

---

# Miami Beach Police Relief

Investment Performance Review  
Period Ending December 31, 2024

MARINER

# Table Of Contents

---

1	Market Environment	Page 1
2	Compliance Report	Page 12
3	Asset Allocation Compliance	Page 14
4	Asset Allocation Pie Chart	Page 15
5	Total Fund Returns Based Analysis	Page 21
6	Inverness Equity Returns Based Analysis	Page 24
7	Intercontinental Returns Based Analysis	Page 33
8	Fee Schedule	Page 35
9	Benchmark History	Page 36
10	Definitions & Disclosure Pages	Page 37

## **4th Quarter 2024 Market Environment**

## **The Economy**

- The US Federal Reserve (the Fed) continued to loosen its policy stance during the quarter with two fed funds rate cuts totaling 0.50%, bringing the year-end rate to a range of 4.25%-4.50%. While the Fed conveyed a degree of confidence that the fight against inflation is progressing in its December press release, Fed Chairman Jerome Powell signaled in his post-meeting press conference that the pace and timing of future rate cuts is unclear. The Fed's December "Dot Plot" now projects only two quarter-point rate cuts in 2025, down from four anticipated cuts in September's plot.
- Growth in the US labor market continued during the fourth quarter. US payrolls grew by 256,000 in December, up from the previous month's total of 212,000, and well above the 155,000 projected. If strength in the labor market continues, this data could support a slower pace Fed action in the form of policy rate reductions in 2025.

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

- US equity results were modestly higher for the quarter. Markets also saw a return to the narrowly focused technology and communication services company exuberance which has dominated domestic performance in recent years. The S&P 500 Index rose 2.4% for the quarter with the small-cap Russell 2000 Index managing just a 0.3% rise. The rotation away from large cap growth stocks during the third quarter seemed to reverse as the Russell 1000 Growth Index once again outpaced the Russell 1000 Value Index by a large margin.
- Large-cap equity benchmarks continue to represent a heavy concentration among a limited number of stocks. As of quarter end, the weight of the top 10 stocks in the S&P 500 Index exceeded 35%.
- Most international stocks faltered during the fourth quarter and US Dollar (USD) denominated results were further exacerbated by a strengthening USD. The USD performance of international stocks fell short of local currency (LCL) returns in most regions for the quarter, albeit to varying degrees.

## **Fixed Income**

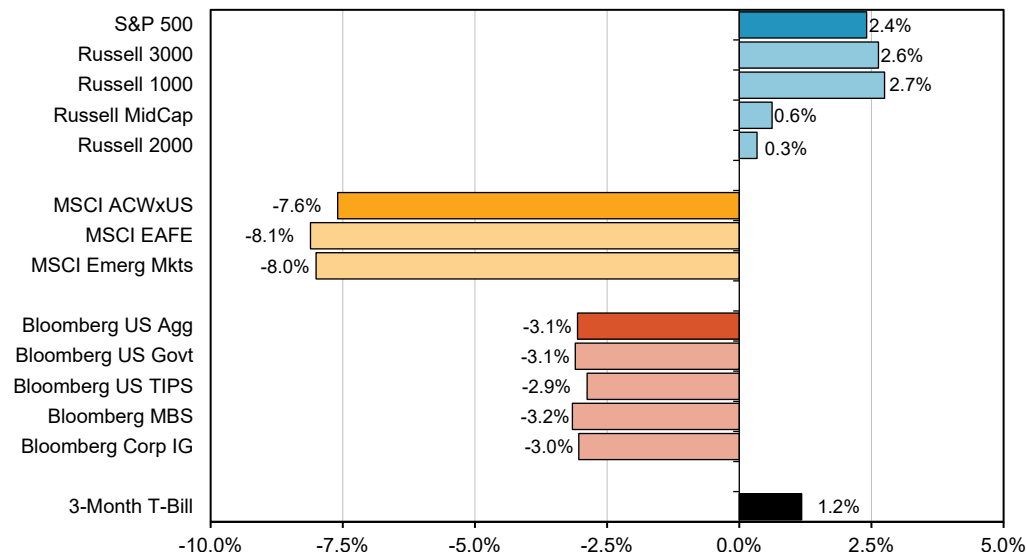
- Fixed-income markets traded lower during the quarter on the back of the Fed's ongoing policy actions. Short term Treasury yields fell while longer term yields rose, leading to a slight steepening in the yield curve. The yield on the bellwether 10-year Treasury advanced by 0.84% during the quarter, closing the year at a yield of 4.58%. The inverse relationship between prices and yields resulted in the Bloomberg US Aggregate Bond Index posting a -3.1% loss for the quarter.
- High-yield bonds outpaced the Bloomberg US Aggregate Bond Index for the quarter, largely due to higher coupons, a shorter duration profile, and a small narrowing of the option-adjusted spread (OAS) for the Bloomberg US High-Yield Index.
- Global bonds fell during the quarter, with the Bloomberg Global Aggregate ex-US returning -6.8% in USD terms. Like international equity results, global bond performance was dragged down by a strengthening USD during the quarter.

## **Market Themes**

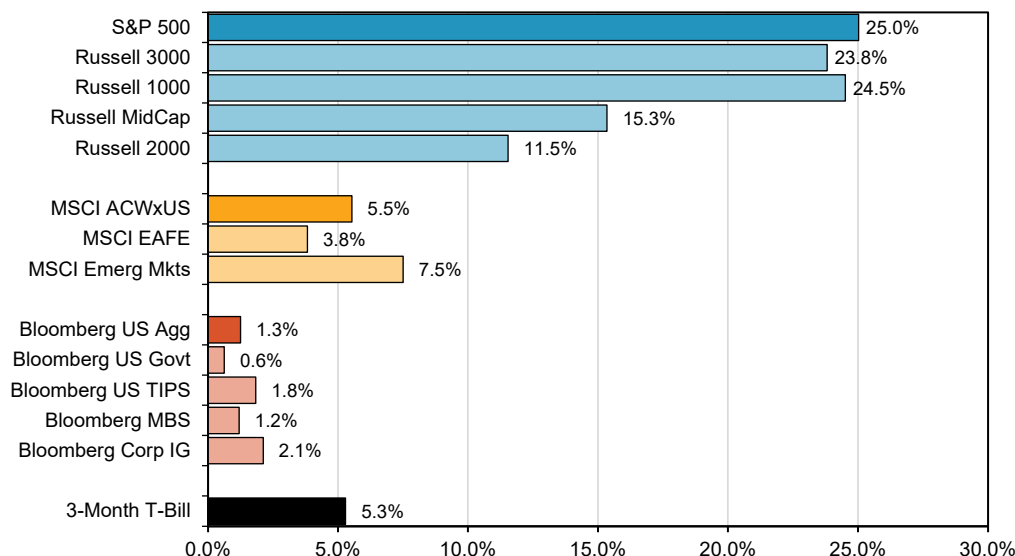
- Strength in the US Dollar during the quarter led to relative weakness in international markets. Many of the major currencies depreciated relative to the US Dollar as the year came to a close. Latin America saw the most significant decline during the period while the Pacific region was the only region to post positive LCL returns.
- The AI trade that has taken shape for much of the past two years continued in 2024 with the communication services and information technology sectors each posting gains of more than 35% for the year. This phenomenon contributed to narrow market leadership particularly within the large-cap segment of the market. The concentration in the large-cap indexes helped the S&P 500 post its second straight year of greater than a 20% return, further widening the performance gap between large and smaller capitalization benchmarks.
- Ongoing military conflicts in Ukraine and the Middle East, coupled with global economic uncertainty, continue to act as headwinds for international market results, further complicated by an advancing USD.
- The results of the most recent US presidential election appeared to please domestic equity markets in anticipation of the new administration supporting loosened regulations and pro-growth policies. As we move into the new year, equity markets will need to digest the anticipated effects of proposed tax legislation changes, a new view on foreign policy, and potential trade tariffs by the new administration.

- Domestic equity markets continued to climb higher during the quarter. Large-cap stocks returned to the forefront, outpacing small-cap stocks. The S&P 500 rose 2.4% during the quarter versus a muted gain of 0.3% for the Russell 2000 Index. The broad capitalization Russell 3000 Index, which benefited from strength in mid- and large-cap names, returned 2.6% for the quarter.
- International developed market equities reversed course and soured during the fourth quarter with the USD performance of the broad benchmarks each trading lower than (LCL) currency performance. The broad MSCI ACWI ex US Index delivered a disappointing -7.6% for the quarter but was down less than both the MSCI EAFE and MSCI EM indexes. The broad index was aided by Canada, which is not included in the EAFE or EM indexes. International developed market (DM) equities narrowly fell behind emerging market (EM) equities, returning -8.1% and -8.0%, respectively for the quarter. Negative performance for the international indexes was broad-based and not localized to any specific region.
- Broad market fixed-income benchmarks displayed a poor finish to the year as many of the core indexes succumbed to a steepening of the yield curve and the prospect of fewer rate cuts in 2025. The Bloomberg US Aggregate Index returned -3.1% for the quarter. The TIPS market, which is not part of the Aggregate Index, was also negative, posting a return of -2.9% for the quarter. While the performance differentials were small, the Mortgage-Backed Securities Index lagged other domestic bond market segments with a benchmark return of -3.2% for the quarter.
- Domestic equity indexes finished the year by adding to their already strong returns over the trailing one-year period. The S&P 500 Index gained 25.0% for the year and the Russell 1000 Index returned 24.5%. The weakest performing capitalization range of domestic equities for the year was the small-cap Russell 2000 Index, which still managed a double-digit climb over the last 12 months, returning a solid 11.5%.
- Domestic bond indexes' results were mixed throughout the year but still managed to deliver positive annual results. While the performance spread was narrow, investment-grade corporate bonds led bond index results for the year, returning a muted 2.1%. The government bond index lagged for the year, but was also positive, posting a return of 0.6%.
- International equity markets also delivered positive results for the trailing one-year period. The MSCI EM Index was the best international performer, returning 7.5%, while the MSCI EAFE and MSCI ACWI ex US indexes posted returns of 3.8% and 5.5%, respectively.

### Quarter Performance



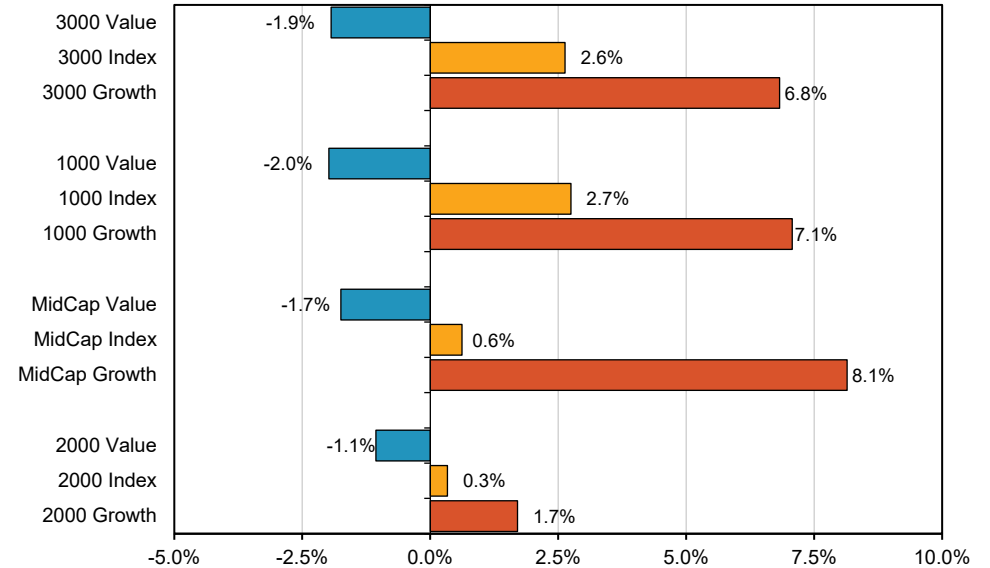
### 1-Year Performance



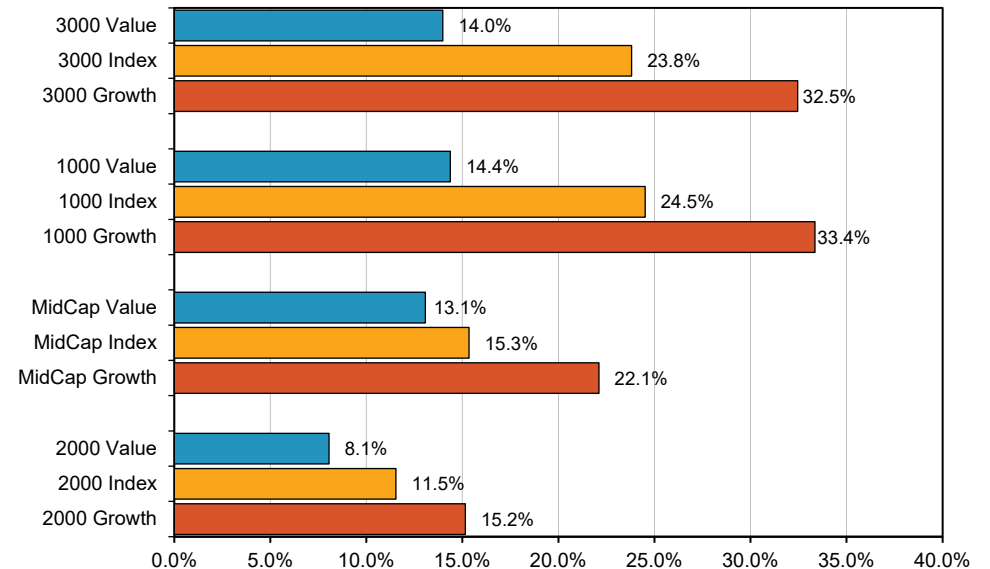
Source: Investment Metrics

- Domestic equity benchmarks exhibited a return to their long-run trend of growth style companies vastly outperforming value during the fourth quarter. This theme was relatively consistent across the capitalization spectrum with growth benchmarks dominating performance results while value benchmarks each posted negative returns for the quarter.
- The broadest disparity between growth and value was visible in the mid-cap index. The Russell Mid Cap Value Index return of -1.7% trailed the Russell Mid Cap Growth Index return of 8.1%, a performance span of nearly 10%. The Russell Mid Cap Growth Index was also the best performing segment of the equity market during the quarter. Conversely, the worst performing segment of the market was large cap value which returned a disappointing -2.0% during the fourth quarter.
- This quarter's ascension of the growth indexes widened their performance gaps relative to the value indexes for the trailing year. The Russell 1000 Growth Index amassed a staggering 33.4% for the year, leading the way among style and market capitalization index performance. Much of the year's strong performance has been attributable to the emergence of the "Magnificent 7" stocks (Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia, and Tesla) which have dominated the large-cap core and growth indexes and the headlines over the past several years. The 10 largest stocks in the Russell 1000 Index have contributed more than 50% of the index's total performance over the trailing 12-month period. The weakest performing index for the year was the Russell 2000 Value Index, which still climbed 8.1%.
- The strength of growth sectors is also evident in the trailing one-year period with the chart on the right showing growth benchmarks at all capitalization ranges outpacing their value counterparts. The performance gap between the Russell 1000 Growth Index and the Russell 1000 Value Index was nearly 20% and the gaps for mid- and small-cap indexes were narrower, but still wide.

**Quarter Performance - Russell Style Series**



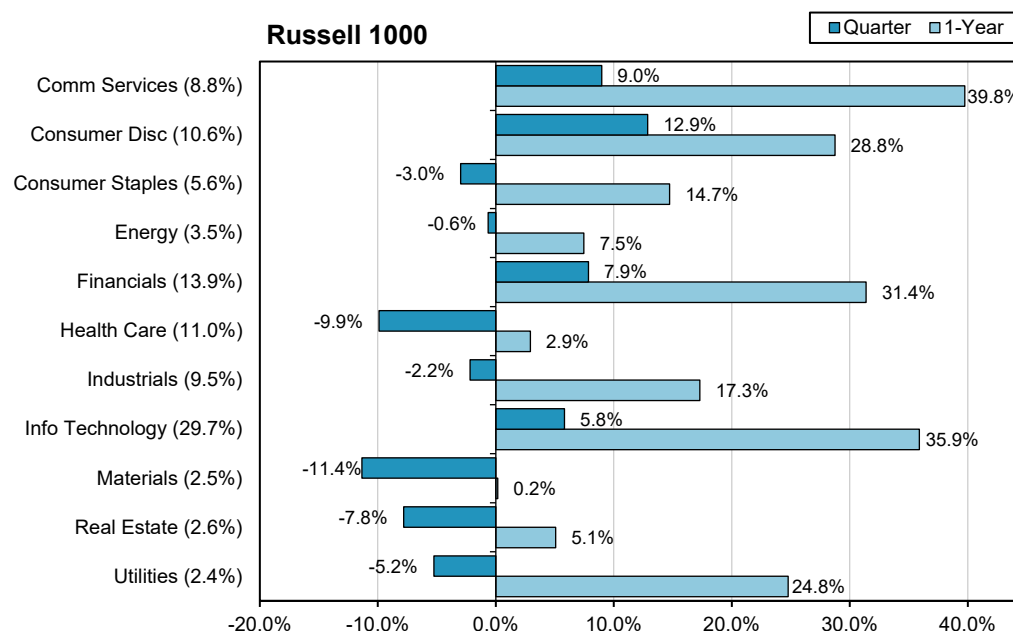
**1-Year Performance - Russell Style Series**



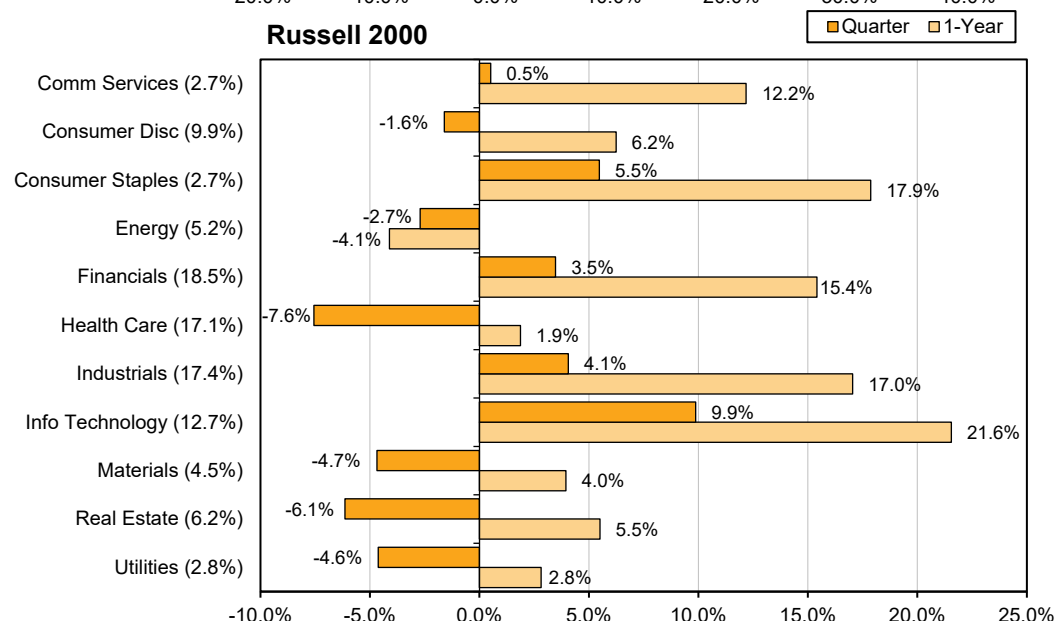
Source: Investment Metrics

- Economic sector performance delivered mixed results in the fourth quarter as just four of the 11 economic sectors moved higher in the large-cap index. While performance during the year could be characterized by broader participation in the domestic equity markets, this was not the case during the fourth quarter as only the communication services, consumer discretionary, financials, and information technology sectors managed to post positive returns. Within the large cap index, consumer discretionary stocks led the way, collectively returning 12.9% for the quarter while the materials sector struggled, falling -11.4% during the period.
- Full year results during 2024 showcased strong performance across the economic sector classifications. Communication services narrowly outpaced information technology for the year, posting returns of 39.8% and 35.9%, respectively, with financials coming in third with a return of 31.4%. While all sectors posted positive returns for the year, the broad index's strong performance during 2024 was largely driven by three of the five most heavily weighted index sectors.
- Similar to the large cap benchmark, just five of the 11 small-cap economic sectors gained value during the quarter. Communication services, consumer staples, financials, industrials, and information technology led the way with information technology as the best performing sector during the quarter. Health care faltered as the worst-performing sector with a return of -7.6% during the quarter, followed closely by real estate, which finished the quarter with a return of -6.1%.
- Despite their struggles during the most recent quarter, small-cap stocks delivered strong results for the year. Ten small-cap sectors advanced higher during the trailing one-year period, making energy the lone negative performer over the period. The sector's -2.7% return during the fourth quarter pushed the sector's performance to -4.1% for the trailing year. Information technology (up 21.6%) was the only sector to cross the 20% return threshold, but four others also amassed double digit positive returns for the calendar year.

