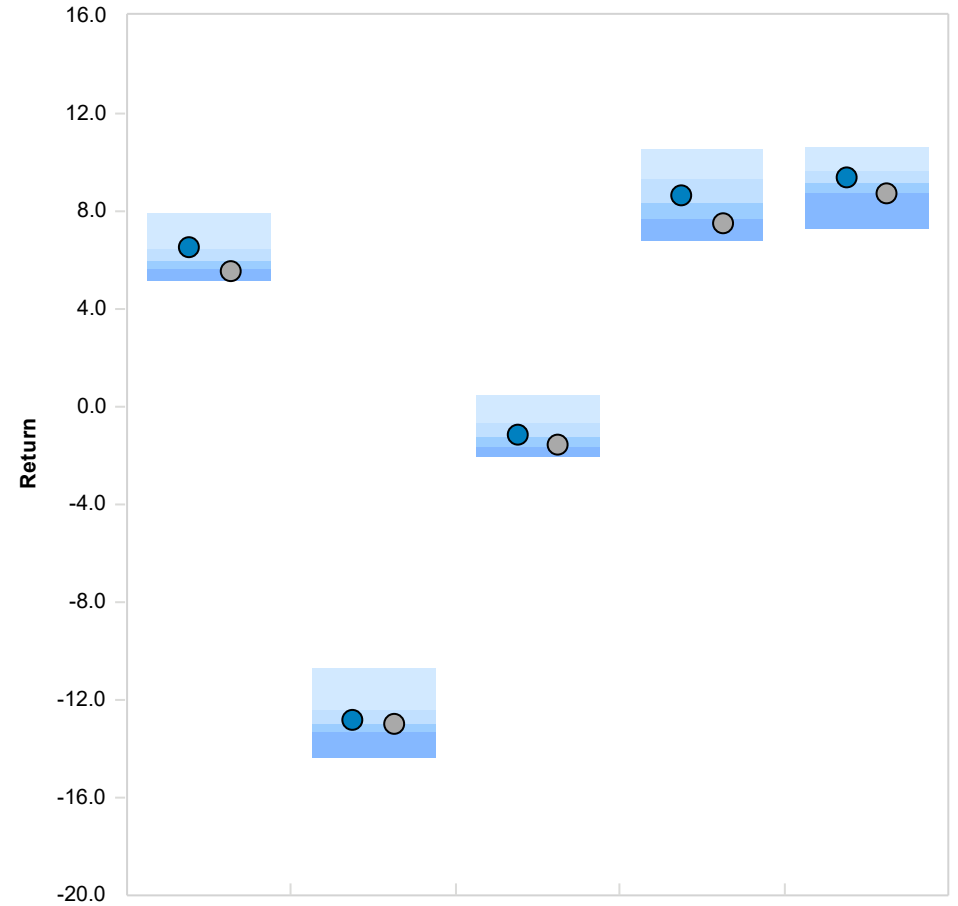


Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	0.18 (67)	-0.30 (57)	3.65 (35)	1.71 (29)	-2.50 (34)	-1.74 (51)	0.42 (40)
● Index	0.07 (94)	-0.71 (95)	2.63 (91)	0.83 (91)	-3.02 (90)	-2.36 (96)	-0.23 (98)
Median	0.26	-0.19	3.21	1.42	-2.63	-1.72	0.31

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



	2023	2022	2021	2020	2019
● Investment	6.49 (25)	-12.78 (39)	-1.16 (46)	8.65 (43)	9.40 (38)
● Index	5.53 (84)	-13.01 (54)	-1.55 (66)	7.51 (86)	8.72 (79)
Median	5.99	-12.95	-1.24	8.34	9.17

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	-0.48 (51)	7.19 (17)	-3.02 (35)	-0.65 (44)	3.11 (62)	2.16 (19)
Index	-0.78 (92)	6.82 (53)	-3.23 (71)	-0.84 (80)	2.96 (78)	1.87 (43)
Median	-0.48	6.82	-3.13	-0.72	3.15	1.82

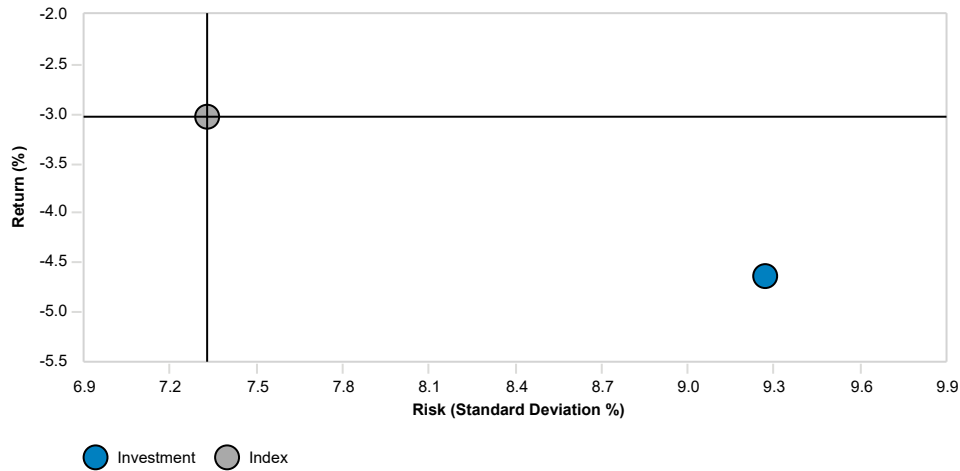
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-4.64	9.27	-0.80	117.62	4	126.45	8
Index	-3.02	7.33	-0.81	100.00	6	100.00	6

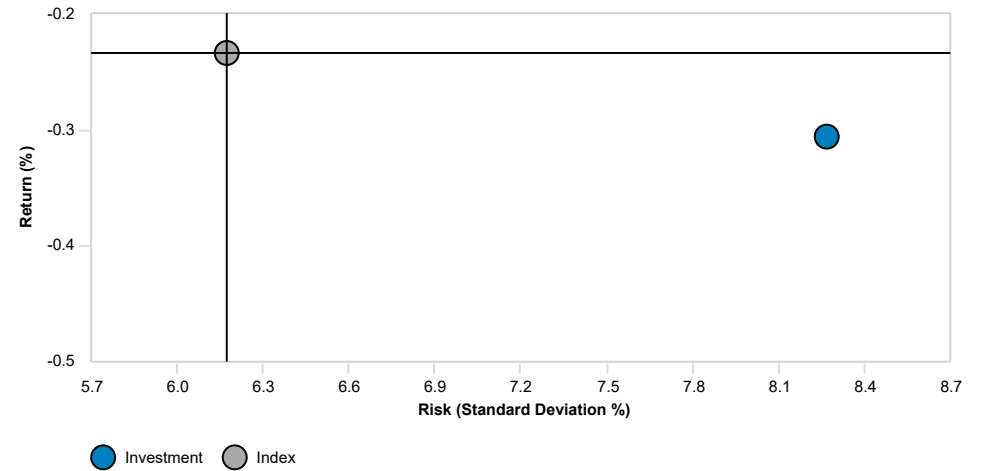
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-0.31	8.27	-0.25	132.36	10	131.24	10
Index	-0.23	6.17	-0.36	100.00	13	100.00	7

