# **Grand Rapids Police and Fire Retirement System** Investment Performance Review Period Ending March 31, 2024 MARINER

**1st Quarter 2024 Market Environment** 

### The Economy

- The US Federal Reserve (the Fed) held rates steady during the first quarter. However, domestic equities rallied on the prospect that the Fed could cut rates later in 2024. In its press release for the March meeting, the Fed stated 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." In addition, the Fed will continue reducing its balance sheet as described in its previously announced plans.
- The Fed's prolonged pause in its rate-hiking cycle and the insertion of the word "any" in its December press release gave the market hope that the Fed may be ready to pivot in its stance and begin reducing rates to a less restrictive level in 2024. The Fed's published "Dot Plot" shared expectations of three quarter-point rate cuts during the year, which would be the first rate cut since the COVID pandemic in 2020.
- Growth in the US labor market continued in March, as nonfarm payrolls increased by 303,000 and unemployment held steady at 3.8%. Federal Reserve Chair Jerome Powell stated, "Strong hiring in and of itself would not be a reason to hold off on rate cuts," adding that the job market is not a primary cause for concern around inflation. Powell added "an unexpected weakening in the labor market could also warrant a policy response."

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

- US equities moved broadly higher during the first quarter based on expectations of a more favorable interest rate environment in the coming year. The S&P 500 Index rose 10.6% for the quarter.
- International stocks experienced robust growth to begin the year, albeit muted by a strengthening US Dollar (USD). USD performance lagged local currency (LCL) performance in most regions for the quarter, though both currency readings were positive.
- GDP growth across regions remains mixed as many regions are dealing with local headwinds and tailwinds as much of the world continues to navigate sticky inflation with varying degrees of success. Conflicts abroad have dragged on performance, but as we have seen with the Russia-Ukraine conflict, market conditions will typically normalize once the broader impact has been reasonably assessed.

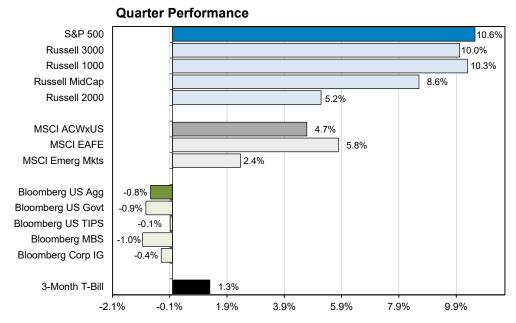
### **Fixed Income**

- While sticky inflation numbers and a robust job market likely prompted the Fed to keep the fed funds rate unchanged during the quarter, this lack of action also tempered expectations for potential rate cuts in 2024. Fixed-income markets fell in March (yield rose) on the belief that rates could be higher for longer.
- High-yield bonds outperformed investment-grade issues for the quarter, largely due to narrowing credit spreads and higher coupons. Although the high-yield bond benchmark's duration is almost half of the US Aggregate Bond index's duration, the high-yield index edged out the bellwether bond benchmark due to a relatively stable yield curve and the aforementioned narrowing credit spreads.
- Global bonds lagged the domestic bond market with the US Aggregate Index beating the Global Aggregate ex-US Index by 2.4%. This broke the two indexes' tie in 2023 and left global bonds 2.4% behind the domestic bond market for the full year.

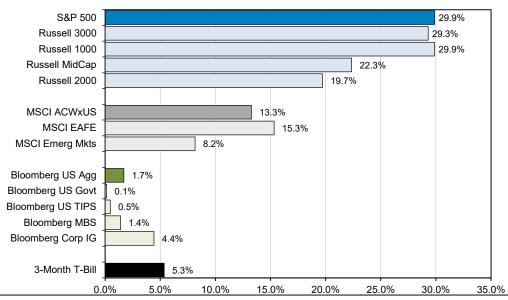
### **Market Themes**

- 2024 opened with strong results in domestic and international equity markets, continuing what was a robust 2023. Growth sectors continued to outpace value sectors but by a narrower margin than 2023, showcasing increased breadth across many markets.
- 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.
- Policy rates remained relatively stable across most developed markets as central banks continued their tight policy stance. However, there are expectations of looser monetary policy to take hold as 2024 progresses.
- Ongoing military conflicts coupled with economic uncertainty around the globe continue to act as headwinds in international markets. While global disruptions from the Russia-Ukraine conflict seemed to subside, the proxy war in the Middle East has spread to other countries in the region and unsettled shipping channels globally.

- Domestic equity markets carried their momentum from late 2023 into the first quarter of 2024. Economic indicators continued to signal improving conditions for growth and softening inflation, resulting in an ongoing tailwind for risk assets. For the period, the S&P 500 large-cap benchmark returned 10.6% versus 8.6% for the Russell Mid Cap Index and 5.2% for the Russell 2000 small-cap index.
- International developed and emerging market equities also posted solid results. European markets continue to face geopolitical risks related to the conflict in Ukraine, the Middle East is grappling with a proxy war that has spread beyond Israel and Palestine, and Asia is feeling contagion effects from China's economic uncertainty. Despite the uncertainty, the developed market MSCI EAFE Index returned 5.8% for the quarter, while the MSCI Emerging Markets Index advanced 2.4%.
- Most broad fixed income indexes fell slightly during the first quarter of 2024. While market participants were generally optimistic about the possibility of a Fed rate cut during the first half of the year, sticky inflation pushed out these expectations and caused markets to re-think the timing of 2024's potential rate cuts. The Bloomberg (BB) US Aggregate Index returned -0.8% for the quarter while investment-grade corporate bonds were down less, returning -0.4%.
- US equity markets posted a stellar 29.9% during the trailing one-year period.
   The weakest relative performance for the year was the Russell 2000 Index, which nonetheless climbed 19.7% over the last 12 months.
- International markets also showcased a healthy rebound in 2023. Over the trailing one-year period, the MSCI EAFE Index was the best international performer, returning 15.3% while the MSCI Emerging Markets Index added a more modest 8.2%.
- Bond markets were relatively flat over the previous 12 months. Investment-grade corporate bonds were the best-performing sector, up by 4.4%. Meanwhile, Treasuries have lagged, returning just 0.1% over the previous 12 months. The bellwether fixed-income benchmark, the Bloomberg US Aggregate Index, returned a muted 1.7% for the year.



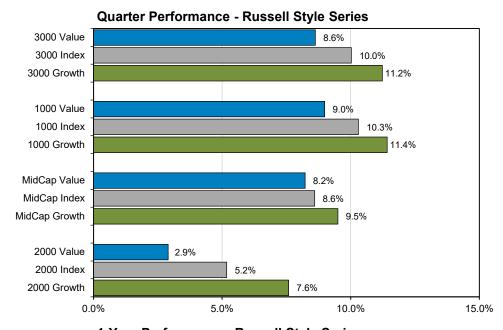
### 1-Year Performance

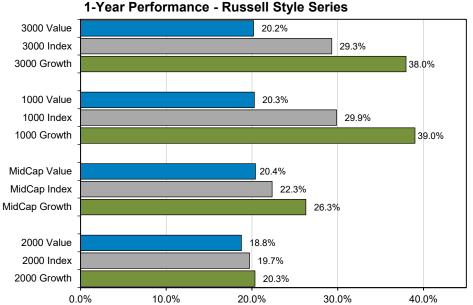


Source: Investment Metrics

- Domestic equity benchmarks were positive for the second consecutive quarter and growth style issues continued to outpace value. The best-performing area of the equity market was large-cap growth, with the Russell 1000 Growth index returning 11.4%. The worst performing area of the market was small-cap value, with the Russell 2000 Value index returning just 2.9% for the quarter. From a market capitalization perspective, large-cap stocks led their small-cap counterparts, with the Russell 1000 Index returning 10.3% and the Russell 2000 Index lagging with a lower, but still solid, 5.2%.
- The market continued its growth-led rally as growth stocks outpaced value stocks across the market-capitalization spectrum. While growth led the way during the quarter, value benchmarks largely kept pace, signaling that the rally seen in domestic equities may be broadening to other areas of the market.

- For the year, within large-cap stocks, the Russell 1000 Growth Index returned an impressive 39.0%, leading the way among style and market capitalization classifications. The weakest performing index for the year was the Russell 2000 Value, which still posted a double-digit return of 18.8%.
- The dominance of growth sectors is evident in the chart, with all growth benchmarks handily outpacing their core and value index counterparts. However, the strength of the outperformance differs meaningfully between the large cap and small cap segments of the market. The Russell 2000 Growth Index returned 20.3%, outpacing the Russell 2000 Value index return by a narrow margin of just 1.5%. However, this spread widens to 5.9% for the Russell Midcap Growth benchmarks and blows out to a span of 18.7% for the large cap benchmarks.

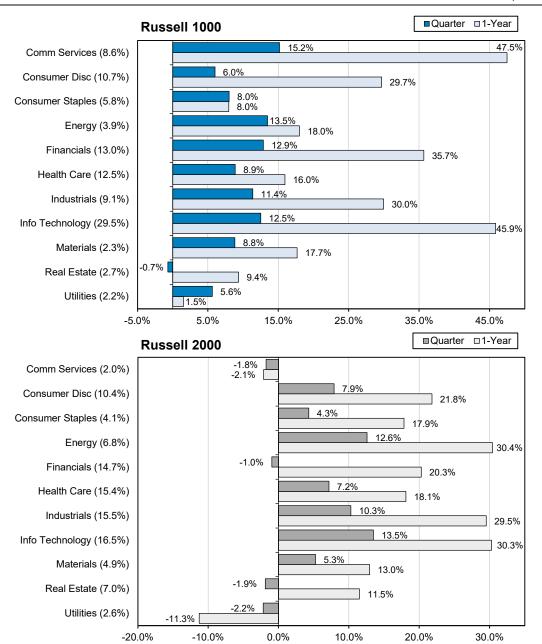




Source: Investment Metrics

- 2023's year-end rally continued into the first quarter of 2024 and expanded its breadth across styles and market capitalizations.
- Ten of the 11 GICS economic sectors in the large-cap Russell 1000 Index moved higher during the first quarter. Five of the 11 sectors outpaced the broad index return of 10.0%. Communication services led the way at 15.2% followed by energy (up 13.5%), financials (12.9%), information technology (12.5%), and industrials (11.4%).
- For the full year, all 11 economic sectors finished in positive territory with communication services leading the way at 47.5% and information technology following in lock step at 45.9%. Of the 11 sectors, four were up at least 30.0% the past year. Utilities (up 1.5%), consumer staples (8.0%), and real estate (9.4%) were the only three sectors that did not post double-digit results over the trailing year.

- Seven small-cap economic sectors posted positive results during the quarter with six of those sectors exceeding the 5.2% return of the Russell 2000 Index. The information technology (up 13.5%), energy (12.6%), and industrials (10.3%) sectors led the way as the only three sectors to showcase double-digit performance for the quarter. Utilities (-2.2%), real estate (-1.9%), communication services (-1.8%), and financials (-1.0%) sectors all lost ground during the quarter.
- Similar to large-cap sector performance, nine of the 11 small cap sectors were positive over the trailing year. Energy posted the strongest sector results (30.4%) with the information technology (30.3%) sector not far behind. Industrials (29.5%), consumer discretionary (21.8%) and financials (20.3%) each also returned more than 20.0% for the period. Six of the 11 economic sectors fell short of the core small-cap benchmark's return of 19.7% over the trailing year. The two negative sectors for the year were utilities with a return of -11.3% and communication services, which returned -2.1%.



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.

Top 10 Weighted Stocks						
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector		
Microsoft Corp	6.5%	12.1%	47.1%	Information Technology		
Apple Inc	5.2%	-10.8%	4.5%	Information Technology		
NVIDIA Corp	4.5%	82.5%	225.4%	Information Technology		
Amazon.com Inc	3.4%	18.7%	74.6%	Consumer Discretionary		
Meta Platforms Inc Class A	2.2%	37.3%	129.4%	Communication Services		
Alphabet Inc Class A	1.9%	8.0%	45.5%	Communication Services		
Berkshire Hathaway Inc Class B	1.6%	17.9%	36.2%	Financials		
Alphabet Inc Class C	1.6%	8.0%	46.4%	Communication Services		
Eli Lilly and Co	1.4%	33.7%	128.4%	Health Care		
JPMorgan Chase & Co	1.2%	18.5%	58.1%	Financials		

Top 10 Weighted Stocks						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
Super Micro Computer Inc	1.9%	255.3%	847.9%	Information Technology		
MicroStrategy Inc Class A	0.9%	169.9%	483.1%	Information Technology		
Comfort Systems USA Inc	0.4%	54.6%	118.7%	Industrials		
e.l.f. Beauty Inc	0.4%	35.8%	138.0%	Consumer Staples		
Light & Wonder Inc Ordinary Shares	0.3%	24.3%	70.0%	Consumer Discretionary		
Carvana Co Class A	0.3%	66.1%	798.0%	Consumer Discretionary		
Onto Innovation Inc	0.3%	18.4%	106.1%	Information Technology		
Simpson Manufacturing Co Inc	0.3%	3.8%	88.6%	Industrials		
Viking Therapeutics Inc	0.3%	340.6%	392.5%	Health Care		
Weatherford International PLC	0.3%	18.0%	94.5%	Energy		

Тор	10 Performir	ng Stocks (b	y Quarter)	
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
NVIDIA Corp	4.5%	82.5%	225.4%	Information Technology
Vistra Corp	0.1%	81.4%	197.1%	Utilities
AppLovin Corp Ordinary Shares	0.0%	73.7%	339.5%	Information Technology
Shockwave Medical Inc	0.0%	70.9%	50.2%	Health Care
Vertiv Holdings Co Class A	0.1%	70.1%	471.2%	Industrials
Cava Group Inc	0.0%	63.0%	N/A	Consumer Discretionary
EMCOR Group Inc	0.0%	62.7%	116.2%	Industrials
Maplebear Inc	0.0%	58.9%	N/A	Consumer Staples
Constellation Energy Corp	0.1%	58.5%	138.0%	Utilities
Williams-Sonoma Inc	0.0%	58.0%	167.4%	Consumer Discretionary

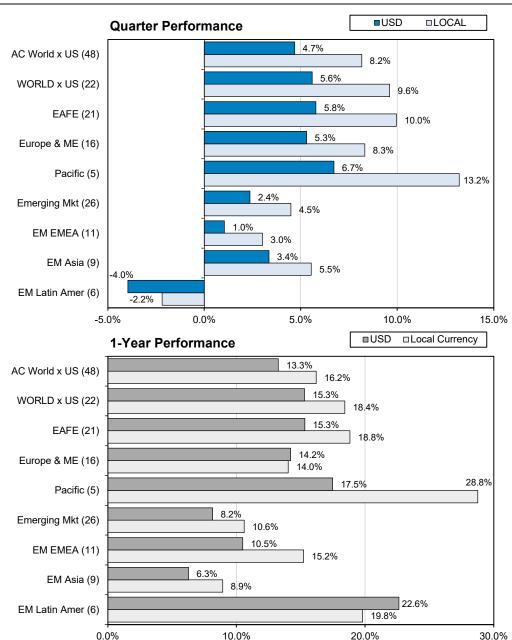
Тор	10 Performir	ig Stocks (by	y Quarter)	
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Ocean Biomedical Inc	0.0%	473.5%	-43.0%	Health Care
Viking Therapeutics Inc	0.3%	340.6%	392.5%	Health Care
Longboard Pharmaceuticals Inc	0.0%	258.2%	438.7%	Health Care
Super Micro Computer Inc	1.9%	255.3%	847.9%	Information Technology
Janux Therapeutics Inc	0.0%	250.9%	211.2%	Health Care
Arcutis Biotherapeutics Inc	0.0%	206.8%	-9.9%	Health Care
Veritone Inc	0.0%	190.6%	-9.8%	Information Technology
Avidity Biosciences Inc	0.1%	182.0%	66.3%	Health Care
Vera Therapeutics Inc Class A	0.1%	180.4%	455.7%	Health Care
SoundHound Al Inc Ordinary Shares	0.0%	177.8%	113.4%	Information Technology