**Russell 1000**



**Russell 2000**



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

**The Market Environment**  
**Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000**  
As of December 31, 2024

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	6.6%	7.6%	30.7%	Information Technology
NVIDIA Corp	5.8%	10.6%	171.2%	Information Technology
Microsoft Corp	5.8%	-1.8%	12.9%	Information Technology
Amazon.com Inc	3.8%	17.7%	44.4%	Consumer Discretionary
Meta Platforms Inc Class A	2.4%	2.4%	66.0%	Communication Services
Tesla Inc	2.1%	54.4%	62.5%	Consumer Discretionary
Alphabet Inc Class A	2.1%	14.3%	36.0%	Communication Services
Broadcom Inc	2.0%	34.7%	110.4%	Information Technology
Alphabet Inc Class C	1.7%	14.0%	35.6%	Communication Services
Berkshire Hathaway Inc Class B	1.5%	-1.5%	27.1%	Financials

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Astera Labs Inc	0.0%	152.8%	N/A	Information Technology
AppLovin Corp Ordinary Shares	0.2%	148.1%	712.6%	Information Technology
Trump Media & Technology Group	0.0%	112.2%	N/A	Communication Services
Palantir Technologies Inc Ordinary	0.3%	103.3%	340.5%	Information Technology
SoFi Technologies Inc Ordinary Shares	0.0%	95.9%	54.8%	Financials
Amer Sports Inc	0.0%	75.3%	N/A	Consumer Discretionary
MicroStrategy Inc	0.1%	71.8%	358.5%	Information Technology
United Airlines Holdings Inc	0.1%	70.2%	135.3%	Industrials
New Fortress Energy Inc	0.0%	66.3%	-59.3%	Utilities
Twilio Inc Class A	0.0%	65.7%	42.5%	Information Technology

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Capri Holdings Ltd	0.0%	-50.4%	-58.1%	Consumer Discretionary
Celanese Corp Class A	0.0%	-48.8%	-54.6%	Materials
Rocket Companies Inc Ordinary	0.0%	-41.3%	-22.2%	Financials
Enphase Energy Inc	0.0%	-39.2%	-48.0%	Information Technology
Moderna Inc	0.0%	-37.8%	-58.2%	Health Care
Acadia Healthcare Co Inc	0.0%	-37.5%	-49.0%	Health Care
Viking Therapeutics Inc	0.0%	-36.4%	116.2%	Health Care
10x Genomics Inc Ordinary	0.0%	-36.4%	-74.3%	Health Care
Monolithic Power Systems Inc	0.1%	-35.9%	-5.6%	Information Technology
The AES Corp	0.0%	-35.1%	-30.3%	Utilities

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
FTAI Aviation Ltd	0.5%	8.6%	214.7%	Industrials
Sprouts Farmers Market Inc	0.5%	15.1%	164.1%	Consumer Staples
Insmed Inc	0.4%	-5.4%	122.8%	Health Care
Vaxcyte Inc Ordinary Shares	0.4%	-28.4%	30.4%	Health Care
Credo Technology Group Holding Ltd	0.4%	118.2%	245.2%	Information Technology
Applied Industrial Technologies Inc	0.3%	7.5%	39.7%	Industrials
Mueller Industries Inc	0.3%	7.4%	70.5%	Industrials
Rocket Lab USA Inc	0.3%	161.8%	360.6%	Industrials
Fluor Corp	0.3%	3.4%	25.9%	Industrials
IonQ Inc Class A	0.3%	377.9%	237.1%	Information Technology

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Rigetti Computing Inc	0.1%	1848.7%	1449.4%	Information Technology
D-Wave Quantum Inc.	0.0%	754.6%	854.4%	Information Technology
Scholar Rock Holding Corp	0.1%	439.6%	129.9%	Health Care
IonQ Inc Class A	0.3%	377.9%	237.1%	Information Technology
SoundHound AI Inc Ordinary Shares	0.2%	325.8%	835.8%	Information Technology
Kodiak Sciences Inc	0.0%	281.2%	227.3%	Health Care
The RealReal Inc	0.0%	248.1%	443.8%	Consumer Discretionary
SES AI Corp	0.0%	242.3%	19.7%	Industrials
Poseida Therapeutics Inc Ordinary	0.0%	235.7%	185.7%	Health Care
Archer Aviation Inc Class A	0.1%	221.8%	58.8%	Industrials

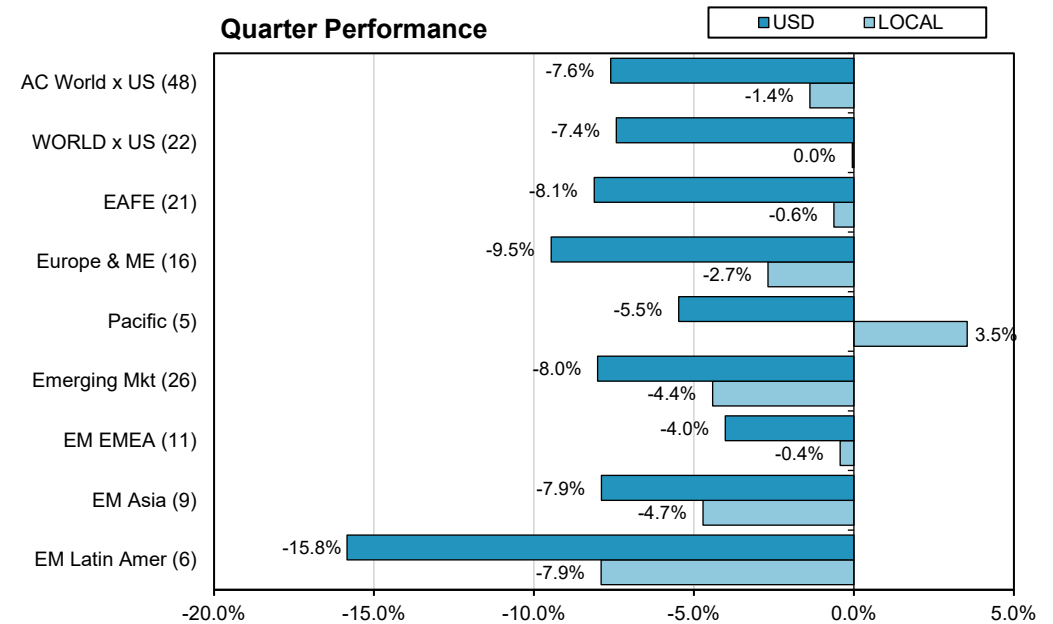
Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Q32 Bio Inc	0.0%	-92.3%	0.0%	Health Care
Cassava Sciences Inc	0.0%	-92.0%	-89.5%	Health Care
Applied Therapeutics Inc	0.0%	-89.9%	-74.4%	Health Care
Perspective Therapeutics Inc	0.0%	-76.1%	-20.6%	Health Care
Keros Therapeutics Inc	0.0%	-72.7%	-60.2%	Health Care
Bioage Labs Inc	0.0%	-72.2%	N/A	Health Care
Inovio Pharmaceuticals Inc	0.0%	-68.3%	-70.1%	Health Care
PACS Group Inc	0.0%	-67.2%	N/A	Health Care
Shattuck Labs Inc Ordinary Shares	0.0%	-65.3%	-83.0%	Health Care
Sunnova Energy International Inc	0.0%	-64.8%	-77.5%	Utilities

Source: Morningstar Direct

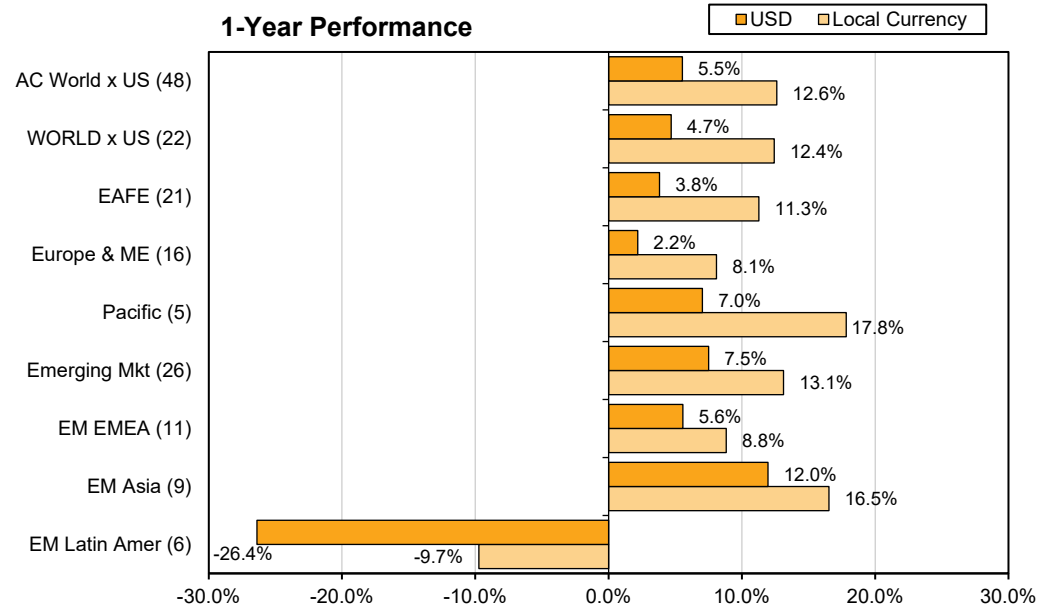


- Results in USD terms among the headline international equity indexes were sharply lower during the quarter. The strengthening USD relative to many major currencies during the quarter was a substantial headwind for the USD performance of non-US regional benchmarks' returns. The developed-market MSCI EAFE Index returned a muted -0.6% in LCL terms but fell -8.1% in USD terms. The MSCI ACWI ex-US Index pulled back -7.6% in USD and -1.4% in LCL terms for the quarter.
- Latin America continued to lag other regions during the quarter in USD terms, posting an outsized loss of -15.8%. Weakening currencies in the region put added pressure on realized performance for US investors. The MSCI Pacific benchmark was the only regional benchmark to deliver positive performance in LCL terms with a return of 3.5%, but USD strength led to a -5.5% decline in USD terms for the quarter. Regional LCL currency performance was disparate for the quarter, with some regional indexes remaining relatively flat over the final three months of the year.
- Full year results by country show Taiwan and Malaysia as the biggest winners during the year in USD terms. These two countries advanced 34.4% and 20.8%, respectively. China was not far behind with the largest economy in the emerging market world climbing 19.4% in USD terms for the year despite declining 7.7% during the fourth quarter. Much of the broad-based MSCI Emerging Market Index's returns are attributable to the health of the dominant Chinese economy, which came under pressure during the year due to troubles in the manufacturing and commercial property sectors.
- Much like domestic markets, trailing one-year results for international developed and emerging markets benchmarks were strongly positive. Higher LCL versus USD returns for most international benchmarks demonstrate the USD's relative strength over the trailing one-year period, which represents a drag on results for US investors.
- Most broad and regional indexes were positive for the trailing 12 months in both USD and LCL terms. The exception to these positive results is the EM Latin America index, where negative LCL performance was exacerbated by the region's currency weakness, which led to a more severe -26.4% return in USD terms. The MSCI Pacific Index led the way with a return of 17.8% in LCL terms for the trailing year, but US investor returns were dampened to just 7.0% in USD terms.

**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 December 31, 2024

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.8%	-4.7%	11.2%
Consumer Discretionary	11.3%	-4.3%	1.4%
Consumer Staples	8.3%	-12.6%	-7.9%
Energy	3.5%	-8.3%	-10.5%
Financials	21.9%	-2.3%	20.9%
Health Care	12.4%	-14.1%	-1.5%
Industrials	17.8%	-6.4%	9.6%
Information Technology	8.8%	-7.2%	3.8%
Materials	6.1%	-17.8%	-12.9%
Real Estate	2.0%	-13.4%	-3.9%
Utilities	3.2%	-12.8%	-4.1%
<b>Total</b>	<b>100.0%</b>	<b>-8.1%</b>	<b>3.8%</b>

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.9%	-6.8%	12.4%
Consumer Discretionary	11.2%	-8.1%	4.6%
Consumer Staples	7.0%	-12.4%	-7.8%
Energy	5.0%	-7.9%	-3.5%
Financials	23.7%	-2.8%	17.5%
Health Care	8.8%	-13.9%	-1.4%
Industrials	14.0%	-7.1%	7.5%
Information Technology	13.5%	-1.8%	13.3%
Materials	6.3%	-17.2%	-12.6%
Real Estate	1.8%	-11.5%	-1.7%
Utilities	3.0%	-12.8%	-2.0%
<b>Total</b>	<b>100.0%</b>	<b>-7.6%</b>	<b>5.5%</b>

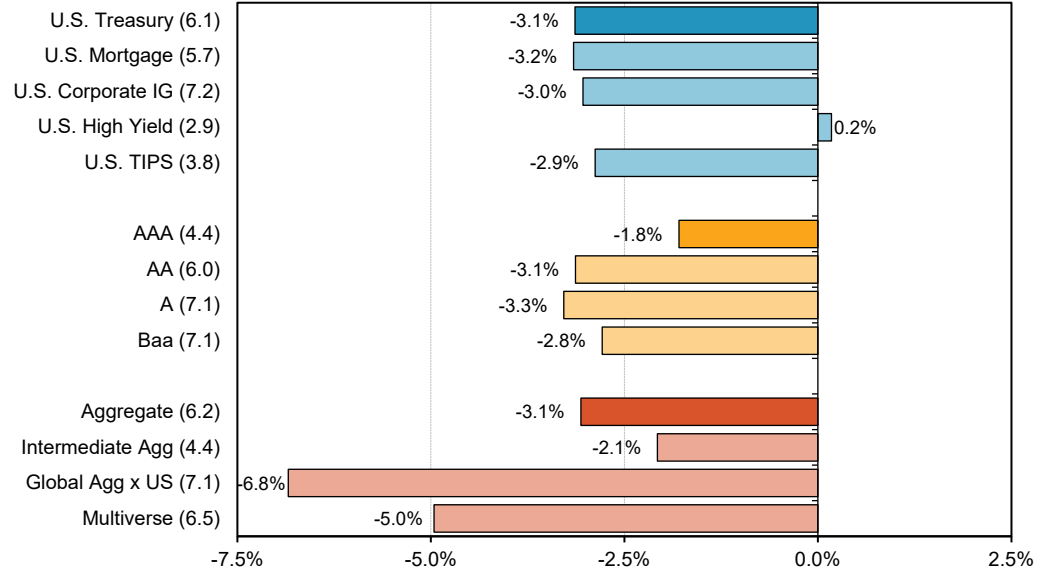
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	9.4%	-8.1%	15.9%
Consumer Discretionary	13.1%	-14.5%	11.8%
Consumer Staples	4.8%	-13.9%	-11.1%
Energy	4.6%	-14.5%	-5.9%
Financials	23.7%	-5.0%	11.0%
Health Care	3.5%	-11.7%	-0.9%
Industrials	6.6%	-10.9%	0.6%
Information Technology	24.3%	1.1%	20.4%
Materials	5.7%	-18.6%	-19.6%
Real Estate	1.7%	-6.5%	3.8%
Utilities	2.7%	-14.1%	3.3%
<b>Total</b>	<b>100.0%</b>	<b>-8.0%</b>	<b>7.5%</b>

Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1-Year Return
Japan	23.2%	14.5%	-3.6%	8.3%
United Kingdom	14.9%	9.3%	-6.8%	7.5%
France	11.1%	6.9%	-10.3%	-5.3%
Switzerland	9.6%	6.0%	-11.3%	-2.0%
Germany	9.2%	5.8%	-5.7%	10.2%
Australia	7.4%	4.6%	-11.4%	1.2%
Netherlands	4.6%	2.9%	-12.4%	1.4%
Sweden	3.6%	2.2%	-14.0%	-3.7%
Denmark	2.9%	1.8%	-21.5%	-12.9%
Italy	2.8%	1.7%	-6.7%	11.3%
Spain	2.8%	1.7%	-9.2%	9.8%
Hong Kong	2.0%	1.2%	-9.8%	0.1%
Singapore	1.7%	1.0%	3.2%	32.3%
Belgium	1.0%	0.6%	-8.3%	8.5%
Finland	1.0%	0.6%	-13.1%	-7.3%
Israel	1.0%	0.6%	14.1%	38.3%
Norway	0.6%	0.4%	-5.4%	-4.3%
Ireland	0.3%	0.2%	-12.6%	14.0%
New Zealand	0.2%	0.1%	-6.0%	-1.5%
Austria	0.2%	0.1%	1.1%	18.3%
Portugal	0.2%	0.1%	-22.7%	-25.2%
<b>Total EAFE Countries</b>	<b>100.0%</b>	<b>62.3%</b>	<b>-8.1%</b>	<b>3.8%</b>
Canada		8.1%	-1.8%	11.9%
<b>Total Developed Countries</b>		<b>70.4%</b>	<b>-7.4%</b>	<b>4.7%</b>
China		8.2%	-7.7%	19.4%
Taiwan		5.8%	3.3%	34.4%
India		5.8%	-11.3%	11.2%
Korea		2.7%	-19.2%	-23.4%
Saudi Arabia		1.2%	-1.5%	0.6%
Brazil		1.2%	-19.4%	-29.8%
South Africa		0.9%	-12.1%	6.7%
Mexico		0.5%	-10.6%	-27.1%
Malaysia		0.5%	-6.9%	20.8%
Indonesia		0.4%	-15.6%	-13.0%
Thailand		0.4%	-10.1%	1.3%
United Arab Emirates		0.4%	9.0%	19.6%
Qatar		0.3%	-0.2%	6.1%
Poland		0.2%	-11.5%	-6.7%
Kuwait		0.2%	1.2%	10.5%
Turkey		0.2%	-3.2%	17.8%
Philippines		0.2%	-13.9%	-0.7%
Greece		0.1%	-6.2%	8.9%
Chile		0.1%	-6.8%	-7.5%
Peru		0.1%	-9.1%	15.8%
Hungary		0.1%	-2.3%	14.0%
Czech Republic		0.0%	0.9%	4.0%
Colombia		0.0%	-0.2%	7.9%
Egypt		0.0%	-9.0%	-31.2%
<b>Total Emerging Countries</b>		<b>29.7%</b>	<b>-8.0%</b>	<b>7.5%</b>
<b>Total ACWixUS Countries</b>		<b>100.0%</b>	<b>-7.6%</b>	<b>5.5%</b>

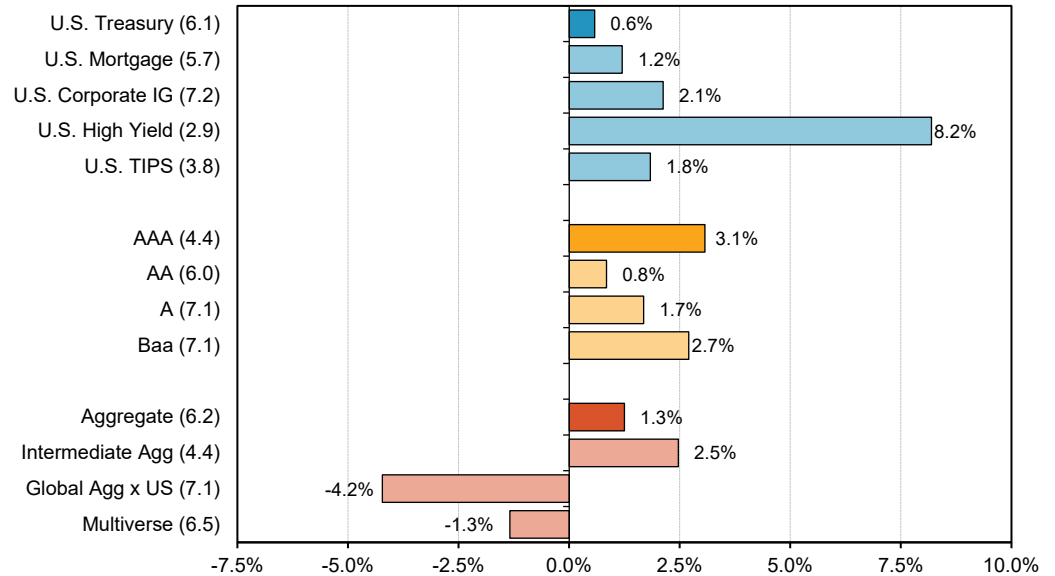
Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)  
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency,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

- Domestic fixed-income markets declined during the fourth quarter despite two additional 0.25% rate cuts by the Fed. Although the Fed's action moved short-term rates lower, longer-term yields advanced during the quarter, leading to a modest steepening of the Treasury Yield Curve. The Fed's target range is now set at 4.25%-4.50% at year-end, down a full percentage point, including the first 0.50% cut in September of 2024.
- While the Fed's first rate cut in September was initially celebrated by fixed income investors and boosted the levels of the indexes during the third quarter, many of the core indexes fell during the fourth quarter as longer-term yields advanced and worked against the Fed's short-term rate declines. Performance across the investment-grade index's segments declined with the Treasury, Mortgage-Backed and Corporate IG indexes falling in a tight range around -3.0%. Higher quality issues performed better, as BBB issues fell by -2.8%, while AAA issues fell a smaller -1.8% due in large part to their lower duration (4.4 vs. 7.1 years).
- High Yield bonds outperformed investment grade issues as longer-term yields climbed. This was primarily due to the high-yield benchmark's lower duration and higher coupon income. Despite their lower credit quality, below-investment grade issues returned just 0.2% for the quarter, but still outpaced all other broad-based investment-grade fixed income indexes.
- Over the trailing one-year period, the Bloomberg US Aggregate Bond Index posted a return of 1.3%. The benchmark's sub-components also posted positive performance over the trailing 12 months with the Bloomberg US Corporate Investment Grade Index rising 2.1% and the US Mortgage Index returning 1.2%. US TIPS, which are excluded from the Bloomberg US Aggregate Bond Index, returned 1.8% for the trailing year.
- Results were mixed across credit qualities of investment grade issues. The performance of AAA issues was aided by their lower duration and returned 3.1% while AA issues returned only 0.8% for the year. High yield bonds were also the best performing segment of the market for the year, returning an outsized 8.2%, more than double any other segment of the domestic fixed income market. Results in high yield were spurred by stable credit spreads and higher coupon income.
- The Bloomberg Global Aggregate ex-US Index finished both the quarter and the year significantly weaker than its domestic benchmark counterpart. Strength in the USD was a primary driver in the international index's weak -6.8% fourth quarter performance and its -4.2% return for the calendar year.

