

Investment Performance Review  
Period Ending September 30, 2023

# Lake Worth Beach General Employees' Retirement System

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# 3rd Quarter 2023 Market Environment



## The Economy

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

## Equity (Domestic and International)

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

## Fixed Income

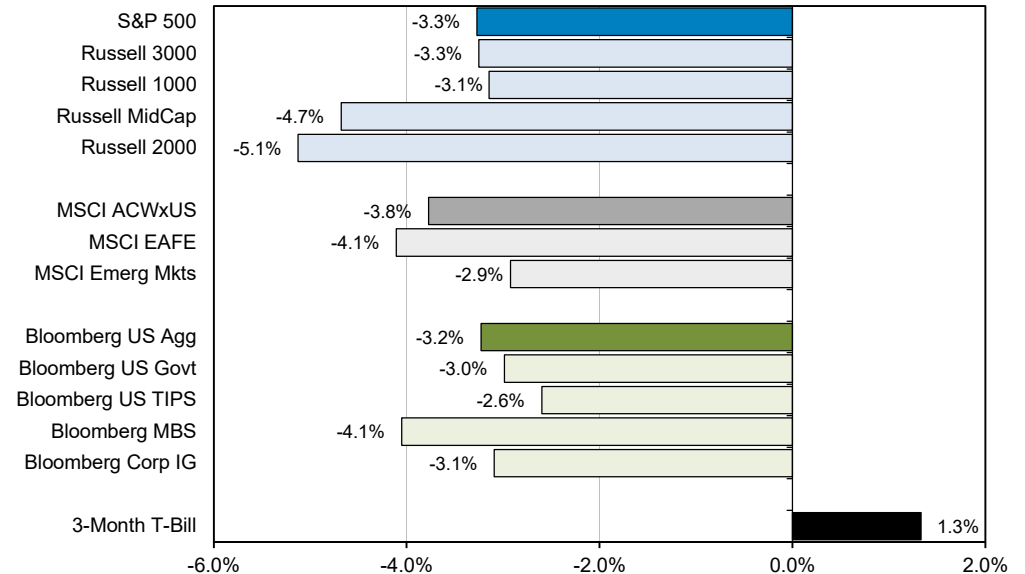
- While the US economy continues to see signs of disinflation, many of the Fed's preferred gauges continue to show inflation above their long-term target. During the quarter, the Fed maintained its inflation-fighting policy stance, increasing interest rates by 0.25% in July but opting to pause in September.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

## Market Themes

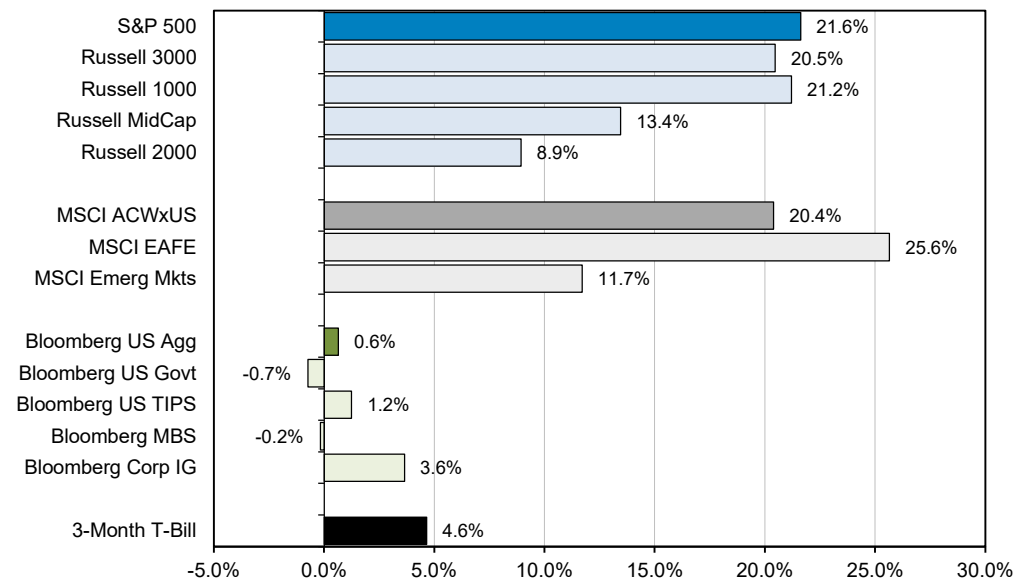
- Economies around the globe continue to struggle with taming inflation. Markets are beginning to experience pressures brought on by higher costs of debt and pricing in expectations of higher interest rates for longer than originally anticipated. US Treasury yields on the long end of the par curve have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

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

### Quarter Performance



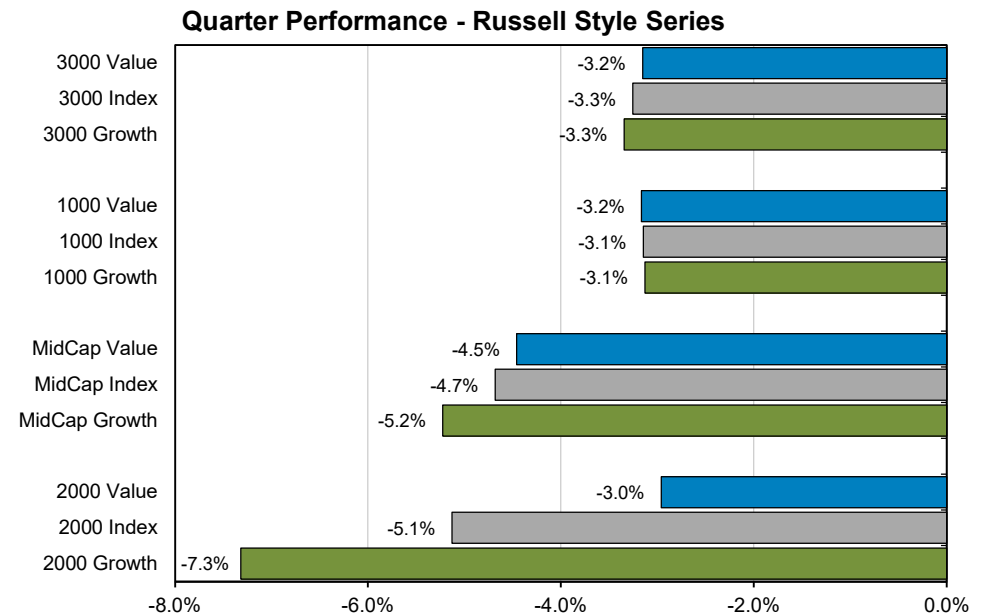
### 1-Year Performance



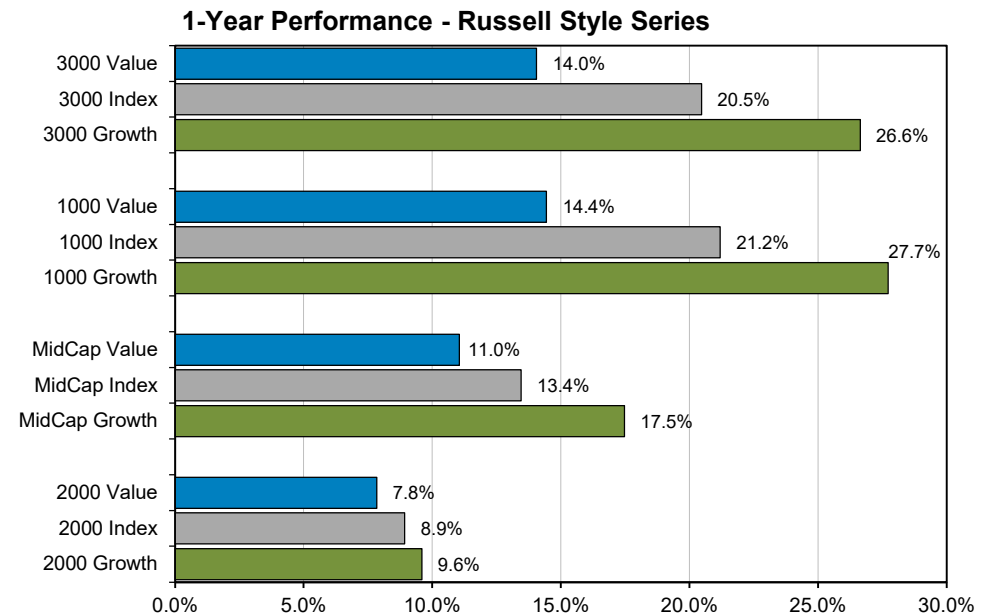
Source: Investment Metrics



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



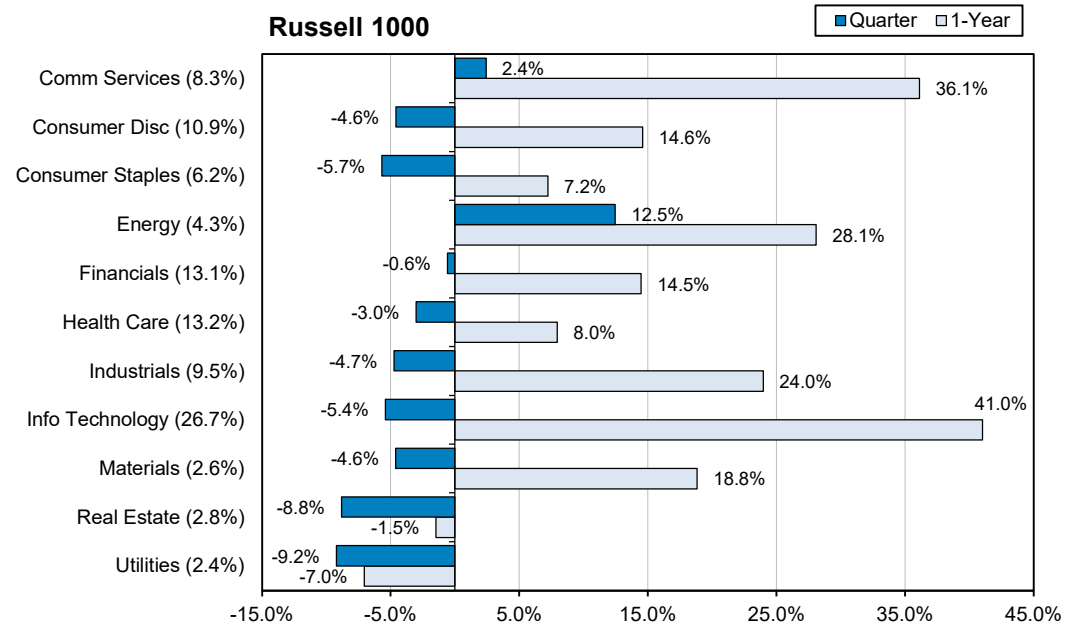
- The third quarter's reversal for domestic equity markets did not eclipse the rebound seen in the asset class during the first half of 2023 as each of the Russell indices were positive on a trailing 12-month basis. Within large-cap stocks, the Russell 1000 Growth Index maintains sizable dominance, returning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



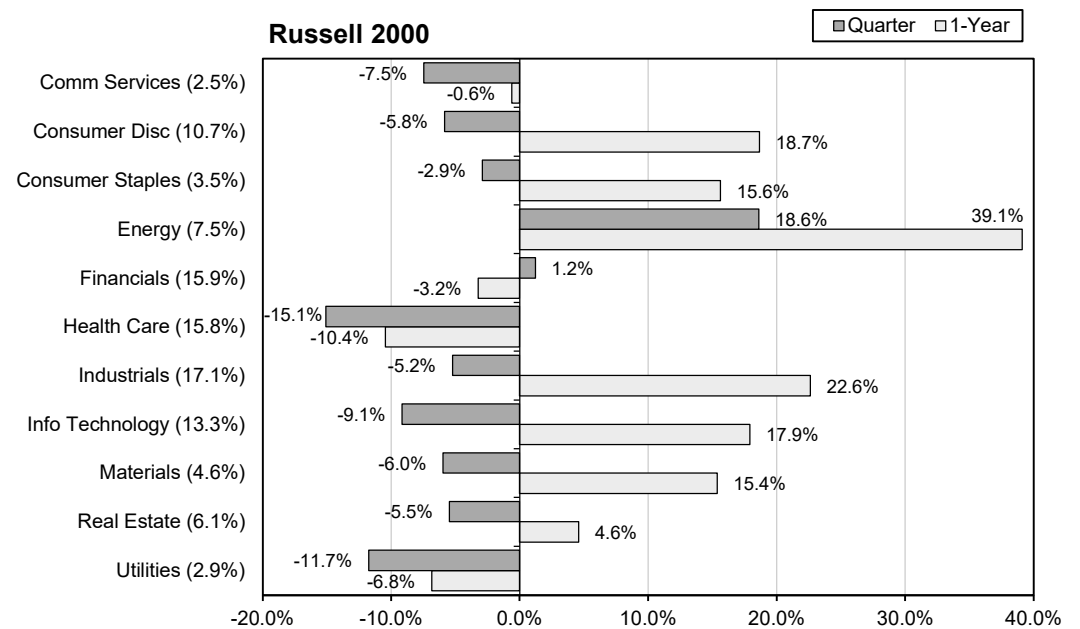
Source: Investment Metrics



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



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



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



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

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

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

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

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

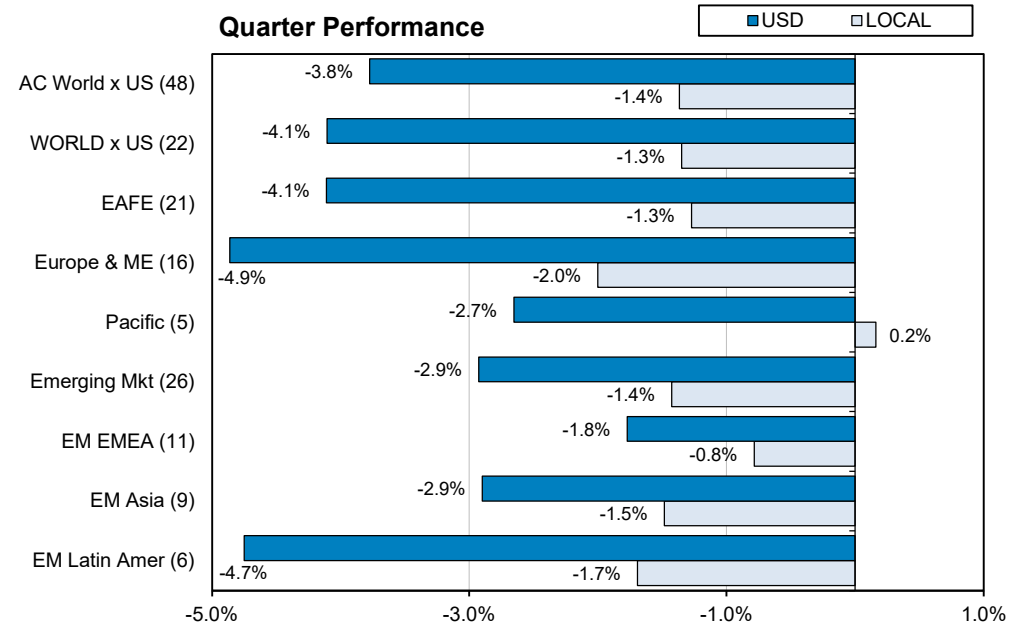
Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Tango Therapeutics Inc	0.0%	239.2%	211.0%	Health Care
PolyMet Mining Corp	0.0%	166.3%	-22.3%	Materials
Cardlytics Inc	0.0%	161.1%	75.5%	Communication Services
Telephone and Data Systems Inc	0.1%	124.8%	41.3%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

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

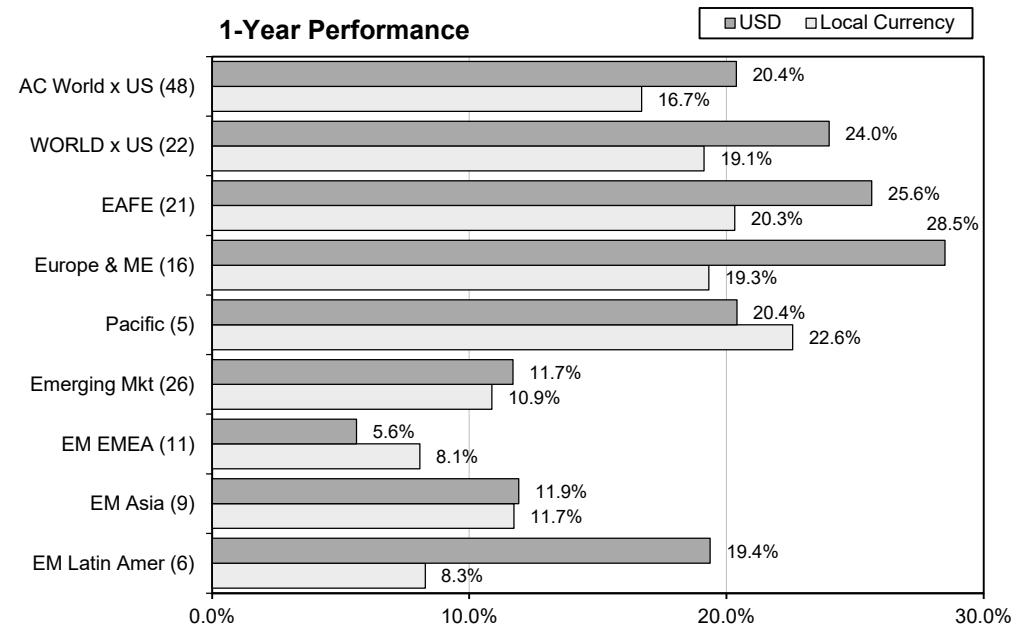
Source: Morningstar Direct



- International developed and emerging market benchmarks struggled in both US Dollar (USD) and local currency (LCL) terms. The strengthening USD contributed to weaker USD performance for non-US indices during the quarter. The developed-market MSCI EAFE Index struggled with a -4.1% return in USD and -1.3% in LCL terms for the period. The MSCI Emerging Markets Index fell by less than most developed market indices, returning -2.9% in USD and -1.4% in LCL terms.
- The EMEA index had the smallest drawdown for the quarter in USD terms, falling -1.8%. In local currency terms, the Pacific regional index exhibited a slight 0.2% gain during the quarter, the only positive return among its peers.



- Trailing one-year results were more appealing compared to the quarter's results. Much like domestic markets, trailing one-year performance for international developed and emerging markets rolled off their poor performance from 2022 resulting in strong returns for the trailing year. Additionally, LCL returns have outpaced USD returns for many developed markets due to the softening USD relative to many of the world's developed-market currencies over the year.
- Annual returns across emerging markets were broadly higher given their strong performance early in the year. Latin American results led the way with returns of 19.4% in USD and 8.3% in LCL terms. Performance in the EMEA regional benchmark detracted from emerging market index with the EMEA Index posting returns of 5.6% in USD and 8.1% in LCL terms. As a result, the broad MSCI Emerging Markets Index returned 11.7% in USD and 10.9% in LCL terms for the year.



Source: MSCI Global Index Monitor (Returns are Net)





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

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

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

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

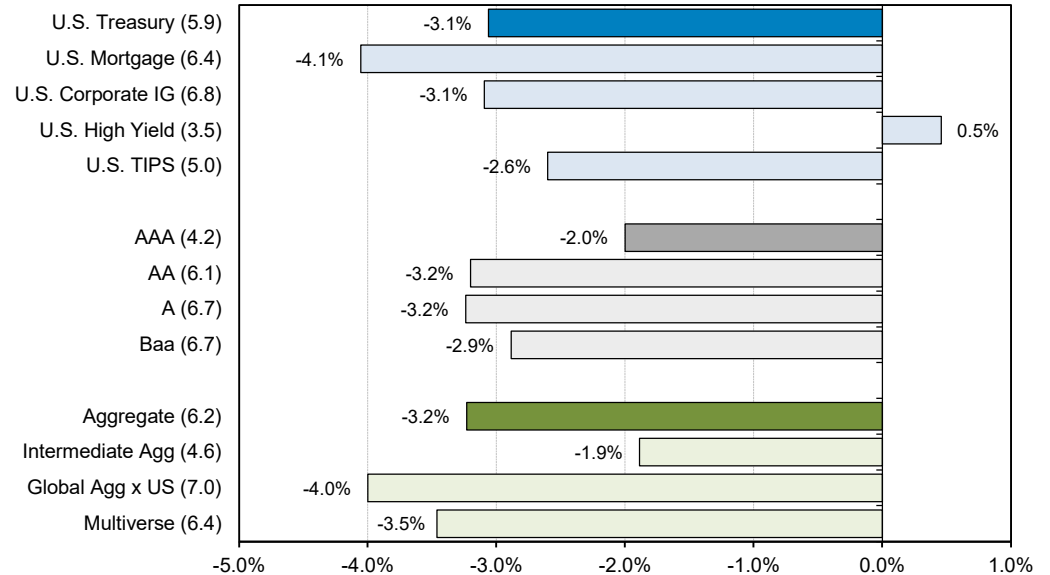
Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1-Year Return
Japan	22.9%	14.7%	-2.4%	23.3%
United Kingdom	15.3%	9.8%	-2.8%	20.0%
France	12.1%	7.7%	-7.1%	31.4%
Switzerland	9.9%	6.4%	-5.5%	13.7%
Germany	8.3%	5.3%	-7.7%	32.3%
Australia	7.4%	4.7%	-4.7%	10.4%
Netherlands	4.3%	2.7%	-14.1%	24.8%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

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

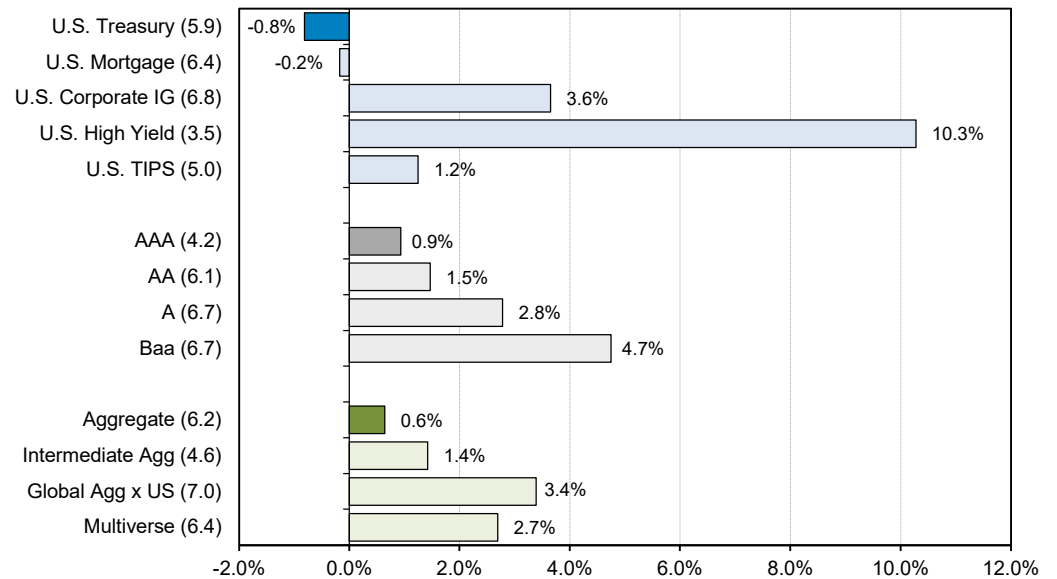


- Fixed income markets continued the decline that began in the second quarter. Yields remain elevated on the back of FOMC actions to hike policy rates throughout the year. After a challenging 2022 in fixed-income markets brought on by the largest and most rapid increase in interest rates since the early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

**Quarter Performance**



**1-Year Performance**

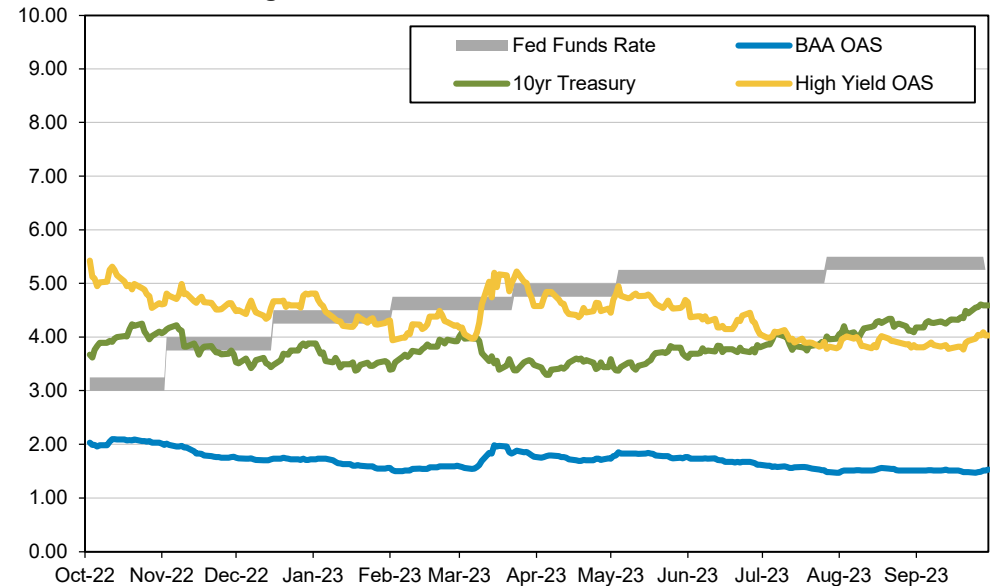


Source: Bloomberg

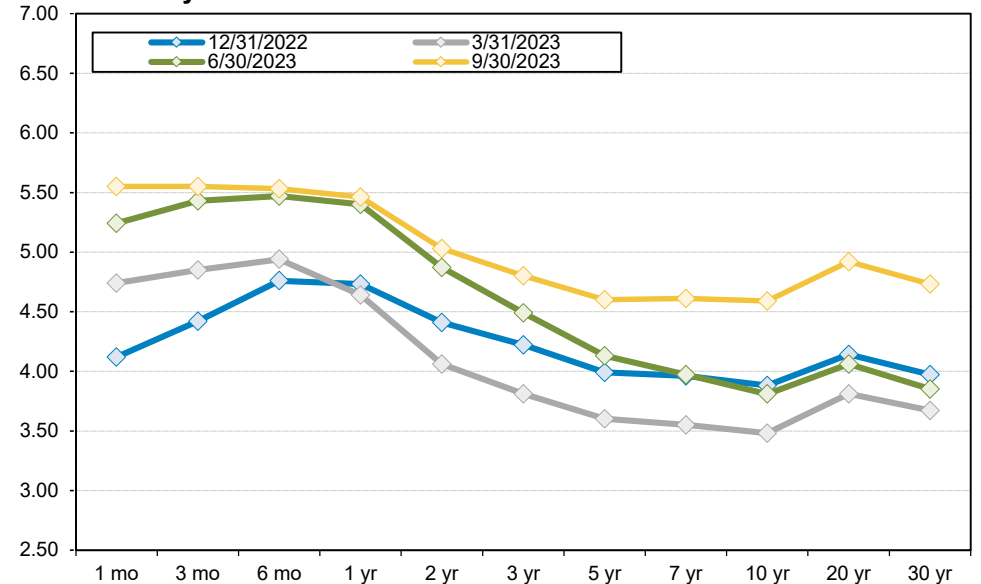


- The gray band across the graph illustrates the range of the current Fed Funds target rate. During the third quarter, the FOMC raised the lower end of its target rate range from 5.00% to 5.25% at their July meeting. While the FOMC paused further rate increases at their September meeting, several speeches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

1-Year Trailing Market Rates



Treasury Yield Curve



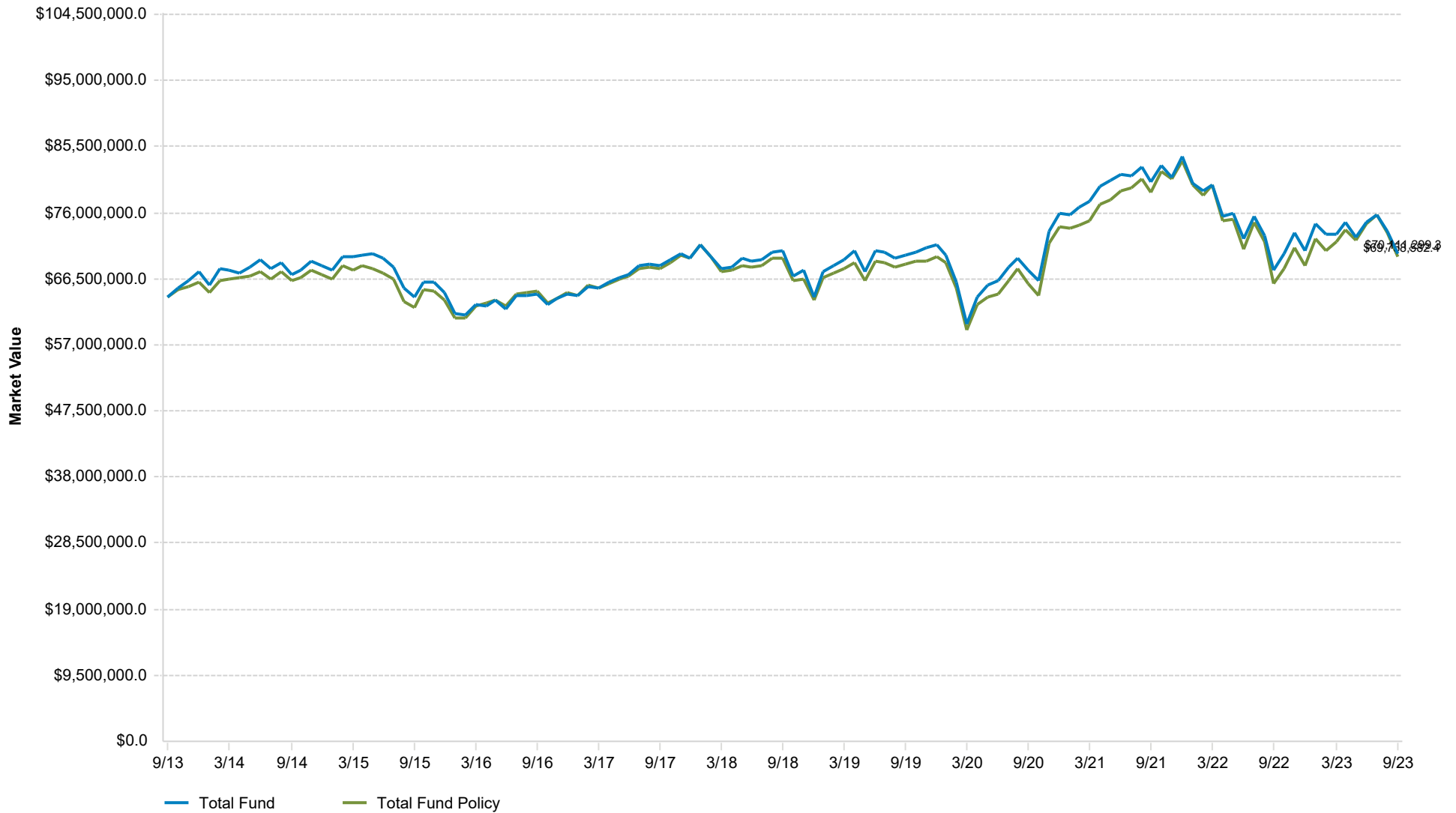
Source: US Department of Treasury, FRED (Federal Reserve of St. Louis)



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**Schedule of Investable Assets**



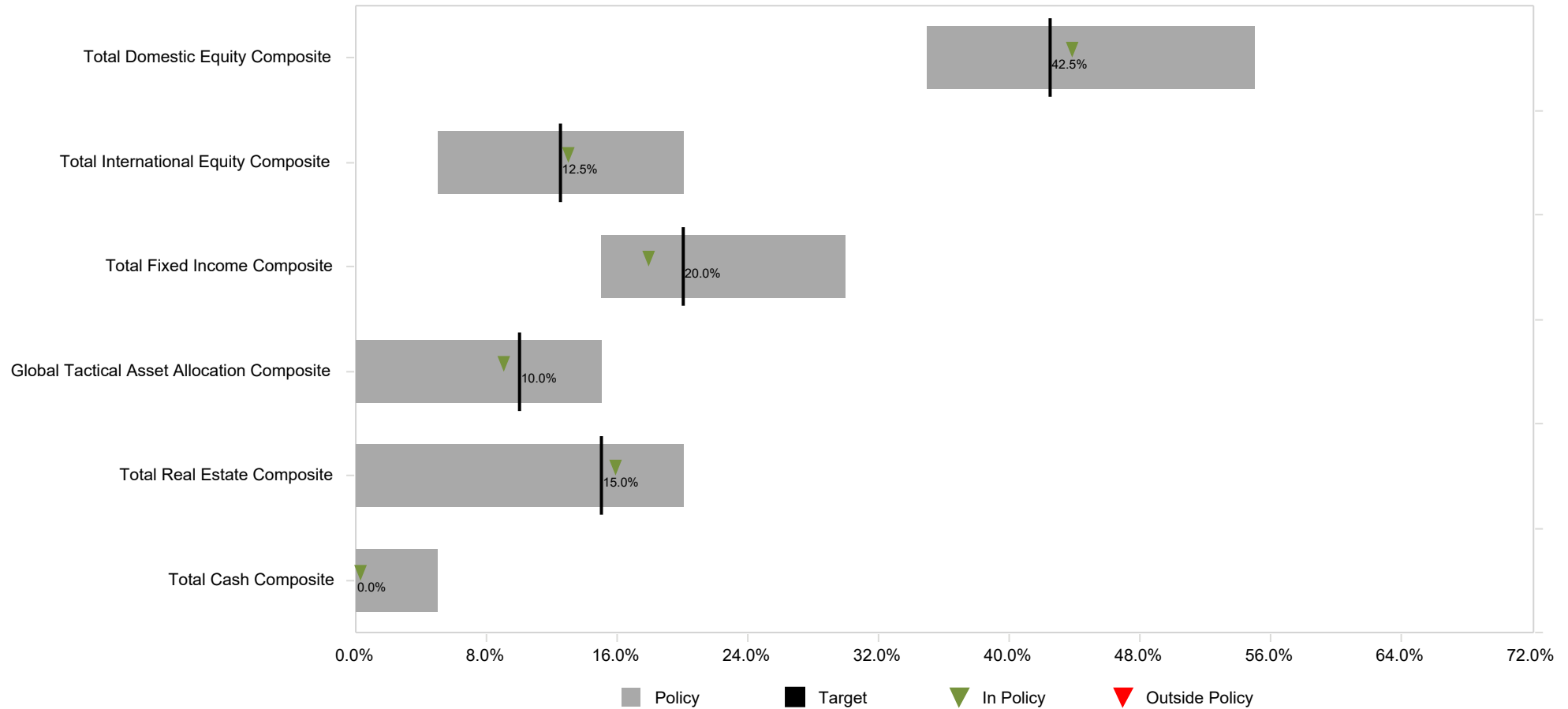
**Schedule of Investable Assets**

Periods Ending	Beginning Market Value \$	Net Cash Flow \$	Gain/Loss \$	Ending Market Value \$	%Return
10 YR	63,768,319	-41,770,278	48,113,257	70,112,299	7.30

Does not include Non-Measured Assets (NMA).



