

December 31, 2023



**Pennsylvania SERS  
Defined Benefit Plan**

**Investment Measurement Service  
Quarterly Review**

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## Pennsylvania SERS

### December 31, 2023

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## Economy Becomes Even More Surprising

### ECONOMY

**2** Last year was supposed to feature the recession caused by the Fed's dedication to fighting inflation; instead, the economy grew 2.5% for the year. While the rate of overall growth slowed in 4Q, the economy seemed to get stronger by the quarter in 2023.

## Broad Rally for Bonds Across the World

### FIXED INCOME

**8** Driven by falling rates and strong risk-on sentiment, the Agg returned 6.8%, the highest quarterly return since 2Q89. The 10-year U.S. Treasury yield closed the year at 3.88%. Global bonds saw broad-based gains across countries and developed markets topped the U.S.

## Net IRR of Nearly 9% Over Three Years

### PRIVATE CREDIT

**12** Given its high returns, private credit remained in high demand across Callan's investor base. Private credit assets under management stood at over \$1.5 trillion at the end of 2023, with Preqin forecasting the asset class will grow to over \$2.5 trillion by 2028.

## Increases in 2023 but Inflation Tops Worries

### INSTITUTIONAL INVESTORS

**4** Robust equity returns led all institutional investor types to show gains for 2023, a stark reversal from the double-digit losses of 2022. But over the last year, all investors lagged a 60% stocks/40% bonds benchmark by a significant amount, likely due to those same equity gains.

## Private RE Falls but REITs Outpace Stocks

### REAL ESTATE/REAL ASSETS

**10** The NCREIF Property Index fell 3.0% during 4Q23. The NCREIF Open-End Diversified Core Equity (ODCE) Index fell 4.8% during 4Q. The FTSE EPRA Nareit Developed REIT Index rose 15.6% during 4Q23. The FTSE Nareit Equity REITs Index increased 16.2%.

## Gains Spurred by Stocks and Bonds

### HEDGE FUNDS/MACs

**13** Most hedge fund managers showed gains in 4Q23. Equity hedge strategies were the best performing. Relative value strategies generated positive performance as well, while event-driven strategies also ended on a strong note. Multi-asset class (MAC) strategies also gained.

## Dovish Policy Drives Widespread Gains

### EQUITY

**6** U.S. equity markets rebounded in the last two months of the year as the impact of possible rate cuts in 2024 started to get priced in. Dovish signaling from central banks and dropping yields led to a broad market rally in 4Q23 for global ex-U.S. markets as well.

## Big Slowdown After Frenzy of 2021

### PRIVATE EQUITY

**11** Both new investment activity and exit activity slowed markedly in 2023. Public equity's strong recovery in 2023 has left private equity in its wake. Private equity only saw about a fifth of the gains of the public markets over the last year, on a PME basis.

## 2.9% Drop After Three Quarters of Gains

### DEFINED CONTRIBUTION

**15** Despite the loss, the Callan DC Index™ saw a trailing one-year gain of 13.8%. The Age 45 Target Date Fund (analogous to the 2045 vintage) fell 3.6%. Balances within the DC Index fell by 3.2% after a 4.3% increase in the previous quarter, driven by investment losses.

## Broad Market Quarterly Returns

**U.S. Equity**  
Russell 3000



**Global ex-U.S. Equity**  
MSCI ACWI ex USA



**U.S. Fixed Income**  
Bloomberg Agg



**Global ex-U.S. Fixed Income**  
Bloomberg Global Agg ex US



Sources: Bloomberg, FTSE Russell, MSCI

# The Economy Is More Surprising by the Quarter

ECONOMY | Jay Kloepfer

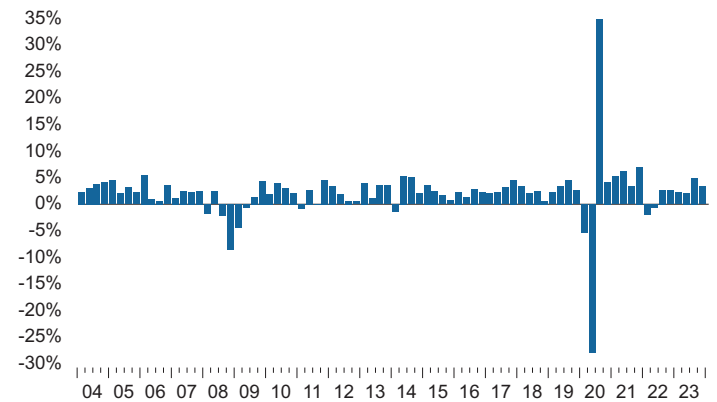
The U.S. economy grew by 3.3% in 4Q23, once again surprising to the upside. If you asked anyone who has to indulge in the hubris of forecasting the economy, all of 2023 has been a surprise. Last year was supposed to feature the recession caused by the Fed's dedication to fighting inflation by raising interest rates; instead, the economy grew 2.5% for the year, up from the 1.9% rate in 2022. The job market has generated 5.4 million new jobs since the end of 2019, before the start of the pandemic. Real wages and real income growth turned positive in mid-2023 as inflation subsided but demand for workers remained. Workers feel confident in the tight labor market, and this confidence is driving consumer spending. Consumption expenditures accounted for half of GDP growth in 3Q and almost 60% in 4Q. The economy seemed to get stronger by the quarter in 2023.

So why no recession? Underneath the mayhem that defined both 2022 and 2023—geopolitical uncertainty, spiking inflation, rising interest rates, and the volatility in the equity market—the U.S. and global economies remain in remarkably good shape. The U.S. economy weathered the rate hikes in 2022 and 2023 particularly well. The first reason is stimulus and lots of it, around the globe, which translated into pent-up demand. Second, the very tight labor market in the U.S. gives workers and their families confidence to spend. Third, despite the housing market taking a big hit as mortgage rates shot up, housing has not dragged down the economy as in rate hike episodes of yore. In addition, we do not have a mortgage crisis similar to the one that struck in 2008-09 and nearly took down the banking system.

However, we do have a commercial real estate tsunami working through offices in central business districts and retail trade, which will reshape the physical as well as business landscape of many communities in the U.S. Finally, we do have a housing shortage around the U.S. that may have long-term generational consequences for homeownership, wealth creation, and financial security for younger people.

## Quarterly Real GDP Growth

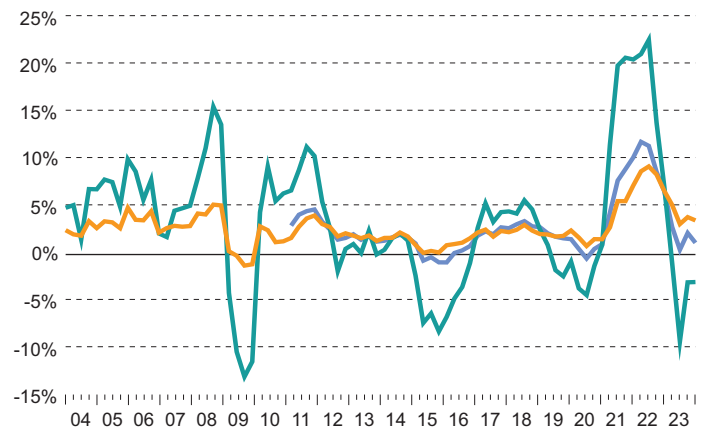
(20 Years)



Source: Bureau of Economic Analysis

## Inflation Year-Over-Year

● CPI (All Urban Consumers) ● PPI (All Commodities) ● PPI (Final Demand)



Source: Bureau of Labor Statistics

Inflation shot up to 9% in mid 2022, but the rate of price increases began to ebb in the second half of 2022 and declined steadily to 3% by the end of 3Q23. Unfortunately, headline inflation ticked back up to 3.5% by the end of the year, so we are not out of the inflation woods yet. Even as the rate of price increases comes down, prices are now “permanently” higher unless we see deflation. The level of the CPI-U index is up 10% since the start of 2022.

One key factor keeping inflation from falling back toward the Federal Reserve’s goal of 2% is the labor market. We ended 2023 with labor markets not only tight but tightening. Initial unemployment claims (measured on a weekly basis)—one of our few leading indicators—began climbing in 2Q, and by early spring weekly claims had surpassed the average set in 2019 of 218,000. As claims rose to 250,000 by August, the data appeared to show that interest rate hikes were finally starting to bite. Then initial claims fell back sharply and we ended the year at 203,000. Continuing unemployment claims also began to rise from a very low level starting in 4Q22 and ended the year about 9% higher than the pre-pandemic level. So initial claims show workers holding onto jobs, but the continuing claims show workers have a bit more trouble finding jobs once laid off. However, the unemployment rate remains low at 3.7%. The tightness in the labor market is inconsistent with the Fed’s goal of achieving its 2% inflation target. As continuing claims rose in 2023, bond markets read the data as the first sign of easing in the labor market, but the robust end-of-the-year GDP report, the lower initial claims, and the strong December job market report suggest labor market tightness is not yet easing.

The remarkable GDP growth is fueling continued demand for workers, and with inflation falling while wages are rising, workers saw real incomes (wages and salaries net of inflation) grow in each of the last three quarters of 2023, with a sharp gain of 2.5% in real disposable (after-tax) income in 4Q. Average hourly earnings growth slowed from 5% (annual growth) in 2022 to 4% by December 2023, but as inflation fell real wage growth finally turned positive starting in May, and this real growth carried through December (wage growth is exceeding inflation).

The upshot: it may take longer than many believed to unravel the current growth momentum in the U.S. economy. The Fed had stated

### The Long-Term View

Index	4Q23	Periods Ended 12/31/23			
		1 Yr	5 Yrs	10 Yrs	25 Yrs
<b>U.S. Equity</b>					
Russell 3000	12.1	26.0	15.2	11.5	7.7
S&P 500	11.7	26.3	15.7	12.0	7.6
Russell 2000	14.0	16.9	10.0	7.2	7.9
<b>Global ex-U.S. Equity</b>					
MSCI EAFE	10.4	18.2	8.2	4.3	4.4
MSCI ACWI ex USA	9.8	15.6	7.1	3.8	--
MSCI Emerging Markets	7.9	9.8	3.7	2.7	--
MSCI ACWI ex USA Small Cap	10.1	15.7	7.9	4.9	7.3
<b>Fixed Income</b>					
Bloomberg Agg	6.8	5.5	1.1	1.8	3.9
90-Day T-Bill	1.4	5.0	1.9	1.3	1.9
Bloomberg Long G/C	13.2	7.1	1.1	3.2	5.2
Bloomberg GI Agg ex US	9.2	5.7	-1.6	-0.8	2.2
<b>Real Estate</b>					
NCREIF Property	-3.0	-7.9	4.3	6.8	8.0
FTSE Nareit Equity	16.2	13.7	7.4	7.6	9.3
<b>Alternatives</b>					
HFRI Fund Weighted	4.2	8.1	7.1	4.6	6.3
Cambridge PE*	-0.4	4.2	14.6	14.3	13.9
Bloomberg Commodity	-4.6	-7.9	7.2	-1.1	2.8
Gold Spot Price	11.0	13.4	10.1	5.6	8.2
<b>Inflation – CPI-U</b>	-0.3	3.4	4.1	2.8	2.5

\*Data for most recent period lags. Data as of 3Q23.  
Sources: Bloomberg, Bureau of Economic Analysis, FTSE Russell, Hedge Fund Research, MSCI, NCREIF, Refinitiv/Cambridge, S&P Dow Jones Indices

earlier in 2023 a belief that rates would remain elevated, based on its economic expectation of “stronger for longer.” After the Fed reversed course in the November and December FOMC meetings, signaling rate cuts were likely in 2024, the economy reverted to stronger for longer on its own.

### Recent Quarterly Economic Indicators

	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22
Employment Cost: Total Compensation Growth	4.2%	4.3%	4.5%	4.8%	5.1%	5.0%
Nonfarm Business: Productivity Growth	3.2%	4.9%	3.6%	-0.8%	1.6%	0.4%
GDP Growth	3.3%	4.9%	2.1%	2.2%	2.6%	2.7%
Manufacturing Capacity Utilization	77.1%	77.7%	78.0%	78.2%	78.5%	79.4%
Consumer Sentiment Index (1966=100)	64.9	69.6	62.3	64.6	58.8	56.1

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan



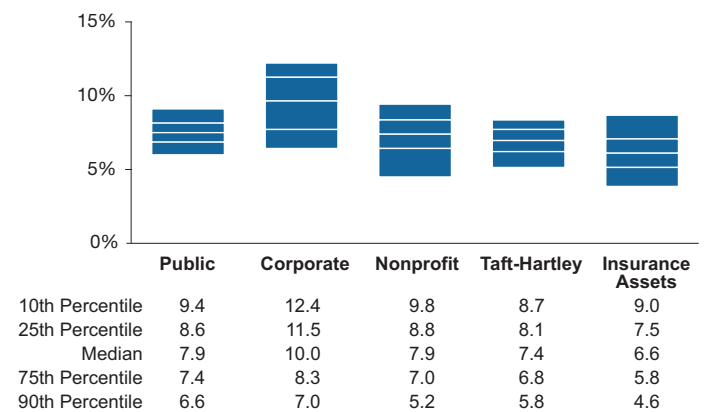
# Gains in 2023 but Inflation Tops Worries

## INSTITUTIONAL INVESTORS

- The 2023 equity market was up 24%, led by seven securities nicknamed “The Magnificent Seven.”
- Other 493 securities gained 12% in 2023.
- These robust equity returns led all institutional investor types to show gains for 2023, a stark reversal from the double-digit losses of 2022.
- Nonprofits showed the best returns, while corporate defined benefit (DB) plans and Taft-Hartley plans brought up the rear.
- But over the last year, all investors lagged a 60%/40% stocks/40% bonds benchmark by a significant amount.
- Remarkable U.S. equity gains likely played a big role in that gap.
- As has been the case for years, institutional investors continued to show 20-year returns close to but still below the 60%/40% benchmark.

- *Recession:* There is no shortage of worries that could cause one: interest rate hikes, global armed conflicts, U.S.-China conflict, the U.S. presidential election ....
- *Equity valuations:* The Magnificent Seven and index concentration worried some clients, while stock prices in light of higher interest rates were also a concern.

Quarterly Returns, Callan Database Groups (12/31/23)



Source: Callan

### All Investor Types

- The major macroeconomic issues investors are discussing include:
  - *Interest rates:* As has been true for much of the past year, worries about inflation and the future direction of interest rates were pervasive.

### Callan Database Median and Index Returns\* for Periods Ended 12/31/23

Database Group	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Public Database	7.9	13.0	4.3	9.0	6.9	7.2
Corporate Database	10.0	11.8	-0.1	6.6	5.7	6.6
Nonprofit Database	7.9	13.5	4.3	8.7	6.5	7.0
Taft-Hartley Database	7.4	11.9	4.5	8.6	6.9	6.8
Insurance Assets Database	6.6	9.7	1.5	5.1	4.1	4.9
All Institutional Investors	8.1	12.6	3.7	8.3	6.5	6.9
Large (>\$1 billion)	7.5	11.7	4.6	8.6	6.9	7.2
Medium (\$100mm - \$1bn)	8.2	12.8	3.8	8.4	6.5	7.0
Small (<\$100 million)	8.3	13.1	3.4	8.2	6.2	6.5
60% S&P 500/40% Bloomberg Agg	9.7	17.7	4.7	10.1	8.1	7.4

\*Returns less than one year are not annualized.

Source: Callan. Callan's database includes the following groups: public defined benefit (DB) plans, corporate DB plans, nonprofits, insurance assets, and Taft-Hartley plans. Approximately 10% to 15% of the database constituents are Callan's clients. All database group returns presented gross of fees. Past performance is no guarantee of future results. Reference to or inclusion in this report of any product, service, or entity should not be construed as a recommendation, approval, affiliation, or endorsement of such product, service, or entity by Callan.

**Public DB Plans**

- The average or median discount rate, according to the most recent NASRA survey, remains at 7.00%.
- A 7.00% return expectation can be hit with almost 50% in fixed income.
- Plans have increased their exposure to both fixed income and/or alternatives.
- Given this rate, investors are weighing how or whether to adjust allocations based on Callan’s 2024-2033 Capital Markets Assumptions.
- The rise in fixed income expectations in particular has made estimated return-on-asset assumptions much easier to hit.
- But if plans increase their discount rates, the higher funded status could lead to increased pressure to improve benefits.

**Corporate DB Plans**

- Liabilities decreased as rates rose.
- Interest rate hedging continues to work.
- Plans that were hedged were insulated from changes to interest rates in 2023.
- Some plans focused on total return “won” for a second year in a row as rising rates decreased the liability, resulting in an increased funded ratio.
- As closed plans’ liabilities shorten, interest in intermediate fixed income continues.

- Many plans’ improved funded status has led some to further implement de-risking glidepaths.
- Higher fixed income assumptions have led clients to weigh changing allocations to the asset class, but in different ways. Some are looking at long duration bonds, others at whether to add to their fixed income allocations or stay pat.

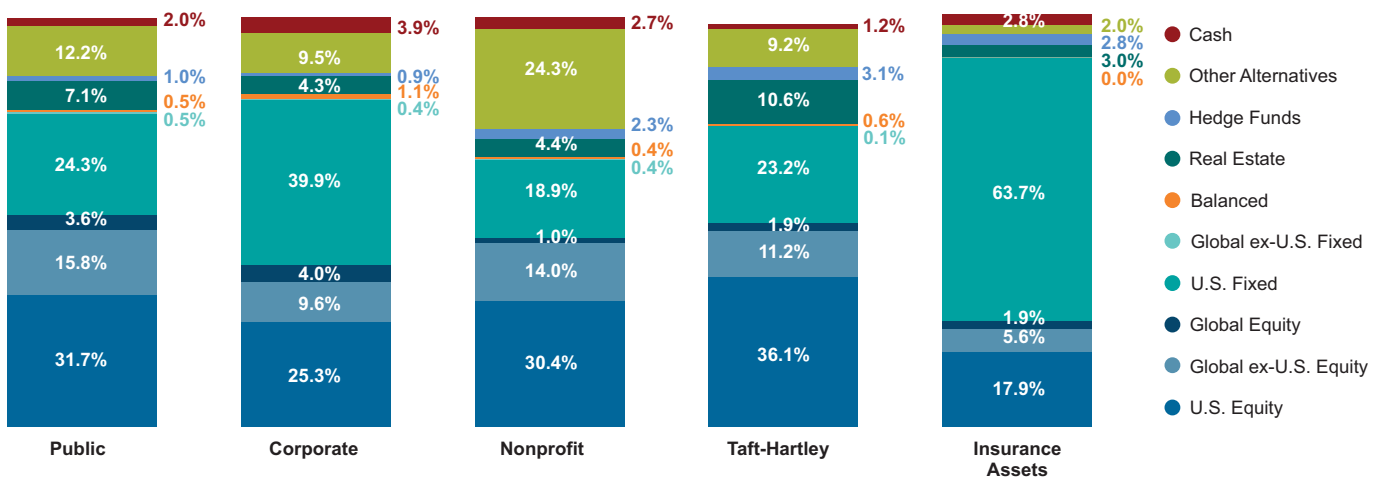
**Nonprofits**

- These investors are still focused on total return.
- Interest in private credit remains strong.
- Inflation concerns continue to affect real returns.
- Strong economies can lead to strong fundraising efforts, which can help dampen return volatility.

**Defined Contribution (DC) Plans**

- These are the significant new issues:
  - SECURE 2.0 and its postponement
  - Retirement income and how the maturing demographics of participants, higher rates, and rollovers can affect the different types of retirement income solutions plans can choose.
- The gap in returns between money market and stable value funds was a new source of concern for some plans.

**Average Asset Allocation, Callan Database Groups**



Note: Charts may not sum to 100% due to rounding. Other alternatives include but is not limited to: diversified multi-asset, private credit, private equity, and real assets. Source: Callan

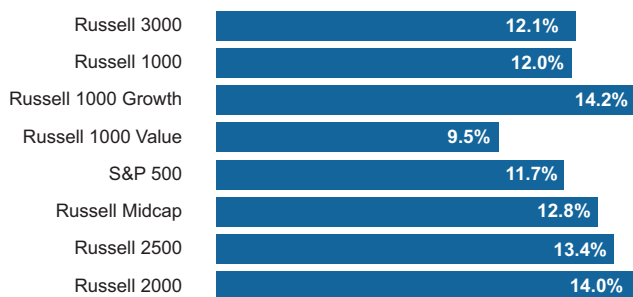
# Equity

## U.S. Equities

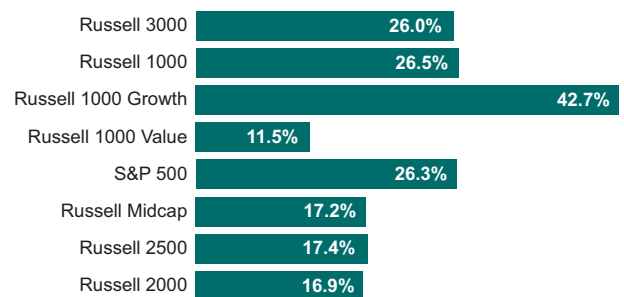
### End-of-the-year rally

- U.S. equity markets rebounded in the last two months of the year as the impact of possible rate cuts in 2024 started to get priced in.
- The S&P 500 Index approached a record high as the year closed. Of note, 2023 was the first year since 2012 that the S&P failed to reach a high-water mark. That said, the index was up an impressive 11.7% in 4Q and 26.3% for the year.
- The tech sector was the clear winner for the quarter and the year (+17.2%; +57.8%) while Energy (-6.9%; -1.3%) was the only sector to register both a 4Q and 2023 decline.
- 2023 saw the narrowest breadth of leadership (“the Magnificent Seven”) since 1987, with just 27% of stocks outperforming the S&P 500. Historically, such concentrated leadership has not been the sign of a healthy market.
- Fourth quarter and 2023 returns for the bunch were impressive: Alphabet: +6.8%, +58.8%; Amazon: +19.5%, +80.9%; Apple: +12.6%, +49.0%; Meta: +17.9%, +194.1%; Microsoft: +19.3%, +58.2%; NVIDIA: +13.9%, +239.0%; Tesla: -0.7%, +101.7%.
- The index would have been up only about 10% for the year without these stocks, and the equal-weighted S&P 500 returned 11.9% in 4Q and 13.9% in 2023.
- However, gains started broadening out in the last two months of the year with the equal-weighted S&P index outperforming the capitalization-weighted version.
- Smaller cap stocks also outperformed their large cap counterparts in 4Q23, further proof of the broadening out of returns.
- For the full year, large cap stocks outperformed small cap stocks by almost 10 percentage points.
- Growth vs. value performance was mixed across market capitalization during the quarter. Within large cap, growth outperformed value, while the opposite was true within small cap.