#### Quarter Performance



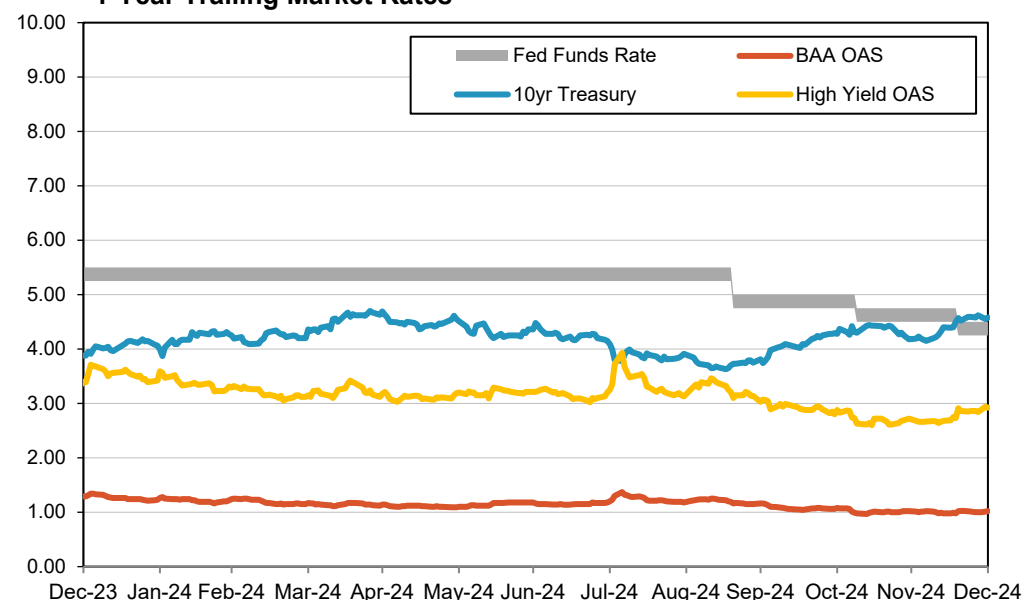
#### 1-Year Performance



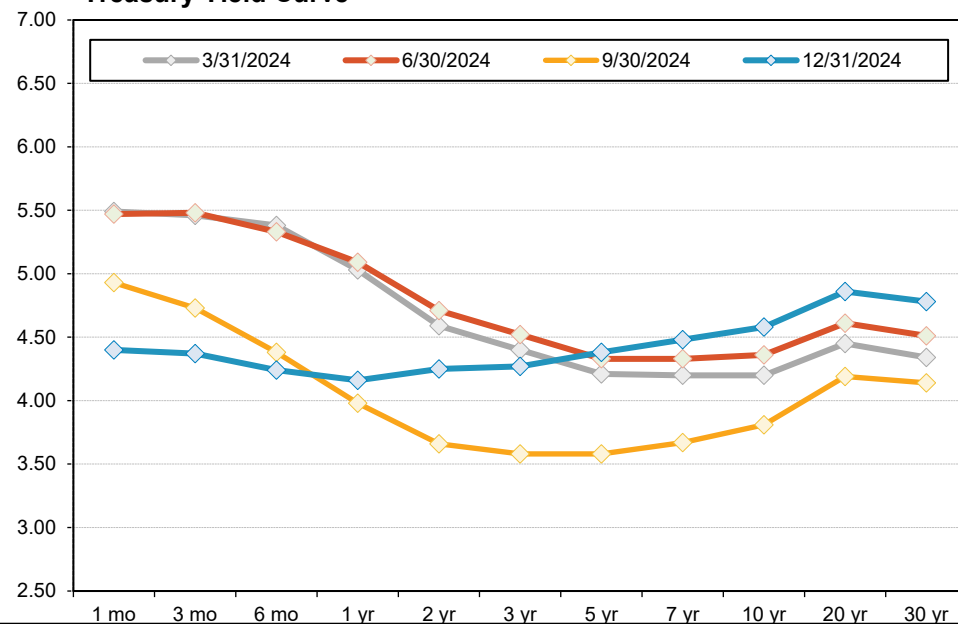
Source: Bloomberg

- The gray band across the graph illustrates the fed funds target rate range over the last 12 months. During the fourth quarter, the Federal Open Market Committee (FOMC) cut its policy rates by 0.50% with two successive 0.25% cuts in November and December. The target policy range now stands at 4.25-4.50%, a level not seen since January of 2023. With inflation declining and unemployment remaining largely stable, the Fed has pivoted from its restrictive monetary policy stance. The most recent FOMC press release continued to emphasize economic data-dependent outcomes while placing greater emphasis on the second part of the committee's dual mandate: full employment. The CME FedWatch tool, which forecasts rates based on fed fund futures pricing, showed a greater than 90% probability of no rate decrease at the FOMC January meeting at the time of this writing. Fed officials and market participants continue to express concern that leaving rates at their current elevated levels for an extended period could tip the US economy into a recession.
- The yield on the US 10-year Treasury (blue line of the top chart) rose 0.84% during the quarter. The bellwether benchmark rate opened the quarter at a yield of 3.74% and finished December at a yield of 4.58%, which is its highest level since May 2024.
- 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 investors require to purchase and hold non-US Treasury issues with the lowest investment grade rating. During the quarter, the yield spread experienced a slight decline, beginning October at 1.13% and finishing December at 1.02%. High-yield OAS spreads (represented by the yellow line in the top chart) also remained relatively stable, despite a sharp spike in early August spurred by an unwinding of the yen carry trade. The high-yield OAS fell by 0.11% over the quarter from 3.03% to 2.92%. The spread measure's relative stability over the trailing year 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. For the first time since November 2022, the quarter-end yield on the 30-year Treasury was higher than the one-month Treasury. Furthermore, the spread between the two-year yield and the 10-year yield continued to widen during the quarter, growing from 0.15% in October to 0.30% at year end. The yield curve had been inverted for much of the last two years. This 2-10-year yield curve inversion is a common heuristic used to foretell a pending recession.

**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 \(jpmorgan.com\)](#)

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

[China's Economy Limpers Into 2024 – WSJ Support Site - Global Index Lens: Index Returns – MSCI](#)

[Federal Reserve issues FOMC statement](#)

[The Fed - Meeting calendars and information \(federalreserve.gov\)](#)

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

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

[Fed rate cut: Here's what changed in the central bank's statement \(cnbc.com\)](#)

[10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity \(T10Y2Y\) | FRED | St. Louis Fed \(stlouisfed.org\)](#)

[The Fed's dot plot shows only two rate cuts in 2025, fewer than previously projected](#)

**Miami Beach Policemen's Relief & Pension Fund**  
**Compliance Checklist**  
As of December 31, 2024

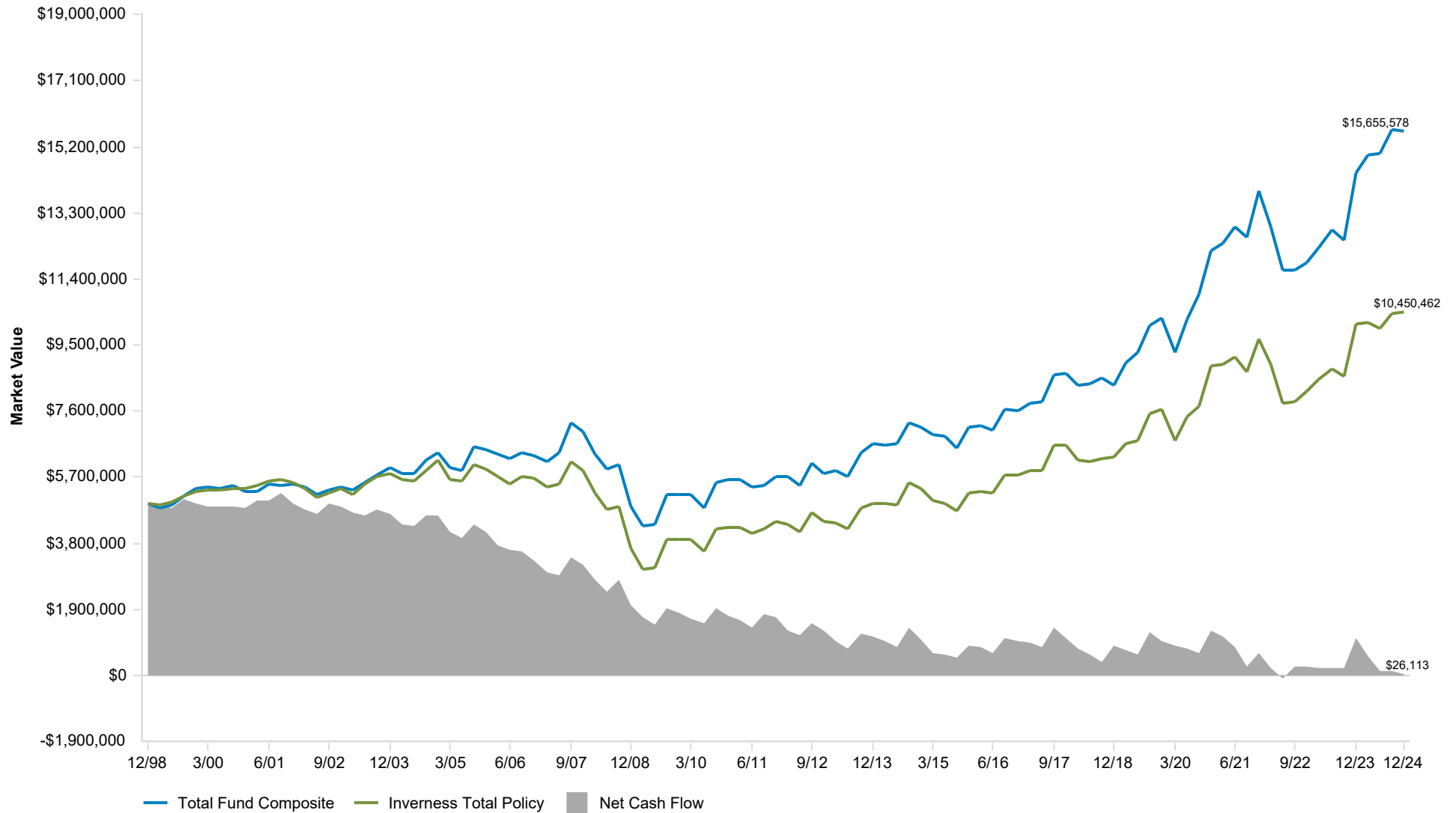
<b>Total Fund Compliance:</b>	<b>Yes</b>	<b>No</b>
The total plan return equaled or exceeded the total plan benchmark over the trailing three year period.	•	
The total plan return equaled or exceeded the total plan benchmark over the trailing five year period.	•	
The total return lies in the top 40th percentile of its peers over the trailing three year period.	•	
The total return lies in the top 40th percentile of its peers over the trailing five year period.	•	
The total return of the fund over the trailing three year period equaled or exceeded 8%.		•
The total return of the fund over the trailing five year period equaled or exceeded 8%.	•	

<b>Corient Equity Compliance:</b>	<b>Yes</b>	<b>No</b>
The equity portfolio return beat the S&P 500 index over the trailing three year period.		•
The equity portfolio return beat the S&P 500 index over the trailing five year period.	•	
The three year return ranks in the top 40% of its peers.		•
The five year return ranks in the top 40% of its peers.	•	
The total amount invested in equity securities is less than or equal to 60% of the Fund's total assets at market value.		•

<b>Fixed Income Compliance:</b>	<b>Yes</b>	<b>No</b>
The total fixed income return equaled or exceed the benchmark over the trailing three year period.		•
The total fixed income return equaled or exceed the benchmark over the trailing five year period.		•
The three year return ranks in the top 40% of its peers.		•
The five year return ranks in the top 40% of its peers.		•

**Schedule of Investable Assets**  
**Total Fund Composite**  
Since Inception Ending December 31, 2024

**Schedule of Investable Assets**



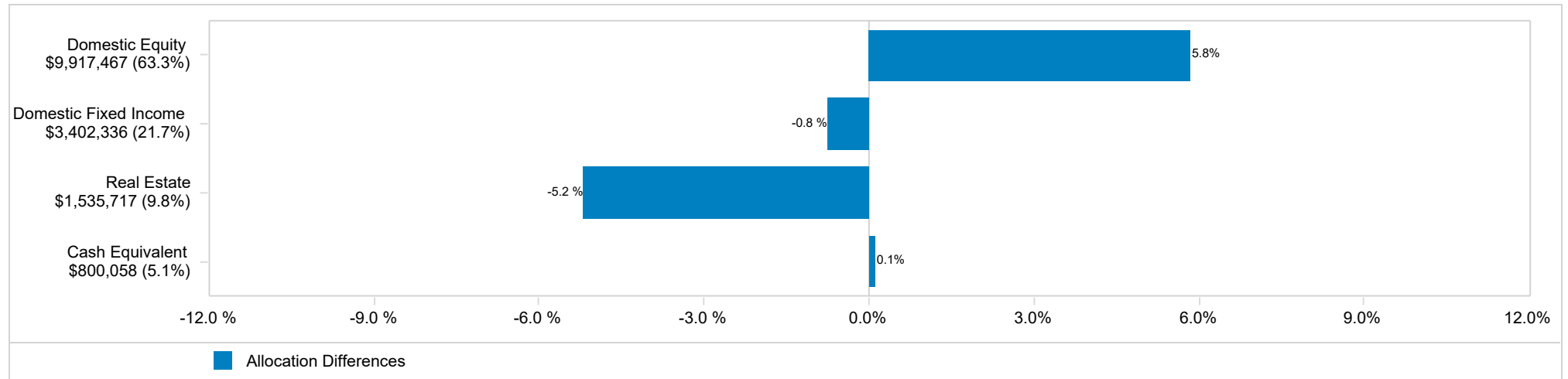
**Schedule of Investable Assets**

Periods Ending	Beginning Market Value \$	Contributions \$	Distributions \$	Gain/Loss \$	Ending Market Value \$	%Return
Inception	4,931,344	20,593,670	-25,498,901	15,629,465	15,655,578	7.64

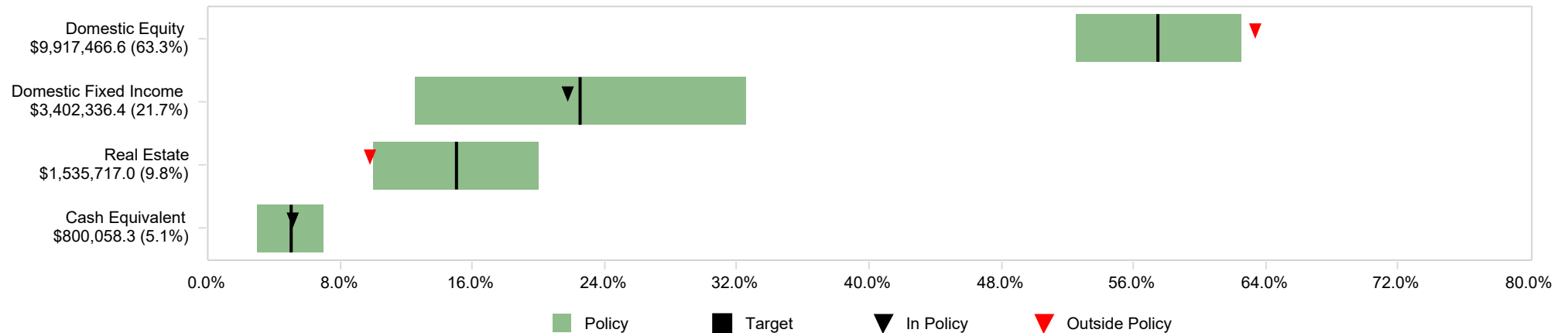
**Asset Allocation Compliance**  
**Miami Beach Police Relief Total Fund Composite**  
As of December 31, 2024

**Asset Allocation Compliance**

	Asset Allocation \$	Current Allocation (%)	Target Allocation (%)	Differences (%)	Target Rebal. (\$000)
Domestic Equity	9,917,467	63.3	57.5	5.8	-915,509
Domestic Fixed Income	3,402,336	21.7	22.5	-0.8	120,169
Real Estate	1,535,717	9.8	15.0	-5.2	812,620
Cash Equivalent	800,058	5.1	5.0	0.1	-17,279
<b>Total Fund</b>	<b>15,655,578</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>	<b>-</b>

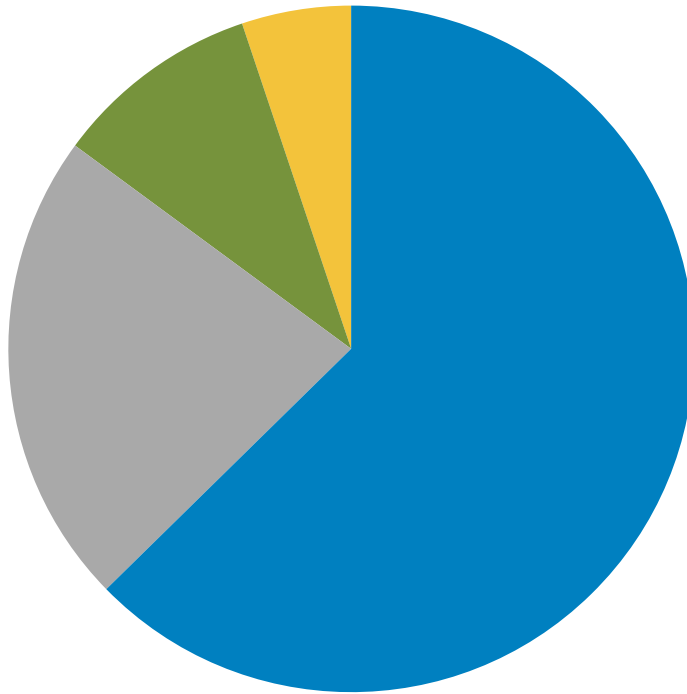


**Executive Summary**

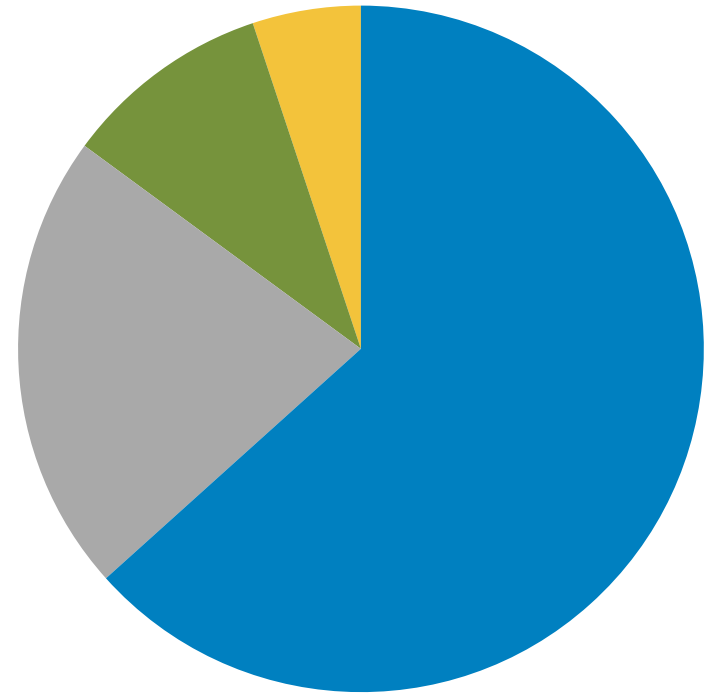




**Asset Allocation By Segment as of  
September 30, 2024 : \$15,687,305**

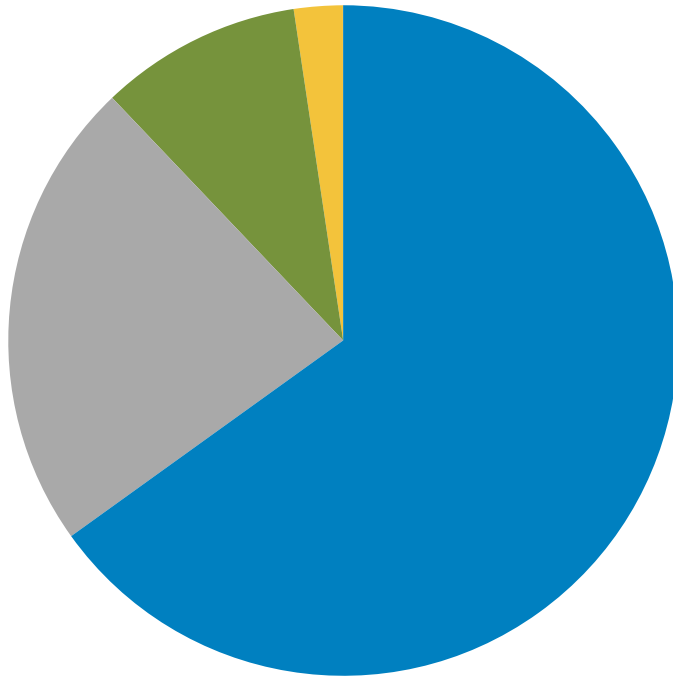


**Asset Allocation By Segment as of  
December 31, 2024 : \$15,655,578**

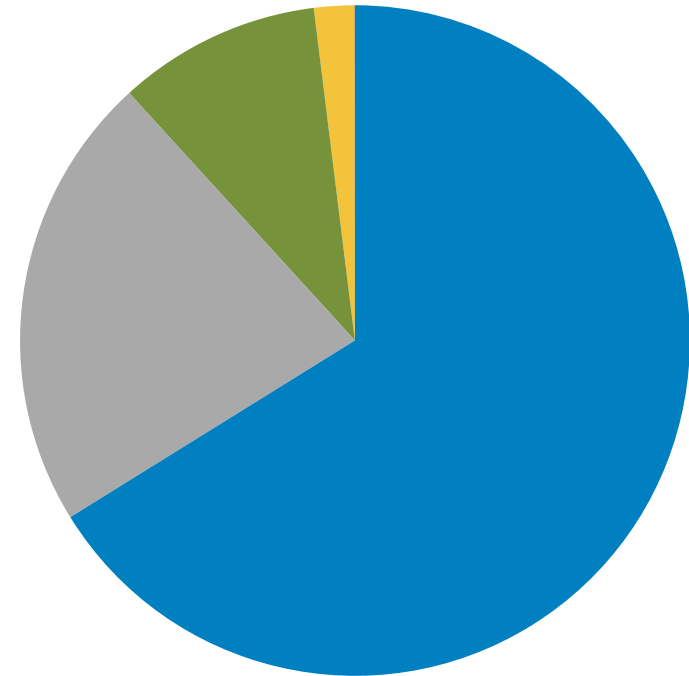


Allocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	9,829,758	62.7	Domestic Equity	9,917,467	63.3
Domestic Fixed Income	3,519,168	22.4	Domestic Fixed Income	3,402,336	21.7
Real Estate	1,528,663	9.7	Real Estate	1,535,717	9.8
Cash Equivalent	809,715	5.2	Cash Equivalent	800,058	5.1