Allocation Summary



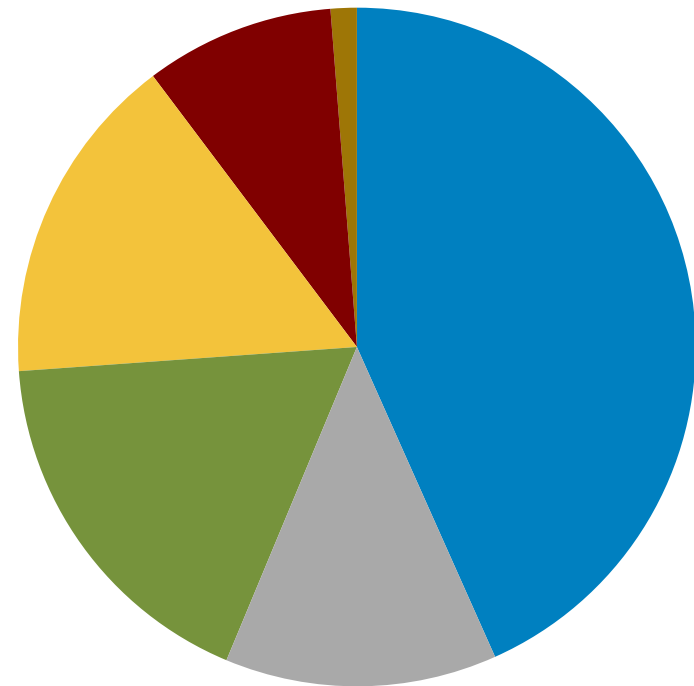
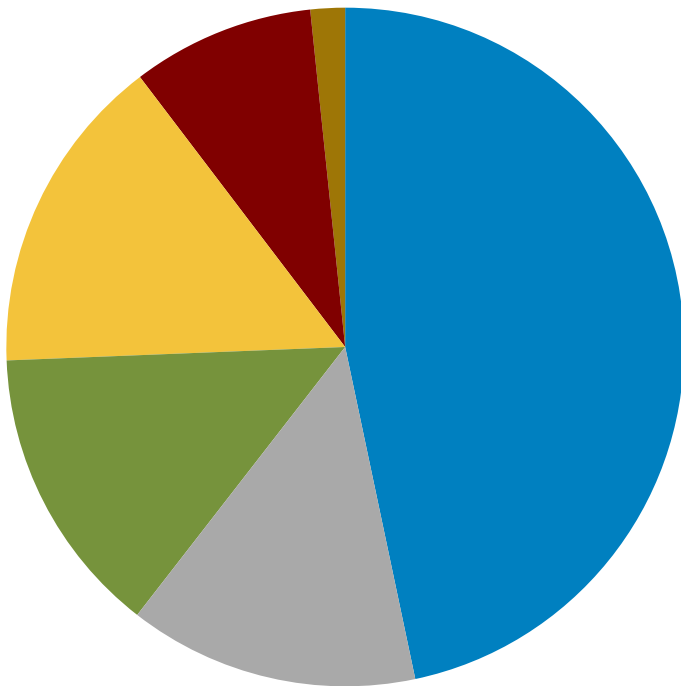
Asset Allocation Compliance

	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)	Target Rebal. (\$)	Differences (%)
<b>Total Fund</b>	<b>70,111,299</b>	<b>100.0</b>		<b>100.0</b>		<b>-</b>	<b>0.0</b>
Total Domestic Equity Composite	30,762,724	43.9	35.0	42.5	55.0	-965,422	1.4
Total International Equity Composite	9,094,919	13.0	5.0	12.5	20.0	-331,007	0.5
Total Fixed Income Composite	12,546,577	17.9	15.0	20.0	30.0	1,475,683	-2.1
Global Tactical Asset Allocation Composite	6,350,655	9.1	0.0	10.0	15.0	660,475	-0.9
Total Real Estate Composite	11,178,406	15.9	0.0	15.0	20.0	-661,711	0.9
Total Cash Composite	178,017	0.3	0.0	0.0	5.0	-178,017	0.3



Asset Allocation By Segment as of  
June 30, 2023 : \$74,515,347

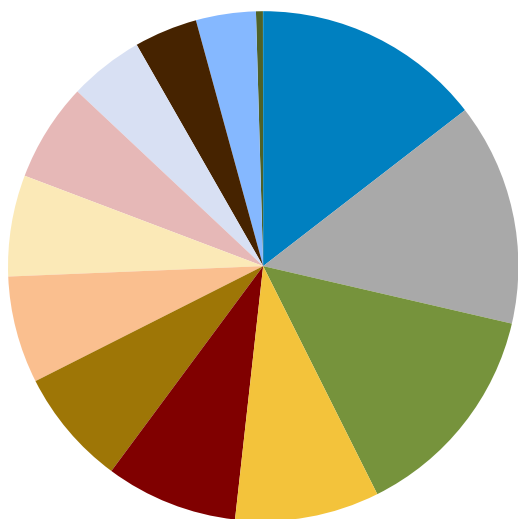
Asset Allocation By Segment as of  
September 30, 2023 : \$70,111,299



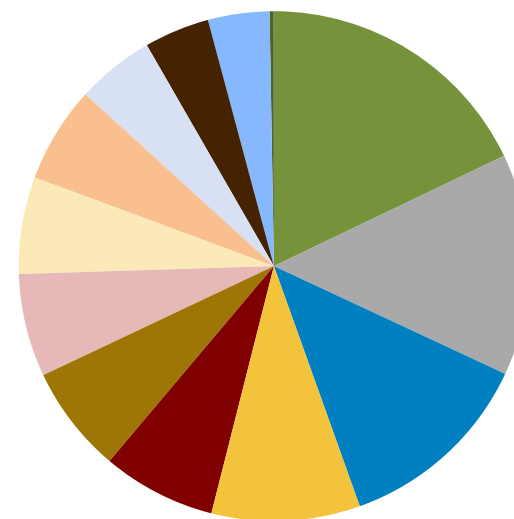
Allocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	34,788,027	46.7	Domestic Equity	30,370,677	43.3
International Equity	10,304,610	13.8	International Equity	9,094,919	13.0
Domestic Fixed Income	10,324,083	13.9	Domestic Fixed Income	12,321,443	17.6
Real Estate	11,383,548	15.3	Real Estate	11,116,660	15.9
Global Tactical Asset Allocation	6,484,090	8.7	Global Tactical Asset Allocation	6,332,043	9.0
Cash Equivalent	1,230,988	1.7	Cash Equivalent	875,557	1.2



Asset Allocation By Manager as of Jun-2023 : \$74,515,347



Asset Allocation By Manager as of Sep-2023 : \$70,111,299



Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ Cambiar Investors Equity	10,820,790	14.5	■ Richmond Capital Fixed Income	12,533,905	17.9
■ Brandywine Dynamic Value (Equity)	10,505,074	14.1	■ Brandywine Dynamic Value (Equity)	9,864,380	14.1
■ Richmond Capital Fixed Income	10,435,440	14.0	■ Cambiar Investors Equity	8,830,230	12.6
■ ARA Core Property Fund, L.P.	6,809,148	9.1	■ ARA Core Property Fund, L.P.	6,594,000	9.4
■ Fred Alger Mgmt Large Cap Growth	6,246,563	8.4	■ Fred Alger Mgmt Large Cap Growth	5,047,918	7.2
■ Dodge & Cox International (DODFX)	5,519,550	7.4	■ Dodge & Cox International (DODFX)	4,783,792	6.8
■ MFS Growth Fund R6 (MFEKX)	5,067,854	6.8	■ Intercontinental Real Estate	4,584,406	6.5
■ EuroPacific Growth Fund R6 (RERGX)	4,785,060	6.4	■ EuroPacific Growth Fund R6 (RERGX)	4,311,128	6.1
■ Intercontinental Real Estate	4,654,136	6.2	■ MFS Growth Fund R6 (MFEKX)	4,284,577	6.1
■ Blackrock Multi-Asset Income Fd (BKMIX)	3,519,254	4.7	■ Blackrock Multi-Asset Income Fd (BKMIX)	3,455,825	4.9
■ JPMorgan Income Builder (JNBZX)	2,984,653	4.0	■ JPMorgan Income Builder (JNBZX)	2,894,830	4.1
■ Fidelity Total Market Index (FSKAX)	2,828,301	3.8	■ Fidelity Total Market Index (FSKAX)	2,735,619	3.9
■ R&D Account	327,009	0.4	■ R&D Account	178,017	0.3
■ Richmond Capital TIPS	12,516	0.0	■ Richmond Capital TIPS	12,672	0.0

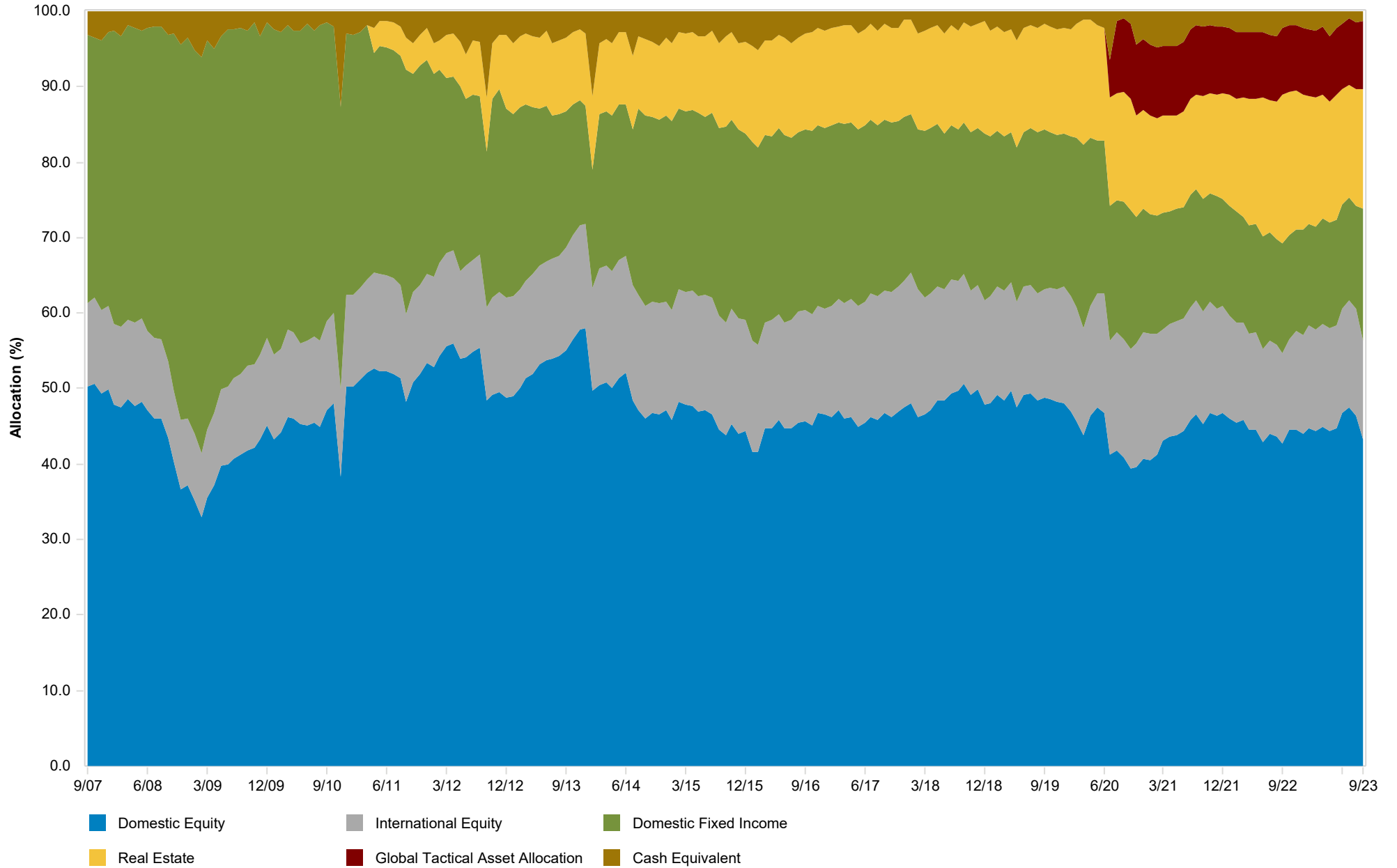




Asset Allocation History by Portfolio	Sep-2022		Dec-2022		Mar-2023		Jun-2023		Sep-2023	
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
<b>Total Equity</b>	<b>38,010,019</b>	<b>56.15</b>	<b>41,230,359</b>	<b>58.53</b>	<b>43,597,664</b>	<b>59.80</b>	<b>45,773,192</b>	<b>61.43</b>	<b>39,857,644</b>	<b>56.85</b>
<b>Total Domestic Equity</b>	<b>29,966,180</b>	<b>44.27</b>	<b>31,982,207</b>	<b>45.40</b>	<b>33,622,255</b>	<b>46.12</b>	<b>35,468,582</b>	<b>47.60</b>	<b>30,762,724</b>	<b>43.88</b>
Brandywine Dynamic Value (Equity)	8,945,692	13.21	10,218,764	14.51	10,232,863	14.04	10,505,074	14.10	9,864,380	14.07
Fred Alger Mgmt Large Cap Growth	4,840,301	7.15	4,819,737	6.84	5,479,702	7.52	6,246,563	8.38	5,047,918	7.20
MFS Growth Fund R6 (MFEKX)	3,968,658	5.86	4,079,280	5.79	4,517,798	6.20	5,067,854	6.80	4,284,577	6.11
Sawgrass Large Cap Growth	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
Cambiar Investors Equity	9,094,287	13.43	10,427,092	14.80	10,777,702	14.78	10,820,790	14.52	8,830,230	12.59
Fidelity Total Market Index (FSKAX)	3,117,243	4.60	2,437,334	3.46	2,614,189	3.59	2,828,301	3.80	2,735,619	3.90
Vanguard Total Stock Market Index (VITSX)	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00
<b>Total International Equity</b>	<b>8,043,839</b>	<b>11.88</b>	<b>9,248,152</b>	<b>13.13</b>	<b>9,975,409</b>	<b>13.68</b>	<b>10,304,610</b>	<b>13.83</b>	<b>9,094,919</b>	<b>12.97</b>
EuroPacific Growth Fund R6 (RERGX)	3,746,433	5.53	4,262,863	6.05	4,683,672	6.42	4,785,060	6.42	4,311,128	6.15
Dodge & Cox International (DODFX)	4,297,406	6.35	4,985,289	7.08	5,291,737	7.26	5,519,550	7.41	4,783,792	6.82
<b>Total Fixed Income</b>	<b>10,242,616</b>	<b>15.13</b>	<b>10,193,820</b>	<b>14.47</b>	<b>10,513,183</b>	<b>14.42</b>	<b>10,447,956</b>	<b>14.02</b>	<b>12,546,577</b>	<b>17.90</b>
Richmond Capital Fixed Income	10,230,464	15.11	10,181,572	14.45	10,500,810	14.40	10,435,440	14.00	12,533,905	17.88
Richmond Capital TIPS	12,152	0.02	12,248	0.02	12,373	0.02	12,516	0.02	12,672	0.02
<b>Global Tactical Asset Allocation Composite</b>	<b>5,991,985</b>	<b>8.85</b>	<b>6,326,324</b>	<b>8.98</b>	<b>6,486,195</b>	<b>8.90</b>	<b>6,503,906</b>	<b>8.73</b>	<b>6,350,655</b>	<b>9.06</b>
Blackrock Multi-Asset Income Fd (BKMIX)	3,188,896	4.71	3,357,598	4.77	3,469,690	4.76	3,519,254	4.72	3,455,825	4.93
JPMorgan Income Builder (JNBZX)	2,803,089	4.14	2,968,726	4.21	3,016,506	4.14	2,984,653	4.01	2,894,830	4.13
<b>Total Real Estate</b>	<b>13,435,247</b>	<b>19.85</b>	<b>12,577,851</b>	<b>17.86</b>	<b>12,032,950</b>	<b>16.50</b>	<b>11,463,284</b>	<b>15.38</b>	<b>11,178,406</b>	<b>15.94</b>
ARA Core Property Fund, L.P.	7,777,478	11.49	7,301,468	10.37	7,015,947	9.62	6,809,148	9.14	6,594,000	9.41
Intercontinental Real Estate	5,657,769	8.36	5,276,383	7.49	5,017,003	6.88	4,654,136	6.25	4,584,406	6.54
<b>Total Cash Equivalent</b>	<b>15,524</b>	<b>0.02</b>	<b>111,256</b>	<b>0.16</b>	<b>277,613</b>	<b>0.38</b>	<b>327,009</b>	<b>0.44</b>	<b>178,017</b>	<b>0.25</b>
R&D Account (Money Market)	15,524	0.02	111,256	0.16	277,613	0.38	327,009	0.44	178,017	0.25
<b>Total Fund</b>	<b>67,695,390</b>	<b>100.00</b>	<b>70,439,609</b>	<b>100.00</b>	<b>72,907,605</b>	<b>100.00</b>	<b>74,515,347</b>	<b>100.00</b>	<b>70,111,299</b>	<b>100.00</b>



Asset Allocation History by Segment



Financial Reconciliation Quarter to Date									
	Market Value 07/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 09/30/2023
<b>Total Equity</b>	<b>45,773,192</b>	<b>-4,613,146</b>	<b>33,412</b>	<b>-</b>	<b>-33,412</b>	<b>-</b>	<b>110,669</b>	<b>-1,413,072</b>	<b>39,857,644</b>
<b>Total Domestic Equity</b>	<b>35,468,582</b>	<b>-3,763,146</b>	<b>33,412</b>	<b>-</b>	<b>-33,412</b>	<b>-</b>	<b>110,669</b>	<b>-1,053,381</b>	<b>30,762,724</b>
Brandywine Dynamic Value (Equity)	10,505,074	-500,000	11,442	-	-11,442	-	64,650	-205,344	9,864,380
Fred Alger Mgmt Large Cap Growth	6,246,563	-1,000,000	8,587	-	-8,587	-	7,911	-206,555	5,047,918
MFS Growth Fund R6 (MFEKX)	5,067,854	-663,146	-	-	-	-	-	-120,131	4,284,577
Cambiar Investors Equity	10,820,790	-1,600,000	13,382	-	-13,382	-	38,109	-428,669	8,830,230
Fidelity Total Market Index (FSKAX)	2,828,301	-	-	-	-	-	-	-92,682	2,735,619
<b>Total International Equity</b>	<b>10,304,610</b>	<b>-850,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-359,691</b>	<b>9,094,919</b>
EuroPacific Growth Fund R6 (RERGX)	4,785,060	-175,000	-	-	-	-	-	-298,932	4,311,128
Dodge & Cox International (DODFX)	5,519,550	-675,000	-	-	-	-	-	-60,759	4,783,792
<b>Total Fixed Income</b>	<b>10,447,956</b>	<b>2,500,000</b>	<b>7,833</b>	<b>-</b>	<b>-7,833</b>	<b>-</b>	<b>134,250</b>	<b>-535,629</b>	<b>12,546,577</b>
Richmond Capital Fixed Income	10,435,440	2,500,000	7,833	-	-7,833	-	134,094	-535,629	12,533,905
Richmond Capital TIPS	12,516	-	-	-	-	-	156	-	12,672
<b>Global Tactical Asset Allocation</b>	<b>6,503,906</b>	<b>-11,203</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>78,477</b>	<b>-220,525</b>	<b>6,350,655</b>
Blackrock Multi-Asset Income Fd (BKMIX)	3,519,254	-	-	-	-	-	53,655	-117,083	3,455,825
JPMorgan Income Builder (JNBZX)	2,984,653	-11,203	-	-	-	-	24,822	-103,442	2,894,830
<b>Total Real Estate</b>	<b>11,463,284</b>	<b>-73,893</b>	<b>-</b>	<b>-</b>	<b>-24,161</b>	<b>-</b>	<b>94,956</b>	<b>-281,780</b>	<b>11,178,406</b>
ARA Core Property Fund, L.P.	6,809,148	-47,111	-	-	-18,184	-	49,437	-199,291	6,594,000
Intercontinental Real Estate	4,654,136	-26,782	-	-	-5,977	-	45,519	-82,490	4,584,406
<b>Total Cash Equivalent</b>	<b>327,009</b>	<b>2,198,241</b>	<b>-</b>	<b>-2,350,000</b>	<b>-</b>	<b>-</b>	<b>2,767</b>	<b>-</b>	<b>178,017</b>
R&D Account (Money Market)	327,009	2,198,241	-	-2,350,000	-	-	2,767	-	178,017
<b>Total Fund</b>	<b>74,515,347</b>	<b>-</b>	<b>41,245</b>	<b>-2,350,000</b>	<b>-65,405</b>	<b>-</b>	<b>421,119</b>	<b>-2,451,006</b>	<b>70,111,299</b>



Financial Reconciliation Fiscal Year to Date									
	Market Value 10/01/2022	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 09/30/2023
<b>Total Equity</b>	<b>38,010,019</b>	<b>-5,576,226</b>	<b>144,086</b>	<b>-300,000</b>	<b>-144,086</b>	<b>-</b>	<b>739,723</b>	<b>6,984,127</b>	<b>39,857,644</b>
<b>Total Domestic Equity</b>	<b>29,966,180</b>	<b>-4,726,226</b>	<b>144,086</b>	<b>-300,000</b>	<b>-144,086</b>	<b>-</b>	<b>551,361</b>	<b>5,271,409</b>	<b>30,762,724</b>
Brandywine Dynamic Value (Equity)	8,945,692	-500,000	45,612	-	-45,612	-	284,056	1,134,632	9,864,380
Fred Alger Mgmt Large Cap Growth	4,840,301	-1,000,000	33,184	-	-33,184	-	37,535	1,170,082	5,047,918
MFS Growth Fund R6 (MFEKX)	3,968,658	-705,680	-	-	-	-	-	1,021,600	4,284,577
Cambiar Investors Equity	9,094,287	-1,600,000	65,290	-300,000	-65,290	-	189,224	1,446,719	8,830,230
Fidelity Total Market Index (FSKAX)	3,117,243	-920,546	-	-	-	-	40,546	498,376	2,735,619
<b>Total International Equity</b>	<b>8,043,839</b>	<b>-850,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>188,362</b>	<b>1,712,718</b>	<b>9,094,919</b>
EuroPacific Growth Fund R6 (RERGX)	3,746,433	-175,000	-	-	-	-	79,796	659,898	4,311,128
Dodge & Cox International (DODFX)	4,297,406	-675,000	-	-	-	-	108,566	1,052,820	4,783,792
<b>Total Fixed Income</b>	<b>10,242,616</b>	<b>2,260,000</b>	<b>31,047</b>	<b>-</b>	<b>-31,047</b>	<b>-</b>	<b>429,774</b>	<b>-385,813</b>	<b>12,546,577</b>
Richmond Capital Fixed Income	10,230,464	2,260,000	31,047	-	-31,047	-	429,334	-385,893	12,533,905
Richmond Capital TIPS	12,152	-	-	-	-	-	440	80	12,672
<b>Global Tactical Asset Allocation</b>	<b>5,991,985</b>	<b>-127,394</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>344,248</b>	<b>141,816</b>	<b>6,350,655</b>
Blackrock Multi-Asset Income Fd (BK MIX)	3,188,896	-	-	-	-	-	203,235	63,694	3,455,825
JPMorgan Income Builder (JNBZX)	2,803,089	-127,394	-	-	-	-	141,013	78,122	2,894,830
<b>Total Real Estate</b>	<b>13,435,247</b>	<b>-330,507</b>	<b>-</b>	<b>-</b>	<b>-88,331</b>	<b>-</b>	<b>390,739</b>	<b>-2,228,742</b>	<b>11,178,406</b>
ARA Core Property Fund, L.P.	7,777,478	-143,971	-	-	-76,442	-	205,353	-1,168,418	6,594,000
Intercontinental Real Estate	5,657,769	-186,536	-	-	-11,889	-	185,386	-1,060,324	4,584,406
<b>Total Cash Equivalent</b>	<b>15,524</b>	<b>3,774,127</b>	<b>1,024,414</b>	<b>-4,650,000</b>	<b>-</b>	<b>-</b>	<b>13,953</b>	<b>-</b>	<b>178,017</b>
R&D Account (Money Market)	15,524	3,774,127	1,024,414	-4,650,000	-	-	13,953	-	178,017
<b>Total Fund</b>	<b>67,695,390</b>	<b>-</b>	<b>1,199,546</b>	<b>-4,950,000</b>	<b>-263,463</b>	<b>-</b>	<b>1,918,438</b>	<b>4,511,389</b>	<b>70,111,299</b>



## Comparative Performance Trailing Returns

	QTR	FYTD	1 YR	3 YR	5 YR	10 YR	Inception	Inception Date
<b>Total Fund (Net)</b>	<b>-2.90</b>	<b>9.06</b>	<b>9.06</b>	<b>3.76</b>	<b>5.35</b>	<b>6.87</b>	<b>7.74</b>	<b>01/01/1991</b>
Total Fund Policy	-3.14	12.28	12.28	5.04	6.19	7.36	8.12	
<b>Total Fund (Gross)</b>	<b>-2.81 (49)</b>	<b>9.45 (76)</b>	<b>9.45 (76)</b>	<b>4.17 (59)</b>	<b>5.81 (16)</b>	<b>7.30 (7)</b>	<b>7.90 (37)</b>	<b>01/01/1991</b>
Total Fund Policy	-3.14 (64)	12.28 (25)	12.28 (25)	5.04 (34)	6.19 (9)	7.36 (6)	8.12 (21)	
All Public Plans-Total Fund Median	-2.87	11.02	11.02	4.43	5.06	6.23	7.69	
<b>Total Equity</b>	<b>-3.15</b>	<b>20.16</b>	<b>20.16</b>	<b>6.66</b>	<b>7.56</b>	<b>9.13</b>	<b>9.06</b>	<b>01/01/1991</b>
Total Equity Policy	-3.35	20.74	20.74	8.16	7.67	9.44	9.24	
<b>Total Domestic Equity</b>	<b>-3.00 (37)</b>	<b>19.27 (38)</b>	<b>19.27 (38)</b>	<b>8.38 (72)</b>	<b>8.69 (38)</b>	<b>10.44 (49)</b>	<b>9.34 (97)</b>	<b>01/01/1991</b>
Total Domestic Equity Policy	-3.25 (45)	20.46 (30)	20.46 (30)	9.38 (62)	9.14 (31)	11.28 (34)	10.21 (93)	
IM U.S. Core Equity (SA+CF) Median	-3.39	16.64	16.64	10.14	7.91	10.21	11.41	
Brandywine Dynamic Value (Equity)	-1.42 (31)	15.76 (62)	15.76 (62)	13.13 (49)	N/A	N/A	9.39 (34)	05/01/2019
Russell 1000 Value Index	-3.16 (78)	14.44 (70)	14.44 (70)	11.05 (75)	6.23 (82)	8.45 (85)	6.53 (89)	
IM U.S. Large Cap Value Equity (SA+CF) Median	-2.17	17.30	17.30	12.97	7.59	9.57	8.49	
Fred Alger Mgmt Large Cap Growth	-3.96 (73)	23.95 (64)	23.95 (64)	2.11 (88)	9.16 (76)	13.26 (53)	13.56 (51)	12/01/2010
Russell 1000 Growth Index	-3.13 (43)	27.72 (38)	27.72 (38)	7.97 (32)	12.42 (20)	14.48 (15)	14.73 (15)	
IM U.S. Large Cap Growth Equity (SA+CF) Median	-3.33	25.66	25.66	6.44	10.55	13.31	13.59	
MFS Growth Fund R6 (MFEKX)	-2.82 (24)	25.35 (58)	25.35 (58)	N/A	N/A	N/A	N/A	09/01/2021
Russell 1000 Growth Index	-3.13 (35)	27.72 (35)	27.72 (35)	7.97 (10)	12.42 (7)	14.48 (5)	-3.26 (12)	
IM U.S. Large Cap Growth Equity (MF) Median	-3.55	26.27	26.27	4.70	9.57	12.33	-6.97	
Cambiar Investors Equity	-4.10 (65)	17.32 (31)	17.32 (31)	14.22 (51)	9.43 (8)	N/A	9.71 (16)	08/01/2015
Russell 2500 Value Index	-3.66 (58)	11.34 (81)	11.34 (81)	13.32 (58)	3.99 (85)	6.95 (89)	6.53 (83)	
IM U.S. SMID Cap Value Equity (SA+CF) Median	-3.25	15.30	15.30	14.39	6.40	8.48	8.05	
Fidelity Total Market Index (FSKAX)	-3.28 (44)	20.53 (30)	20.53 (30)	N/A	N/A	N/A	N/A	09/01/2021
CRSP U.S. Total Market TR Index	-3.30 (46)	20.37 (34)	20.37 (34)	9.26 (38)	9.07 (24)	11.24 (13)	-2.78 (42)	
IM U.S. Multi-Cap Core Equity (MF) Median	-3.40	18.77	18.77	8.61	7.93	9.66	-3.40	

Fiscal year ends September 30th.  
Returns are expressed as percentages.  
Returns for periods greater than one year are annualized.



Comparative Performance

Total Fund

As of September 30, 2023

	QTR		FYTD		1 YR		3 YR		5 YR		10 YR		Inception		Inception Date	
<b>Total International Equity</b>	<b>-3.68</b>	<b>(11)</b>	<b>23.39</b>	<b>(58)</b>	<b>23.39</b>	<b>(58)</b>	<b>1.29</b>	<b>(95)</b>	<b>3.90</b>	<b>(24)</b>	<b>4.72</b>	<b>(3)</b>	<b>3.85</b>	<b>(13)</b>	<b>04/01/2008</b>	
Total International Equity Policy	-3.68	(11)	21.02	(78)	21.02	(78)	4.24	(62)	3.07	(40)	3.83	(24)	2.66	(42)		
IM International Large Cap Core Equity (MF) Median	-4.99		24.25		24.25		5.04		2.77		3.28		2.50			
EuroPacific Growth Fund R6 (RERGX)	-6.31	(48)	19.66	(41)	19.66	(41)	0.08	(52)	3.12	(35)	4.65	(25)	7.95	(42)	02/01/2009	
MSCI AC World ex USA Growth (Net)	-7.31	(63)	15.84	(74)	15.84	(74)	-1.86	(68)	2.54	(49)	3.92	(45)	7.24	(65)		
IM International Growth Equity (MF) Median	-6.39		18.83		18.83		0.37		2.51		3.79		7.67			
Dodge & Cox International (DODFX)	-1.32	(34)	26.74	(68)	26.74	(68)	N/A		N/A		N/A		2.44	(54)	06/01/2022	
MSCI AC World ex USA Value (net)	-0.07	(16)	25.17	(75)	25.17	(75)	9.57	(45)	2.29	(65)	2.58	(69)	1.46	(64)		
IM International Value Equity (MF) Median	-2.09		28.68		28.68		9.11		2.68		3.15		2.62			
<b>Total Fixed Income</b>	<b>-3.43</b>	<b>(88)</b>	<b>0.90</b>	<b>(60)</b>	<b>0.90</b>	<b>(60)</b>	<b>-4.98</b>	<b>(63)</b>	<b>0.21</b>	<b>(81)</b>	<b>1.17</b>	<b>(85)</b>	<b>4.71</b>	<b>(100)</b>	<b>01/01/1991</b>	
Total Fixed Income Policy	-3.23	(71)	0.64	(73)	0.64	(73)	-5.21	(85)	0.10	(94)	1.13	(95)	4.82	(100)		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-3.14		1.06		1.06		-4.84		0.54		1.58		5.18			
Richmond Capital Fixed Income	-3.43	(88)	0.90	(60)	0.90	(60)	-4.98	(63)	0.32	(72)	1.37	(75)	3.66	(76)	01/01/2001	
Blmbg. U.S. Aggregate Index	-3.23	(71)	0.64	(73)	0.64	(73)	-5.21	(85)	0.10	(94)	1.13	(95)	3.47	(94)		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-3.14		1.06		1.06		-4.84		0.54		1.58		3.88			
<b>Global Tactical Asset Allocation</b>	<b>-2.19</b>	<b>(46)</b>	<b>8.10</b>	<b>(52)</b>	<b>8.10</b>	<b>(52)</b>	<b>1.43</b>	<b>(59)</b>	<b>N/A</b>		<b>N/A</b>		<b>1.48</b>	<b>(62)</b>	<b>08/01/2020</b>	
GTAA Hybrid Index	-3.37	(68)	13.11	(17)	13.11	(17)	2.81	(45)	N/A		N/A		3.09	(47)		
IM Flexible Portfolio (MF) Median	-2.52		8.26		8.26		2.21		2.46		4.00		2.55			
Blackrock Multi-Asset Income Fd (BKMIX)	-1.80	(40)	8.37	(49)	8.37	(49)	1.35	(60)	N/A		N/A		1.47	(63)	08/01/2020	
Blackrock Multi-Asset Hybrid	-3.32	(68)	11.02	(28)	11.02	(28)	1.48	(58)	3.99	(29)	N/A		1.76	(58)		
IM Flexible Portfolio (MF) Median	-2.52		8.26		8.26		2.21		2.46		4.00		2.55			
JPMorgan Income Builder (JNBZX)	-2.65	(54)	7.76	(55)	7.76	(55)	1.94	(54)	N/A		N/A		1.90	(56)	08/01/2020	
GTAA Hybrid Index	-3.37	(68)	13.11	(17)	13.11	(17)	2.81	(45)	N/A		N/A		3.09	(47)		
IM Flexible Portfolio (MF) Median	-2.52		8.26		8.26		2.21		2.46		4.00		2.55			
<b>Total Real Estate</b>	<b>-1.64</b>	<b>(21)</b>	<b>-13.88</b>	<b>(72)</b>	<b>-13.88</b>	<b>(72)</b>	<b>7.39</b>	<b>(33)</b>	<b>6.56</b>	<b>(16)</b>	<b>8.97</b>	<b>(31)</b>	<b>9.85</b>	<b>(38)</b>	<b>07/01/2011</b>	
NCREIF ODCE	-1.97	(25)	-12.44	(46)	-12.44	(46)	7.56	(29)	6.09	(41)	8.44	(55)	9.16	(58)		
IM U.S. Open End Private Real Estate (SA+CF) Median	-3.10		-12.75		-12.75		6.79		5.76		8.63		9.56			
ARA Core Property Fund, L.P.	-2.22	(31)	-12.54	(48)	-12.54	(48)	7.69	(15)	6.27	(30)	8.26	(58)	8.72	(58)	04/01/2012	
NCREIF Fund Index-Open End Diversified Core (EW)	-1.97	(25)	-12.44	(46)	-12.44	(46)	7.56	(29)	6.09	(41)	8.44	(55)	8.91	(54)		
IM U.S. Open End Private Real Estate (SA+CF) Median	-3.10		-12.75		-12.75		6.79		5.76		8.63		9.15			
Intercontinental Real Estate	-0.80	(13)	-15.75	(84)	-15.75	(84)	6.94	(47)	6.73	(15)	9.77	(18)	10.77	(21)	07/01/2011	
NCREIF Fund Index-Open End Diversified Core (EW)	-1.97	(25)	-12.44	(46)	-12.44	(46)	7.56	(29)	6.09	(41)	8.44	(55)	9.16	(58)		
IM U.S. Open End Private Real Estate (SA+CF) Median	-3.10		-12.75		-12.75		6.79		5.76		8.63		9.56			

Fiscal year ends September 30th.  
Returns are expressed as percentages.  
Returns for periods greater than one year are annualized.



## Comparative Performance Fiscal Year Returns

	FYTD	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015
<b>Total Fund (Net)</b>	<b>9.06</b>	<b>-13.93</b>	<b>19.02</b>	<b>10.67</b>	<b>4.98</b>	<b>9.66</b>	<b>12.90</b>	<b>7.34</b>	<b>0.48</b>
Total Fund Policy	12.28	-14.47	20.68	10.65	5.30	8.60	12.02	11.00	0.37
<b>Total Fund (Gross)</b>	<b>9.45 (76)</b>	<b>-13.48 (36)</b>	<b>19.39 (60)</b>	<b>11.21 (21)</b>	<b>5.47 (12)</b>	<b>9.88 (16)</b>	<b>13.29 (19)</b>	<b>7.65 (86)</b>	<b>1.06 (11)</b>
Total Fund Policy	12.28 (25)	-14.47 (47)	20.68 (40)	10.65 (27)	5.30 (14)	8.60 (36)	12.02 (46)	11.00 (9)	0.37 (21)
All Public Plans-Total Fund Median	11.02	-14.76	19.92	8.54	3.99	7.92	11.82	9.40	-0.70
<b>Total Equity</b>	<b>20.16</b>	<b>-21.93</b>	<b>29.36</b>	<b>14.47</b>	<b>3.62</b>	<b>13.67</b>	<b>19.49</b>	<b>8.15</b>	<b>-1.84</b>
Total Equity Policy	20.74	-19.42	30.03	12.06	2.04	13.62	19.14	13.68	-3.37
<b>Total Domestic Equity</b>	<b>19.27 (38)</b>	<b>-18.46 (69)</b>	<b>30.91 (71)</b>	<b>14.20 (30)</b>	<b>4.30 (25)</b>	<b>17.47 (42)</b>	<b>18.93 (52)</b>	<b>8.04 (89)</b>	<b>-0.59 (69)</b>
Total Domestic Equity Policy	20.46 (30)	-17.63 (62)	31.88 (65)	15.00 (26)	2.92 (35)	17.58 (40)	18.71 (56)	14.96 (35)	-0.49 (68)
IM U.S. Core Equity (SA+CF) Median	16.64	-16.16	36.51	7.08	0.30	16.35	19.16	13.42	1.08
MD Sass Large Cap Value	N/A	N/A	N/A	N/A	1.67 (56)	1.78 (99)	19.01 (37)	4.96 (97)	-5.74 (76)
Russell 1000 Value Index	14.44 (70)	-11.36 (67)	35.01 (59)	-5.03 (65)	4.00 (39)	9.45 (76)	15.12 (77)	16.19 (26)	-4.42 (63)
IM U.S. Large Cap Value Equity (SA+CF) Median	17.30	-9.53	37.08	-3.28	2.49	11.83	17.78	13.35	-3.34
Brandywine Dynamic Value (Equity)	15.76 (62)	-12.46 (76)	42.86 (26)	2.15 (28)	N/A	N/A	N/A	N/A	N/A
Russell 1000 Value Index	14.44 (70)	-11.36 (67)	35.01 (59)	-5.03 (65)	4.00 (39)	9.45 (76)	15.12 (77)	16.19 (26)	-4.42 (63)
IM U.S. Large Cap Value Equity (SA+CF) Median	17.30	-9.53	37.08	-3.28	2.49	11.83	17.78	13.35	-3.34
Fred Alger Mgmt Large Cap Growth	23.95 (64)	-30.74 (79)	24.01 (82)	41.86 (20)	2.65 (61)	28.80 (24)	21.56 (42)	12.02 (48)	3.22 (57)
Russell 1000 Growth Index	27.72 (38)	-22.59 (40)	27.32 (49)	37.53 (31)	3.71 (51)	26.30 (39)	21.94 (39)	13.76 (21)	3.17 (58)
IM U.S. Large Cap Growth Equity (SA+CF) Median	25.66	-25.12	27.23	33.81	3.80	24.84	21.08	11.84	3.88
MFS Growth Fund R6 (MFEKX)	25.35 (58)	-28.25 (55)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 1000 Growth Index	27.72 (35)	-22.59 (20)	27.32 (30)	37.53 (31)	3.71 (30)	26.30 (36)	21.94 (28)	13.76 (15)	3.17 (43)
IM U.S. Large Cap Growth Equity (MF) Median	26.27	-27.73	25.85	34.07	2.15	24.80	20.19	10.85	2.64
Cambiar Investors Equity	17.32 (31)	-11.06 (28)	42.80 (83)	-1.90 (25)	7.33 (2)	15.92 (11)	20.18 (31)	7.04 (92)	N/A
Russell 2500 Value Index	11.34 (81)	-15.35 (63)	54.38 (42)	-12.62 (66)	-4.35 (65)	10.24 (47)	15.75 (69)	17.68 (25)	-2.44 (65)
IM U.S. SMID Cap Value Equity (SA+CF) Median	15.30	-13.80	52.22	-8.87	-2.81	9.84	18.44	14.30	-0.29
Heartland Value Equity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 3000 Value Index	14.05 (68)	-11.79 (48)	36.64 (62)	-5.67 (69)	3.10 (44)	9.46 (75)	15.53 (65)	16.38 (33)	-4.22 (66)
IM U.S. All Cap Value Equity (SA+CF) Median	17.37	-12.53	39.51	-2.37	1.79	11.85	17.72	14.43	-2.77
Fidelity Total Market Index (FSKAX)	20.53 (30)	-18.03 (61)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CRSP U.S. Total Market TR Index	20.37 (34)	-17.98 (59)	32.11 (35)	14.99 (25)	2.92 (36)	17.62 (22)	18.64 (42)	14.99 (11)	-0.55 (37)
IM U.S. Multi-Cap Core Equity (MF) Median	18.77	-17.28	30.69	11.14	1.48	15.61	18.24	11.19	-1.56

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages. Fiscal year ends September 30th.