Bottor	Bottom 10 Performing Stocks (by Quarter)					
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector		
New York Community Bancorp Inc	0.0%	-68.2%	-62.3%	Financials		
SSR Mining Inc	0.0%	-58.7%	-70.1%	Materials		
Rivian Automotive Inc Class A	0.0%	-53.3%	-29.3%	Consumer Discretionary		
Agilon Health Inc	0.0%	-51.4%	-74.3%	Health Care		
AMC Entertainment Holdings Inc	0.0%	-39.2%	-91.6%	Communication Services		
Iridium Communications Inc	0.0%	-36.1%	-57.2%	Communication Services		
Viasat Inc	0.0%	-35.3%	-46.5%	Information Technology		
QuidelOrtho Corp	0.0%	-35.0%	-46.2%	Health Care		
Unity Software Inc Ordinary Shares	0.0%	-34.7%	-17.7%	Information Technology		
10x Genomics Inc Ordinary Shares	0.0%	-32.9%	-32.7%	Health Care		

Bottom 10 Performing Stocks (by Quarter)						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
Amylyx Pharmaceuticals Inc	0.0%	-80.7%	-90.3%	Health Care		
Bakkt Holdings Inc Ordinary Shares	0.0%	-79.4%	-73.3%	Financials		
WW International Inc	0.0%	-78.9%	-55.1%	Consumer Discretionary		
iRobot Corp	0.0%	-77.4%	-79.9%	Consumer Discretionary		
LivePerson Inc	0.0%	-73.7%	-77.4%	Information Technology		
Office Properties Income Trust	0.0%	-72.1%	-81.1%	Real Estate		
Spirit Airlines Inc	0.0%	-69.6%	-69.3%	Industrials		
2U Inc	0.0%	-68.3%	-94.3%	Consumer Discretionary		
CareMax Inc Ordinary Shares	0.0%	-67.8%	-94.0%	Health Care		
Presto Automation Inc	0.0%	-67.3%	-89.0%	Information Technology		

Source: Morningstar Direct

- Many of the international developed- and emerging-market benchmarks posted positive performance in both USD and LCL terms for the first quarter. A strengthening of the USD during the period was a drag on domestic non-US index performance across all regions. The developed-market MSCI EAFE Index still returned a solid 5.8% in USD and 10.0% in LCL terms for the period. The MSCI Emerging Markets Index rose by 2.4% in USD and 4.5% in LCL terms.
- Latin America was the only region to post negative performance for the quarter in both USD and LCL terms. The cyclicality of demand for commodity exports in the region has resulted in greater volatility due to continued uncertainty over central bank policies and global demand.
- The heaviest weighted country in the emerging market index (China, 7.0%) continued its drag on broad index returns, returning -2.2% during the quarter. The Chinese economy grew at a rate of 5.2% in 2023, lower than its prepandemic rate of 6.0% which was a headwind for performance. Troubles in the commercial property and banking sectors have also created challenges for growth in the region.
- Much like domestic markets, trailing one-year results for international developed and emerging markets benchmarks were strong. Outside of EM Latin America, the USD showed strength over broad and regional benchmarks for the year, and as a result, LCL returns finished higher than USD performance.
- MSCI Pacific results led the way in LCL currency terms at 28.8% for the trailing year. USD returns for the region were still strong but returned a more muted 17.5% due to softening currency in the region. Due to demand for commodity exports and rising oil prices, EM Latin America was the only region where the USD weakened relative to LCL returns, resulting in higher USD returns (22.6% vs. 19.8%). The EM Asia regional benchmark was the weakest relative-performing region in the emerging market index, with the EM Asia index returning 6.3% in USD and 8.9% in LCL terms.



Source: MSCI Global Index Monitor (Returns are Net)

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.0%	4.1%	6.6%
Consumer Discretionary	12.5%	11.1%	15.5%
Consumer Staples	8.6%	-3.1%	-5.9%
Energy	4.1%	2.2%	14.6%
Financials	19.3%	8.6%	25.8%
Health Care	12.7%	4.7%	8.6%
Industrials	16.8%	7.9%	23.1%
Information Technology	9.4%	14.3%	31.1%
Materials	7.2%	-1.1%	10.2%
Real Estate	2.3%	1.5%	13.0%
Utilities	3.1%	-5.0%	2.7%
Total	100.0%	5.8%	15.3%

MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.1%	2.1%	-3.0%
Consumer Discretionary	11.8%	7.2%	8.6%
Consumer Staples	7.4%	-3.2%	-4.6%
Energy	5.5%	5.2%	21.4%
Financials	21.4%	5.9%	21.4%
Health Care	9.2%	3.7%	7.5%
Industrials	13.8%	6.9%	19.8%
Information Technology	13.4%	11.4%	29.4%
Materials	7.4%	-1.6%	4.1%
Real Estate	2.0%	-0.3%	6.8%
Utilities	3.0%	-3.0%	5.2%
Total	100.0%	4.7%	13.3%

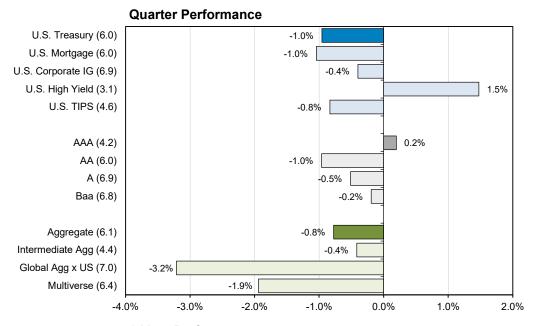
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	8.6%	0.8%	-11.5%
Consumer Discretionary	12.4%	-0.5%	-5.3%
Consumer Staples	5.6%	-4.3%	-2.6%
Energy	5.3%	6.9%	36.0%
Financials	22.4%	2.3%	15.0%
Health Care	3.5%	-4.5%	-0.9%
Industrials	7.0%	1.4%	4.6%
Information Technology	23.7%	9.9%	26.7%
Materials	7.2%	-4.6%	-5.4%
Real Estate	1.5%	-6.0%	-11.3%
Utilities	2.8%	3.5%	17.9%
Total	100.0%	2.4%	8.2%

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Country	MSCI-EAFE	MSCI-ACWIXUS	Quarter	1- Year
Country Japan	Weight 23.3%	Weight 15.0%	Return 10.2%	Return 23.5%
United Kingdom	14.6%	9.4%	1.9%	6.4%
France	12.1%	7.8%	5.7%	9.7%
Switzerland	9.3%	6.0%	-2.1%	4.9%
Germany	8.7%	5.6%	6.8%	12.0%
Australia	7.3%	4.7%	-0.5%	8.1%
Netherlands	5.2%	3.3%	15.4%	22.5%
Denmark	3.6%	2.3%	14.4%	33.0%
Sweden	3.1%	2.0%	0.2%	11.6%
Italy	2.8%	1.8%	13.1%	30.6%
Spain	2.7%	1.7%	7.7%	19.6%
Hong Kong	1.8%	1.7%	-12.2%	-25.8%
Singapore	1.3%	0.9%	-0.1%	-6.1%
Singapore Finland	1.0%	0.6%	-6.0%	-12.8%
	0.9%	0.6%	1.7%	-0.2%
Belgium Israel			12.2%	
	0.7%	0.5%		22.1% -0.2%
Norway	0.6%	0.4%	-7.9%	-
Ireland	0.4%	0.2%	14.8%	16.9%
Portugal	0.2%	0.1%	-17.9%	-16.6%
New Zealand	0.2%	0.1%	-4.9%	-8.2%
Austria	0.2%	0.1%	0.5%	10.5%
Total EAFE Countries	100.0%	64.5%	5.8%	15.3%
Canada		7.7%	3.4%	12.3%
Total Developed Countries		71.9%	5.6%	15.3%
China		7.0%	-2.2%	-17.1%
India		5.0%	6.1%	36.8%
Taiwan		4.9%	12.4%	27.8%
Korea		3.5%	1.6%	14.2%
Brazil		1.4%	-7.4%	27.0%
Saudi Arabia		1.2%	4.7%	15.8%
South Africa		0.8%	-6.8%	-4.9%
Mexico		0.8%	0.5%	17.7%
Indonesia		0.5%	2.1%	3.4%
Thailand		0.4%	-8.2%	-16.4%
Malaysia		0.4%	3.0%	3.1%
United Arab Emirates		0.3%	0.4%	9.2%
Poland		0.3%	3.5%	55.3%
Qatar		0.2%	-3.6%	-1.4%
Kuwait		0.2%	8.3%	4.1%
Turkey		0.2%	14.6%	19.3%
Philippines		0.2%	6.1%	7.2%
Chile		0.1%	-4.5%	-5.9%
Greece		0.1%	6.5%	37.4%
Peru		0.1%	15.8%	46.2%
Hungary		0.1%	0.5%	47.4%
Czech Republic		0.0%	-7.7%	-7.6%
Colombia		0.0%	14.2%	48.3%
Egypt		0.0%	-29.7%	3.2%
Total Emerging Countries		27.9%	2.4%	8.2%
Total ACWIXUS Countries		100.0%	4.7%	13.3%

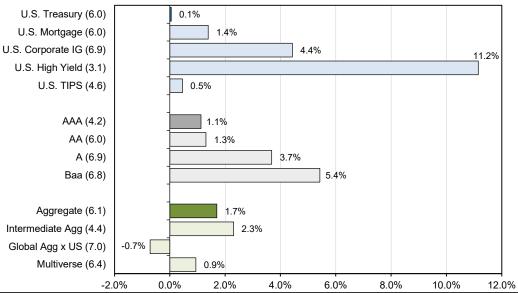
Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)

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 pulled back slightly to start the year with many domestic and international bond indexes finishing modestly lower during the guarter. Yields remain elevated due to the Federal Reserve's decision to maintain rates at their current levels. While market expectations are that the Fed will eventually begin cutting rates in 2024, which will be a jolt to bond holder performance as yield fall, higher yields and coupon rates on bonds also are also offer an attractive stabilizing, lower-risk benefit for bond allocations in diversified portfolios.
- The Bloomberg US Aggregate Bond Index, the bellwether US investment grade benchmark, returned a mild negative result of -0.8% for the guarter. Performance across the investment grade index's segments finished the period with similar performance with the Bloomberg US Corporate Investment Grade Index returning -0.4% and the US Mortgage Index sliding by -1.0%.
- Outside of the Aggregate index's sub-components, high-yield bonds continued to rise with a return of 1.5% as credit spreads narrowed during the guarter. US TIPS fell -0.8% for the quarter. The Bloomberg Global Aggregate ex-US Index return of -3.2% for the guarter lagged all domestic fixed-income indexes as well as the multiverse benchmark's return of -1.9%.
- Over the trailing one-year period, the Bloomberg US Aggregate Bond Index climbed 1.7%. The benchmark's sub-components also posted positive performance over the trailing 12 months with the Bloomberg US Corporate Investment Grade Index rising 4.4% and the US Mortgage Index posting a more modest 1.4% return. US TIPS, which are excluded from the aggregate index, rose 0.5% for the year. High-yield corporate bonds, which have a much shorter duration, outpaced their investment grade counterparts with the Bloomberg US High Yield Index posting and equity-like return of 11.2% for the last year.
- Performance for non-US bonds were negative for the trailing year with the Bloomberg Global Aggregate ex-US Index falling by -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.

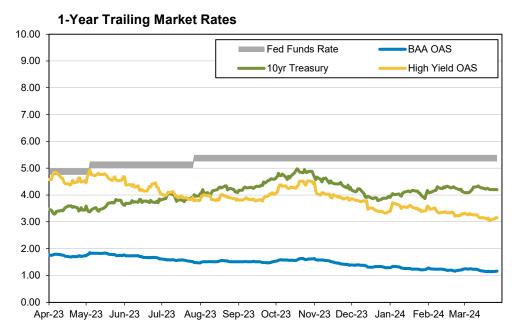


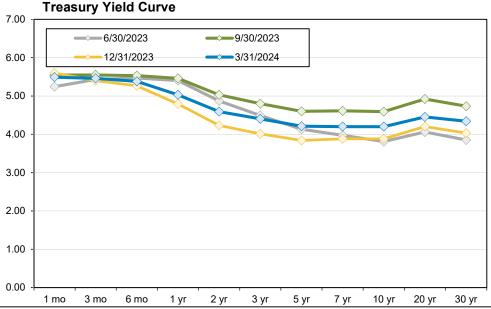
# 1-Year Performance



Source: Bloomberg

- The gray band across the graph illustrates the range of the current Fed Funds target rate. During the first quarter, the Federal Open Market Committee (FOMC) continued to hold the 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 and while their press releases have continued to push economic datadependent outcomes, subtle press release rewordings since last July have increased the likelihood there will be no additional rate increase in this cycle. With early April's inflation surprise, the CME FedWatch tool, which forecasts rates based on Fed Fund futures pricing, is predicting two 0.25% rate cuts for 2024, with the first occurring in September. Fed officials and market participants have expressed concern about leaving rates at their current levels for an extended period could tip the US economy into a recession, but inflation remains stubbornly elevated and higher rates are the FOMC's primary inflation-fighting tool. Additionally, the FOMC continues to remove liquidity from the market by allowing bonds held on its balance sheet to mature without reinvesting maturity proceeds.
- The yield on the US 10-year Treasury (green line of the top chart) rose modestly, opening at the at 3.88% and finishing the quarter at 4.20%. The 0.32% increase was largely attributable to sticky inflation data released throughout the quarter. The benchmark's rate peaked in October 2023, cresting at just under 5.00% before pulling back in the remainder of the year.
- The blue line in the top chart illustrates changes in 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 spread narrowed from 1.29% to 1.17%, which is equivalent to falling rates for BAA bonds. The spread measure has continued to narrow 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 yellow line in the top chart) have also continued to narrow from 3.39% at the end of 2023 to 3.15% at the end of March 2024. This narrowing provided an additional boost to high yield performance.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. If the anticipated rate cuts materialize in 2024, the yield curve will steepen into a positively sloped yield curve, which is the normal shape of the yield. Historically, a persistent inversion of the yield curve, as measured by the spread between 2 and 10-year Treasuries, has been a precursor of an economic recession within six to 24 months. As of quarter-end, the current yield curve inversion has persisted for 21 months.





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

Fed Minutes Suggest Rate Hikes Are Over, but Offer No Timetable on Cuts - WSJ

Fed meeting today: Live updates on March Fed rate decision (cnbc.com)

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)

The quarter in review: what happened in the first three months of 2024? | J.P. Morgan Asset Management (jpmorgan.com)

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

Resource Center | U.S. Department of the Treasury

The S&P 500 Clinches Best Start to Year Since 2019 - WSJ

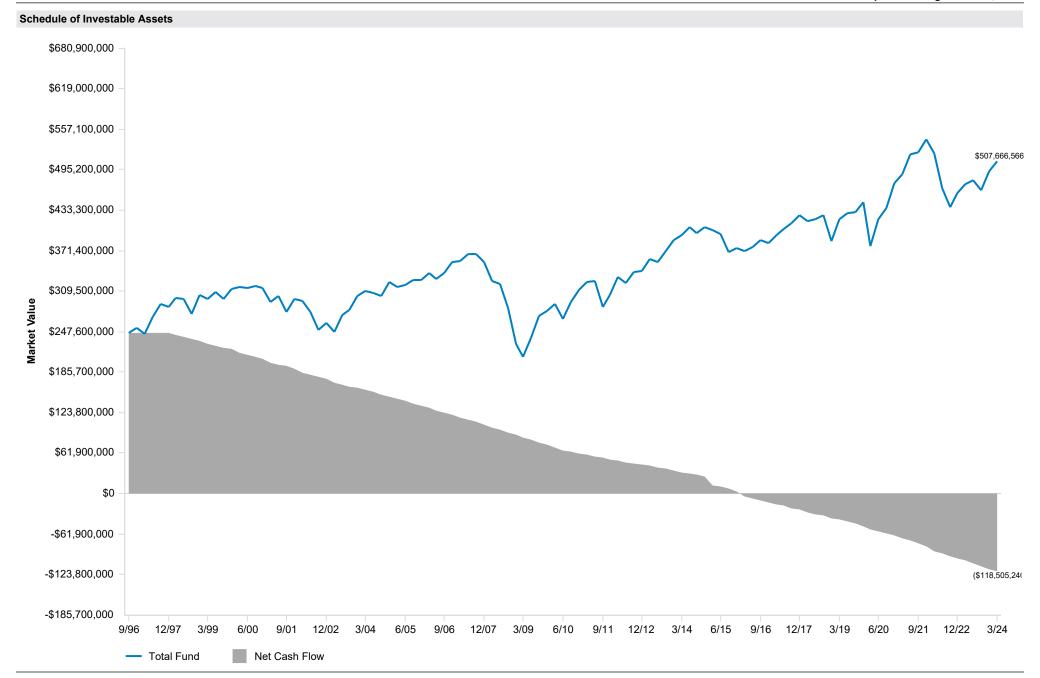
China's Economy Limps Into 2024 - WSJ

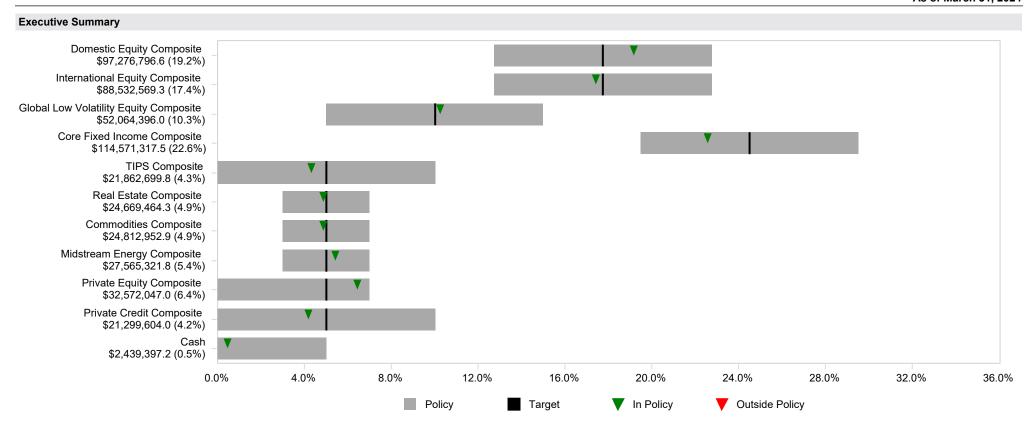
Support Site - Global Index Lens: Index Returns - MSCI