**Asset Allocation By Manager as of  
Sep-2024 : \$15,687,305**



**Asset Allocation By Manager as of  
Dec-2024 : \$15,655,578**



Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
Corient Equity	10,210,044	65.1	Corient Equity	10,358,930	66.2
Tocqueville Fixed	3,576,703	22.8	Tocqueville Fixed	3,452,545	22.1
Intercontinental	1,528,663	9.7	Intercontinental	1,535,717	9.8
Vanguard Total Stock Market Index Fund (VTSAX)	369,400	2.4	Vanguard Total Stock Market Index Fund (VTSAX)	304,928	1.9
Receipt & Disbursement (Cash & Equiv)	2,494	0.0	Receipt & Disbursement (Cash & Equiv)	3,458	0.0

**Asset Allocation & Performance**  
**Total Fund Composite Gross & Net**  
As of December 31, 2024

	Allocation		Performance(%)										
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	10 YR	15 YR	Inception	Inception Date	
Total Fund Composite (Gross)	15,655,578	100.0	0.34 (6)	0.34 (6)	16.44 (2)	5.00 (3)	10.27 (2)	10.10 (1)	9.06 (1)	9.17 (3)	7.79 (2)	10/01/1998	
Total Fund Policy			1.10 (2)	1.10 (2)	14.44 (4)	4.56 (5)	8.61 (4)	8.58 (3)	8.13 (8)	8.76 (10)	6.83 (26)		
Difference			-0.76	-0.76	2.01	0.44	1.65	1.53	0.93	0.41	0.96		
All Public Plans-Total Fund Median			-0.93	-0.93	10.83	2.66	6.93	6.93	6.96	7.82	6.47		
Total Fund Composite (Net)	15,655,578	100.0	0.26	0.26	16.06	4.72	9.91	9.74	8.63	8.78	7.42	10/01/1998	
Total Fund Policy			1.10	1.10	14.44	4.56	8.61	8.58	8.13	8.76	6.83		
Difference			-0.84	-0.84	1.62	0.15	1.30	1.17	0.51	0.02	0.58		
Total Equity	10,663,858	68.1	1.59 (42)	1.59 (42)	24.81 (26)	8.43 (27)	15.41 (17)	14.55 (18)	13.36 (20)	13.78 (30)	10.53 (34)	10/01/1998	
All Cap Median			0.70	0.70	16.71	6.21	11.33	10.72	10.70	12.60	9.93		
Corient Equity Plus Cash (Gross)	10,358,930	66.2	1.57 (65)	1.57 (65)	24.89 (45)	8.46 (56)	15.43 (29)	14.56 (25)	13.37 (33)	13.78 (59)	10.54 (16)	10/01/1998	
S&P 500 Index			2.41 (45)	2.41 (45)	25.02 (43)	8.94 (48)	14.53 (44)	13.83 (40)	13.10 (42)	13.88 (53)	8.90 (90)		
Difference			-0.84	-0.84	-0.13	-0.48	0.90	0.73	0.27	-0.10	1.64		
(10/01/2020) 90% S&P500 & 10% 3-Month TBill Policy			2.30 (51)	2.30 (51)	22.96 (57)	8.57 (56)	N/A	N/A	N/A	N/A	N/A		
Difference			-0.73	-0.73	1.94	-0.11	N/A	N/A	N/A	N/A	N/A		
IM U.S. Large Cap Core Equity (SA+CF) Median			2.31	2.31	24.42	8.88	14.34	13.57	12.97	13.89	9.76		
Vanguard Total Stock Market Index Fund (VTSAX)	304,928	1.9	2.62 (21)	2.62 (21)	N/A	N/A	N/A	N/A	N/A	N/A	8.95 (12)	07/01/2024	
Russell 3000 Index			2.63 (20)	2.63 (20)	23.81 (44)	8.01 (48)	13.86 (40)	13.16 (34)	12.55 (28)	13.56 (20)	9.03 (10)		
Difference			-0.01	-0.01	N/A	N/A	N/A	N/A	N/A	N/A	-0.07		
Large Blend Median			2.05	2.05	23.23	7.88	13.39	12.50	11.89	12.76	7.42		
Corient Equity Plus Cash (Net)	10,358,930	66.2	1.47 (63)	1.47 (63)	24.42 (40)	8.06 (52)	15.08 (22)	14.32 (19)	13.20 (21)	13.67 (31)	10.47 (7)	10/01/1998	
S&P 500 Index			2.41 (38)	2.41 (38)	25.02 (33)	8.94 (39)	14.53 (32)	13.83 (24)	13.10 (24)	13.88 (24)	8.90 (65)		
Difference			-0.94	-0.94	-0.60	-0.88	0.56	0.48	0.10	-0.21	1.57		
(10/01/2020) 90% S&P500 & 10% 3-Month TBill Policy			2.30 (42)	2.30 (42)	22.96 (53)	8.57 (44)	N/A	N/A	N/A	N/A	N/A		
Difference			-0.83	-0.83	1.47	-0.51	N/A	N/A	N/A	N/A	N/A		
IM U.S. Large Cap Core Equity (SA+CF) Median			2.12	2.12	23.43	8.19	13.51	12.69	12.23	13.30	9.18		

**Asset Allocation & Performance**  
**Total Fund Composite Gross & Net**  
As of December 31, 2024

	Allocation		Performance(%)									
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	10 YR	15 YR	Inception	Inception Date
Total Fixed Income	3,452,545	22.1	-3.46 (90)	-3.46 (90)	1.80 (79)	-0.92 (64)	0.73 (72)	1.99 (59)	2.14 (58)	2.74 (66)	4.03 (56)	10/01/1998
IM U.S. Fixed Income (SA+CF) Median			-1.36	-1.36	3.32	0.18	1.48	2.22	2.27	3.16	4.11	
Tocqueville Fixed (Gross)	3,452,545	22.1	-3.46 (90)	-3.46 (90)	1.80 (79)	-0.32 (59)	N/A	N/A	N/A	N/A	-0.54 (69)	09/01/2020
Fixed Income Index			-2.34 (63)	-2.34 (63)	2.09 (74)	-1.38 (68)	0.33 (80)	1.41 (83)	1.61 (87)	2.44 (77)	-1.18 (80)	
Difference			-1.12	-1.12	-0.29	1.06	N/A	N/A	N/A	N/A	0.64	
IM U.S. Fixed Income (SA+CF) Median			-1.36	-1.36	3.32	0.18	1.48	2.22	2.27	3.16	0.48	
Tocqueville Fixed (Net)	3,452,545	22.1	-3.46 (90)	-3.46 (90)	1.80 (74)	-0.32 (54)	N/A	N/A	N/A	N/A	-0.54 (64)	09/01/2020
Fixed Income Index			-2.34 (63)	-2.34 (63)	2.09 (69)	-1.38 (64)	0.33 (74)	1.41 (72)	1.61 (74)	2.44 (67)	-1.18 (76)	
Difference			-1.12	-1.12	-0.29	1.06	N/A	N/A	N/A	N/A	0.64	
IM U.S. Fixed Income (SA+CF) Median			-1.37	-1.37	3.01	-0.11	1.24	1.94	2.02	2.88	0.27	
Total Real Estate												
Intercontinental (Gross)	1,535,717	9.8	0.60 (65)	0.60 (65)	-4.19 (85)	-4.59 (84)	1.87 (70)	N/A	N/A	N/A	3.88 (58)	04/01/2018
NCREIF Fund ODCE (EW)			1.03 (46)	1.03 (46)	-1.67 (65)	-2.37 (53)	3.06 (47)	4.21 (56)	6.12 (56)	8.60 (62)	4.04 (54)	
Difference			-0.43	-0.43	-2.52	-2.22	-1.18	N/A	N/A	N/A	-0.16	
IM U.S. Private Real Estate (SA+CF) Median			0.97	0.97	-1.35	-2.28	2.99	4.37	6.17	8.92	4.16	
Intercontinental (Net)	1,535,717	9.8	0.46	0.46	-4.93	-4.92	0.76	N/A	N/A	N/A	2.66	04/01/2018
NCREIF Fund ODCE (EW)			1.03	1.03	-1.67	-2.37	3.06	4.21	6.12	8.60	4.04	
Difference			-0.57	-0.57	-3.26	-2.55	-2.29	N/A	N/A	N/A	-1.38	
Receipt & Disbursement (Cash & Equiv)	3,458	0.0										

**Asset Allocation & Performance**  
**Total Fund Composite Gross & Net**  
As of December 31, 2024

	Allocation		Performance(%)					
	Market Value \$	%	Oct-2023 To Sep-2024	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019
<b>Total Fund Composite (Gross)</b>	<b>15,655,578</b>	<b>100.0</b>	<b>25.34 (6)</b>	<b>6.87 (94)</b>	<b>-7.39 (6)</b>	<b>18.18 (75)</b>	<b>15.70 (1)</b>	<b>7.51 (3)</b>
Total Policy			21.36 (49)	9.88 (66)	-9.47 (11)	17.37 (83)	10.98 (20)	6.02 (8)
Difference			3.97	-3.00	2.08	0.81	4.72	1.49
All Public Plans-Total Fund Median			21.23	10.77	-14.86	20.05	7.93	3.99
<b>Total Fund Composite (Net)</b>	<b>15,655,578</b>	<b>100.0</b>	<b>25.08</b>	<b>6.55</b>	<b>-8.00</b>	<b>17.85</b>	<b>15.54</b>	<b>7.06</b>
Corient Total Policy			21.36	9.88	-9.47	17.37	10.98	6.02
Difference			3.72	-3.32	1.46	0.48	4.56	1.04
<b>Total Equity</b>	<b>10,663,858</b>	<b>68.1</b>	<b>36.01 (28)</b>	<b>19.67 (38)</b>	<b>-14.73 (37)</b>	<b>27.63 (82)</b>	<b>22.16 (25)</b>	<b>4.42 (27)</b>
All Cap Median			29.77	16.99	-16.93	34.00	8.12	1.35
Corient Equity (Plus Cash)	10,358,930	66.2	36.02 (46)	19.80 (60)	-14.73 (49)	27.63 (74)	22.16 (11)	4.42 (35)
S&P 500 Index			36.35 (41)	21.62 (37)	-15.47 (57)	30.00 (58)	15.15 (38)	4.25 (38)
Difference			-0.33	-1.82	0.75	-2.38	7.01	0.17
IM U.S. Large Cap Core Equity (SA+CF) Median			35.33	20.79	-14.86	30.87	13.28	3.11
Vanguard Total Stock Market Index Fund (VTSAX)	304,928	1.9	N/A	N/A	N/A	N/A	N/A	N/A
Russell 3000 Index			35.19 (47)	20.46 (50)	-17.63 (70)	31.88 (22)	15.00 (30)	2.92 (52)
Difference			N/A	N/A	N/A	N/A	N/A	N/A
Large Blend Median			34.94	20.44	-16.16	29.68	13.54	3.10
<b>Total Fixed Income</b>	<b>3,452,545</b>	<b>22.1</b>	<b>14.21</b>	<b>-3.02</b>	<b>-9.58</b>	<b>-0.62</b>	<b>8.54</b>	<b>10.73</b>
Tocqueville Fixed	3,452,545	22.1	14.21 (24)	-1.25 (96)	-9.49 (38)	-0.62 (90)	N/A	N/A
Fixed Income Index			10.39 (61)	1.57 (75)	-12.57 (57)	-0.76 (91)	7.18 (33)	9.74 (33)
Difference			3.82	-2.82	3.07	0.14	N/A	N/A
IM U.S. Fixed Income (SA+CF) Median			11.72	2.81	-11.48	1.46	5.63	7.89
<b>Total Real Estate</b>								
Intercontinental	1,535,717	9.8	-11.09 (91)	-15.74 (86)	26.46 (14)	13.84 (72)	4.39 (14)	8.30 (17)
NCREIF Fund ODCE (EW)			-7.75 (63)	-12.40 (48)	22.76 (39)	15.75 (50)	1.74 (43)	6.17 (69)
Difference			-3.34	-3.34	3.69	-1.91	2.65	2.14
IM U.S. Private Real Estate (SA+CF) Median			-6.61	-12.47	20.46	15.73	1.62	6.80
Receipt & Disbursement (Cash & Equiv)	3,458	0.0						

**Asset Allocation & Performance**  
**Total Fund Composite Gross & Net**  
As of December 31, 2024

	Performance(%)						
	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012
<b>Total Fund Composite (Gross)</b>	<b>11.23 (5)</b>	<b>8.99 (92)</b>	<b>8.71 (68)</b>	<b>1.48 (7)</b>	<b>11.38 (14)</b>	<b>10.88 (72)</b>	<b>17.44 (47)</b>
Total Policy	9.43 (20)	10.04 (84)	10.20 (25)	0.76 (15)	11.74 (9)	9.88 (81)	17.96 (36)
Difference	1.80	-1.05	-1.49	0.71	-0.36	0.99	-0.52
All Public Plans-Total Fund Median	7.84	11.87	9.42	-0.75	9.61	11.95	17.30
<b>Total Fund Composite (Net)</b>	<b>10.89</b>	<b>7.92</b>	<b>8.39</b>	<b>1.17</b>	<b>11.05</b>	<b>10.53</b>	<b>17.09</b>
Corient Total Policy	9.43	10.04	10.20	0.76	11.74	9.88	17.96
Difference	1.46	-2.12	-1.81	0.41	-0.70	0.65	-0.87
<b>Total Equity</b>	<b>20.62 (29)</b>	<b>18.68 (57)</b>	<b>11.61 (69)</b>	<b>-1.10 (64)</b>	<b>19.57 (20)</b>	<b>21.88 (72)</b>	<b>34.75 (9)</b>
All Cap Median	16.11	19.30	13.32	0.07	15.98	25.62	29.82
Corient Equity (Plus Cash)	20.62 (19)	18.68 (57)	11.61 (67)	-1.10 (72)	19.57 (49)	21.88 (33)	34.75 (6)
S&P 500 Index	17.91 (43)	18.61 (59)	15.43 (22)	-0.61 (66)	19.73 (46)	19.34 (64)	30.20 (45)
Difference	2.71	0.07	-3.82	-0.49	-0.16	2.54	4.55
IM U.S. Large Cap Core Equity (SA+CF) Median	17.48	19.06	13.25	0.10	19.33	20.55	29.77
Vanguard Total Stock Market Index Fund (VTSAX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 3000 Index	17.58 (31)	18.71 (37)	14.96 (25)	-0.49 (27)	17.76 (52)	21.60 (33)	30.20 (24)
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Large Blend Median	16.60	18.24	13.18	-1.28	17.92	20.43	29.11
<b>Total Fixed Income</b>	<b>-0.41</b>	<b>-1.06</b>	<b>6.56</b>	<b>3.18</b>	<b>2.60</b>	<b>-0.99</b>	<b>5.05</b>
Tocqueville Fixed	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fixed Income Index	-1.16 (88)	0.11 (89)	4.68 (63)	2.71 (33)	3.13 (70)	-1.23 (75)	5.03 (75)
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Fixed Income (SA+CF) Median	0.16	1.43	5.60	2.02	4.56	0.06	7.68
<b>Total Real Estate</b>							
Intercontinental	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund ODCE (EW)	8.82 (58)	7.81 (52)	10.62 (66)	14.71 (58)	12.39 (73)	12.47 (66)	11.77 (59)
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Private Real Estate (SA+CF) Median	8.98	7.88	11.18	15.54	13.23	13.35	12.58

Receipt & Disbursement (Cash & Equiv)

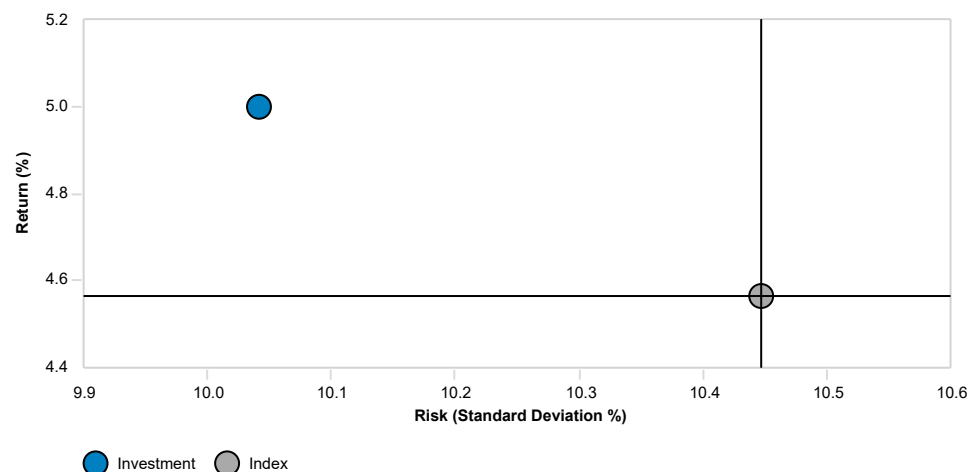
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.00	10.04	0.16	98.90	8	95.64	4
Index	4.56	10.45	0.12	100.00	8	100.00	4

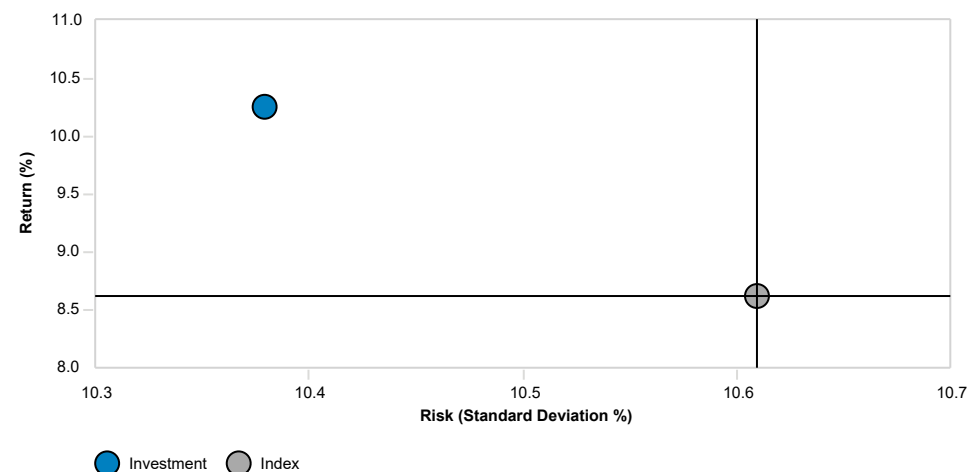
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	10.27	10.38	0.76	104.85	15	95.58	5
Index	8.61	10.61	0.60	100.00	15	100.00	5