Comparative Performance

Total Fund

As of September 30, 2023

	FYTD	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015
<b>Total International Equity</b>	<b>23.39 (58)</b>	<b>-32.72 (100)</b>	<b>25.16 (43)</b>	<b>15.19 (1)</b>	<b>1.17 (5)</b>	<b>1.68 (38)</b>	<b>20.63 (31)</b>	<b>8.52 (23)</b>	<b>-5.83 (27)</b>
Total International Equity Policy	21.02 (78)	-24.79 (34)	24.45 (48)	3.45 (45)	-0.72 (21)	2.25 (19)	20.15 (33)	9.80 (16)	-11.78 (73)
IM International Large Cap Core Equity (MF) Median	24.25	-25.40	24.28	2.82	-2.78	1.30	18.72	5.11	-8.36
EuroPacific Growth Fund R6 (RERGX)	19.66 (41)	-32.85 (59)	24.76 (38)	14.97 (46)	1.17 (28)	1.47 (63)	20.63 (27)	8.52 (49)	-4.93 (45)
MSCI AC World ex USA Growth (Net)	15.84 (74)	-30.22 (47)	16.95 (83)	17.54 (32)	2.03 (20)	3.08 (45)	17.68 (59)	11.50 (24)	-8.12 (76)
IM International Growth Equity (MF) Median	18.83	-31.05	22.54	13.48	-1.42	2.64	18.37	8.29	-5.45
Dodge & Cox International (DODFX)	26.74 (68)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI AC World ex USA Value (net)	25.17 (75)	-20.02 (18)	31.38 (44)	-10.84 (80)	-4.51 (22)	0.42 (36)	21.55 (33)	6.96 (29)	-16.16 (88)
IM International Value Equity (MF) Median	28.68	-22.74	30.13	-6.00	-6.37	-0.16	20.25	5.30	-9.62
Manning & Napier Overseas Fund (EXOSX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI AC World ex USA	21.02 (78)	-24.79 (34)	24.45 (48)	3.45 (45)	-0.72 (21)	2.25 (19)	20.15 (33)	9.80 (16)	-11.78 (73)
IM International Large Cap Core Equity (MF) Median	24.25	-25.40	24.28	2.82	-2.78	1.30	18.72	5.11	-8.36
<b>Total Fixed Income</b>	<b>0.90 (60)</b>	<b>-14.20 (32)</b>	<b>-0.90 (83)</b>	<b>7.41 (54)</b>	<b>9.68 (89)</b>	<b>-0.65 (41)</b>	<b>0.43 (63)</b>	<b>5.02 (89)</b>	<b>2.67 (77)</b>
Total Fixed Income Policy	0.64 (73)	-14.60 (61)	-0.90 (83)	6.98 (77)	10.30 (69)	-1.22 (88)	0.07 (84)	5.19 (80)	2.94 (62)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	1.06	-14.51	-0.05	7.52	10.42	-0.75	0.62	5.66	3.02
Richmond Capital Fixed Income	0.90 (60)	-14.21 (34)	-0.90 (83)	7.59 (48)	10.07 (79)	-0.87 (55)	0.52 (57)	5.07 (87)	3.45 (16)
Blmbg. U.S. Aggregate Index	0.64 (73)	-14.60 (61)	-0.90 (83)	6.98 (77)	10.30 (69)	-1.22 (88)	0.07 (84)	5.19 (80)	2.94 (62)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	1.06	-14.51	-0.05	7.52	10.42	-0.75	0.62	5.66	3.02
Richmond Capital TIPS	4.28 (1)	0.50 (1)	0.00 (100)	6.56 (98)	5.74 (89)	0.42 (59)	-0.07 (23)	4.84 (96)	-0.86 (70)
Blmbg.Barcl. U.S. TIPS 1-10 Year	2.11 (39)	-7.44 (21)	5.75 (18)	7.75 (93)	5.75 (88)	0.33 (93)	-0.14 (29)	4.83 (96)	-0.82 (55)
IM U.S. TIPS (SA+CF) Median	1.47	-11.52	5.25	10.07	7.11	0.49	-0.55	6.57	-0.79

Returns for periods greater than one year are annualized.  
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Comparative Performance

Total Fund

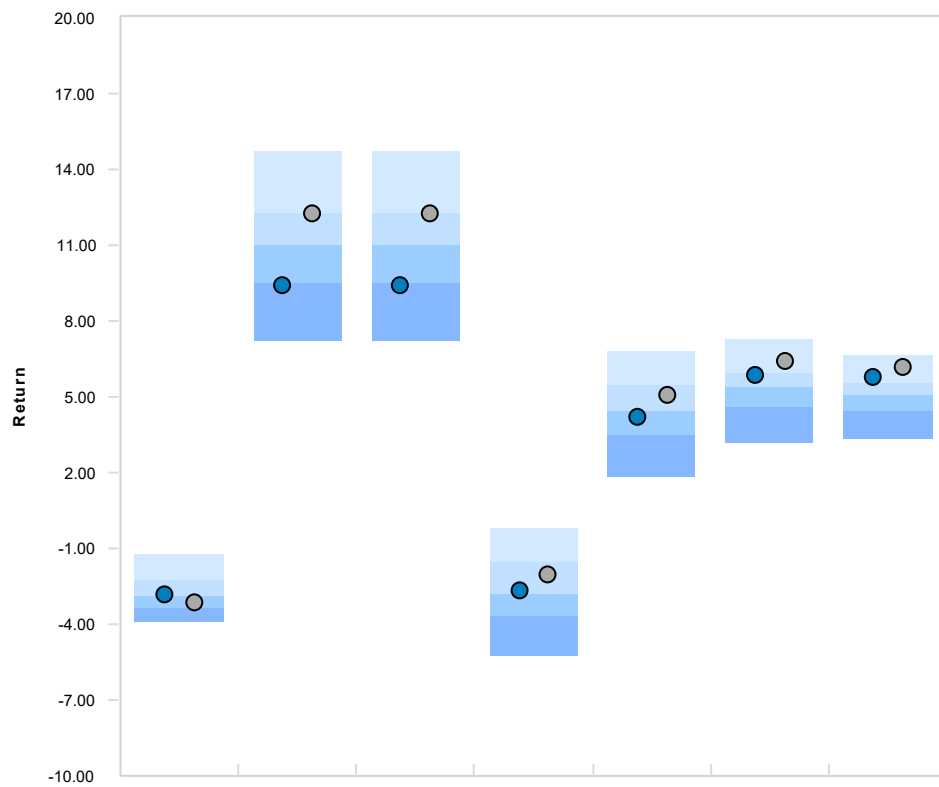
As of September 30, 2023

	FYTD		Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015
<b>Global Tactical Asset Allocation</b>	<b>8.10</b>	<b>(52)</b>	<b>-15.19 (53)</b>	<b>13.82 (68)</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
GTAA Hybrid Index	13.11	(17)	-17.43 (64)	16.34 (50)	N/A	N/A	N/A	N/A	N/A	N/A
IM Flexible Portfolio (MF) Median	8.26		-14.79	16.30	2.57	2.64	3.46	9.51	8.68	-4.37
Blackrock Multi-Asset Income Fd (BKMIX)	8.37	(49)	-14.34 (46)	12.13 (77)	N/A	N/A	N/A	N/A	N/A	N/A
Blackrock Multi-Asset Hybrid	11.02	(28)	-16.91 (62)	13.29 (72)	9.36 (17)	6.40 (19)	4.93 (36)	N/A	N/A	N/A
IM Flexible Portfolio (MF) Median	8.26		-14.79	16.30	2.57	2.64	3.46	9.51	8.68	-4.37
JPMorgan Income Builder (JNBZX)	7.76	(55)	-14.92 (51)	15.54 (57)	N/A	N/A	N/A	N/A	N/A	N/A
GTAA Hybrid Index	13.11	(17)	-17.43 (64)	16.34 (50)	N/A	N/A	N/A	N/A	N/A	N/A
IM Flexible Portfolio (MF) Median	8.26		-14.79	16.30	2.57	2.64	3.46	9.51	8.68	-4.37
<b>Total Real Estate</b>	<b>-13.88</b>	<b>(72)</b>	<b>26.27 (16)</b>	<b>13.89 (69)</b>	<b>2.88 (18)</b>	<b>7.82 (28)</b>	<b>9.75 (31)</b>	<b>9.37 (29)</b>	<b>10.87 (57)</b>	<b>13.98 (60)</b>
NCREIF ODCE	-12.44	(46)	22.76 (38)	15.75 (54)	1.74 (43)	6.17 (70)	8.82 (56)	7.81 (51)	10.62 (68)	14.71 (56)
IM U.S. Open End Private Real Estate (SA+CF) Median	-12.75		20.19	16.09	1.58	6.80	8.93	7.83	11.18	15.20
ARA Core Property Fund, L.P.	-12.54	(48)	25.79 (18)	13.51 (75)	1.62 (49)	6.81 (50)	8.50 (61)	7.52 (55)	9.04 (89)	13.98 (60)
NCREIF Fund Index-Open End Diversified Core (EW)	-12.44	(46)	22.76 (38)	15.75 (54)	1.74 (43)	6.17 (70)	8.82 (56)	7.81 (51)	10.62 (68)	14.71 (56)
IM U.S. Open End Private Real Estate (SA+CF) Median	-12.75		20.19	16.09	1.58	6.80	8.93	7.83	11.18	15.20
Intercontinental Real Estate	-15.75	(84)	26.92 (10)	14.39 (58)	4.55 (10)	8.31 (19)	11.37 (10)	11.74 (6)	13.27 (20)	13.96 (60)
NCREIF Fund Index-Open End Diversified Core (EW)	-12.44	(46)	22.76 (38)	15.75 (54)	1.74 (43)	6.17 (70)	8.82 (56)	7.81 (51)	10.62 (68)	14.71 (56)
IM U.S. Open End Private Real Estate (SA+CF) Median	-12.75		20.19	16.09	1.58	6.80	8.93	7.83	11.18	15.20

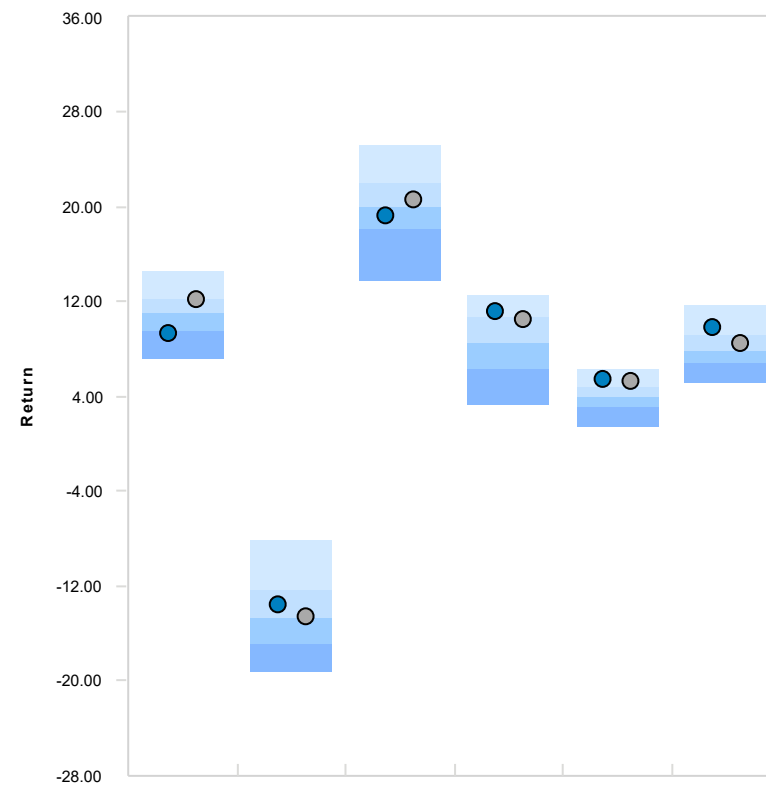
Returns for periods greater than one year are annualized.  
Returns are expressed as percentages. Fiscal year ends September 30th.



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Fund (Gross)	-2.81 (49)	9.45 (76)	9.45 (76)	-2.69 (49)	4.17 (59)	5.89 (28)	5.81 (16)
● Total Fund Policy	-3.14 (64)	12.28 (25)	12.28 (25)	-2.00 (33)	5.04 (34)	6.42 (14)	6.19 (9)
Median	-2.87	11.02	11.02	-2.81	4.43	5.40	5.06



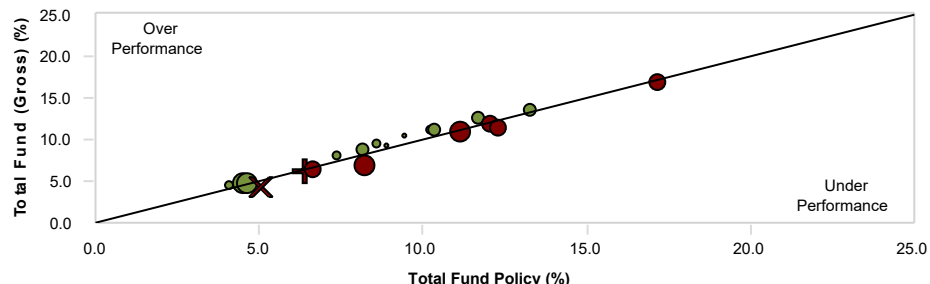
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Total Fund (Gross)	9.45 (76)	-13.48 (36)	19.39 (60)	11.21 (21)	5.47 (12)	9.88 (16)
● Total Fund Policy	12.28 (25)	-14.47 (47)	20.68 (40)	10.65 (27)	5.30 (14)	8.60 (36)
Median	11.02	-14.76	19.92	8.54	3.99	7.92

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
<b>Total Fund (Gross)</b>	<b>2.80 (74)</b>	<b>3.49 (82)</b>	<b>5.85 (44)</b>	<b>-4.09 (39)</b>	<b>-9.53 (27)</b>	<b>-4.70 (43)</b>
Total Fund Policy	4.08 (16)	5.12 (16)	5.96 (41)	-4.81 (71)	-11.31 (68)	-4.12 (28)
All Public Plans-Total Fund Median	3.29	4.30	5.67	-4.31	-10.64	-4.92

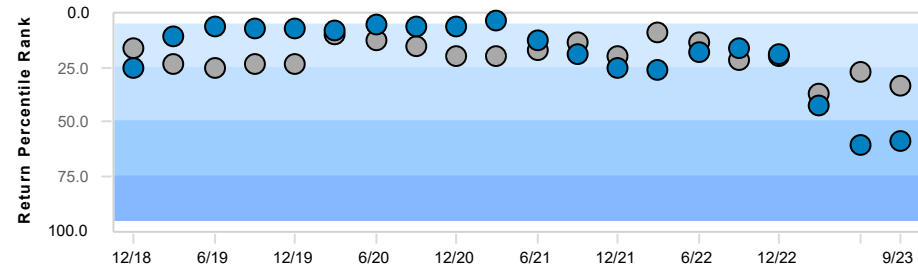


### 3 Yr Rolling Under/Over Performance - 5 Years



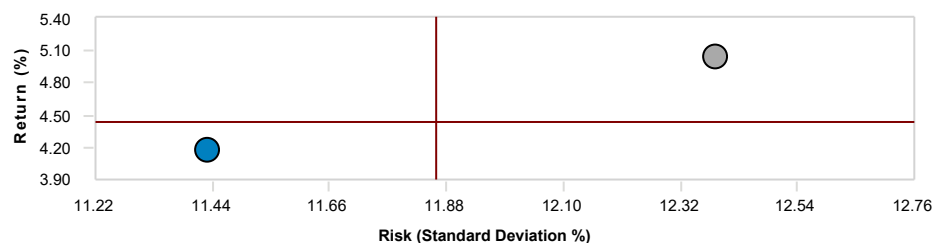
- Over Performance
- Under Performance
- + Earliest Date
- × Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



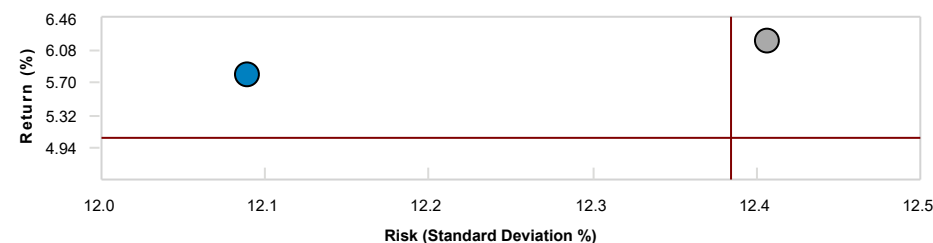
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<span style="color: blue;">●</span> Total Fund (Gross)	20	16 (80%)	2 (10%)	2 (10%)	0 (0%)
<span style="color: grey;">●</span> Total Fund Policy	20	17 (85%)	3 (15%)	0 (0%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Fund (Gross)	4.17	11.43
<span style="color: grey;">●</span> Total Fund Policy	5.06	12.38
<span style="color: red;">—</span> Median	4.43	11.86

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Fund (Gross)	5.81	12.09
<span style="color: grey;">●</span> Total Fund Policy	6.19	12.41
<span style="color: red;">—</span> Median	5.06	12.38

### Historical Statistics - 3 Years

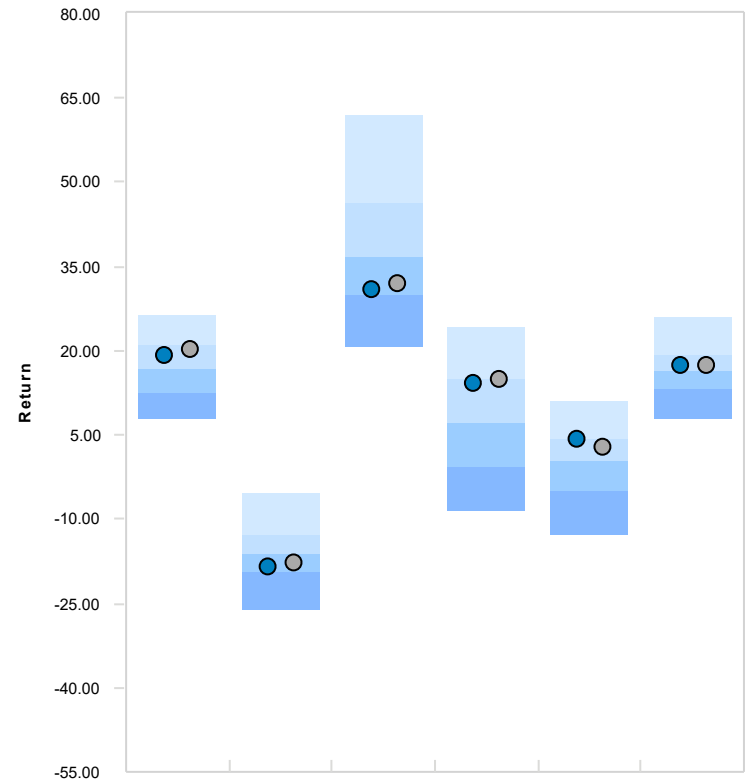
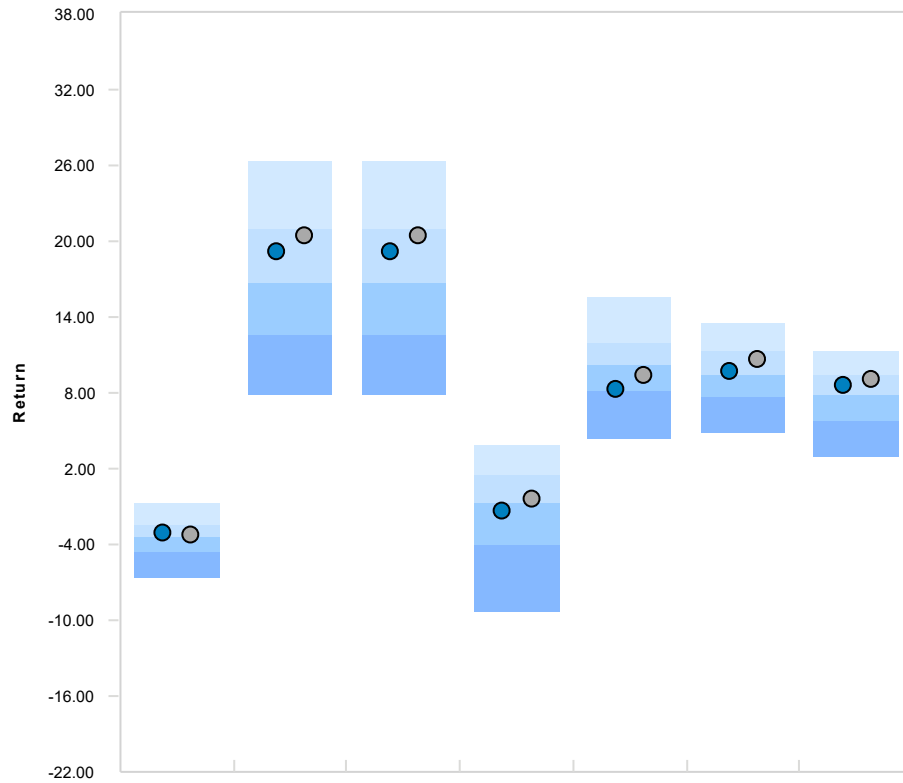
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund (Gross)	2.14	90.93	93.83	-0.45	-0.45	0.27	0.91	7.37
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.32	1.00	8.10

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund (Gross)	2.02	96.78	98.05	-0.14	-0.20	0.38	0.96	8.01
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.41	1.00	8.27



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Domestic Equity	-3.00 (37)	19.27 (38)	19.27 (38)	-1.38 (58)	8.38 (72)	9.81 (44)	8.69 (38)
● Domestic Equity Policy	-3.25 (45)	20.46 (30)	20.46 (30)	-0.39 (48)	9.38 (62)	10.76 (33)	9.14 (31)
Median	-3.39	16.64	16.64	-0.68	10.14	9.38	7.91

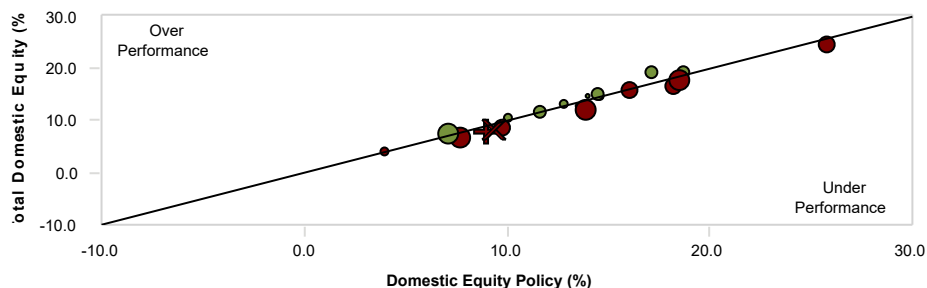
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Total Domestic Equity	19.27 (38)	18.46 (69)	30.91 (71)	14.20 (30)	4.30 (25)	17.47 (42)
● Domestic Equity Policy	20.46 (30)	17.63 (62)	31.88 (65)	15.00 (26)	2.92 (35)	17.58 (40)
Median	16.64	16.16	36.51	7.08	0.30	16.35

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Total Domestic Equity	6.41 (44)	5.13 (48)	9.91 (35)	-4.61 (62)	-15.15 (50)	-6.02 (58)
Domestic Equity Policy	8.39 (23)	7.18 (23)	7.18 (76)	-4.46 (57)	-16.70 (76)	-5.28 (49)
IM U.S. Core Equity (SA+CF) Median	5.88	4.91	8.81	-4.24	-15.18	-5.37

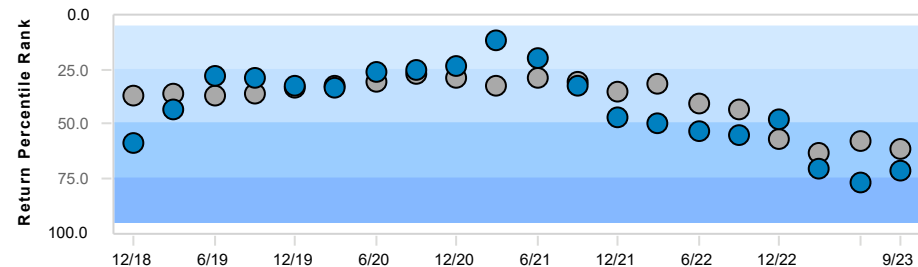


### 3 Yr Rolling Under/Over Performance - 5 Years



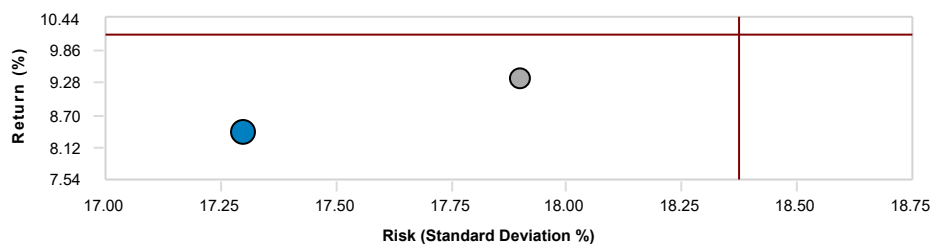
- Over Performance
- Under Performance
- + Earliest Date
- X Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



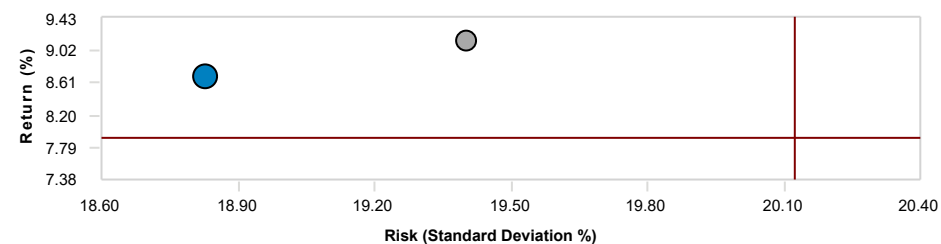
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<span style="color: blue;">●</span> Total Domestic Equity	20	4 (20%)	10 (50%)	5 (25%)	1 (5%)
<span style="color: grey;">●</span> Domestic Equity Policy	20	0 (0%)	16 (80%)	4 (20%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Domestic Equity	8.38	17.30
<span style="color: grey;">●</span> Domestic Equity Policy	9.38	17.90
<span style="color: red;">—</span> Median	10.14	18.37

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Domestic Equity	8.69	18.83
<span style="color: grey;">●</span> Domestic Equity Policy	9.14	19.40
<span style="color: red;">—</span> Median	7.91	20.12

### Historical Statistics - 3 Years

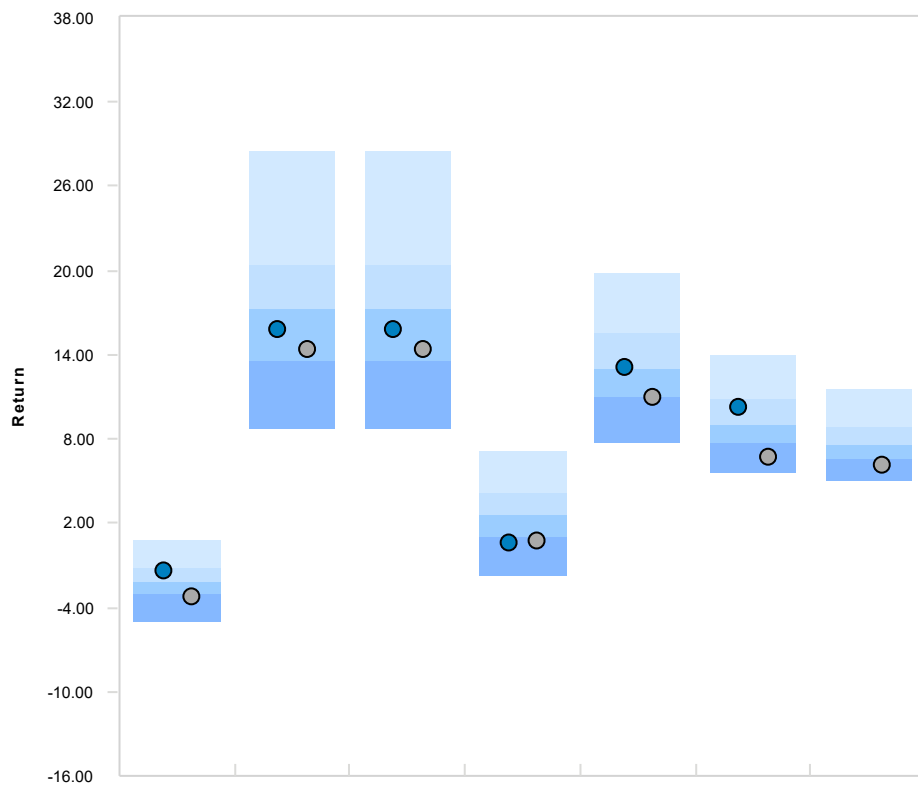
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Domestic Equity	3.63	91.21	91.70	-0.46	-0.28	0.45	0.95	10.62
Domestic Equity Policy	0.00	100.00	100.00	0.00	N/A	0.50	1.00	11.33

### Historical Statistics - 5 Years

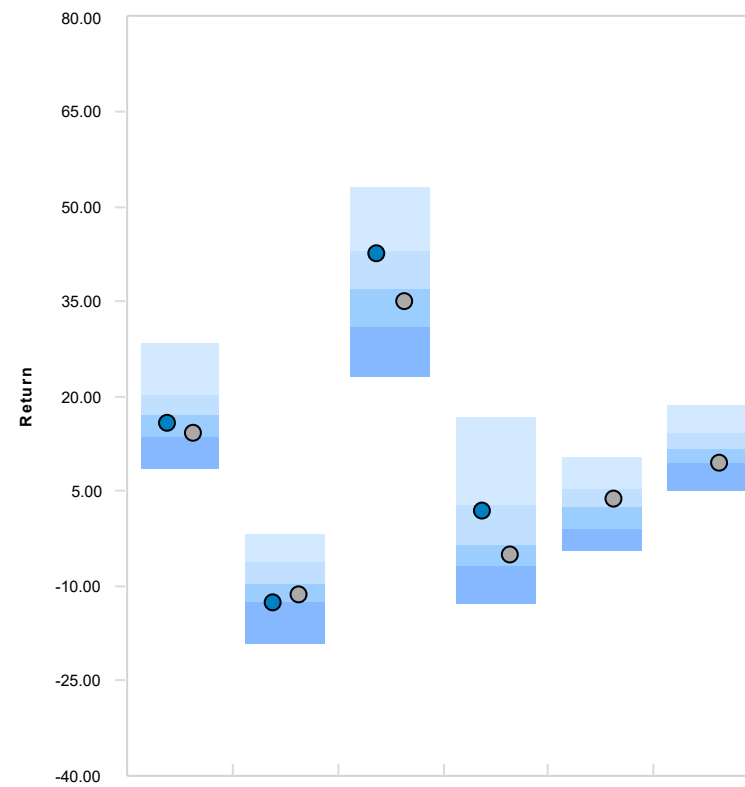
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Domestic Equity	3.18	94.55	94.36	-0.08	-0.17	0.45	0.96	12.32
Domestic Equity Policy	0.00	100.00	100.00	0.00	N/A	0.46	1.00	12.97



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Brandywine LCV	-1.42 (31)	15.76 (62)	15.76 (62)	0.66 (79)	13.13 (49)	10.27 (31)	N/A
● Russell 1000 V Index	-3.16 (78)	14.44 (70)	14.44 (70)	0.71 (79)	11.05 (75)	6.79 (87)	6.23 (82)
Median	-2.17	17.30	17.30	2.62	12.97	9.03	7.59



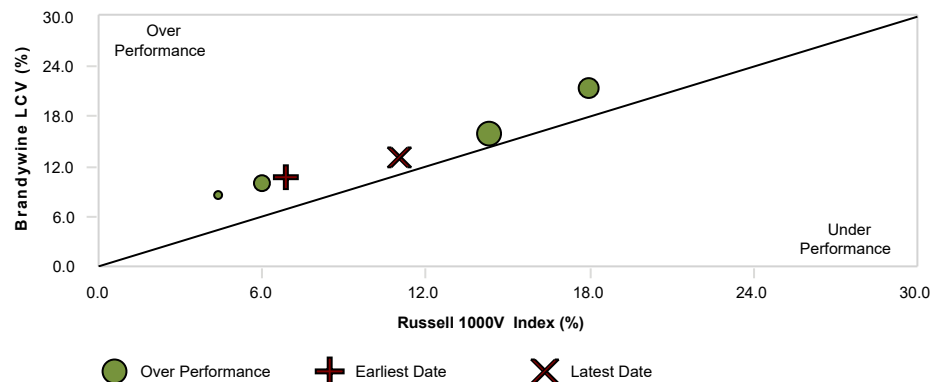
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Brandywine LCV	15.76 (62)	12.46 (76)	42.86 (26)	2.15 (28)	N/A	N/A
● Russell 1000 V Index	14.44 (70)	11.36 (67)	35.01 (59)	-5.03 (65)	4.00 (39)	9.45 (76)
Median	17.30	-9.53	37.08	-3.28	2.49	11.83

Comparative Performance

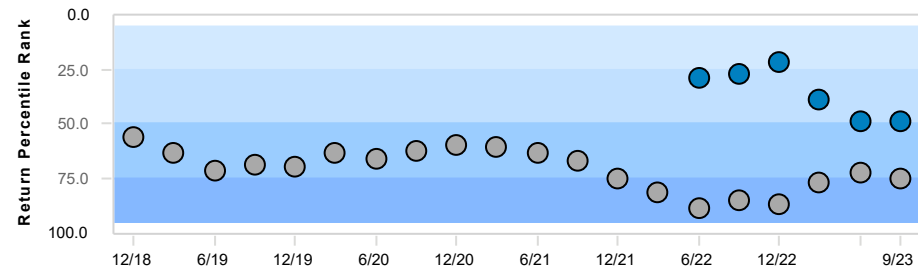
	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Brandywine LCV	2.66 (81)	0.14 (68)	14.23 (26)	-4.40 (25)	-12.14 (61)	-1.43 (67)
Russell 1000V Index	4.07 (55)	1.01 (49)	12.42 (55)	-5.62 (50)	-12.21 (62)	-0.74 (60)
IM U.S. LCV Equity (SA+CF)	4.32	0.93	12.69	-5.65	-11.50	-0.21



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

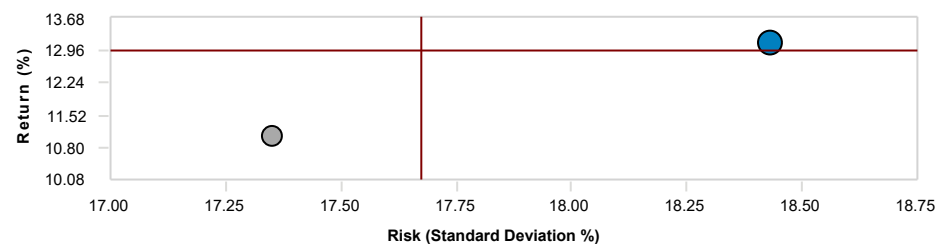


### 3 Yr Rolling Percentile Ranking - 5 Years



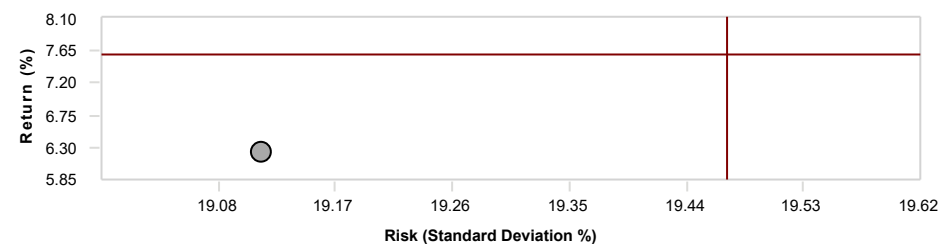
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Brandywine LCV	6	1 (17%)	5 (83%)	0 (0%)	0 (0%)
● Russell 1000 V Index	20	0 (0%)	0 (0%)	15 (75%)	5 (25%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Brandywine LCV	13.13	18.43
● Russell 1000 V Index	11.05	17.35
— Median	12.97	17.67

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Brandywine LCV	N/A	N/A
● Russell 1000 V Index	6.23	19.11
— Median	7.59	19.47

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Brandywine LCV	4.68	105.89	98.97	1.74	0.44	0.67	1.03	10.22
Russell 1000 V Index	0.00	100.00	100.00	0.00	N/A	0.59	1.00	9.92

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Brandywine LCV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 1000 V Index	0.00	100.00	100.00	0.00	N/A	0.32	1.00	13.12



Portfolio Characteristics (Benchmark: Russell 1000 Value Index)		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	75,571,906,112	137,852,794,799
Median Mkt. Cap (\$)	13,246,697,560	11,541,639,650
Price/Earnings ratio	11.32	15.28
Price/Book ratio	2.54	2.43
5 Yr. EPS Growth Rate (%)	18.39	15.74
Current Yield (%)	2.82	2.49
Beta (3 Years, Monthly)	1.03	1.00
Number of Stocks	112	845