Q1 2024 CIO Review and Outlook - Matthews Asia - Commentaries - Advisor Perspectives

Treasuries Selloff Deepens as Traders Push Back First Rate Cut - Articles - Advisor Perspectives

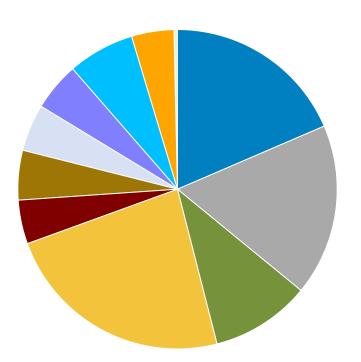
Federal Reserve issues FOMC statement

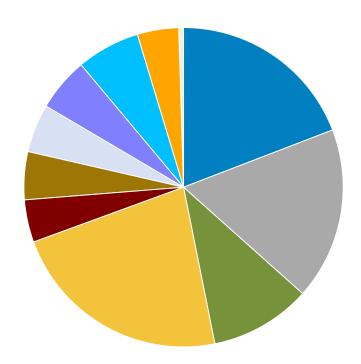




Asset Allocation Compliance					
	Asset Allocation \$	Current Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)
Total Fund	507,666,566	100.0	100.0	N/A	N/A
Domestic Equity Composite	97,276,797	19.2	17.8	12.8	22.8
International Equity Composite	88,532,569	17.4	17.8	12.8	22.8
Global Low Volatility Equity Composite	52,064,396	10.3	10.0	5.0	15.0
Core Fixed Income Composite	114,571,317	22.6	24.5	19.5	29.5
TIPS Composite	21,862,700	4.3	5.0	0.0	10.0
Real Estate Composite	24,669,464	4.9	5.0	3.0	7.0
Commodities Composite	24,812,953	4.9	5.0	3.0	7.0
Midstream Energy Composite	27,565,322	5.4	5.0	3.0	7.0
Private Equity Composite	32,572,047	6.4	5.0	0.0	7.0
Private Credit Composite	21,299,604	4.2	5.0	0.0	10.0
Cash	2,439,397	0.5	0.0	0.0	5.0

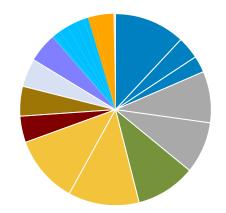
Dec-2023 : \$492,446,000 Mar-2024 : \$507,666,566

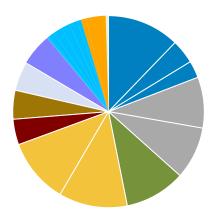




location			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ Domestic Equity Composite	91,240,272	18.5	■ Domestic Equity Composite	97,276,797	19.2
International Equity Composite	85,679,303	17.4	International Equity Composite	88,532,569	17.4
■ Global Low Volatility Equity Composite	49,715,107	10.1	Global Low Volatility Equity Composite	52,064,396	10.3
Core Fixed Income Composite	115,447,798	23.4	Core Fixed Income Composite	114,571,317	22.6
■ TIPS Composite	21,862,700	4.4	■ TIPS Composite	21,862,700	4.3
■ Real Estate Composite	24,732,801	5.0	Real Estate Composite	24,669,464	4.9
Commodities Composite	23,469,682	4.8	Commodities Composite	24,812,953	4.9
Midstream Energy Composite	24,126,689	4.9	Midstream Energy Composite	27,565,322	5.4
Private Equity Composite	33,280,710	6.8	Private Equity Composite	32,572,047	6.4
Private Credit Composite	21,126,480	4.3	Private Credit Composite	21,299,604	4.2
Cash	1,764,457	0.4	Cash	2,439,397	0.5

Dec-2023: \$492,446,000 Mar-2024: \$507,666,566





llocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ NTAM S&P 500	58,857,051	12.0	■ NTAM S&P 500	62,033,948	12.2
■ PIMCO Stock Plus	18,615,110	3.8	PIMCO Stock Plus	20,670,730	4.1
■ Wellington Small Cap	13,768,112	2.8	Wellington Small Cap	14,572,119	2.9
■ Harding Loevner	42,728,959	8.7	Harding Loevner	43,631,414	8.6
Neuberger Berman CIT	42,950,345	8.7	Neuberger Berman CIT	44,901,155	8.8
■ BlackRock MSCI ACWI Min Vol	49,715,107	10.1	BlackRock MSCI ACWI Min Vol	52,064,396	10.3
Baird Advisors	59,060,771	12.0	Baird Advisors	58,776,367	11.6
Western Asset Management	56,387,027	11.5	Western Asset Management	55,794,951	11.0
■ Brown Brothers Harriman	21,862,700	4.4	■ Brown Brothers Harriman	21,862,700	4.3
■ Centersquare	24,732,801	5.0	■ Centersquare	24,669,464	4.9
Wellington Commodities	23,469,682	4.8	Wellington Commodities	24,812,953	4.9
■ Harvest MLP	24,126,689	4.9	Harvest MLP	27,565,322	5.4
Adams Street 2010 Direct Fund	161,473	0.0	Adams Street 2010 Direct Fund	157,077	0.0
Adams Street 2010 EM Fund	401,961	0.1	Adams Street 2010 EM Fund	387,243	0.1
Adams Street 2010 Non-US Fund	575,019	0.1	Adams Street 2010 Non-US Fund	565,576	0.1
Adams Street 2010 US Fund	1,398,036	0.3	Adams Street 2010 US Fund	1,341,806	0.3
Adams Street 2013 Global Fund	4,710,766	1.0	Adams Street 2013 Global Fund	4,651,872	0.9
Adams Street 2015 Global	7,732,564	1.6	Adams Street 2015 Global	7,721,794	1.5
Adams Street 2017 Global Fund	7,478,679	1.5	Adams Street 2017 Global Fund	7,288,159	1.4
Adams Street 2019 Global	7,197,911	1.5	Adams Street 2019 Global	7,351,303	1.4
Aberdeen Global	3,624,301	0.7	Aberdeen Global	3,107,217	0.6
50 South Capital Private Credit	4,608,835	0.9	50 South Capital Private Credit	4,465,020	0.9
Grosvenor PC	16,517,645	3.4	■ Grosvenor PC	16,834,584	3.3
Cash	1,764,457	0.4	Cash	2,439,397	0.5

	Market Value	Net	O = m4mlh + 14l = r = =	Diatella est a s	Management	Other	Return On	Market Value
	01/01/2024	Transfers	Contributions	Distributions	Fees	Expenses	Investment	03/31/2024
otal Fund	492,446,000	-	5,972,852	-9,093,840	-265,123	-175,100	18,781,778	507,666,566
Domestic Equity Composite	91,240,272	-2,803,611	_	_	-21,389		8,861,524	97,276,797
NTAM S&P 500	58,857,051	-2,822,340	•	-	-21,36 <del>9</del> -2,660	•	6,001,897	62,033,948
PIMCO Stock Plus	18,615,110	-2,022,340	-	-	-2,000	-	2,055,620	20,670,730
	, ,	10.700	-	-	10.720	-	, ,	
Wellington Small Cap	13,768,112	18,729	-	-	-18,729	-	804,007	14,572,119
International Equity Composite	85,679,303	53,051	-	-	-53,051	-1,620	2,854,886	88,532,569
Harding Loevner	42,728,959	53,051	-	-	-53,051	-1,620	904,075	43,631,414
Neuberger Berman CIT	42,950,345	-	-	-	-	-	1,950,811	44,901,155
Global Low Volatility Equity Composite	49,715,107	7,242	-	-	-7,242	-	2,349,289	52,064,396
BlackRock MSCI ACWI Min Vol	49,715,107	7,242	-	-	-7,242	-	2,349,289	52,064,396
Core Fixed Income Composite	115,447,798	70,689	-	-	-70,689	-476	-876,005	114,571,317
Baird Advisors	59,060,771	31,158	-	-	-31,158	-476	-283,929	58,776,367
Western Asset Management	56,387,027	39,531	-	-	-39,531	-	-592,076	55,794,951
Total Real Assets Composite	94,191,871	112,753	-	-	-112,753	-181	4,718,749	98,910,439
TIPS Composite	21,862,700	-	_	_	-		-	21,862,700
Brown Brothers Harriman	21,862,700	-	-	-	-	-	-	21,862,700
Real Estate Composite	24,732,801	28,134	-	-	-28,134	-50	-63,286	24,669,464
Centersquare	24,732,801	28,134	-	-	-28,134	-50	-63,286	24,669,464
Commodities Composite	23,469,682	38,288		-	-38,288	-	1,343,271	24,812,953
Wellington Commodities	23,469,682	38,288	-	-	-38,288	-	1,343,271	24,812,953
Midstream Energy Composite	24,126,689	46,330	-	-	-46,330	-130	3,438,763	27,565,322
Harvest MLP	24,126,689	46,330	-	-	-46,330	-130	3,438,763	27,565,322

## Financial Reconciliation Total Fund

1 Quarter Ending March 31, 2024

	Market Value 01/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Return On Investment	Market Value 03/31/2024
Private Equity Composite	33,280,710	-1,144,081	-	-	-	-4,464	439,883	32,572,047
Adams Street 2010 Direct Fund	161,473	-	-	-	-	-	-4,396	157,077
Adams Street 2010 EM Fund	401,961	-12,387	-	-	-	-	-2,331	387,243
Adams Street 2010 Non-US Fund	575,019	-30,548	-	-	-	-	21,105	565,576
Adams Street 2010 US Fund	1,398,036	-50,932	-	-	-	-	-5,298	1,341,806
Adams Street 2013 Global Fund	4,710,766	-120,837	-	-	-	-	61,943	4,651,872
Adams Street 2015 Global	7,732,564	-226,238	-	-	-	-	215,468	7,721,794
Adams Street 2017 Global Fund	7,478,679	-190,520	-	-	-	-	-	7,288,159
Adams Street 2019 Global	7,197,911	-	-	-	-	-	153,392	7,351,303
Aberdeen Global	3,624,301	-512,619	-	-	-	-4,464	-	3,107,217
Private Credit Composite	21,126,480	-143,815	-	-	-	-	316,939	21,299,604
50 South Capital Private Credit	4,608,835	-143,815	-	-	-	-	-	4,465,020
Grosvenor PC	16,517,645	-	-	-	-	-	316,939	16,834,584
Cash	1,764,457	3,847,773	5,972,852	-9,093,840	-	-168,359	116,514	2,439,397

	Market Value	Net	0 4 11 41	Distribution	Management	Other	Return On	Market Value
	01/01/2024	Transfers	Contributions	Distributions	Fees	Expenses	Investment	03/31/2024
otal Fund	492,446,000	-	5,972,852	-9,093,840	-265,123	-175,100	18,781,778	507,666,566
Domestic Equity Composite	91,240,272	-2,803,611	-	-	-21,389	-	8,861,524	97,276,797
NTAM S&P 500	58,857,051	-2,822,340	_	_	-2,660		6,001,897	62,033,948
PIMCO Stock Plus	18,615,110	-2,022,040	_	_	-2,000	_	2,055,620	20,670,730
Wellington Small Cap	13,768,112	18,729	-	-	-18,729	-	804,007	14,572,119
International Equity Composite	85,679,303	53,051	-	-	-53,051	-1,620	2,854,886	88,532,569
Harding Loevner	42,728,959	53,051	-	-	-53,051	-1,620	904,075	43,631,414
Neuberger Berman CIT	42,950,345	-	-	-	-	-	1,950,811	44,901,155
Global Low Volatility Equity Composite	49,715,107	7,242	-	-	-7,242	-	2,349,289	52,064,396
BlackRock MSCI ACWI Min Vol	49,715,107	7,242	-	-	-7,242	-	2,349,289	52,064,396
Core Fixed Income Composite	115,447,798	70,689	-	-	-70,689	-476	-876,005	114,571,317
Baird Advisors	59,060,771	31,158	-	-	-31,158	-476	-283,929	58,776,367
Western Asset Management	56,387,027	39,531	-	-	-39,531	-	-592,076	55,794,951
Total Real Assets Composite	94,191,871	112,753	•	-	-112,753	-181	4,718,749	98,910,439
TIPS Composite	21,862,700		-	-				21,862,700
Brown Brothers Harriman	21,862,700	-	-	-	-	-	-	21,862,700
Real Estate Composite	24,732,801	28,134	-	-	-28,134	-50	-63,286	24,669,464
Centersquare	24,732,801	28,134	-	-	-28,134	-50	-63,286	24,669,464
Commodities Composite	23,469,682	38,288	-	-	-38,288	-	1,343,271	24,812,953
Wellington Commodities	23,469,682	38,288	-	-	-38,288	-	1,343,271	24,812,953
Midstream Energy Composite	24,126,689	46,330	-	-	-46,330	-130	3,438,763	27,565,322
Harvest MLP	24,126,689	46,330	-	-	-46,330	-130	3,438,763	27,565,322

# Financial Reconciliation Total Fund

January 1, 2024 To March 31, 2024

	Market Value 01/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Return On Investment	Market Value 03/31/2024
Private Equity Composite	33,280,710	-1,144,081	-	-	-	-4,464	439,883	32,572,047
Adams Street 2010 Direct Fund	161,473	-	-	-	-	-	-4,396	157,077
Adams Street 2010 EM Fund	401,961	-12,387	-	-	-	-	-2,331	387,243
Adams Street 2010 Non-US Fund	575,019	-30,548	-	-	-	-	21,105	565,576
Adams Street 2010 US Fund	1,398,036	-50,932	-	-	-	-	-5,298	1,341,806
Adams Street 2013 Global Fund	4,710,766	-120,837	-	-	-	-	61,943	4,651,872
Adams Street 2015 Global	7,732,564	-226,238	-	-	-	-	215,468	7,721,794
Adams Street 2017 Global Fund	7,478,679	-190,520	-	-	-	-	-	7,288,159
Adams Street 2019 Global	7,197,911	-	-	-	-	-	153,392	7,351,303
Aberdeen Global	3,624,301	-512,619	-	-	-	-4,464	-	3,107,217
Private Credit Composite	21,126,480	-143,815	-	-	-	-	316,939	21,299,604
50 South Capital Private Credit	4,608,835	-143,815	-	-	-	-	-	4,465,020
Grosvenor PC	16,517,645	-	-	-	-	-	316,939	16,834,584
Cash	1,764,457	3,847,773	5,972,852	-9,093,840	-	-168,359	116,514	2,439,397