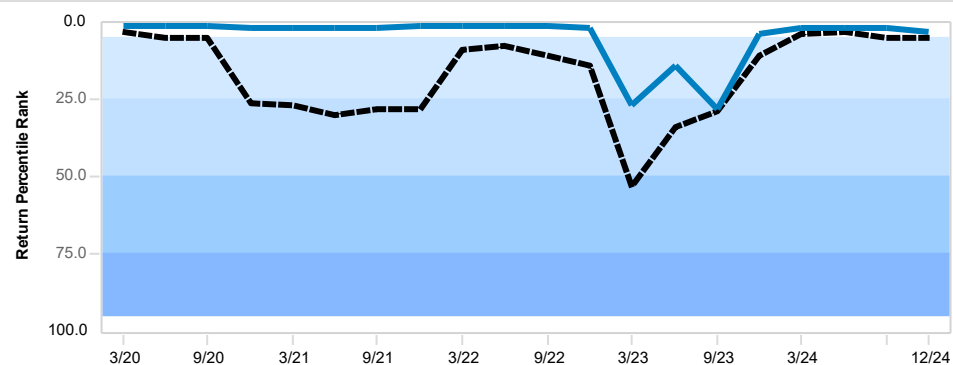
### Risk and Return 3 Years



### Risk and Return 5 Years

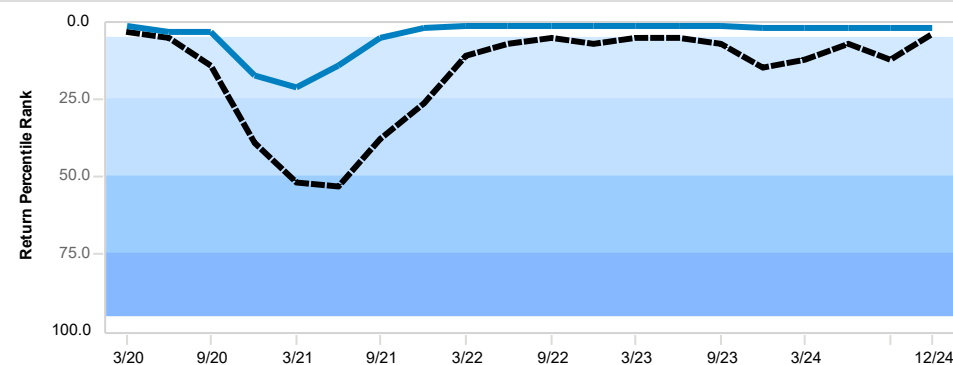


### 3 Year Rolling Percentile Rank All Public Plans-Total Fund



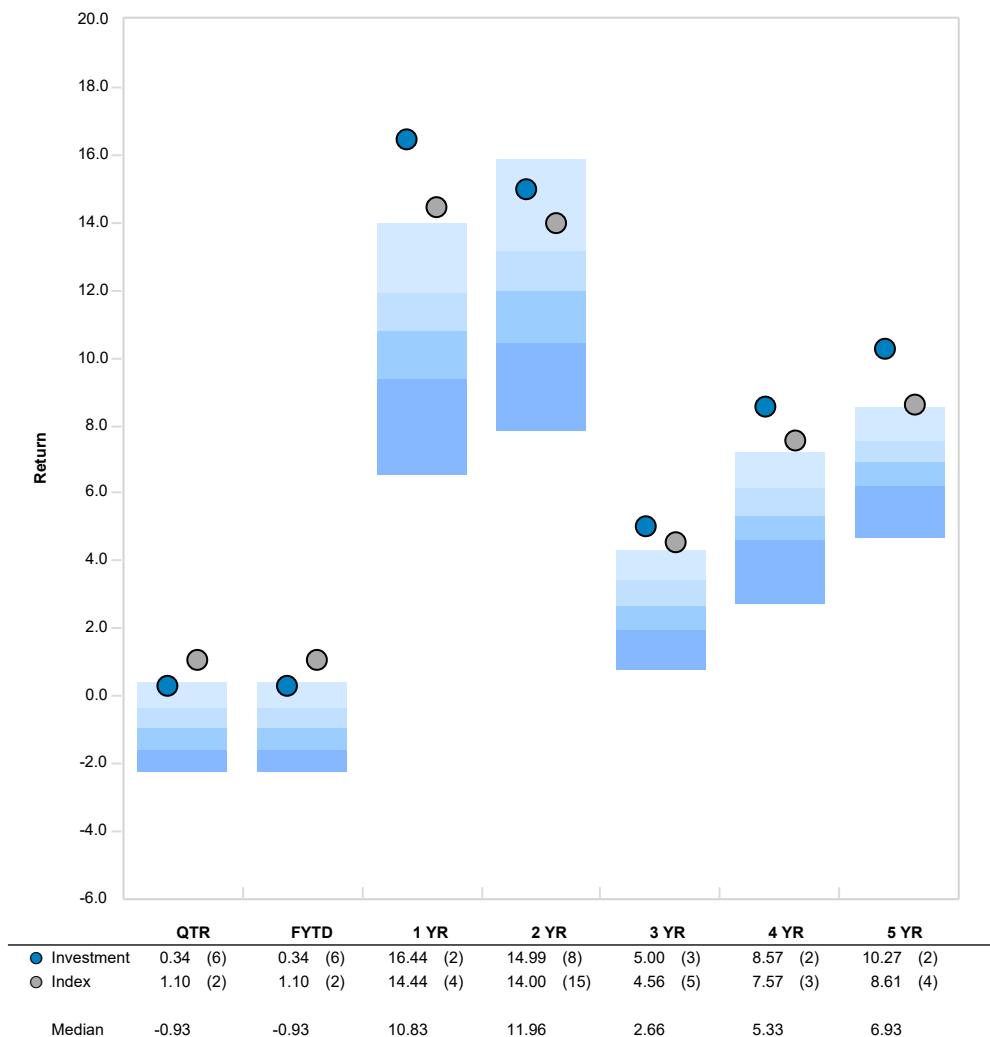
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	18 (90%)	2 (10%)	0 (0%)	0 (0%)
Index	20	12 (60%)	7 (35%)	1 (5%)	0 (0%)

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

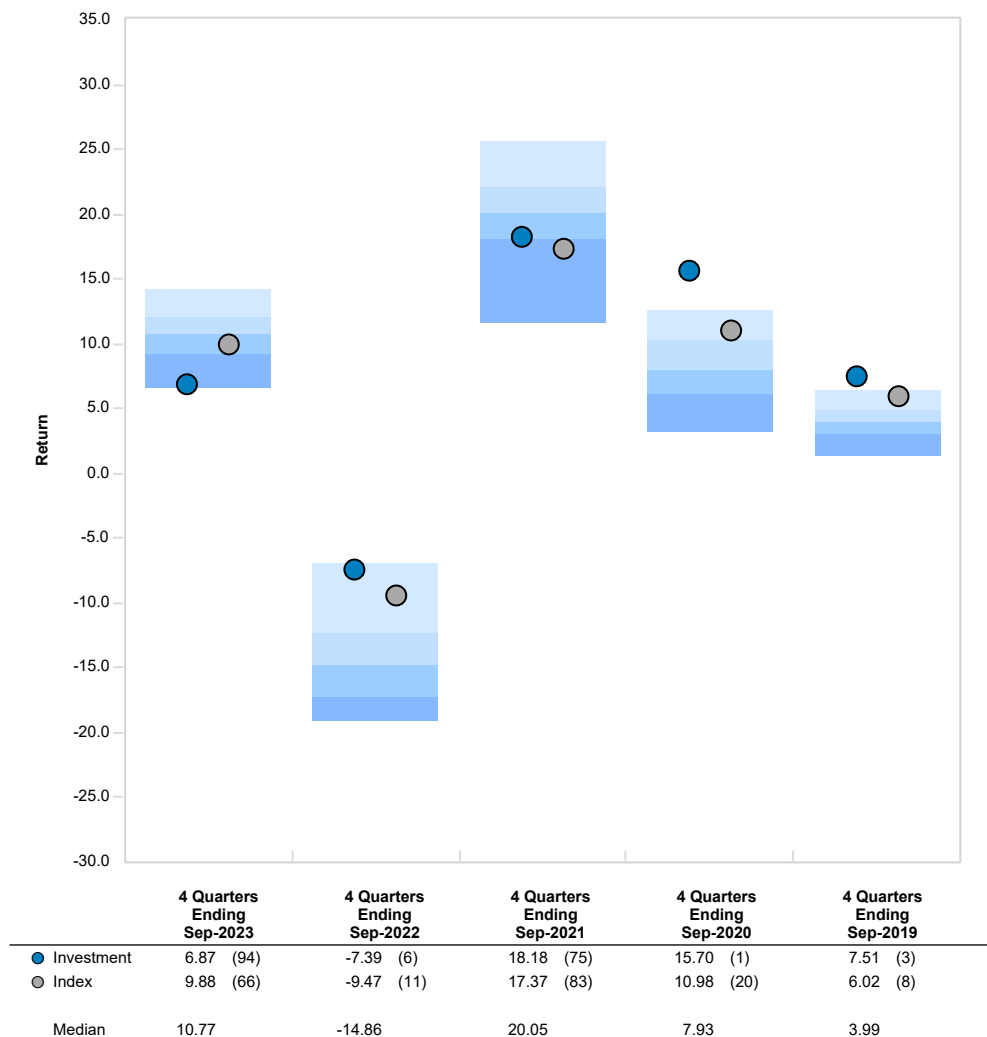


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	15 (75%)	3 (15%)	2 (10%)	0 (0%)

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



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

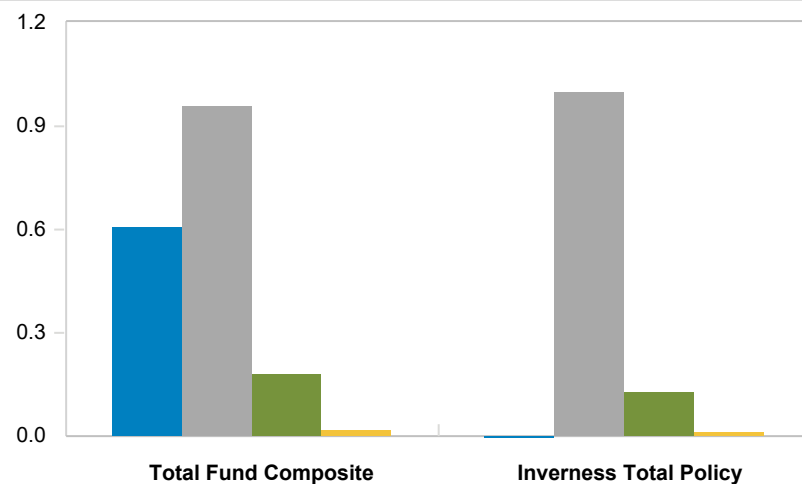


Comparative Performance

	1 Qtr Ending Sep-2024	1 Qtr Ending Jun-2024	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023
Investment	4.72 (77)	3.25 (1)	7.33 (2)	8.00 (56)	-2.45 (32)	3.95 (17)
Index	4.50 (84)	2.54 (2)	5.62 (22)	7.22 (72)	-2.28 (27)	4.05 (14)
Median	5.44	1.16	4.87	8.17	-2.95	3.28

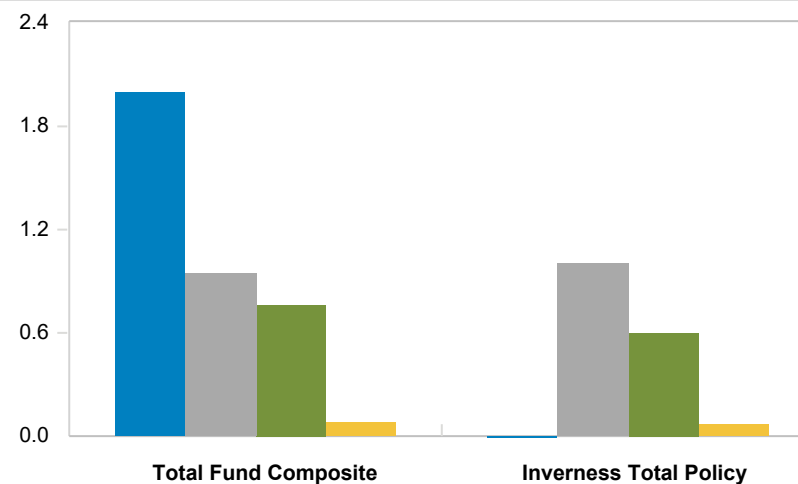


Risk / Reward Historical Statistics 3 Years Ending December 31, 2024



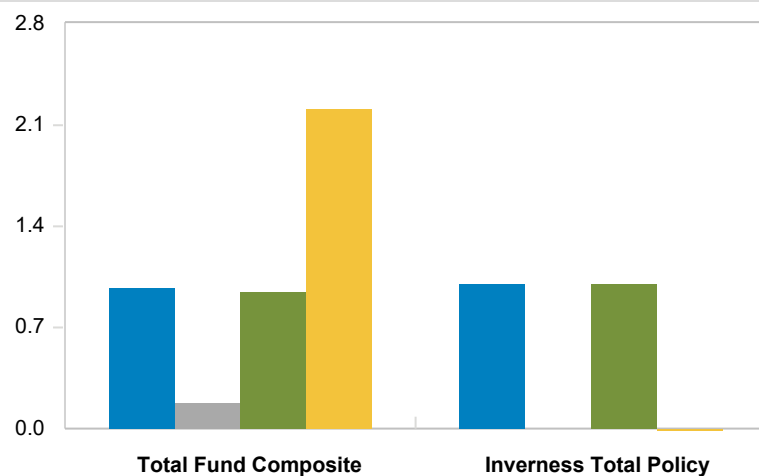
	Total Fund Composite	Inverness Total Policy
Alpha	0.60	0.00
Beta	0.96	1.00
Sharpe Ratio	0.18	0.13
Treynor Ratio	0.02	0.01

Risk / Reward Historical Statistics 5 Years Ending December 31, 2024



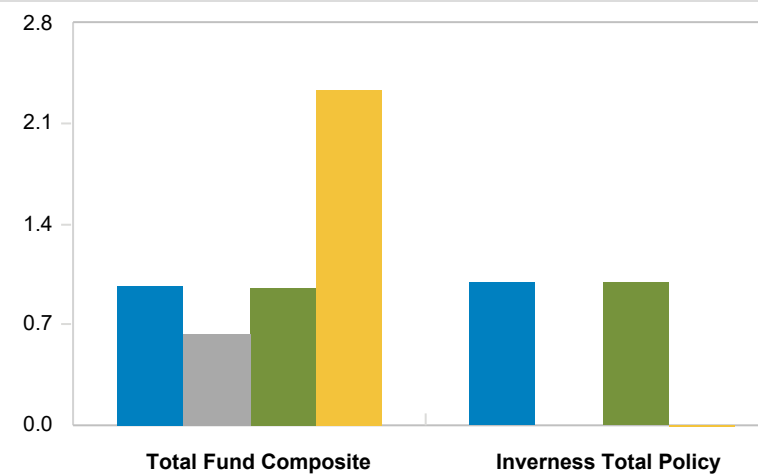
	Total Fund Composite	Inverness Total Policy
Alpha	2.00	0.00
Beta	0.95	1.00
Sharpe Ratio	0.76	0.60
Treynor Ratio	0.08	0.06

Index Relative Historical Statistics 3 Years Ending December 31, 2024



	Total Fund Composite	Inverness Total Policy
Actual Correlation	0.97	1.00
Information Ratio	0.18	N/A
R-Squared	0.94	1.00
Tracking Error	2.21	0.00

Index Relative Historical Statistics 5 Years Ending December 31, 2024



	Total Fund Composite	Inverness Total Policy
Actual Correlation	0.98	1.00
Information Ratio	0.64	N/A
R-Squared	0.95	1.00
Tracking Error	2.34	0.00

Benchmark: Inverness Total Policy

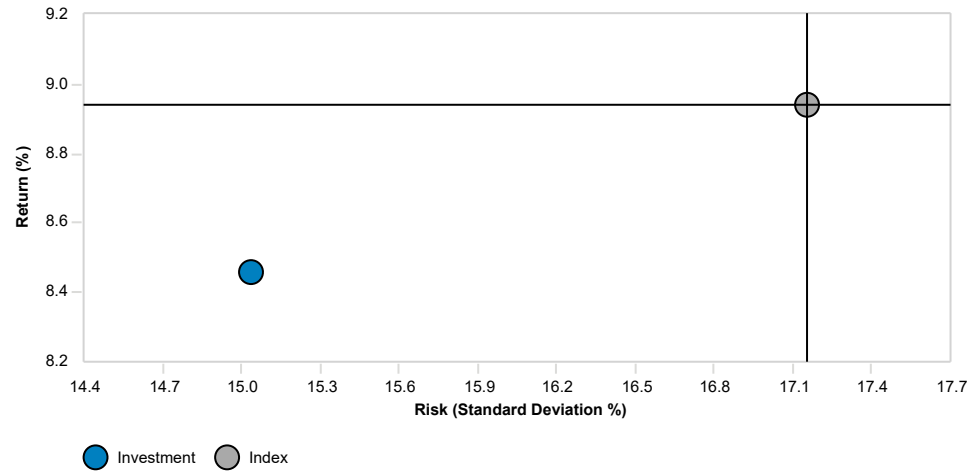
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.46	15.04	0.37	88.65	8	86.94	4
Index	8.94	17.15	0.37	100.00	8	100.00	4

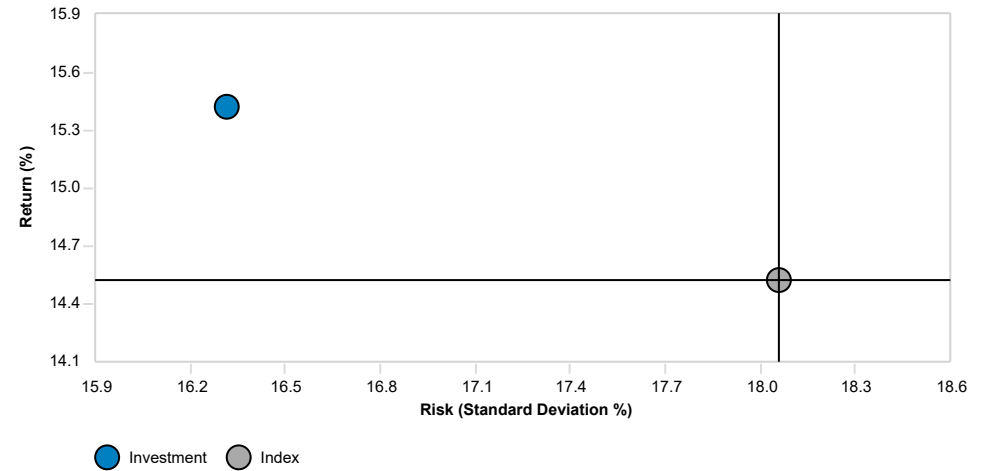
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	15.43	16.31	0.82	93.79	15	86.30	5
Index	14.53	18.06	0.71	100.00	15	100.00	5

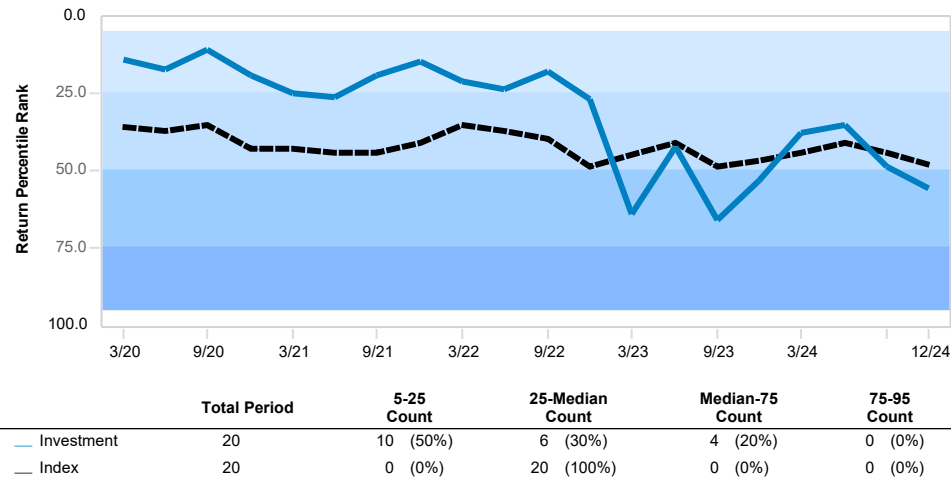
### Risk and Return 3 Years



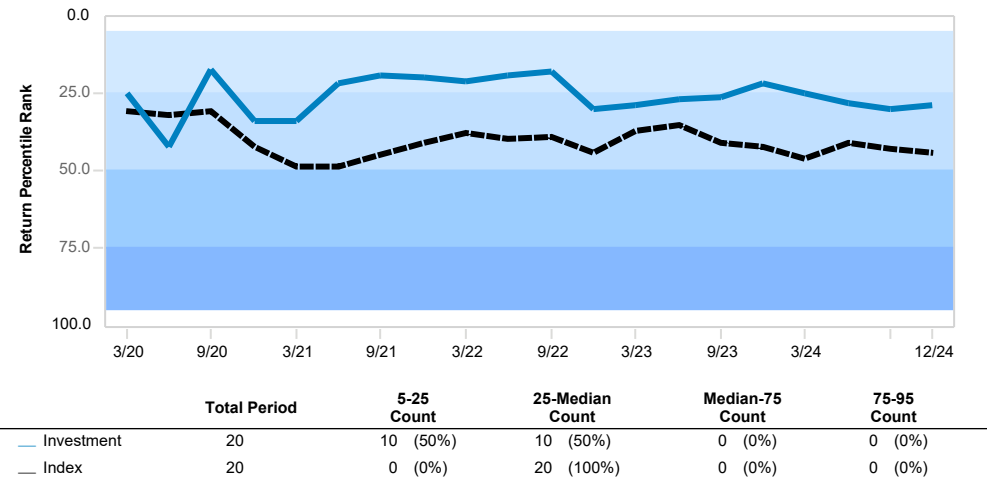
### Risk and Return 5 Years



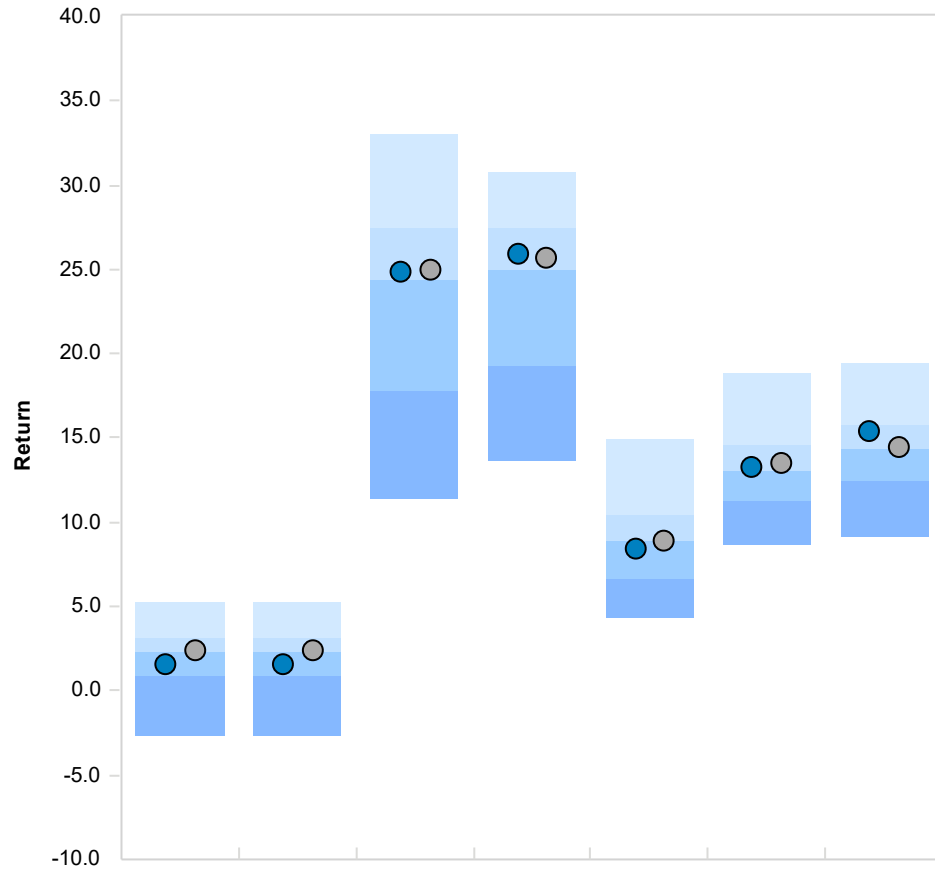
### 3 Year Rolling Percentile Rank IM U.S. Large Cap Core Equity (SA+CF)