### U.S. Equity: Quarterly Returns (12/31/23)

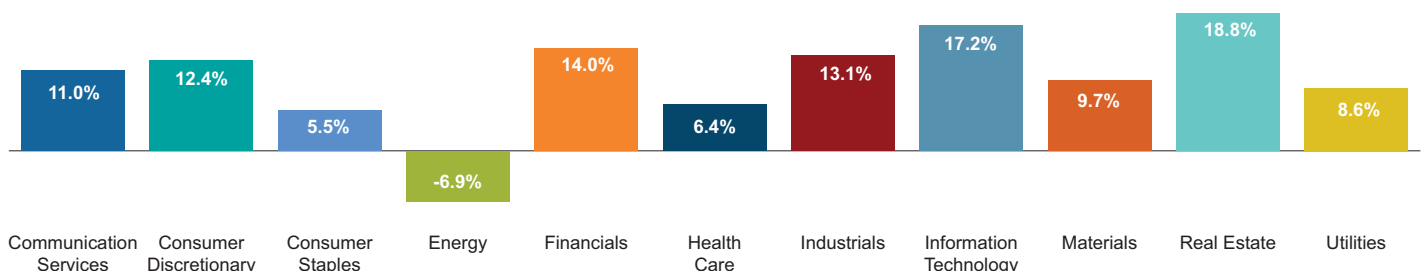


### U.S. Equity: One-Year Returns (12/31/23)



Sources: FTSE Russell and S&P Dow Jones Indices

### Quarterly Performance of Industry Sectors (12/31/23)



Source: S&P Dow Jones Indices

## Global Equities: Global markets in the black for 4Q

### Broad market

- Dovish signaling from central banks and dropping yields led to a broad market rally in 4Q23.
- Global ex-U.S. small caps reclaimed some of their lagging performance in 4Q but ended the year as the worst-performing broad-based index, albeit up over 12%. Elevated borrowing costs and the persistent risk of a recession have kept investors away.
- Japan's low rates have benefited exporters, and the threat of being delisted spurred a stock buy-back spree. Coupled with an increased focus on governance, this spurred Japan to a multi-decade high.

### Emerging markets

- Emerging markets underperformed developed markets.
- India's rally couldn't overcome China's weakness, whose economic growth was near the government's target, but investor concerns around stimulus and a surprisingly sluggish reopening drove stocks lower.

### Growth vs. value

- Energy, a volatile area in the market, pulled back value's rally after having a strong 3Q. Global ex-U.S. growth rallied on lowering yields but couldn't overcome earlier underperformance and ended the year behind its value peers in both emerging and developed markets.

### U.S. dollar vs. other currencies

- The U.S. dollar weakened in 4Q as investors believed that U.S. interest rates would fall faster than much of the developed world.

### China: Danger or opportunity?

#### Long-term growth potential

- China has the second-largest GDP and the world's largest population of consumers.

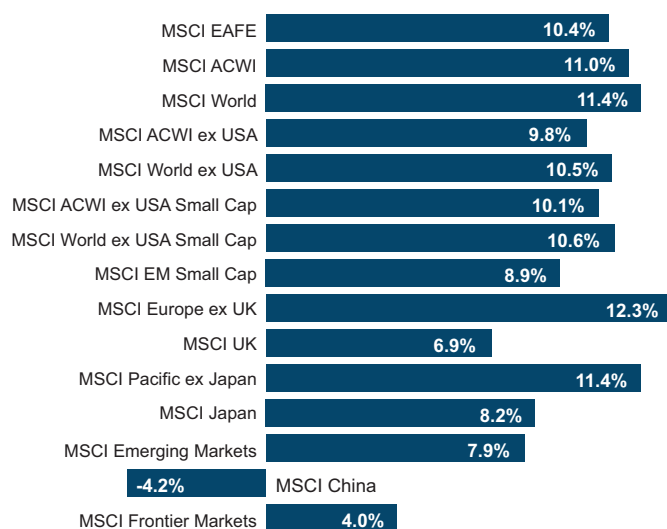
#### Valuation

- Valuations remain attractive on a forward P/E basis.

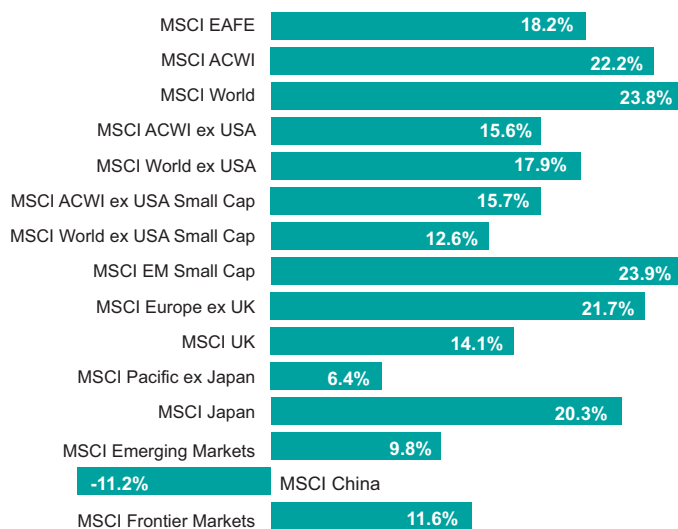
### Structural challenges

- Inbound foreign direct investment (FDI) for China went negative for the first time as local markets remained weak and geopolitical tensions persisted.
- China is run by an authoritarian regime that may act against investors' best interests.

### Global ex-U.S. Equity: Quarterly Returns (U.S. Dollar, 12/31/23)



### Global ex-U.S. Equity: One-Year Returns (U.S. Dollar, 12/31/23)



Source: MSCI

# Fixed Income

## U.S. Fixed Income

### Strong returns at end of year

- Driven by falling rates and strong risk-on sentiment, the Agg returned 6.8%, the highest quarterly return since 2Q89 (when the 90-day T-bill was over 8% and inflation hit 14% earlier in the decade)!
- 10-year U.S. Treasury yield closed the year at 3.88%
- A round trip from December 2022, masking significant volatility during the year
- High was 4.98% in October and low was 3.30% in April
- Corporates and mortgages outperformed Treasuries for the quarter and year.
- High yield corporates soared as defaults remained low and the economy resilient.

### U.S. Treasury yield curve remained inverted, but less so

- 106 bps as of 6/30; 44 bps as of 9/30; 35 bps as of 12/31

### Fed kept Fed Funds rate on hold and softened language

- Pivoted from “higher for longer” to projected rate cuts in 2024
- Inflation over past six months below Fed’s 2% target
- Core PCE Price Index was 1.9% annualized in November.
- Markets expect six rate cuts in 2024 versus three in the Fed’s Summary of Economic Projections.

### Valuations

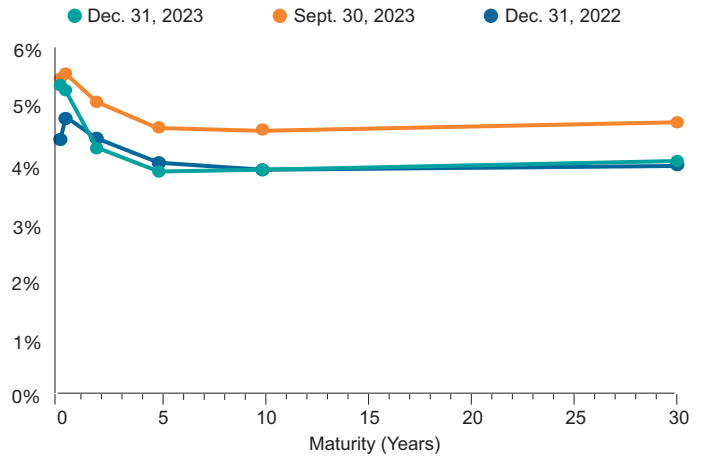
- Investment grade and high yield corporate spreads now below 10-year averages

## Municipal Bonds

### Gains in 4Q and a superb November

- November was the best month since August 1982.
- Helped by falling yields, muted issuance, and strong demand
- Reversed the -1.4% year-to-date return as of 9/30

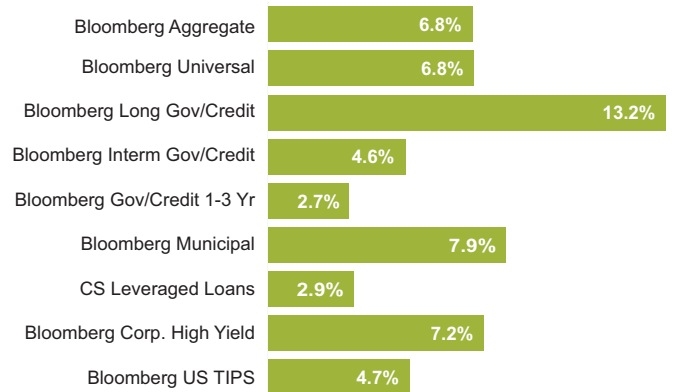
## U.S. Treasury Yield Curves



Source: Bloomberg

## U.S. Fixed Income: Quarterly Returns

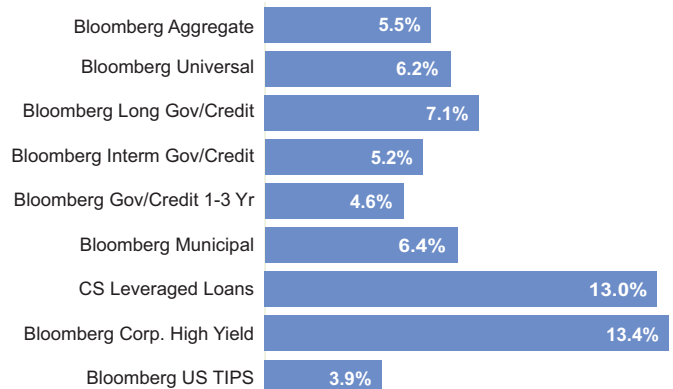
(12/31/23)



Sources: Bloomberg and Credit Suisse

## U.S. Fixed Income: One-Year Returns

(12/31/23)



## FIXED INCOME (Continued)

### BBBs performed best for quarter and year

- AAA: +8.4%; +5.8%
- AA: +7.6%; +5.9%
- A: +8.0%; +7.3%
- BBB: +9.2%; +8.9%

### Valuations

- Credit spreads close to historical averages
- Mortgage spreads widened on interest rate volatility and slowing prepayments.

### Valuations vs. U.S. Treasuries richened

- 10-year AAA Muni/10-year U.S. Treasury yield ratio 59%, down from 75% as of 9/30
- Well below 10-year median of 87%
- After-tax yields remain attractive at 5.4% (source: Morgan Stanley).

### Fundamentals for state, local governments remain sound

- Upgrades exceeded downgrades in 2023.

### Global Fixed Income

#### Falling rates bolstered 4Q returns globally

- Central banks seen as moving closer to cutting rates as inflation moderated
- Gains were broad-based across countries with the U.S. lagging other developed markets in unhedged terms.
- Emerging markets also posted strong results with gains across most countries.

#### U.S. dollar weakened

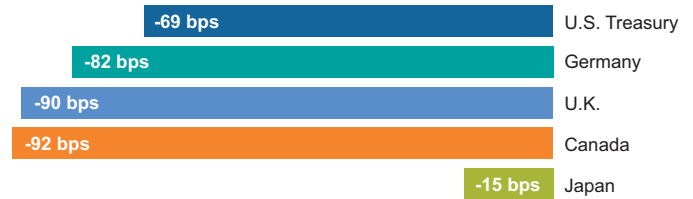
- Major currencies rose compared to the dollar in 4Q.

#### Emerging markets also posted strong results

- Gains across most countries

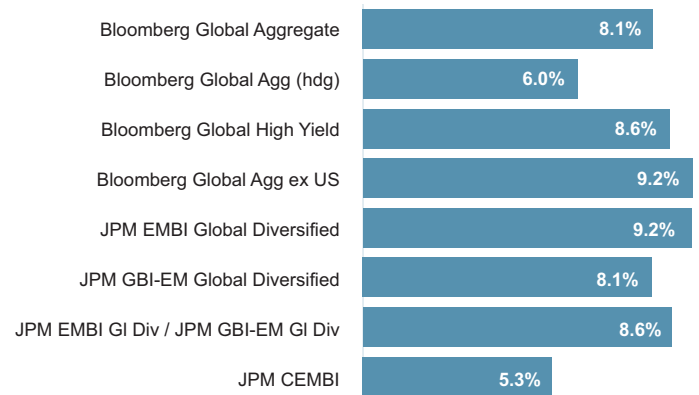
### Change in 10-Year Global Government Bond Yields

3Q23 to 4Q23



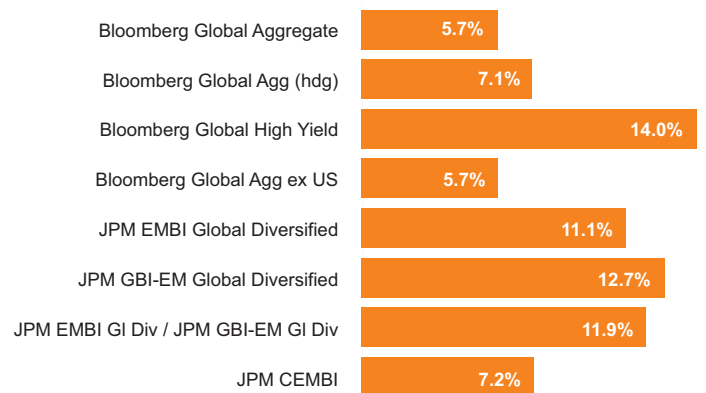
Source: Bloomberg

### Global Fixed Income: Quarterly Returns (12/31/23)



Sources: Bloomberg and JPMorgan Chase

### Global Fixed Income: One-Year Returns (12/31/23)



Sources: Bloomberg and JPMorgan Chase

# Private RE Falls but REITs Outpace Stocks

REAL ESTATE/REAL ASSETS | Munir Iman

## Private RE valuations reflect higher rates

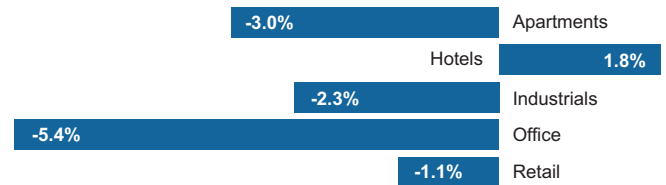
- The NCREIF Property Index, a measure of U.S. institutional real estate assets, fell 3.0% during 4Q23. The income return was 1.1% while the appreciation return was –4.1%.
- Hotels, which represent a small portion of the index, led property sector performance with a gain of 1.8%.
- Office finished last with a loss of 5.4%.
- Regionally, the South led with a loss of 1.9%, while the West was the worst performer with a drop of 3.7%.
- The NCREIF Open-End Diversified Core Equity (ODCE) Index, representing equity ownership positions in U.S. core real estate, fell 4.8% during 4Q, with an income return of 1.0% and an appreciation return of -5.8%.

## REITs outperform equities

- The FTSE EPRA Nareit Developed REIT Index, a measure of global real estate securities, rose 15.6% during 4Q23.
- U.S. REITs, as measured by the FTSE Nareit Equity REITs Index, increased 16.2%.
- The FTSE EPRA Nareit Asia Index (USD), representing the Asia/Pacific region, gained 8.6%.
- European REITs, as measured by the FTSE EPRA Nareit Europe Index (USD), jumped 26.8%.
- U.S. REITs outperformed the S&P 500 (11.7%). They also topped Asia REITs but underperformed Europe.

## Sector Quarterly Returns by Property Type

(12/31/23)



Source: NCREIF

- The outperformance in the U.S. was driven by dampening inflation, coupled with a more dovish Federal Reserve sentiment sparking a rally to close the year.
- The office sector outperformed, coming off its lows.
- Gaming, residential, health care, and data center lagged, impacted by interest rate challenges and prior strong performances.
- The FTSE EPRA Nareit Developed Asia Index (USD) rose 8.6% during the quarter. China's economic outlook remains uncertain, exacerbated by geopolitical tensions and underwhelming stimulus.
- The FTSE EPRA Nareit Developed Europe Index (USD) increased by 26.8% during the quarter.
- Europe was the top-performing region, driven by meaningful currency tailwinds. Expectations of a dovish central bank were driven by weakening economic data.

## Callan Database Median and Index Returns\* for Periods Ended 12/31/23

Private Real Assets	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years	15 Years
<b>Real Estate ODCE Style</b>	<b>-0.4</b>	<b>-10.0</b>	<b>-10.0</b>	<b>4.9</b>	<b>4.7</b>	<b>7.0</b>	<b>5.2</b>
NFI-ODCE (value-weighted, net)	-5.0	-12.7	-12.7	4.0	3.3	6.3	5.1
NCREIF Property	-3.0	-7.9	-7.9	4.6	4.3	6.8	6.4
NCREIF Farmland	2.3	5.0	5.0	7.4	6.0	7.3	9.4
NCREIF Timberland	4.3	9.5	9.5	10.5	6.6	5.8	4.7
<b>Public Real Estate</b>							
<b>Global Real Estate Style</b>	<b>15.4</b>	<b>12.2</b>	<b>12.2</b>	<b>2.6</b>	<b>5.6</b>	<b>6.0</b>	<b>9.3</b>
FTSE EPRA Nareit Developed	11.3	2.2	2.2	3.5	5.9	6.0	8.6
<b>Global ex-U.S. Real Estate Style</b>	<b>15.4</b>	<b>9.0</b>	<b>9.0</b>	<b>-3.7</b>	<b>3.2</b>	<b>4.8</b>	<b>8.6</b>
FTSE EPRA Nareit Dev ex US	14.9	6.3	6.3	-4.5	-0.5	1.0	5.6
<b>U.S. REIT Style</b>	<b>16.5</b>	<b>14.0</b>	<b>14.0</b>	<b>6.8</b>	<b>8.8</b>	<b>8.6</b>	<b>11.6</b>
FTSE EPRA Nareit Equity REITs	16.2	13.7	13.7	7.2	7.4	7.6	10.5

\*Returns less than one year are not annualized. Sources: Callan, FTSE Russell, NCREIF

# Big Slowdown After Frenzy of 2021

PRIVATE EQUITY | Ashley Kahn

Both new investment activity and exit activity slowed markedly in 2023, following rising interest rates, declines in the public markets, and continued price uncertainty.

**Fundraising** ► Fundraising declined back closer to historical levels in 2022 after its frenzied peak in 2021. So far, 2023 has been another down year, with LPs being more selective with their commitments.

**Buyouts** ► There was a significant decline in deal activity this year after the highs of 2021-2022, caused by high interest rates, a wide bid-ask spread, and lingering effects from the slowdown in the public markets. There was also greater difficulty in obtaining financing this year, particularly for mega buyout deals, which has brought down leverage ratios across the industry.

Buyout valuations are finally starting to normalize in 2023 after their peak in 2021. Buyout valuations are sensitive to changes in interest rates—as the cost of borrowing rises, it is harder to justify high valuations.

**Venture Capital and Growth Equity** ► There was a substantial decline in venture capital and growth equity activity in 2023, following the crazed highs of 2021 and early 2022. Valuations, likewise, have reverted back to historical levels, particularly at the late stage.

## Private Equity Performance (%) (Pooled Horizon IRRs through 9/30/23\*)

Strategy	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years
All Venture	-2.4	-8.9	14.8	17.2	17.2	13.4	12.5	20.4
Growth Equity	-0.6	0.8	12.3	14.8	14.3	13.1	13.8	14.3
All Buyouts	0.1	10.2	16.8	15.0	14.6	12.4	14.6	12.8
Mezzanine	1.8	13.0	13.5	11.0	11.1	10.7	11.1	9.9
Credit Opportunities	1.2	8.2	11.1	7.1	7.5	10.1	9.3	9.6
Control Distressed	0.4	5.6	19.4	13.6	11.7	11.5	11.6	11.4
<b>All Private Equity</b>	<b>-0.4</b>	<b>4.2</b>	<b>15.4</b>	<b>14.8</b>	<b>14.3</b>	<b>12.5</b>	<b>13.6</b>	<b>13.0</b>
S&P 500	11.7	26.3	10.0	15.7	12.0	14.0	9.7	7.6
Russell 3000	12.1	26.0	8.5	15.2	11.5	13.8	9.7	7.7

Note: Private equity returns are net of fees. Sources: Refinitiv/Cambridge and S&P Dow Jones Indices  
\*Most recent data available at time of publication

**Exits** ► Exits have declined dramatically after hitting all-time records in 2021. Only 8% of total private equity AUM generated liquidity in 2023 (the lowest level ever)—lower even than the depths of the Global Financial Crisis.

With the IPO window still closed and increasing antitrust sentiment, it is unclear whether exit activity will rebound in 2024. IPO exits in 2023 were at just 15% of pre-pandemic levels.

**Returns** ► Public equity's strong recovery in 2023 (led by the "Magnificent 7" technology stocks) has left private equity in its wake. Private equity only saw about a fifth of the gains of the public markets over the last year, on a PME basis.

## Funds Closed 1/1/23 to 12/31/23

Strategy	No. of Funds	Amt (\$mm)	Share
Venture Capital	1,584	199,090	21%
Growth Equity	139	103,324	11%
Buyouts	515	471,684	50%
Mezzanine Debt	24	36,050	4%
Distressed/Special Credit	42	46,018	5%
Energy	6	3,296	0%
Secondary and Other	137	74,616	8%
Fund-of-funds	25	5,567	1%
<b>Totals</b>	<b>1,472</b>	<b>552,402</b>	<b>100%</b>

Source: PitchBook (Figures may not total due to rounding.)

Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of the *Capital Markets Review* and other Callan publications.