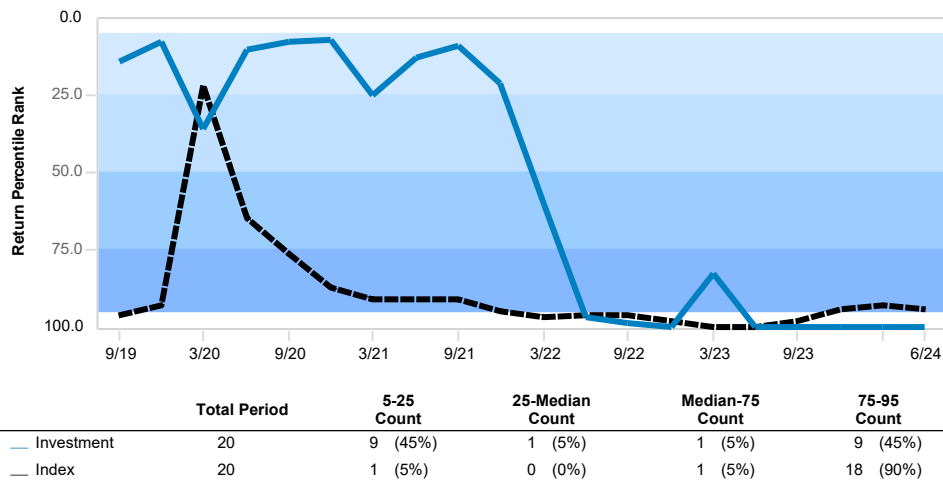
Risk and Return 3 Years



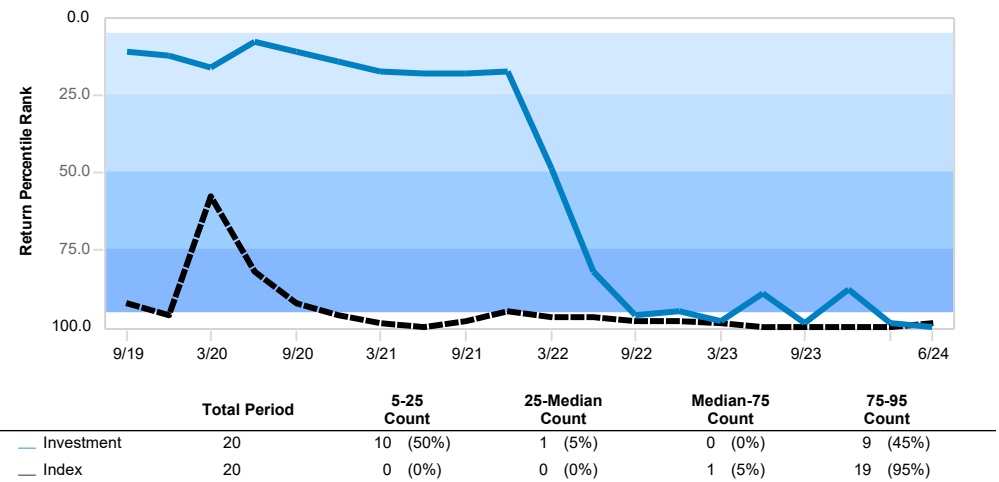
Risk and Return 5 Years



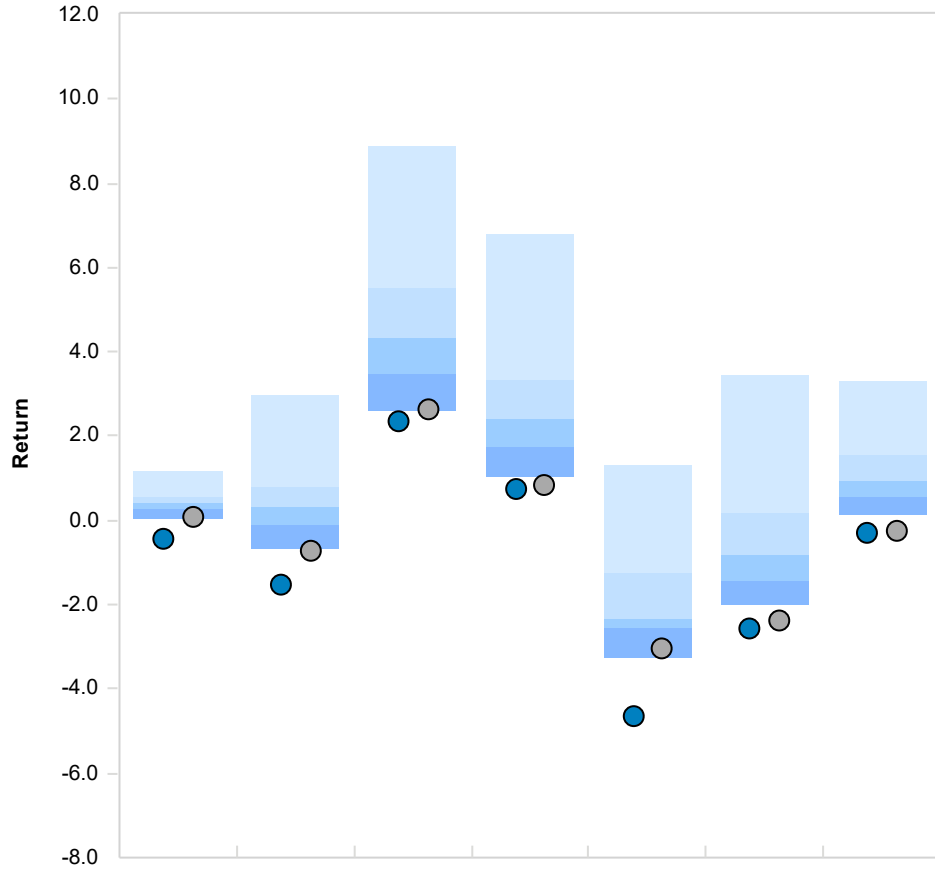
3 Year Rolling Percentile Rank IM U.S. Broad Market Core+ Fixed Income (SA+CF)