Top Ten Equity Holdings (Benchmark: Russell 1000 Value Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
The Cigna Group	4.26	0.41	3.85	2.40
Lockheed Martin Corp	4.17	0.00	4.17	-10.58
Conocophillips	3.66	0.78	2.88	16.70
Gilead Sciences Inc	3.56	0.50	3.06	-1.82
CSX Corp	3.25	0.29	2.96	-9.50
Marathon Petroleum Corp	3.16	0.34	2.82	30.48
Chevron Corp	2.92	1.60	1.32	8.17
Pioneer Natural Resources	2.76	0.29	2.47	11.64
Ameriprise Financial Inc	2.48	0.00	2.48	-0.36
AFLAC Inc	2.33	0.25	2.08	10.59

Ten Best Performers (Benchmark: Russell 1000 Value Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Marathon Petroleum Corp	3.16	0.34	2.82	30.48
United States Steel Corp	0.23	0.04	0.19	30.14
HF Sinclair Corp	0.12	0.04	0.08	28.63
Ryder System Inc	0.06	0.03	0.03	27.06
Amgen Inc	1.31	0.25	1.06	22.03
Valero Energy Corp	1.31	0.27	1.04	21.79
Charter Communications Inc	1.21	0.00	1.21	19.72
Civitas Resources Inc	0.09	0.00	0.09	19.01
Packaging Corp Of America	0.66	0.07	0.59	17.16
Conocophillips	3.66	0.78	2.88	16.70

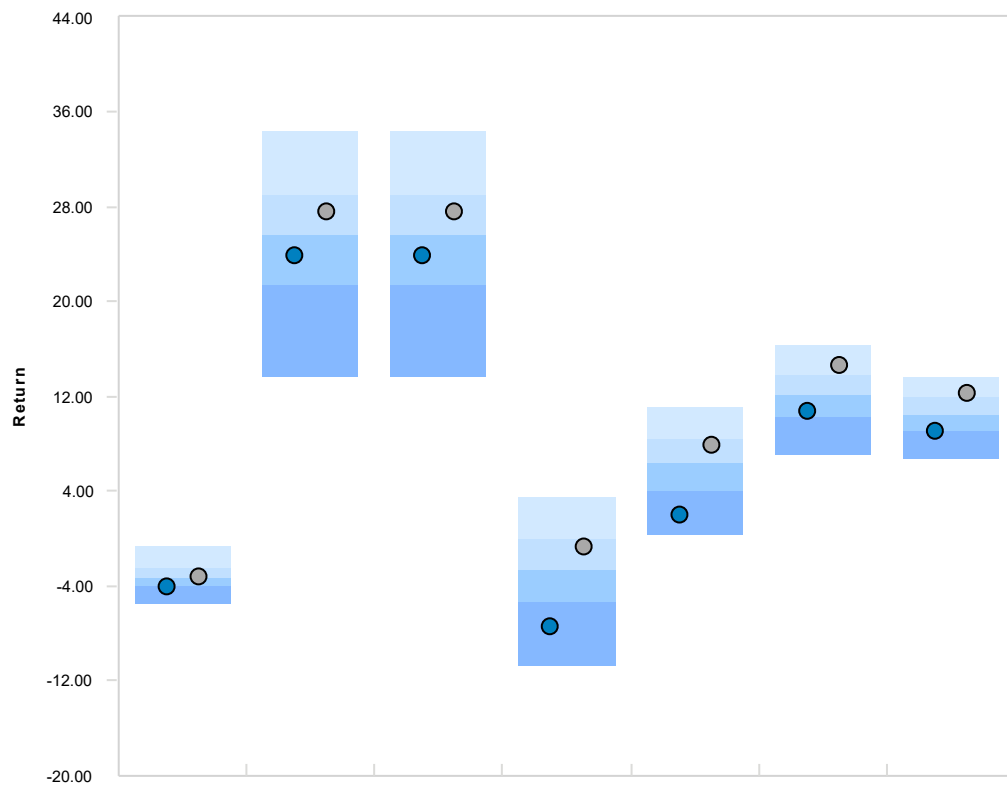
Ten Worst Performers (Benchmark: Russell 1000 Value Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Tapestry Inc	0.43	0.03	0.40	-32.09
Louisiana-Pacific Corp	0.18	0.02	0.16	-26.01
Discover Financial Services	1.06	0.12	0.94	-25.28
Interpublic Group	0.35	0.06	0.29	-25.01
Chemours Co (The)	0.17	0.02	0.15	-23.41
NextEra Energy Inc	0.26	0.62	-0.36	-22.26
Omnicom Group Inc	1.28	0.08	1.20	-20.99
RH	0.16	0.02	0.14	-19.79
MGM Resorts International	0.48	0.06	0.42	-16.30
General Mills Inc.	1.19	0.20	0.99	-15.92

Buy and Hold Sector Attribution (Benchmark: Russell 1000 Value Index)								Portfolio Comparison	
	Allocation		Performance		Stock	Attribution		Brandywine Dynamic Value (Equity)	
	Portfolio	Benchmark	Portfolio	Benchmark		Sector	Total	Market Capitalization (%)	
Communication Services	3.4	5.0	-11.04	-4.06	-0.22	0.00	-0.22	Greater than 25000M	64.05
Consumer Discretionary	8.5	5.2	-8.40	-9.29	0.09	-0.21	-0.12	16000M To 25000M	7.06
Consumer Staples	5.1	8.3	-5.14	-5.07	-0.01	0.06	0.05	12000M To 16000M	9.78
Energy	10.3	8.3	17.68	12.27	0.41	0.38	0.79	8000M To 12000M	6.69
Financials	27.4	20.4	-0.31	-0.56	0.03	0.17	0.21	5000M To 8000M	8.43
Health Care	14.6	15.5	-1.37	-5.26	0.60	0.04	0.65	3000M To 5000M	2.18
Industrials	16.2	13.5	-7.42	-5.56	-0.34	-0.05	-0.39	Cash	1.80
Information Technology	3.8	9.1	-2.73	-2.49	0.03	0.00	0.03		
Materials	7.3	4.9	-1.08	-4.38	0.23	-0.03	0.19		
Real Estate	0.0	4.8	0.00	-8.10	0.00	0.24	0.24		
Utilities	1.7	5.1	-9.27	-9.18	0.00	0.21	0.21		
Cash	1.6	0.0	1.31	0.00	0.00	0.06	0.06		
Total	100.0	100.0	-1.45	-3.15	0.83	0.87	1.70		

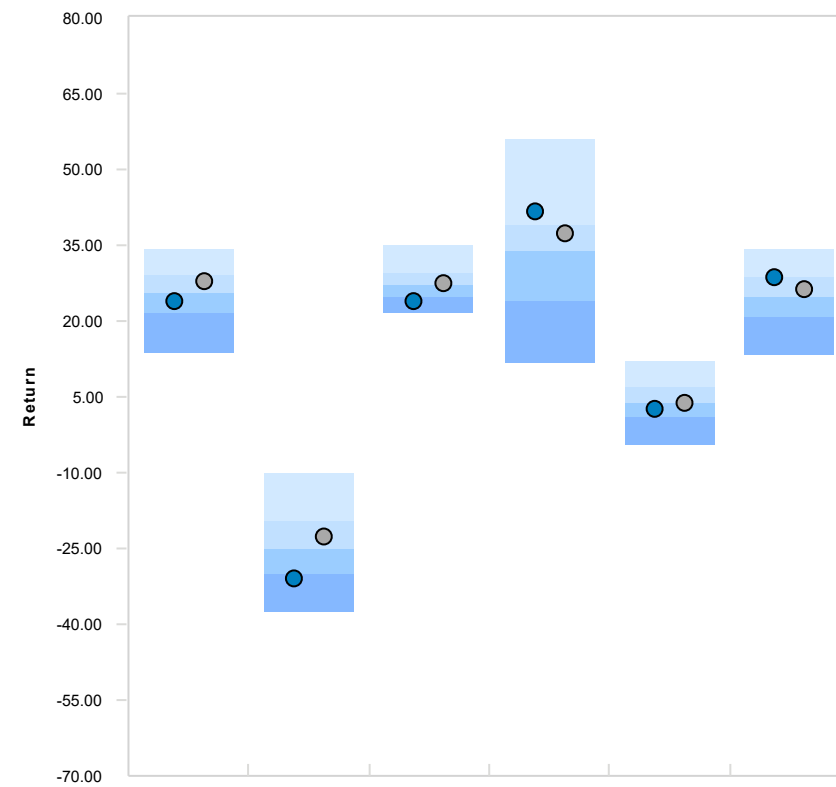




Peer Group Analysis - IM U.S. LCG (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Fred Alger	-3.96 (73)	23.95 (64)	23.95 (64)	-7.34 (83)	2.11 (88)	10.86 (69)	9.16 (76)
○ R1000 G	-3.13 (43)	27.72 (38)	27.72 (38)	-0.57 (29)	7.97 (32)	14.71 (17)	12.42 (20)
Median	-3.33	25.66	25.66	-2.59	6.44	12.14	10.55



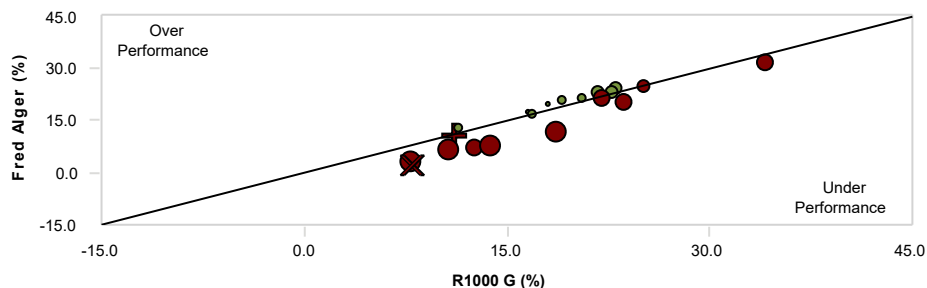
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Fred Alger	23.95 (64)	-30.74 (79)	24.01 (82)	41.86 (20)	2.65 (61)	28.80 (24)
○ R1000 G	27.72 (38)	-22.59 (40)	27.32 (49)	37.53 (31)	3.71 (51)	26.30 (39)
Median	25.66	-25.12	27.23	33.81	3.80	24.84

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Fred Alger	13.99 (20)	13.69 (40)	-0.42 (88)	-2.54 (22)	-24.61 (90)	-11.87 (71)
R1000 G	12.81 (36)	14.37 (30)	2.20 (71)	-3.60 (37)	-20.92 (57)	-9.04 (37)
IM U.S. LCG (SA+CF)	11.73	12.78	3.89	-4.14	-20.29	-10.21

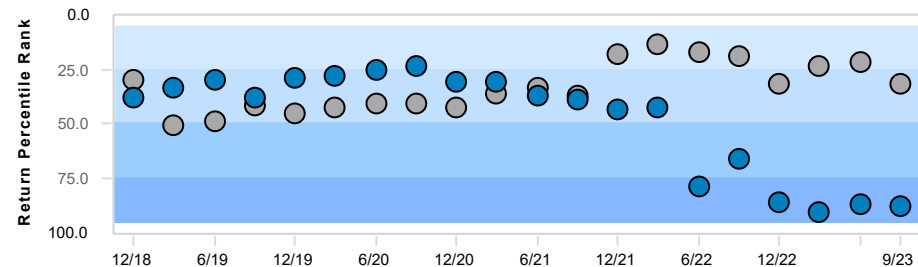


### 3 Yr Rolling Under/Over Performance - 5 Years



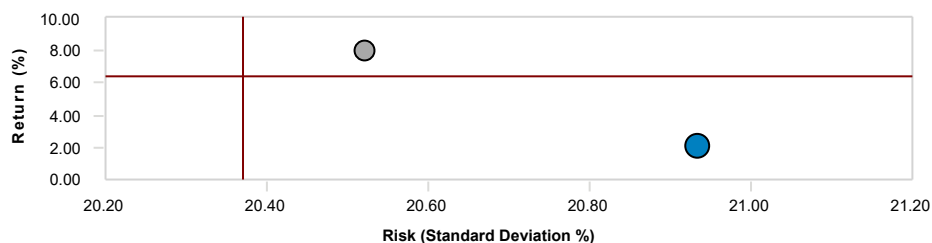
- Over Performance
- Under Performance
- + Earliest Date
- X Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



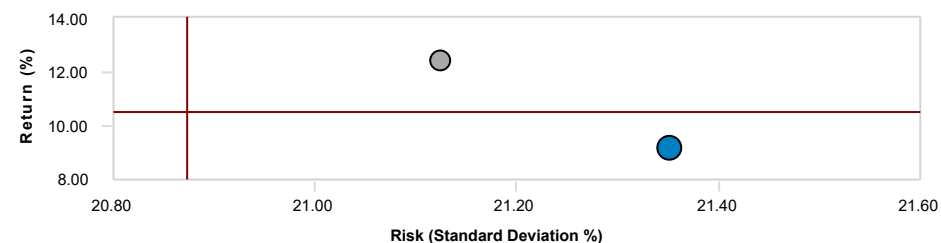
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<span style="color: blue;">●</span> Fred Alger	20	2 (10%)	12 (60%)	1 (5%)	5 (25%)
<span style="color: grey;">●</span> R1000 G	20	6 (30%)	13 (65%)	1 (5%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Fred Alger	2.11	20.93
<span style="color: grey;">●</span> R1000 G	7.97	20.52
<span style="color: red;">—</span> Median	6.44	20.37

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Fred Alger	9.16	21.35
<span style="color: grey;">●</span> R1000 G	12.42	21.12
<span style="color: red;">—</span> Median	10.55	20.87

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Fred Alger	3.63	86.99	103.69	-5.41	-1.52	0.13	1.00	14.93
R1000 G	0.00	100.00	100.00	0.00	N/A	0.40	1.00	13.63

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Fred Alger	3.19	93.27	101.32	-2.85	-0.91	0.44	1.00	14.17
R1000 G	0.00	100.00	100.00	0.00	N/A	0.58	1.00	13.55



**Portfolio Characteristics (Benchmark: Russell 1000 Growth Index)**

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	793,580,520,275	952,599,494,369
Median Mkt. Cap (\$)	63,511,912,840	15,785,611,710
Price/Earnings ratio	33.17	31.79
Price/Book ratio	6.49	10.36
5 Yr. EPS Growth Rate (%)	23.66	20.40
Current Yield (%)	0.50	0.82
Beta (5 Years, Monthly)	1.00	1.00
Number of Stocks	66	446

**Top Ten Equity Holdings (Benchmark: Russell 1000 Growth Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Microsoft Corp	11.04	11.22	-0.18	-7.08
NVIDIA Corporation	7.64	4.94	2.70	2.84
Amazon.com Inc	6.58	5.47	1.11	-2.49
Apple Inc	6.44	12.20	-5.76	-11.61
Meta Platforms Inc	5.50	3.17	2.33	4.61
Alphabet Inc	5.14	3.20	1.94	8.99
Visa Inc	2.99	1.78	1.21	-2.96
Tesla Inc	2.34	3.30	-0.96	-4.41
GFL Environmental Inc	2.08	0.00	2.08	-18.12
TransDigm Group Inc	1.90	0.04	1.86	-5.71

**Ten Best Performers (Benchmark: Russell 1000 Growth Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Vertiv Holdings Co	0.66	0.00	0.66	50.18
Schlumberger Ltd	1.25	0.00	1.25	19.18
Diamondback Energy Inc	0.71	0.00	0.71	18.56
Eli Lilly and Co	1.07	2.17	-1.10	14.77
Regeneron Pharma	0.60	0.03	0.57	14.53
Booking Holdings Inc	0.43	0.55	-0.12	14.21
Intuit Inc.	0.86	0.67	0.19	11.71
Pioneer Natural Resources	0.74	0.00	0.74	11.64
DraftKings Inc	0.59	0.06	0.53	10.80
Old Dominion Freight Line	0.41	0.18	0.23	10.76

**Ten Worst Performers (Benchmark: Russell 1000 Growth Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Transmedics Group Inc	0.90	0.00	0.90	-34.81
DexCom Inc	0.59	0.17	0.42	-27.40
Albemarle Corp	0.59	0.00	0.59	-23.62
Las Vegas Sands Corp	0.33	0.07	0.26	-20.69
GFL Environmental Inc	2.08	0.00	2.08	-18.12
Toast Inc	0.43	0.03	0.40	-17.01
MGM Resorts International	0.34	0.00	0.34	-16.30
MongoDB Inc	0.51	0.11	0.40	-15.85
Intuitive Surgical Inc	0.86	0.49	0.37	-14.52
Netflix Inc	1.17	0.79	0.38	-14.28

**Buy and Hold Sector Attribution (Benchmark: Russell 1000 Growth Index)**

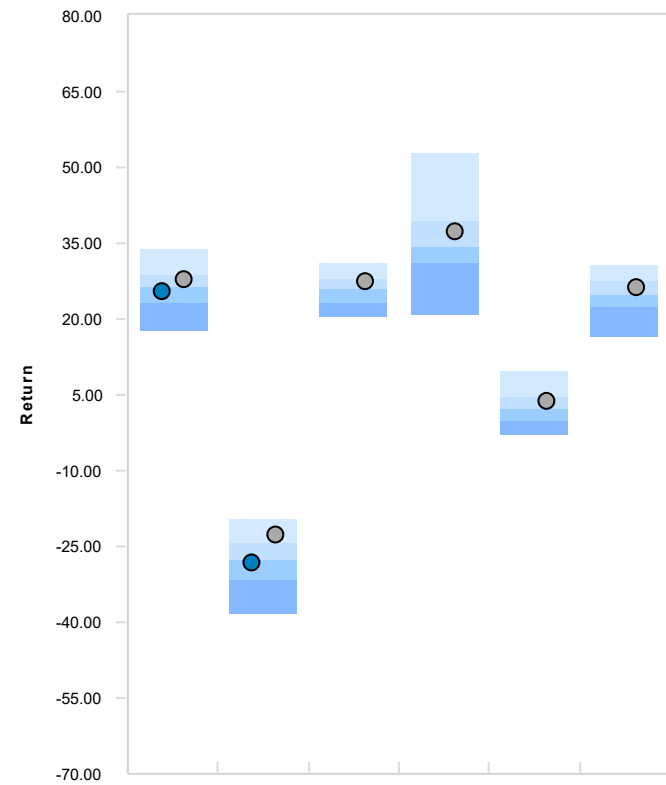
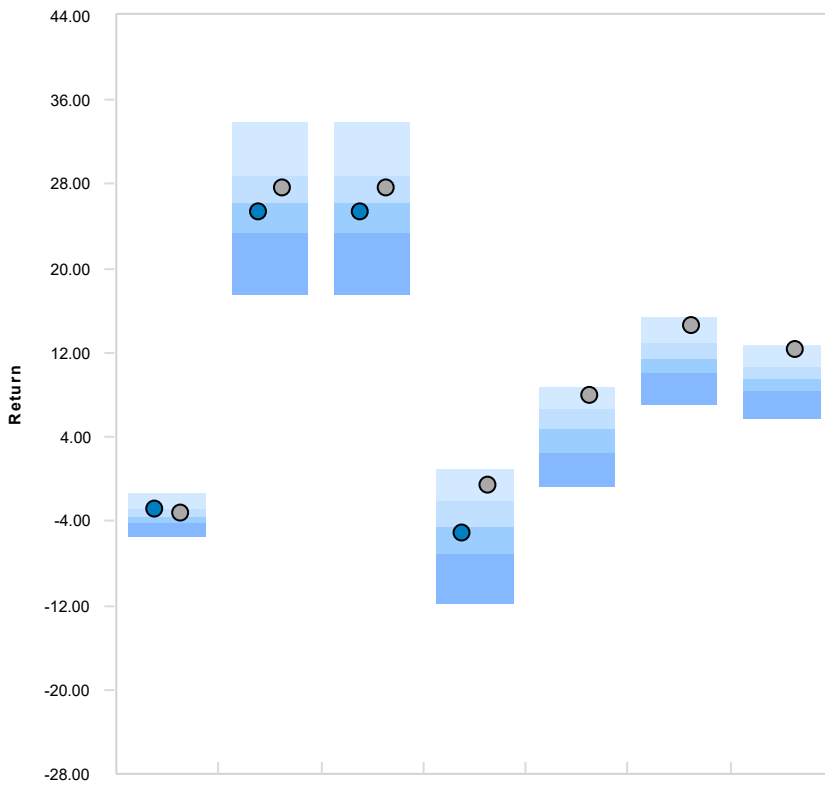
	Allocation		Performance		Stock	Attribution	
	Portfolio	Benchmark	Portfolio	Benchmark		Sector	Total
Communication Services	11.9	11.2	1.20	5.18	-0.44	0.01	-0.43
Consumer Discretionary	14.6	16.0	-1.54	-3.18	0.26	0.00	0.27
Consumer Staples	0.0	4.3	0.00	-6.71	0.00	0.16	0.16
Energy	3.2	0.5	15.81	15.25	0.01	0.47	0.48
Financials	6.6	6.4	-4.73	-0.54	-0.27	-0.01	-0.28
Health Care	13.5	10.9	-6.36	-0.08	-0.84	0.04	-0.81
Industrials	8.6	6.0	-3.51	-3.28	-0.03	0.00	-0.03
Information Technology	38.1	43.0	-5.92	-5.92	0.00	0.14	0.14
Materials	2.5	0.7	-14.38	-5.96	-0.21	-0.05	-0.27
Real Estate	0.0	0.9	0.00	-10.95	0.00	0.07	0.07
Utilities	0.0	0.1	0.00	-12.55	0.00	0.00	0.00
Cash	0.8	0.0	1.31	0.00	0.00	0.09	0.09
Total	100.0	100.0	-3.72	-3.13	-1.52	0.93	-0.60

**Portfolio Comparison**

Fred Alger Mgmt Large Cap Growth	
Market Capitalization (%)	
Greater than 25000M	82.26
16000M To 25000M	3.49
12000M To 16000M	3.54
8000M To 12000M	2.08
5000M To 8000M	2.77
3000M To 5000M	1.37
1000M To 3000M	0.90
Cash	3.60



Peer Group Analysis - IM U.S. LC Gr (MF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● MFS Growth Fund R6 (MFEKX)	-2.82 (24)	25.35 (58)	25.35 (58)	-5.16 (58)	N/A	N/A	N/A
● R1000 G	-3.13 (35)	27.72 (35)	27.72 (35)	-0.57 (13)	7.97 (10)	14.71 (8)	12.42 (7)
Median	-3.55	26.27	26.27	-4.52	4.70	11.44	9.57

	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● MFS Growth Fund R6 (MFEKX)	!5.35 (58)	!8.25 (55)	N/A	N/A	N/A	N/A
● R1000 G	!7.72 (35)	!2.59 (20)	!7.32 (30)	!7.53 (31)	3.71 (30)	!6.30 (36)
Median	!6.27	!7.73	!5.85	!4.07	2.15	!4.80

Comparative Performance

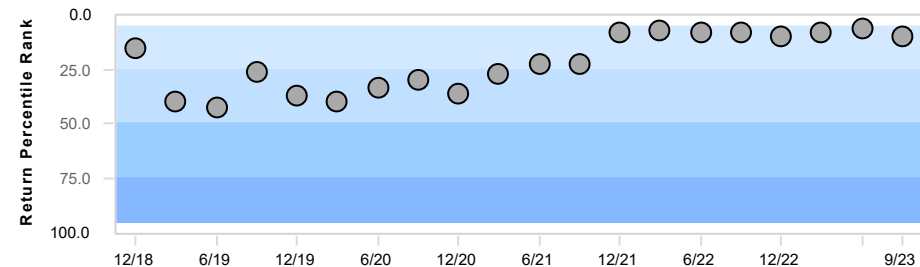
	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
MFS Growth Fund R6 (MFEKX)	12.18 (57)	10.75 (77)	3.82 (33)	-6.09 (89)	-19.36 (19)	-12.33 (72)
R1000 G	12.81 (45)	14.37 (37)	2.20 (57)	-3.60 (26)	-20.92 (40)	-9.04 (18)
IM U.S. LC Gr (MF)	12.69	13.68	2.48	-4.41	-21.94	-10.62



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

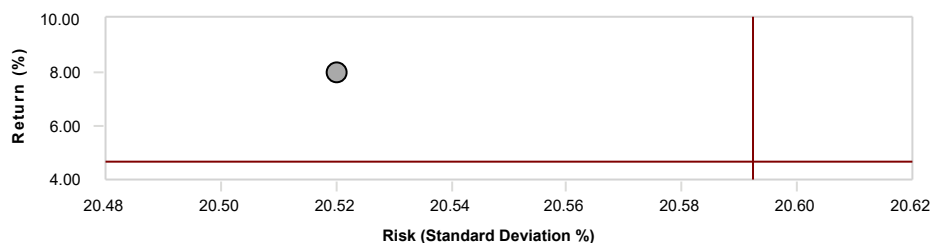
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### 3 Yr Rolling Percentile Ranking - 5 Years



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● MFS Growth Fund R6 (MFEKX)	0	0	0	0	0
● R1000 G	20	11 (55%)	9 (45%)	0 (0%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● MFS Growth Fund R6 (MFEKX)	N/A	N/A
● R1000 G	7.97	20.52
— Median	4.70	20.59

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● MFS Growth Fund R6 (MFEKX)	N/A	N/A
● R1000 G	12.42	21.12
— Median	9.57	21.11

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
MFS Growth Fund R6 (MFEKX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R1000 G	0.00	100.00	100.00	0.00	N/A	0.40	1.00	13.63

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
MFS Growth Fund R6 (MFEKX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R1000 G	0.00	100.00	100.00	0.00	N/A	0.58	1.00	13.55



Portfolio Characteristics (Benchmark: Russell 1000 Growth Index)		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	863,272,196,727	952,599,494,369
Median Mkt. Cap (\$)	65,585,852,450	15,785,611,710
Price/Earnings ratio	36.73	31.79
Price/Book ratio	8.26	10.36
5 Yr. EPS Growth Rate (%)	21.74	20.40
Current Yield (%)	0.57	0.82
Beta	N/A	1.00
Number of Stocks	69	446

Top Ten Equity Holdings (Benchmark: Russell 1000 Growth Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Microsoft Corp	13.68	11.22	2.46	-7.08
Alphabet Inc	6.65	3.71	2.94	9.32
Amazon.com Inc	6.14	5.47	0.67	-2.49
Apple Inc	5.88	12.20	-6.32	-11.61
NVIDIA Corporation	5.85	4.94	0.91	2.84
Mastercard Inc	4.05	1.59	2.46	0.81
Meta Platforms Inc	3.74	3.17	0.57	4.61
Visa Inc	3.27	1.78	1.49	-2.96
Eli Lilly and Co	2.28	2.17	0.11	14.77
Boston Scientific Corp	2.03	0.00	2.03	-2.38

Ten Best Performers (Benchmark: Russell 1000 Growth Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
arGEN-X SE	0.30	0.00	0.30	26.15
Eli Lilly and Co	2.28	2.17	0.11	14.77
Regeneron Pharma	0.38	0.03	0.35	14.53
Arista Networks Inc	0.38	0.22	0.16	13.50
Novo Nordisk A/S	0.07	0.00	0.07	12.93
Hess Corp	0.74	0.11	0.63	12.85
Intuit Inc.	1.19	0.67	0.52	11.71
Caterpillar Inc	0.29	0.50	-0.21	11.50
MSCI Inc	1.65	0.09	1.56	9.61
Alphabet Inc	6.65	3.71	2.94	9.32

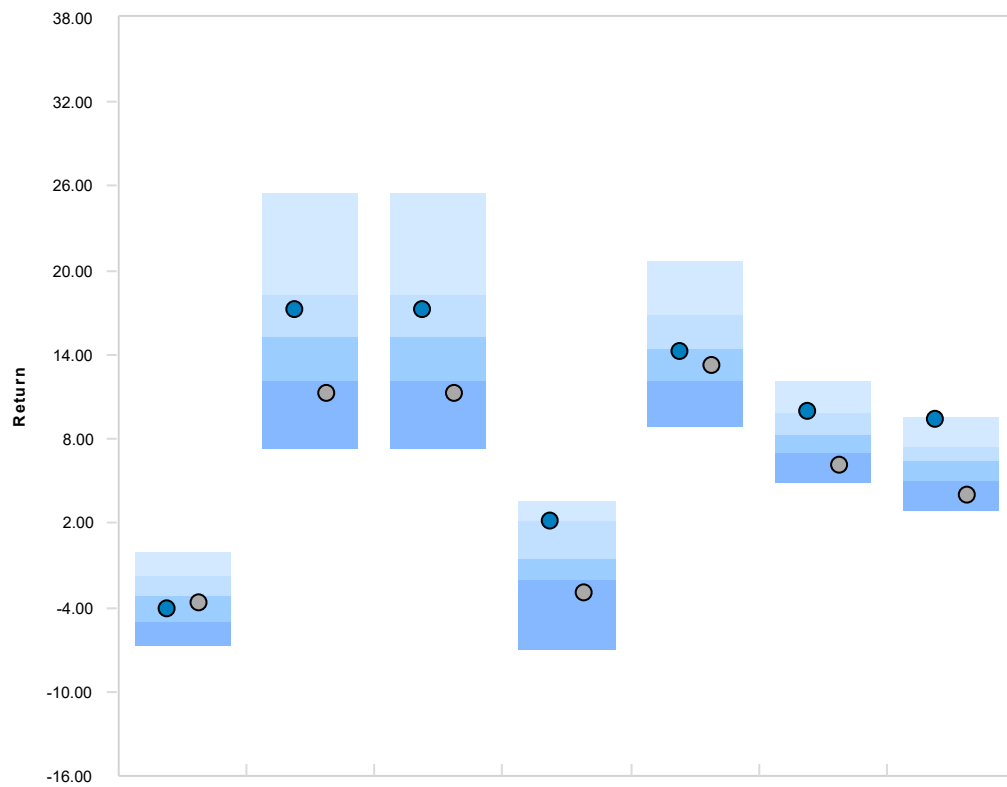
Ten Worst Performers (Benchmark: Russell 1000 Growth Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Estee Lauder Companies Inc	0.54	0.05	0.49	-26.10
Johnson Controls Intl	0.70	0.00	0.70	-21.39
Las Vegas Sands Corp	0.22	0.07	0.15	-20.69
Louis Vuitton	1.10	0.00	1.10	-19.59
ASML Holding NV	1.31	0.00	1.31	-18.60
Chipotle Mexican Grill Inc	0.43	0.24	0.19	-14.36
American Express Co	0.17	0.14	0.03	-14.06
CoStar Group Inc	1.17	0.06	1.11	-13.61
Rockwell Automation Inc.	0.72	0.16	0.56	-12.88
Apple Inc	5.88	12.20	-6.32	-11.61

Buy and Hold Sector Attribution (Benchmark: Russell 1000 Growth Index)					
	Allocation		Performance		Stock
	Portfolio	Benchmark	Portfolio	Benchmark	
Communication Services	12.5	11.2	6.03	5.18	0.10
Consumer Discretionary	10.4	16.0	-5.42	-3.18	-0.23
Consumer Staples	1.2	4.3	-20.22	-6.71	-0.19
Energy	0.6	0.5	12.85	15.25	-0.01
Financials	11.1	6.4	0.00	-0.54	0.06
Health Care	11.1	10.9	2.03	-0.08	0.21
Industrials	8.0	6.0	-5.41	-3.28	-0.20
Information Technology	38.7	43.0	-4.84	-5.92	0.43
Materials	5.4	0.7	-6.30	-5.96	-0.02
Real Estate	1.1	0.9	-10.67	-10.95	0.02
Utilities	0.0	0.1	0.00	-12.55	0.00
Total	100.0	100.0	-2.68	-3.13	0.16

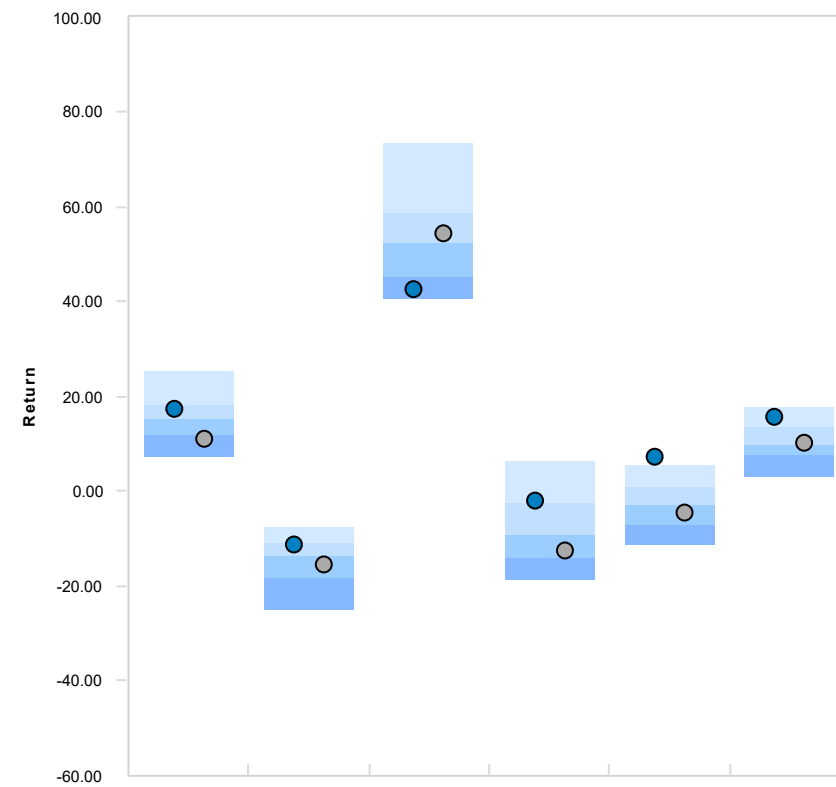
Portfolio Comparison		
MFS Growth Fund R6 (MFEKX)		
Market Capitalization (%)		
Greater than 25000M		98.13
16000M To 25000M		1.87



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Cambiar	-4.10 (65)	17.32 (31)	17.32 (31)	2.15 (26)	14.22 (51)	9.96 (25)	9.43 (8)
● R2500 V	-3.66 (58)	11.34 (81)	11.34 (81)	-2.92 (79)	13.32 (58)	6.19 (85)	3.99 (85)
Median	-3.25	15.30	15.30	-0.46	14.39	8.29	6.40



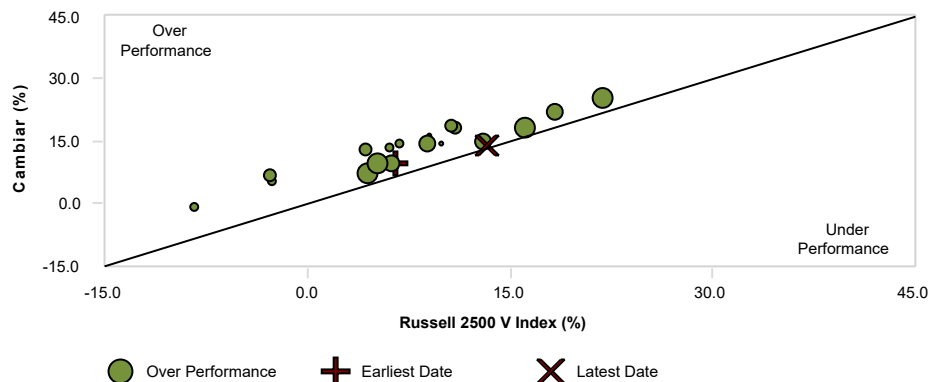
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Cambiar	17.32 (31)	-11.06 (28)	42.80 (83)	-1.90 (25)	7.33 (2)	15.92 (11)
● R2500 V	11.34 (81)	-15.35 (63)	54.38 (42)	-12.62 (66)	-4.35 (65)	10.24 (47)
Median	15.30	-13.80	52.22	-8.87	-2.81	9.84

Comparative Performance

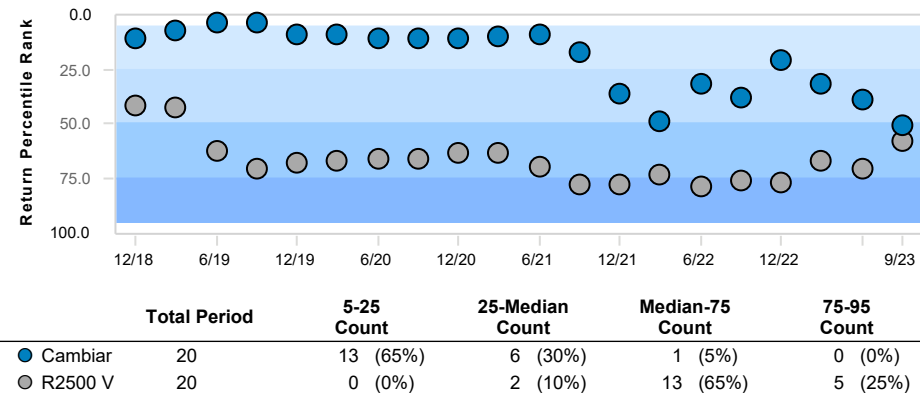
	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Cambiar	3.23 (78)	3.36 (39)	14.66 (9)	-5.33 (64)	-9.55 (11)	-3.38 (62)
Russell 2500 V Index	4.37 (53)	1.40 (80)	9.21 (76)	-4.50 (43)	-15.39 (82)	-1.50 (38)
IM U.S. SMID CV (SA+CF)	4.50	2.77	10.50	-4.67	-13.46	-2.56