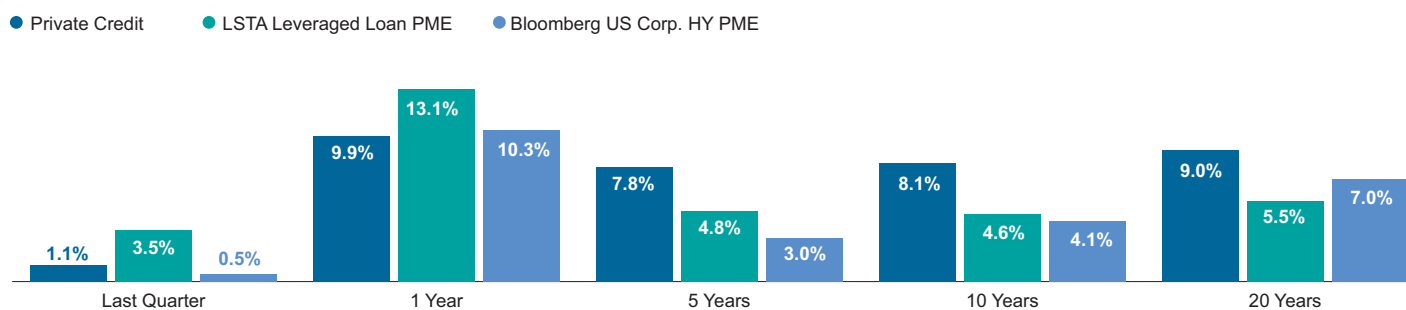


# Net IRR of Nearly 9% Over Three Years

PRIVATE CREDIT | Catherine Beard

- Private credit performance varies across sub-asset class and underlying return drivers. Over the past three years the asset class has generated a net IRR of nearly 9%. Higher-risk strategies have performed better than lower-risk strategies.
- Private credit remained in high demand across Callan’s investor base, and a number of large defined benefit plans are looking to increase their existing private credit allocations from 2%–3% to 5%–10%.
- While we always work to build out diversified client portfolios, we think there is particularly interesting relative value in upper middle market sponsor-backed lending and asset-based lending.
- We are seeing an uptick in stress for some individual names in direct lending portfolios due to a combination of input cost inflation and increased interest expense.
- Private credit AUM stood at over \$1.5 trillion at the end of 2023, with Preqin forecasting the asset class will grow to over \$2.5 trillion by 2028 at a 11.13% CAGR from 2023 to 2028.
- Direct lending is expected to grow steadily through 2028 as investors increase their private credit allocations. Distressed exposure will grow a bit more slowly with other strategies such as opportunistic, special situations, and other niche diversifiers growing more quickly.

## Private Credit Performance (%) (Pooled Horizon IRRs through 9/30/23\*)



## Private Credit Performance (%) (Pooled Horizon IRRs by Strategy through 9/30/23\*)

Strategy	Quarter	1 Year	5 Years	10 Years	20 Years
Senior Debt	0.1	11.4	5.9	6.6	6.8
Mezzanine	1.8	13.0	11.0	11.1	10.5
Credit Opportunities	1.2	8.2	7.1	7.6	8.9

Source: LSEG/Cambridge

\*Most recent data available at time of publication

# Gains in 4Q23 Spurred by Rising Stocks and Bonds

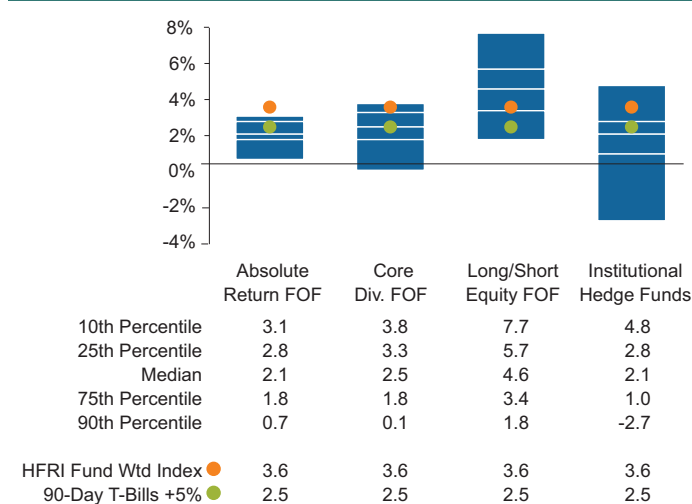
HEDGE FUNDS/MACs | Joe McGuane

Equity markets ended the final quarter of 2023 with double-digit gains and, by the time the year ended, recouped all of 2022's losses. This surge was marked by rising expectations that the Federal Reserve was done hiking interest rates and would begin easing monetary policy in the new year. The yield on the U.S. 10-year Treasury declined sharply to end December at 3.9%, the same level where it began the year. Credit in general had a positive quarter, driven by lower rates and tighter spreads. Investment grade outperformed high yield, as both indices ended the quarter positive.

Hedge funds ended the year on a strong note. Equity hedge strategies were the best performing, as those with higher net long exposure performed better, along with strategies focused on health care and technology, media, and telecommunications (TMT). Relative value strategies generated positive performance during the quarter, driven by fundamental and systematic equity relative value strategies. Event-driven strategies

## Hedge Fund Style Group Returns

(12/31/23)



Sources: Callan, Credit Suisse, Federal Reserve

## Callan Peer Group Median and Index Returns\* for Periods Ended 12/31/23

Hedge Fund Universe	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years
Callan Institutional Hedge Fund Peer Group	2.1	7.5	7.5	5.6	7.1	5.8
Callan Fund-of-Funds Peer Group	2.9	6.9	6.9	4.0	5.6	4.2
Callan Absolute Return FOF Style	2.1	5.7	5.7	5.5	5.3	4.3
Callan Core Diversified FOF Style	2.5	6.8	6.8	3.7	5.7	3.6
Callan Long/Short Equity FOF Style	4.6	9.0	9.0	-0.2	6.1	5.2
HFRI Fund Weighted Index	3.6	7.6	7.6	4.3	7.0	4.5
HFRI Fixed Convertible Arbitrage	1.4	4.8	4.8	3.8	6.8	4.8
HFRI Distressed/Restructuring	3.2	6.7	6.7	5.7	6.3	4.0
HFRI Emerging Markets	4.2	8.1	8.1	0.1	4.8	3.1
HFRI Equity Market Neutral	1.4	5.6	5.6	4.6	3.2	2.9
HFRI Event-Driven	5.4	10.4	10.4	5.7	6.8	4.6
HFRI Relative Value	2.6	7.0	7.0	4.6	4.9	4.0
HFRI Macro	-1.1	-0.6	-0.6	5.3	5.5	3.1
HFRI Equity Hedge	5.6	10.5	10.5	3.5	8.3	5.2
HFRI Multi-Strategy	4.6	9.8	9.8	1.8	4.5	2.9
HFRI Merger Arbitrage	4.3	5.8	5.8	6.4	6.2	4.7
90-Day T-Bill + 5%	2.5	10.0	10.0	7.2	6.9	6.3

\*Net of fees. Sources: Callan, Credit Suisse, Hedge Fund Research

also ended on a strong note, as interest rate volatility provided trading opportunities when credit spreads tightened going into year-end. Macro strategies ended the quarter slightly negative, as losses from short positions in U.S. equities and developed market rates were offset by long technology equities and long front-end rates positions.

Serving as a proxy for large, broadly diversified hedge funds with low-beta exposure to equity markets, the median Callan Institutional Hedge Fund Peer Group rose 2.1%. Within this style group of 50 peers, the average hedged credit manager gained 2.6%, driven by actively trading around interest rate volatility. The median Callan Institutional hedged rates manager rose 2.3%, largely driven by relative value fixed income trades. Meanwhile, the average hedged equity manager added 2.2%, as sector-focused managers were able to profit from the broad market rally.

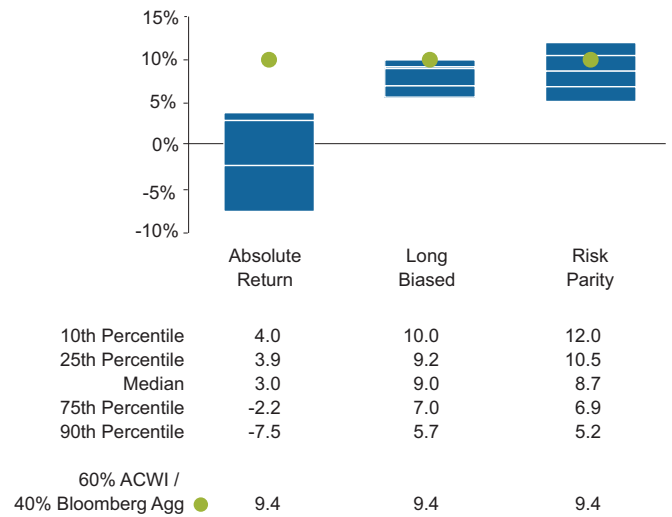
Within the HFRI indices, the best-performing strategy last quarter was equity hedge (5.6%), as health care-, financial-, and technology-focused strategies drove performance during the final quarter of the year. Macro strategies fell 1.1%, as short equity positions offset gains from front end interest rate trading.

Across the Callan Hedge FOF database, the median Callan Long-Short Equity FOF gained 4.6%, as sector-focused strategies drove performance during the quarter. The median Callan Core Diversified FOF rose 2.5%, boosted by equity and event-driven strategies. The Callan Absolute Return FOF ended 2.1% higher, as lower equity beta strategies were behind this move higher.

Within Callan's database of liquid alternative solutions, the Callan MAC Long Biased manager rose 9.0%, as the broad-based equity rally moved performance higher. The Callan MAC Risk Parity peer group rose 8.7%, as equities and fixed income drove performance. The Callan MAC Absolute Return peer group rose, as broad markets had a strong end of the year.

## MAC Style Group Returns

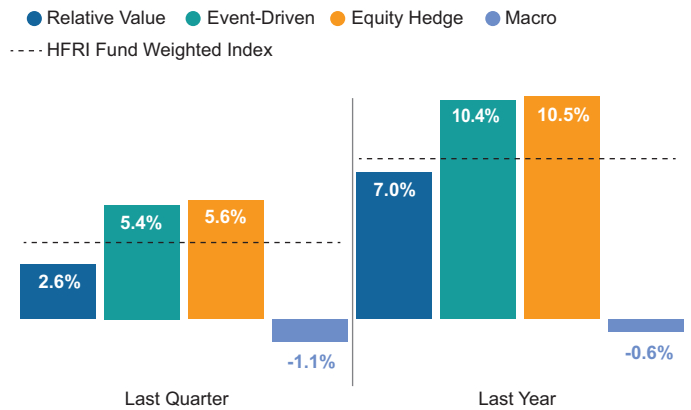
(12/31/23)



Sources: Bloomberg, Callan, Eurekahedge, S&P Dow Jones Indices

## HFRI Hedge Fund-Weighted Strategy Returns

(12/31/23)



Source: HFRI

# Index Drops by 2.9% After Three Quarters of Gains

DEFINED CONTRIBUTION | [Scotty Lee](#)

## Performance: Index Dips after Third Straight Quarterly Gain

- The Callan DC Index™ lost 2.9% in 3Q23, which brought the Index’s trailing one-year gain to 13.8%. The Age 45 Target Date Fund (analogous to the 2045 vintage) had a lower quarterly return (-3.6%).

## Growth sources: Investment Losses Lead to Fall in Balances

- Balances within the DC Index fell by 3.2% after a 4.3% increase in the previous quarter. Investment losses (-2.9%) were the primary driver.

## Turnover: Net Transfers Decrease

- Turnover (i.e., net transfer activity levels within DC plans) in the DC Index decreased to 0.26% from the previous quarter’s measure of 0.33%. Despite the decrease, the Index’s historical average (0.55%) remained steady.

## Net cash flow analysis: Stable Value Declines Sharply

- Automatic features and their appeal to “do-it-for-me” investors typically result in target date funds (TDFs) receiving the largest net inflows in the DC Index, which was the case in 3Q23 as the asset allocation funds garnered 87.2% of quarterly net flows. Stable value (-56.2%) saw relatively large outflows for the fourth straight quarter.

## Equity allocation: Exposure Declines

- The Index’s overall allocation to equity (71.5%) fell slightly from the previous quarter’s level (71.8%). The current equity allocation continues to sit above the Index’s historical average (68.4%).

## Asset allocation: Fixed Income, TDFs See Gains

- U.S. fixed income (5.5%) and target date funds (34.1%) were among the asset classes with the largest percentage increases in allocation, while U.S small/mid cap equity (7.4%) had the largest decrease in allocation from the previous quarter due to net outflows.

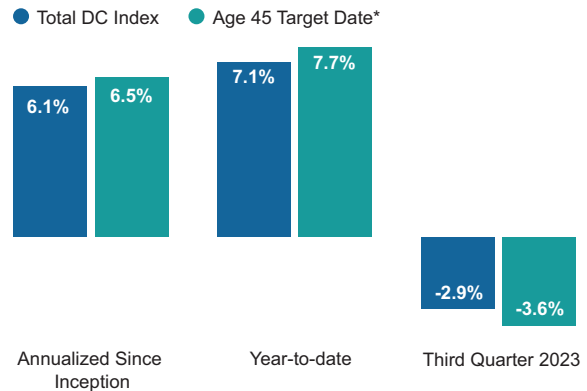
## Prevalence: Money Market Up, Stable Value Down

- The prevalence of money market funds (54.1%) rose by 1.5% accompanied by a decrease in the prevalence of stable value funds (70.1%) by 0.8%.

*Underlying fund performance, asset allocation, and cash flows of more than 100 large defined contribution plans representing approximately \$400 billion in assets are tracked in the Callan DC Index.*

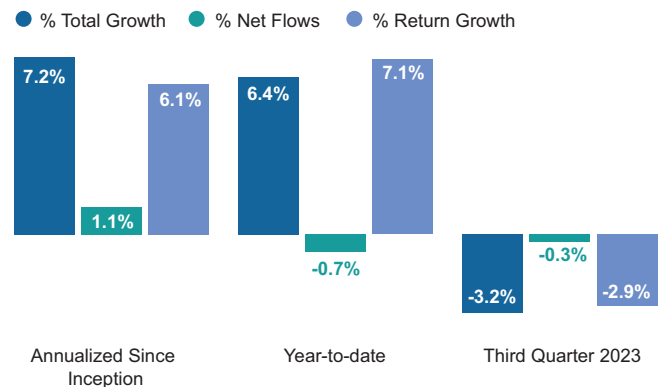
## Investment Performance

(9/30/23)



## Growth Sources

(9/30/23)



## Net Cash Flow Analysis (3Q23)

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	87.2%
Global ex-U.S. Equity	5.3%
U.S. Small/Mid Cap	-13.3%
Stable Value	-56.2%
<b>Total Turnover**</b>	<b>0.3%</b>

Data provided here is the most recent available at time of publication.

Source: Callan DC Index

Note: DC Index inception date is January 2006.

\* The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.

\*\* Total Index “turnover” measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.



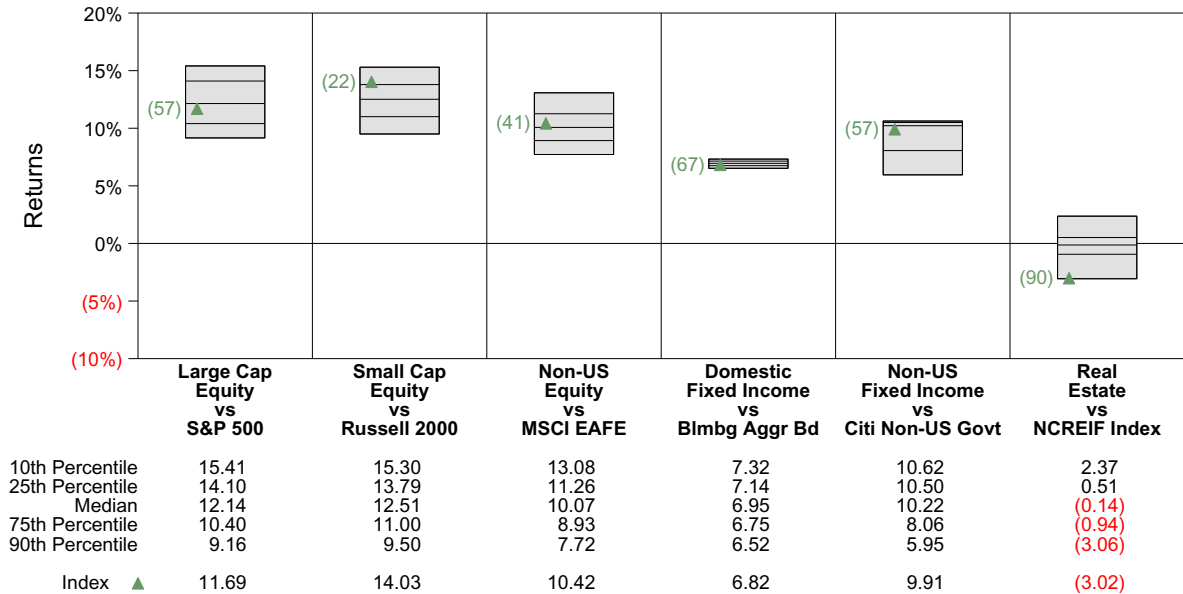
## Market Overview

### Active Management vs Index Returns

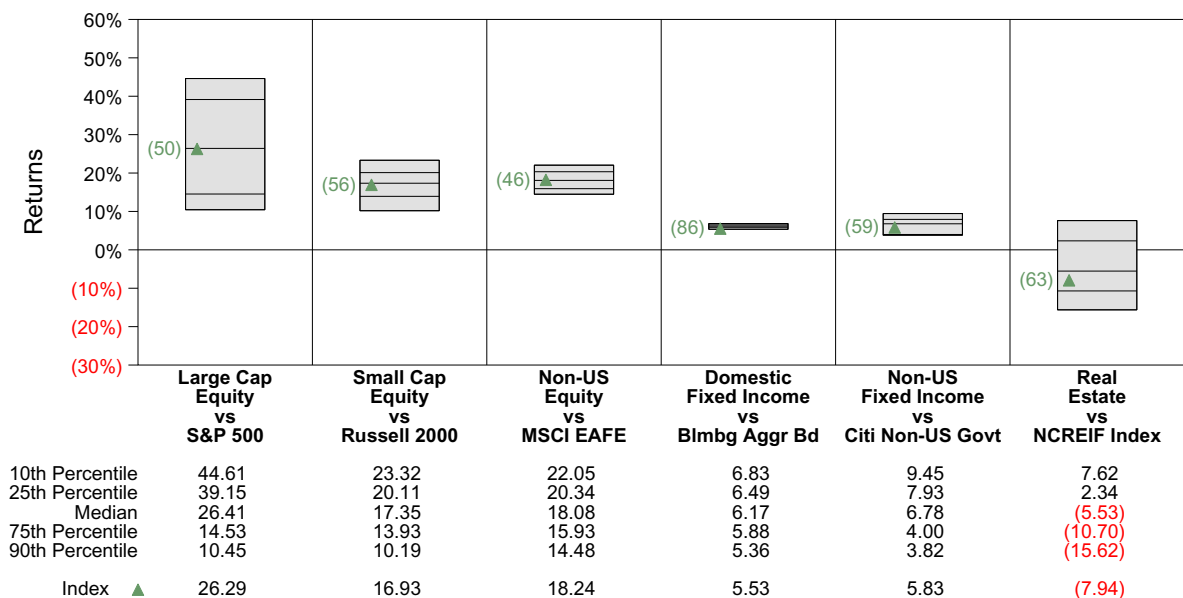
#### Market Overview

The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also shown for each asset class for comparison purposes. As an example, the first bar in the upper chart illustrates the range of returns for domestic equity managers over the last quarter. The triangle represents the S&P 500 return. The number next to the triangle represents the ranking of the S&P 500 in the Large Cap Equity manager database.

#### Range of Separate Account Manager Returns by Asset Class One Quarter Ended December 31, 2023



#### Range of Separate Account Manager Returns by Asset Class One Year Ended December 31, 2023





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## ASSET ALLOCATION AND PERFORMANCE

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### **Asset Allocation and Performance**

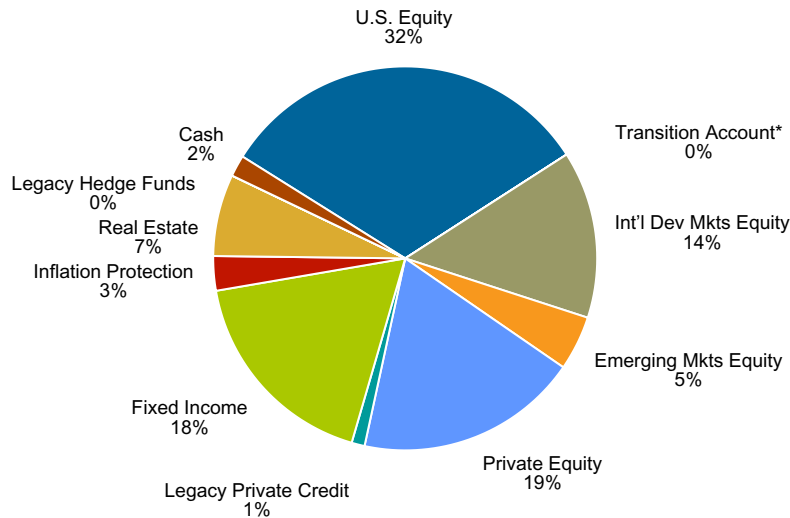
This section begins with an overview of the fund's asset allocation at the broad asset class level. This is followed by a top down performance attribution analysis which analyzes the fund's performance relative to the performance of the fund's policy target asset allocation. The fund's historical performance is then examined relative to funds with similar objectives. Performance of each asset class is then shown relative to the asset class performance of other funds. Finally, a summary is presented of the holdings of the fund's investment managers, and the returns of those managers over various recent periods.



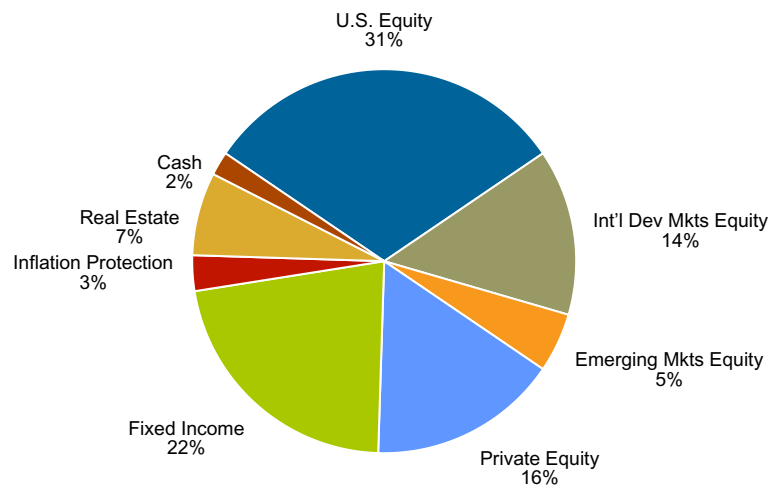
## Actual vs Target Asset Allocation As of December 31, 2023

The first chart below shows the Fund's current asset allocation. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement. Transition account market values are not included in any asset class and are excluded from these charts.