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

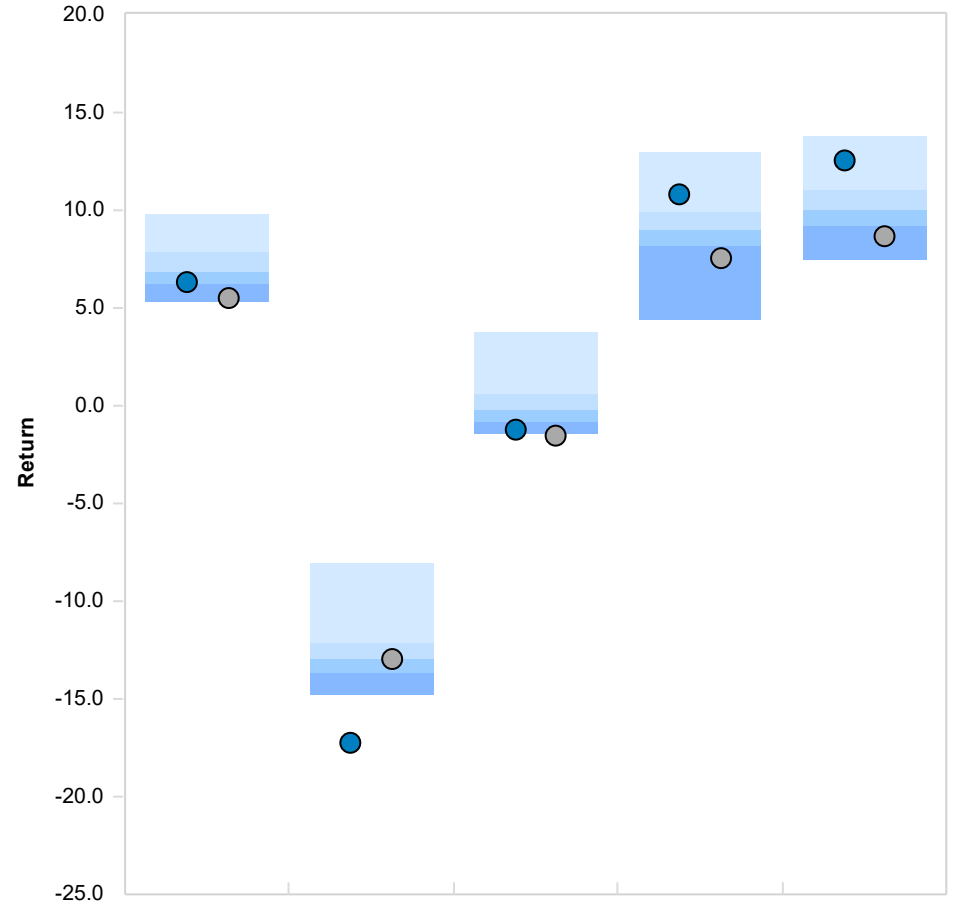


Peer Group Analysis - IM U.S. Broad Market Core+ Fixed Income (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	-0.46 (100)	-1.50 (100)	2.37 (97)	0.76 (98)	-4.64 (100)	-2.57 (100)	-0.31 (100)
● Index	0.07 (95)	-0.71 (96)	2.63 (95)	0.83 (98)	-3.02 (94)	-2.36 (99)	-0.23 (99)
Median	0.42	0.33	4.34	2.40	-2.32	-0.81	0.92

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



	2023	2022	2021	2020	2019
● Investment	6.30 (74)	-17.28 (100)	-1.24 (91)	10.79 (13)	12.56 (9)
● Index	5.53 (94)	-13.01 (54)	-1.55 (99)	7.51 (85)	8.72 (89)
Median	6.86	-12.91	-0.24	8.98	9.95

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	-1.05 (99)	8.79 (1)	-4.46 (100)	-0.54 (61)	2.84 (83)	2.50 (27)
Index	-0.78 (95)	6.82 (70)	-3.23 (82)	-0.84 (90)	2.96 (74)	1.87 (69)
Median	-0.05	7.07	-2.85	-0.43	3.23	2.15

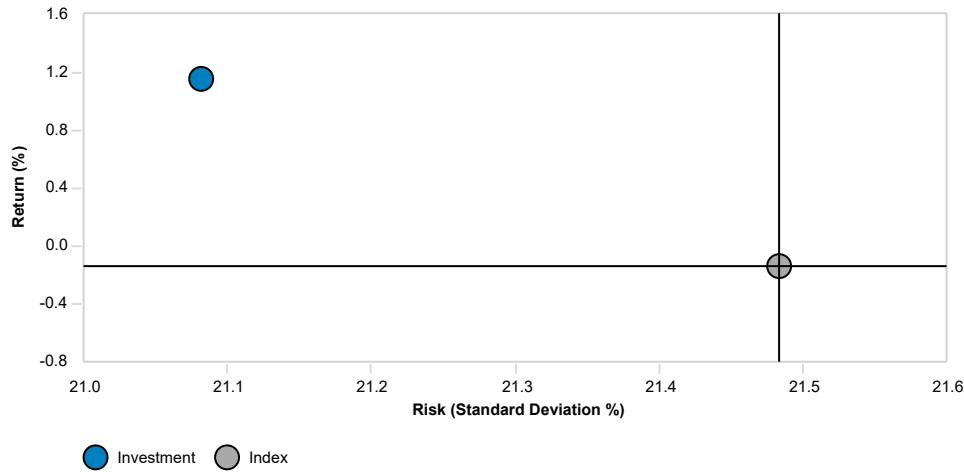
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	1.15	21.08	0.02	100.22	7	96.47	5
Index	-0.14	21.48	-0.04	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	2.78	21.63	0.14	100.00	12	100.00	8