Asset Allocation & Performance											
	Allocatio	on				P	erformance(%	<b>%</b> )			
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
Total Fund (Gross)	507,666,566	100.0	3.82 (84)	3.82 (84)	11.44 (84)	5.28 (16)	7.81 (53)	7.39 (63)	6.62 (66)	8.18 (-)	Oct-1987
Total Fund Composite Policy			3.63	3.63	11.12	4.68	6.75	6.41	5.59	7.73	
All Public Plans-Total Fund Median			5.00	5.00	14.35	4.13	7.88	7.69	6.90	-	
Total Fund (Net)	507,666,566	100.0	3.77	3.77	11.19	5.05	7.57	7.14	6.37	7.97	Oct-1987
Total Fund Composite Policy			3.63	3.63	11.12	4.68	6.75	6.41	5.59	7.73	
Domestic Equity Composite	97,276,797	19.2	9.93 (41)	9.93 (41)	29.12 (32)	9.94 (36)	14.67 (28)	13.74 (31)	12.70 (26)	10.40 (77)	Oct-1987
FT Wilshire 5000 Total Market TR Index			9.95	9.95	29.26	10.13	14.56	13.62	12.52	10.22	
IM U.S. Equity (SA+CF) Median			8.98	8.98	24.07	8.27	12.56	11.73	10.61	11.22	
NTAM S&P 500	62,033,948	12.2	10.54 (55)	10.54 (55)	29.86 (54)	11.49 (39)	15.06 (40)	14.12 (42)	13.01 (36)	9.27 (29)	Apr-1998
NTAM Policy			10.56	10.56	29.88	11.49	15.05	14.09	12.96	8.31	•
IM U.S. Large Cap Core Equity (SA+CF) Median			10.82	10.82	30.01	11.04	14.75	13.76	12.74	8.81	
PIMCO Stock Plus	20,670,730	4.1	11.04 (40)	11.04 (40)	31.07 (31)	10.69 (43)	14.78 (30)	13.94 (25)	12.71 (24)	7.72 (66)	Jun-2000
S&P 500 Index			10.56	10.56	29.88	11.49	15.05	14.09	12.96	7.66	
IM U.S. Large Cap Core Equity (SA+CF) Median			10.55	10.55	29.51	10.31	13.88	13.01	12.05	8.03	
Wellington Small Cap	14,572,119	2.9	5.84 (54)	5.84 (54)	23.23 (28)	2.96 (67)	11.82 (31)	11.44 (20)	10.99 (12)	11.80 (28)	Sep-1999
Russell 2000 Index			5.18	5.18	19.71	-0.10	8.10	7.73	7.58	8.17	
IM U.S. Small Cap Core Equity (SA+CF) Median			6.13	6.13	20.00	4.40	10.89	9.88	9.47	11.36	
International Equity Composite	88,532,569	17.4	3.33 (72)	3.33 (72)	11.15 (71)	1.71 (68)	7.54 (53)	7.07 (52)	5.56 (54)	7.68 (43)	Jan-1990
International Equity Composite Policy			4.69	4.69	13.26	1.94	5.97	5.88	4.25	4.66	
IM International Equity (SA+CF) Median			5.08	5.08	14.06	3.52	7.68	7.10	5.69	7.54	
Harding Loevner	43,631,414	8.6	2.12 (91)	2.12 (91)	9.83 (85)	1.65 (78)	7.49 (59)	7.05 (60)	-	6.38 (47)	Apr-2015
MSCI AC World ex USA (Net)			4.69	4.69	13.26	1.94	5.97	5.88	-	4.86	
IM International Large Cap Equity (SA+CF) Median			5.36	5.36	14.21	3.99	7.89	7.39	-	6.29	
Neuberger Berman CIT	44,901,155	8.8	4.54 (64)	4.54 (64)	12.46 (63)	1.77 (72)	7.62 (41)	-	-	5.78 (46)	Jul-2018
MSCI AC World ex USA (Net)			4.69	4.69	13.26	1.94	5.97	-	-	4.87	
IM International Large Cap Equity (SA+CF) Median			5.29	5.29	13.92	3.32	7.22	-	-	5.64	

	Allocatio	n				Pe	rformance(%	o)			
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
Global Low Volatility Equity Composite	52,064,396	10.3	4.73 (79)	4.73 (79)	11.59 (82)	4.66 (74)	-	-	-	6.11 (95)	Jun-2019
MSCI ACWI Minimum Volatility Index (Net)			4.71	4.71	11.12	4.26	-	-	-	5.68	
IM Global Equity (SA+CF) Median			7.44	7.44	20.64	6.72	-	-	-	12.28	
BlackRock MSCI ACWI Min Vol	52,064,396	10.3	4.73 (79)	4.73 (79)	11.59 (82)	4.66 (74)	-	-	-	6.11 (95)	Jun-2019
MSCI ACWI Minimum Volatility Index (Net)			4.71	4.71	11.12	4.26	-	-	-	5.68	
IM Global Equity (SA+CF) Median			7.44	7.44	20.64	6.72	-	-	-	12.28	
Core Fixed Income Composite	114,571,317	22.6	-0.76 (88)	-0.76 (88)	2.54 (37)	-2.72 (96)	0.81 (61)	1.64 (43)	2.32 (19)	6.06 (38)	Oct-1987
Blmbg. U.S. Aggregate Index			-0.78	-0.78	1.70	-2.46	0.36	1.06	1.54	5.50	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			-0.47	-0.47	2.25	-2.11	0.91	1.56	2.01	6.00	
Baird Advisors	58,776,367	11.6	-0.48 (52)	-0.48 (52)	2.79 (29)	-1.89 (33)	1.03 (38)	1.72 (33)	2.27 (21)	3.68 (53)	Dec-2002
Blmbg. U.S. Aggregate Index			-0.78	-0.78	1.70	-2.46	0.36	1.06	1.54	3.22	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			-0.47	-0.47	2.25	-2.11	0.91	1.56	2.01	3.73	
Western Asset Management	55,794,951	11.0	-1.05 (99)	-1.05 (99)	2.29 (81)	-3.57 (100)	0.57 (99)	1.53 (87)	2.36 (56)	4.12 (47)	Jan-2004
Blmbg. U.S. Aggregate Index			-0.78	-0.78	1.70	-2.46	0.36	1.06	1.54	3.09	
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median			-0.06	-0.06	3.52	-1.60	1.49	2.06	2.45	4.05	
Total Real Assets Composite	98,910,439	19.5	5.01	5.01	13.25	11.52	8.37	6.56	-	4.79	Apr-2015
Real Assets Composite Policy			3.83	3.83	11.72	10.60	7.26	5.73	-	4.04	
TIPS Composite	21,862,700	4.3	0.00 (47)	0.00 (47)	0.00 (76)	-0.86 (78)	2.23 (81)	2.03 (83)	-	1.89 (82)	May-2015
Bloomberg U.S. TIPS Index			-0.08	-0.08	0.46	-0.53	2.49	2.29	-	2.05	
IM U.S. TIPS (SA+CF) Median			-0.02	-0.02	0.37	-0.61	2.43	2.24	-	2.01	
Brown Brothers Harriman	21,862,700	4.3	0.00 (47)	0.00 (47)	0.00 (76)	-0.86 (78)	2.23 (81)	2.03 (83)	-	1.89 (82)	May-2015
Bloomberg U.S. TIPS Index			-0.08	-0.08	0.46	-0.53	2.49	2.29	-	2.05	
IM U.S. TIPS (SA+CF) Median			-0.02	-0.02	0.37	-0.61	2.43	2.24	-	2.01	
Real Estate Composite	24,669,464	4.9	-0.26	-0.26	11.29	4.86	4.88	5.81	5.36	8.45	Jun-2009
Real Estate Policy Index			-0.39	-0.39	10.45	3.69	2.38	3.99	4.38	7.86	
Centersquare	24,669,464	4.9	-0.26 (22)	-0.26 (22)	11.29 (17)	4.86 (13)	-	-	-	4.22 (31)	Oct-2019
Dow Jones U.S. Select REIT			-0.39	-0.39	10.45	3.69	-	-	-	1.63	
IM U.S. REIT (SA+CF) Median			-0.90	-0.90	9.74	3.69	-	-	-	3.38	
Commodities Composite	24,812,953	4.9	5.72	5.72	10.05	12.56	11.32	8.57	2.48	1.08	Feb-2013
Bloomberg Commodity Index Total Return			2.19	2.19	-0.56	9.11	6.38	4.26	-1.56	-1.90	
Wellington Commodities	24,812,953	4.9	5.72	5.72	10.05	12.56	11.32	8.57	2.48	1.08	Feb-2013
Bloomberg Commodity Index Total Return			2.19	2.19	-0.56	9.11	6.38	4.26	-1.56	-1.90	

	Allocation	1				P	erformance(%	)			
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
Midstream Energy Composite	27,565,322	5.4	14.25	14.25	31.24	28.64	12.12	7.80	-	4.48	Mar-2015
Alerian Midstream Energy Index			10.15	10.15	24.63	20.46	10.45	7.45	-	4.20	
Harvest MLP	27,565,322	5.4	14.25 (27)	14.25 (27)	31.24 (50)	28.64 (43)	12.12 (42)	7.80 (30)	-	4.35 (30)	Jan-2015
Alerian Midstream Energy Index			10.15	10.15	24.63	20.46	10.45	7.45	-	3.91	
IM Energy MLP (MF) Median			12.60	12.60	31.16	26.33	10.99	6.84	-	3.72	
Total Cash Equivalents Composite	2,439,397	0.5									

<b>Comparative Performance - IRR</b>											
	Market Value \$ (\$)	%	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
<b>Private Equity Composite</b>	32,572,047	6.4	1.32	1.32	-2.48	12.40	18.56	18.16	16.38	15.49	04/30/2010
Adams Street 2010 Direct Fund	157,077	0.0	-2.72	<b>-</b> 2.72	-4.58	-5.71	5.54	11.50	11.42	11.54	04/30/2010
Adams Street 2010 EM Fund	387,243	0.1	-0.59	-0.59	-2.67	-2.00	8.08	10.54	11.22	9.77	01/03/2011
Adams Street 2010 Non-US Fund	565,576	0.1	3.70	3.70	0.56	8.55	16.55	19.26	13.76	12.61	04/30/2010
Adams Street 2010 US Fund	1,341,806	0.3	-0.39	-0.39	-8.30	12.23	23.41	19.51	16.88	16.02	04/30/2010
Adams Street 2013 Global Fund	4,651,872	0.9	1.32	1.32	-2.53	5.89	14.84	15.54	13.04	12.89	07/03/2013
Adams Street 2015 Global	7,721,794	1.5	2.80	2.80	1.25	11.13	18.81	18.62	N/A	19.91	09/15/2015
Adams Street 2017 Global Fund	7,288,159	1.4	0.00	0.00	-0.16	16.23	18.09	N/A	N/A	17.14	06/22/2017
Adams Street 2019 Global	7,351,303	1.4	2.13	2.13	2.01	10.71	N/A	N/A	N/A	17.41	12/30/2019
Aberdeen Global	3,107,217	0.6	-0.13	-0.13	-18.66	25.22	23.50	21.26	17.68	15.43	01/17/2012
Private Credit Composite	21,299,604	4.2	1.50	1.50	7.65	6.70	5.61	N/A	N/A	5.48	09/30/2018
50 South Capital Private Credit	4,465,020	0.9	0.00	0.00	9.76	11.78	7.41	N/A	N/A	7.23	11/05/2018
Grosvenor PC	16,834,584	3.3	1.92	1.92	7.05	5.17	5.03	N/A	N/A	4.93	09/27/2018

Comparative Performance Fiscal Year Returns										
					Perform	nance(%)				
	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 (20)	18.37 (5)	10.67 (82)	18.80 (60)	-5.76 (86)	14.49 (61)	7.41 (39)	-2.26 (89)	7.94 (11)
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	13.21	-13.96	13.67	13.50	19.48	-4.48	15.07	7.00	-0.20	6.24
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 (25)	-5.92 (43)	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	19.36	-16.41	26.10	16.54	28.60	-7.08	19.43	13.21	-0.49	9.99
NTAM S&P 500	26.28 (38)	-18.09 (65)	28.69 (37)	18.45 (45)	31.56 (32)	-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	24.68	-16.54	27.74	17.65	30.06	-5.07	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	23.79	-17.02	26.87	15.93	29.47	-5.68	21.58	9.87	1.05	12.69
Wellington Small Cap	22.19 (14)	-21.41 (83)	16.56 (87)	29.54 (16)	34.14 (8)	-9.98 (49)	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	17.18	-16.11	24.24	18.71	25.82	-10.13	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	17.69	-16.27	11.76	11.58	23.56	-14.58	28.71	2.41	1.19	-3.37
Harding Loevner	16.65 (67)	-19.07 (71)	10.23 (63)	21.17 (21)	23.17 (55)	-13.43 (40)	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	18.09	-15.74	11.71	11.10	23.94	-14.24	27.78	1.82	-	-
Neuberger Berman CIT	14.57 (80)	-19.99 (72)	12.39 (36)	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	17.35	-16.58	11.06	10.97	23.43	-	-	-	-	-

									Pe	rform	nance(%)							
	Dec 20	23	Dec 20	022	Dec 2	021	Dec 2		Dec 2	019	Dec 20	018	Dec 201	7 Dec	2016	Dec 2	2015	Dec 2014
Global Low Volatility Equity Composite	8.41 (	(88)	-10.02	(29)	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	20.16		-16.59		19.10		15.76		-		-		-		-	-		-
BlackRock MSCI ACWI Min Vol	8.41 (	(88)	-10.02	(29)	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	20.16		-16.59		19.10		15.76		-		-		-			-		-
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	l (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	5	0.55	. ,	5.97
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	5.99		-12.95		-1.24		8.36		9.17		0.06		3.99	3.07	7	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	5	0.55		5.97
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	5.99		-12.95		-1.24		8.36		9.17		0.06		3.99	3.07	7	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 (1	1) 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	5	0.55		5.97
IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median	6.86		-12.91		-0.24		8.96		9.94		-0.25		4.79	4.68	3	0.38		6.19
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	6	-		-
TIPS Composite	3.53 (	(62)	-12.08	(66)	5.74	(45)	10.41	(64)	8.42	(32)	-1.63	(65)	2.81 (6	1) 4.90	(24)	-		-
Bloomberg U.S. TIPS Index	3.90		-11.85		5.96		10.99		8.43		-1.26		3.01	4.68	3	-		-
IM U.S. TIPS (SA+CF) Median	3.81		-11.94		5.71		10.61		8.34		-1.42		2.96	4.62	2	-		-
Brown Brothers Harriman	3.53 (	(62)	-12.08	(66)	5.74	(45)	10.41	(64)	8.42	(32)	-1.63	(65)	2.81 (6	1) 4.90	(24)	-		-
Bloomberg U.S. TIPS Index	3.90		-11.85		5.96		10.99		8.43		-1.26		3.01	4.68	3	-		-
IM U.S. TIPS (SA+CF) Median	3.81		-11.94		5.71		10.61		8.34		-1.42		2.96	4.62	2	-		-
Real Estate Composite	14.78 (	(12)	-23.42	(9)	42.75	(33)	-3.74	(40)	21.50	(93)	-7.93	(84)	11.50 (8)	1.47	(100)	-0.60	(89)	14.87 (96
Real Estate Policy Index	13.96		-25.96		45.91		-11.20		18.34		-5.63		10.36	4.06	6	-0.79		15.02
Real Estate Median	12.02		-26.21		41.34		-4.78		27.71		-5.74		5.41	6.18	3	2.94		29.77
Centersquare	14.78 (	(23)	-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	13.82		-25.58		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	7	-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	7	-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

					Perforn	nance(%)				
	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 (48)	-13.16 (42)	-5.01 (51)	20.84 (78)	-30.54 (27)	-
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	25.70	42.00	-26.15	12.90	-14.20	-4.78	29.18	-33.94	-

Median-75

Count

2 (10%)

4 (20%)

75-95

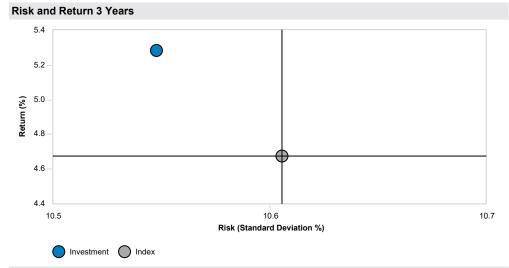
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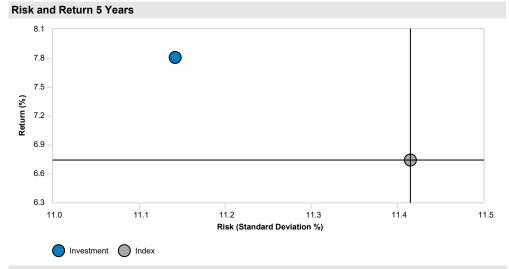
10 (50%)