### Actual Asset Allocation



### Target Asset Allocation



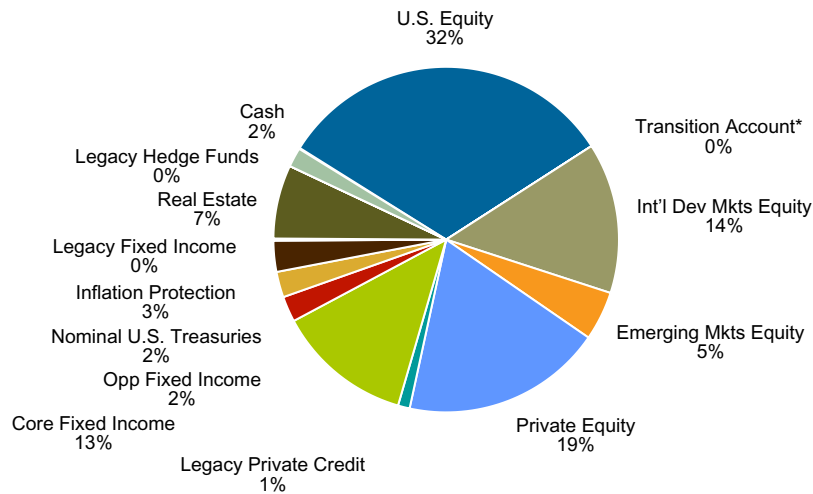
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
U.S. Equity	11,667,636	32.0%	31.0%	1.0%	374,347
Transition Account*	1,015	0.0%	0.0%	0.0%	1,015
Int'l Dev Mkts Equity	5,150,792	14.1%	14.0%	0.1%	50,597
Emerging Mkts Equity	1,661,759	4.6%	5.0%	(0.4%)	(159,739)
Private Equity	6,860,223	18.8%	16.0%	2.8%	1,031,429
Legacy Private Credit	393,410	1.1%	0.0%	1.1%	393,410
Fixed Income	6,472,712	17.8%	22.0%	(4.2%)	(1,541,880)
Inflation Protection	1,044,578	2.9%	3.0%	(0.1%)	(48,321)
Real Estate	2,517,663	6.9%	7.0%	(0.1%)	(32,434)
Legacy Hedge Funds	15,921	0.0%	0.0%	0.0%	15,921
Cash	644,255	1.8%	2.0%	(0.2%)	(84,345)
<b>Total</b>	<b>36,429,964</b>	<b>100.0%</b>	<b>100.0%</b>		

\*Market values are shown net of accrued fees.

## Actual Asset Allocation As of December 31, 2023

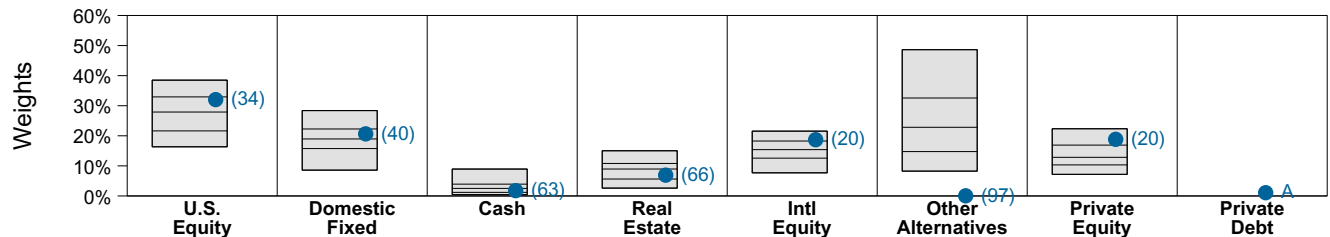
The first chart below shows the Fund's asset allocation as of December 31, 2023. The second chart ranks the fund's asset allocation versus the Callan Public Fund Spons- V Lg DB (>10B).

### Actual Asset Allocation



Asset Class	\$000s Actual	Weight Actual
U.S. Equity	11,667,636	32.0%
Transition Account*	1,015	0.0%
Int'l Dev Mkts Equity	5,150,792	14.1%
Emerging Mkts Equity	1,661,759	4.6%
Private Equity	6,860,223	18.8%
Legacy Private Credit	393,410	1.1%
Core Fixed Income	4,623,460	12.7%
Opp Fixed Income	881,850	2.4%
Nominal U.S. Treasuries	879,272	2.4%
Inflation Protection	1,044,578	2.9%
Legacy Fixed Income	88,130	0.2%
Real Estate	2,517,663	6.9%
Legacy Hedge Funds	15,921	0.0%
Cash	644,255	1.8%
<b>Total</b>	<b>36,429,964</b>	<b>100.0%</b>

### Asset Class Weights vs Callan Public Fund Spons- V Lg DB (>10B)



10th Percentile	38.50	28.38	8.94	15.03	21.55	48.63	22.34	-
25th Percentile	32.93	22.27	3.92	10.81	18.27	32.56	16.90	-
Median	27.90	18.95	2.52	8.95	15.40	22.83	12.85	-
75th Percentile	21.64	15.75	1.20	5.63	12.57	14.75	10.33	-
90th Percentile	16.34	8.58	0.44	2.61	7.69	8.25	7.18	-
<b>Fund</b>	<b>32.03</b>	<b>20.63</b>	<b>1.77</b>	<b>6.91</b>	<b>18.70</b>	<b>0.04</b>	<b>18.83</b>	<b>1.08</b>

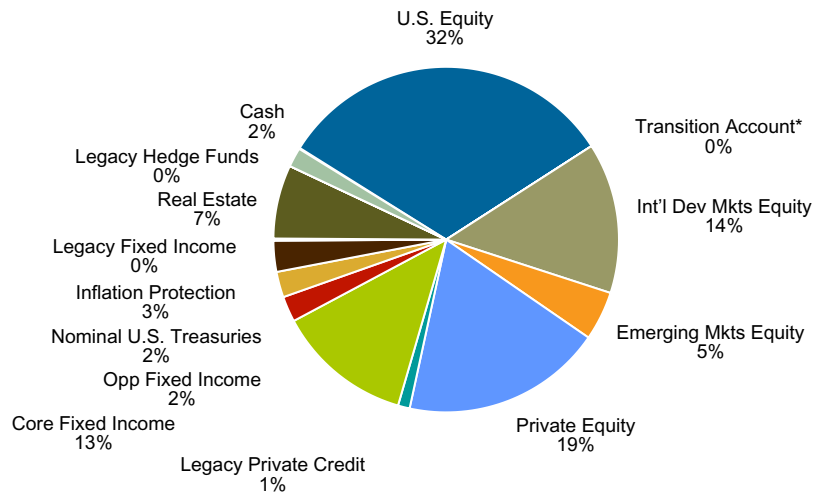
% Group Invested    100.00%    96.97%    90.91%    96.97%    100.00%    90.91%    15.15%    0.00%

\*Market values are shown net of accrued fees.

## Actual Asset Allocation As of December 31, 2023

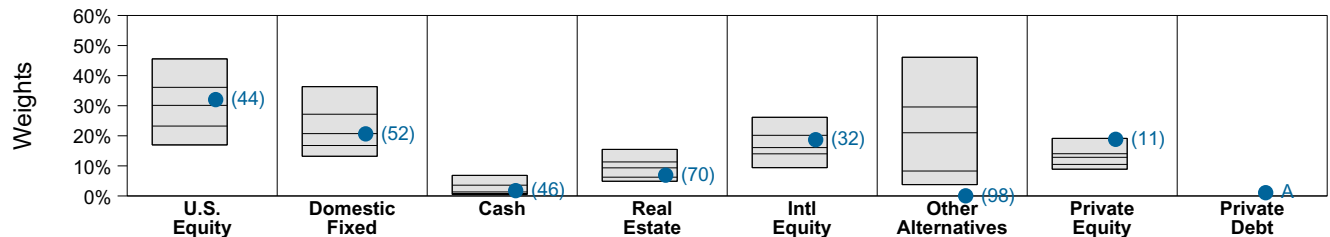
The first chart below shows the Fund's asset allocation as of December 31, 2023. The second chart ranks the fund's asset allocation versus the Callan Public Fund Spns - Large (>1B).

### Actual Asset Allocation



Asset Class	\$000s Actual	Weight Actual
U.S. Equity	11,667,636	32.0%
Transition Account*	1,015	0.0%
Int'l Dev Mkts Equity	5,150,792	14.1%
Emerging Mkts Equity	1,661,759	4.6%
Private Equity	6,860,223	18.8%
Legacy Private Credit	393,410	1.1%
Core Fixed Income	4,623,460	12.7%
Opp Fixed Income	881,850	2.4%
Nominal U.S. Treasuries	879,272	2.4%
Inflation Protection	1,044,578	2.9%
Legacy Fixed Income	88,130	0.2%
Real Estate	2,517,663	6.9%
Legacy Hedge Funds	15,921	0.0%
Cash	644,255	1.8%
<b>Total</b>	<b>36,429,964</b>	<b>100.0%</b>

### Asset Class Weights vs Callan Public Fund Spns - Large (>1B)



10th Percentile	45.57	36.34	6.84	15.48	26.15	46.11	19.14	-
25th Percentile	36.11	27.17	3.58	11.31	20.16	29.58	14.04	-
Median	30.11	20.72	1.33	9.34	16.08	21.01	12.85	-
75th Percentile	23.24	16.77	0.81	6.24	14.00	8.28	10.49	-
90th Percentile	16.97	13.19	0.52	4.89	9.41	3.77	8.89	-
<b>Fund</b>	<b>32.03</b>	<b>20.63</b>	<b>1.77</b>	<b>6.91</b>	<b>18.70</b>	<b>0.04</b>	<b>18.83</b>	<b>1.08</b>

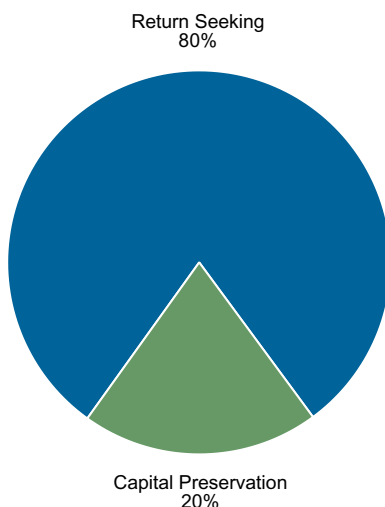
% Group Invested    98.31%    96.61%    88.14%    79.66%    96.61%    74.58%    18.64%    0.00%

\*Market values are shown net of accrued fees.

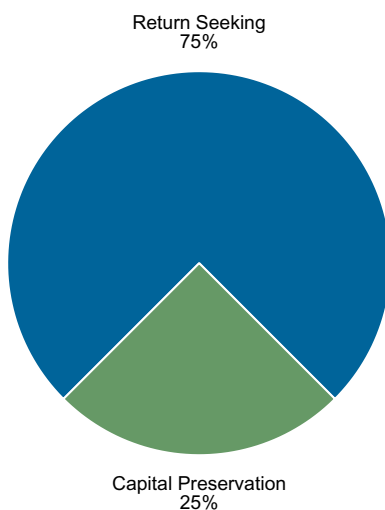
## Actual vs Target Asset Allocation As of December 31, 2023

The first chart below shows the Fund's asset allocation as of December 31, 2023. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

### Actual Asset Allocation



### Target Asset Allocation



Asset Class	\$Millions Actual	Weight Actual	Target	Percent Difference	\$Millions Difference
Return Seeking	28,845	80.0%	75.0%	5.0%	1,818
Capital Preservation	7,192	20.0%	25.0%	(5.0%)	(1,818)
Total	36,037	100.0%	100.0%		

\*Return Seeking Assets: U.S. Equity, Int'l Developed Markets Equity, Emerging Markets Equity, Transition Account, Private Equity, Real Estate, Opportunistic Fixed Income, Legacy Hedge Funds and Legacy Fixed Income.

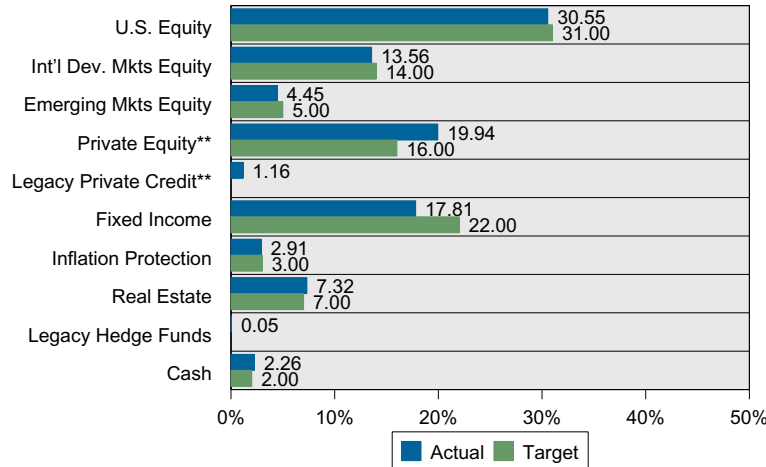
\*Capital Preservation Assets: Core Fixed Income, Nominal U.S. Treasuries, Inflation Protection (TIPS) and Cash.

\*Market values are shown net of accrued fees; Legacy Private Credit is excluded from this analysis.

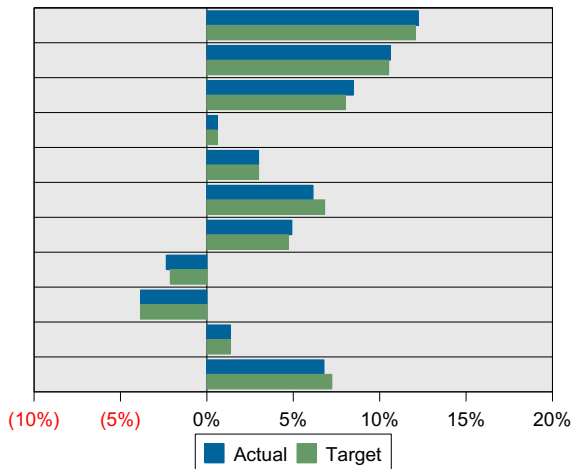
## Quarterly Total Fund Absolute Attribution - December 31, 2023

The following analysis approaches Total Fund Attribution from the perspective of Absolute Return Contribution. Absolute return attribution quantifies the contribution of each asset class to total fund absolute performance as well as target performance. Absolute return contribution is a function of both the size of the exposure (\$ weight) to each asset class as well as the actual return of each asset class.

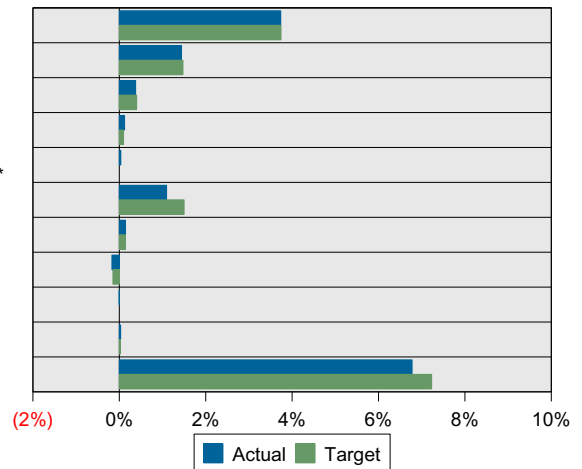
### Actual and Target Weights



### Actual and Target Returns



### Absolute Return Contributions



### Absolute Attribution Effects for Quarter ended December 31, 2023

	Effective Actual Weight	Actual Return	Absolute Return Contribution	Effective Target Weight	Target Return	Target Return Contribution	Return Contribution Difference
U.S. Equity	31%	12.23%	3.74%	31%	12.07%	3.74%	(0.01%)
Int'l Dev. Mkts Equity	14%	10.61%	1.44%	14%	10.52%	1.47%	(0.03%)
Emerging Mkts Equity	4%	8.48%	0.38%	5%	8.02%	0.40%	(0.02%)
Private Equity**	20%	0.61%	0.12%	16%	0.61%	0.10%	0.02%
Legacy Private Credit**	1%	2.99%	0.03%	0%	2.99%	0.00%	0.03%
Fixed Income	18%	6.14%	1.09%	22%	6.82%	1.50%	(0.41%)
Inflation Protection	3%	4.92%	0.14%	3%	4.71%	0.14%	0.00%
Real Estate	7%	(2.35%)	(0.17%)	7%	(2.12%)	(0.15%)	(0.02%)
Legacy Hedge Funds	0%	(3.84%)	(0.00%)	0%	(3.84%)	0.00%	(0.00%)
Cash	2%	1.36%	0.03%	2%	1.37%	0.03%	0.00%

**Total Fund Return 6.78%**      **Target Return 7.23%**      **(0.45%)**

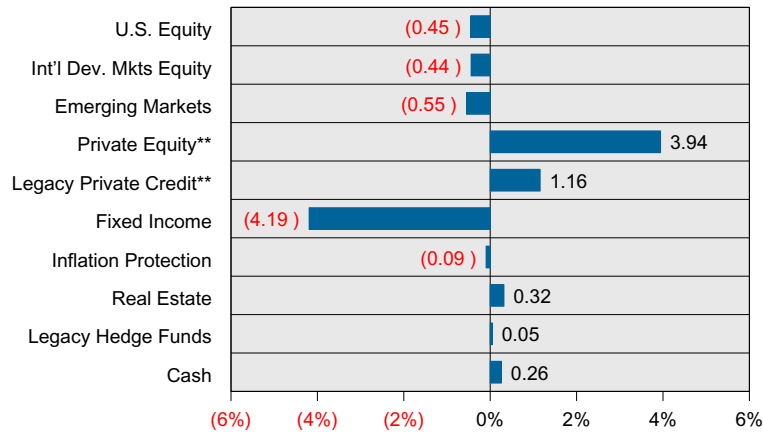
\* Current Quarter Target = 22% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.

\*\*For this analysis, PE and PC are benchmarked to the SERS' PE and PC program returns, respectively.

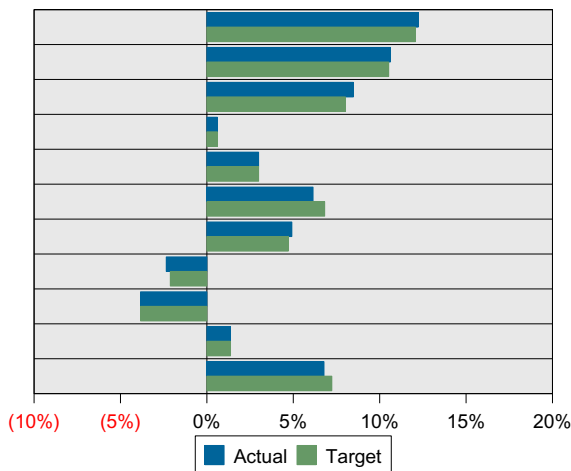
## Quarterly Total Fund Relative Attribution - December 31, 2023

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

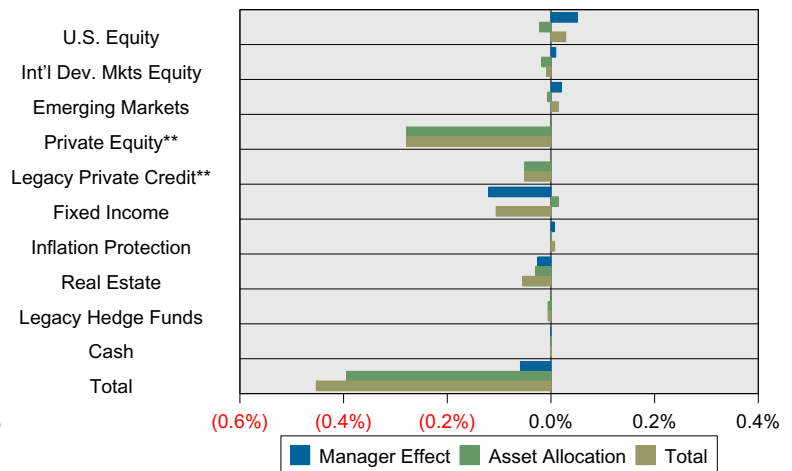
### Asset Class Under or Overweighting



### Actual vs Target Returns



### Relative Attribution by Asset Class



### Relative Attribution Effects for Quarter ended December 31, 2023

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
U.S. Equity	31%	31%	12.23%	12.07%	0.05%	(0.02%)	0.03%
Int'l Dev. Mkts Equity	14%	14%	10.61%	10.52%	0.01%	(0.02%)	(0.01%)
Emerging Markets	4%	5%	8.48%	8.02%	0.02%	(0.01%)	0.01%
Private Equity**	20%	16%	0.61%	0.61%	0.00%	(0.28%)	(0.28%)
Legacy Private Credit**	1%	0%	2.99%	2.99%	0.00%	(0.05%)	(0.05%)
Fixed Income	18%	22%	6.14%	6.82%	(0.12%)	0.01%	(0.11%)
Inflation Protection	3%	3%	4.92%	4.71%	0.01%	0.00%	0.01%
Real Estate	7%	7%	(2.35%)	(2.12%)	(0.03%)	(0.03%)	(0.06%)
Legacy Hedge Funds	0%	0%	(3.84%)	(3.84%)	0.00%	(0.01%)	(0.01%)
Cash	2%	2%	1.36%	1.37%	(0.00%)	0.00%	0.00%
<b>Total</b>			<b>6.78%</b>	<b>7.23%</b>	<b>(0.06%)</b>	<b>(0.39%)</b>	<b>(0.45%)</b>

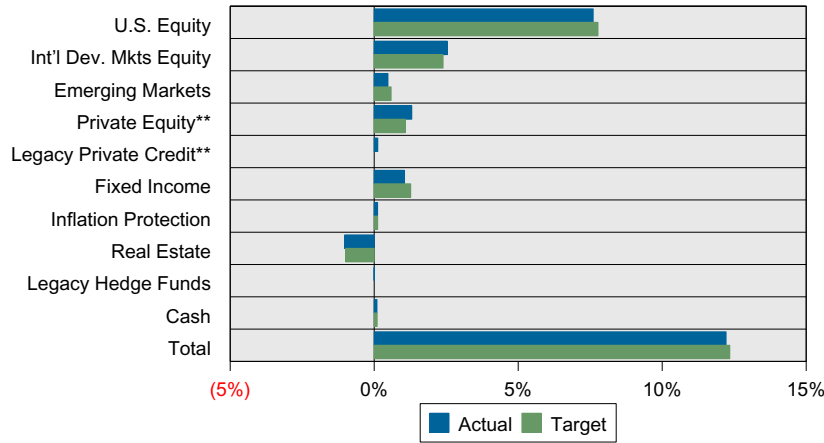
\* Current Quarter Target = 22% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.

\*\*For this analysis, PE and PC are benchmarked to the SERS' PE and PC program returns, respectively.