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

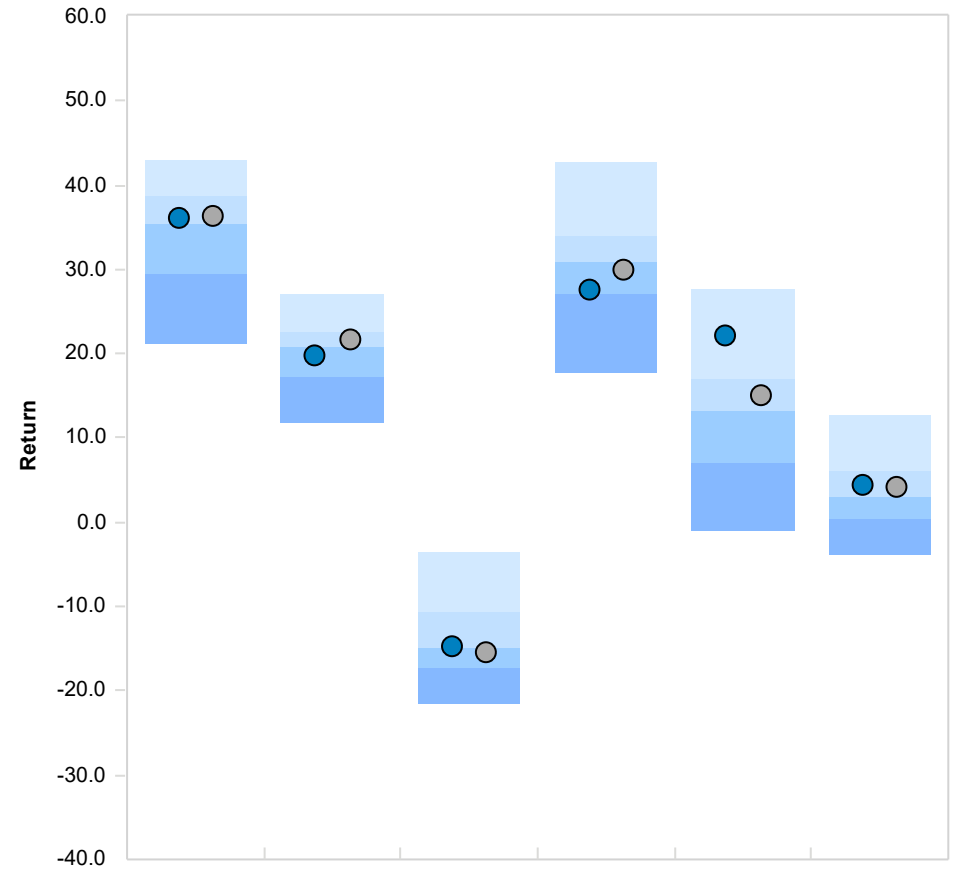


**Peer Group Analysis - IM U.S. Large Cap Core Equity (SA+CF)**



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	1.57 (65)	1.57 (65)	24.89 (45)	25.99 (40)	8.46 (56)	13.30 (47)	15.43 (29)
● Index	2.41 (45)	2.41 (45)	25.02 (43)	25.65 (44)	8.94 (48)	13.58 (41)	14.53 (44)
Median	2.31	2.31	24.42	25.01	8.88	13.02	14.34

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

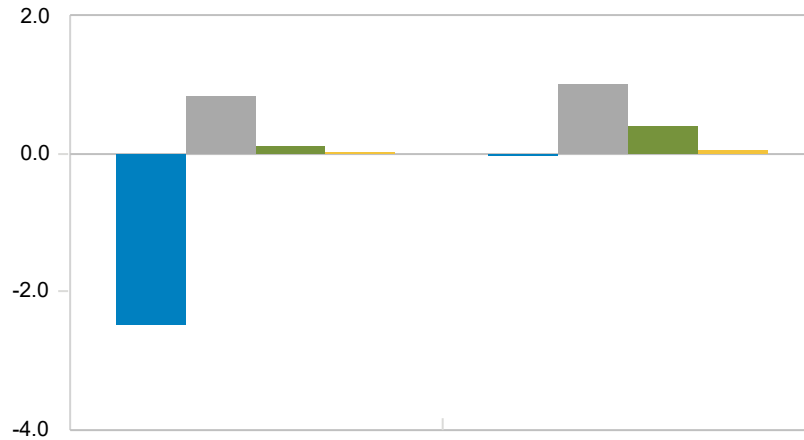


	Oct-2023 To Sep-2024	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019
● Investment	36.02 (46)	19.80 (60)	-14.73 (49)	27.63 (74)	22.16 (11)	4.42 (35)
● Index	36.35 (41)	21.62 (37)	-15.47 (57)	30.00 (58)	15.15 (38)	4.25 (38)
Median	35.33	20.79	-14.86	30.87	13.28	3.11

**Comparative Performance**

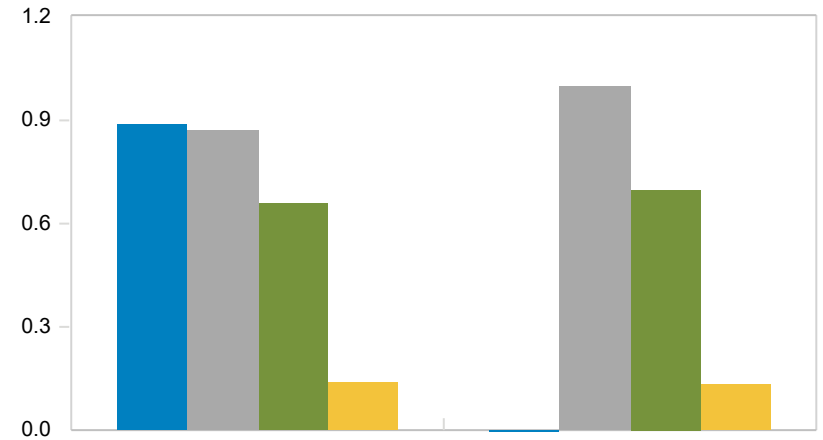
	1 Qtr Ending Sep-2024	1 Qtr Ending Jun-2024	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023
Investment	5.11 (70)	4.84 (15)	11.58 (40)	10.62 (71)	-1.95 (31)	9.73 (15)
Index	5.89 (49)	4.28 (30)	10.56 (53)	11.69 (47)	-3.27 (74)	8.74 (30)
Median	5.85	3.16	10.75	11.63	-2.77	7.88

Risk / Reward Historical Statistics 3 Years Ending December 31, 2024



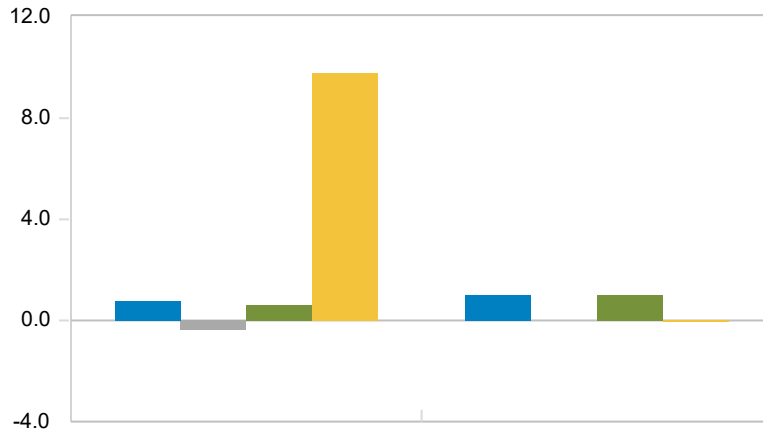
	Corient Equity (Plus Cash)	S&P 500 Index
Alpha	-2.47	0.00
Beta	0.83	1.00
Sharpe Ratio	0.12	0.41
Treynor Ratio	0.02	0.06

Risk / Reward Historical Statistics 5 Years Ending December 31, 2024



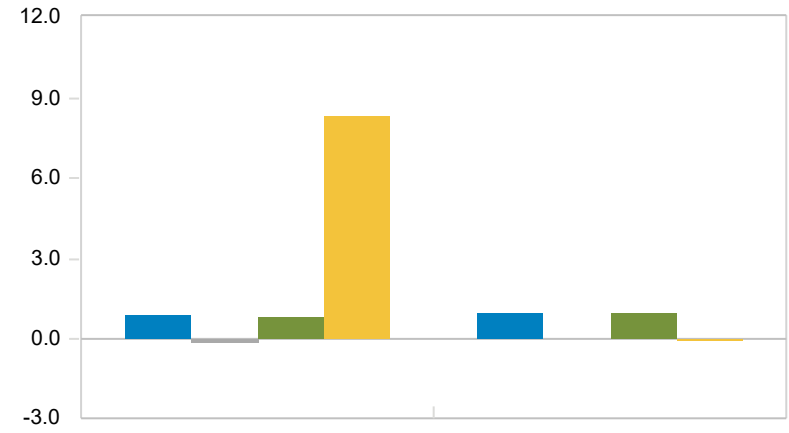
	Corient Equity (Plus Cash)	S&P 500 Index
Alpha	0.89	0.00
Beta	0.87	1.00
Sharpe Ratio	0.66	0.70
Treynor Ratio	0.14	0.13

Index Relative Historical Statistics 3 Years Ending December 31, 2024



	Corient Equity (Plus Cash)	S&P 500 Index
Actual Correlation	0.81	1.00
Information Ratio	-0.43	N/A
R-Squared	0.66	1.00
Tracking Error	9.80	0.00

Index Relative Historical Statistics 5 Years Ending December 31, 2024



	Corient Equity (Plus Cash)	S&P 500 Index
Actual Correlation	0.90	1.00
Information Ratio	-0.14	N/A
R-Squared	0.81	1.00
Tracking Error	8.34	0.00

Benchmark: S&P 500 Index

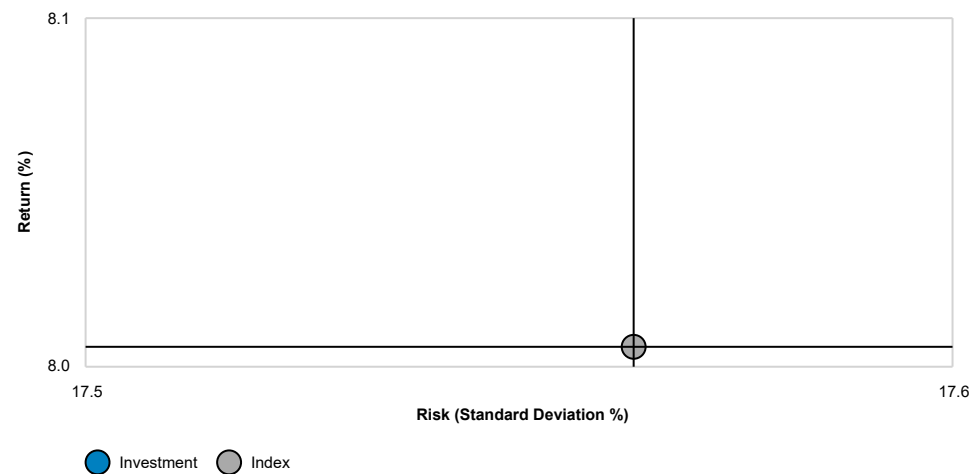
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	8.01	17.56	0.31	100.00	8	100.00	4

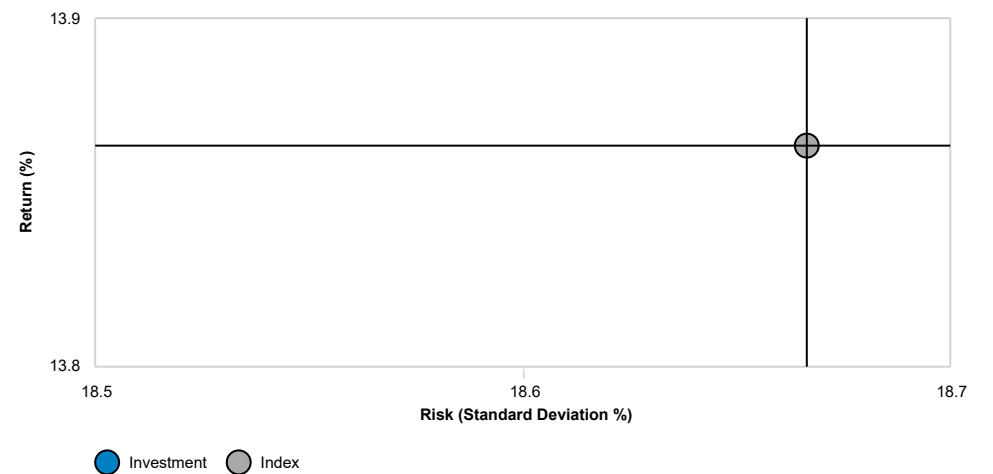
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	13.86	18.67	0.66	100.00	14	100.00	6

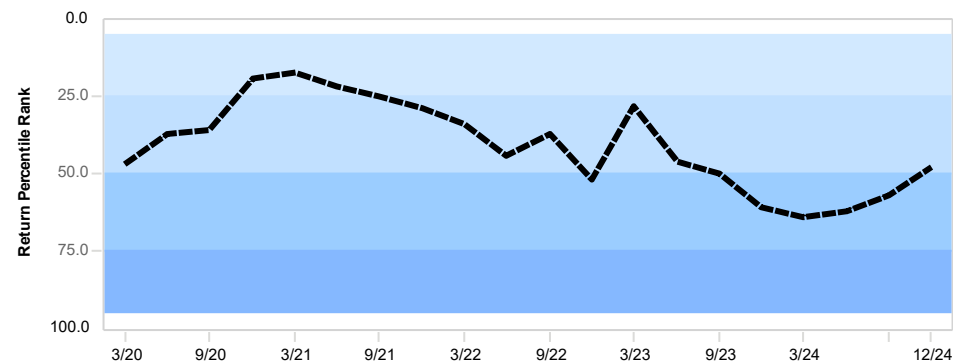
Risk and Return 3 Years



Risk and Return 5 Years

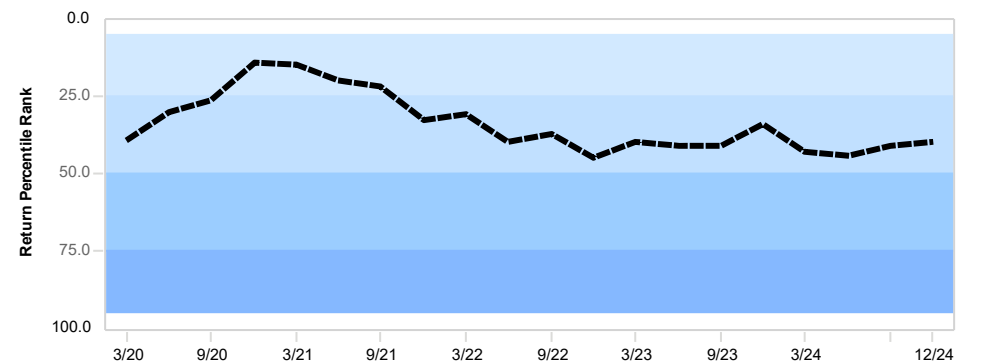


3 Year Rolling Percentile Rank Large Blend



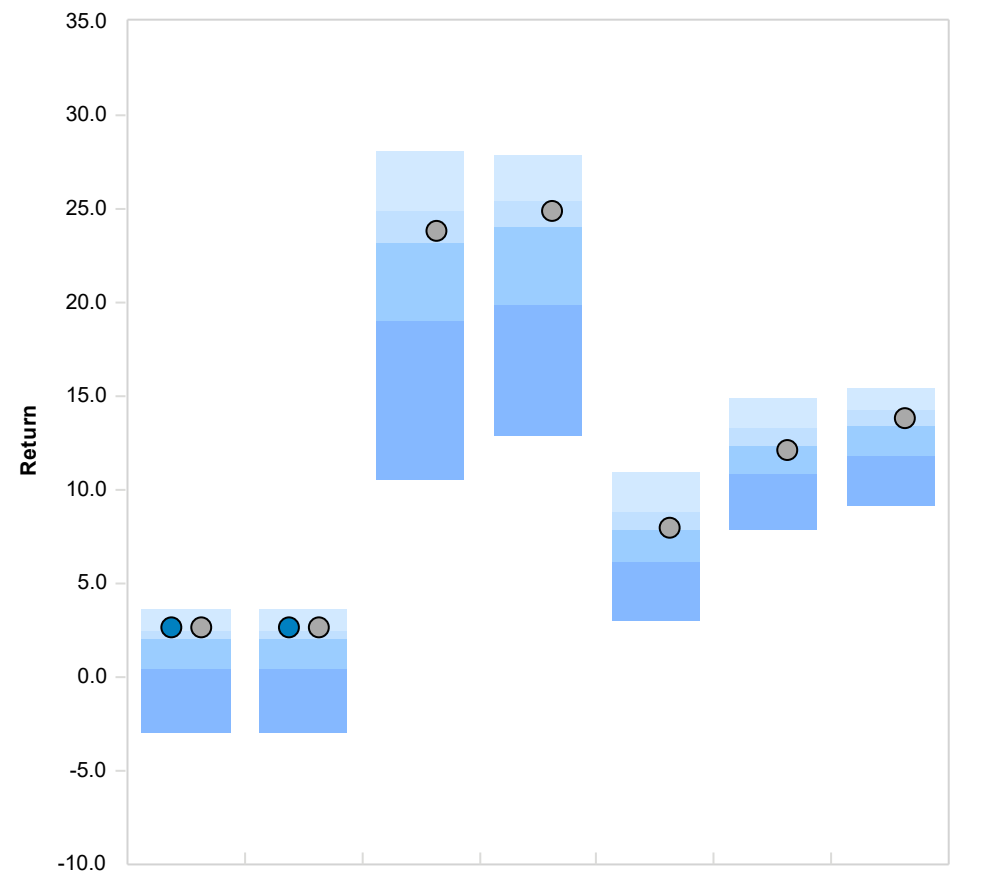
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	4 (20%)	11 (55%)	5 (25%)	0 (0%)