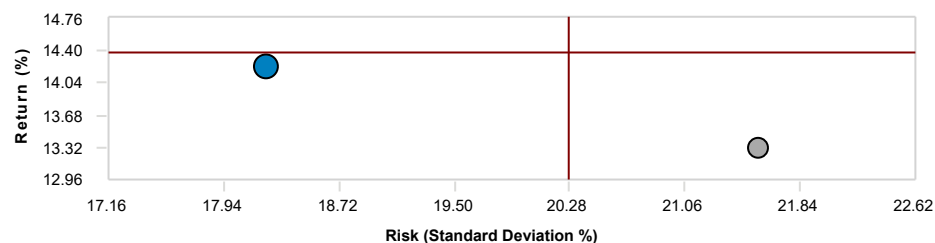
### 3 Yr Rolling Under/Over Performance - 5 Years



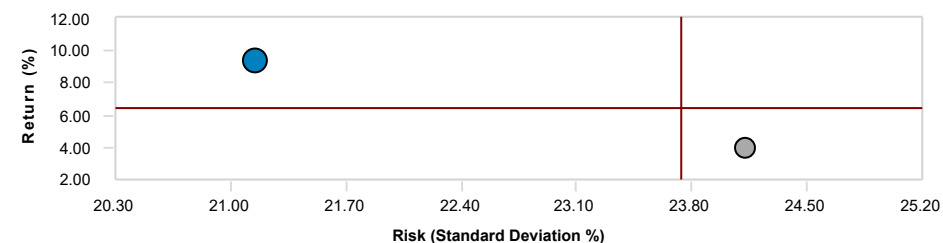
### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Cambiar	6.98	86.15	77.02	3.08	0.02	0.73	0.81	9.55
R2500 V	0.00	100.00	100.00	0.00	N/A	0.61	1.00	12.25

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Cambiar	6.59	95.08	79.05	5.59	0.67	0.45	0.85	14.15
R2500 V	0.00	100.00	100.00	0.00	N/A	0.22	1.00	17.15





**Portfolio Characteristics (Benchmark: Russell 2500 Value Index)**

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	11,355,487,538	6,309,949,577
Median Mkt. Cap (\$)	9,830,705,430	1,150,409,185
Price/Earnings ratio	18.59	11.28
Price/Book ratio	2.87	2.02
5 Yr. EPS Growth Rate (%)	13.23	12.56
Current Yield (%)	1.54	2.25
Beta (5 Years, Monthly)	0.85	1.00
Number of Stocks	41	1,884

**Top Ten Equity Holdings (Benchmark: Russell 2500 Value Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Molina Healthcare Inc.	3.00	0.00	3.00	8.85
Gentex Corporation	2.99	0.22	2.77	11.66
EPAM Systems Inc	2.97	0.00	2.97	13.77
Packaging Corp Of America	2.96	0.40	2.56	17.16
Magnolia Oil & Gas Corp	2.95	0.01	2.94	10.16
Targa Resources Corp	2.91	0.00	2.91	13.34
JB Hunt Transport	2.83	0.00	2.83	4.35
HealthEquity Inc	2.74	0.00	2.74	15.70
Masco Corporation	2.73	0.00	2.73	-6.40
Expeditors Intl	2.71	0.00	2.71	-5.37

**Ten Best Performers (Benchmark: Russell 2500 Value Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Packaging Corp Of America	2.96	0.40	2.56	17.16
Fidelity Nat. Financial Inc	2.40	0.00	2.40	15.94
HealthEquity Inc	2.74	0.00	2.74	15.70
EPAM Systems Inc	2.97	0.00	2.97	13.77
Cboe Global Markets Inc	2.68	0.48	2.20	13.60
Targa Resources Corp	2.91	0.00	2.91	13.34
Gentex Corporation	2.99	0.22	2.77	11.66
Magnolia Oil & Gas Corp	2.95	0.01	2.94	10.16
Molina Healthcare Inc.	3.00	0.00	3.00	8.85
Mercury Systems Inc	1.96	0.05	1.91	7.23

**Ten Worst Performers (Benchmark: Russell 2500 Value Index)**

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
FMC Corp.	1.91	0.00	1.91	-35.25
Euronet Worldwide Inc	2.29	0.05	2.24	-32.37
IPG Photonics Corp	2.41	0.09	2.32	-25.24
Lamb Weston Holdings Inc	2.34	0.00	2.34	-19.35
Toro Co (The)	2.15	0.00	2.15	-18.25
NNN REIT Inc	1.90	0.19	1.71	-16.32
Bruker Corporation	2.57	0.00	2.57	-15.66
Ultra Salon Cosmetics	2.49	0.00	2.49	-15.12
Littelfuse Inc	2.47	0.17	2.30	-14.89
DENTSPLY SIRONA Inc	2.31	0.21	2.10	-14.29

**Buy and Hold Sector Attribution (Benchmark: Russell 2500 Value Index)**

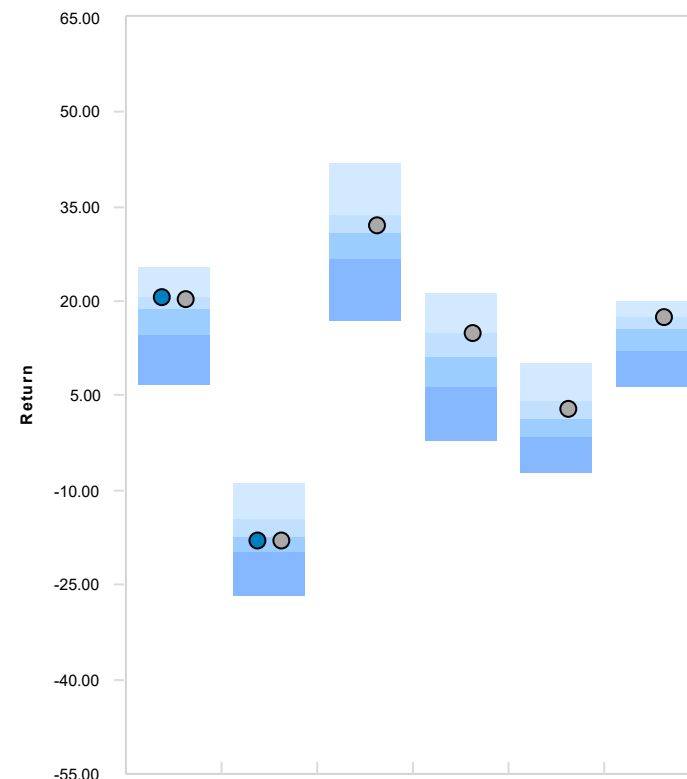
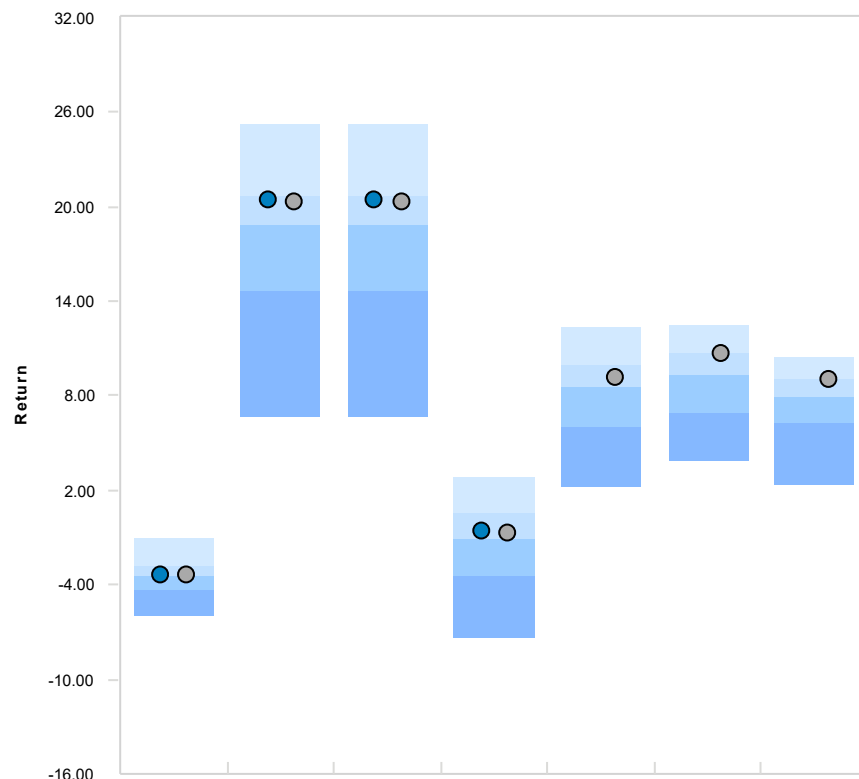
	Allocation		Performance		Stock	Attribution	
	Portfolio	Benchmark	Portfolio	Benchmark		Sector	Total
Communication Services	0.0	3.0	0.00	-9.14	0.00	0.17	0.17
Consumer Discretionary	4.9	12.6	0.35	-6.61	0.34	0.22	0.56
Consumer Staples	2.5	3.0	-19.35	-2.98	-0.45	-0.02	-0.46
Energy	5.3	5.6	11.71	15.48	-0.17	-0.05	-0.22
Financials	19.4	19.2	-0.13	1.61	-0.38	0.07	-0.31
Health Care	19.0	8.2	-3.91	-12.19	1.74	-0.97	0.77
Industrials	21.8	19.8	-6.16	-4.32	-0.37	-0.05	-0.42
Information Technology	10.7	8.5	-8.55	-6.15	-0.28	-0.06	-0.34
Materials	4.3	6.4	-0.03	-1.53	-0.13	-0.04	-0.17
Real Estate	5.0	10.3	-9.76	-6.36	-0.18	0.15	-0.03
Utilities	4.7	3.5	-10.52	-9.69	-0.04	-0.07	-0.11
Cash	2.3	0.0	1.31	0.00	0.00	0.00	0.00
Total	100.0	100.0	-4.17	-3.61	0.08	-0.65	-0.56

**Portfolio Comparison**

	Cambiar Investors Equity
<b>Market Capitalization (%)</b>	
Greater than 25000M	2.63
16000M To 25000M	19.30
12000M To 16000M	20.16
8000M To 12000M	28.48
5000M To 8000M	14.84
3000M To 5000M	12.49
1000M To 3000M	1.96
Cash	0.14



Peer Group Analysis - IM U.S. MC Core (MF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Fidelity TM (FSKAX)	-3.28 (44)	20.53 (30)	20.53 (30)	-0.60 (42)	N/A	N/A	N/A	20.53 (30)	18.03 (61)	N/A	N/A	N/A	N/A
● CRSP U.S. Total Market TR	-3.30 (46)	20.37 (34)	20.37 (34)	-0.64 (44)	9.26 (38)	10.66 (28)	9.07 (24)	20.37 (34)	17.98 (59)	32.11 (35)	14.99 (25)	2.92 (36)	17.62 (22)
Median	-3.40	18.77	18.77	-1.07	8.61	9.35	7.93	18.77	17.28	30.69	11.14	1.48	15.61

Comparative Performance

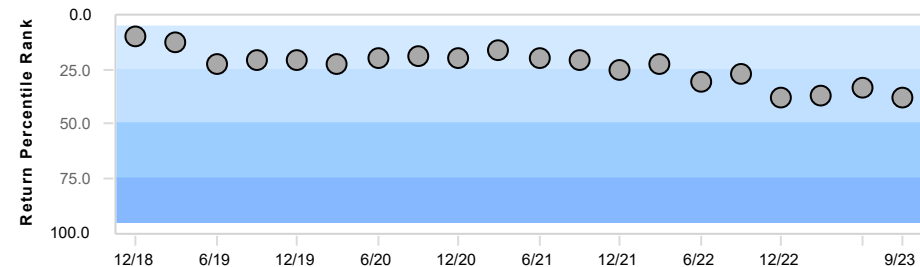
	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Fidelity TM (FSKAX)	8.40 (24)	7.26 (25)	7.18 (61)	-4.56 (47)	-16.83 (77)	-5.40 (41)
CRSP U.S. Total Market TR	8.41 (23)	7.15 (29)	7.15 (64)	-4.44 (39)	-16.85 (79)	-5.44 (42)
IM U.S. MC Core Equity (MF)	7.16	6.16	8.04	-4.63	-15.83	-5.87



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

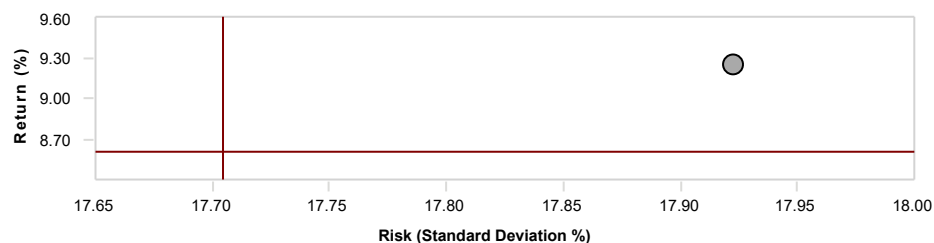
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### 3 Yr Rolling Percentile Ranking - 5 Years



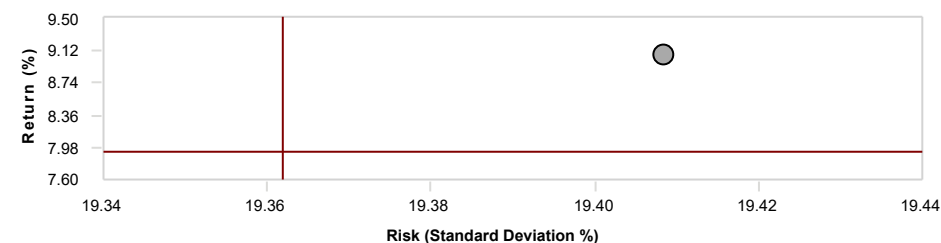
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Fidelity TM (FSKAX)	0	0	0	0	0
CRSP U.S. Total Market TR	20	14 (70%)	6 (30%)	0 (0%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Fidelity TM (FSKAX)	N/A	N/A
CRSP U.S. Total Market TR	9.26	17.92
Median	8.61	17.70

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Fidelity TM (FSKAX)	N/A	N/A
CRSP U.S. Total Market TR	9.07	19.41
Median	7.93	19.36

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Fidelity TM (FSKAX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CRSP U.S. Total Market TR	0.00	100.00	100.00	0.00	N/A	0.49	1.00	11.37

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Fidelity TM (FSKAX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CRSP U.S. Total Market TR	0.00	100.00	100.00	0.00	N/A	0.46	1.00	12.99



**Fund Information**

Fund Name : Fidelity Concord Street Trust: Fidelity Total Market Index Fund  
Fund Family : Fidelity Investments  
Ticker : FSKAX  
Inception Date : 09/08/2011  
Fund Assets : \$74,007 Million  
Portfolio Turnover : 2%

Portfolio Assets : \$121,295 Million  
Portfolio Manager : Team Managed  
PM Tenure :  
Fund Style : IM U.S. Multi-Cap Core Equity (MF)  
Style Benchmark : CRSP U.S. Total Market TR Index

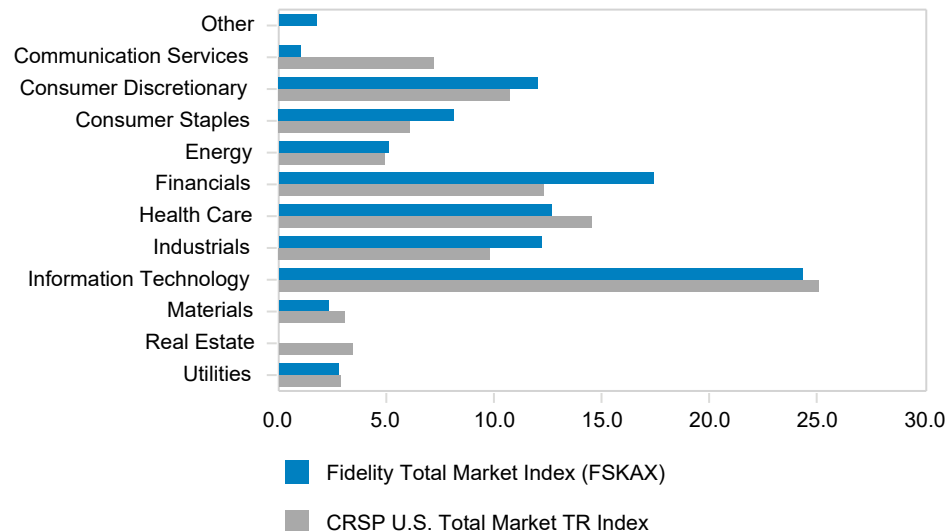
**Portfolio Characteristics As of 01/31/2023**

	Portfolio	Benchmark
Total Securities	3,988	3,944
Avg. Market Cap	364,487,018,870	384,573,830,236
Price/Earnings (P/E)	27.72	19.58
Price/Book (P/B)	8.08	3.78
Dividend Yield	2.02	1.62
Annual EPS	28.70	241.81
5 Yr EPS	18.14	19.54
3 Yr EPS Growth	19.78	N/A
Beta	N/A	1.00

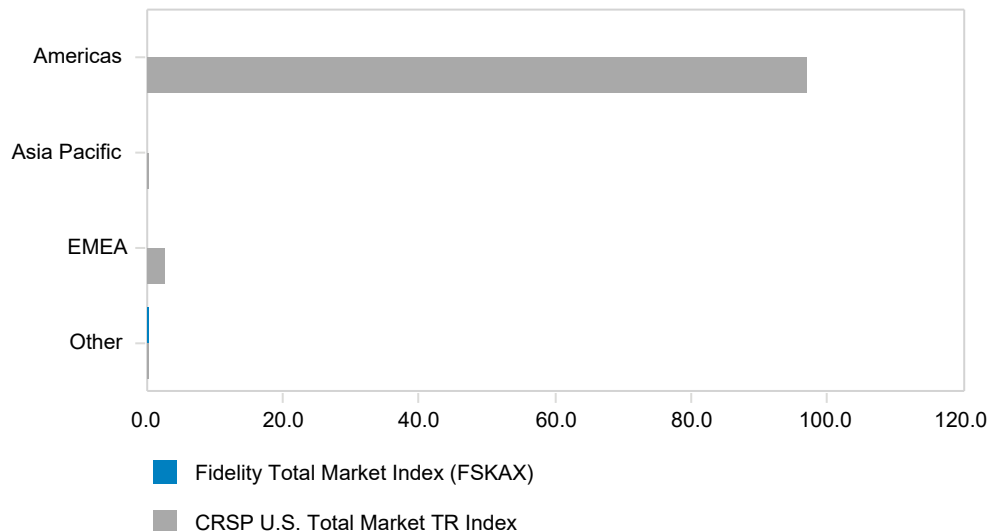
**Top Ten Securities As of 01/31/2023**

Apple Inc ORD	5.3 %
Microsoft Corp ORD	4.6 %
Amazon.com Inc ORD	2.3 %
Alphabet Inc Class A ORD	1.5 %
Berkshire Hathaway Inc ORD	1.4 %
Alphabet Inc Class C ORD	1.3 %
NVIDIA Corp ORD	1.2 %
Exxon Mobil Corp ORD	1.2 %
UnitedHealth Group Inc ORD	1.2 %
Tesla Inc ORD	1.2 %

**Sector Weights As of 01/31/2023**



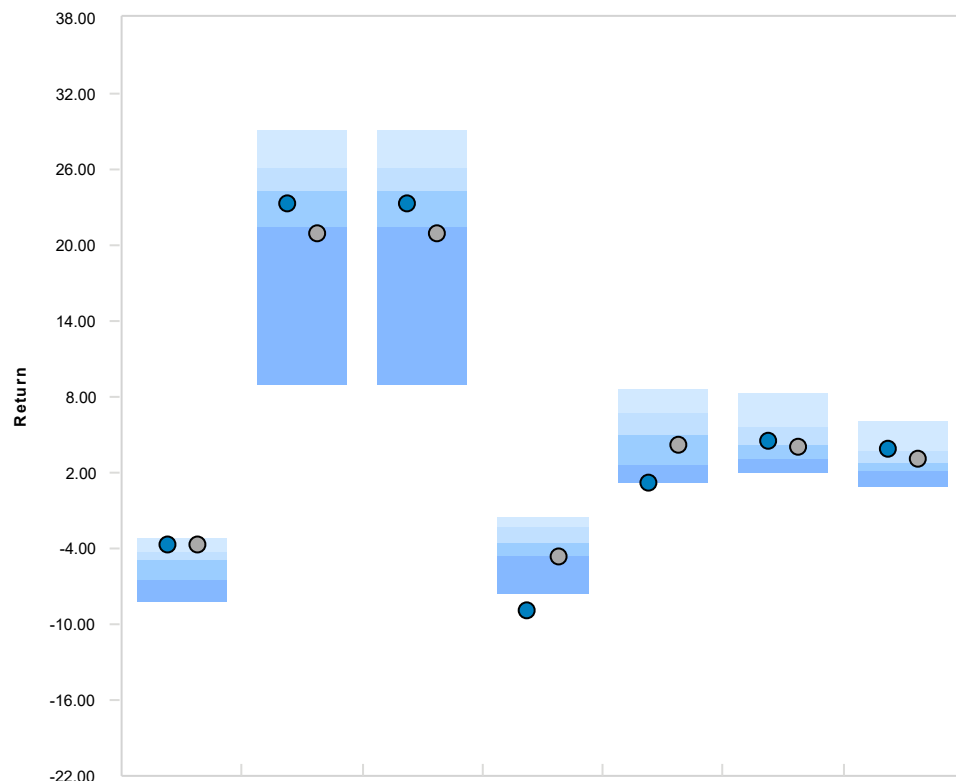
**Region Weights As of 01/31/2023**



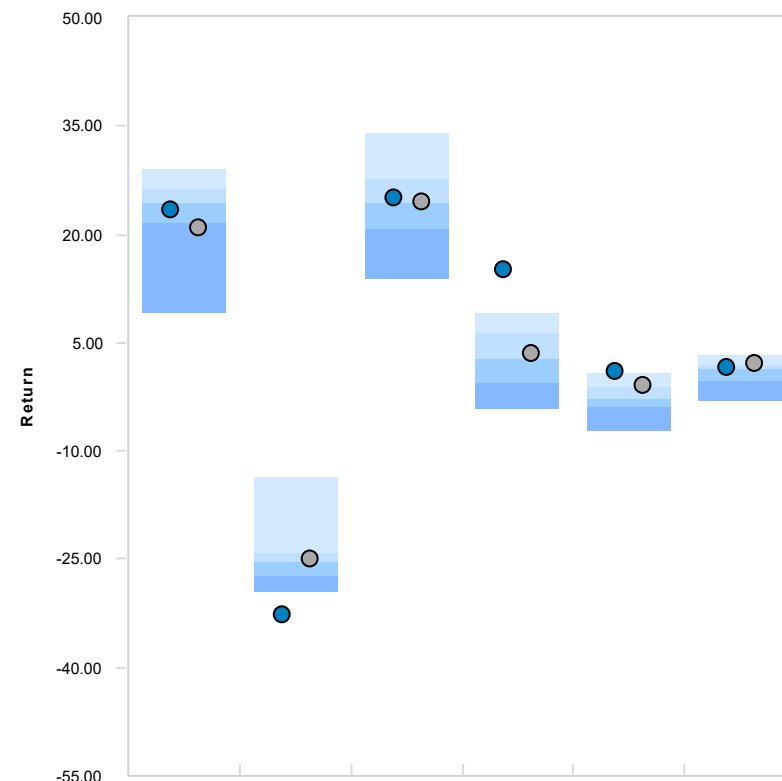
Statistics provided by Lipper. Most recent available data shown.



Peer Group Analysis - IM Int'l Large Cap Core Equity (MF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Int'l Equity	-3.68 (11)	23.39 (58)	23.39 (58)	-8.89 (100)	1.29 (95)	4.60 (42)	3.90 (24)
● Int'l Equity Policy	-3.68 (11)	21.02 (78)	21.02 (78)	-4.59 (75)	4.24 (62)	4.04 (52)	3.07 (40)
Median	-4.99	24.25	24.25	-3.48	5.04	4.16	2.77



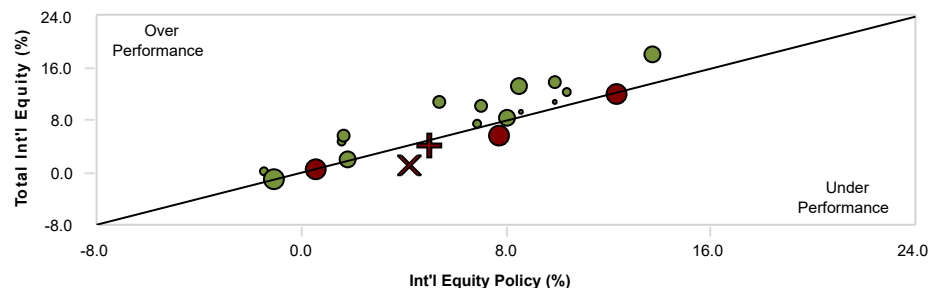
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Total Int'l Equity	23.39 (58)	-32.72 (100)	25.16 (43)	15.19 (1)	1.17 (5)	1.68 (38)
● Int'l Equity Policy	21.02 (78)	-24.79 (34)	24.45 (48)	3.45 (45)	-0.72 (21)	2.25 (19)
Median	24.25	-25.40	24.28	2.82	-2.78	1.30

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Total Int'l Equity	3.30 (45)	7.86 (71)	14.97 (77)	-10.06 (48)	-13.79 (70)	-12.24 (100)
Int'l Equity Policy	2.67 (75)	7.00 (77)	14.37 (82)	-9.80 (40)	-13.54 (62)	-5.33 (21)
IM Int'l Large Cap Core Equity (MF)	3.20	8.47	17.19	-10.19	-13.27	-6.90

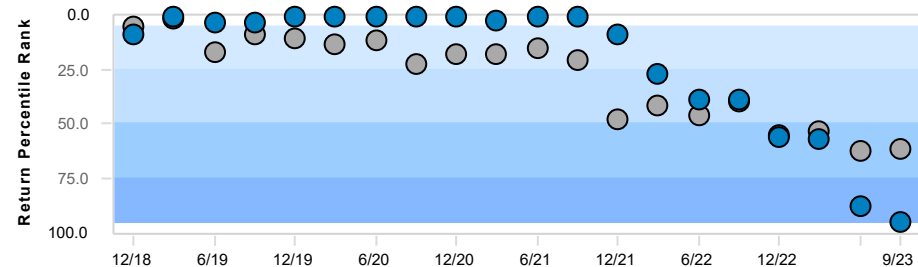


### 3 Yr Rolling Under/Over Performance - 5 Years



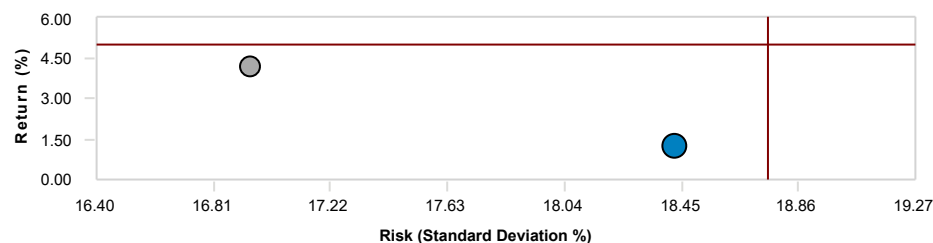
- Over Performance
- Under Performance
- + Earliest Date
- × Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



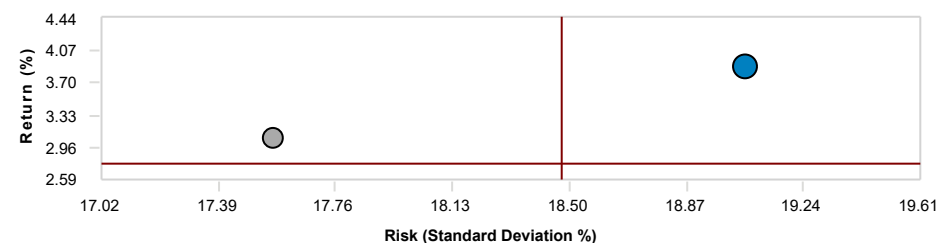
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<span style="color: blue;">●</span> Total Int'l Equity	20	13 (65%)	3 (15%)	2 (10%)	2 (10%)
<span style="color: grey;">●</span> Int'l Equity Policy	20	12 (60%)	4 (20%)	4 (20%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Int'l Equity	1.29	18.43
<span style="color: grey;">●</span> Int'l Equity Policy	4.24	16.94
<span style="color: red;">—</span> Median	5.04	18.76

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Int'l Equity	3.90	19.05
<span style="color: grey;">●</span> Int'l Equity Policy	3.07	17.56
<span style="color: red;">—</span> Median	2.77	18.47

### Historical Statistics - 3 Years

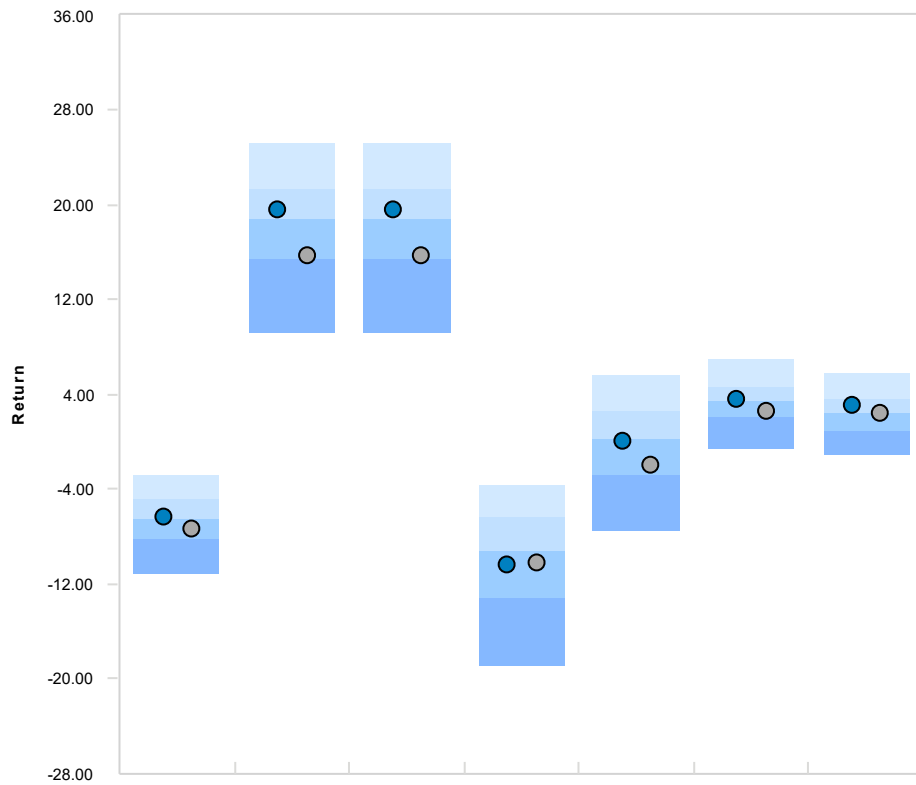
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Int'l Equity	4.35	101.70	115.09	-2.91	-0.60	0.07	1.06	11.86
Int'l Equity Policy	0.00	100.00	100.00	0.00	N/A	0.23	1.00	10.50

### Historical Statistics - 5 Years

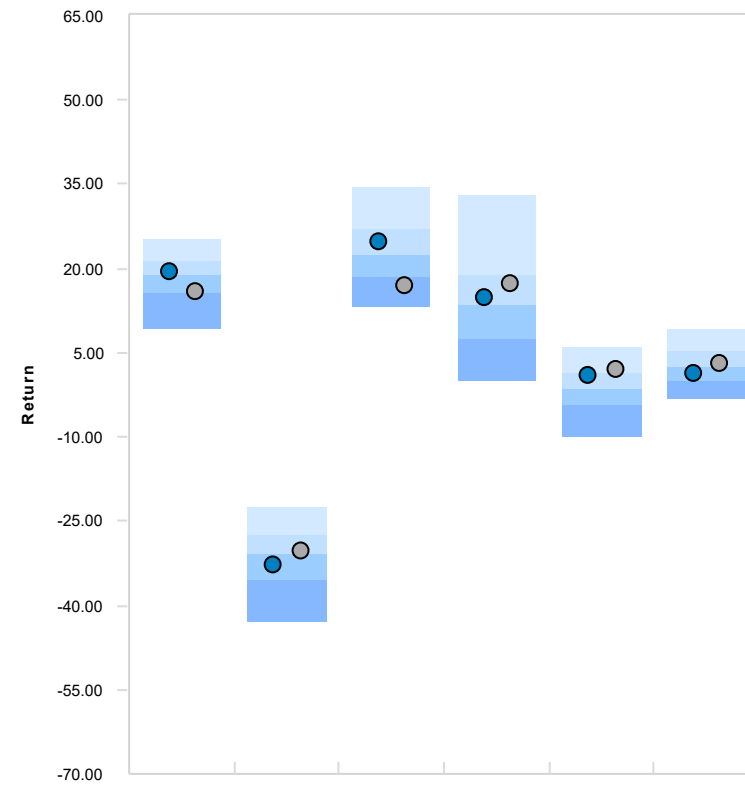
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Int'l Equity	4.15	110.36	107.65	0.80	0.26	0.21	1.06	12.93
Int'l Equity Policy	0.00	100.00	100.00	0.00	N/A	0.16	1.00	12.15



Peer Group Analysis - IM International Growth Equity (MF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● EuroPacific	-6.31 (48)	19.66 (41)	19.66 (41)	-10.36 (56)	0.08 (52)	3.61 (45)	3.12 (35)
○ MSCI ACW ex US Gr	-7.31 (63)	15.84 (74)	15.84 (74)	-10.10 (55)	-1.86 (68)	2.67 (67)	2.54 (49)
Median	-6.39	18.83	18.83	-9.09	0.37	3.47	2.51



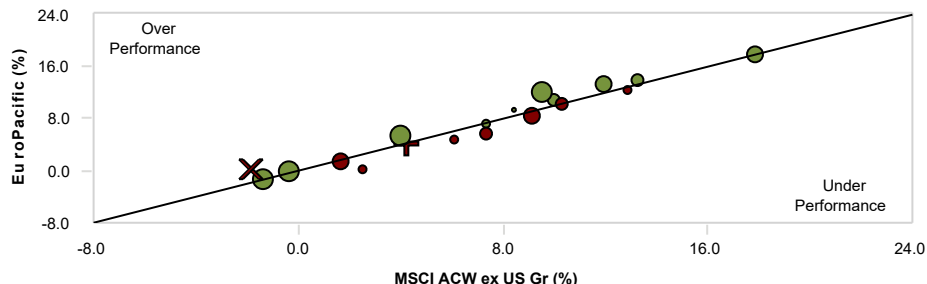
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● EuroPacific	19.66 (41)	32.85 (59)	24.76 (38)	14.97 (46)	1.17 (28)	1.47 (63)
○ MSCI ACW ex US Gr	15.84 (74)	30.22 (47)	16.95 (83)	17.54 (32)	2.03 (20)	3.08 (45)
Median	18.83	31.05	22.54	13.48	-1.42	2.64

Comparative Performance

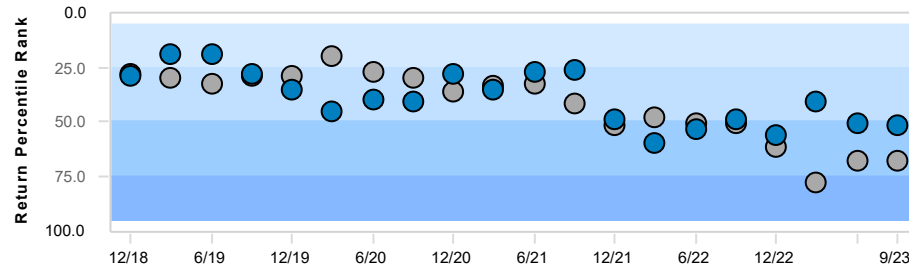
	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
EuroPacific	2.16 (52)	9.87 (28)	13.78 (63)	-9.33 (38)	-14.65 (35)	-12.24 (53)
MSCI ACW ex US Gr	1.94 (59)	8.59 (45)	12.89 (77)	-9.37 (39)	-15.71 (53)	-10.78 (45)
IM International Growth Equity (MF) Median	2.23	8.22	14.53	-9.66	-15.47	-11.55



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

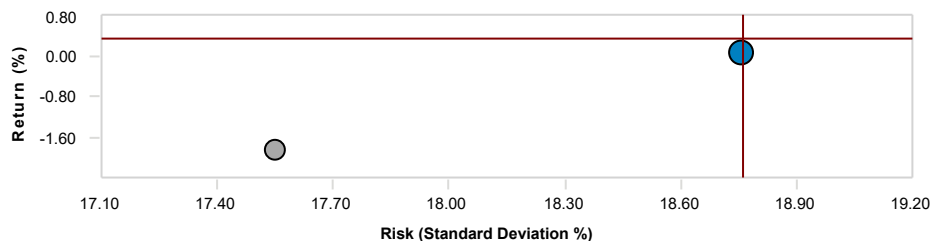


### 3 Yr Rolling Percentile Ranking - 5 Years



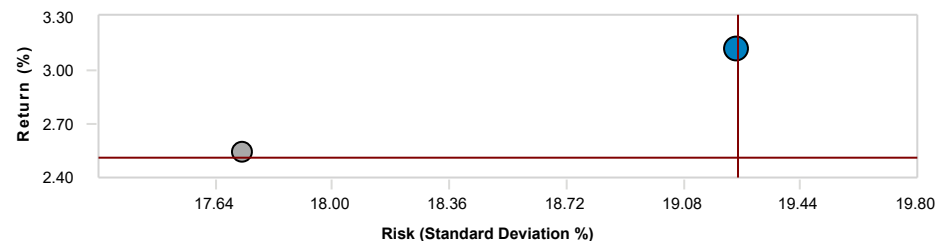
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● EuroPacific	20	2 (10%)	13 (65%)	5 (25%)	0 (0%)
● MSCI ACW ex US Gr	20	1 (5%)	12 (60%)	6 (30%)	1 (5%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● EuroPacific	0.08	18.76
● MSCI ACW ex US Gr	-1.86	17.55
— Median	0.37	18.76