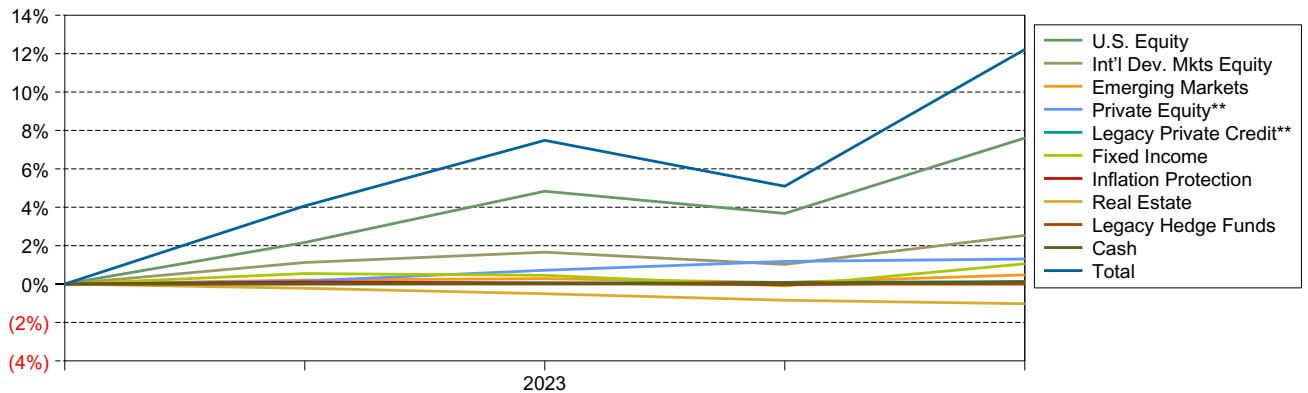
## Cumulative Total Fund Absolute Attribution - December 31, 2023

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of absolute total fund performance and target performance. These cumulative results quantify the longer-term contribution of each asset class to absolute total fund return as well as the target return.

### One Year Absolute Return Contributions



### Cumulative Absolute Return Contributions



### One Year Absolute Attribution Effects

	Effective Actual Weight	Actual Return	Absolute Return Contribution	Effective Target Weight	Target Return	Target Return Contribution	Return Contribution Difference
U.S. Equity	31%	25.56%	7.60%	31%	25.96%	7.77%	(0.17%)
Int'l Dev. Mkts Equity	14%	18.99%	2.54%	14%	17.18%	2.39%	0.14%
Emerging Markets	4%	11.40%	0.48%	5%	11.67%	0.59%	(0.11%)
Private Equity**	19%	6.59%	1.30%	16%	6.59%	1.08%	0.22%
Legacy Private Credit**	1%	10.85%	0.12%	0%	10.85%	0.00%	0.12%
Fixed Income	18%	5.57%	1.05%	22%	5.53%	1.27%	(0.21%)
Inflation Protection	3%	3.85%	0.12%	3%	3.90%	0.12%	(0.00%)
Real Estate	8%	(11.91%)	(1.02%)	7%	(13.08%)	(0.99%)	(0.03%)
Legacy Hedge Funds	0%	(4.46%)	(0.00%)	0%	(4.46%)	0.00%	(0.00%)
Cash	2%	5.14%	0.09%	2%	5.01%	0.10%	(0.01%)

**Total Fund Return 12.22%**      **Target Return 12.35%**      **(0.13%)**

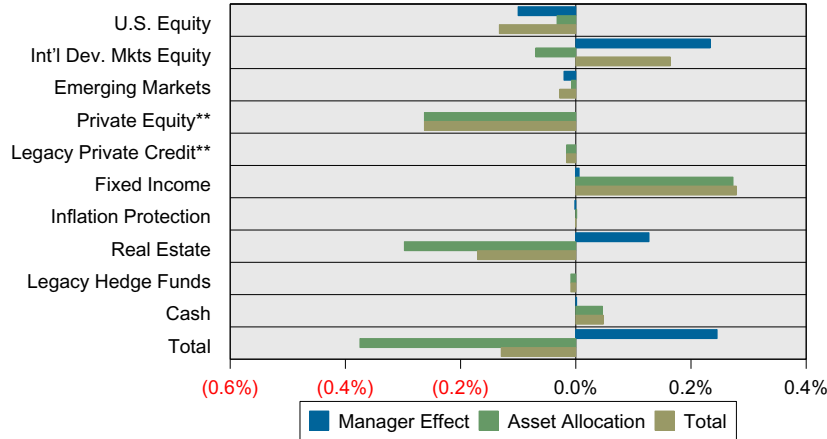
\* Current Quarter Target = 22% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.

\*\*For this analysis, PE and PC are benchmarked to the SERS' PE and PC program returns, respectively.

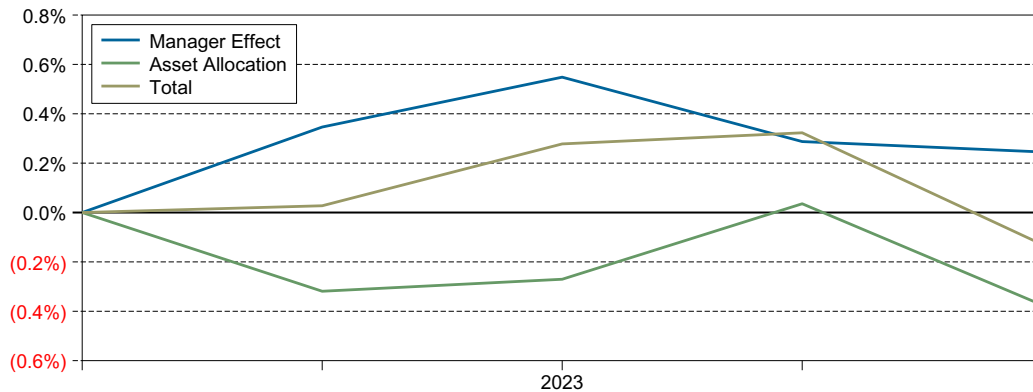
## Cumulative Total Fund Relative Attribution - December 31, 2023

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
U.S. Equity	31%	31%	25.56%	25.96%	(0.10%)	(0.03%)	(0.13%)
Int'l Dev. Mkts Equity	14%	14%	18.99%	17.18%	0.23%	(0.07%)	0.16%
Emerging Markets	4%	5%	11.40%	11.67%	(0.02%)	(0.01%)	(0.03%)
Private Equity**	19%	16%	6.59%	6.59%	0.00%	(0.26%)	(0.26%)
Legacy Private Credit**	1%	0%	10.85%	10.85%	0.00%	(0.02%)	(0.02%)
Fixed Income	18%	22%	5.57%	5.53%	0.01%	0.27%	0.28%
Inflation Protection	3%	3%	3.85%	3.90%	(0.00%)	0.00%	(0.00%)
Real Estate	8%	7%	(11.91%)	(13.08%)	0.13%	(0.30%)	(0.17%)
Legacy Hedge Funds	0%	0%	(4.46%)	(4.46%)	0.00%	(0.01%)	(0.01%)
Cash	2%	2%	5.14%	5.01%	0.00%	0.05%	0.05%
<b>Total</b>			<b>12.22%</b>	<b>12.35%</b>	<b>+ 0.25%</b>	<b>+ (0.37%)</b>	<b>(0.13%)</b>

\* Current Quarter Target = 22% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.

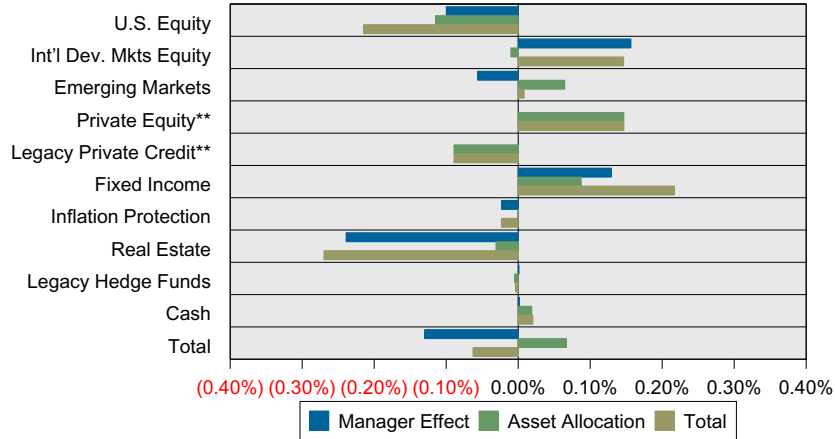
\*\*For this analysis, PE and PC are benchmarked to the SERS' PE and PC program returns, respectively.



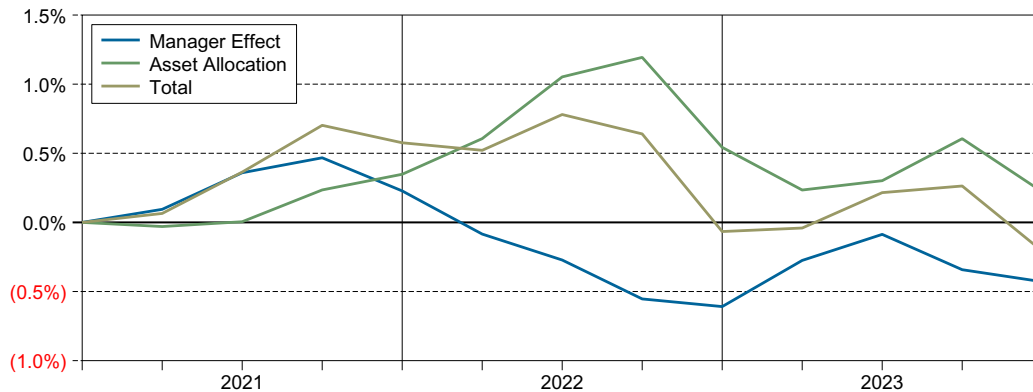
## Cumulative Total Fund Relative Attribution - December 31, 2023

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Three Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
U.S. Equity	30%	30%	8.19%	8.54%	(0.10%)	(0.11%)	(0.21%)
Int'l Dev. Mkts Equity	13%	14%	4.94%	3.73%	0.16%	(0.01%)	0.15%
Emerging Markets	4%	5%	(5.06%)	(3.71%)	(0.06%)	0.06%	0.01%
Private Equity**	17%	14%	15.64%	15.64%	0.00%	0.15%	0.15%
Legacy Private Credit**	3%	2%	13.22%	13.22%	0.00%	(0.09%)	(0.09%)
Fixed Income	21%	23%	(2.80%)	(3.31%)	0.13%	0.09%	0.22%
Inflation Protection	3%	3%	(1.69%)	(1.00%)	(0.02%)	(0.00%)	(0.02%)
Real Estate	8%	7%	3.31%	6.23%	(0.24%)	(0.03%)	(0.27%)
Legacy Hedge Funds	0%	0%	(2.40%)	(4.20%)	0.00%	(0.00%)	(0.00%)
Cash	2%	2%	2.26%	2.15%	0.00%	0.02%	0.02%
<b>Total</b>			<b>4.95%</b>	<b>5.01%</b>	<b>(0.13%)</b>	<b>0.07%</b>	<b>(0.06%)</b>

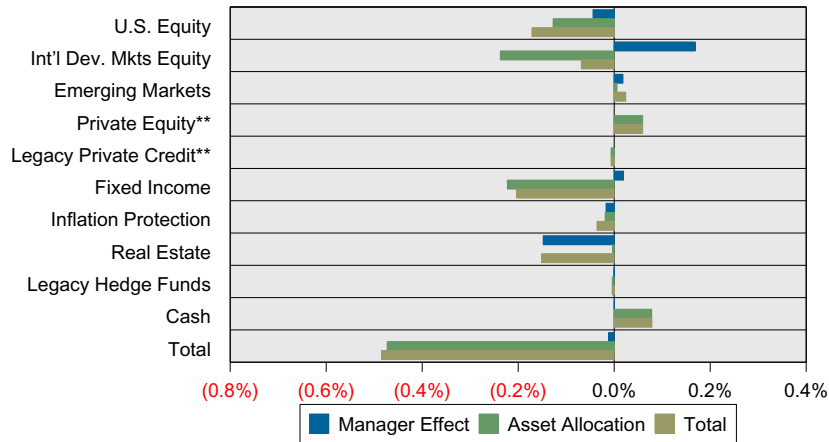
\* Current Quarter Target = 22% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.

\*\*For this analysis, PE and PC are benchmarked to the SERS' PE and PC program returns, respectively.

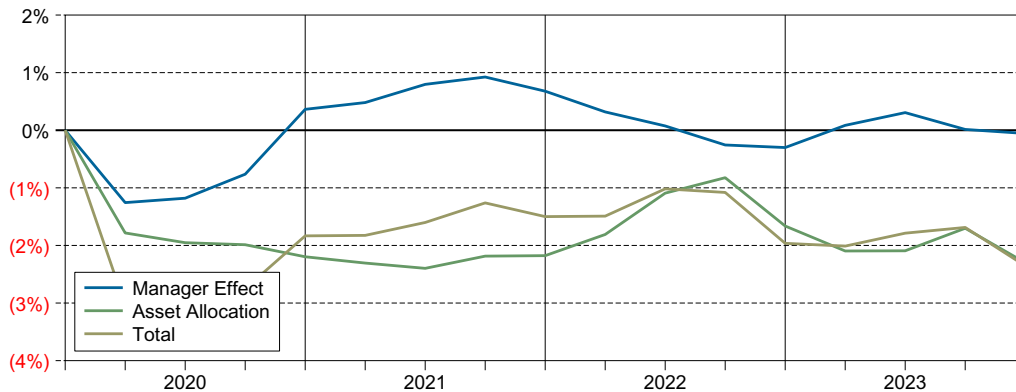
## Cumulative Total Fund Relative Attribution - December 31, 2023

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Four Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Four Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
U.S. Equity	29%	28%	11.33%	11.51%	(0.04%)	(0.13%)	(0.17%)
Int'l Dev. Mkts Equity	13%	14%	6.09%	4.86%	0.17%	(0.24%)	(0.07%)
Emerging Markets	4%	5%	1.58%	1.39%	0.02%	0.01%	0.02%
Private Equity**	16%	14%	16.32%	16.32%	0.00%	0.06%	0.06%
Legacy Private Credit**	2%	2%	10.65%	10.65%	0.00%	(0.01%)	(0.01%)
Fixed Income	22%	24%	(0.72%)	(0.72%)	0.02%	(0.22%)	(0.20%)
Inflation Protection	3%	3%	1.35%	1.87%	(0.02%)	(0.02%)	(0.04%)
Real Estate	8%	7%	3.01%	4.70%	(0.15%)	(0.00%)	(0.15%)
Legacy Hedge Funds	0%	0%	(0.94%)	(0.63%)	(0.00%)	(0.00%)	(0.00%)
Cash	2%	2%	1.85%	1.78%	0.00%	0.08%	0.08%
<b>Total</b>			<b>6.45%</b>	<b>6.94%</b>	<b>(0.01%)</b>	<b>(0.47%)</b>	<b>(0.48%)</b>

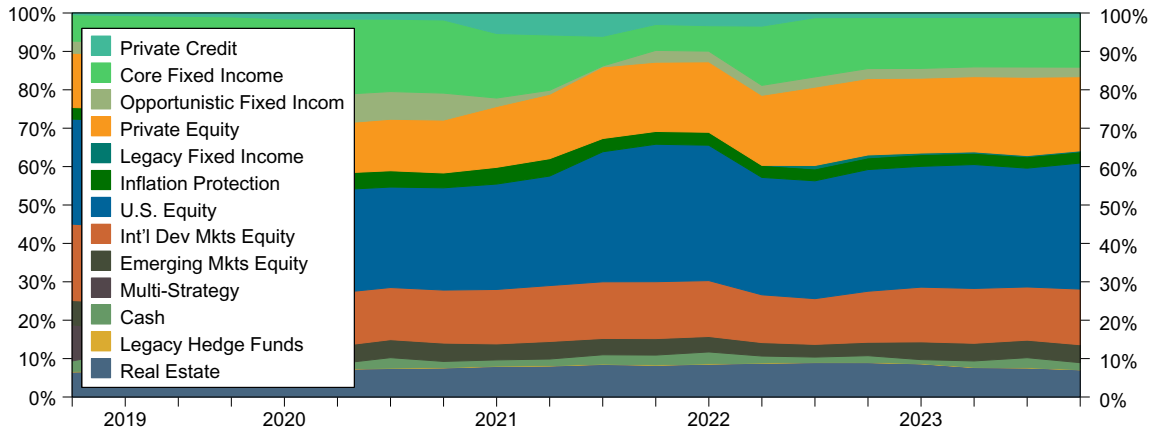
\* Current Quarter Target = 22% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.

\*\*For this analysis, PE and PC are benchmarked to the SERS' PE and PC program returns, respectively.

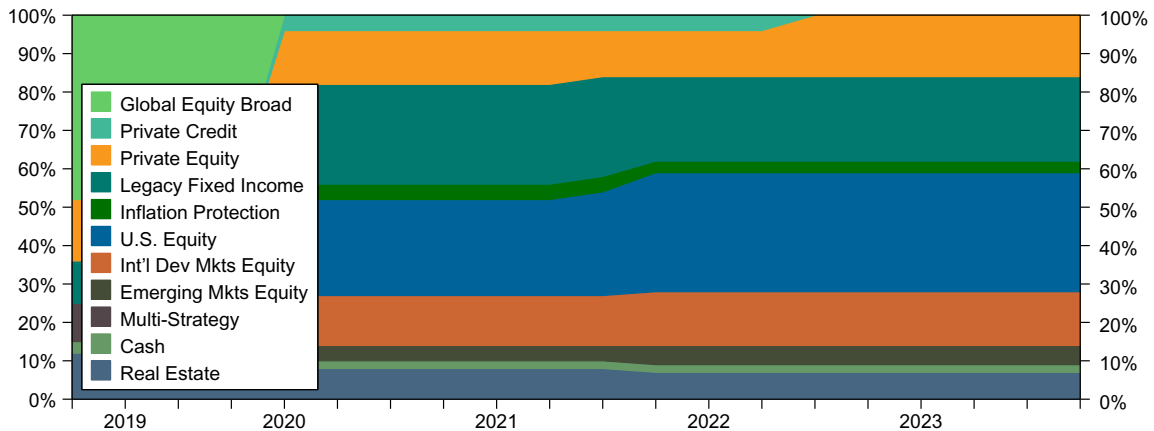
## Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Callan Public Fund Spons- V Lg DB (>10B).

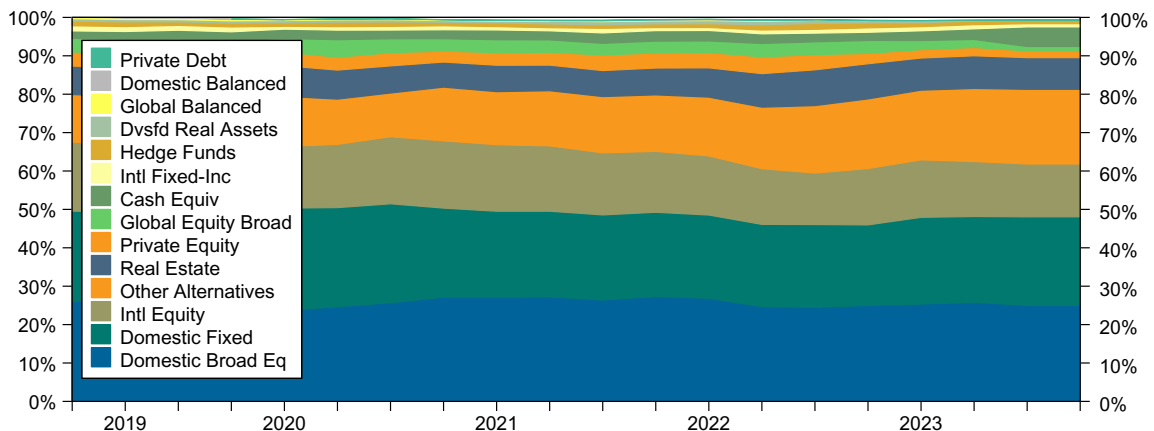
### Actual Historical Asset Allocation



### Target Historical Asset Allocation



### Average Callan Public Fund Spons- V Lg DB (>10B) Historical Asset Allocation



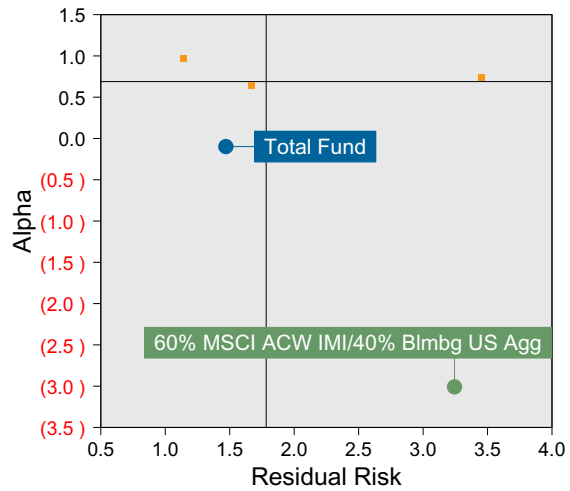
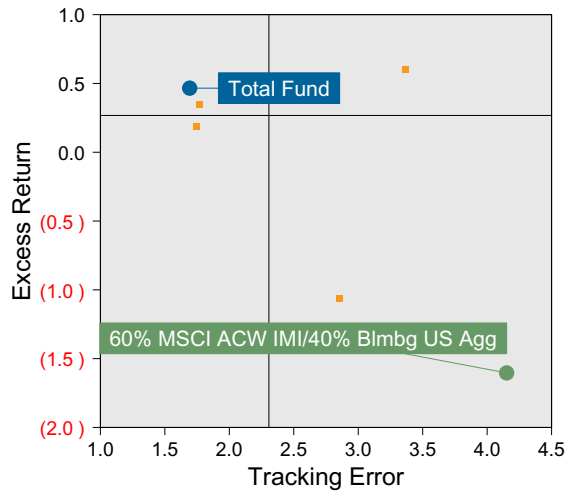
# Total Fund

## Total Fund vs Target Risk Analysis

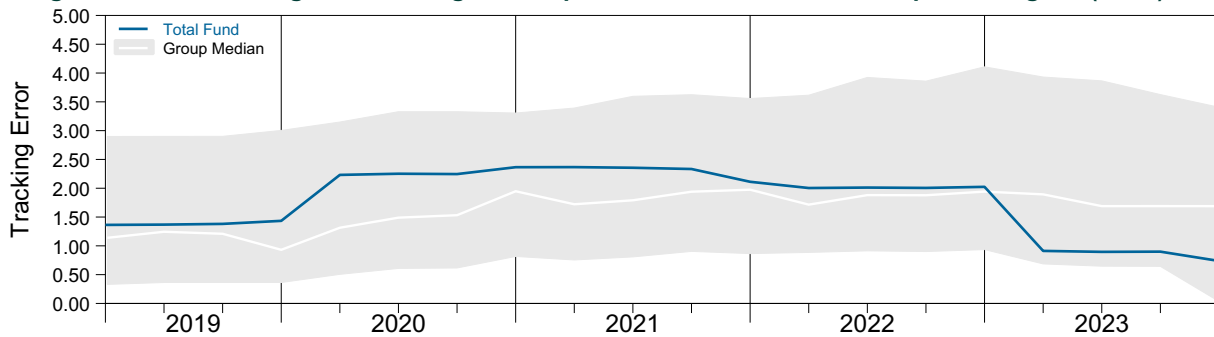
### Risk Analysis

The graphs below analyze the performance and risk of the fund relative to the appropriate target mix. This relative performance is compared to a peer group of funds wherein each member fund is measured against its own target mix. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the target. The second scatter chart displays the relationship, sometimes called Information Ratio, between alpha (market-risk or "beta" adjusted return) and residual risk (non-market or "unsystematic" risk). The third chart shows tracking error patterns over time compared to the range of tracking error patterns for the peer group. The last two charts show the ranking of the fund's risk statistics versus the peer group.