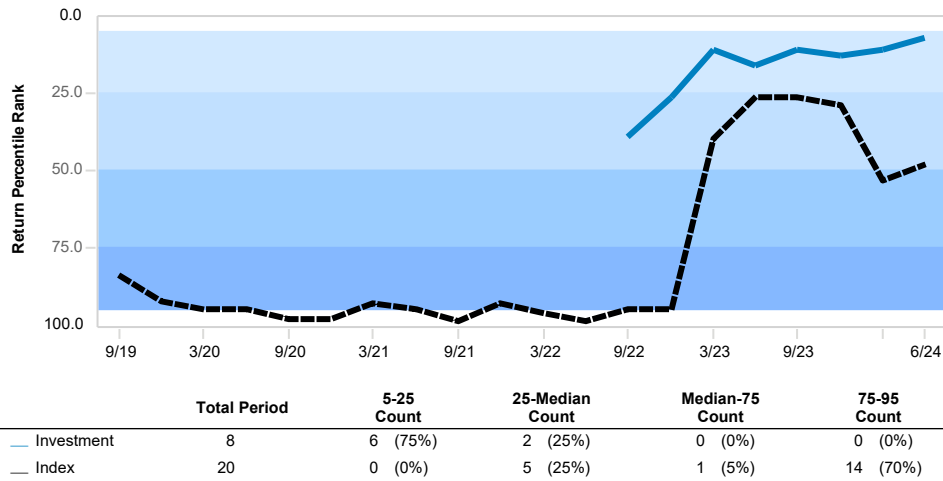
Risk and Return 3 Years



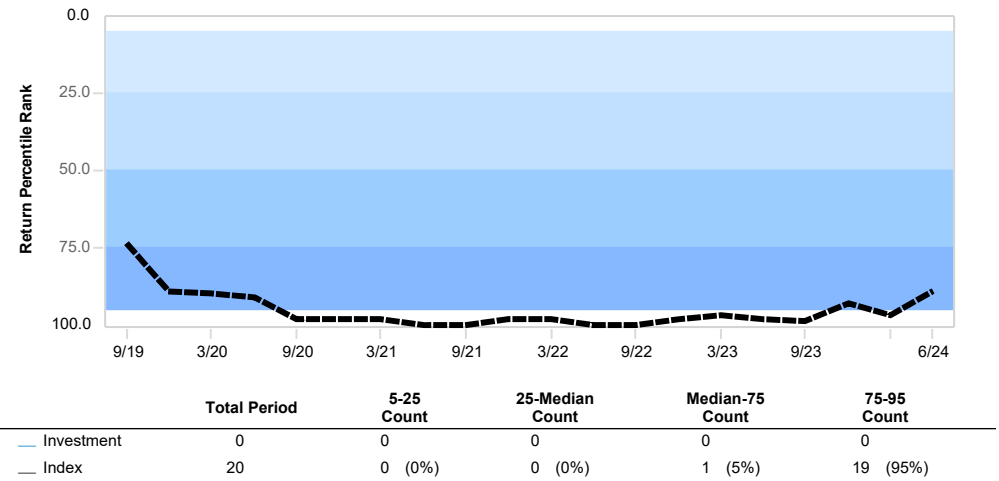
Risk and Return 5 Years



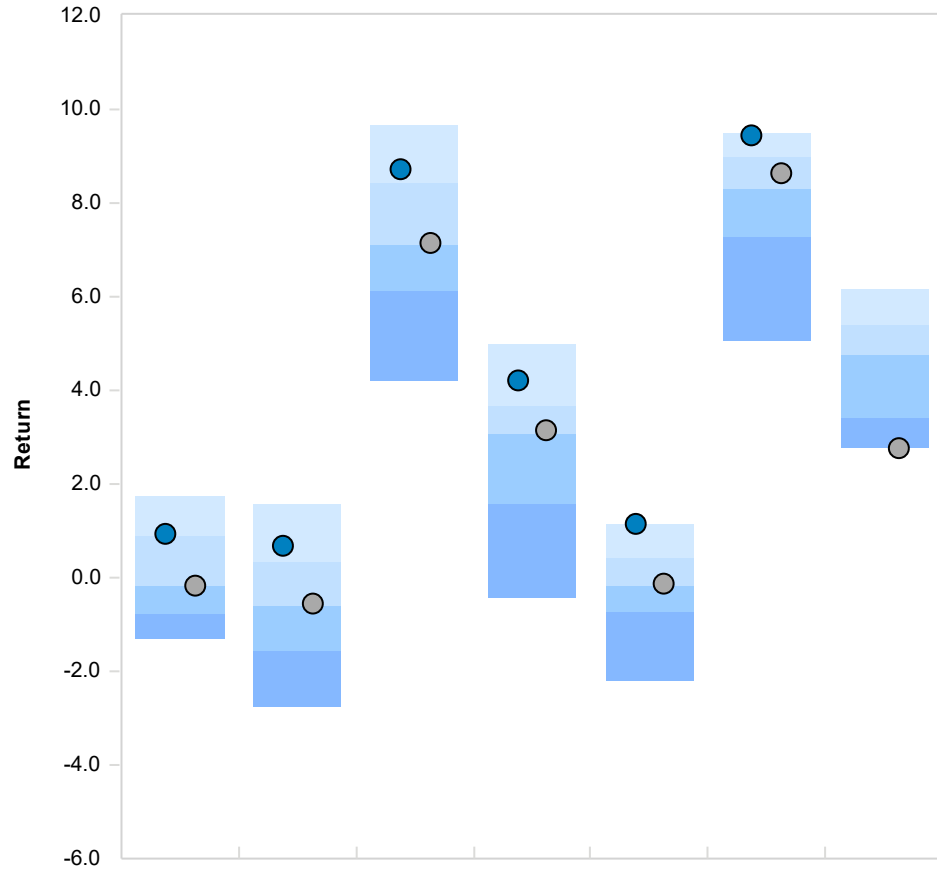
3 Year Rolling Percentile Rank IM U.S. REIT (SA+CF)



5 Year Rolling Percentile Rank IM U.S. REIT (SA+CF)

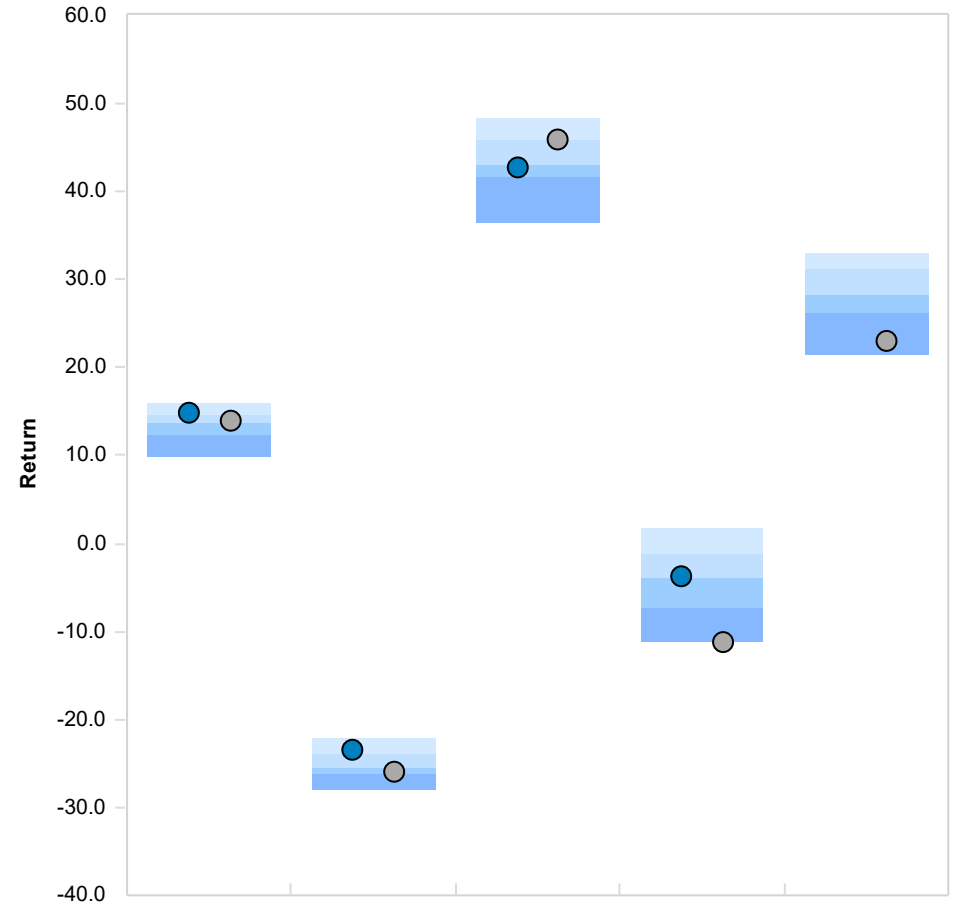


Peer Group Analysis - IM U.S. REIT (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	0.92 (25)	0.66 (16)	8.74 (11)	4.23 (13)	1.15 (7)	9.44 (12)	N/A
● Index	-0.16 (52)	-0.55 (43)	7.15 (46)	3.15 (41)	-0.14 (48)	8.66 (32)	2.78 (89)
Median	-0.15	-0.59	7.10	3.05	-0.15	8.31	4.75

Peer Group Analysis - IM U.S. REIT (SA+CF)



	2023	2022	2021	2020	2019
● Investment	14.78 (24)	-23.42 (13)	42.75 (56)	-3.74 (49)	N/A
● Index	13.96 (46)	-25.96 (58)	45.91 (24)	-11.20 (97)	23.10 (89)
Median	13.85	-25.48	42.97	-3.90	28.17

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	-0.26 (22)	16.38 (51)	-7.18 (26)	3.28 (28)	2.87 (50)	4.82 (14)
Index	-0.39 (34)	16.35 (58)	-7.40 (45)	2.92 (40)	2.77 (57)	4.76 (18)
Median	-0.89	16.39	-7.41	2.82	2.86	4.20