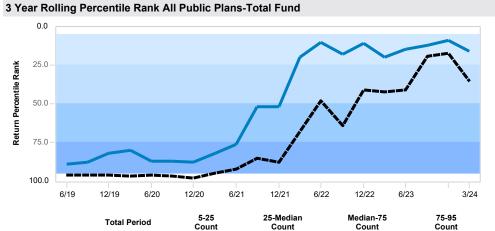
16 (80%)

Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.28	10.55	0.30	103.27	8	100.19	4
Index	4.68	10.61	0.25	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	7.81	11.14	0.55	103.27	15	97.20	5
Index	6.75	11.41	0.45	100.00	15	100.00	5







0 (0%)

5 (25%)

2 (10%)

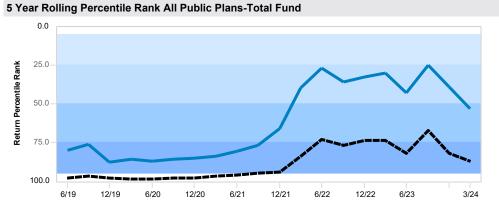
2 (10%)

9 (45%)

11 (55%)

9 (45%)

2 (10%)



25-Median

Count

7 (35%)

0 (0%)

5-25

Count

1 (5%)

0 (0%)

**Total Period** 

20

20

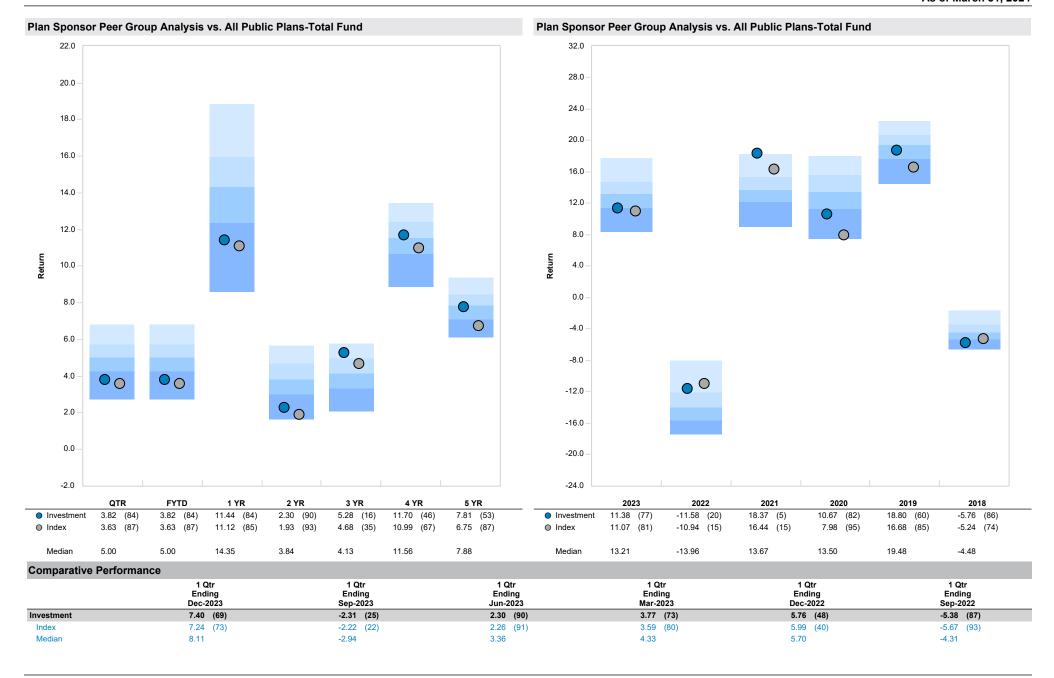
Investment

\_\_ Index

Investment

\_\_ Index

20



						_								_	
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Do Quai
estment	11.49	17.34	0.57	99.95	8	99.93	4	Investment	15.06	18.20	0.76	99.97	15	99.89	5
idex	11.49	17.35	0.57	100.00	8	100.00	4	Index	15.05	18.21	0.75	100.00	15	100.00	5
k and Retu	urn 3 Years							Risk and Retur	n 5 Years						
11.5			•					15.1							
								(%) د							
								Return (%)					9		
11.4								15.0							
17.3			Risk (Standard	Dovistion %)			17.4	18.0		18.1	Risk (Standard		18.2		
	nvestment	·	iisk (Staildaid	Deviation ///				Inve	estment		Nisk (Stalldard	Deviation ///			
U Ir								_							
	g Percentile Ran	k IM U.S. Lar	ge Cap Cor	e Equity (S	A+CF)			5 Year Rolling	Percentile Rar	ık IM U.S. La	rge Cap Co	re Equity (S	A+CF)		
		k IM U.S. Lar	ge Cap Cor	e Equity (S	A+CF)			5 Year Rolling	Percentile Rar	IK IM U.S. La	rge Cap Co	ore Equity (S	SA+CF)		
ear Rolling		k IM U.S. Lar	ge Cap Cor	e Equity (S	A+CF)			0.0	Percentile Rar	IK IM U.S. La	rge Cap Co	ore Equity (S	SA+CF)		
ear Rolling			ge Cap Cor	e Equity (S	A+CF)			0.0	Percentile Ran	ik IM U.S. La	rge Cap Co	ore Equity (S	SA+CF)		
ear Rolling	g Percentile Ran		ge Cap Cor	e Equity (S	A+CF)	~		0.0	Percentile Rar	IK IM U.S. La	rge Cap Co	ore Equity (S	SA+CF)		
0.0 25.0	g Percentile Ran		ge Cap Cor	e Equity (S	A+CF)	~		0.0	Percentile Rar	IK IM U.S. La	rge Cap Co	ore Equity (S	SA+CF)		
0.0 25.0	g Percentile Ran		ge Cap Cor	e Equity (S	A+CF)	~		25.0 – 25.0 –	Percentile Rar	IK IM U.S. La	rge Cap Co	ore Equity (S	SA+CF)		
25.0 – 50.0 – 75.0 –	g Percentile Ran		ge Cap Cor	e Equity (S	A+CF)	~		0.0 Securitie Rank 25.0 – 20.0	Percentile Rar		rge Cap Co	ore Equity (S	SA+CF)		
25.0 – 50.0 –	g Percentile Ran			e Equity (S		6/23	3/24	0.0	Percentile Ran			pre Equity (S		6/23	3/2
25.0	g Percentile Ran	20 12/20	6/21 1			5 7	3/24 25-95 Count	0.0 Seturn Percentile Rank 25.0 – 25.		20 12/20	6/21			75	3/3 75-95 Count

20 (100%)

0 (0%)

0 (0%)

\_\_ Index

20

0 (0%)

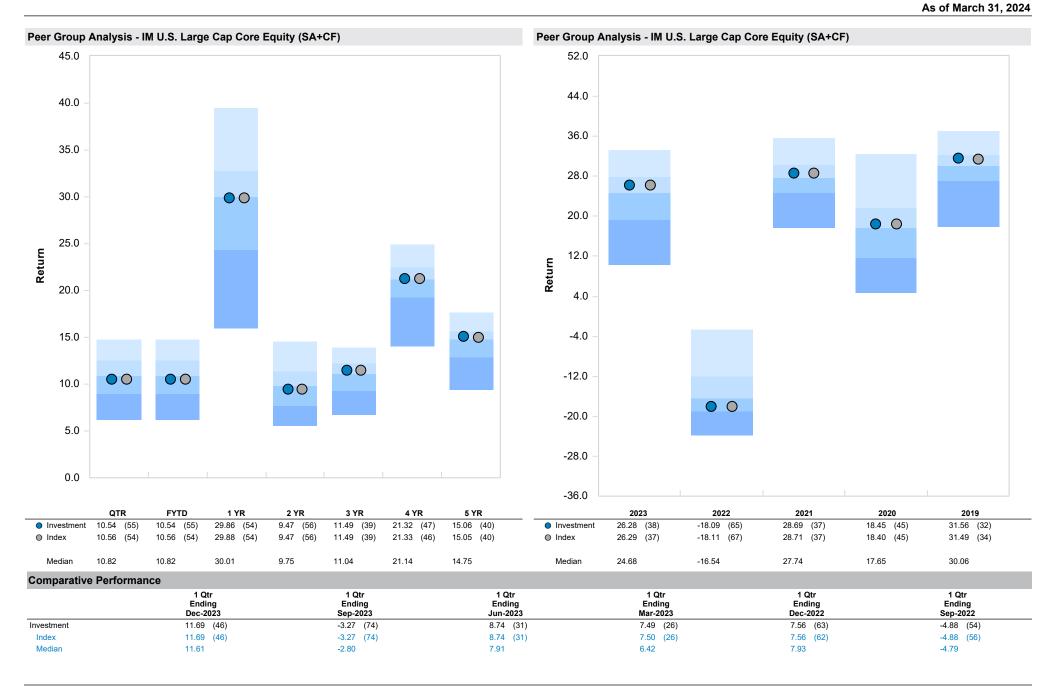
20 (100%)

0 (0%)

0 (0%)

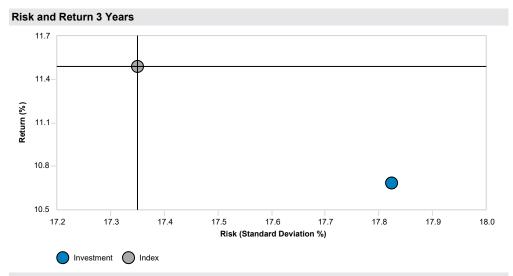
0 (0%)

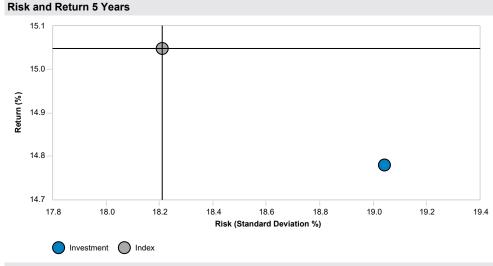
\_\_ Index

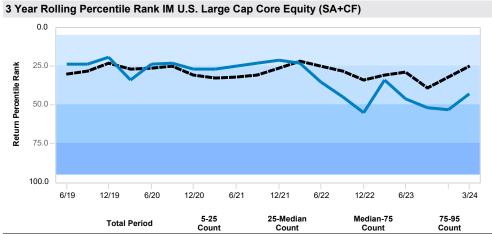


Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	10.69	17.82	0.52	100.78	8	104.46	4
Index	11.49	17.35	0.57	100.00	8	100.00	4

Historical Statistics 5 Years								
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters	
Investment	14.78	19.04	0.72	102.36	15	104.68	5	
Index	15.05	18.21	0.75	100.00	15	100.00	5	







8 (40%)

15 (75%)

3 (15%)

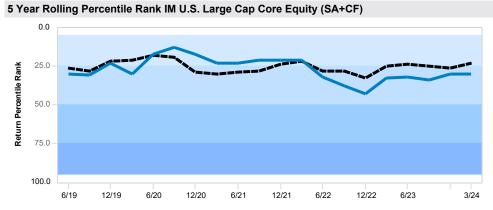
0 (0%)

0 (0%)

0 (0%)

9 (45%)

5 (25%)

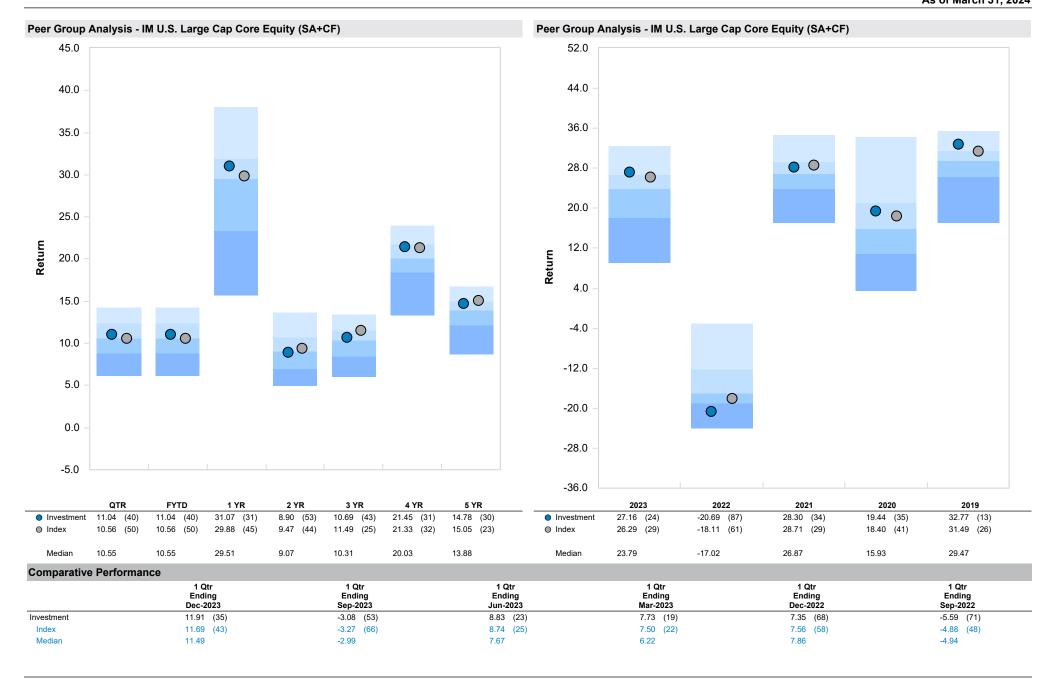


	Total Period	Count	Count	Count	Count	
Investment	20	9 (45%)	11 (55%)	0 (0%)	0 (0%)	
Index	20	10 (50%)	10 (50%)	0 (0%)	0 (0%)	

Investment

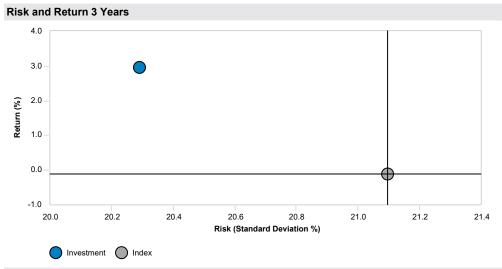
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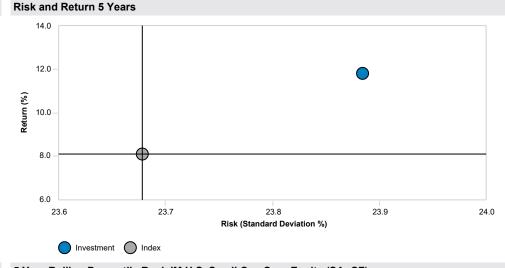
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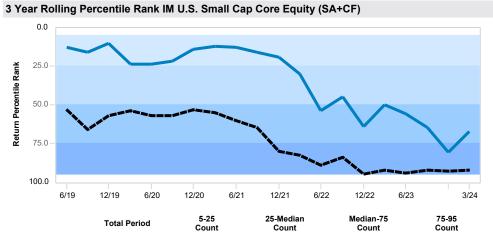


Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	2.96	20.29	0.12	98.87	7	88.95	5
Index	-0.10	21.09	-0.02	100.00	7	100.00	5

Historical Stati	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	11.82	23.88	0.51	102.18	13	90.29	7
Index	8.10	23.68	0.36	100.00	13	100.00	7







3 (15%)

0 (0%)

5 (25%)

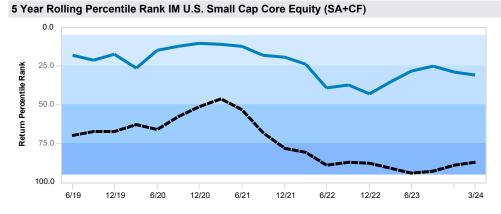
10 (50%)

1 (5%)

10 (50%)

11 (55%)

0 (0%)