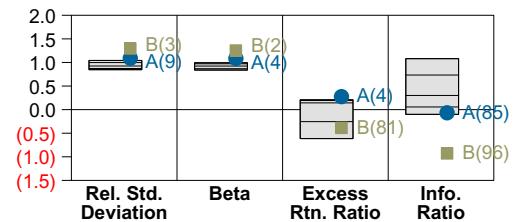
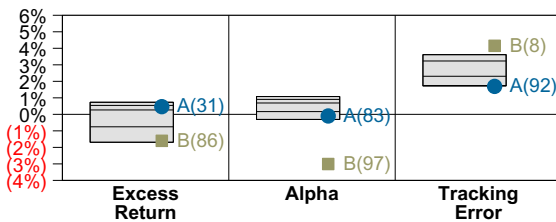
### Risk Analysis vs Callan Public Fund Spons- V Lg DB (>10B) Five Years Ended December 31, 2023



### Rolling 12 Quarter Tracking Error vs Targets Compared to Callan Public Fund Spons- V Lg DB (>10B)



### Risk Statistics Rankings vs Targets Rankings Against Callan Public Fund Spons- V Lg DB (>10B) Five Years Ended December 31, 2023



10th Percentile	0.73	1.08	3.61
25th Percentile	0.54	0.91	3.23
Median	0.27	0.69	2.31
75th Percentile	(0.75)	0.17	1.74
90th Percentile	(1.69)	(0.31)	1.72

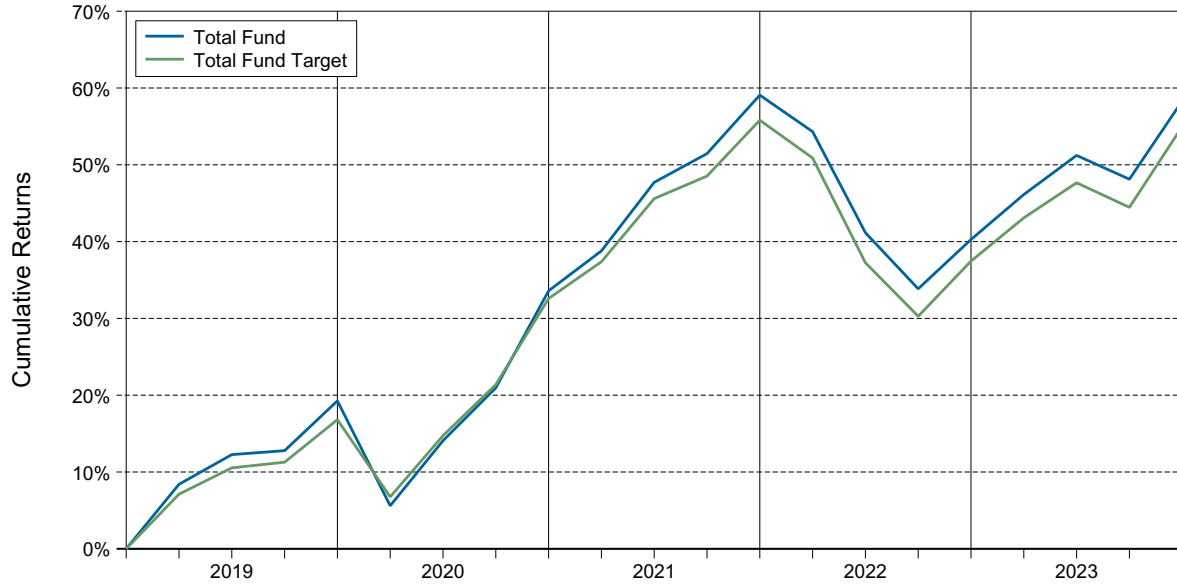
10th Percentile	1.04	0.99	0.21	1.08
25th Percentile	1.00	0.97	0.19	0.73
Median	0.92	0.92	0.14	0.30
75th Percentile	0.87	0.87	(0.25)	0.06
90th Percentile	0.85	0.84	(0.61)	(0.10)

Total Fund	● A	0.47	(0.10)	1.69	Total Fund	● A	1.09	1.08	0.28	(0.07)
60% MSCI ACW					60% MSCI ACW					
IMI/40% Blmbg US Agg	■ B	(1.60)	(3.01)	4.15	IMI/40% Blmbg US Agg	■ B	1.30	1.25	(0.39)	(0.93)

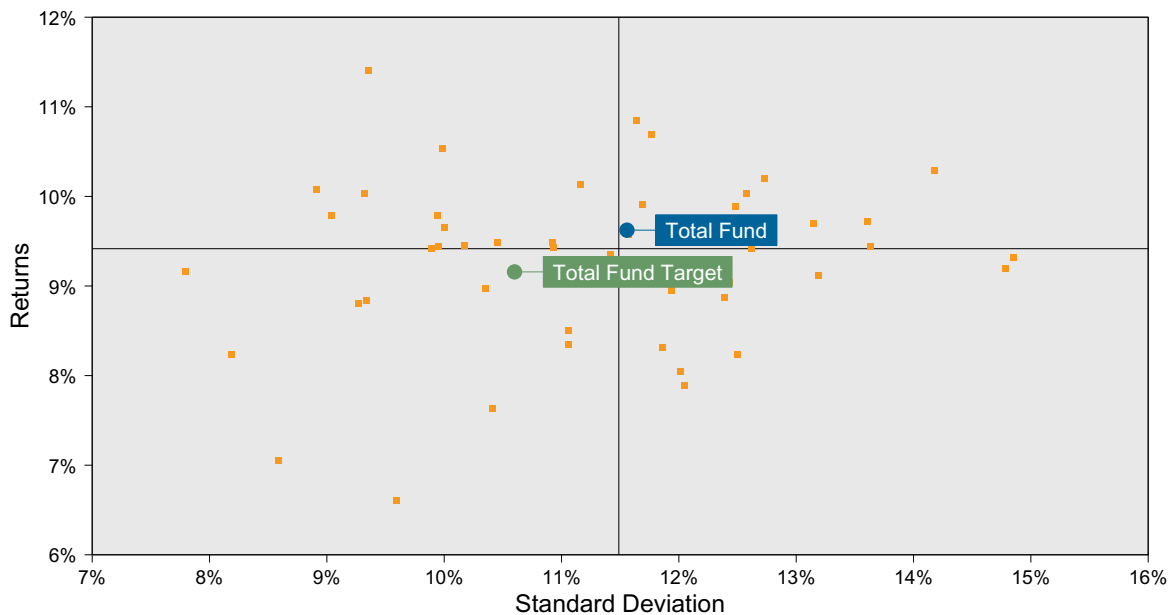
## Cumulative Performance Relative to Target

The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the Callan Public Fund Spons- V Lg DB (>10B).

### Cumulative Returns Actual vs Target



### Five Year Annualized Risk vs Return

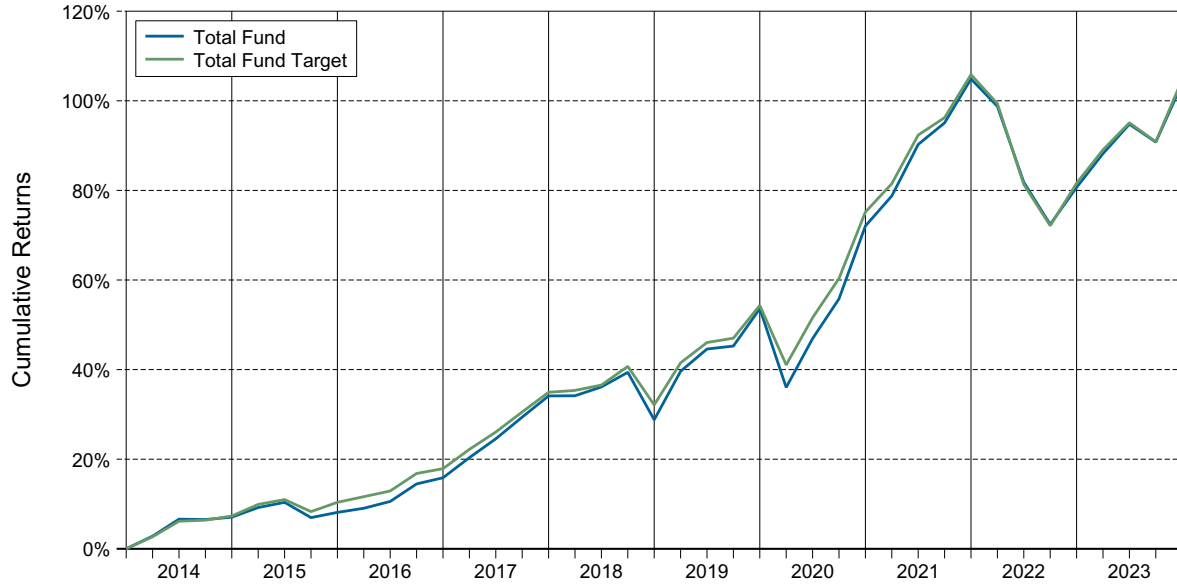


Squares represent membership of the Callan Public Fund Spons- V Lg DB (>10B)

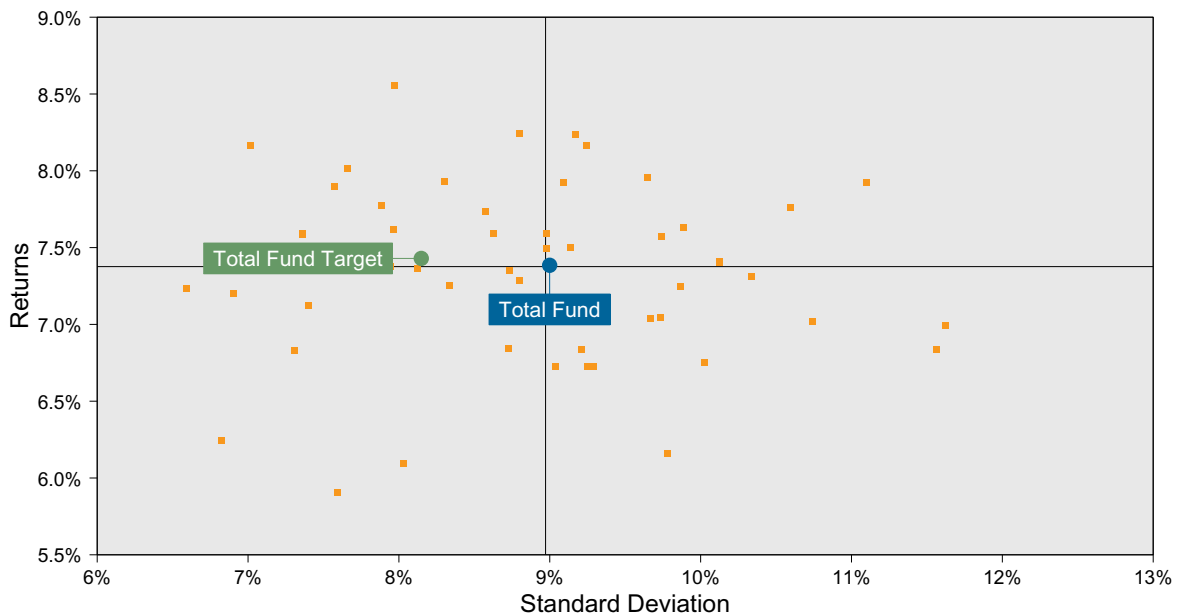
## Cumulative Performance Relative to Target

The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the Callan Public Fund Spons- V Lg DB (>10B).

### Cumulative Returns Actual vs Target



### Ten Year Annualized Risk vs Return

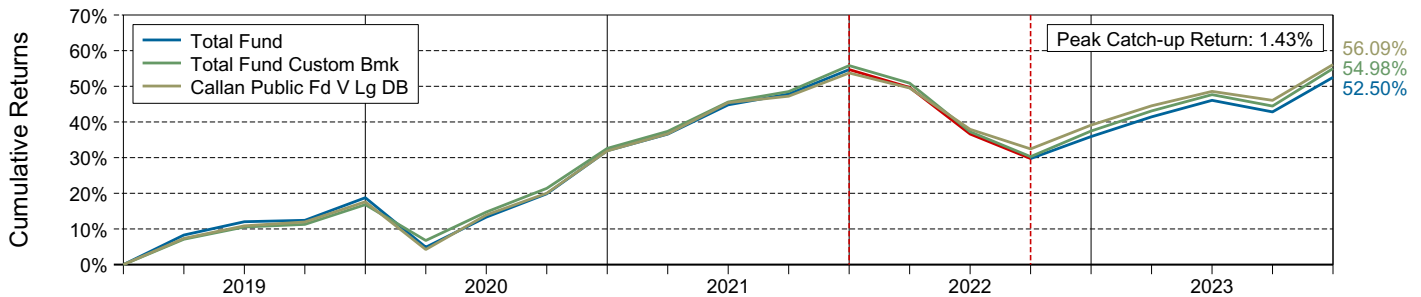


Squares represent membership of the Callan Public Fund Spons- V Lg DB (>10B)

## Total Fund Drawdown Analysis for Five Years Ended December 31, 2023

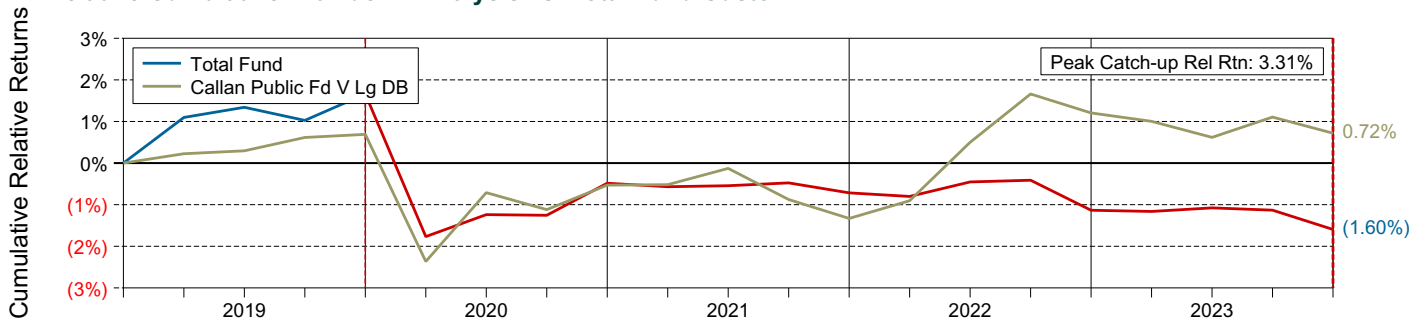
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute Drawdown as well as the Current Drawdown (cumulative return from high-water mark to now). The second chart focuses on Relative Drawdown (negative excess return vs. index). The bottom charts highlight the portfolio's peer rankings during drawdown periods.

### Absolute Cumulative Drawdown Analysis



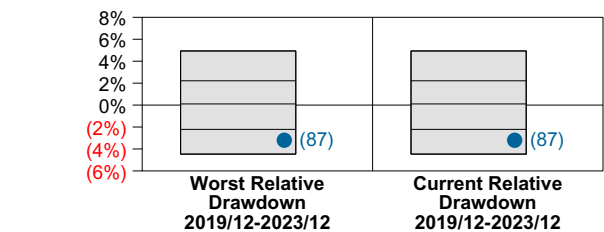
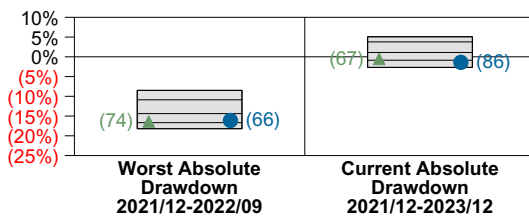
	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Total Fund	(16.13)%	0.75	2021/12-2022/09	(16.39)%	(13.85)%	(1.41)%	2.00	2021/12-2023/12	(0.53)%	1.53%
Recovery from Trough	17.55%	1.25+	2022/09-2023/12	18.96%	17.86%	17.55%	1.25+	2022/09-2023/12	18.96%	17.86%
Total Fund Custom Bmk	(16.39)%	0.75	2021/12-2022/09			(0.53)%	2.00	2021/12-2023/12		
Callan Public Fd V Lg DB	(13.85)%	0.75	2021/12-2022/09			-	-	-		

### Relative Cumulative Drawdown Analysis vs. Total Fund Custom Bmk



	Worst Relative Drawdown				Current Relative Drawdown			
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Total Fund	(3.20)%	4.00	2019/12-2023/12	0.03%	(3.20)%	4.00	2019/12-2023/12	0.03%
Recovery from Trough	0.17%	3.75+	2020/03-2023/12	3.16%	0.17%	3.75+	2020/03-2023/12	3.16%
Callan Public Fd V Lg DB	(2.01)%	2.00	2019/12-2021/12		(0.93)%	1.25	2022/09-2023/12	

### Drawdown Rankings vs. Total Fund Custom Bmk Rankings against Callan Public Fund Spons- V Lg DB (>10B) Five Years Ended December 31, 2023



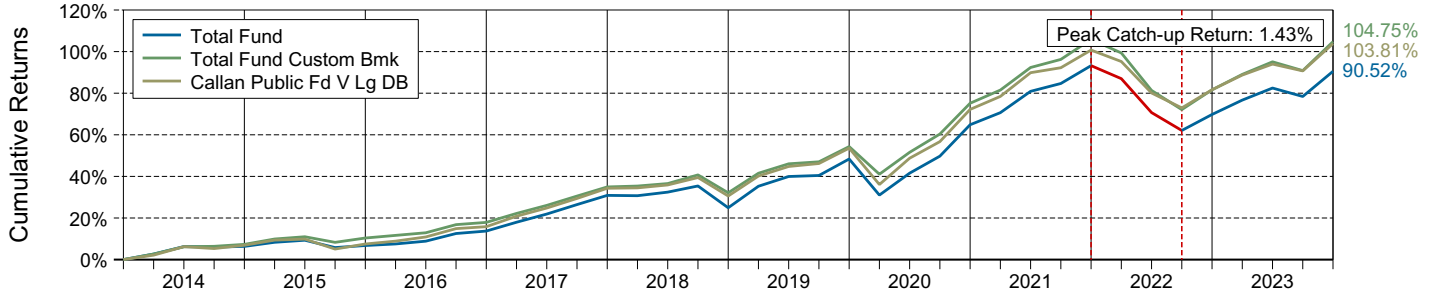
	Worst Absolute Drawdown 2021/12-2022/09	Current Absolute Drawdown 2021/12-2023/12
10th Percentile	(8.49)	5.08
25th Percentile	(10.88)	3.78
Median	(14.38)	1.10
75th Percentile	(16.67)	(0.86)
90th Percentile	(18.20)	(2.68)
<b>Total Fund</b> ●	<b>(16.13)</b>	<b>(1.41)</b>
Total Fund Custom Bmk ▲	(16.39)	(0.53)

	Worst Relative Drawdown 2019/12-2023/12	Current Relative Drawdown 2019/12-2023/12
10th Percentile	4.94	4.94
25th Percentile	2.22	2.22
Median	0.11	0.11
75th Percentile	(2.21)	(2.21)
90th Percentile	(4.47)	(4.47)
<b>Total Fund</b> ●	<b>(3.20)</b>	<b>(3.20)</b>

# Total Fund Drawdown Analysis for Ten Years Ended December 31, 2023

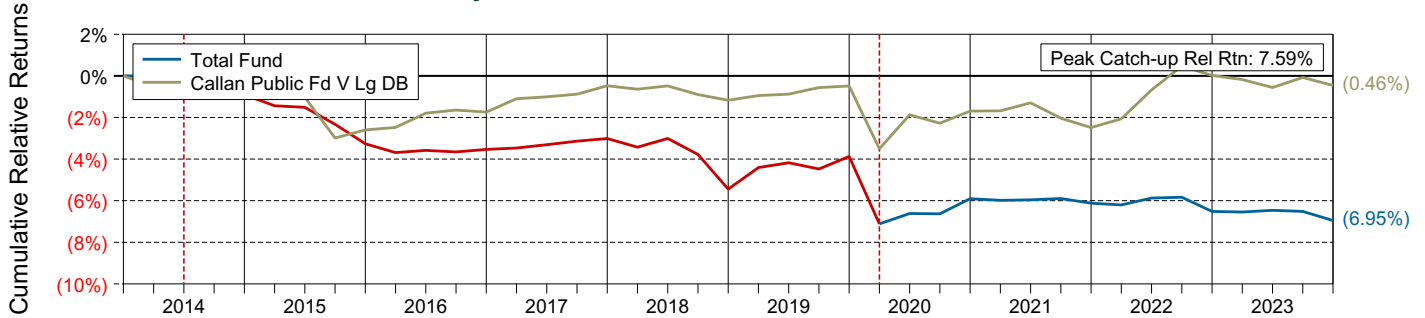
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute Drawdown as well as the Current Drawdown (cumulative return from high-water mark to now). The second chart focuses on Relative Drawdown (negative excess return vs. index). The bottom charts highlight the portfolio's peer rankings during drawdown periods.