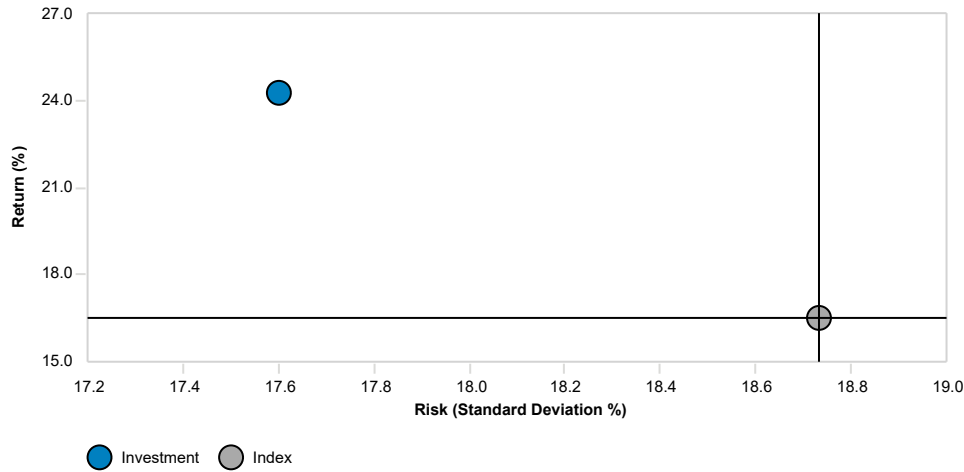
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	24.32	17.60	1.16	102.17	10	69.63	2
Index	16.55	18.73	0.76	100.00	8	100.00	4

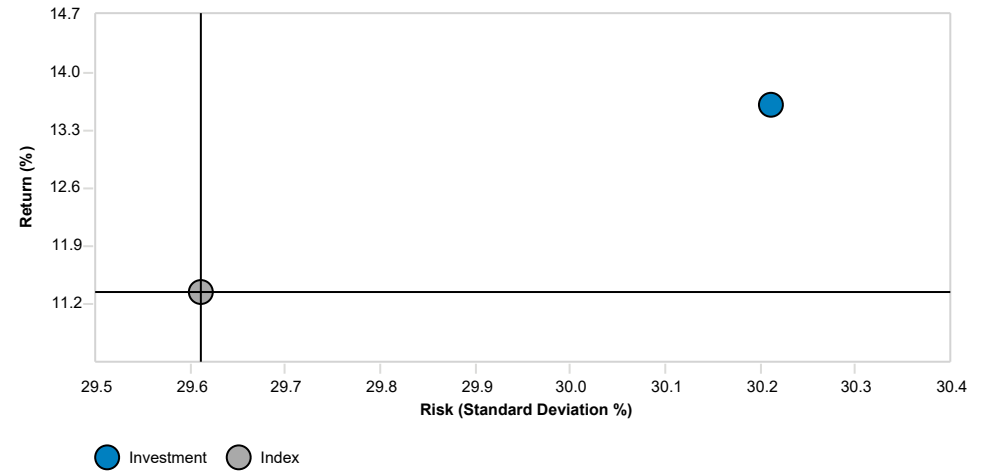
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	13.62	30.21	0.52	101.37	14	93.51	6
Index	11.33	29.61	0.45	100.00	13	100.00	7

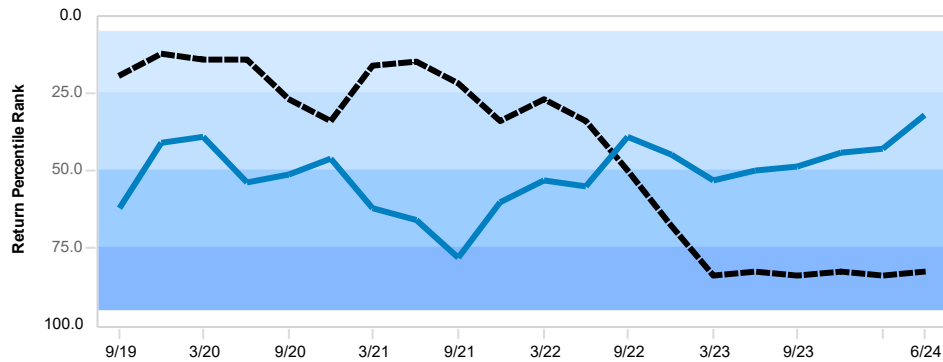
Risk and Return 3 Years



Risk and Return 5 Years

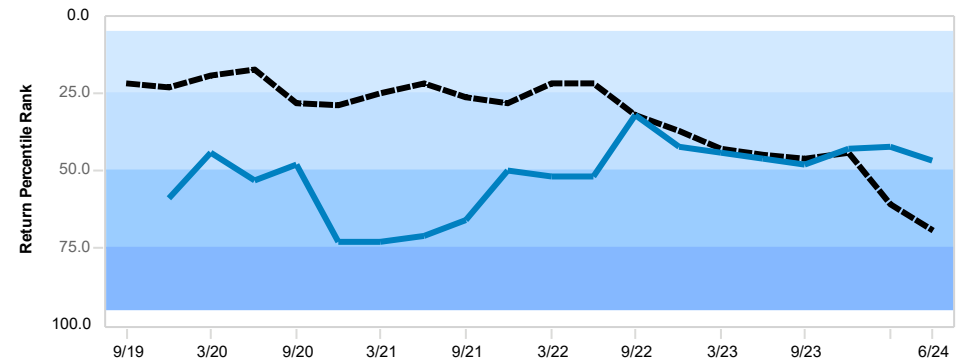


3 Year Rolling Percentile Rank IM Energy MLP (MF)



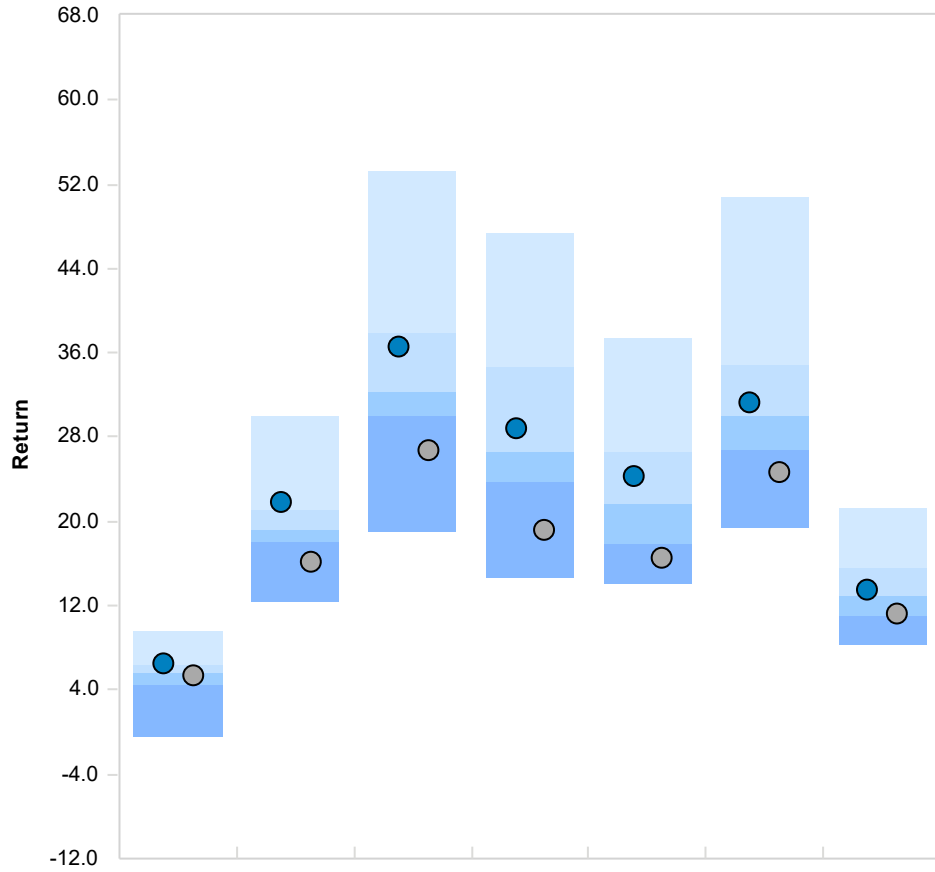
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	10 (50%)	9 (45%)	1 (5%)
Index	20	7 (35%)	6 (30%)	1 (5%)	6 (30%)