5 Year Rolling Percentile Rank Large Blend



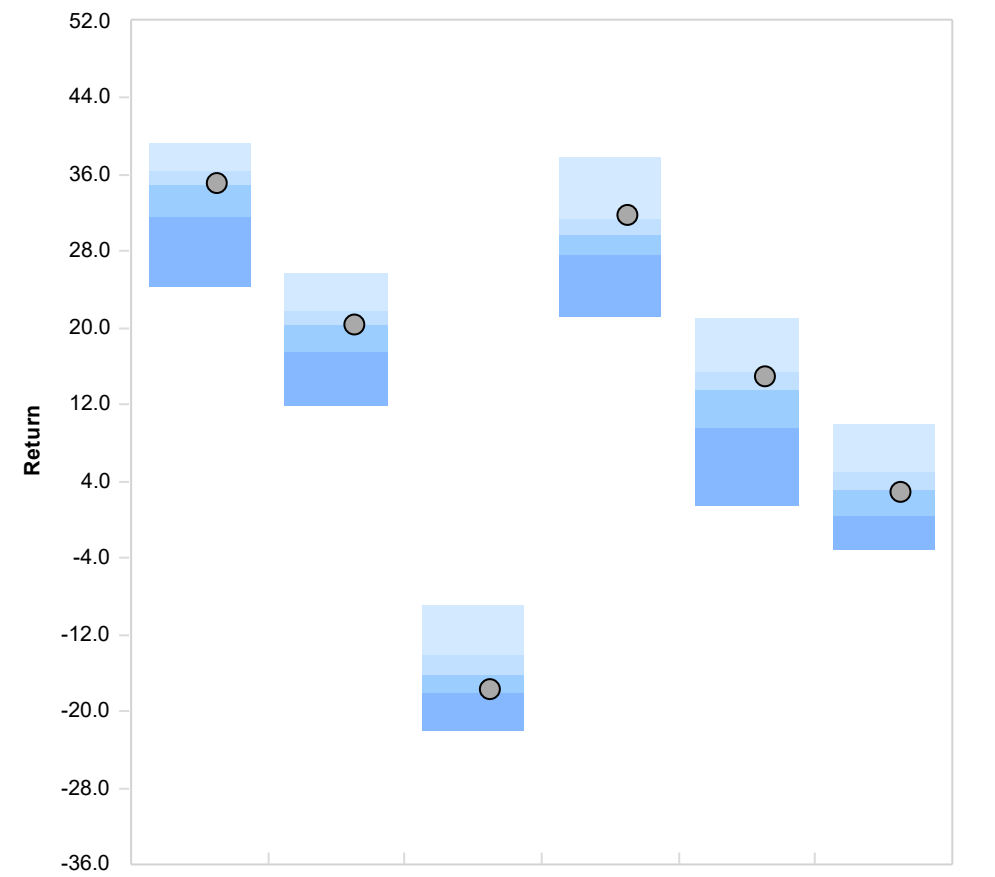
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	4 (20%)	16 (80%)	0 (0%)	0 (0%)

Peer Group Analysis - Large Blend



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
Investment	2.62 (21)	2.62 (21)	N/A	N/A	N/A	N/A	N/A
Index	2.63 (20)	2.63 (20)	23.81 (44)	24.88 (39)	8.01 (48)	12.17 (53)	13.86 (40)
Median	2.05	2.05	23.23	24.04	7.88	12.32	13.39

Peer Group Analysis - Large Blend

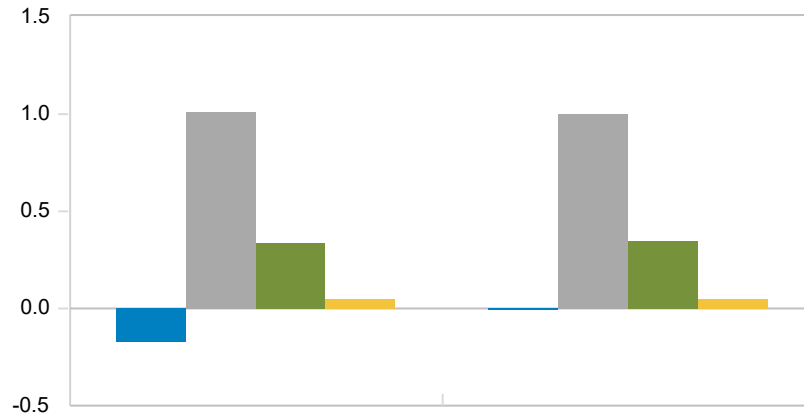


	Oct-2023 To Sep-2024	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019
Investment	N/A	N/A	N/A	N/A	N/A	N/A
Index	35.19 (47)	20.46 (50)	-17.63 (70)	31.88 (22)	15.00 (30)	2.92 (52)
Median	34.94	20.44	-16.16	29.68	13.54	3.10

Comparative Performance

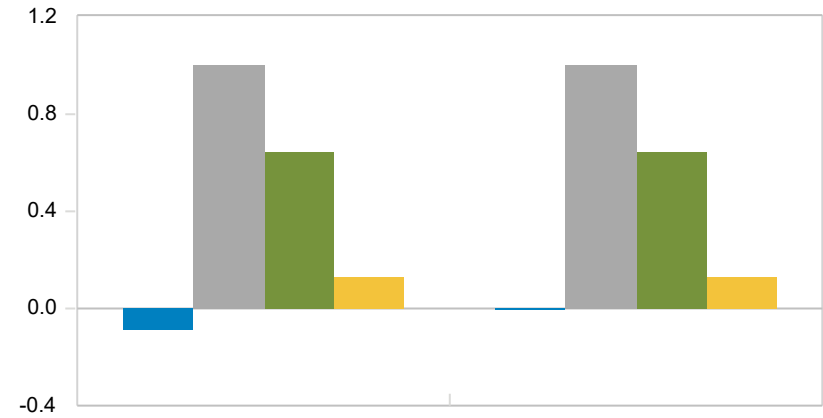
	1 Qtr Ending Sep-2024	1 Qtr Ending Jun-2024	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023
Investment	6.17 (30)	N/A	N/A	N/A	N/A	N/A
Index	6.23 (27)	3.22 (52)	10.02 (67)	12.07 (29)	-3.25 (48)	8.39 (41)
Median	5.76	3.28	10.47	11.64	-3.28	8.07

Risk / Reward Historical Statistics 3 Years Ending December 31, 2024



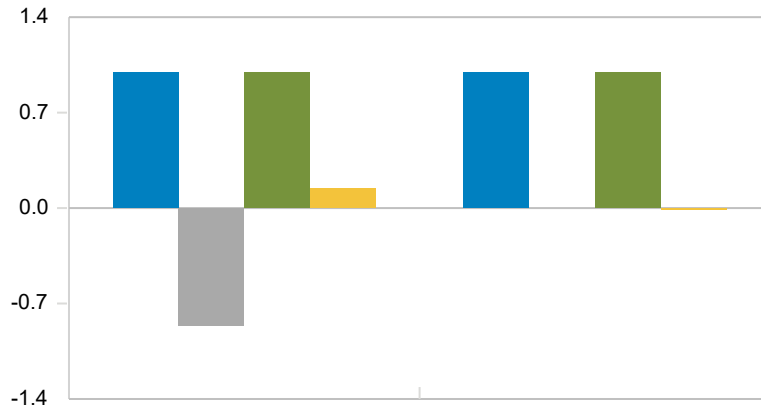
	Vanguard Total Stock Market Index (VTSAX)	Russell 3000 Index
Alpha	-0.18	0.00
Beta	1.01	1.00
Sharpe Ratio	0.34	0.35
Treynor Ratio	0.05	0.05

Risk / Reward Historical Statistics 5 Years Ending December 31, 2024



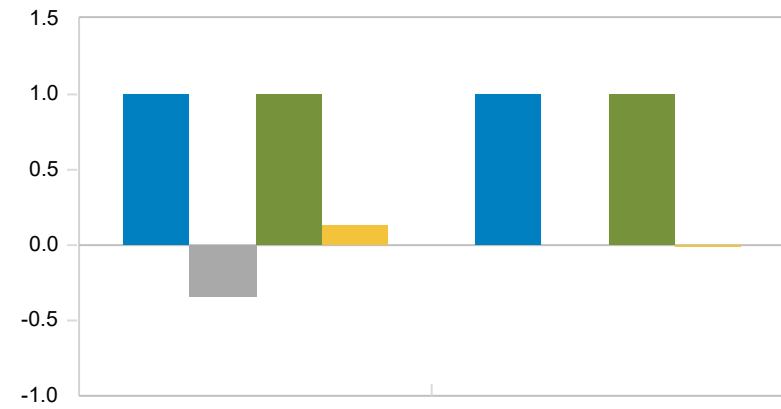
	Vanguard Total Stock Market Index (VTSAX)	Russell 3000 Index
Alpha	-0.09	0.00
Beta	1.00	1.00
Sharpe Ratio	0.64	0.65
Treynor Ratio	0.13	0.13

Index Relative Historical Statistics 3 Years Ending December 31, 2024



	Vanguard Total Stock Market Index (VTSAX)	Russell 3000 Index
Actual Correlation	1.00	1.00
Information Ratio	-0.86	N/A
R-Squared	1.00	1.00
Tracking Error	0.14	0.00

Index Relative Historical Statistics 5 Years Ending December 31, 2024



	Vanguard Total Stock Market Index (VTSAX)	Russell 3000 Index
Actual Correlation	1.00	1.00
Information Ratio	-0.35	N/A
R-Squared	1.00	1.00
Tracking Error	0.14	0.00

Benchmark: Russell 3000 Index

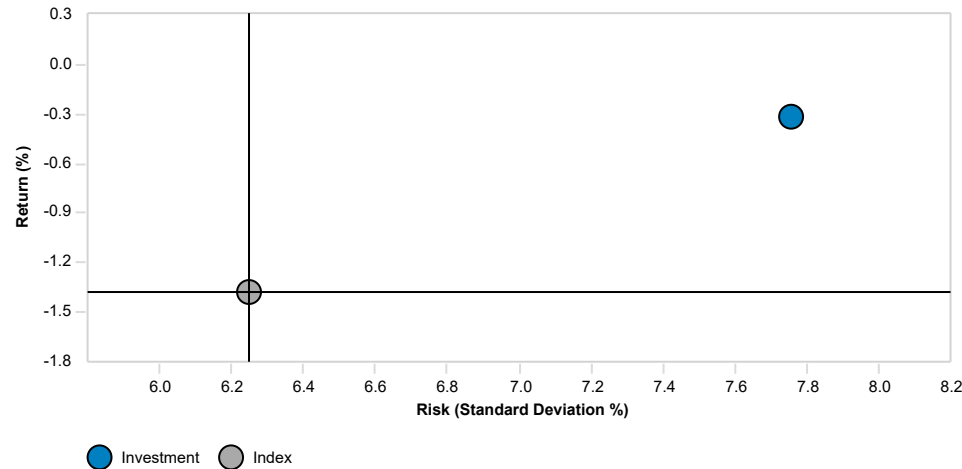
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-0.32	7.75	-0.50	129.56	4	114.09	8
Index	-1.38	6.25	-0.83	100.00	5	100.00	7

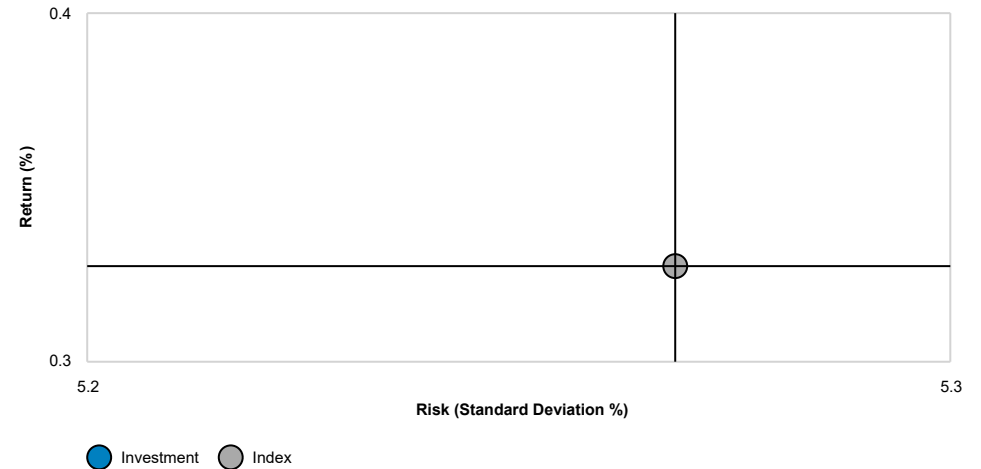
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	0.33	5.27	-0.38	100.00	11	100.00	9

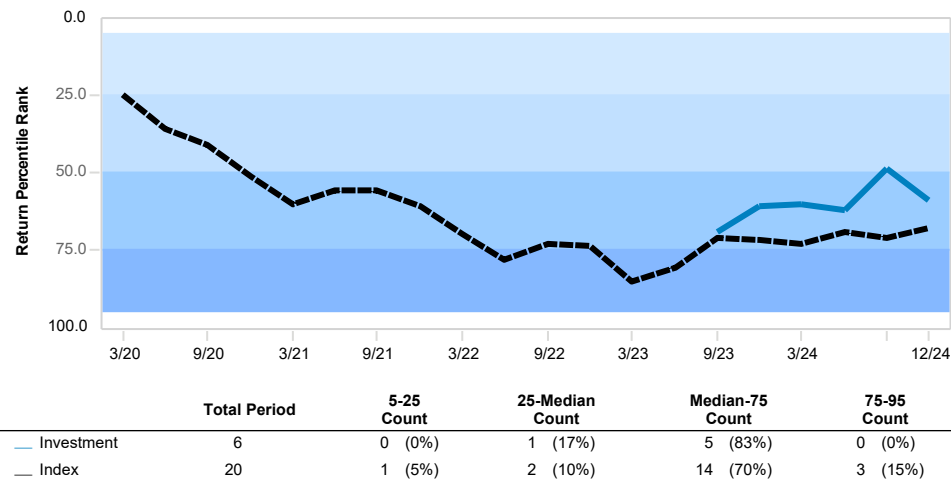
### Risk and Return 3 Years



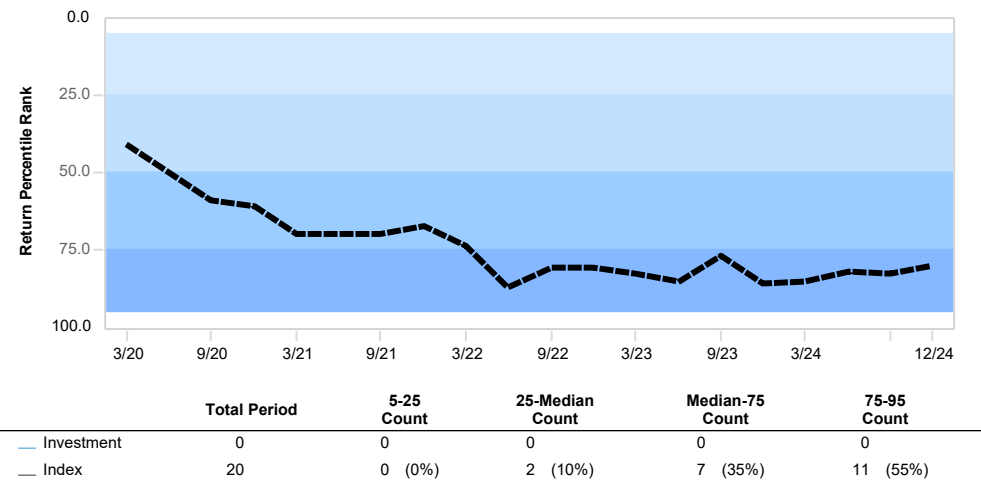
### Risk and Return 5 Years



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

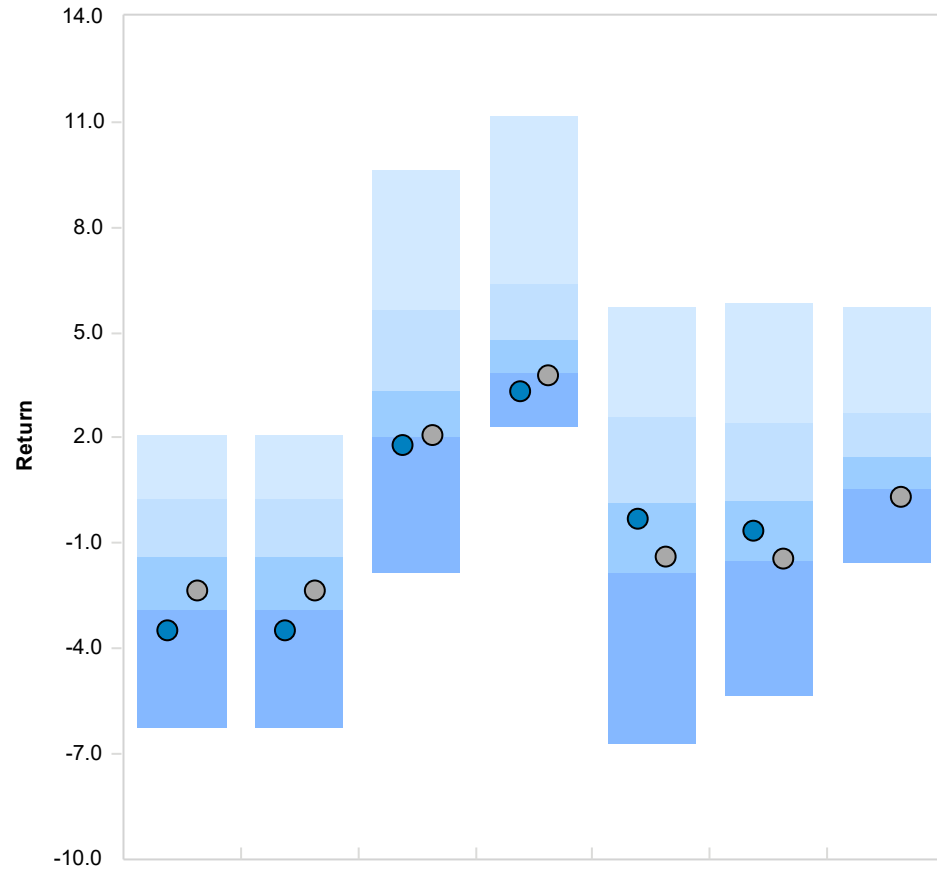


### 5 Year Rolling Percentile Rank IM U.S. Fixed Income (SA+CF)



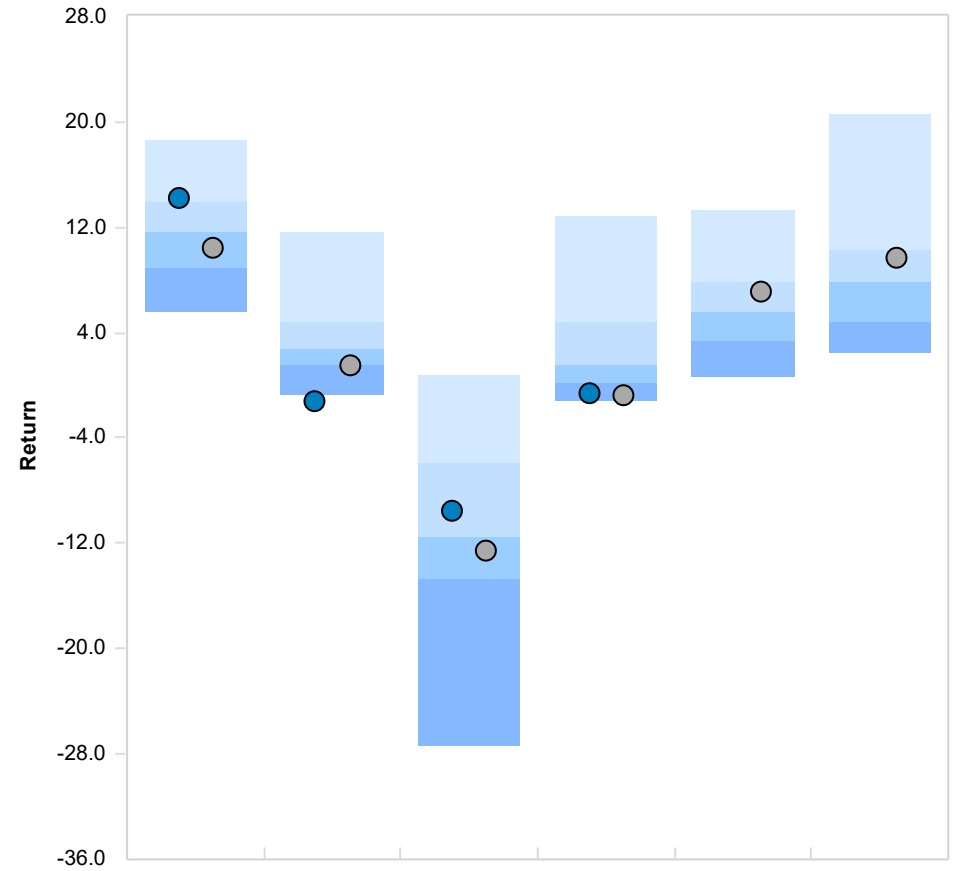


Peer Group Analysis - IM U.S. Fixed Income (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
Investment	-3.46 (90)	-3.46 (90)	1.80 (79)	3.32 (85)	-0.32 (59)	-0.65 (65)	N/A
Index	-2.34 (63)	-2.34 (63)	2.09 (74)	3.78 (77)	-1.38 (68)	-1.43 (74)	0.33 (80)
Median	-1.36	-1.36	3.32	4.83	0.18	0.21	1.48

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

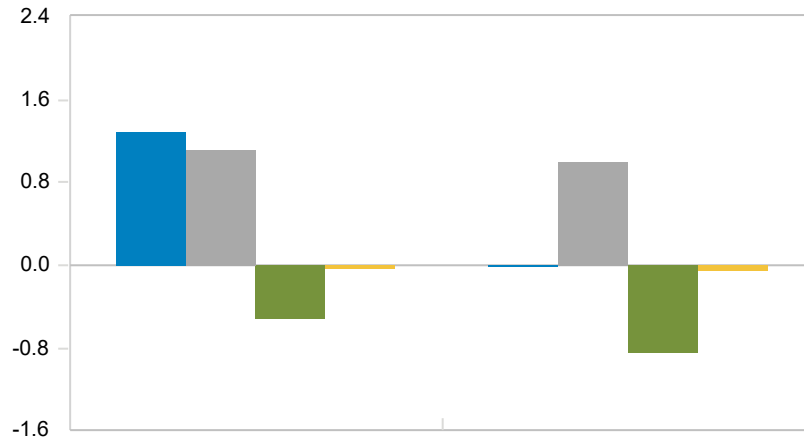


	Oct-2023 To Sep-2024	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019
Investment	14.21 (24)	-1.25 (96)	-9.49 (38)	-0.62 (90)	N/A	N/A
Index	10.39 (61)	1.57 (75)	-12.57 (57)	-0.76 (91)	7.18 (33)	9.74 (33)
Median	11.72	2.81	-11.48	1.46	5.63	7.89