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● EuroPacific	3.12	19.24
● MSCI ACW ex US Gr	2.54	17.72
— Median	2.51	19.25

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
EuroPacific	4.29	107.79	98.79	2.20	0.50	0.01	1.04	12.22
MSCI ACW ex US Gr	0.00	100.00	100.00	0.00	N/A	-0.12	1.00	12.14

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
EuroPacific	4.20	108.13	105.88	0.60	0.20	0.17	1.06	13.14
MSCI ACW ex US Gr	0.00	100.00	100.00	0.00	N/A	0.13	1.00	12.29





**Fund Information**

Fund Name : EuroPacific Growth Fund; Class R6 Shares  
Fund Family : Capital Group/American Funds  
Ticker : REGX  
Inception Date : 05/01/2009  
Fund Assets : \$65,245 Million  
Portfolio Turnover : 34%

Portfolio Assets : \$134,705 Million  
Portfolio Manager : Team Managed  
PM Tenure :  
Fund Style : IM International Large Cap Growth Equity (MF)  
Style Benchmark : MSCI ACW ex US Gr

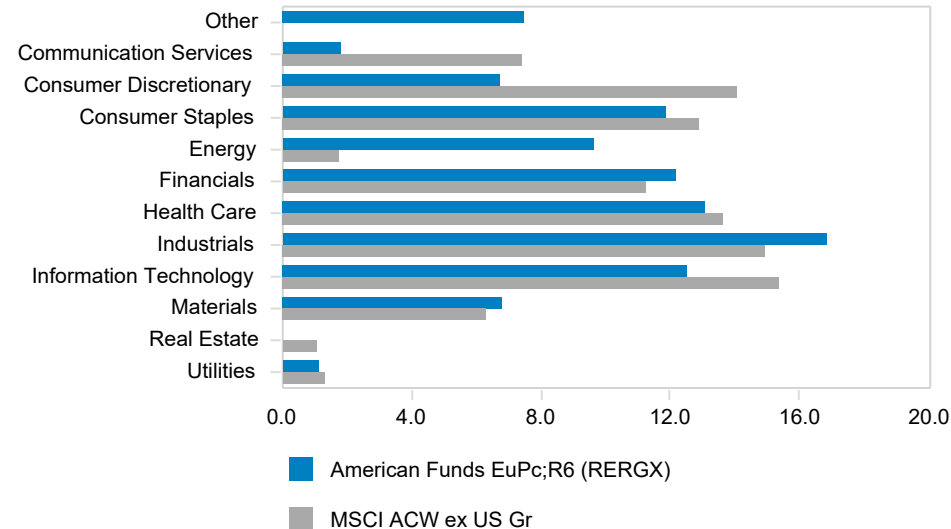
**Portfolio Characteristics As of 12/31/2022**

	Portfolio	Benchmark
Total Securities	367	1,242
Avg. Market Cap	93,963,349,389	97,467,013,278
Price/Earnings (P/E)	26.55	19.54
Price/Book (P/B)	6.03	3.34
Dividend Yield	2.54	1.82
Annual EPS	43.86	631.25
5 Yr EPS	14.87	13.95
3 Yr EPS Growth	15.56	N/A
Beta (5 Years, Monthly)	1.06	1.00

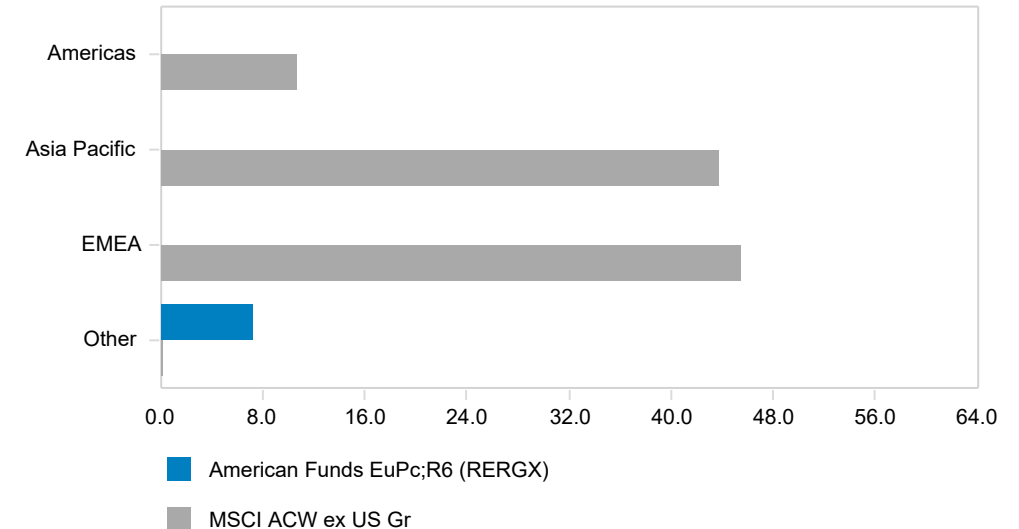
**Top Ten Securities As of 12/31/2022**

Capital Group Central Cash Fund;	5.8 %
Novo Nordisk A/S ORD	3.7 %
Reliance Industries Ltd ORD	3.1 %
LVMH Moet Hennessy Louis Vuitton	2.8 %
ASML Holding NV ORD	2.4 %
Canadian Natural Resources Ltd	2.3 %
AIA Group Ltd ORD	2.2 %
Airbus SE ORD	2.1 %
Daiichi Sankyo Co Ltd ORD	2.1 %
Taiwan Semiconductor Manufacturing	1.9 %

**Sector Weights As of 12/31/2022**



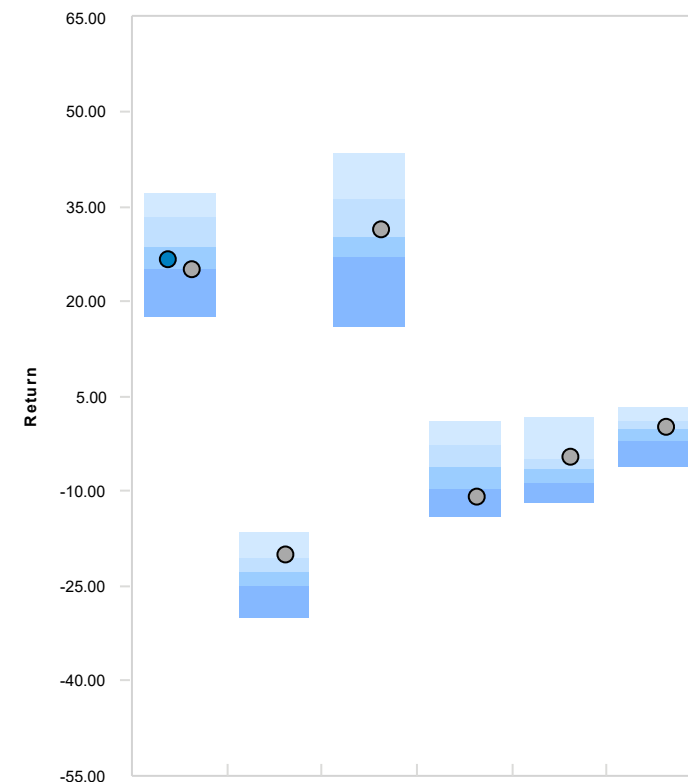
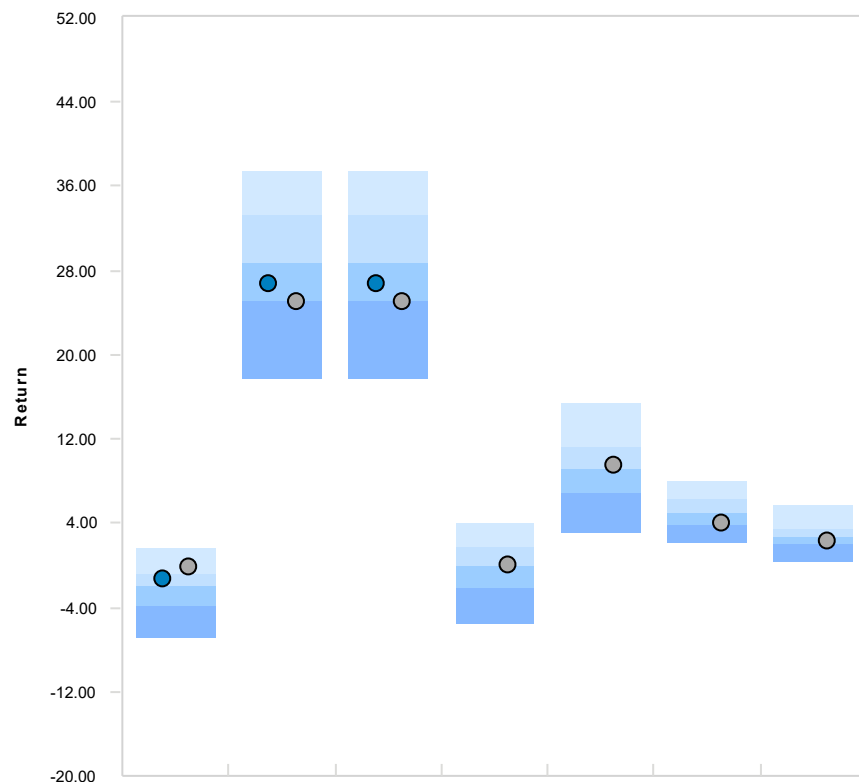
**Region Weights As of 12/31/2022**



Statistics provided by Lipper. Most recent available data shown. Performance attribution is calculated monthly based on a "buy and hold" strategy for portfolio level securities using transaction data provided by the client's custodial bank.



Peer Group Analysis - IM International Value Equity (MF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Dodge & Cox Inter (DODFX)	-1.32 (34)	26.74 (68)	26.74 (68)	N/A	N/A	N/A	N/A
○ MSCI ACW ex US Val	-0.07 (16)	25.17 (75)	25.17 (75)	0.06 (47)	9.57 (45)	4.07 (72)	2.29 (65)
Median	-2.09	28.68	28.68	-0.12	9.11	4.93	2.68

	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Dodge & Cox Inter (DODFX)	26.74 (68)	N/A	N/A	N/A	N/A	N/A
○ MSCI ACW ex US Val	25.17 (75)	20.02 (18)	31.38 (44)	10.84 (80)	-4.51 (22)	0.42 (36)
Median	28.68	22.74	30.13	-6.00	-6.37	-0.16

Comparative Performance

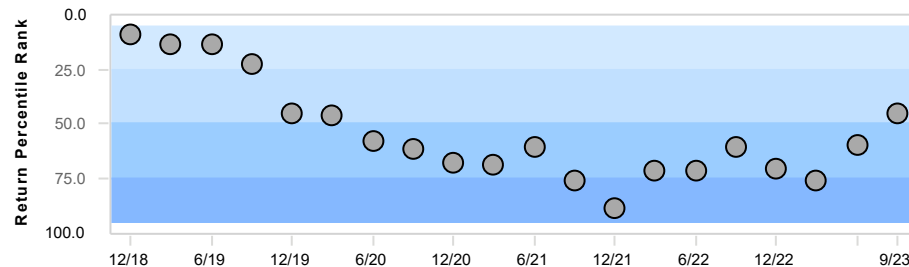
	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Dodge & Cox Inter (DODFX)	4.30 (11)	6.15 (77)	16.01 (84)	-10.69 (45)	N/A	N/A
MSCI ACW ex US Val	2.95 (47)	5.16 (94)	15.70 (86)	-10.44 (40)	-11.90 (57)	0.13 (6)
IM International Value Equity (MF) Median	2.90	7.28	18.65	-10.98	-11.64	-3.66



3 Yr Rolling Under/Over Performance - 5 Years

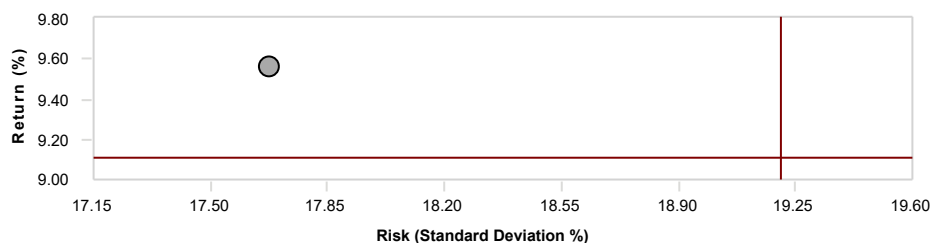
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3 Yr Rolling Percentile Ranking - 5 Years



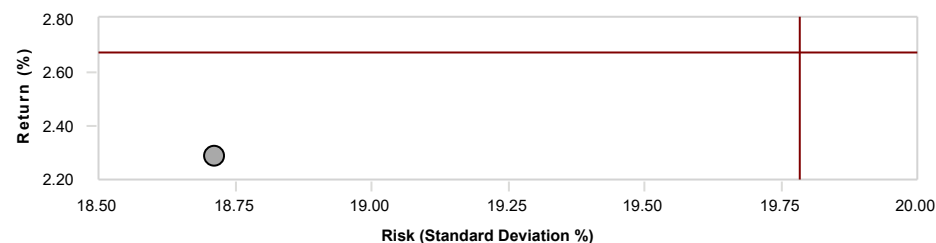
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Dodge & Cox Inter (DODFX)	0	0	0	0	0
○ MSCI ACW ex US Val	20	4 (20%)	3 (15%)	10 (50%)	3 (15%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Dodge & Cox Inter (DODFX)	N/A	N/A
○ MSCI ACW ex US Val	9.57	17.67
— Median	9.11	19.21

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Dodge & Cox Inter (DODFX)	N/A	N/A
○ MSCI ACW ex US Val	2.29	18.71
— Median	2.68	19.79

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Dodge & Cox Inter (DODFX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI ACW ex US Val	0.00	100.00	100.00	0.00	N/A	0.51	1.00	9.91

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Dodge & Cox Inter (DODFX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI ACW ex US Val	0.00	100.00	100.00	0.00	N/A	0.12	1.00	13.13



**Fund Information**

Fund Name : Dodge & Cox Funds: Dodge & Cox International Stock Fund; Class I Shares  
Fund Family : Dodge & Cox Funds  
Ticker : DODFX  
Inception Date : 05/01/2001  
Fund Assets : \$39,697 Million  
Portfolio Turnover : 12%

Portfolio Assets : \$45,929 Million  
Portfolio Manager : Team Managed  
PM Tenure :  
Fund Style : IM International Large Cap Value Equity (MF)  
Style Benchmark : MSCI ACW ex US Val

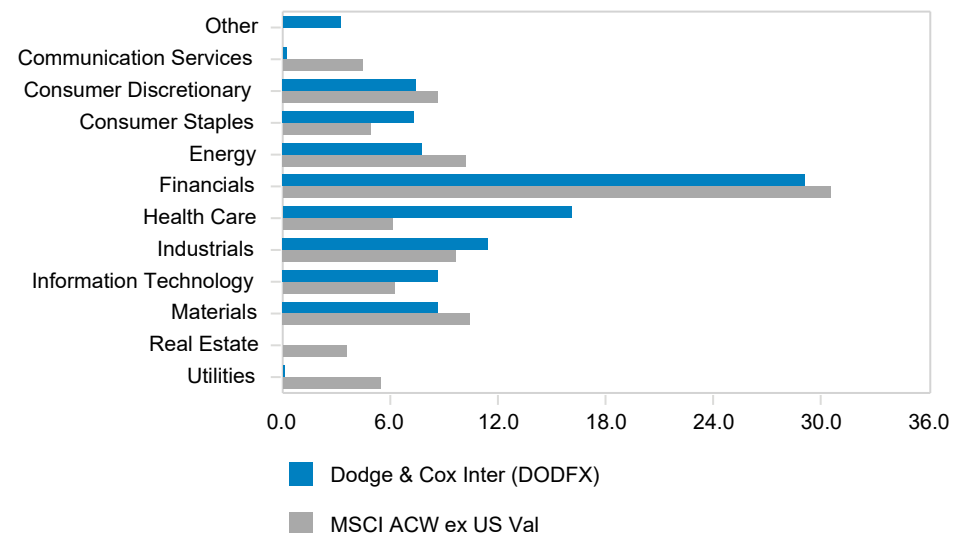
**Portfolio Characteristics As of 12/31/2022**

	Portfolio	Benchmark
Total Securities	81	1,344
Avg. Market Cap	66,601,492,544	57,996,630,973
Price/Earnings (P/E)	14.15	8.85
Price/Book (P/B)	2.27	1.69
Dividend Yield	3.46	4.92
Annual EPS	42.35	549.01
5 Yr EPS	15.70	10.36
3 Yr EPS Growth	12.52	N/A
Beta (5 Years, Monthly)	1.12	1.00

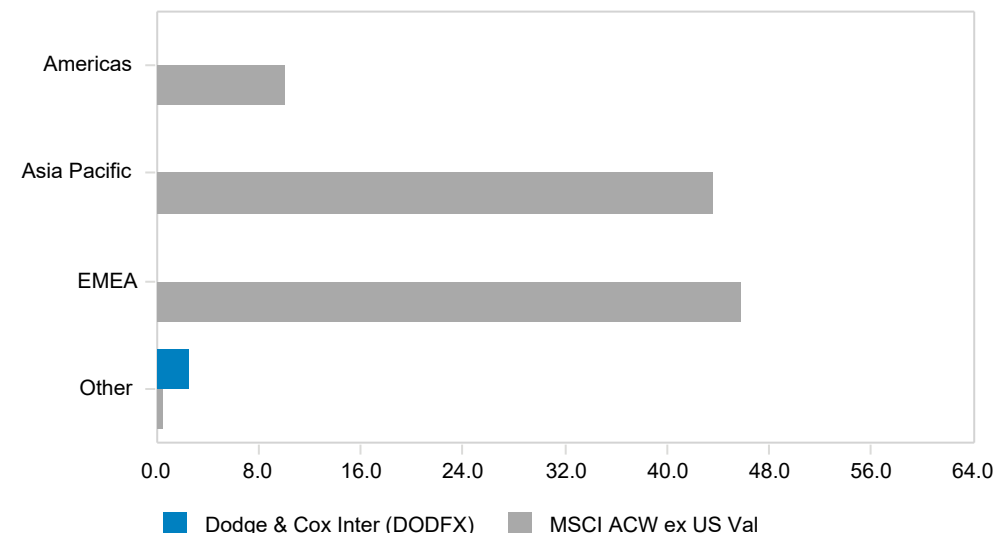
**Top Ten Securities As of 12/31/2022**

Sanofi SA ORD	4.2 %
UBS Group AG ORD	3.8 %
Novartis AG ORD	3.7 %
Prosus NV ORD	3.3 %
BNP Paribas SA ORD	3.0 %
GSK plc ORD	2.8 %
Banco Santander SA ORD	2.8 %
TotalEnergies SE ORD	2.7 %
Axis Bank Ltd ORD	2.7 %
Holcim AG ORD	2.5 %

**Sector Weights As of 12/31/2022**



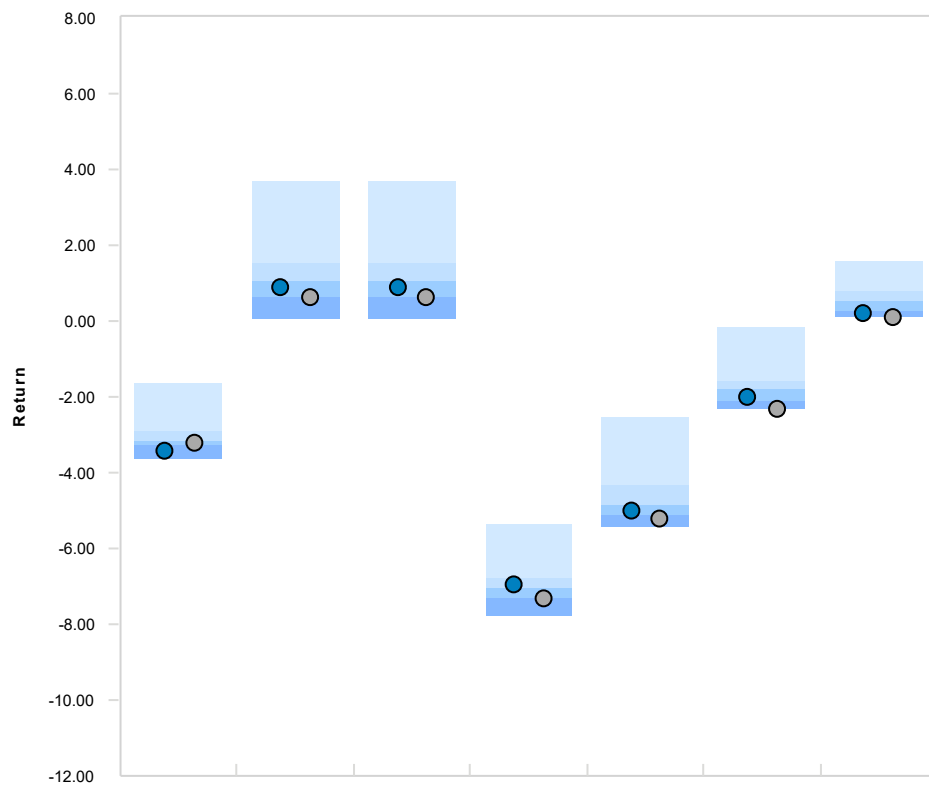
**Region Weights As of 12/31/2022**



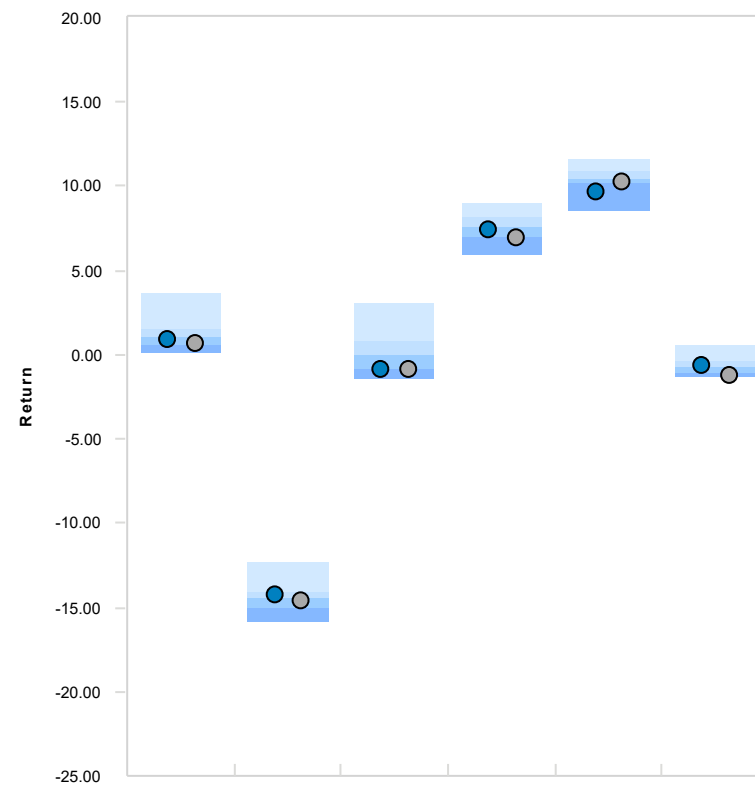
Statistics provided by Lipper. Most recent available data shown. Performance attribution is calculated monthly based on a "buy and hold" strategy for portfolio level securities using transaction data provided by the client's custodial bank.



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Fixed Income	-3.43 (88)	0.90 (60)	0.90 (60)	-6.95 (42)	-4.98 (63)	-2.02 (68)	0.21 (81)
● Fixed Income Policy	-3.23 (71)	0.64 (73)	0.64 (73)	-7.29 (75)	-5.21 (85)	-2.30 (94)	0.10 (94)
Median	-3.14	1.06	1.06	-7.06	-4.84	-1.80	0.54



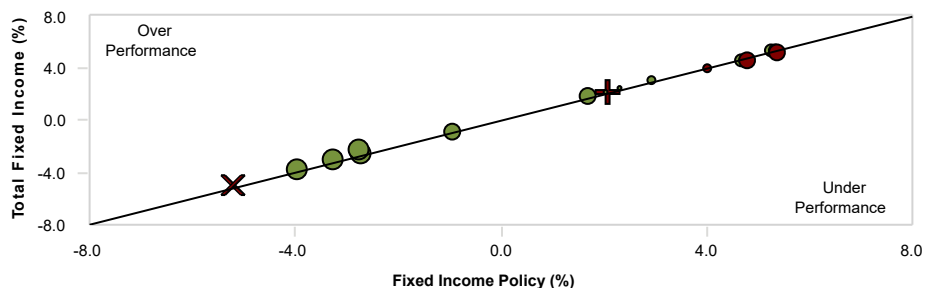
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Total Fixed Income	0.90 (60)	-14.20 (32)	-0.90 (83)	7.41 (54)	9.68 (89)	-0.65 (41)
● Fixed Income Policy	0.64 (73)	-14.60 (61)	-0.90 (83)	6.98 (77)	10.30 (69)	-1.22 (88)
Median	1.06	-14.51	-0.05	7.52	10.42	-0.75

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Total Fixed Income	-0.62 (42)	3.13 (57)	1.94 (34)	-4.52 (43)	-4.94 (63)	-5.38 (17)
Fixed Income Policy	-0.84 (80)	2.96 (78)	1.87 (42)	-4.75 (78)	-4.69 (39)	-5.93 (71)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-0.71	3.16	1.80	-4.59	-4.73	-5.81

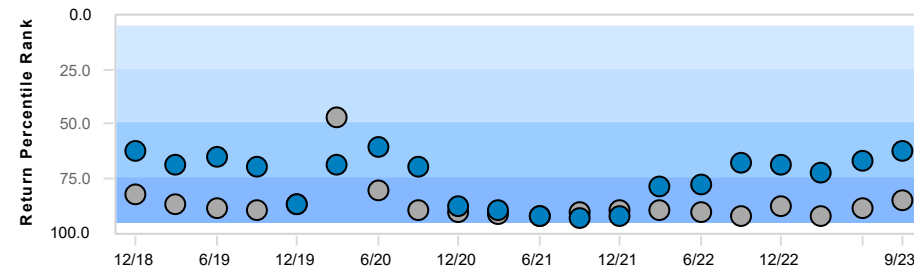


### 3 Yr Rolling Under/Over Performance - 5 Years



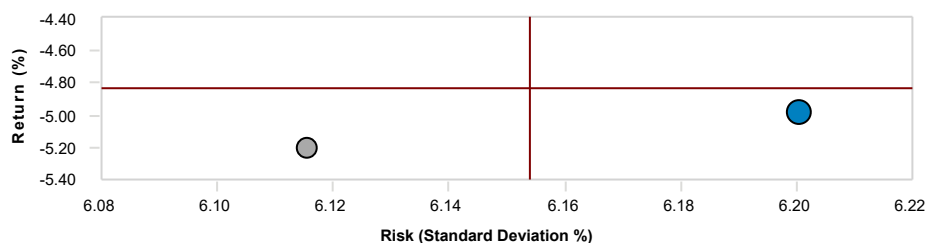
- Over Performance
- Under Performance
- + Earliest Date
- + Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



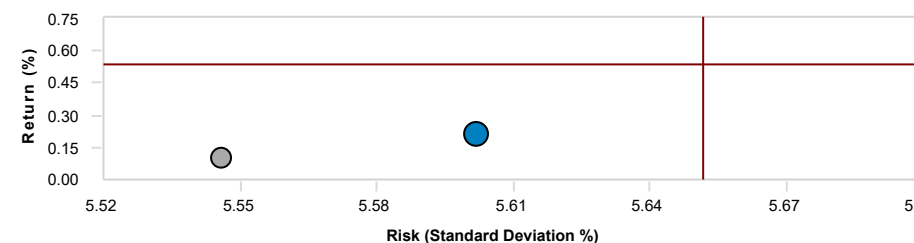
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<span style="color: blue;">●</span> Total Fixed Income	20	0 (0%)	0 (0%)	12 (60%)	8 (40%)
<span style="color: grey;">●</span> Fixed Income Policy	20	0 (0%)	1 (5%)	0 (0%)	19 (95%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Fixed Income	-4.98	6.20
<span style="color: grey;">●</span> Fixed Income Policy	-5.21	6.12
<span style="color: red;">—</span> Median	-4.84	6.15

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Fixed Income	0.21	5.60
<span style="color: grey;">●</span> Fixed Income Policy	0.10	5.55
<span style="color: red;">—</span> Median	0.54	5.65

### Historical Statistics - 3 Years

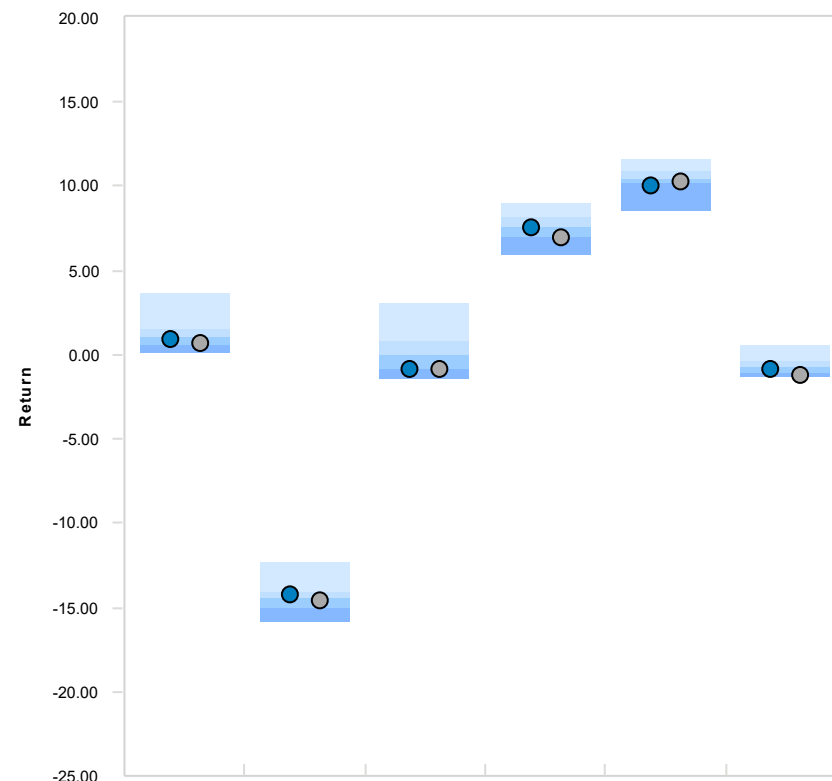
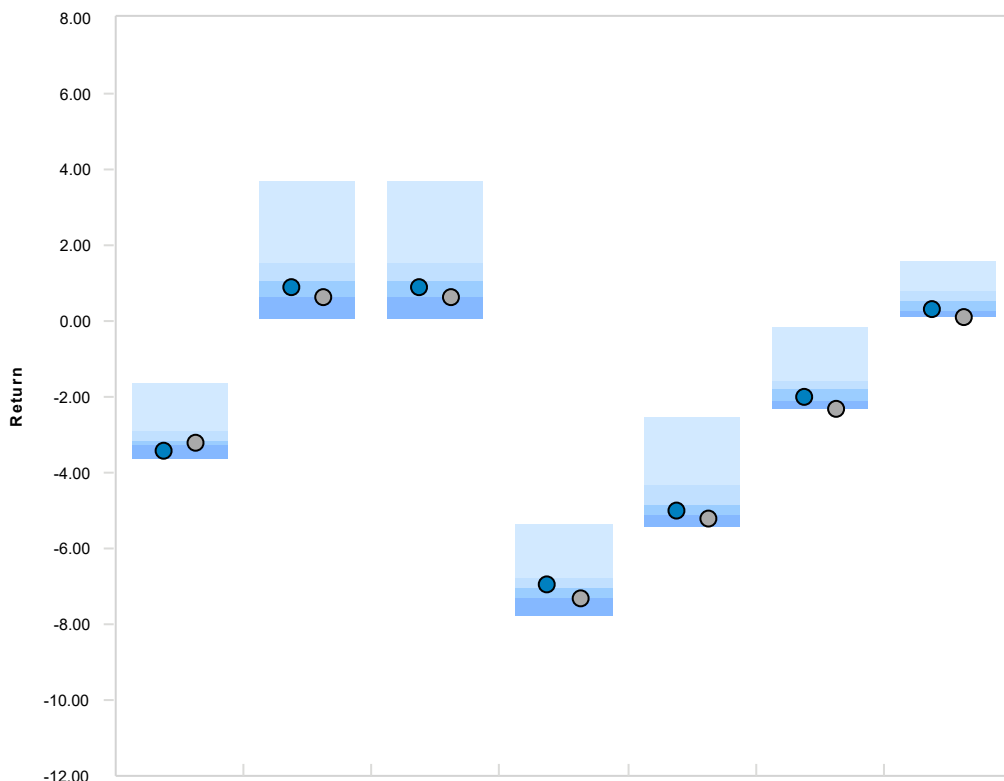
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fixed Income	0.46	103.16	99.43	0.30	0.54	-1.06	1.01	5.11
Fixed Income Policy	0.00	100.00	100.00	0.00	N/A	-1.12	1.00	5.13

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fixed Income	0.63	101.75	100.22	0.11	0.18	-0.24	1.00	4.03
Fixed Income Policy	0.00	100.00	100.00	0.00	N/A	-0.26	1.00	4.02



Peer Group Analysis - IM U.S. Broad Core FI (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Richmond	-3.43 (88)	0.90 (60)	0.90 (60)	-6.96 (44)	-4.98 (63)	-1.99 (67)	0.32 (72)
● BC Agg	-3.23 (71)	0.64 (73)	0.64 (73)	-7.29 (75)	-5.21 (85)	-2.30 (94)	0.10 (94)
Median	-3.14	1.06	1.06	-7.06	-4.84	-1.80	0.54

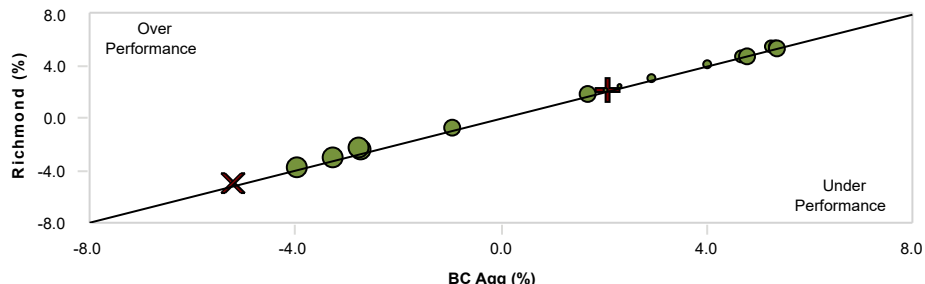
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Richmond	0.90 (60)	-14.21 (34)	-0.90 (83)	7.59 (48)	10.07 (79)	-0.87 (55)
● BC Agg	0.64 (73)	-14.60 (61)	-0.90 (83)	6.98 (77)	10.30 (69)	-1.22 (88)
Median	1.06	-14.51	-0.05	7.52	10.42	-0.75

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Richmond	-0.62 (42)	3.14 (55)	1.94 (34)	-4.53 (43)	-4.94 (64)	-5.38 (17)
BC Agg	-0.84 (80)	2.96 (78)	1.87 (42)	-4.75 (78)	-4.69 (39)	-5.93 (71)
IM U.S. Broad Core FI (SA+CF)	-0.71	3.16	1.80	-4.59	-4.73	-5.81

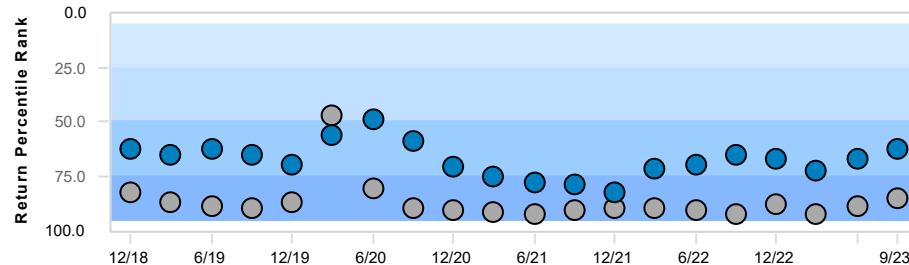


### 3 Yr Rolling Under/Over Performance - 5 Years



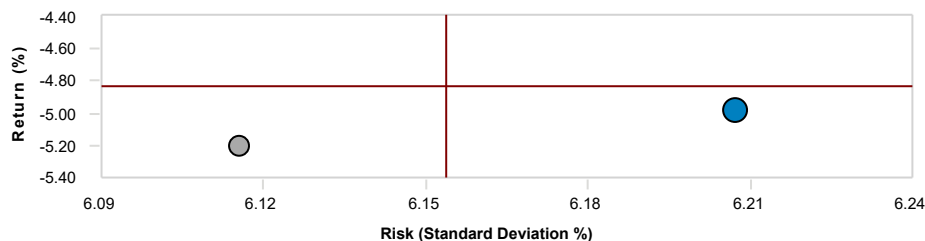
- Over Performance
- Under Performance
- + Earliest Date
- + Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



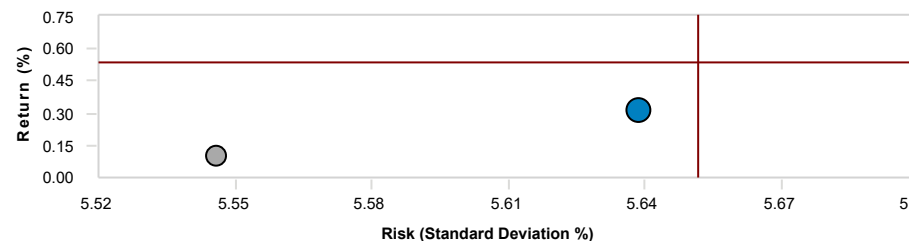
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<span style="color: blue;">●</span> Richmond	20	0 (0%)	1 (5%)	16 (80%)	3 (15%)
<span style="color: grey;">●</span> BC Agg	20	0 (0%)	1 (5%)	0 (0%)	19 (95%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Richmond	-4.98	6.21
<span style="color: grey;">●</span> BC Agg	-5.21	6.12
<span style="color: red;">—</span> Median	-4.84	6.15