5 Year Rolling Percentile Rank IM Energy MLP (MF)



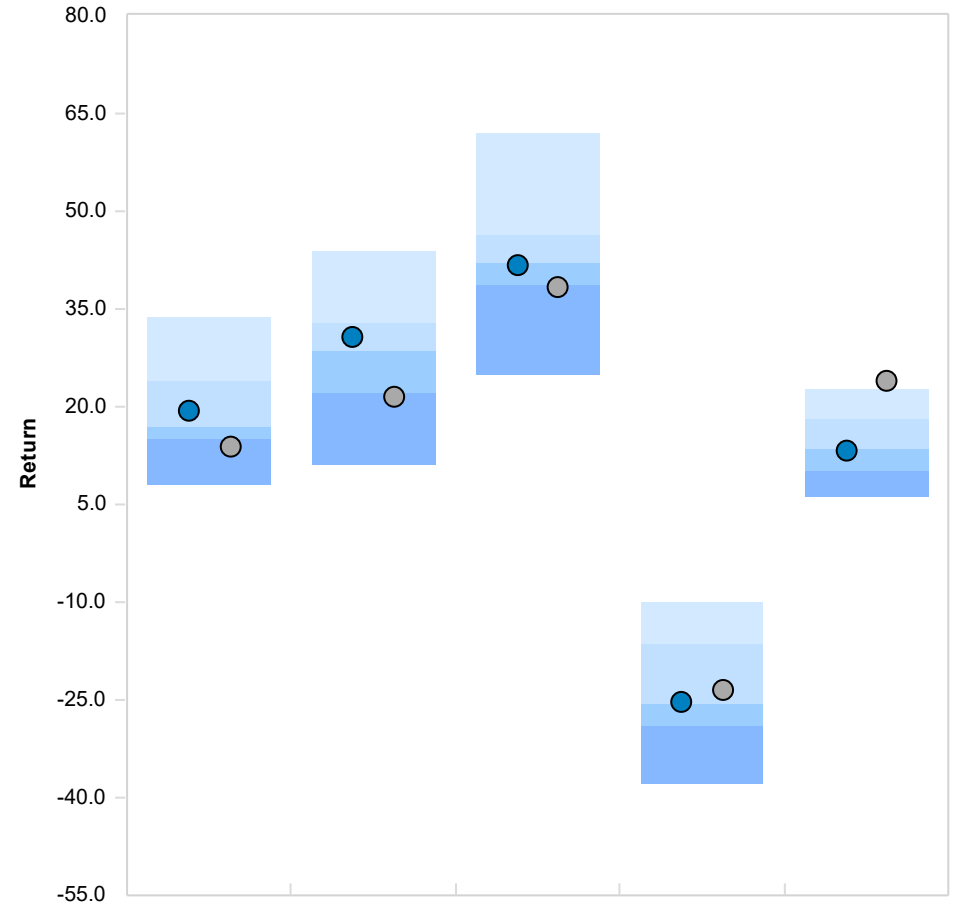
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	19	0 (0%)	11 (58%)	8 (42%)	0 (0%)
Index	20	8 (40%)	10 (50%)	2 (10%)	0 (0%)

Peer Group Analysis - IM Energy MLP (MF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	6.57 (19)	21.76 (19)	36.52 (34)	28.91 (43)	24.32 (32)	31.27 (42)	13.62 (47)
● Index	5.42 (55)	16.12 (82)	26.68 (82)	19.20 (86)	16.55 (83)	24.78 (80)	11.33 (69)
Median	5.55	19.13	32.28	26.59	21.70	30.08	12.88

Peer Group Analysis - IM Energy MLP (MF)



	2023	2022	2021	2020	2019
● Investment	19.25 (42)	30.63 (35)	41.85 (51)	-25.18 (50)	13.40 (55)
● Index	14.02 (80)	21.53 (78)	38.42 (76)	-23.36 (49)	24.04 (3)
Median	16.84	28.46	42.00	-25.55	13.68

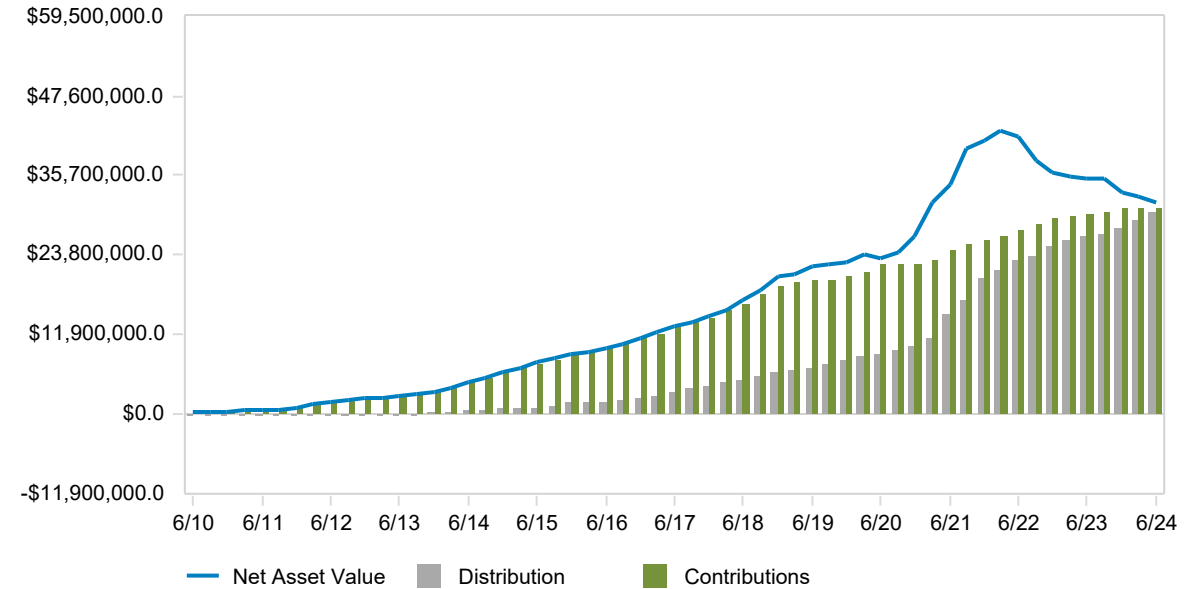
Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	14.25 (28)	3.99 (83)	7.82 (40)	2.45 (82)	3.81 (19)	7.07 (88)
Index	10.15 (87)	6.45 (10)	2.49 (82)	3.71 (78)	0.77 (60)	8.38 (80)
Median	13.33	5.40	6.18	5.05	0.86	10.65