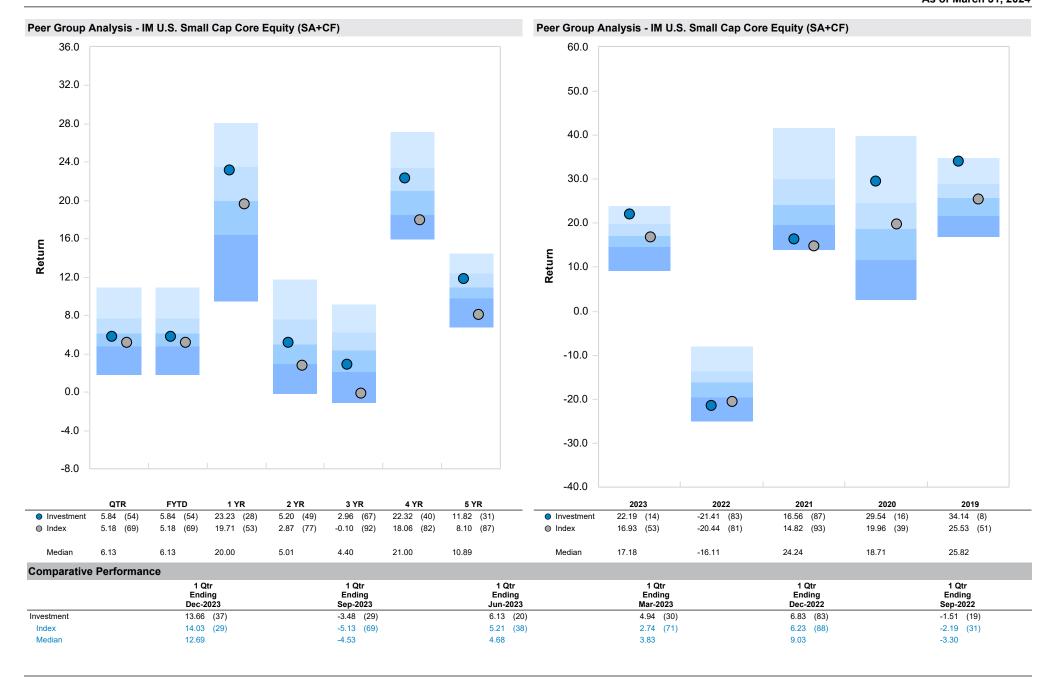


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	12 (60%)	8 (40%)	0 (0%)	0 (0%)
Index	20	0 (0%)	1 (5%)	9 (45%)	10 (50%)

Investment

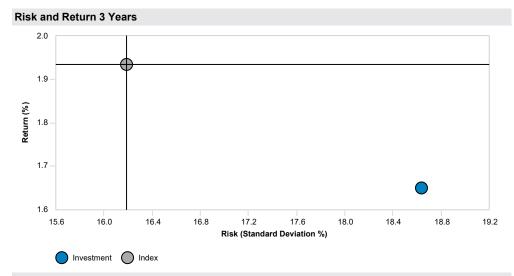
\_\_ Index

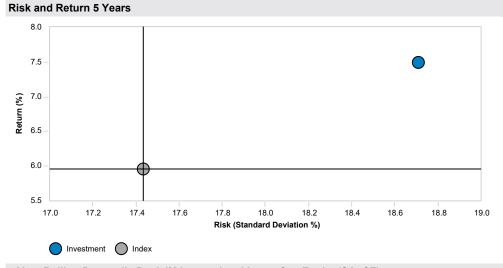
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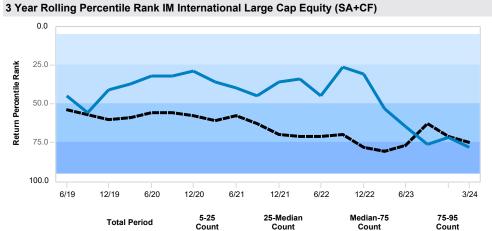


Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	1.65	18.64	0.04	112.10	7	113.36	5
Index	1.94	16.19	0.04	100.00	7	100.00	5

Historical Statistics 5 Years							
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.49	18.71	0.37	110.10	13	105.77	7
Index	5.97	17.44	0.31	100.00	13	100.00	7







14 (70%)

0 (0%)

4 (20%)

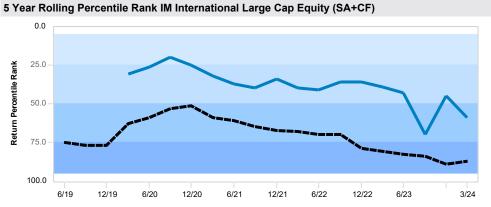
17 (85%)

2 (10%)

3 (15%)

0 (0%)

0 (0%)



	Total Period	Count	Count	Count	Count	
Investment	17	2 (12%)	13 (76%)	2 (12%)	0 (0%)	
Index	20	0 (0%)	0 (0%)	12 (60%)	8 (40%)	

25 Modian

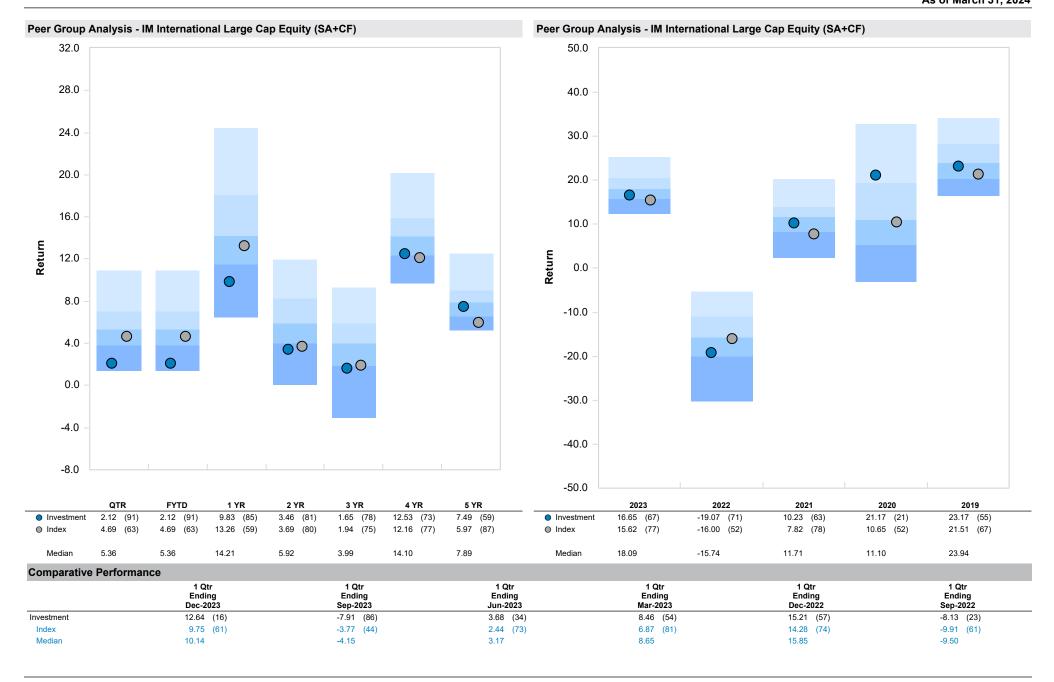
75 95

E 25

Investment

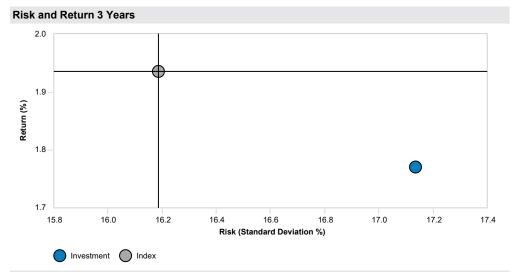
\_\_ Index

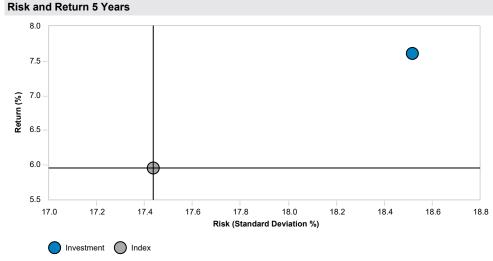
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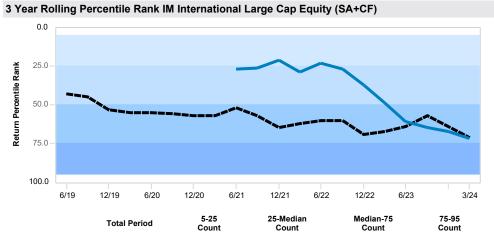


Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	1.77	17.14	0.04	106.85	7	107.91	5
Index	1.94	16.19	0.04	100.00	7	100.00	5

<b>Historical Stati</b>	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.62	18.52	0.38	109.14	14	103.92	6
Index	5.97	17.44	0.31	100.00	13	100.00	7







6 (50%)

2 (10%)

2 (17%)

0 (0%)

4 (33%)

18 (90%)

0 (0%)

0 (0%)

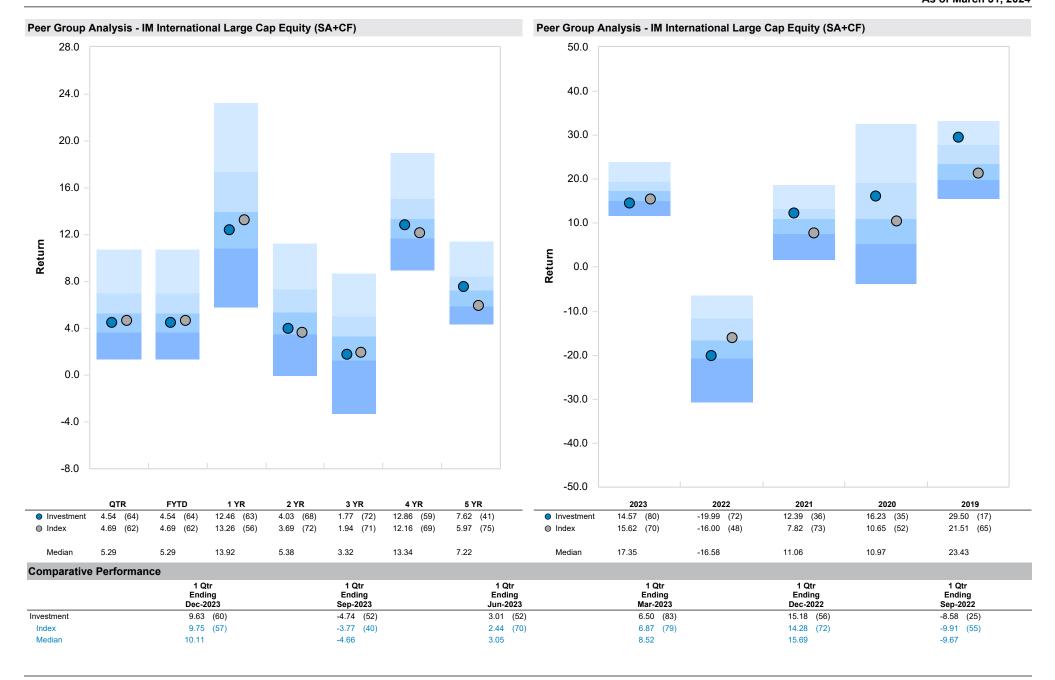


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	4	0 (0%)	4 (100%)	0 (0%)	0 (0%)
Index	20	0 (0%)	3 (15%)	17 (85%)	0 (0%)

Investment

\_\_ Index

12



	Return	Standard Deviation	Sharpe Ratio	Up Market	Up Quarters	Down Market	Down Quarters		Return	Standard Deviation	Sharpe Ratio	Up Market	Up Quarters	Down Market	Dov Quar
tment	4.66	11.27	0.24	<b>Capture</b> 101.58	8	Capture 99.51	4	Investment	N/A	N/A	N/A	Capture N/A	N/A	Capture N/A	N/
ex	4.26	11.21	0.20	100.00	8	100.00	4	Index	5.44	12.06	0.33	100.00	15	100.00	
and Return	2 Vooro							Risk and Return	o E Vooro						
4.8	o rears							5.5	15 Teals						
4.6 – 4.4 – 4.2 – 4.0			1	1.2		•	11.3	S.4 (%)							
	ent	F		rd Deviation %)					tment Index	ı	Risk (Standard	d Deviation %)			
ar Rolling Pe		k IM Global I	Equity (SA	A+CF)				5 Year Rolling F		k IM Global	Equity (SA	A+CF)			
25.0	<u> </u>							0.0 25.0 – 50.0	\_						
75.0 –	12/19 6/2	0 12/20	6/21	12/21 6/2	2 12/22	6/23	3/24	75.0 – 100.0 – 6/19	12/19 6/	20 12/20	6/21	12/21 6/2	12 12/22	6/23	3/2

6 (75%)

14 (70%)

2 (25%)

4 (20%)

0 (0%)

5 (25%)

12 (60%)

3 (15%)

0

20

\_\_ Investment

\_\_ Index

0 (0%)

2 (10%)

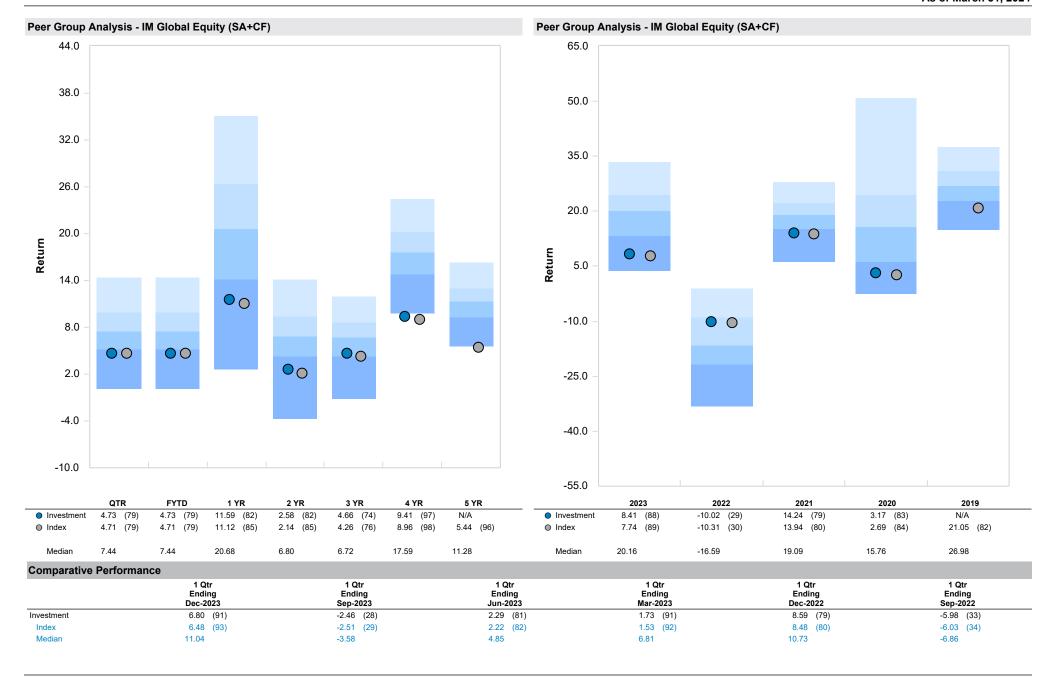
0 (0%)

0 (0%)

\_\_ Investment

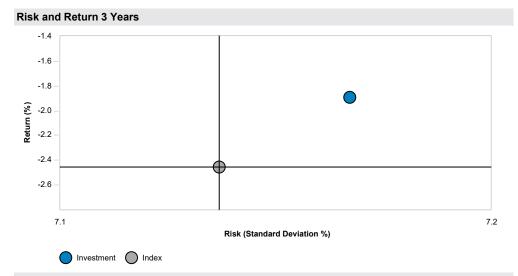
\_\_ Index

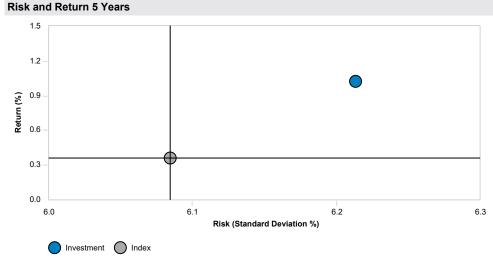
8

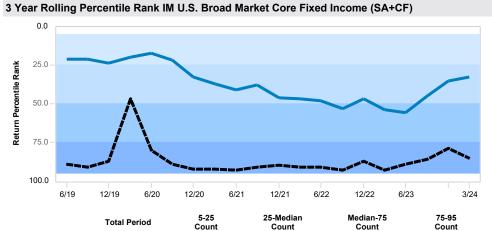


<b>Historical Stati</b>	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-1.89	7.17	-0.60	102.58	5	96.63	7
Index	-2.46	7.14	-0.68	100.00	6	100.00	6

<b>Historical Stati</b>	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	1.03	6.21	-0.13	106.88	12	98.57	8
Index	0.36	6.08	-0.24	100.00	13	100.00	7







11 (55%)

1 (5%)

3 (15%)

0 (0%)

0 (0%)

19 (95%)

6 (30%)

0 (0%)