Comparative Performance

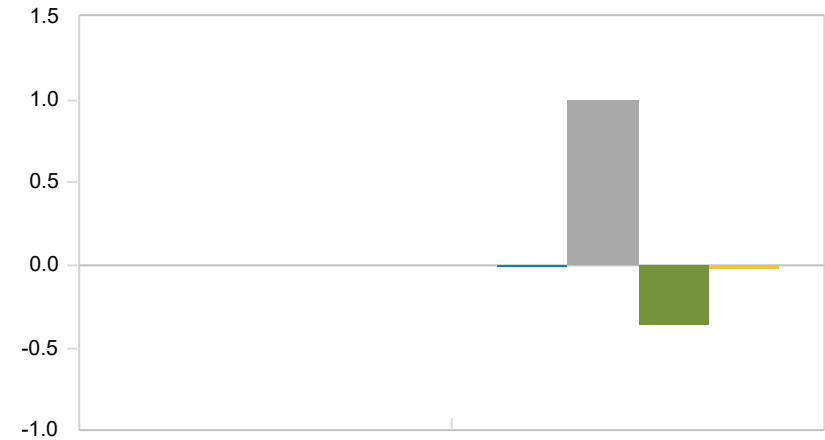
	1 Qtr Ending Sep-2024	1 Qtr Ending Jun-2024	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023
Investment	6.06 (10)	-0.03 (89)	-0.55 (83)	8.31 (12)	-4.63 (92)	-1.00 (90)
Index	4.64 (47)	0.34 (69)	-0.44 (79)	5.60 (55)	-1.92 (56)	-0.87 (88)
Median	4.46	0.69	0.23	5.99	-1.18	-0.24

Risk / Reward Historical Statistics 3 Years Ending December 31, 2024



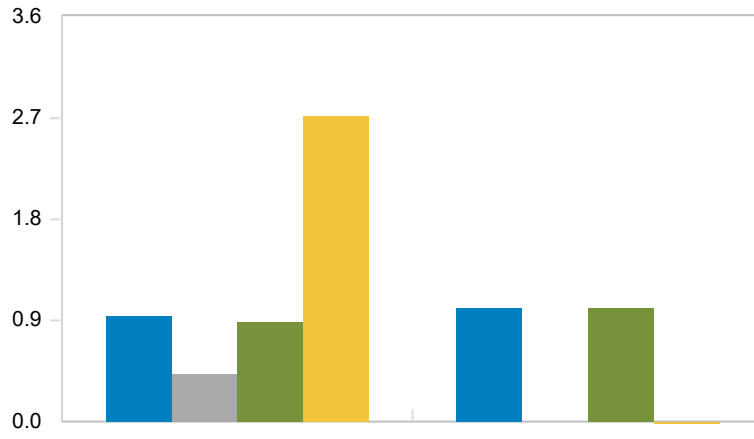
	Tocqueville Fixed	Fixed Income Index
Alpha	1.28	0.00
Beta	1.11	1.00
Sharpe Ratio	-0.52	-0.84
Treynor Ratio	-0.03	-0.05

Risk / Reward Historical Statistics 5 Years Ending December 31, 2024



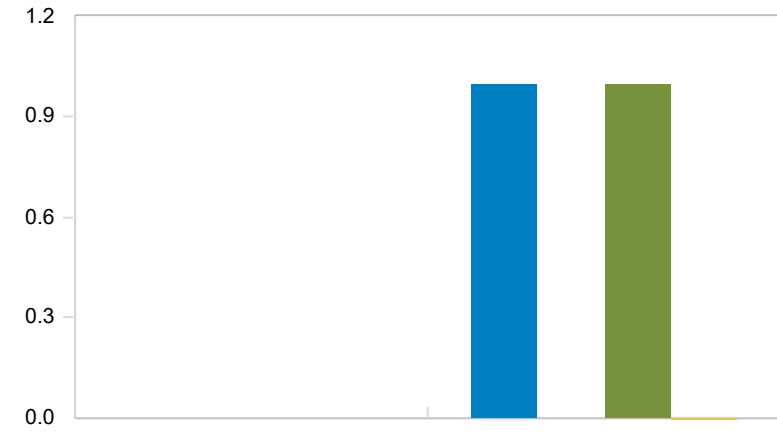
	Tocqueville Fixed	Fixed Income Index
Alpha	N/A	0.00
Beta	N/A	1.00
Sharpe Ratio	N/A	-0.36
Treynor Ratio	N/A	-0.02

Index Relative Historical Statistics 3 Years Ending December 31, 2024



	Tocqueville Fixed	Fixed Income Index
Actual Correlation	0.94	1.00
Information Ratio	0.42	N/A
R-Squared	0.89	1.00
Tracking Error	2.73	0.00

Index Relative Historical Statistics 5 Years Ending December 31, 2024



	Tocqueville Fixed	Fixed Income Index
Actual Correlation	N/A	1.00
Information Ratio	N/A	N/A
R-Squared	N/A	1.00
Tracking Error	N/A	0.00

Benchmark: Fixed Income Index

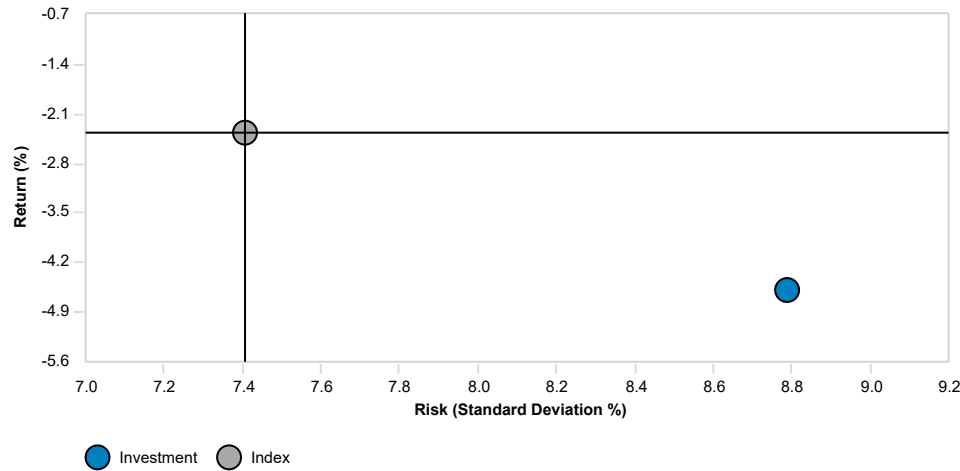
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-4.59	8.79	-0.90	97.00	4	129.00	8
Index	-2.37	7.41	-0.77	100.00	5	100.00	7

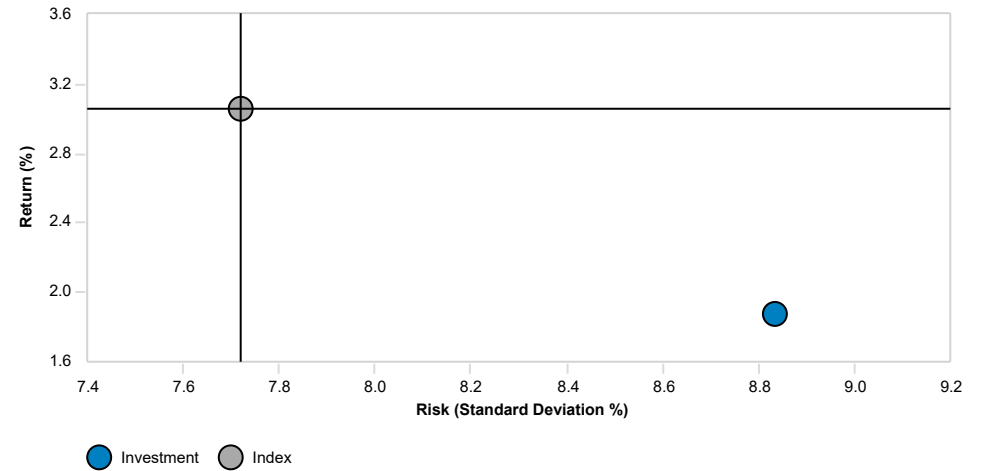
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	1.87	8.83	-0.02	98.79	11	121.76	9
Index	3.06	7.72	0.11	100.00	12	100.00	8

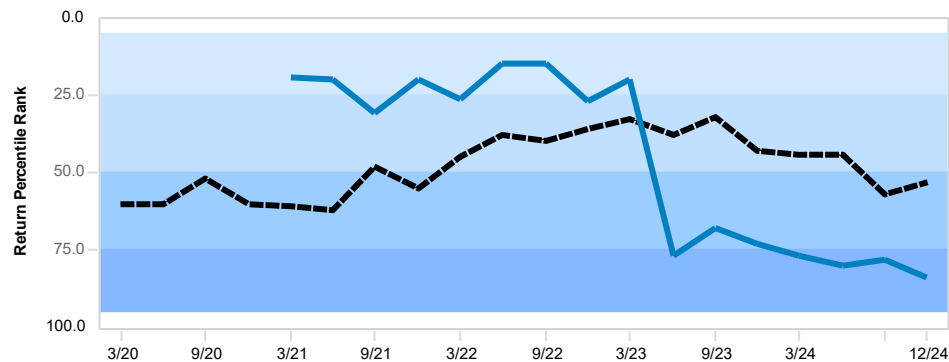
### Risk and Return 3 Years



### Risk and Return 5 Years

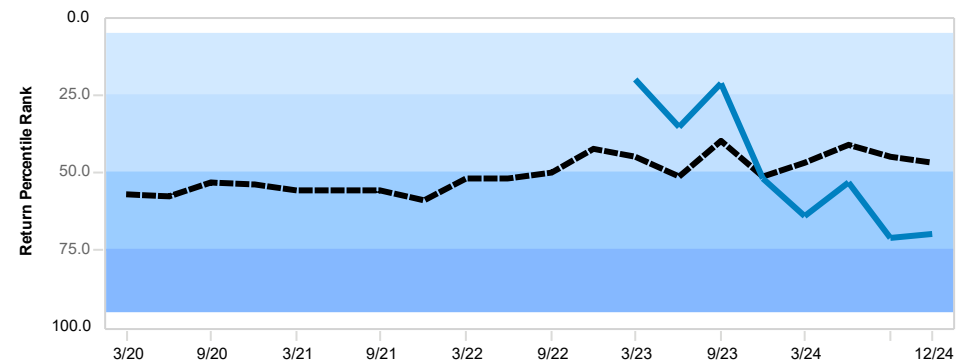


### 3 Year Rolling Percentile Rank IM U.S. Open End Private Real Estate (SA+CF)



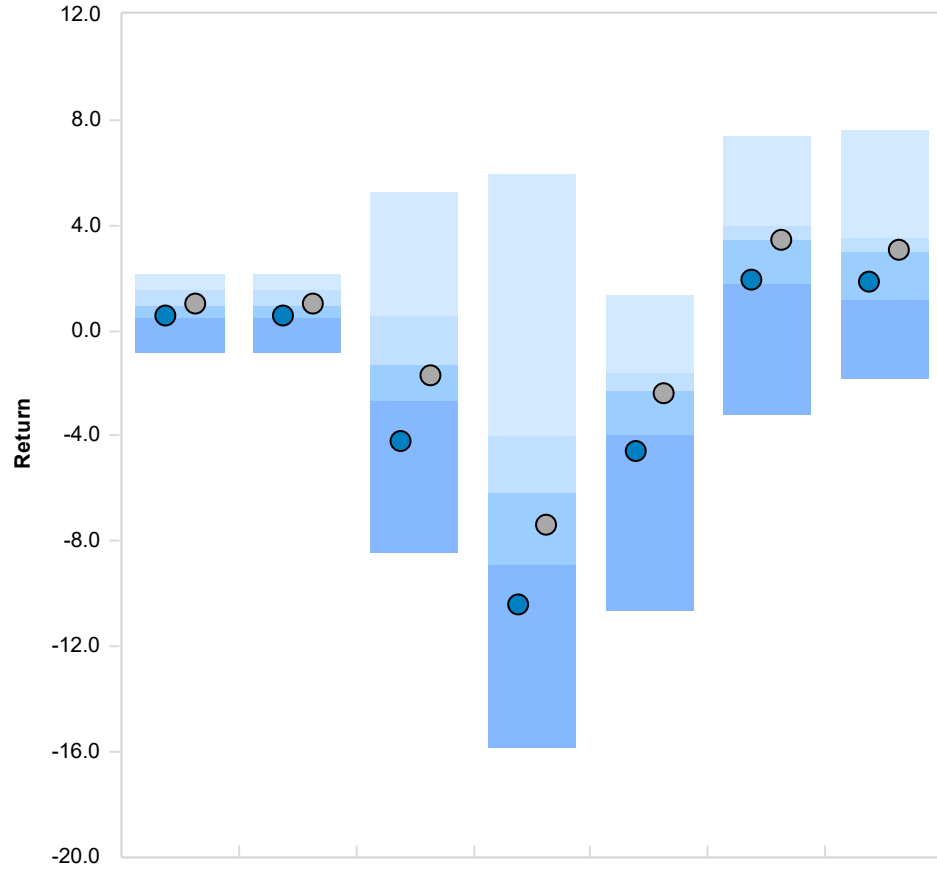
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	16	6 (38%)	3 (19%)	2 (13%)	5 (31%)
Index	20	0 (0%)	11 (55%)	9 (45%)	0 (0%)

### 5 Year Rolling Percentile Rank IM U.S. Open End Private Real Estate (SA+CF)



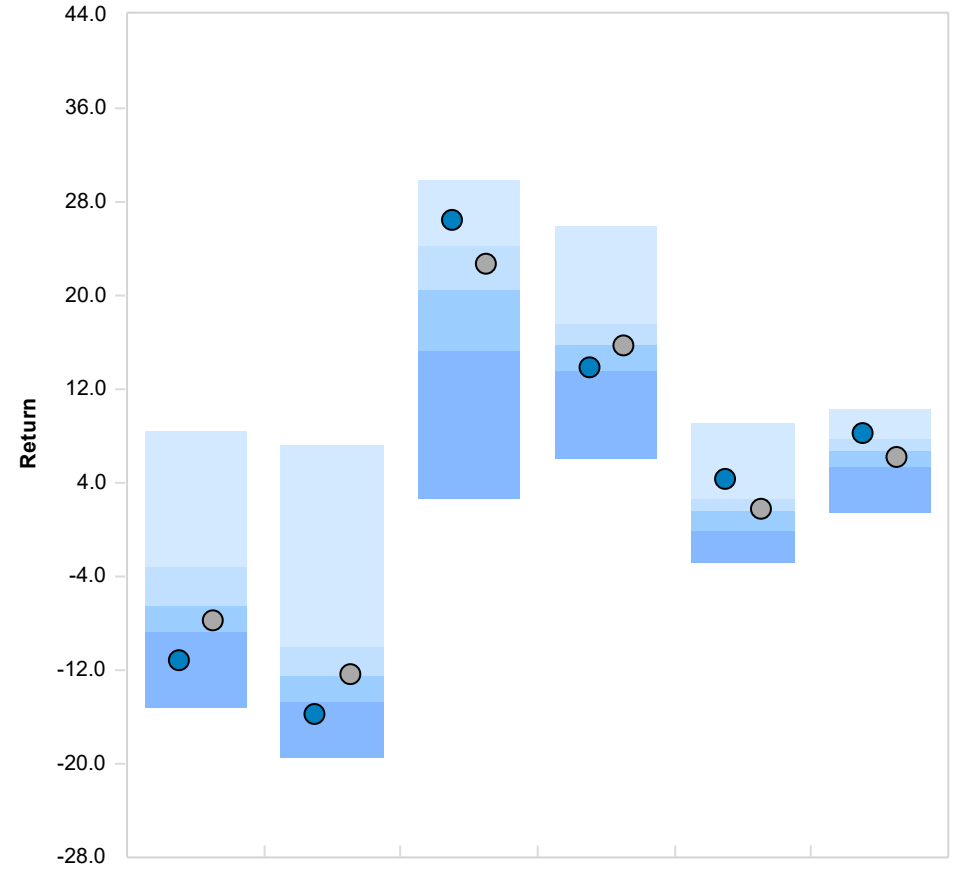
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	8	2 (25%)	1 (13%)	5 (63%)	0 (0%)
Index	20	0 (0%)	8 (40%)	12 (60%)	0 (0%)

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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	0.60 (65)	0.60 (65)	-4.19 (85)	-10.39 (89)	-4.59 (84)	1.94 (75)	1.87 (70)
● Index	1.03 (46)	1.03 (46)	-1.67 (65)	-7.35 (62)	-2.37 (53)	3.43 (44)	3.06 (47)
Median	0.97	0.97	-1.35	-6.13	-2.28	3.42	2.99

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



	Oct-2023 To Sep-2024	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019
● Investment	-11.09 (91)	-15.74 (86)	26.46 (14)	13.84 (72)	4.39 (14)	8.30 (17)
● Index	-7.75 (63)	-12.40 (48)	22.76 (39)	15.75 (50)	1.74 (43)	6.17 (69)
Median	-6.61	-12.47	20.46	15.73	1.62	6.80

**Comparative Performance**

	1 Qtr Ending Sep-2024	1 Qtr Ending Jun-2024	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023
Investment	-0.99 (97)	-0.10 (26)	-3.72 (91)	-6.64 (85)	-0.81 (16)	-6.10 (97)
Index	0.13 (66)	-0.63 (45)	-2.19 (57)	-5.22 (70)	-1.93 (42)	-2.86 (70)
Median	0.26	-0.69	-2.10	-4.20	-2.37	-2.02

**Miami Beach Police Relief  
Fee Analysis  
As of December 31, 2024**

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Corient Equity	0.30	10,358,930	31,077	0.30 % of Assets
Tocqueville Fixed	0.15	3,452,545	5,179	0.15 % of Assets
Vanguard Total Stock Market Index Fund (VTSAX)	0.04	304,928	122	0.04 % of Assets
Intercontinental	0.85	1,535,717	13,054	0.85 % of Assets
Receipt & Disbursement (Cash & Equiv)	0.00	3,458	-	0.00 % of Assets
<b>Total Fund Composite</b>	<b>0.32</b>	<b>15,655,578</b>	<b>49,431</b>	

Fee information on this page is an illustrative estimate of management fees based on current reported portfolio values. Fee estimates do not reflect actual calculation methodologies or applicable carried interest.  
\*Manager fees associated with money market or cash accounts are not tracked.

**Benchmark History**  
**Investment Policy Benchmarks**  
As of December 31, 2024

Total Policy Historical Hybrid Composition	
Allocation Mandate	Weight (%)
<b>Jan-1978</b>	
S&P 500 Index	35.00
Bloomberg Intermediate US Govt/Credit Idx	30.00
Blmbg. U.S. Gov't/Credit	30.00
FTSE 3 Month T-Bill	5.00
<b>Jan-2004</b>	
S&P 500 Index	55.00
Bloomberg Intermediate US Govt/Credit Idx	17.50
Blmbg. U.S. Gov't/Credit	17.50
FTSE 3 Month T-Bill	10.00
<b>Jul-2018</b>	
S&P 500 Index	55.00
Bloomberg Intermediate US Govt/Credit Idx	15.50
Blmbg. U.S. Gov't/Credit	15.50
FTSE 3 Month T-Bill	10.00
NCREIF Fund Index-Open End Diversified Core (EW)	4.00
<b>Nov-2018</b>	
S&P 500 Index	55.00
Bloomberg Intermediate US Govt/Credit Idx	12.50
Blmbg. U.S. Gov't/Credit	12.50
FTSE 3 Month T-Bill	10.00
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
<b>Oct-2022</b>	
S&P 500 Index	52.50
Bloomberg Intermediate US Govt/Credit Idx	11.25
Blmbg. U.S. Gov't/Credit	11.25
FTSE 3 Month T-Bill	10.00
NCREIF Fund Index-Open End Diversified Core (EW)	15.00
<b>Oct-2023</b>	
S&P 500 Index	57.50
Bloomberg Intermediate US Govt/Credit Idx	11.25
Blmbg. U.S. Gov't/Credit	11.25
FTSE 3 Month T-Bill	5.00
NCREIF Fund Index-Open End Diversified Core (EW)	15.00

Total Fixed Income Historical Hybrid Composition	
Allocation Mandate	Weight (%)
<b>Oct-1998</b>	
Bloomberg Intermediate US Govt/Credit Idx	50.00
Blmbg. U.S. Gov't/Credit	50.00

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

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

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

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

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

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

This document may contain data provided by Bloomberg.

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

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

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

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

#### **\*IMPORTANT DISCLOSURE INFORMATION RE GREENWICH QUALITY LEADER AWARD**

These ratings are not indicative of Mariner Institutional's future performance. These awards or any other rankings and/or recognition by unaffiliated rating services and/or publications should not be construed as a guarantee that a client will experience a certain level of results or satisfaction if they invest with Mariner Institutional, nor should it be construed as a current or past endorsement by any of our clients. Mariner Institutional did not pay a fee to participate in this award survey.

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.



# MARINER

*Access to a wealth of knowledge and solutions.*