Cash Flow Summary

Capital Committed:	\$34,500,000
Capital Invested:	\$9,587,228
Total Contributions:	\$30,860,216
Remaining Capital Commitment:	\$3,639,784
Total Distributions:	\$30,125,395
Market Value:	\$31,563,947
Inception Date:	05/01/2010
Inception IRR:	15.2
TVPI:	2.0

Cash Flow Analysis



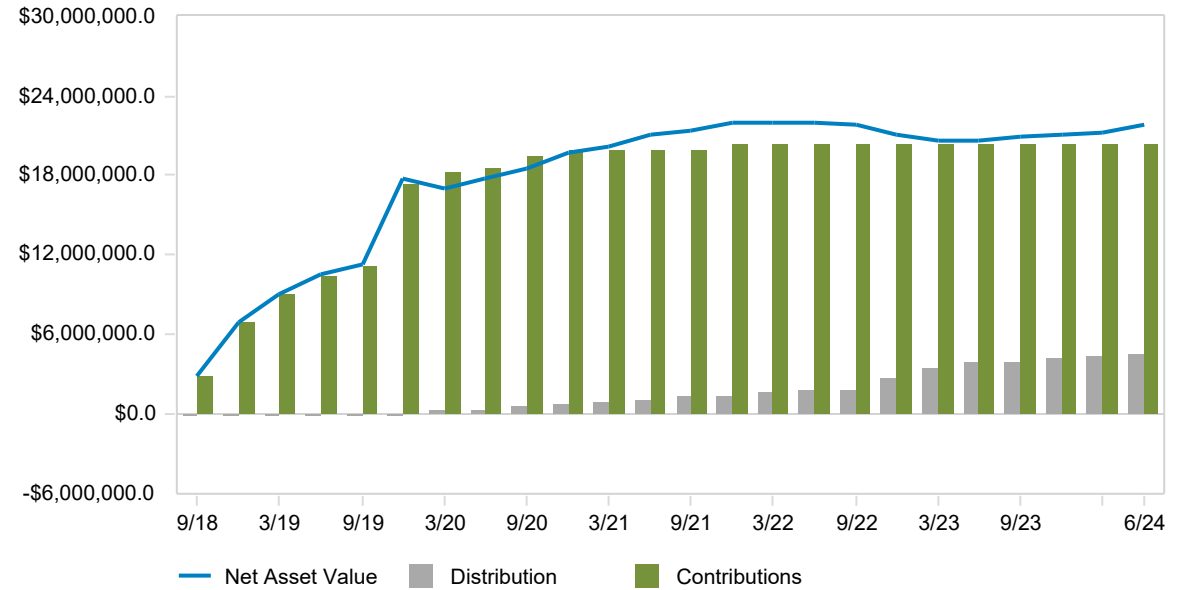
Private Equity Portfolio

Partnerships	Investment Type	Vintage Year	Investment Strategy	Capital Committed \$	Total Contribution \$	Total Distribution \$	Market Value \$	IRR	TVPI Multiple
Adams Street 2010 Direct Fund	Fund Of Funds	2010	Diversified	500,000	480,500	742,147	163,161	11.6	1.9
Adams Street 2010 EM Fund	Fund Of Funds	2010	Diversified	500,000	449,000	545,645	341,802	9.5	2.0
Adams Street 2010 Non-US Fund	Fund Of Funds	2010	Diversified	1,500,000	1,350,750	2,074,508	516,797	12.4	1.9
Adams Street 2010 US Fund	Fund Of Funds	2010	Diversified	2,500,000	2,202,500	4,207,637	1,265,520	15.9	2.5
Adams Street 2013 Global Fund	Fund Of Funds	2013	Diversified	5,000,000	4,634,201	5,110,902	4,411,868	12.6	2.1
Adams Street 2015 Global	Fund Of Funds	2015	Diversified	6,500,000	5,853,145	5,364,143	7,460,560	19.3	2.2
Adams Street 2017 Global Fund	Fund Of Funds	2017	Diversified	6,000,000	5,119,421	2,187,544	7,317,570	16.7	1.9
Aberdeen Global	Fund Of Funds	2011	Other	5,000,000	4,950,000	9,333,423	2,757,590	15.2	2.4
Adams Street 2019 Global	Fund Of Funds	2019	Diversified	7,000,000	5,820,699	559,446	7,329,079	15.3	1.4
Private Equity Composite				34,500,000	30,860,216	30,125,395	31,563,947	15.1	2.0

Cash Flow Summary

Capital Committed:	\$21,000,000
Capital Invested:	\$2,670,227
Total Contributions:	\$20,290,736
Remaining Capital Commitment:	\$709,264
Total Distributions:	\$4,460,432
Market Value:	\$21,821,038
Inception Date:	09/30/2018
Inception IRR:	5.8
TVPI:	1.3

Cash Flow Analysis



Private Equity Portfolio

Partnerships	Investment Type	Vintage Year	Investment Strategy	Capital Committed \$	Total Contribution \$	Total Distribution \$	Market Value \$	IRR	TVPI Multiple
50 South Capital Private Credit	Fund Of Funds	2018	Private Debt	7,000,000	6,290,736	3,653,293	4,698,570	8.3	1.3
Grosvenor PC	Other	2016	Other	14,000,000	14,000,000	807,139	17,122,468	5.0	1.3
Private Credit Composite				21,000,000	20,290,736	4,460,432	21,821,038	5.8	1.3

**Grand Rapids Police and Fire Retirement
Fee Analysis
As of June 30, 2024**

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Fund	0.38	511,451,438	1,920,694	
Domestic Equity Composite	0.10	98,685,855	99,100	
NTAM S&P 500	0.02	63,443,771	12,689	0.02 % of Assets
PIMCO Stock Plus		20,840,180	-	
Wellington Small Cap	0.60	14,401,904	86,411	0.60 % of Assets
International Equity Composite	0.57	89,338,297	505,632	
Harding Loevner	0.58	43,819,386	255,278	0.80 % of First \$20 M 0.40 % Thereafter
Neuberger Berman CIT	0.55	45,518,912	250,354	0.55 % of Assets
Core Fixed Income Composite	0.26	136,558,595	354,333	
Baird Advisors	0.22	67,843,219	148,186	0.25 % of First \$25 M 0.20 % Thereafter
Western Asset Management	0.30	68,715,376	206,146	0.30 % of First \$100 M 0.15 % Thereafter
Total Real Assets Composite	0.64	78,343,185	499,870	
Real Estate Composite	0.50	24,896,637	124,483	
Centersquare	0.50	24,896,637	124,483	0.50 % of First \$50 M 0.40 % Thereafter
Commodities Composite	0.65	25,462,599	165,507	
Wellington Commodities	0.65	25,462,599	165,507	0.65 % of Assets
Midstream Energy Composite	0.75	27,983,949	209,880	
Harvest MLP	0.75	27,983,949	209,880	0.75 % of Assets

See the disclosure page at the end of the report.
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.