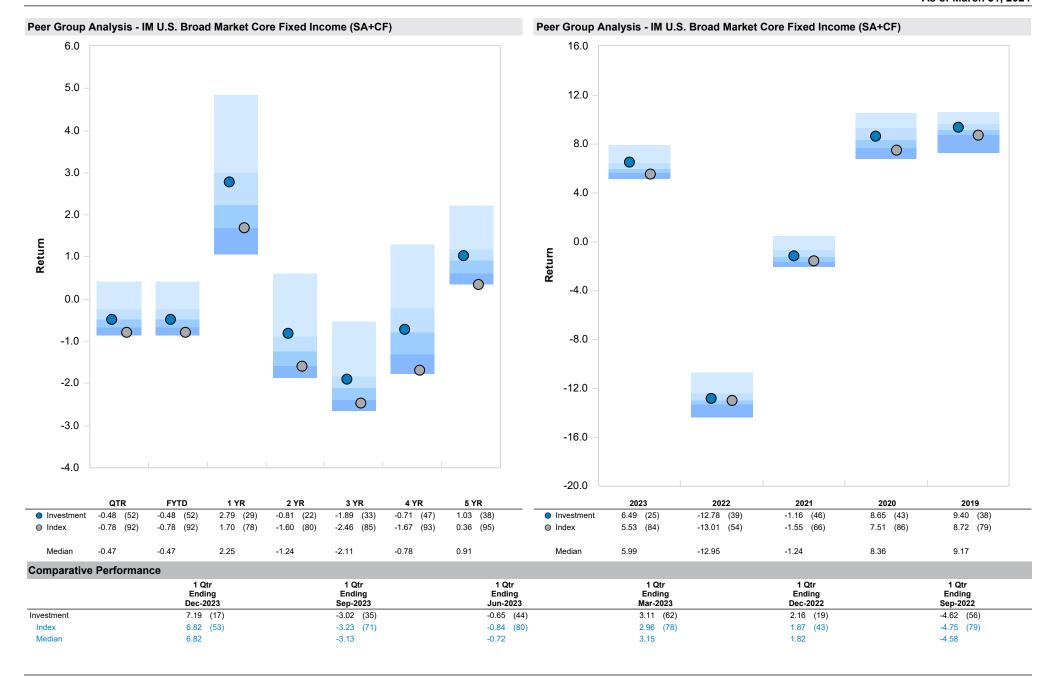


	Total Period	Count	Count	Count	Count
Investment	20	7 (35%)	13 (65%)	0 (0%)	0 (0%)
Index	20	0 (0%)	0 (0%)	1 (5%)	19 (95%)

Investment

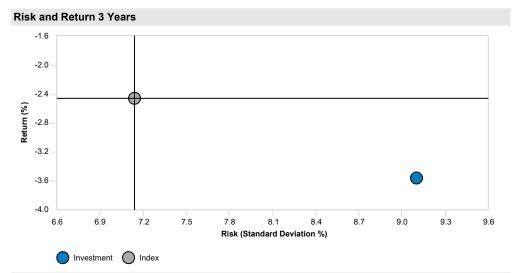
\_\_ Index

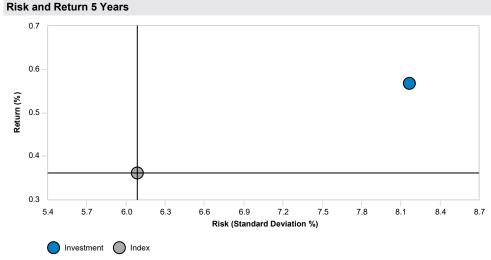
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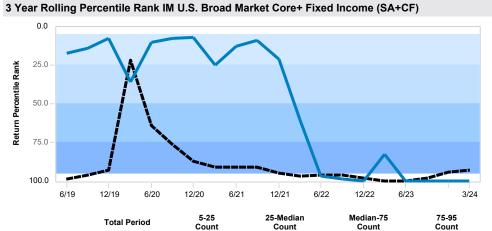


Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-3.57	9.10	-0.64	122.03	5	126.61	7
Index	-2.46	7.14	-0.68	100.00	6	100.00	6

<b>Historical Stati</b>	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	0.57	8.17	-0.14	133.91	11	131.69	9
Index	0.36	6.08	-0.24	100.00	13	100.00	7







1 (5%)

0 (0%)

1 (5%)

1 (5%)

8 (40%)

18 (90%)

10 (50%)

1 (5%)

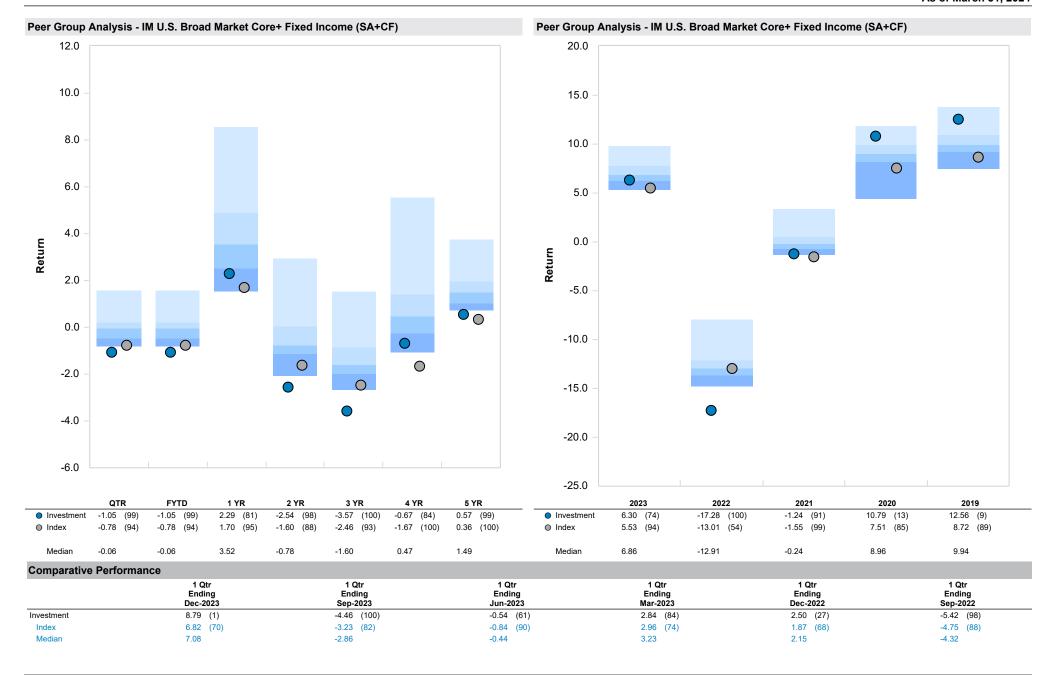


	Total Period	Count	Count	Count	Count	
Investment	20	11 (55%)	1 (5%)	0 (0%)	8 (40%)	
Index	20	0 (0%)	0 (0%)	1 (5%)	19 (95%)	

Investment

\_\_ Index

20



Capture   Capt		Datum	Standard	Sharpe	Up Market	Up	Down	Down		Detum	Standard	Sharpe	Up Market	Up	Down	Dov
Risk and Return 5 Years  Risk and Return 5 Years  Risk (Standard Deviation %)				Ratio	Capture	Quarters	Capture				Deviation	Ratio	Capture		Capture	Quar
Risk and Return 5 Years  2.5  2.5  2.5  2.5  2.5  2.5  2.5  2.	stment															7
26 28 28 29 29 21 20 Risk (Standard Deviation %) Risk (Sta		-0.33	7.00	-0.40	100.00	· ·	100.00	Ü	index	2.40	0.14	0.10	100.00	15	100.00	,
2.5	c and Return 3	Years							Risk and Retur	n 5 Years						
0.8 - 0.8 -	-0.4								2.6							
22 - 21 6.1 Risk (Standard Deviation %)  Investment Investment Index  ARROlling Percentile Rank IM U.S. TIPS (SA+CF)  5 Year Rolling Percentile Rank IM U.S. TIPS (SA+CF)  5 Year Rolling Percentile Rank IM U.S. TIPS (SA+CF)	-0.6 —								2.5 –	<del></del>						
22 - 21 6.1 Risk (Standard Deviation %)  Investment Investment Index  ARROlling Percentile Rank IM U.S. TIPS (SA+CF)  5 Year Rolling Percentile Rank IM U.S. TIPS (SA+CF)  5 Year Rolling Percentile Rank IM U.S. TIPS (SA+CF)									<b>%</b> 2.4 –							
7.0 Risk (Standard Deviation %)  Investment Index  ar Rolling Percentile Rank IM U.S. TIPS (SA+CF)  5 Year Rolling Percentile Rank IM U.S. TIPS (SA+CF)  5 Year Rolling Percentile Rank IM U.S. TIPS (SA+CF)  75.0  90.0	-0.8								<b>7.3</b> 2.3 –							
7.0	-1.0 —								2.2 —							
7.0																
To a resulting Percentile Rank IM U.S. TIPS (SA+CF)  5 Year Rolling Percentile Rank IM U.S. TIPS (SA+CF)  5 Year Rolling Percentile Rank IM U.S. TIPS (SA+CF)  5 Year Rolling Percentile Rank IM U.S. TIPS (SA+CF)  75.0  75.0  6/19 12/19 6/20 12/20 6/21 12/21 6/22 12/22 6/23 3/24			1													
0.0 25.0 50.0 75.0 100.0 6/19 12/19 6/20 12/20 6/21 12/21 6/22 12/22 6/23 3/24	7.0		 					7.2			ı					
25.0 50.0 75.0 100.0 6/19 12/19 6/20 12/20 6/21 12/21 6/22 12/22 6/23 3/24	Investme			Risk (Standard				7.2	6.1 Inves			Risk (Standard	Deviation %)			
50.0 - 100.0 - 6/19 12/19 6/20 12/20 6/21 12/21 6/22 12/22 6/23 3/24 - 100.0 - 6/19 12/19 6/20 12/20 6/21 12/21 6/22 12/22 6/23	Investme			Risk (Standard				7.2	6.1 Inves  5 Year Rolling I			Risk (Standard	Deviation %)			
100.0 6/19 12/19 6/20 12/20 6/21 12/21 6/22 12/22 6/23 3/24 6/19 12/19 6/20 12/20 6/21 12/21 6/22 12/22 6/23	Investme			Risk (Standard				7.2	5 Year Rolling I			Risk (Standard	Deviation %)			
100.0 6/19 12/19 6/20 12/20 6/21 12/21 6/22 12/22 6/23 3/24 6/19 12/19 6/20 12/20 6/21 12/21 6/22 12/22 6/23	Investme			Risk (Standard				7.2	5 Year Rolling I			Risk (Standard	Deviation %)			
6/19 12/19 6/20 12/20 6/21 12/21 6/22 12/22 6/23 3/24 6/19 12/19 6/20 12/20 6/21 12/21 6/22 12/22 6/23	Investme			Risk (Standard				7.2	5 Year Rolling I			Risk (Standard	Deviation %)	~~~~		
	Investment of the control of the con			Risk (Standard				7.2	5 Year Rolling I			Risk (Standard	Deviation %)			
	Investment of the control of the con			Risk (Standard				7.2	5 Year Rolling No.0 25.0 - 50.0 - 75.			Risk (Standard	Deviation %)			

6 (30%)

0 (0%)

12 (60%)

1 (5%)

16

20

\_\_ Investment

\_\_ Index

0 (0%)

6 (30%)

2 (13%)

14 (70%)

8 (50%)

0 (0%)

6 (38%)

0 (0%)

\_\_ Investment

\_\_ Index

20

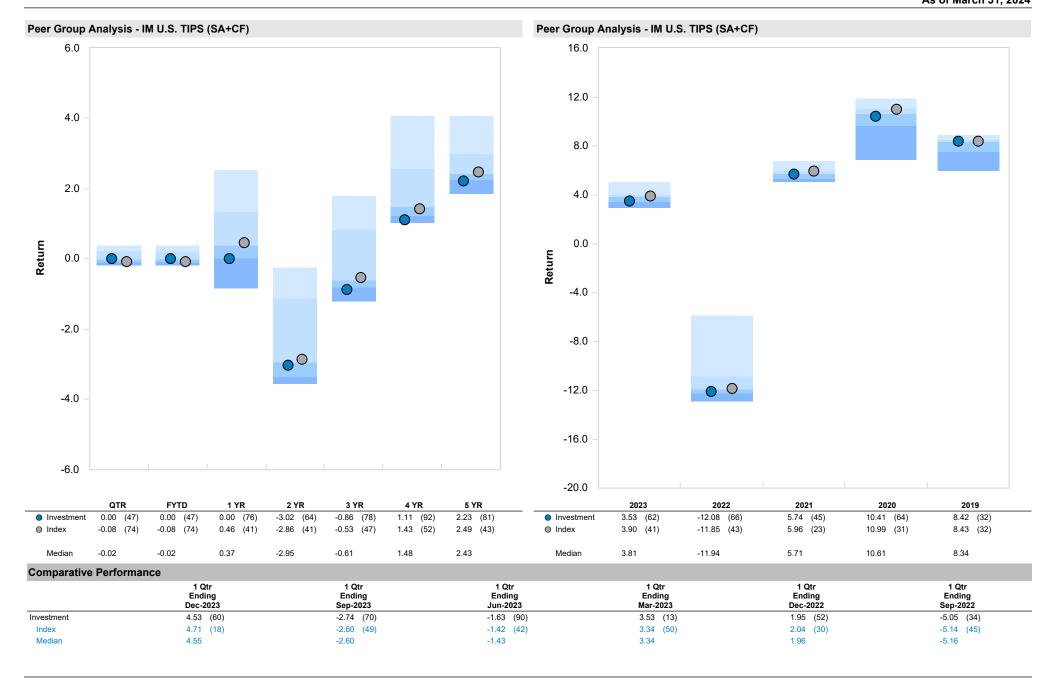
20

0 (0%)

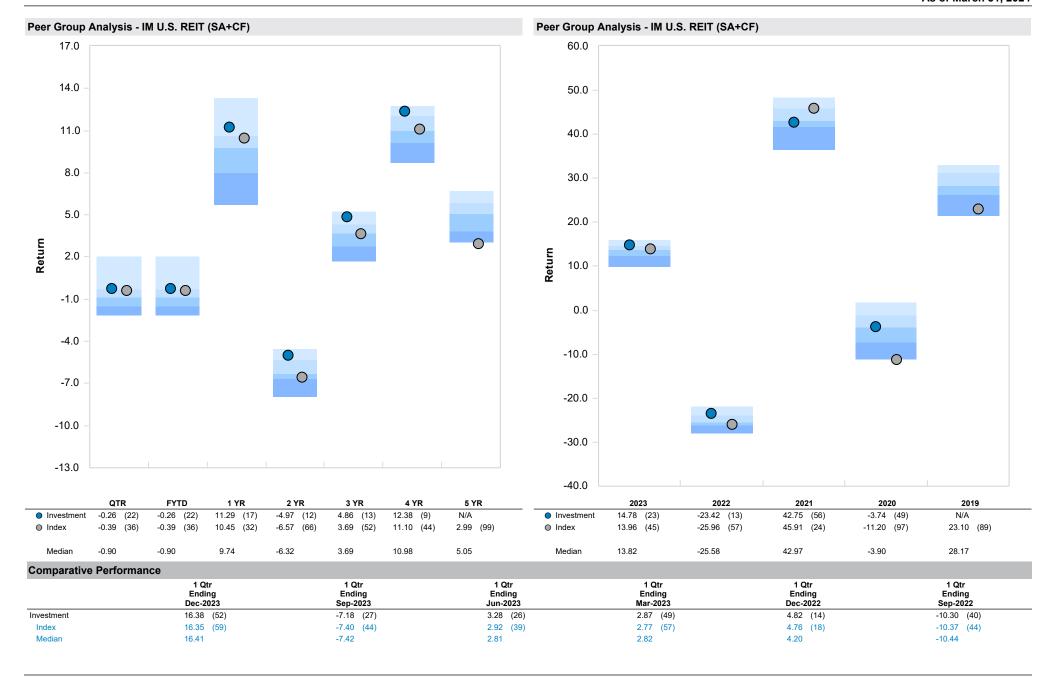
6 (30%)

2 (10%)

13 (65%)