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Richmond	0.32	5.64
<span style="color: grey;">●</span> BC Agg	0.10	5.55
<span style="color: red;">—</span> Median	0.54	5.65

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Richmond	0.46	103.27	99.54	0.30	0.52	-1.06	1.01	5.11
BC Agg	0.00	100.00	100.00	0.00	N/A	-1.12	1.00	5.13

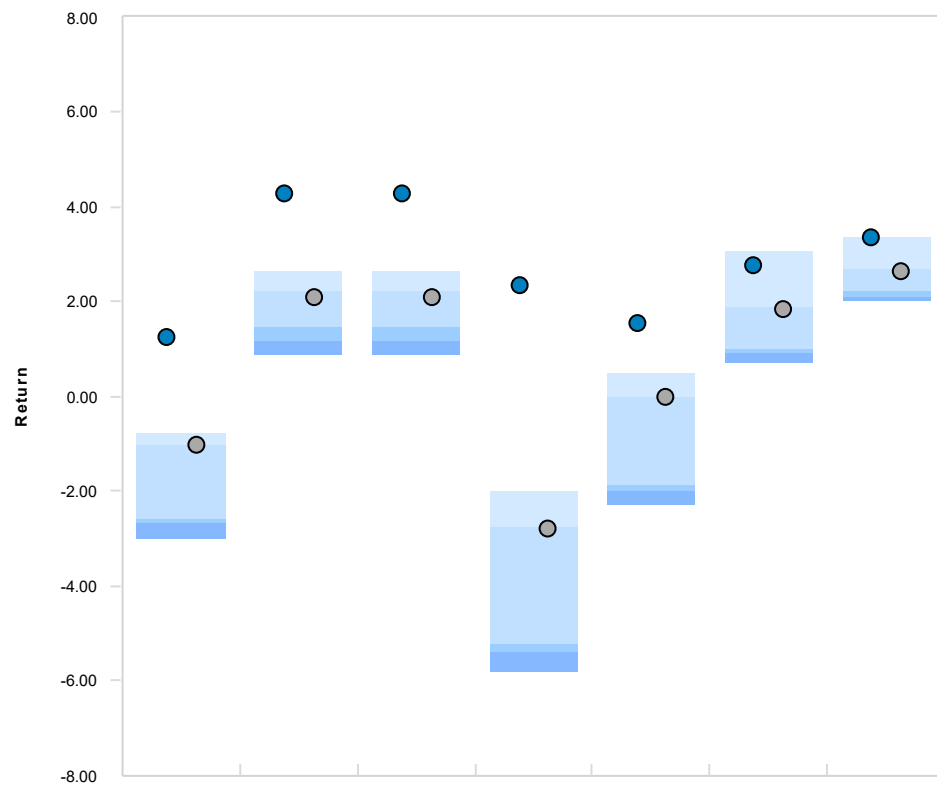
### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Richmond	0.61	103.16	100.23	0.22	0.36	-0.22	1.01	4.03
BC Agg	0.00	100.00	100.00	0.00	N/A	-0.26	1.00	4.02

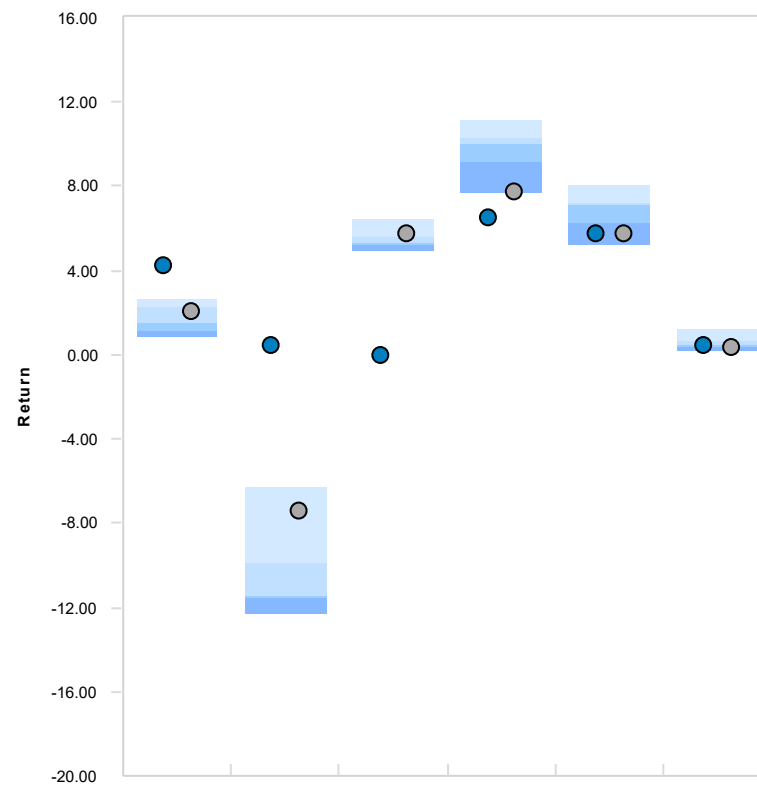




Peer Group Analysis - IM U.S. TIPS (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Richmond TIPS	1.25 (1)	4.28 (1)	4.28 (1)	2.37 (1)	1.57 (4)	2.80 (7)	3.38 (5)
● BC U.S. TI: 1-10 Yr	-1.00 (24)	2.11 (39)	2.11 (39)	-2.78 (30)	-0.02 (26)	1.87 (27)	2.63 (31)
Median	-2.55	1.47	1.47	-5.23	-1.85	1.00	2.21



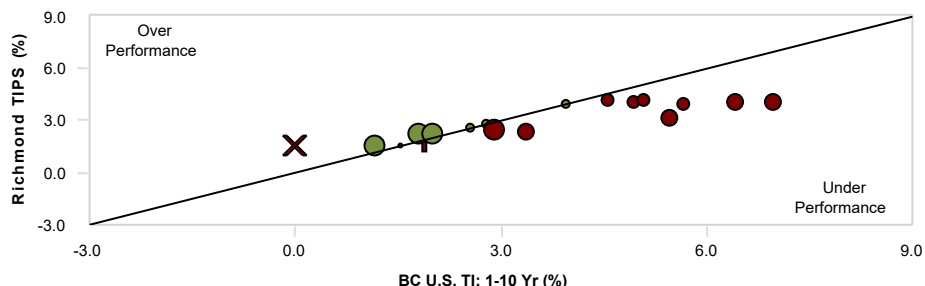
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Richmond TIPS	4.28 (1)	0.50 (1)	0.00 (100)	6.56 (98)	5.74 (89)	0.42 (59)
● BC U.S. TI: 1-10 Yr	2.11 (39)	-7.44 (21)	5.75 (18)	7.75 (93)	5.75 (88)	0.33 (93)
Median	1.47	-11.52	5.25	10.07	7.11	0.49

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Richmond TIPS	1.15 (1)	1.02 (100)	0.80 (100)	0.41 (1)	0.09 (1)	0.00 (1)
BC U.S. TI: 1-10 Yr	-1.42 (74)	2.94 (94)	1.64 (88)	-3.94 (23)	-3.42 (11)	-1.74 (21)
IM U.S. TIPS (SA+CF) Median	-1.40	3.40	2.01	-5.10	-6.09	-2.87

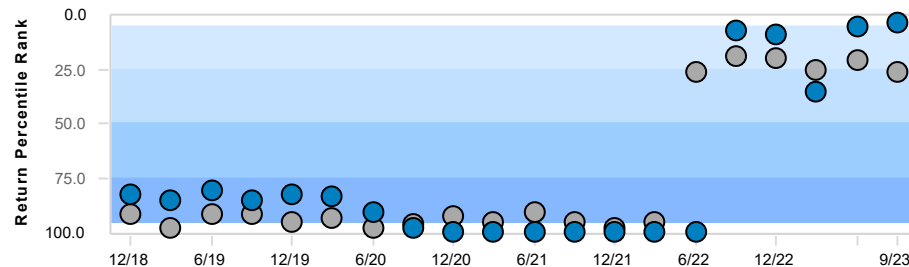


### 3 Yr Rolling Under/Over Performance - 5 Years



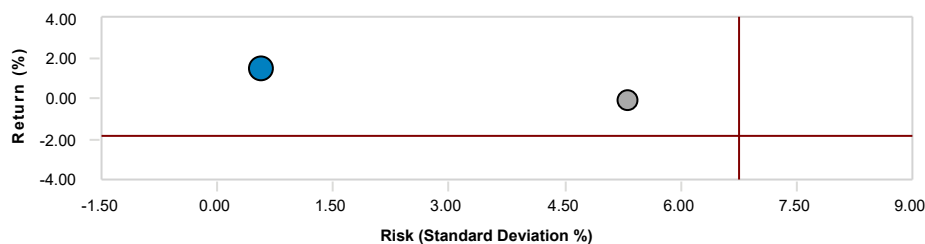
- Over Performance
- Under Performance
- + Earliest Date
- X Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



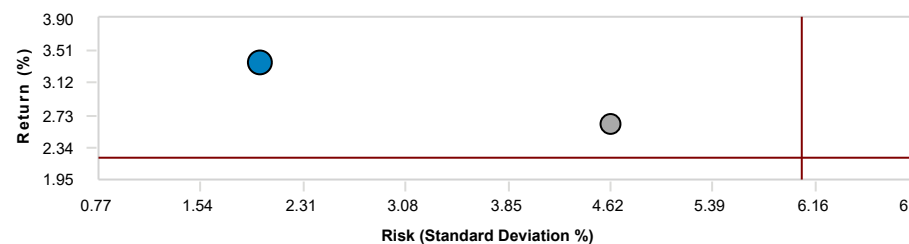
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<span style="color: blue;">●</span> Richmond TIPS	20	4 (20%)	1 (5%)	0 (0%)	15 (75%)
<span style="color: grey;">●</span> BC U.S. TI: 1-10 Yr	20	4 (20%)	2 (10%)	0 (0%)	14 (70%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Richmond TIPS	1.57	0.57
<span style="color: grey;">●</span> BC U.S. TI: 1-10 Yr	-0.02	5.32
<span style="color: red;">—</span> Median	-1.85	6.77

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Richmond TIPS	3.38	1.98
<span style="color: grey;">●</span> BC U.S. TI: 1-10 Yr	2.63	4.61
<span style="color: red;">—</span> Median	2.21	6.06

### Historical Statistics - 3 Years

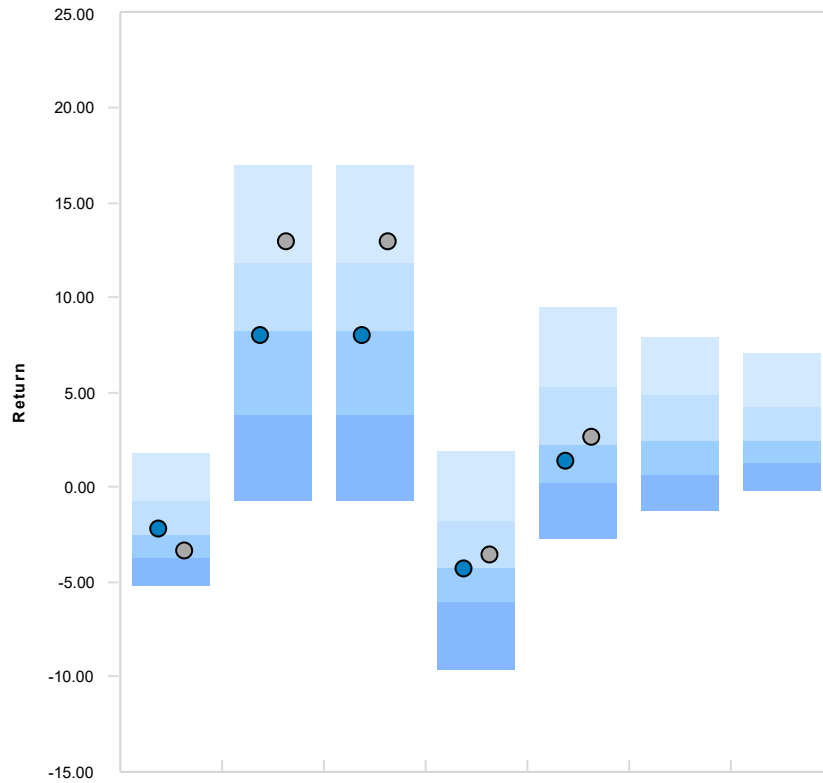
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Richmond TIPS	5.38	9.95	-13.07	1.58	0.27	-1.15	-0.01	0.00
BC U.S. TI: 1-10 Yr	0.00	100.00	100.00	0.00	N/A	-0.29	1.00	3.96

### Historical Statistics - 5 Years

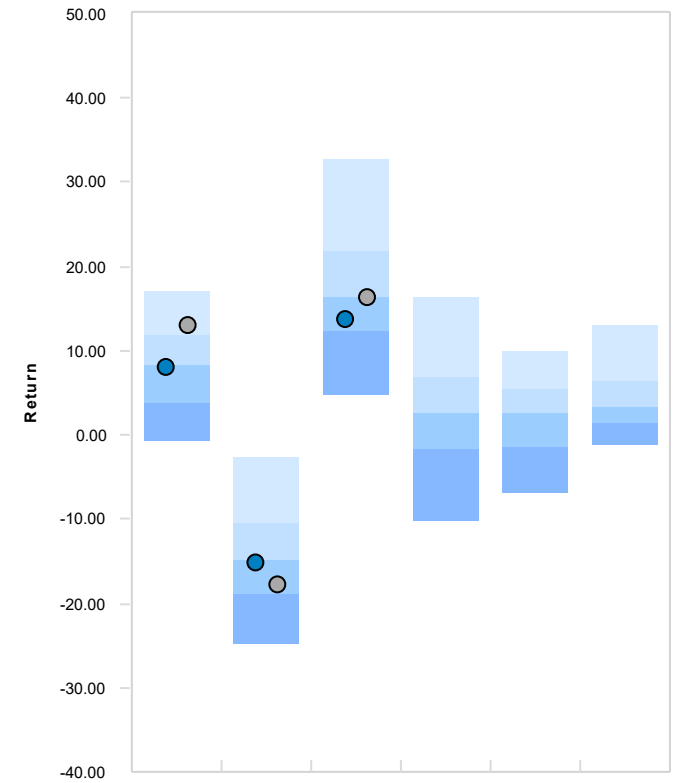
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Richmond TIPS	4.23	46.75	3.38	2.92	0.15	0.83	0.17	0.97
BC U.S. TI: 1-10 Yr	0.00	100.00	100.00	0.00	N/A	0.21	1.00	3.22



Peer Group Analysis - IM Flexible Portfolio (MF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Global Tactical Asset Allocation	-2.19 (46)	8.10 (52)	8.10 (52)	-4.25 (50)	1.43 (59)	N/A	N/A
● GTAA Hybrid Index	-3.34 (68)	13.04 (18)	13.04 (18)	-3.50 (42)	2.68 (46)	N/A	N/A
Median	-2.52	8.26	8.26	-4.29	2.21	2.46	2.46



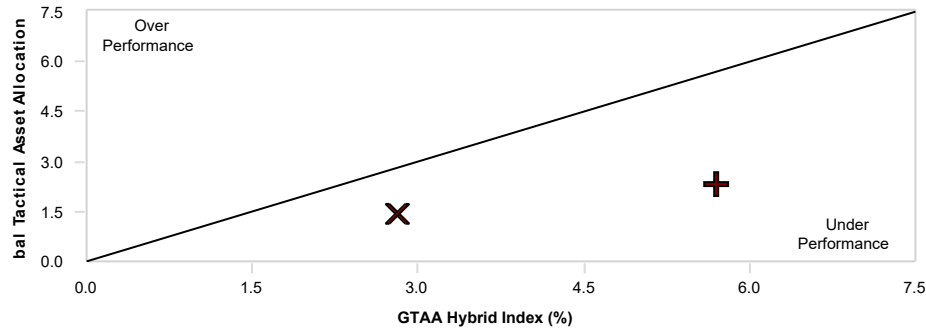
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Global Tactical Asset Allocation	8.10 (52)	5.19 (53)	3.82 (68)	N/A	N/A	N/A
● GTAA Hybrid Index	3.04 (18)	7.63 (65)	6.25 (51)	N/A	N/A	N/A
Median	8.26	4.79	6.30	2.57	2.64	3.46

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Global Tactical Asset Allocation	0.96 (76)	3.16 (47)	6.12 (43)	-4.36 (49)	-9.59 (47)	-4.22 (40)
GTAA Hybrid Index	3.76 (20)	5.82 (11)	6.61 (38)	-5.61 (62)	-11.59 (75)	-5.47 (63)
IM Flexible Portfolio (MF) Median	2.12	2.87	5.08	-4.54	-10.06	-4.80

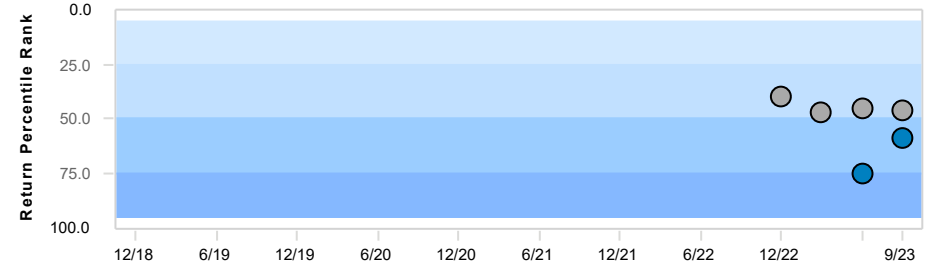


3 Yr Rolling Under/Over Performance - 5 Years



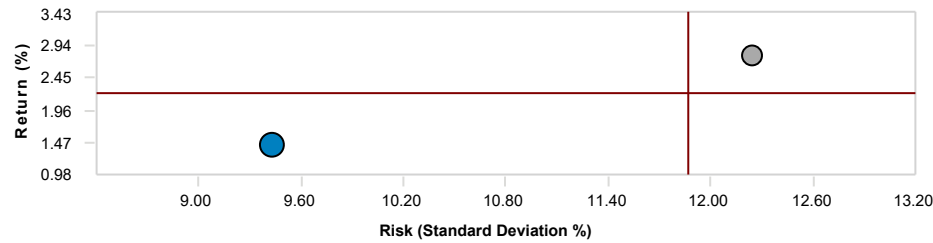
+ Earliest Date X Latest Date

3 Yr Rolling Percentile Ranking - 5 Years



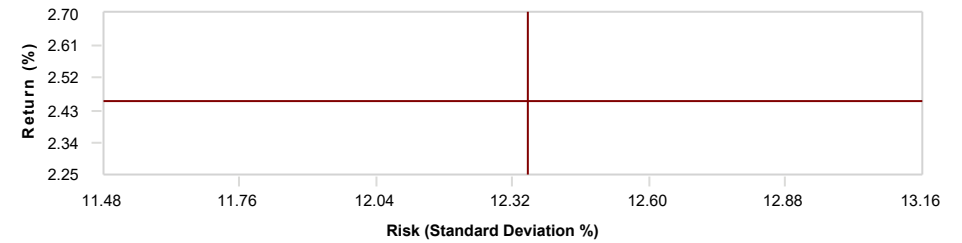
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Global Tactical Asset Allocation	2	0 (0%)	0 (0%)	2 (100%)	0 (0%)
● GTAA Hybrid Index	4	0 (0%)	4 (100%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Global Tactical Asset Allocation	1.43	9.43
● GTAA Hybrid Index	2.81	12.25
— Median	2.21	11.87

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Global Tactical Asset Allocation	N/A	N/A
● GTAA Hybrid Index	N/A	N/A
— Median	2.46	12.35

Historical Statistics - 3 Years

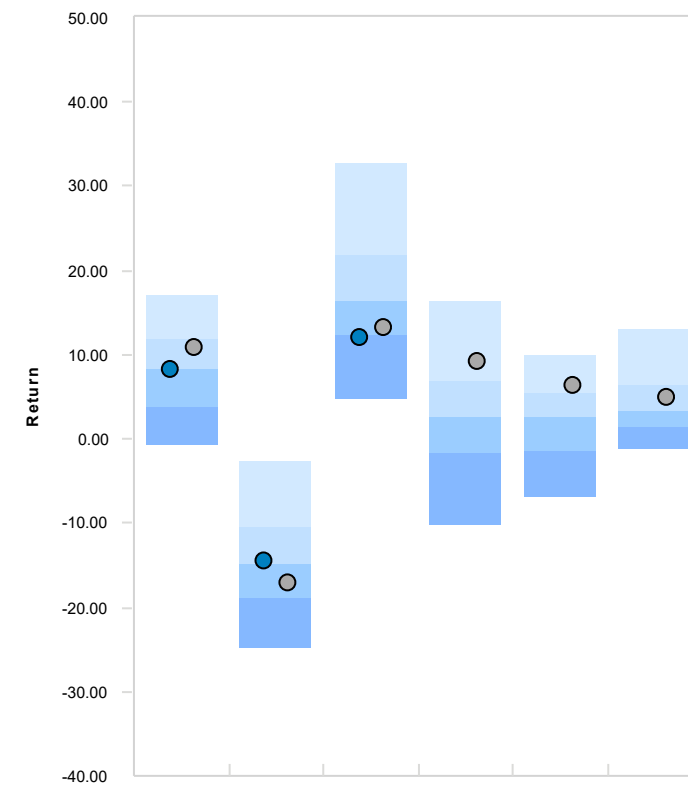
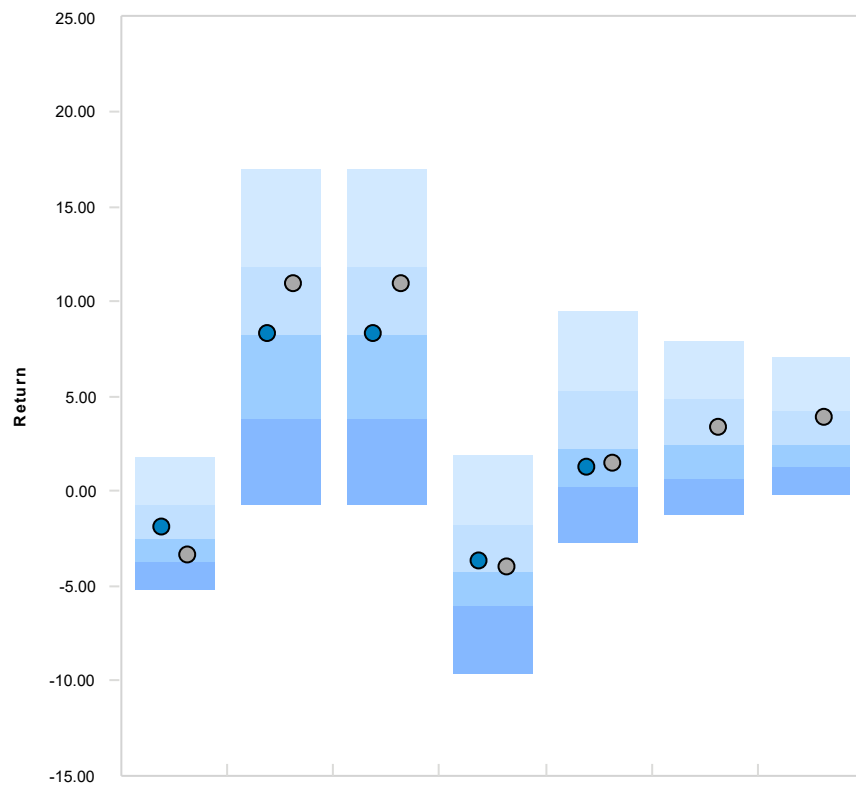
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Global Tactical Asset Allocation	3.82	72.26	76.52	-0.77	-0.43	0.02	0.75	6.52
GTAA Hybrid Index	0.00	100.00	100.00	0.00	N/A	0.15	1.00	8.33

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Global Tactical Asset Allocation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GTAA Hybrid Index	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



**Peer Group Analysis - IM Flexible Portfolio (MF)**



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Blackrock (BKMIX)	-1.80 (40)	8.37 (49)	8.37 (49)	-3.65 (44)	1.35 (60)	N/A	N/A
○ Blackrock Multi-Asset Hybrid	-3.32 (68)	11.02 (28)	11.02 (28)	-3.96 (47)	1.48 (58)	3.40 (42)	3.99 (29)
Median	-2.52	8.26	8.26	-4.29	2.21	2.46	2.46

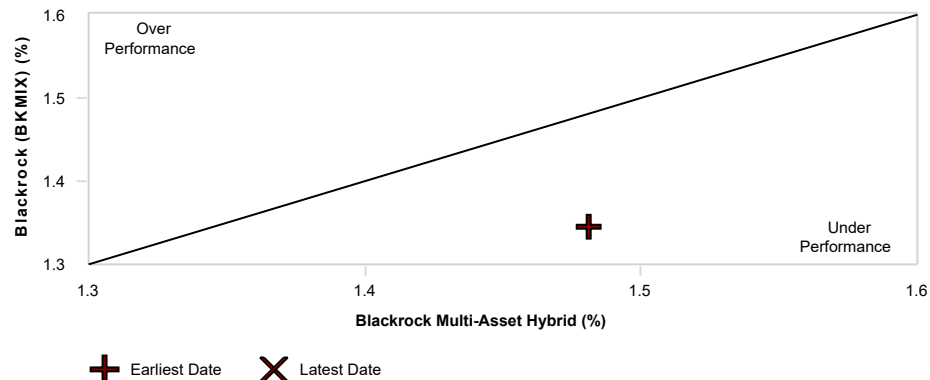
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Blackrock (BKMIX)	8.37 (49)	14.34 (46)	12.13 (77)	N/A	N/A	N/A
○ Blackrock Multi-Asset Hybrid	11.02 (28)	16.91 (62)	13.29 (72)	9.36 (17)	6.40 (19)	4.93 (36)
Median	8.26	14.79	16.30	2.57	2.64	3.46

**Comparative Performance**

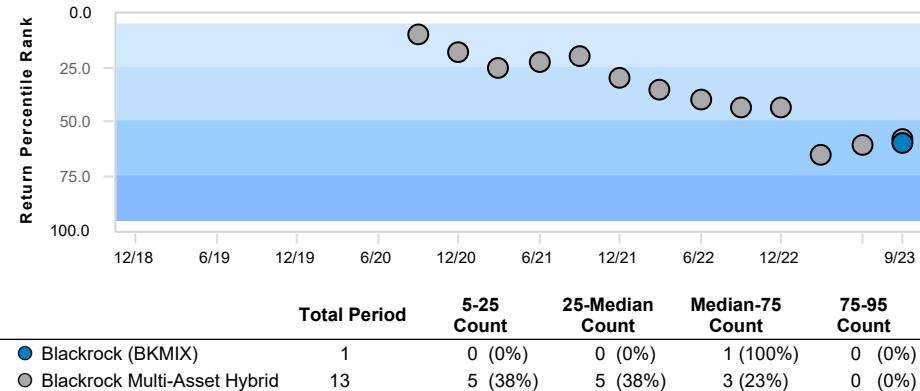
	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Blackrock (BKMIX)	1.43 (67)	3.34 (45)	5.29 (49)	-3.44 (39)	-9.28 (43)	-4.08 (39)
Blackrock Multi-Asset Hybrid	2.97 (34)	5.34 (14)	5.87 (44)	-5.40 (59)	-10.54 (57)	-5.49 (64)
IM Flexible Portfolio (MF) Median	2.12	2.87	5.08	-4.54	-10.06	-4.80



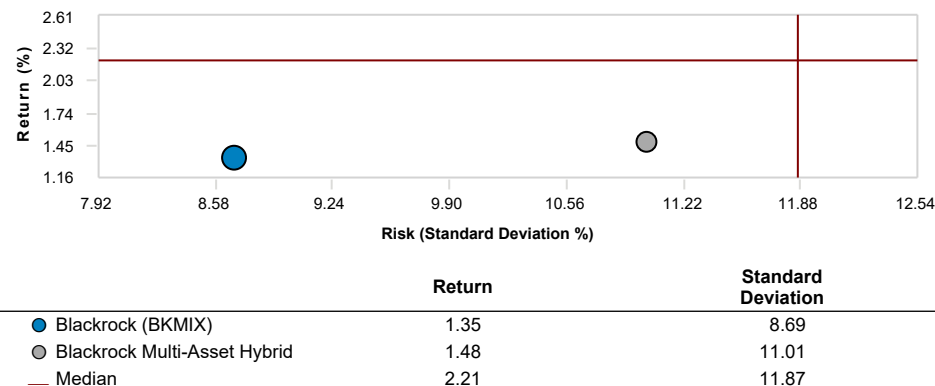
### 3 Yr Rolling Under/Over Performance - 5 Years



### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

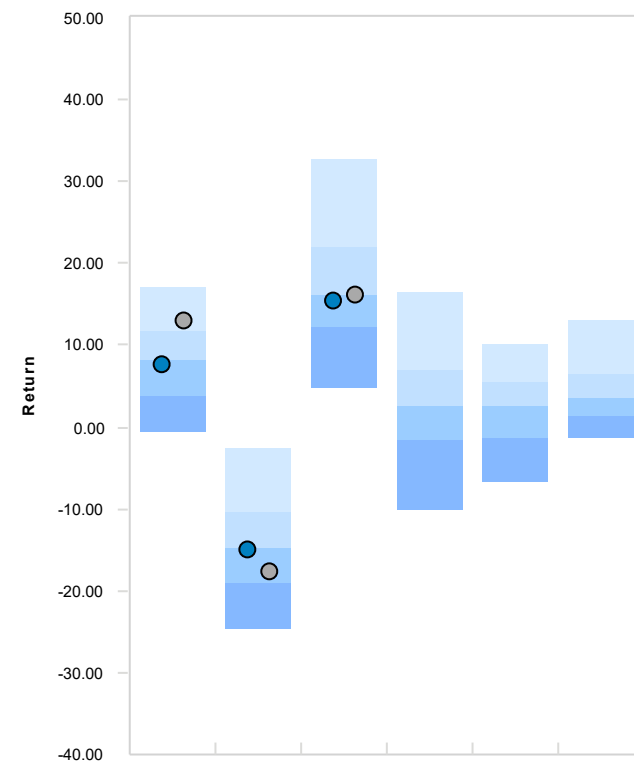
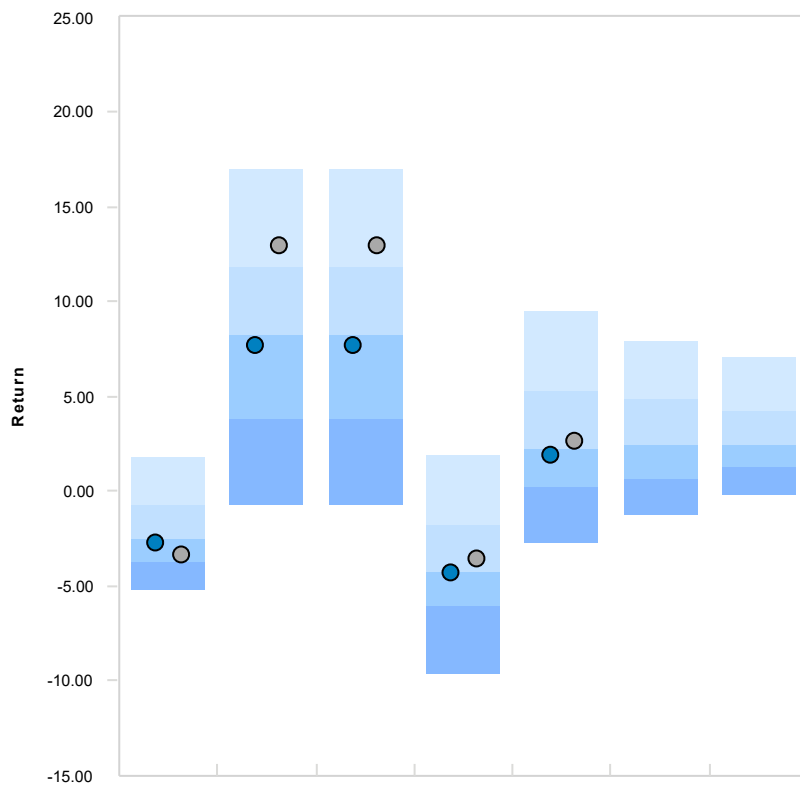
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Blackrock (BKMIX)	3.38	76.35	75.47	0.13	-0.11	0.00	0.76	5.96
Blackrock Multi-Asset Hybrid	0.00	100.00	100.00	0.00	N/A	0.04	1.00	7.67

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Blackrock (BKMIX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blackrock Multi-Asset Hybrid	0.00	100.00	100.00	0.00	N/A	0.26	1.00	7.31



**Peer Group Analysis - IM Flexible Portfolio (MF)**



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● JPMorgan Income Builder (JNBZX)	-2.65 (54)	7.76 (55)	7.76 (55)	-4.25 (50)	1.94 (54)	N/A	N/A
● GTAA Hybrid Index	-3.34 (68)	13.04 (18)	13.04 (18)	-3.50 (42)	2.68 (46)	N/A	N/A
Median	-2.52	8.26	8.26	-4.29	2.21	2.46	2.46

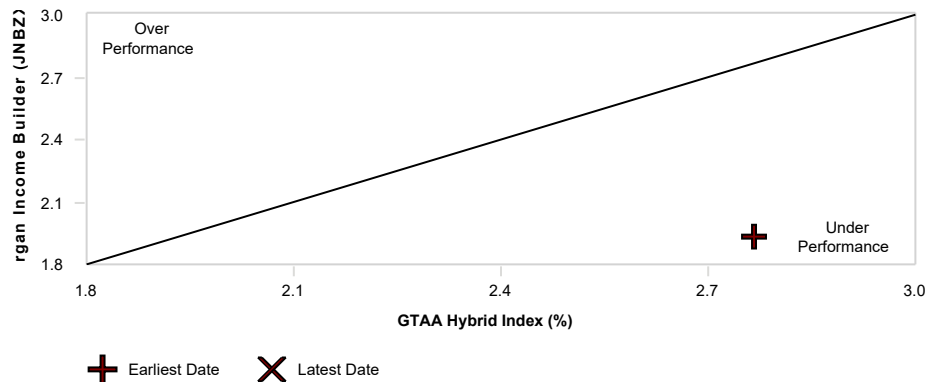
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● JPMorgan Income Builder (JNBZX)	7.76 (55)	4.92 (51)	5.54 (57)	N/A	N/A	N/A
● GTAA Hybrid Index	3.04 (18)	7.63 (65)	6.25 (51)	N/A	N/A	N/A
Median	8.26	4.79	6.30	2.57	2.64	3.46

**Comparative Performance**

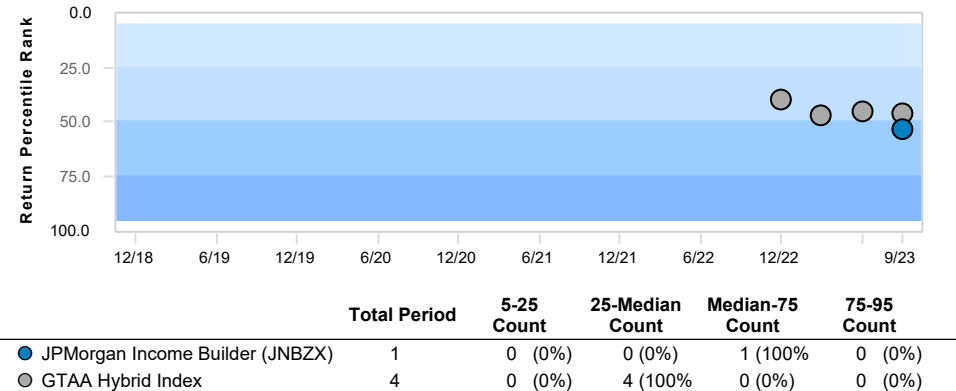
	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
JPMorgan Income Builder (JNBZX)	0.41 (86)	2.96 (50)	7.07 (31)	-5.38 (59)	-9.94 (49)	-4.36 (42)
GTAA Hybrid Index	3.76 (20)	5.82 (11)	6.61 (38)	-5.61 (62)	-11.59 (75)	-5.47 (63)
IM Flexible Portfolio (MF) Median	2.12	2.87	5.08	-4.54	-10.06	-4.80



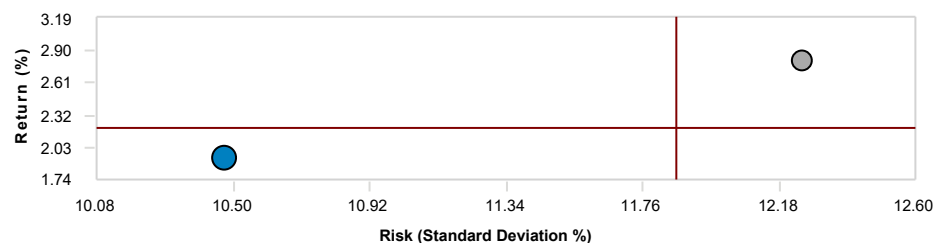
### 3 Yr Rolling Under/Over Performance - 5 Years