**Grand Rapids Police and Fire Retirement
Fee Analysis**

As of June 30, 2024

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Private Equity Composite	0.94	31,563,947	296,589	
Adams Street 2010 Direct Fund	2.00	163,161	3,263	2.00 % of Assets
Adams Street 2010 EM Fund	1.00	341,802	3,418	1.00 % of Assets
Adams Street 2010 Non-US Fund	1.00	516,797	5,168	1.00 % of Assets
Adams Street 2010 US Fund	1.00	1,265,520	12,655	1.00 % of Assets
Adams Street 2013 Global Fund	1.00	4,411,868	44,119	1.00 % of Assets
Adams Street 2015 Global	1.00	7,460,560	74,606	1.00 % of Assets
Adams Street 2017 Global Fund	1.00	7,317,570	73,176	1.00 % of Assets
Adams Street 2019 Global	1.00	7,329,079	73,291	1.00 % of Assets
Aberdeen Global	0.25	2,757,590	6,894	0.25 % of Assets
Private Credit Composite	0.76	21,821,038	165,171	
50 South Capital Private Credit	0.60	4,698,570	28,191	0.60 % of Assets
Grosvenor PC	0.80	17,122,468	136,980	0.80 % of First \$25 M 0.70 % of Next \$25 M 0.60 % Thereafter
Cash		55,140,521	-	

See the disclosure page at the end of the report.
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.

Historical Hybrid Composition
Total Fund Composite Policy
As of June 30, 2024

Historical Hybrid Composition

Allocation Mandate	Weight (%)
Jan-1976	
FT Wilshire 5000 Total Market TR Index	55.00
Blmbg. U.S. Aggregate Index	40.00
MSCI EAFE (Net) Index	5.00
Jul-1998	
FT Wilshire 5000 Total Market TR Index	50.00
Blmbg. U.S. Aggregate Index	40.00
MSCI EAFE (Net) Index	10.00
Oct-2002	
FT Wilshire 5000 Total Market TR Index	50.00
Blmbg. U.S. Aggregate Index	35.00
MSCI EAFE (Net) Index	15.00
Apr-2006	
FT Wilshire 5000 Total Market TR Index	55.00
Blmbg. U.S. Aggregate Index	30.00
MSCI EAFE (Net) Index	15.00
Jul-2006	
FT Wilshire 5000 Total Market TR Index	55.00
Blmbg. U.S. Aggregate Index	30.00
MSCI AC World ex USA (Net)	15.00
Jul-2009	
FT Wilshire 5000 Total Market TR Index	50.00
Blmbg. U.S. Aggregate Index	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Apr-2010	
FT Wilshire 5000 Total Market TR Index	50.00
Blmbg. U.S. Aggregate Index	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00

Allocation Mandate	Weight (%)
May-2010	
FT Wilshire 5000 Total Market TR Index	45.00
Blmbg. U.S. Aggregate Index	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity Composite	5.00
Jul-2010	
FT Wilshire 5000 Total Market TR Index	45.00
Blmbg. U.S. Aggregate Index	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity Policy Index	5.00
Jan-2013	
FT Wilshire 5000 Total Market TR Index	40.00
Blmbg. U.S. Aggregate Index	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00
Apr-2015	
FT Wilshire 5000 Total Market TR Index	22.50
Blmbg. U.S. Aggregate Index	25.00
MSCI AC World ex USA (Net)	22.50
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00
S&P MLP Index	5.00
Bloomberg U.S. TIPS Index	10.00
Dec-2018	
FT Wilshire 5000 Total Market TR Index	22.50
Blmbg. U.S. Aggregate Index	25.00
MSCI AC World ex USA (Net)	22.50
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00
S&P MLP Index	5.00
Bloomberg U.S. TIPS Index	10.00

Allocation Mandate	Weight (%)
Jul-2019	
FT Wilshire 5000 Total Market TR Index	17.75
Blmbg. U.S. Aggregate Index	24.50
MSCI AC World ex USA (Net)	17.75
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00
Alerian MLP Index	5.00
Bloomberg U.S. TIPS Index	5.00
Morningstar LSTA US Leveraged Loan	5.00
MSCI ACWI Minimum Volatility Index (Net)	10.00
Oct-2019	
FT Wilshire 5000 Total Market TR Index	17.75
MSCI AC World ex USA (Net)	17.75
MSCI ACWI Minimum Volatility Index (Net)	10.00
Private Equity Policy Index	5.00
Morningstar LSTA US Leveraged Loan	5.00
Blmbg. U.S. Aggregate Index	24.50
Bloomberg U.S. TIPS Index	5.00
Dow Jones U.S. Select REIT	5.00
Bloomberg Commodity Index Total Return	5.00
Alerian MLP Index	5.00
Oct-2020	
FT Wilshire 5000 Total Market TR Index	17.75
MSCI AC World ex USA (Net)	17.75
Private Equity Policy Index	5.00
MSCI ACWI Minimum Volatility Index (Net)	10.00
Morningstar LSTA US Leveraged Loan	5.00
Blmbg. U.S. Aggregate Index	24.50
Bloomberg U.S. TIPS Index	5.00
Dow Jones U.S. Select REIT	5.00
Bloomberg Commodity Index Total Return	5.00
Alerian Midstream Energy Index	5.00

NTAM S&P 500	
Historical Hybrid Composition	
Oct-1979	
Russell 1000 Index	100.00
Jul-2007	
S&P 500 Index	100.00

International Equity	
Historical Hybrid Composition	
Oct-1979	
MSCI EAFE (Net) Index	100.00
Jul-2006	
MSCI AC World ex USA (Net)	100.00

Real Assets	
Historical Hybrid Composition	
Mar-2005	
Bloomberg U.S. TIPS Index	
FTSE EPRA/NAREIT Developed Index (Net)	
S&P MLP Total Return Index	
Bloomberg Commodity Index Total Return	
Jul-2019	
Bloomberg U.S. TIPS Index	
FTSE EPRA/NAREIT Developed Index (Net)	
Alerian MLP Index	
Bloomberg Commodity Index Total Return	
Oct-2019	
Bloomberg U.S. TIPS Index	
Dow Jones U.S. Select REIT	
Alerian MLP Index	
Bloomberg Commodity Index Total Return	

Real Estate	
Historical Hybrid Composition	
Jun-2009	
FTSE EPRA/NAREIT Developed Index (Net)	100.00
Jul-2009	
FTSE EPRA/NAREIT Developed Index (Net)	100.00
Oct-2019	
Dow Jones U.S. Select REIT	100.00

Data prior to 2/1/2024 is from the previous consultant.

Performance is calculated using custodial statements as the investment book of record.

Returns for periods greater than one year are annualized.

Manager fees associated with money market or cash accounts are not tracked.

As of 4/1/2023, each of the underlying funds for Aberdeen (HighVista) have an annual management fee of .25%.

The PIMCO StocksPLUS LP A fee is performance based: 50% of the first .40% of the amount by which performance exceeds the total rate of return on the S&P 500 for the previous twelve month period. Thereafter, the fee is 20% of performance in excess of .40%.

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

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Methodology for this Award: For the 2022 Greenwich Quality Award for Overall U.S. Investment Consulting – Midsize Consultants – Between February and November 2022, Coalition Greenwich conducted interviews with 727 individuals from 590 of the largest tax-exempt funds in the United States. These U.S.-based institutional investors are corporate and union funds, public funds, and endowment and foundation funds, with either pension or investment pool assets greater than \$150 million. Study participants were asked to provide quantitative and qualitative evaluations of their asset management and investment consulting providers, including qualitative assessments of those firms soliciting their business and detailed information on important market trends.

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