## Absolute Cumulative Drawdown Analysis



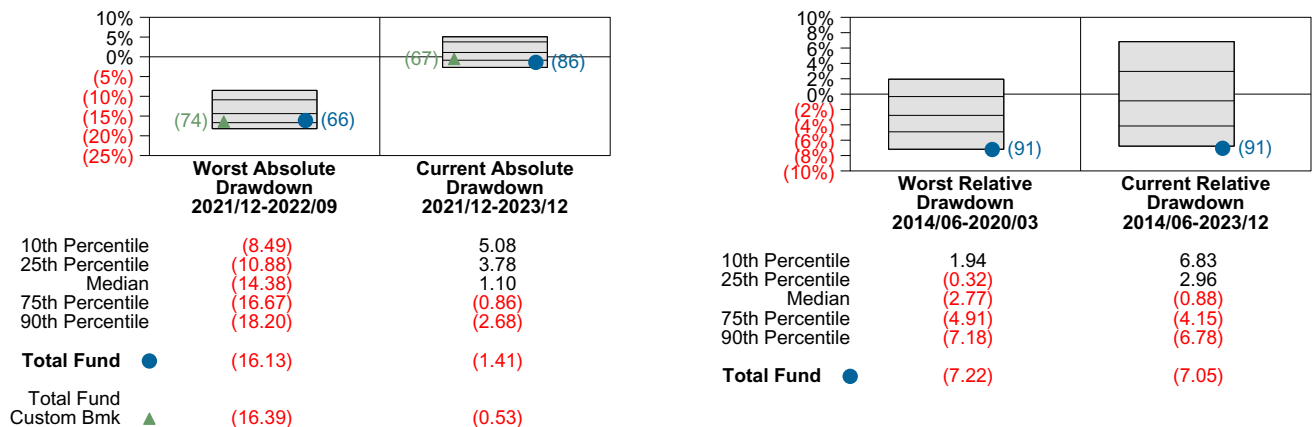
	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Total Fund	(16.13)%	0.75	2021/12-2022/09	(16.39)%	(13.85)%	(1.41)%	2.00	2021/12-2023/12	(0.53)%	1.53%
Recovery from Trough	17.55%	1.25+	2022/09-2023/12	18.96%	17.86%	17.55%	1.25+	2022/09-2023/12	18.96%	17.86%
Total Fund Custom Bmk	(16.39)%	0.75	2021/12-2022/09			(0.53)%	2.00	2021/12-2023/12		
Callan Public Fd V Lg DB	(13.85)%	0.75	2021/12-2022/09			-	-	-		

## Relative Cumulative Drawdown Analysis vs. Total Fund Custom Bmk



	Worst Relative Drawdown				Current Relative Drawdown			
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Total Fund	(7.22)%	5.75	2014/06-2020/03	(3.56)%	(7.05)%	9.50	2014/06-2023/12	(0.52)%
Recovery from Trough	0.18%	3.75+	2020/03-2023/12	3.16%	0.18%	3.75+	2020/03-2023/12	3.16%
Callan Public Fd V Lg DB	(3.56)%	5.75	2014/06-2020/03		(0.93)%	1.25	2022/09-2023/12	

## Drawdown Rankings vs. Total Fund Custom Bmk Rankings against Callan Public Fund Spons- V Lg DB (>10B) Ten Years Ended December 31, 2023

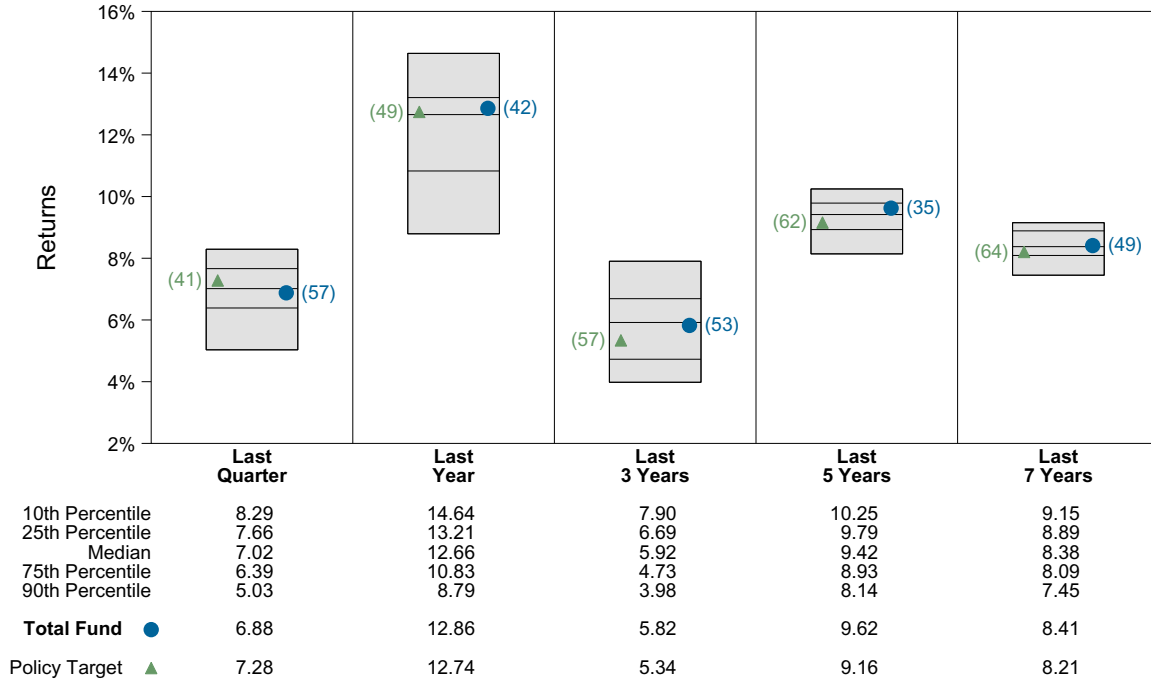




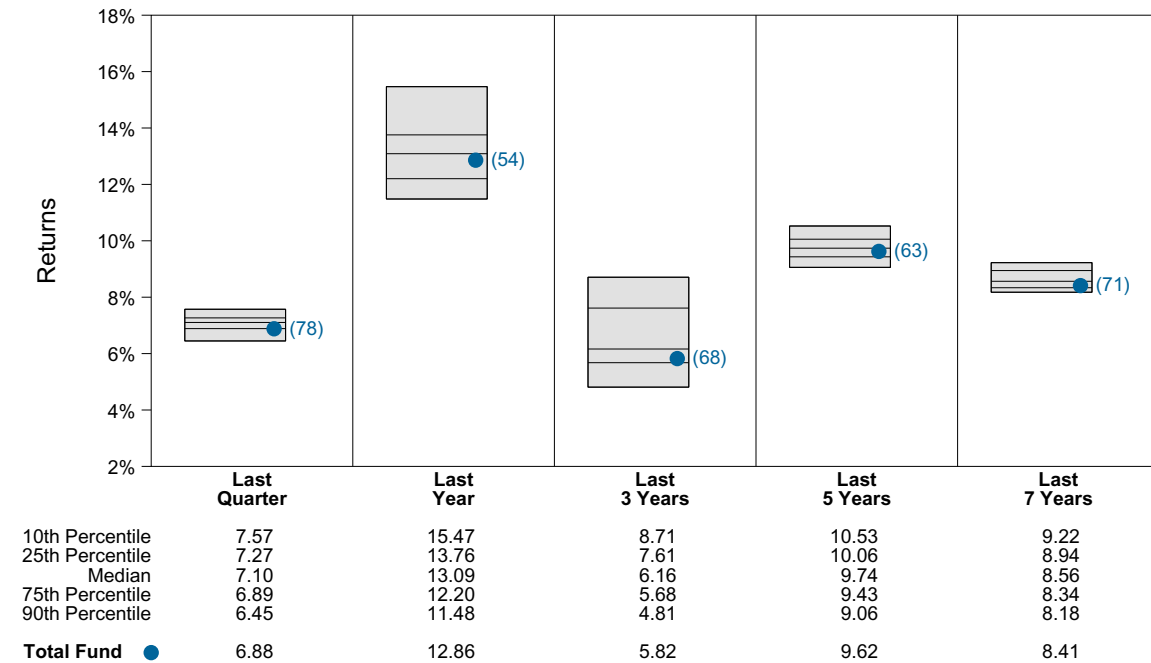
## Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Spons- V Lg DB (>10B) for periods ended December 31, 2023. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

### Callan Public Fund Spons- V Lg DB (>10B)



### Asset Allocation Adjusted Ranking



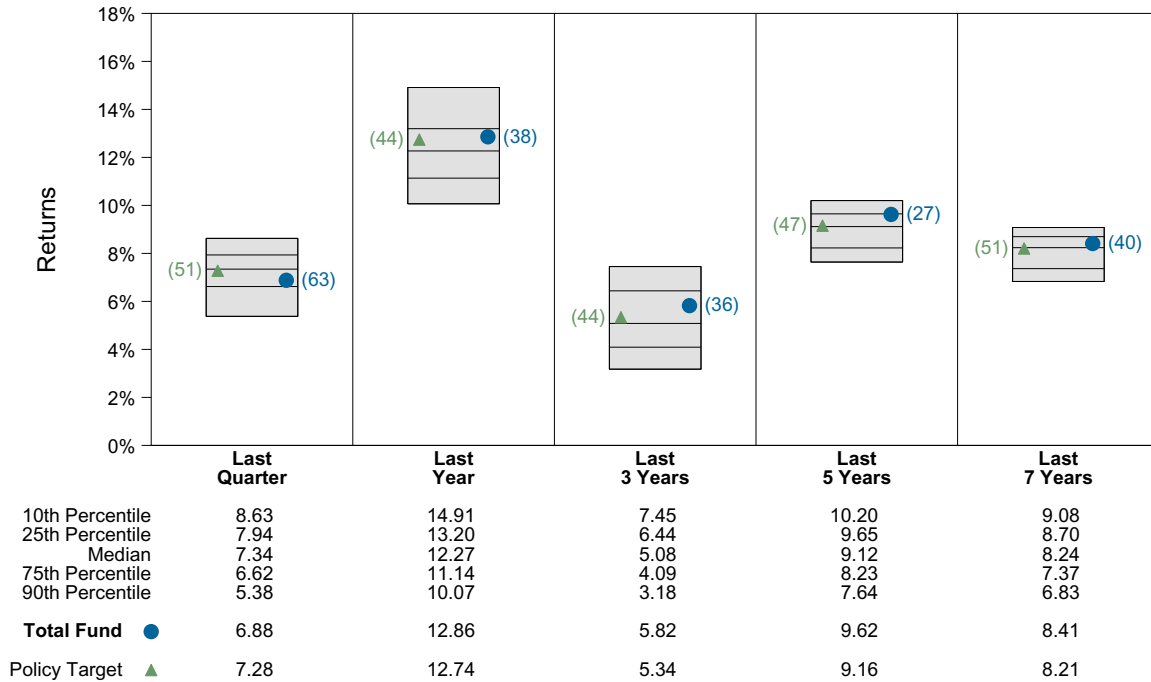
\* Current Quarter Target = 31.0% Russell 3000 Index, 22.0% Blmbg:Aggregate, 16.0% Private Equity, 14.0% MSCI World xUS IMI, 7.0% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 5.0% MSCI EM IMI, 3.0% Blmbg TIPS and 2.0% 3-month Treasury Bill.

\*The gross history shown is estimated by BNY Mellon using a gross-up methodology through 12/31/19. Gross performance is calculated for the Total Fund starting 01/01/2020.

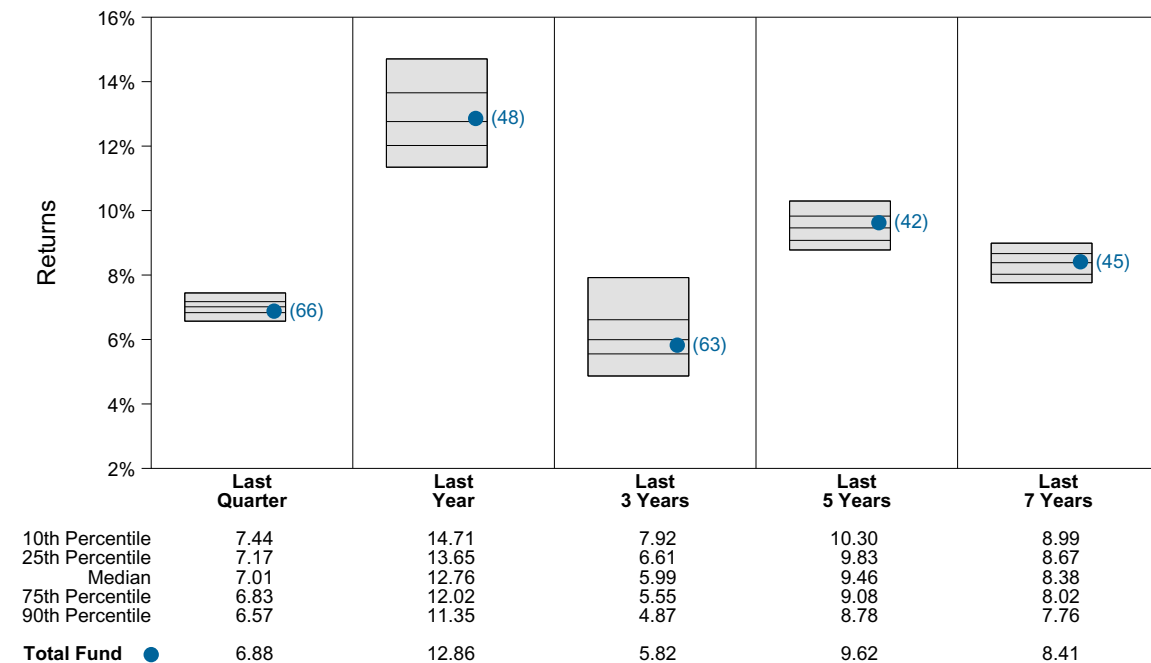
## Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Spons - Large (>1B) for periods ended December 31, 2023. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

### Callan Public Fund Spons - Large (>1B)



### Asset Allocation Adjusted Ranking



\* Current Quarter Target = 31.0% Russell 3000 Index, 22.0% Blmbg:Aggregate, 16.0% Private Equity, 14.0% MSCI World xUS IMI, 7.0% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 5.0% MSCI EM IMI, 3.0% Blmbg TIPS and 2.0% 3-month Treasury Bill.

\*The gross history shown is estimated by BNY Mellon using a gross-up methodology through 12/31/19. Gross performance is calculated for the Total Fund starting 01/01/2020.

# Total Fund Period Ended December 31, 2023

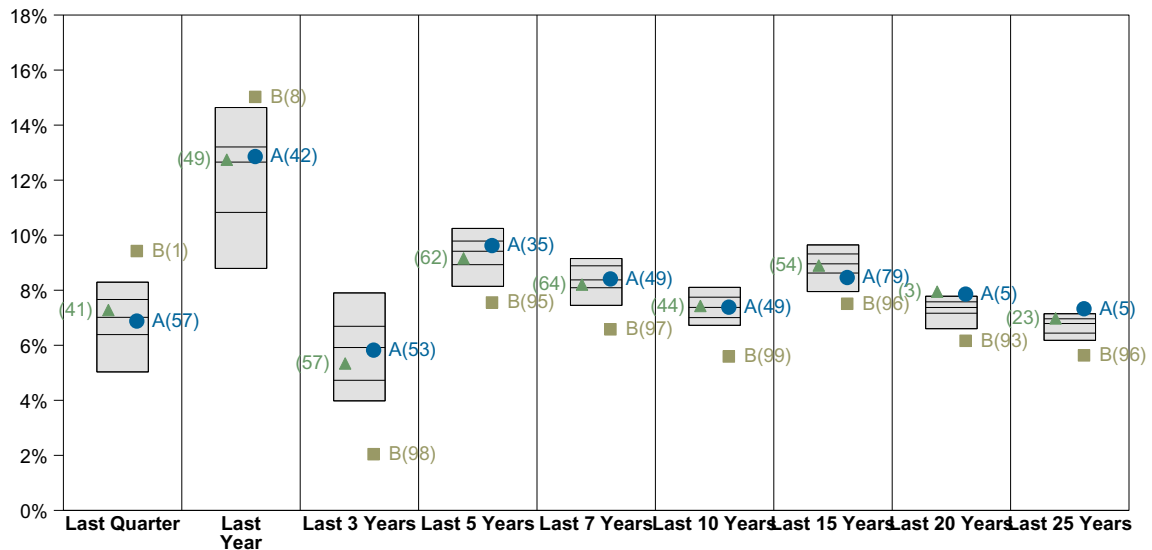
## Gross Performance History

The gross history shown is estimated by BNY Mellon using a gross-up methodology through 12/31/19. Gross performance is calculated for the Total Fund starting 01/01/2020.

## Quarterly Summary and Highlights

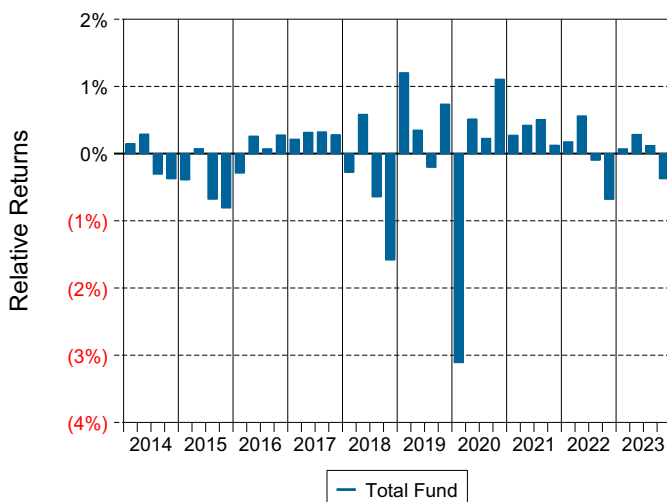
- Total Fund's portfolio posted a 6.88% return for the quarter placing it in the 57 percentile of the Callan Public Fund Spons- V Lg DB (>10B) group for the quarter and in the 42 percentile for the last year.
- Total Fund's portfolio underperformed the Total Fund Custom Benchmark by 0.40% for the quarter and outperformed the Total Fund Custom Benchmark for the year by 0.11%.

## Performance vs Callan Public Fund Spons- V Lg DB (>10B) (Gross)

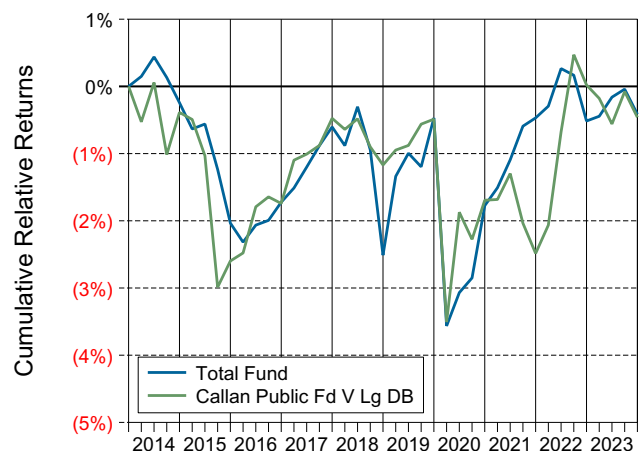


		Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years
10th Percentile		8.29	14.64	7.90	10.25	9.15	8.10	9.65	7.78	7.15
25th Percentile		7.66	13.21	6.69	9.79	8.89	7.75	9.32	7.58	6.96
Median		7.02	12.66	5.92	9.42	8.38	7.38	8.96	7.37	6.79
75th Percentile		6.39	10.83	4.73	8.93	8.09	7.01	8.63	7.16	6.44
90th Percentile		5.03	8.79	3.98	8.14	7.45	6.73	7.95	6.60	6.18
Total Fund	● A	6.88	12.86	5.82	9.62	8.41	7.38	8.46	7.86	7.33
60% MSCI ACW										
IMI/40% Blmbg U.S. Agg	■ B	9.42	15.03	2.04	7.55	6.58	5.59	7.51	6.16	5.63
Total Fund Custom Benchmark	▲	7.28	12.74	5.34	9.16	8.21	7.43	8.90	7.95	6.98

## Relative Returns vs Total Fund Custom Benchmark



## Cumulative Returns vs Total Fund Custom Benchmark



# Total Fund Period Ended December 31, 2023

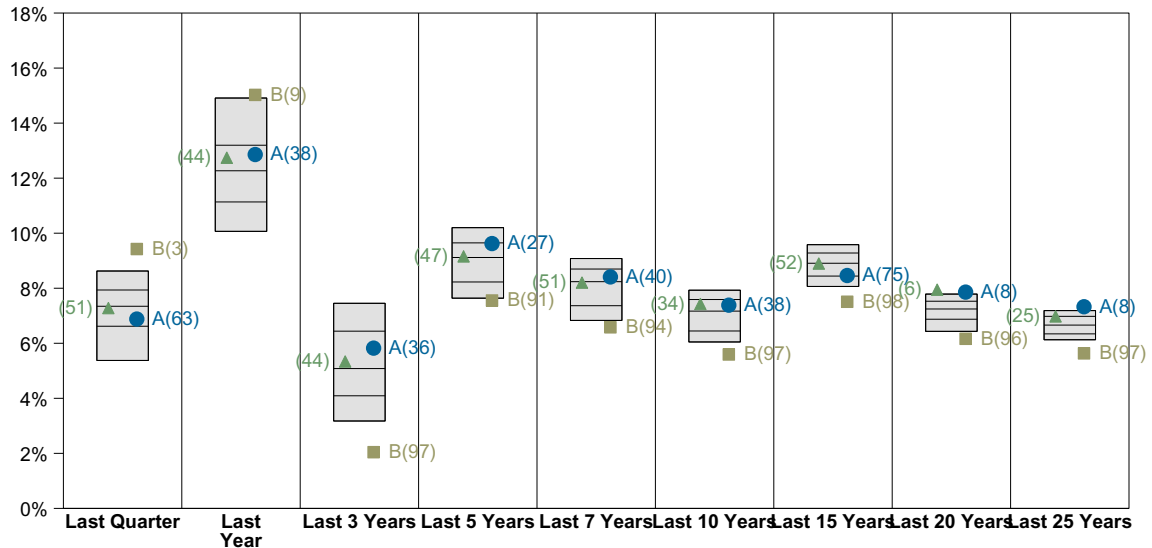
## Gross Performance History

The gross history shown is estimated by BNY Mellon using a gross-up methodology through 12/31/19. Gross performance is calculated for the Total Fund starting 01/01/2020.

## Quarterly Summary and Highlights

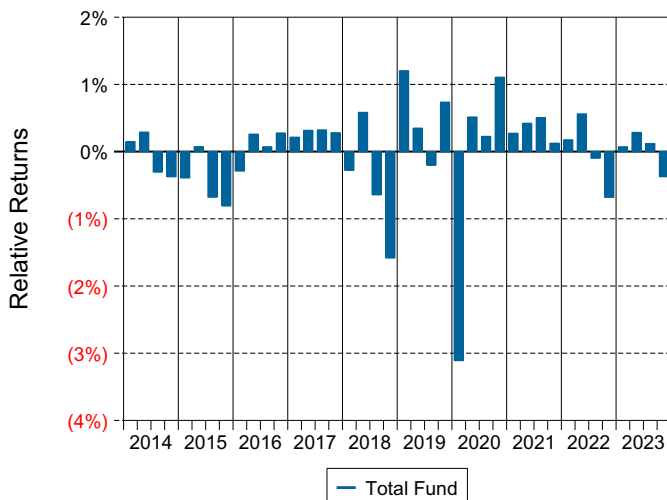
- Total Fund's portfolio posted a 6.88% return for the quarter placing it in the 63 percentile of the Callan Public Fund Spons - Large (>1B) group for the quarter and in the 38 percentile for the last year.
- Total Fund's portfolio underperformed the Total Fund Custom Benchmark by 0.40% for the quarter and outperformed the Total Fund Custom Benchmark for the year by 0.11%.