### 3 Yr Rolling Percentile Ranking - 5 Years

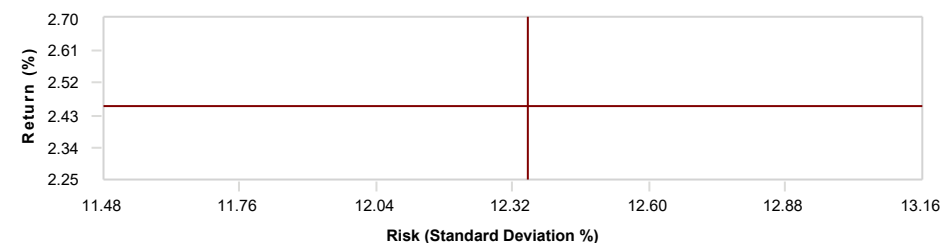


### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● JPMorgan Income Builder (JNBZX)	1.94	10.48
○ GTAA Hybrid Index	2.81	12.25
— Median	2.21	11.87

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● JPMorgan Income Builder (JNBZX)	N/A	N/A
○ GTAA Hybrid Index	N/A	N/A
— Median	2.46	12.35

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
JPMorgan Income Builder (JNBZX)	3.72	81.57	84.10	-0.42	-0.28	0.07	0.82	7.18
GTAA Hybrid Index	0.00	100.00	100.00	0.00	N/A	0.15	1.00	8.33

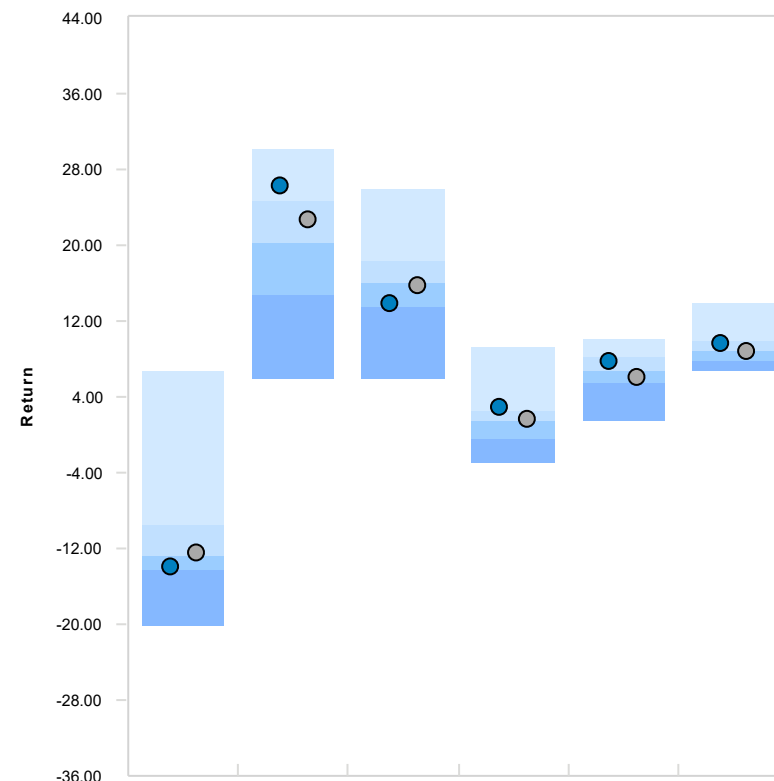
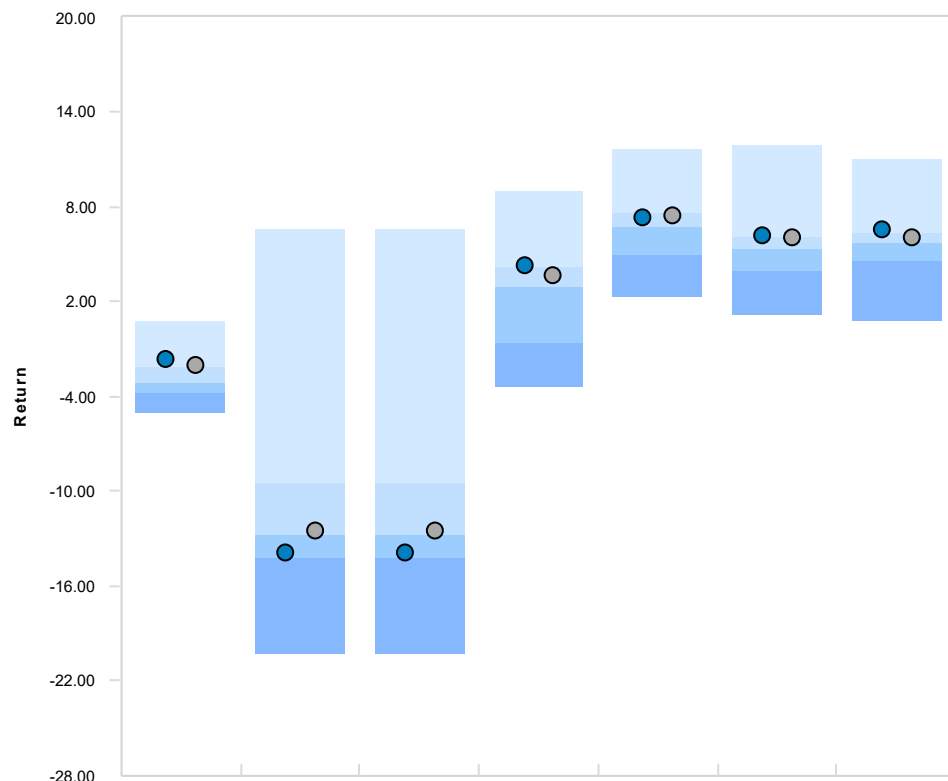
### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
JPMorgan Income Builder (JNBZX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GTAA Hybrid Index	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A





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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
Total Real Estate	-1.64 (21)	-13.88 (72)	-13.88 (72)	4.28 (25)	7.39 (33)	6.24 (23)	6.56 (16)
NCREIF ODCE	-1.97 (25)	-12.44 (46)	-12.44 (46)	3.68 (28)	7.56 (29)	6.07 (32)	6.09 (41)
Median	-3.10	-12.75	-12.75	2.89	6.79	5.36	5.76

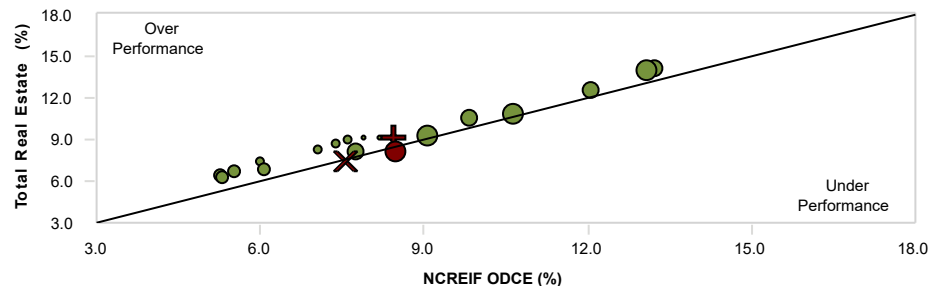
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
Total Real Estate	-13.88 (72)	26.27 (16)	13.89 (69)	2.88 (18)	7.82 (28)	9.75 (31)
NCREIF ODCE	-12.44 (46)	22.76 (38)	15.75 (54)	1.74 (43)	6.17 (70)	8.82 (56)
Median	-12.75	20.19	16.09	1.58	6.80	8.93

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Total Real Estate	-3.80 (78)	-3.41 (66)	-5.77 (73)	1.68 (19)	5.89 (20)	7.37 (32)
NCREIF ODCE	-2.86 (71)	-3.31 (64)	-4.90 (49)	0.96 (40)	4.55 (37)	7.99 (16)
IM U.S. Open End Private Real Estate (SA+CF) Median	-1.98	-2.98	-4.97	0.59	4.17	6.68

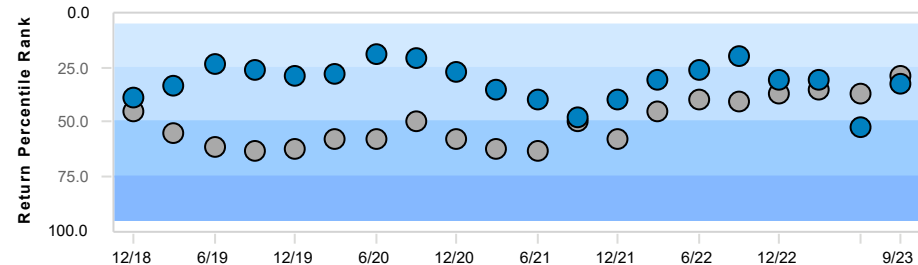


### 3 Yr Rolling Under/Over Performance - 5 Years



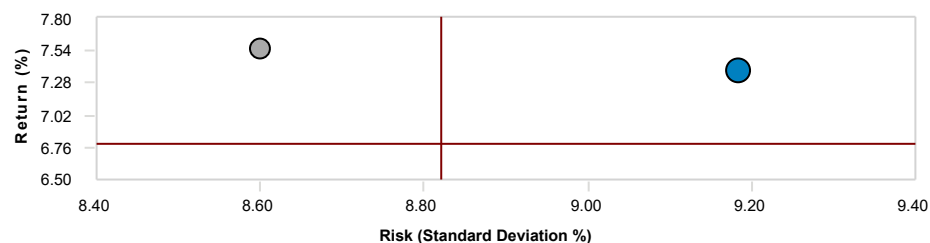
- Over Performance
- Under Performance
- + Earliest Date
- X Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



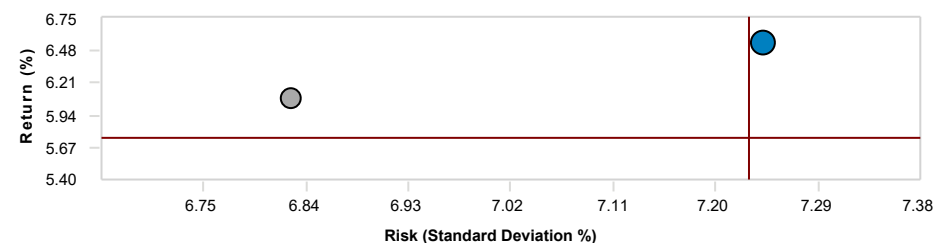
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<span style="color: blue;">●</span> Total Real Estate	20	4 (20%)	15 (75%)	1 (5%)	0 (0%)
<span style="color: grey;">●</span> NCREIF ODCE	20	0 (0%)	10 (50%)	10 (50%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Real Estate	7.39	9.18
<span style="color: grey;">●</span> NCREIF ODCE	7.56	8.60
<span style="color: red;">—</span> Median	6.79	8.82

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Real Estate	6.56	7.24
<span style="color: grey;">●</span> NCREIF ODCE	6.09	6.83
<span style="color: red;">—</span> Median	5.76	7.23

### Historical Statistics - 3 Years

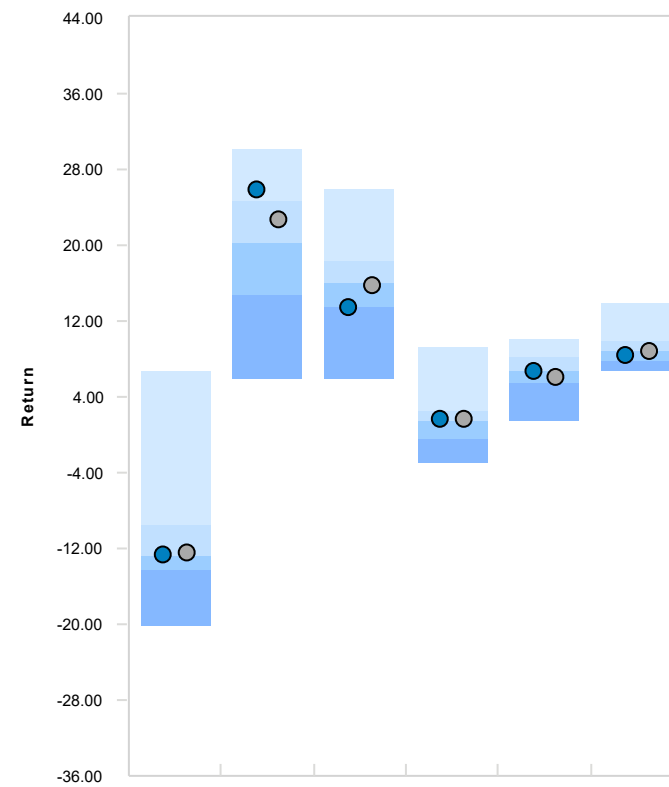
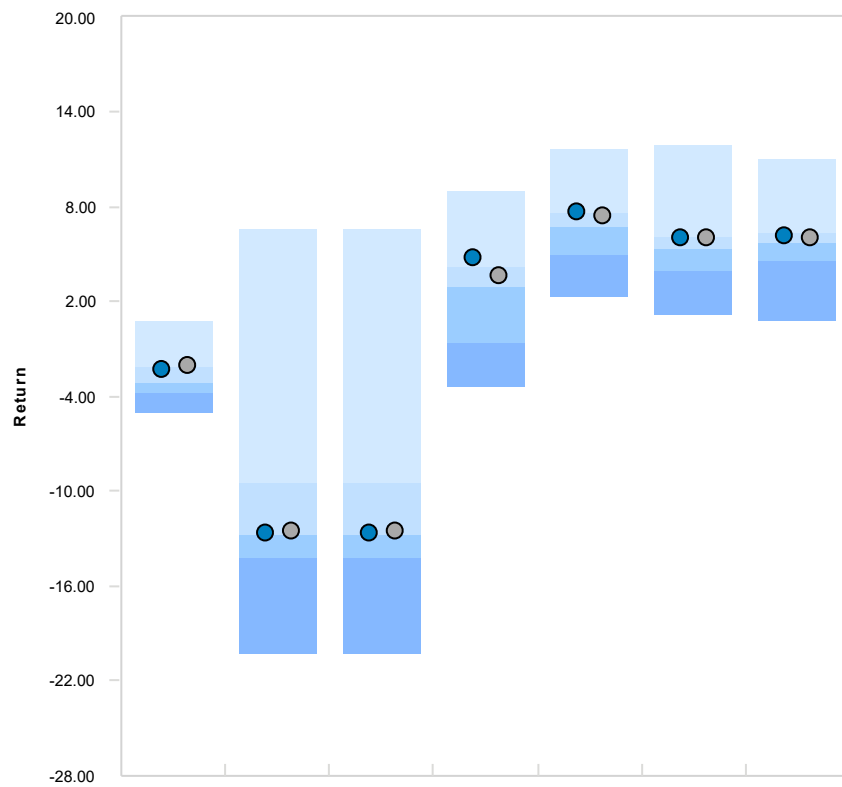
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Real Estate	1.71	104.13	113.85	-0.46	-0.06	0.59	1.05	4.61
NCREIF ODCE	0.00	100.00	100.00	0.00	N/A	0.64	1.00	3.96

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Real Estate	1.41	107.97	108.68	0.22	0.33	0.63	1.04	3.59
NCREIF ODCE	0.00	100.00	100.00	0.00	N/A	0.60	1.00	3.12



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● ARA Core Property Fund, L.P.	-2.22 (31)	12.54 (48)	12.54 (48)	4.89 (20)	7.69 (15)	6.14 (25)	6.27 (30)
● NCREIF Fund Index (EW)	-1.97 (25)	12.44 (46)	12.44 (46)	3.68 (28)	7.56 (29)	6.07 (32)	6.09 (41)
Median	-3.10	12.75	12.75	2.89	6.79	5.36	5.76

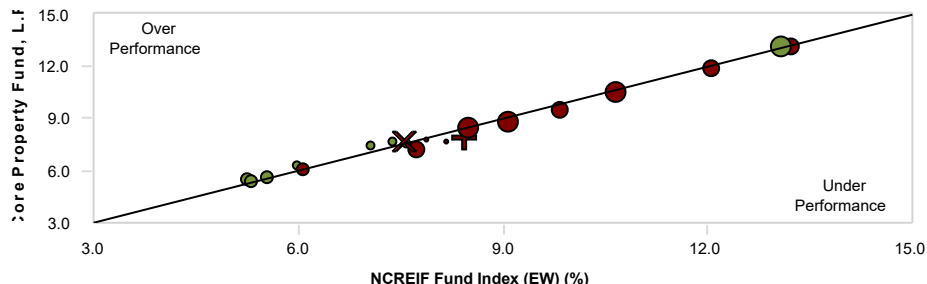
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● ARA Core Property Fund, L.P.	12.54 (48)	15.79 (18)	13.51 (75)	1.62 (49)	6.81 (50)	8.50 (61)
● NCREIF Fund Index (EW)	12.44 (46)	12.76 (38)	15.75 (54)	1.74 (43)	6.17 (70)	8.82 (56)
Median	12.75	10.19	16.09	1.58	6.80	8.93

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
ARA Core Property Fund, L.P.	-2.22 (66)	-3.28 (64)	-5.42 (66)	1.66 (20)	4.84 (31)	8.46 (11)
NCREIF Fund Index (EW)	-2.86 (71)	-3.31 (64)	-4.90 (49)	0.96 (40)	4.55 (37)	7.99 (16)
IM U.S. Open End Private RE (SA+CF)	-1.98	-2.98	-4.97	0.59	4.17	6.68

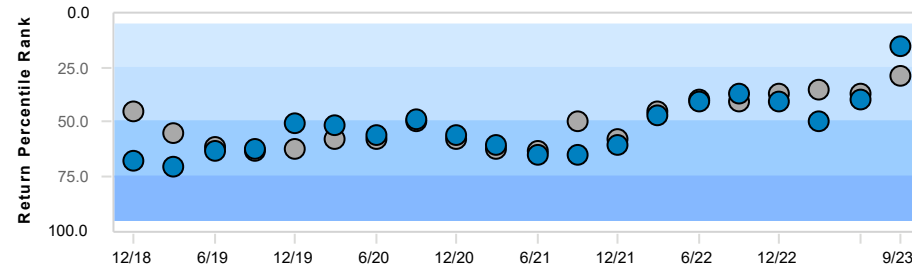


**3 Yr Rolling Under/Over Performance - 5 Years**



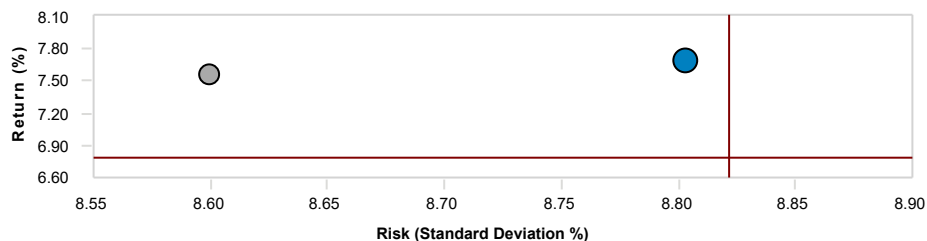
- Over Performance
- Under Performance
- + Earliest Date
- X Latest Date

**3 Yr Rolling Percentile Ranking - 5 Years**



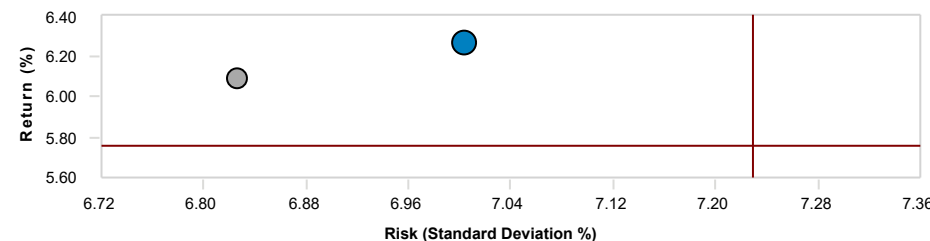
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● ARA Core Property Fund, L.P.	20	1 (5%)	7 (35%)	12 (60%)	0 (0%)
● NCREIF Fund Index (EW)	20	0 (0%)	10 (50%)	10 (50%)	0 (0%)

**Peer Group Scattergram - 3 Years**



	Return	Standard Deviation
● ARA Core Property Fund, L.P.	7.69	8.80
● NCREIF Fund Index (EW)	7.56	8.60
— Median	6.79	8.82

**Peer Group Scattergram - 5 Years**



	Return	Standard Deviation
● ARA Core Property Fund, L.P.	6.27	7.00
● NCREIF Fund Index (EW)	6.09	6.83
— Median	5.76	7.23

**Historical Statistics - 3 Years**

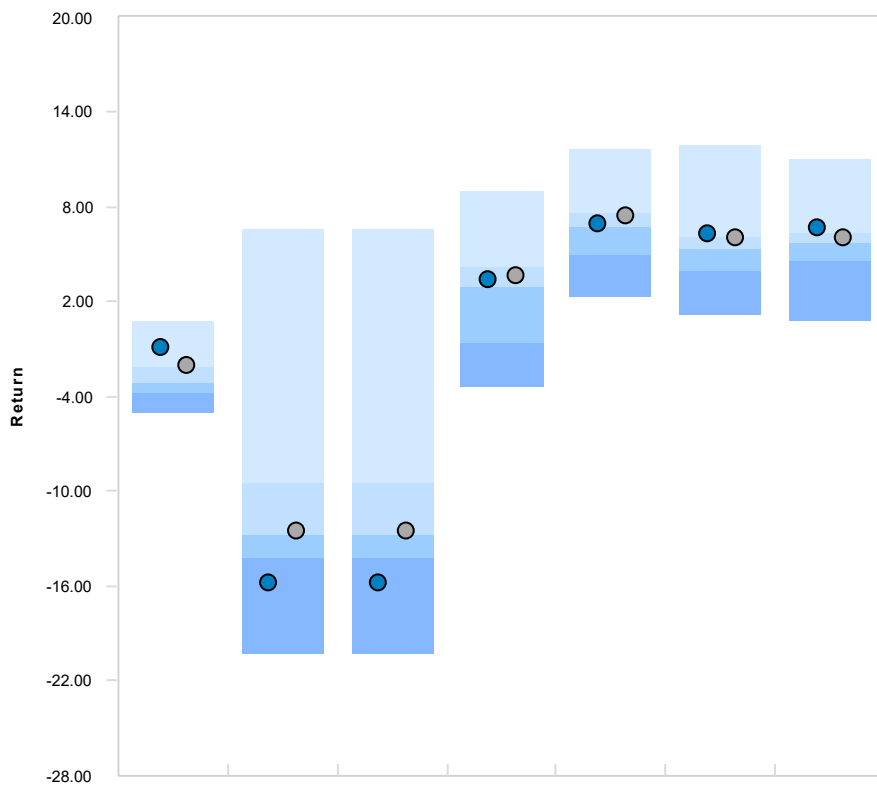
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
ARA Core Property Fund, L.P.	1.28	101.44	100.74	0.04	0.11	0.64	1.01	4.08
NCREIF Fund Index (EW)	0.00	100.00	100.00	0.00	N/A	0.64	1.00	3.96

**Historical Statistics - 5 Years**

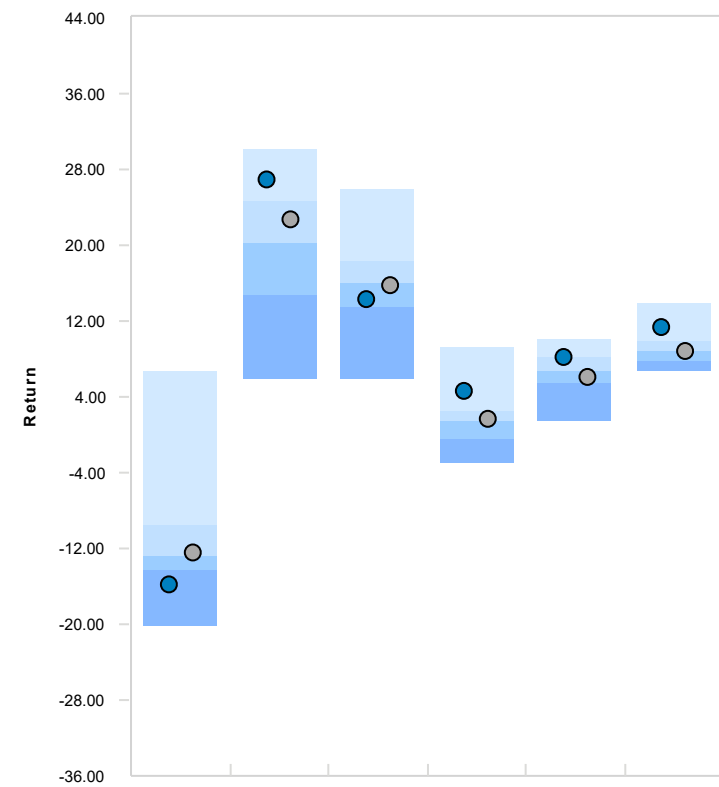
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
ARA Core Property Fund, L.P.	1.09	102.16	100.37	0.09	0.17	0.61	1.02	3.21
NCREIF Fund Index (EW)	0.00	100.00	100.00	0.00	N/A	0.60	1.00	3.12



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Intercontinental	-0.80 (13)	-15.75 (84)	-15.75 (84)	3.41 (29)	6.94 (47)	6.34 (21)	6.73 (15)
● NCREIF Fund Index (EW)	-1.97 (25)	-12.44 (46)	-12.44 (46)	3.68 (28)	7.56 (29)	6.07 (32)	6.09 (41)
Median	-3.10	-12.75	-12.75	2.89	6.79	5.36	5.76



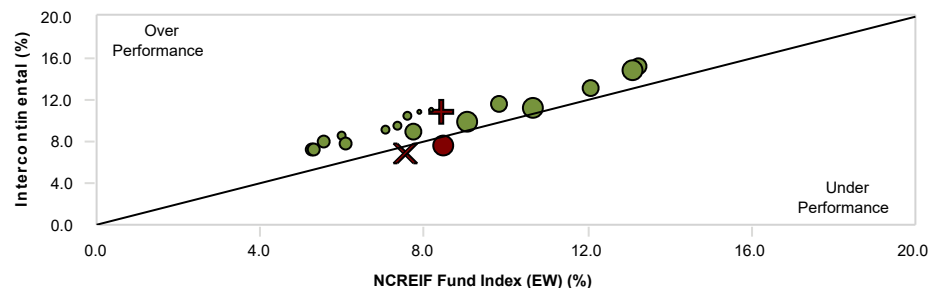
	Oct-2022 To Sep-2023	Oct-2021 To Sep-2022	Oct-2020 To Sep-2021	Oct-2019 To Sep-2020	Oct-2018 To Sep-2019	Oct-2017 To Sep-2018
● Intercontinental	15.75 (84)	26.92 (10)	14.39 (58)	4.55 (10)	8.31 (19)	11.37 (10)
● NCREIF Fund Index (EW)	12.44 (46)	22.76 (38)	15.75 (54)	1.74 (43)	6.17 (70)	8.82 (56)
Median	12.75	20.19	16.09	1.58	6.80	8.93

Comparative Performance

	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022
Intercontinental	-6.03 (96)	-3.59 (70)	-6.26 (93)	1.71 (17)	7.38 (7)	5.89 (71)
NCREIF Fund Index (EW)	-2.86 (71)	-3.31 (64)	-4.90 (49)	0.96 (40)	4.55 (37)	7.99 (16)
IM U.S. Open End Private RE (SA+CF)	-1.98	-2.98	-4.97	0.59	4.17	6.68

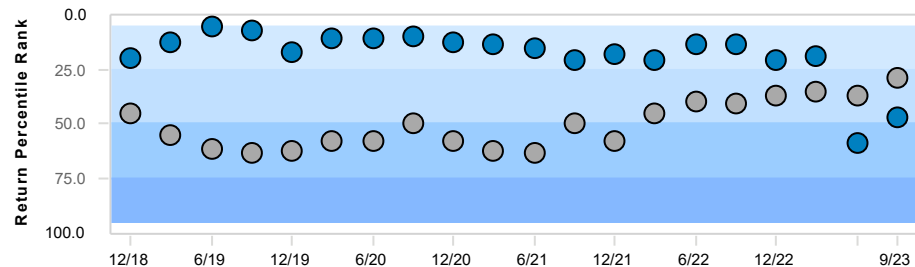


### 3 Yr Rolling Under/Over Performance - 5 Years



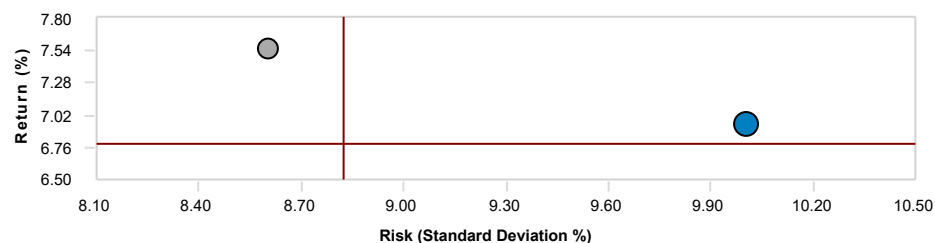
- Over Performance
- Under Performance
- + Earliest Date
- X Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



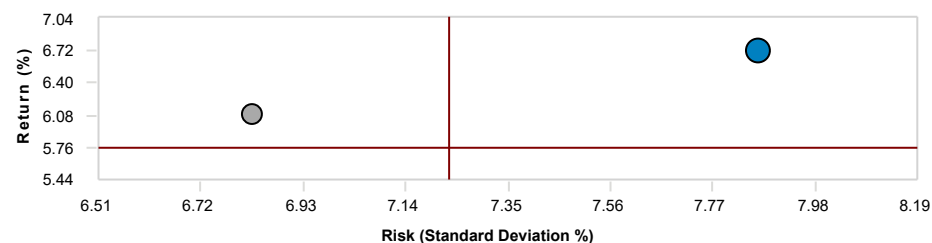
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<span style="color: blue;">●</span> Intercontinental	20	18 (90%)	1 (5%)	1 (5%)	0 (0%)
<span style="color: grey;">●</span> NCREIF Fund Index (EW)	20	0 (0%)	10 (50%)	10 (50%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Intercontinental	6.94	10.00
<span style="color: grey;">●</span> NCREIF Fund Index (EW)	7.56	8.60
<span style="color: red;">—</span> Median	6.79	8.82

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Intercontinental	6.73	7.86
<span style="color: grey;">●</span> NCREIF Fund Index (EW)	6.09	6.83
<span style="color: red;">—</span> Median	5.76	7.23

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Intercontinental	3.45	107.86	131.88	-1.14	-0.13	0.52	1.09	5.64
NCREIF Fund Index (EW)	0.00	100.00	100.00	0.00	N/A	0.64	1.00	3.96

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Intercontinental	2.91	113.99	120.28	0.24	0.24	0.61	1.07	4.37
NCREIF Fund Index (EW)	0.00	100.00	100.00	0.00	N/A	0.60	1.00	3.12



Lake Worth Beach General Employees' Retirement System

Fee Analysis

As of September 30, 2023

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Brandywine Dynamic Value (Equity)	0.45	9,864,380	44,390	0.45 % of First \$10 M 0.40 % of Next \$5 M 0.38 % of Next \$10 M 0.35 % of Next \$25 M 0.30 % Thereafter
Cambiar Investors Equity	0.50	8,830,230	44,151	0.50 % of Assets
MFS Growth Fund R6 (MFEKX)	0.53	4,284,577	22,708	0.53 % of Assets
Fred Alger Mgmt Large Cap Growth	0.65	5,047,918	32,811	0.65 % of Assets
Fidelity Total Market Index (FSKAX)	0.01	2,735,619	274	0.01 % of Assets
EuroPacific Growth Fund R6 (RERGX)	0.49	4,311,128	21,125	0.49 % of Assets
Dodge & Cox International (DODFX)	0.63	4,783,792	30,138	0.63 % of Assets
Richmond Capital Fixed Income	0.30	12,533,905	37,602	0.30 % of Assets
Richmond Capital TIPS	0.10	12,672	13	0.10 % of Assets
Blackrock Multi-Asset Income Fd (BKMIX)	0.53	3,455,825	18,316	0.53 % of Assets
JPMorgan Income Builder (JNBZX)	0.52	2,894,830	15,053	0.52 % of Assets
ARA Core Property Fund, L.P.	1.10	6,594,000	72,534	1.10 % of Assets
Intercontinental Real Estate	1.10	4,584,406	50,428	1.10 % of Assets
R&D Account		178,017	-	
Total Fund	0.56	70,111,299	389,542	

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.



**Benchmark History**  
**Investment Policy Benchmarks**

As of September 30,2023

<b>Total Fund Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Dec-1975</b>	
S&P 500 Index	50.00
MSCI EAFE Index	10.00
ICE BofAML Govt/ Corp Master	40.00
<b>Apr-2010</b>	
Russell 3000 Index	45.00
MSCI AC World ex USA	15.00
Blmbg. U.S. Aggregate Index	35.00
Bloomberg U.S. TIPS Index	5.00
<b>Jul-2011</b>	
Russell 3000 Index	45.00
MSCI AC World ex USA	15.00
Blmbg. U.S. Aggregate Index	30.00
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
<b>May-2018</b>	
Russell 3000 Index	45.00
MSCI AC World ex USA	15.00
Blmbg. U.S. Aggregate Index	30.00
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
<b>Jul-2020</b>	
Russell 3000 Index	45.00
MSCI AC World ex USA	15.00
Blmbg. U.S. Aggregate Index	20.00
NCREIF Fund Index-Open End Diversified Core (EW)	10.00
GTAA Hybrid Index	10.00
<b>Sep-2023</b>	
Russell 3000 Index	45.00
MSCI AC World ex USA	15.00
Blmbg. U.S. Aggregate Index	15.00
NCREIF Fund Index-Open End Diversified Core (EW)	15.00
GTAA Hybrid Index	10.00

<b>Total Equity Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1975</b>	
S&P 500 Index	85.00
MSCI EAFE Index	15.00
<b>Apr-2010</b>	
Russell 3000 Index	75.00
MSCI AC World ex USA	25.00
<b>Total Domestic Equity Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1975</b>	
S&P 500 Index	100.00
<b>Apr-2010</b>	
Russell 3000 Index	100.00
<b>Total International Equity Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1975</b>	
MSCI EAFE Index	100.00
<b>Apr-2010</b>	
MSCI AC World ex USA	100.00
<b>Total Fixed Income Policy</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1975</b>	
ICE BofAML Govt/ Corp Master	100.00
<b>Apr-2010</b>	
Blmbg. U.S. Aggregate Index	100.00

Investment management fees are not paid from the custodial accounts and are not reflected in the net of fee return.





**Lake Worth Beach General Employees' Retirement System Compliance Checklist as of September 30, 2023**

<b>Total Fund Compliance:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. The total plan return equaled or exceeded the total plan benchmark over the trailing three year period.		✓	
2. The total plan return equaled or exceeded the total plan benchmark over the trailing five year period.		✓	
3. The total plan return ranked within the top 40th percentile of its peer group over the trailing three year period.	✓		
4. The total plan return ranked within the top 40th percentile of its peer group over the trailing five year period	✓		
5. The total plan return equaled or exceeded the 7.1% actuarial earnings assumption over the trailing three year period.		✓	
6. The total plan return equaled or exceeded the 7.1% actuarial earnings assumption over the trailing five year period.		✓	

<b>Equity Compliance:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. The total domestic equity returns meet or exceed the benchmark over the trailing three year period.		✓	
2. The total domestic equity returns meet or exceed the benchmark over the trailing five year period.		✓	
3. The total domestic equity returns ranked within the top 40th percentile of its peer group over the trailing three year period.		✓	
4. The total domestic equity returns ranked within the top 40th percentile of its peer group over the trailing five year period.	✓		
5. The total equity allocation was less than 70% of the total plan assets at market.	✓		
6. Total total foreign equity was less than 25% of the total plan assets at market.	✓		

<b>Fixed Income Compliance:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. The total fixed income returns meet or exceed the benchmark over the trailing three year period.	✓		
2. The total fixed income returns meet or exceed the benchmark over the trailing five year period.	✓		
3. The total fixed income returns ranked within the top 40th percentile of its peer group over the trailing three year period.		✓	
4. The total fixed income returns ranked within the top 40th percentile of its peer group over the trailing five year period.		✓	
5. Eighty percent (80%) of fixed income portfolio had minimum rating of investment grade or higher.	✓		
6. The total real estate did not exceed 10% of the total plan portfolio at market at the time of purchase.	✓		
7. The maximum duration did not exceed 135% of the duration of the Barclays Aggregate Index.	✓		

**Lake Worth Beach General Employees' Retirement System Compliance Checklist as of September 30, 2023**

<b>Manager Compliance:</b>	<b>Manager outperformed the index over the trailing three and five year period.</b>			<b>Manager ranked within the top 40th percentile over trailing three and five year period.</b>			<b>Less than four consecutive quarters of under performance relative to the benchmark.</b>			<b>Three-year and five-year down-market capture ratio less than the index.</b>			<b>Manager reports compliance with PFIA.</b>		
	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Cambiar	✓				✓		✓			✓			✓		
2. Brandywine	✓				✓		✓			✓			✓		
3. Fred Alger		✓			✓		✓			✓			✓		
4. MFS LC Gr*			✓			✓	✓			✓		✓			✓
5. EuroPacific		✓			✓		✓			✓			✓		✓
6. Richmond	✓				✓		✓						✓		
7. Richmond TIPS			✓			✓			✓				✓		
8. ARA Core Property	✓			✓			✓			✓			✓		
9. Intercontinental									✓				✓		
10. Fidelity Total Stk*			✓			✓	✓					✓			✓
11. Blackrock*			✓			✓	✓					✓			✓
12. JPMorgan Inc Build*			✓			✓	✓					✓			✓
13. D&C International*			✓			✓	✓					✓			✓
*less than 3 year															



- Prior to 11/2012 returns for the American Fund product are for share class: Europacific Growth R5 (RERFX- Cusip: 298706839). In 11/2012 this was changed out to the following share class: Europacific Growth R6 (RERGX - Cusip: 298706821).
- Performance attribution is calculated monthly based on a "buy and hold" strategy for portfolio level securities using transaction data provided by the client's custodial bank.

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



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

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

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

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