								<b>Historical Statis</b>	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Dow Quarte
estment dex	4.86 3.69	21.00 21.35	0.21 0.16	100.57 100.00	7 7	97.09 100.00	5 5	Investment Index	N/A 2.99	N/A 21.25	N/A 0.15	N/A 100.00	N/A 13	N/A 100.00	N/A
k and Return	2 Voare							Risk and Return	n E Voore						
5.2	I S Teals							3.0	II 5 Teals						
0.2								0.0							
4.8 —											$\overline{}$				
4.4 —								(%) د							
4.4 –								Return (%)							
4.0								_							
3.6 —					<del></del>										
3.2								2.9							
20.9	21.0	21.1	21.2	2	21.3	21.4	21.5	21.2							2
20.9	21.0	21.1	21.2 tisk (Standard		21.3	21.4	21.5	21.2		ı	Risk (Standard	Deviation %)			2
	21.0				21.3	21.4	21.5		stment	ļ	Risk (Standard	Deviation %)			2
Invest		F	tisk (Standard	Deviation %)	21.3	21.4	21.5		_						2
Invest	ment Index	F	tisk (Standard	Deviation %)	21.3	21.4	21.5	Inves	_						2
Invest	ment Index	F	tisk (Standard	Deviation %)	21.3	21.4	21.5	Inves  5 Year Rolling I	_						2
lnvest rear Rolling P	ment Index	F	tisk (Standard	Deviation %)	21.3	21.4	21.5	5 Year Rolling I	_						2
lnvest rear Rolling P	ment Index	F	tisk (Standard	Deviation %)	21.3	21.4	21.5	5 Year Rolling I	_						2
lnvest rear Rolling P	ment Index	F	tisk (Standard	Deviation %)	21.3	21.4	21.5	5 Year Rolling I	_						2
lnvest rear Rolling P	ment Index	F	tisk (Standard	Deviation %)	21.3	21.4	21.5	5 Year Rolling I	_						2
ear Rolling P	ment Index	F	tisk (Standard	Deviation %)	21.3	21.4	21.5	5 Year Rolling I	_						2
Parameter (Parameter Control of the	ment Index	F	tisk (Standard	Deviation %)	21.3	21.4	21.5	5 Year Rolling I	_	ik IM U.S. RE	EIT (SA+CF				2
lnvest rear Rolling P	ment Index	k IM U.S. RE	IT (SA+CF)	Deviation %)		21.4	3/24	5 Year Rolling I	_	ak IM U.S. RE	EIT (SA+CF		2 12/22	6/23	
Part of the second of the seco	rercentile Rank	k IM U.S. RE	IT (SA+CF)	Deviation %)  12/21 6/22	12/22	6/23	3/24	5 Year Rolling I	Percentile Ran	20 12/20	6/21	12/21 6/2:			3/24
Part of the second of the seco	ercentile Rank	k IM U.S. RE	IT (SA+CF)	Deviation %)		6/23		5 Year Rolling I	Percentile Ran	20 12/20	6/21 25		2 12/22 Median-75 Count	7	3/24 5-95 ount



75-95 Count

0 (0%)

0 (0%)

Median-75

Count

6 (33%)

1 (5%)

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Dov Quar
stment	28.64	17.85	1.37	103.12	10	70.51	2	Investment	12.12	30.25	0.48	101.29	13	95.39	7
lex	20.46	18.98	0.95	100.00	8	100.00	4	Index	10.45	29.61	0.43	100.00	13	100.00	7
k and Returi	n 3 Years							Risk and Return	n 5 Years						
33.0								12.5							
30.0 —								12.0 —							
27.0 —								<b>%</b> 11.5–							
27.0 — 24.0 —								<b>Return</b> (%) 11.5–							
21.0 –						$\overline{}$		10.5 –	$\bigcirc$						
18.0	17.8	8.0 18.	2 18.4 Risk (Standard		18.8	19.0	19.2	10.0	29.6 29.7		29.9 Risk (Standard		30.1 30	.2 30.3	
_	stment							Investigation	stment						
Inve			MID (ME)					5 Year Rolling F	Percentile Ran	k IM Energy	MLP (MF)				
	Percentile Ran	k IM Energy	IVILE (IVII )												
	Percentile Ran	k IM Energy	WILF (WII )					0.0	-9	<b>X</b>					
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ear Rolling F 0.0 25.0	Percentile Ran	k IM Energy						turn Percentile Rank  -0.05							

75-95 Count

0 (0%)

5 (25%)

Median-75

Count

8 (40%)

1 (5%)

5-25 Count

1 (6%)

11 (55%)

**Total Period** 

18

20

\_\_ Investment

\_\_ Index

25-Median

Count

11 (61%)

8 (40%)

\_\_ Investment

\_\_ Index

5-25

Count

1 (5%)

10 (50%)

**Total Period** 

20

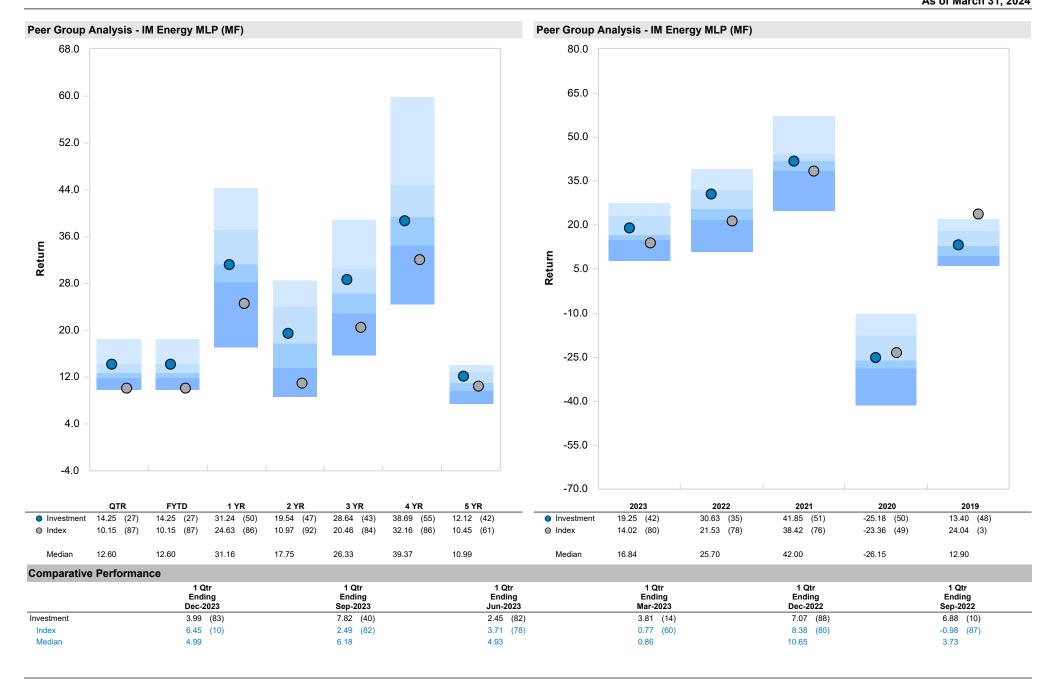
20

25-Median

Count

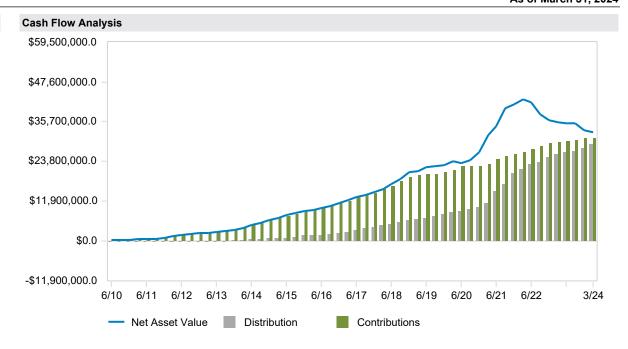
11 (55%)

4 (20%)



Cash Flow Summary	
Capital Committed:	\$34,500,000
Capital Invested:	\$9,515,686
Total Contributions:	\$30,788,674
Remaining Capital Commitment:	\$4,080,081
Total Distributions:	\$29,079,247
Market Value:	\$32,572,047
Inception Date:	05/01/2010
Inception IRR:	15.5

2.0



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	738,844	157,077	11.5	1.9
Adams Street 2010 EM Fund	Fund Of Funds	2010	Diversified	500,000	449,000	508,434	387,243	9.8	2.0
Adams Street 2010 Non-US Fund	Fund Of Funds	2010	Diversified	1,500,000	1,350,750	2,044,445	565,576	12.6	1.9
Adams Street 2010 US Fund	Fund Of Funds	2010	Diversified	2,500,000	2,202,500	4,136,394	1,341,806	16.0	2.5
Adams Street 2013 Global Fund	Fund Of Funds	2013	Diversified	5,000,000	4,634,201	4,925,354	4,651,872	12.9	2.1
Adams Street 2015 Global	Fund Of Funds	2015	Diversified	6,500,000	5,781,603	5,029,915	7,721,794	19.9	2.2
Adams Street 2017 Global Fund	Fund Of Funds	2017	Diversified	6,000,000	5,119,421	2,081,403	7,288,159	17.1	1.8
Aberdeen Global	Fund Of Funds	2011	Other	5,000,000	4,950,000	9,055,012	3,107,217	15.4	2.5
Adams Street 2019 Global	Fund Of Funds	2019	Diversified	7,000,000	5,820,699	559,446	7,351,303	17.4	1.4
Private Equity Composite	Total Fund		Hybrid	34,500,000	30,788,674	29,079,247	32,572,047	15.5	2.0

TVPI:

Cash Flow	Summary
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Capital Committed: \$21,000,000 Capital Invested: \$2,670,227 **Total Contributions:** \$20,290,736 Remaining Capital Commitment: \$709,264 **Total Distributions:** \$4,316,618 \$21,299,604 Market Value:

Inception Date: 09/30/2018 Inception IRR: 5.5 TVPI:

1.3

## **Cash Flow Analysis** \$30,000,000.0 \$24,000,000.0 \$18,000,000.0 \$12,000,000.0 \$6,000,000.0

3/20

9/20

Distribution

3/21

9/21

Contributions

3/22

9/22

3/23

9/23

3/24

9/19

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	3,509,479	4,465,020	7.2	1.3
Grosvenor PC	Other	2016	Other	14,000,000	14,000,000	807,139	16,834,584	4.9	1.3
Private Credit Composite	Total Fund		Hybrid	21,000,000	20,290,736	4,316,618	21,299,604	5.5	1.3

9/18

3/19

Net Asset Value

\$0.0

-\$6,000,000.0

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Fund	0.38	507,666,566	1,919,617	
Domestic Equity Composite	0.10	97,276,797	99,840	
NTAM S&P 500	0.02	62,033,948	12,407	0.02 % of Assets
PIMCO Stock Plus		20,670,730	- -	
Wellington Small Cap	0.60	14,572,119	87,433	0.60 % of Assets
nternational Equity Composite	0.57	88,532,569	501,482	
Harding Loevner	0.58	43,631,414	254,526	0.80 % of First \$20 M 0.40 % Thereafter
Neuberger Berman CIT	0.55	44,901,155	246,956	0.55 % of Assets
Global Low Volatility Equity Composite	0.06	52,064,396	31,239	
BlackRock MSCI ACWI Min Vol	0.06	52,064,396	31,239	0.06 % of Assets
Core Fixed Income Composite	0.26	114,571,317	297,438	
Baird Advisors	0.22	58,776,367	130,053	0.25 % of First \$25 M 0.20 % Thereafter
Western Asset Management	0.30	55,794,951	167,385	0.30 % of First \$100 M 0.15 % Thereafter
Total Real Assets Composite	0.53	98,910,439	524,165	
TIPS Composite	0.15	21,862,700	32,794	
Brown Brothers Harriman	0.15	21,862,700	32,794	0.15 % of Assets
Real Estate Composite	0.50	24,669,464	123,347	
Centersquare	0.50	24,669,464	123,347	0.50 % of First \$50 M 0.40 % Thereafter
Commodities Composite	0.65	24,812,953	161,284	
Wellington Commodities	0.65	24,812,953	161,284	0.65 % of Assets
Midstream Energy Composite	0.75	27,565,322	206,740	
Harvest MLP	0.75	27,565,322	206,740	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.

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Private Equity Composite	0.93	32,572,047	303,987	
Adams Street 2010 Direct Fund	2.00	157,077	3,142	2.00 % of Assets
Adams Street 2010 EM Fund	1.00	387,243	3,872	1.00 % of Assets
Adams Street 2010 Non-US Fund	1.00	565,576	5,656	1.00 % of Assets
Adams Street 2010 US Fund	1.00	1,341,806	13,418	1.00 % of Assets
Adams Street 2013 Global Fund	1.00	4,651,872	46,519	1.00 % of Assets
Adams Street 2015 Global	1.00	7,721,794	77,218	1.00 % of Assets
Adams Street 2017 Global Fund	1.00	7,288,159	72,882	1.00 % of Assets
Adams Street 2019 Global	1.00	7,351,303	73,513	1.00 % of Assets
Aberdeen Global	0.25	3,107,217	7,768	0.25 % of Assets
Private Credit Composite	0.76	21,299,604	161,467	
50 South Capital Private Credit	0.60	4,465,020	26,790	0.60 % of Assets
Grosvenor PC	0.80	16,834,584	134,677	0.80 % of First \$25 M 0.70 % of Next \$25 M 0.60 % Thereafter
Cash		2,439,397	•	

Historical Hybrid Composition			
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-1976		May-2010	
FT Wilshire 5000 Total Market TR Index	55.00	FT Wilshire 5000 Total Market TR Index	45.00
Blmbg. U.S. Aggregate Index	40.00	Blmbg. U.S. Aggregate Index	30.00
MSCI EAFE (Net) Index	5.00	MSCI AC World ex USA (Net)	15.00
		FTSE EPRA/NAREIT Developed Index (Net)	5.00
Jul-1998		Private Equity Composite	5.00
FT Wilshire 5000 Total Market TR Index	50.00		
Blmbg. U.S. Aggregate Index	40.00	Jul-2010	
MSCI EAFE (Net) Index	10.00	FT Wilshire 5000 Total Market TR Index	45.00
0-4 0000		Blmbg. U.S. Aggregate Index	30.00
Oct-2002		MSCI AC World ex USA (Net)	15.00
FT Wilshire 5000 Total Market TR Index	50.00	FTSE EPRA/NAREIT Developed Index (Net)	5.00
Blmbg. U.S. Aggregate Index	35.00	Private Equity Policy Index	5.00
MSCI EAFE (Net) Index	15.00		
Apr-2006		Jan-2013	
FT Wilshire 5000 Total Market TR Index	55.00	FT Wilshire 5000 Total Market TR Index	40.00
Blmbg. U.S. Aggregate Index	30.00	Blmbg. U.S. Aggregate Index	30.00
	15.00	MSCI AC World ex USA (Net)	15.00
MSCI EAFE (Net) Index	15.00	FTSE EPRA/NAREIT Developed Index (Net)	5.00
Jul-2006		Private Equity Policy Index	5.00
FT Wilshire 5000 Total Market TR Index	55.00	Bloomberg Commodity Index Total Return	5.00
Blmbg. U.S. Aggregate Index	30.00	Any 2045	
MSCI AC World ex USA (Net)	15.00	Apr-2015	22.50
meer to train ax acre (real)	10.00	FT Wilshire 5000 Total Market TR Index	22.50
Jul-2009		Blmbg. U.S. Aggregate Index	25.00
FT Wilshire 5000 Total Market TR Index	50.00	MSCI AC World ex USA (Net)	22.50
Blmbg. U.S. Aggregate Index	30.00	FTSE EPRA/NAREIT Developed Index (Net)	5.00
MSCI AC World ex USA (Net)	15.00	Private Equity Policy Index	5.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00	Bloomberg Commodity Index Total Return	5.00
, ,		S&P MLP Index	5.00
Apr-2010		Bloomberg U.S. TIPS Index	10.00
FT Wilshire 5000 Total Market TR Index	50.00	Dec-2018	
Blmbg. U.S. Aggregate Index	30.00	FT Wilshire 5000 Total Market TR Index	22.50
MSCI AC World ex USA (Net)	15.00	Blmbg. U.S. Aggregate Index	25.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00	MSCI AC World ex USA (Net)	23.00
		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
<b>Jul-2007</b> 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-2020 Bloomberg U.S. TIPS Index Dow Jones U.S. Select REIT Alerian MLP Index Bloomberg Commodity Index Total Return
Oct-2019 Bloomberg U.S. TIPS Index Dow Jones U.S. Select REIT Alerian MLP Index	

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

Bloomberg Commodity Index Total Return

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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