## Performance vs Callan Public Fund Spons - Large (>1B) (Gross)

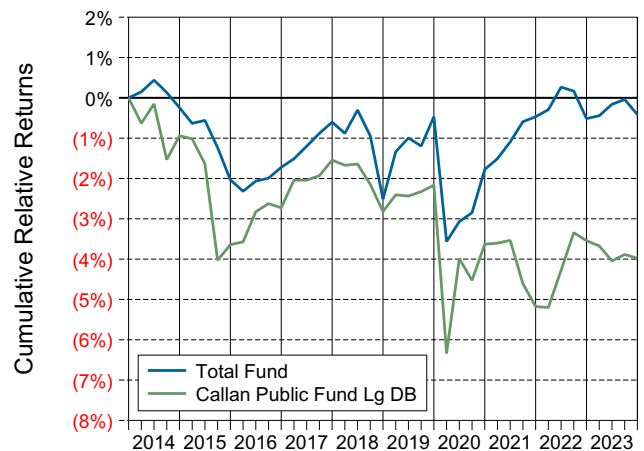


10th Percentile	8.63	14.91	7.45	10.20	9.08	7.93	9.58	7.79	7.19	
25th Percentile	7.94	13.20	6.44	9.65	8.70	7.59	9.28	7.53	6.98	
Median	7.34	12.27	5.08	9.12	8.24	7.17	8.91	7.25	6.66	
75th Percentile	6.62	11.14	4.09	8.23	7.37	6.45	8.44	6.87	6.34	
90th Percentile	5.38	10.07	3.18	7.64	6.83	6.05	8.07	6.43	6.13	
Total Fund	● A	6.88	12.86	5.82	9.62	8.41	7.38	8.46	7.86	7.33
60% MSCI ACW										
IMI/40% Blmbg U.S. Agg	■ B	9.42	15.03	2.04	7.55	6.58	5.59	7.51	6.16	5.63
Total Fund Custom Benchmark	▲	7.28	12.74	5.34	9.16	8.21	7.43	8.90	7.95	6.98

## Relative Returns vs Total Fund Custom Benchmark



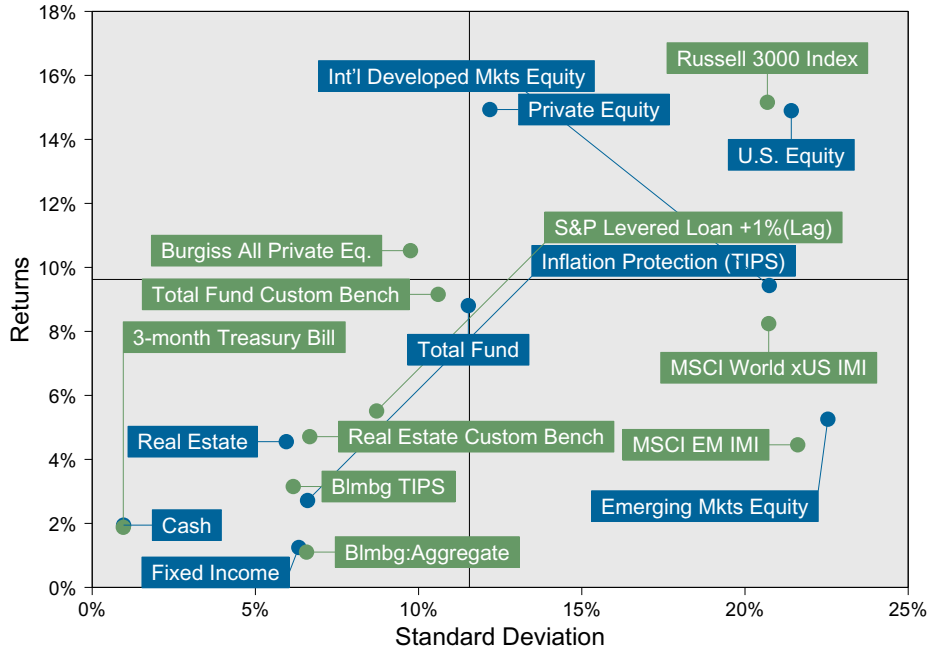
## Cumulative Returns vs Total Fund Custom Benchmark



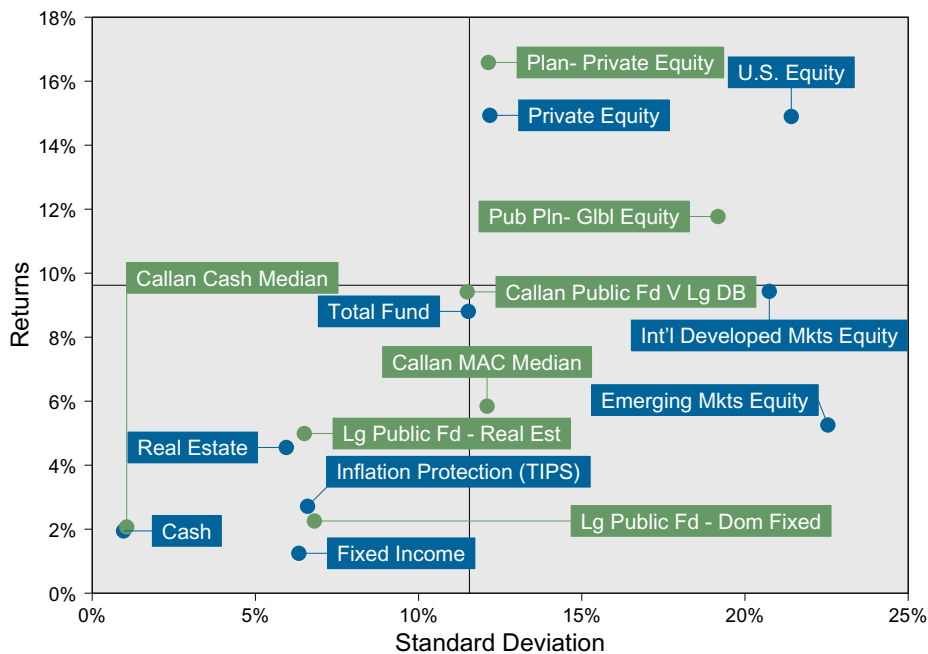
## Asset Class Risk and Return

The charts below show the five year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

### Five Year Annualized Risk vs Return Asset Classes vs Benchmark Indices



### Five Year Annualized Risk vs Return Asset Classes vs Asset Class Median



## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2023, with the distribution as of September 30, 2023.

### Asset Distribution Across Investment Managers

	December 31, 2023					September 30, 2023		
	Market Value \$(000)	% of Total Weight	(min) Weight	Target \$(000)	(max) Weight	Market Value Weight	% of Total	Target
<b>NET OF FEES*</b>								
<b>U.S. Equity</b>	<b>\$11,667,636</b>	<b>32.03%</b>	<b>26.00%</b>	<b>31.00%</b>	<b>36.00%</b>	<b>\$10,396,188</b>	<b>30.21%</b>	<b>31.00%</b>
<b>Int'l Developed Markets Equity</b>	<b>\$5,150,792</b>	<b>14.14%</b>	<b>9.00%</b>	<b>14.00%</b>	<b>19.00%</b>	<b>\$4,656,489</b>	<b>13.53%</b>	<b>14.00%</b>
<b>Emerging Mkts Equity</b>	<b>\$1,661,759</b>	<b>4.56%</b>	<b>1.00%</b>	<b>5.00%</b>	<b>9.00%</b>	<b>\$1,531,820</b>	<b>4.45%</b>	<b>5.00%</b>
<b>Private Equity (1)</b>	<b>\$6,860,223</b>	<b>18.83%</b>	<b>14.00%</b>	<b>16.00%</b>	<b>18.00%</b>	<b>\$6,856,175</b>	<b>19.93%</b>	<b>16.00%</b>
Buyouts	3,743,461	10.28%				3,754,849	10.91%	
Special Situations	1,685,418	4.63%				1,665,422	4.84%	
Growth Equity	1,231,053	3.38%				1,233,057	3.58%	
Keystone Legacy (2)	200,291	0.55%				202,848	0.59%	
<b>Legacy Private Credit (3)</b>	<b>\$393,410</b>	<b>1.08%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$397,212</b>	<b>1.15%</b>	<b>-</b>
<b>Fixed Income (4)</b>	<b>\$6,472,712</b>	<b>17.77%</b>	<b>17.00%</b>	<b>22.00%</b>	<b>27.00%</b>	<b>\$6,134,570</b>	<b>17.83%</b>	<b>22.00%</b>
Core Fixed Income	4,623,460	12.69%				4,330,741	12.59%	
Opportunistic Fixed Income	881,850	2.42%				891,741	2.59%	
Nominal U.S. Treasuries	879,272	2.41%				810,179	2.35%	
Legacy Fixed Income	88,130	0.24%				101,909	0.30%	
<b>Inflation Protection (TIPS)</b>	<b>\$1,044,578</b>	<b>2.87%</b>	<b>0.00%</b>	<b>3.00%</b>	<b>6.00%</b>	<b>\$995,629</b>	<b>2.89%</b>	<b>3.00%</b>
<b>Real Estate (1)</b>	<b>\$2,517,663</b>	<b>6.91%</b>	<b>N/A</b>	<b>7.00%</b>	<b>N/A</b>	<b>\$2,543,394</b>	<b>7.39%</b>	<b>7.00%</b>
Core/Core Plus Real Estate Funds	1,178,537	3.24%				1,199,131	3.49%	
Value Add/Opportunistic SMA	437,404	1.20%				476,829	1.39%	
Value Add/Opportunistic Funds	770,804	2.12%				754,823	2.19%	
REITS	130,918	0.36%				112,611	0.33%	
<b>Legacy Hedge Funds</b>	<b>\$15,921</b>	<b>0.04%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$16,557</b>	<b>0.05%</b>	<b>-</b>
<b>Cash</b>	<b>\$644,255</b>	<b>1.77%</b>	<b>0.00%</b>	<b>2.00%</b>	<b>7.00%</b>	<b>\$879,137</b>	<b>2.56%</b>	<b>2.00%</b>
<b>Total Fund</b>	<b>\$36,429,964</b>	<b>100.00%</b>		<b>100.00%</b>		<b>\$34,408,158</b>	<b>100.00%</b>	<b>100.00%</b>

\*Market values shown are net of accrued fees.

(1) Private Equity and Real Estate Market Values have a 1 Qtr lag

(2) As of 09/30/2023 Keystone Legacy SPV consists of 42 non-core funds, prior performance reflected in previous sub-asset classes.

(3) The Legacy Private Credit and Legacy Fixed Income composite was incepted on 07/01/2022.

(4) On 07/01/2022, the sub-composites of the new fixed income structure was liquidated and the managers reorganized under Core Fixed Income, Opportunistic Fixed Income, Nominal US Treasuries and Legacy Fixed Income sub-composites.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2023, with the distribution as of September 30, 2023.

### Asset Distribution Across Investment Managers

	December 31, 2023					September 30, 2023		
	Market Value \$(000)	% of Total Weight	(min) Weight	Target \$(000)	(max) Weight	Market Value Weight	% of Total	Target
<b>GROSS OF FEES*</b>								
<b>U.S. Equity</b>	<b>\$11,668,255</b>	<b>32.03%</b>	<b>26.00%</b>	<b>31.00%</b>	<b>36.00%</b>	<b>\$10,396,801</b>	<b>30.21%</b>	<b>31.00%</b>
<b>Int'l Developed Markets Equity</b>	<b>\$5,151,882</b>	<b>14.14%</b>	<b>9.00%</b>	<b>14.00%</b>	<b>19.00%</b>	<b>\$4,657,577</b>	<b>13.54%</b>	<b>14.00%</b>
<b>Emerging Mkts Equity</b>	<b>\$1,662,066</b>	<b>4.56%</b>	<b>1.00%</b>	<b>5.00%</b>	<b>9.00%</b>	<b>\$1,532,132</b>	<b>4.45%</b>	<b>5.00%</b>
<b>Private Equity (1)</b>	<b>\$6,860,223</b>	<b>18.83%</b>	<b>14.00%</b>	<b>16.00%</b>	<b>18.00%</b>	<b>\$6,856,175</b>	<b>19.92%</b>	<b>16.00%</b>
Buyouts	3,743,461	10.27%				3,754,849	10.91%	
Special Situations	1,685,418	4.63%				1,665,422	4.84%	
Growth Equity	1,231,053	3.38%				1,233,057	3.58%	
Keystone Legacy (2)	200,291	0.55%				202,848	0.59%	
<b>Legacy Private Credit (3)</b>	<b>\$393,410</b>	<b>1.08%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$397,212</b>	<b>1.15%</b>	<b>-</b>
<b>Fixed Income (4)</b>	<b>\$6,473,234</b>	<b>17.77%</b>	<b>17.00%</b>	<b>22.00%</b>	<b>27.00%</b>	<b>\$6,135,117</b>	<b>17.83%</b>	<b>22.00%</b>
Core Fixed Income	4,623,795	12.69%				4,331,072	12.59%	
Opportunistic Fixed Income	881,850	2.42%				891,741	2.59%	
Nominal U.S. Treasuries	879,299	2.41%				810,204	2.35%	
Legacy Fixed Income	88,290	0.24%				102,101	0.30%	
<b>Inflation Protection (TIPS)</b>	<b>\$1,044,847</b>	<b>2.87%</b>	<b>0.00%</b>	<b>3.00%</b>	<b>6.00%</b>	<b>\$995,898</b>	<b>2.89%</b>	<b>3.00%</b>
<b>Real Estate (1)</b>	<b>\$2,517,799</b>	<b>6.91%</b>	<b>N/A</b>	<b>7.00%</b>	<b>N/A</b>	<b>\$2,543,530</b>	<b>7.39%</b>	<b>7.00%</b>
Core/Core Plus Real Estate Funds	1,178,537	3.23%				1,199,131	3.48%	
Value Add/Opportunistic SMA	437,404	1.20%				476,829	1.39%	
Value Add/Opportunistic Funds	770,804	2.12%				754,823	2.19%	
REITS	131,053	0.36%				112,747	0.33%	
<b>Legacy Hedge Funds</b>	<b>\$15,921</b>	<b>0.04%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$16,557</b>	<b>0.05%</b>	<b>-</b>
<b>Cash</b>	<b>\$644,255</b>	<b>1.77%</b>	<b>0.00%</b>	<b>2.00%</b>	<b>7.00%</b>	<b>\$879,137</b>	<b>2.55%</b>	<b>2.00%</b>
<b>Total Fund</b>	<b>\$36,432,906</b>	<b>100.00%</b>		<b>100.00%</b>		<b>\$34,411,124</b>	<b>100.00%</b>	<b>100.00%</b>

\*Market values shown are gross of accrued fees.

(1) Private Equity and Real Estate Market Values have a 1 Qtr lag

(2) As of 09/30/2023 Keystone Legacy SPV consists of 42 non-core funds, prior performance reflected in previous sub-asset classes.

(3) The Legacy Private Credit and Legacy Fixed Income composite was incepted on 07/01/2022.

(4) On 07/01/2022, the sub-composites of the new fixed income structure was liquidated and the managers reorganized under Core Fixed Income, Opportunistic Fixed Income, Nominal US Treasuries and Legacy Fixed Income sub-composites.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2023						
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Net Performance</b>						
<b>Total Fund</b>	<b>\$36,430</b>	<b>100.00%</b>	<b>6.78%</b>	<b>12.22%</b>	<b>4.95%</b>	<b>8.81%</b>
Total Fund Custom Benchmark(1)	-	-	7.28%	12.74%	5.34%	9.16%
Public Market Equiv Benchmark(2)	-	-	7.04%	17.12%	4.73%	8.63%
60/40 Index(3)	-	-	9.42%	15.03%	2.04%	7.55%
<b>U.S. Equity</b>	<b>\$11,668</b>	<b>32.03%</b>	<b>12.23%</b>	<b>25.56%</b>	<b>8.19%</b>	<b>14.90%</b>
Russell 3000 Index (4)	-	-	12.07%	25.96%	8.54%	15.16%
S&P 1500 Index	-	-	11.78%	25.47%	9.83%	15.39%
<b>Int'l Developed Mkts Equity</b>	<b>\$5,151</b>	<b>14.14%</b>	<b>10.61%</b>	<b>18.99%</b>	<b>4.94%</b>	<b>9.43%</b>
MSCI World ex US IMI	-	-	10.52%	17.18%	3.73%	8.24%
<b>Emerging Mkts Equity</b>	<b>\$1,662</b>	<b>4.56%</b>	<b>8.48%</b>	<b>11.40%</b>	<b>(5.06%)</b>	<b>5.26%</b>
MSCI EM IMI	-	-	8.02%	11.67%	(3.71%)	4.46%
<b>Private Equity</b>	<b>\$6,860</b>	<b>18.83%</b>	<b>0.61%</b>	<b>6.59%</b>	<b>15.64%</b>	<b>14.93%</b>
Burgiss Private Equity Index (Qtr lag)	-	-	0.00%	0.03%	10.79%	10.52%
Global Equity + 3% (Qtr lag)(5)	-	-	(2.57%)	24.90%	12.22%	11.73%
<b>Legacy Private Credit Funds (6)</b>	<b>\$393</b>	<b>1.08%</b>	<b>2.99%</b>	<b>10.85%</b>	<b>13.22%</b>	<b>10.18%</b>
S&P Levered Loan Index + 1% (Qtr lag)	-	-	3.68%	14.06%	7.09%	5.51%
<b>Fixed Income</b>	<b>\$6,473</b>	<b>17.77%</b>	<b>6.14%</b>	<b>5.57%</b>	<b>(2.80%)</b>	<b>1.25%</b>
Blmbg U.S. Agg Bond Index	-	-	6.82%	5.53%	(3.31%)	1.10%
<b>Inflation Protection (TIPS)</b>	<b>\$1,045</b>	<b>2.87%</b>	<b>4.92%</b>	<b>3.85%</b>	<b>(1.69%)</b>	<b>2.72%</b>
Blmbg U.S. TIPS Index	-	-	4.71%	3.90%	(1.00%)	3.15%
<b>Real Estate</b>	<b>\$2,518</b>	<b>6.91%</b>	<b>(2.35%)</b>	<b>(11.91%)</b>	<b>3.31%</b>	<b>4.55%</b>
Real Estate Custom Bench (Qtr lag)(7)	-	-	(2.12%)	(13.08%)	6.23%	4.71%
CPI + 3% (Qtr lag)	-	-	1.60%	6.70%	8.75%	7.05%
<b>Cash</b>	<b>\$644</b>	<b>1.77%</b>	<b>1.36%</b>	<b>5.14%</b>	<b>2.26%</b>	<b>1.95%</b>
3-month Treasury Bill	-	-	1.37%	5.01%	2.15%	1.88%

\* All returns on this report are shown with 2- decimal precision. This may differ from the decimal precision shown in BNY Mellon reports.

(1) The current total fund benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index. See page 77 for full benchmark history.

(2) The current public equivalent benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 31% Russell 3000, 14% MSCI World ex US IMI Index, 12% Russell 3000+ 3% (Qtr lag), 7% CPI+3% (Qtr Lag), 3% Bloomberg US TIPS Index, 5% MSCI EM IMI Index, 4% MSCI World ex US +3% (Qtr lag), 2% ICE BofAML 3 Mo US T-Bill Index. See page 77 for full benchmark history.

(3) Benchmark consists of 60% MSCI ACW IMI Index and 40% Bloomberg U.S. Agg Bond Index.

(4) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

(5) As of 01/01/2020 benchmark consists of 25% MSCI World ex US +3% (Qtr lag) and 75% Russell 3000 + 3% (Qtr lag). Benchmark performance represents the historical benchmark (Russell 3000 +3% Qtr lag) linked to the current benchmark.

(6) Legacy Private Credit performance is included in the total fund starting at the composite's true inception date, 07/01/2022. The history is calculated and shown for informational purposes.

(7) As of 07/01/2022, the benchmark consists of 100% NCREIF NFI-ODCE (Qtr lag). From 03/31/2019 to 07/01/2022, the benchmark consists of 90% NCREIF ODCE Index (Qtr lag) and 10% FTSE NAREIT Index (unlagged).



## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception	
<b>Net Performance</b>						
<b>Total Fund</b>	<b>6.66%</b>	<b>7.70%</b>	<b>7.05%</b>	<b>6.55%</b>	<b>9.26%</b>	(1/81)
Total Fund Custom Benchmark(1)	7.43%	8.90%	7.95%	6.98%	-	
Public Market Equiv Benchmark(2)	7.39%	8.98%	8.01%	7.03%	-	
60/40 Index(3)	5.59%	7.51%	6.16%	5.63%	-	
<b>U.S. Equity</b>	<b>10.63%</b>	<b>13.33%</b>	<b>8.96%</b>	<b>7.46%</b>	<b>10.79%</b>	(1/81)
Russell 3000 Index (4)	11.48%	13.84%	9.67%	7.74%	11.09%	(1/81)
S&P 1500 Index	11.76%	13.91%	9.74%	7.80%	-	
<b>Int'l Developed Mkts Equity</b>	<b>5.10%</b>	<b>8.27%</b>	<b>6.03%</b>	-	<b>6.35%</b>	(1/02)
MSCI World ex US IMI	4.35%	7.20%	5.86%	4.92%	6.26%	(1/02)
<b>Emerging Mkts Equity</b>	<b>3.41%</b>	<b>5.97%</b>	<b>5.18%</b>	-	<b>6.43%</b>	(1/02)
MSCI EM IMI	3.00%	6.97%	7.11%	7.33%	8.22%	(1/02)
<b>Private Equity</b>	<b>12.53%</b>	<b>11.24%</b>	<b>12.75%</b>	<b>12.09%</b>	<b>11.46%</b>	(1/86)
Burgiss Private Equity Index (Qtr lag)	11.85%	10.91%	12.91%	12.55%	16.25%	(1/86)
Global Equity + 3% (Qtr lag)(5)	14.15%	14.26%	12.90%	11.39%	14.35%	(1/86)
<b>Legacy Private Credit Funds (6)</b>	-	-	-	-	<b>10.31%</b>	(4/18)
S&P Levered Loan Index + 1% (Qtr lag)	-	-	-	-	5.63%	(4/18)
<b>Fixed Income</b>	<b>1.87%</b>	<b>4.88%</b>	<b>3.97%</b>	<b>4.44%</b>	<b>7.52%</b>	(1/81)
Blmbg U.S. Agg Bond Index	1.81%	2.68%	3.17%	3.85%	6.83%	(1/81)
<b>Inflation Protection (TIPS)</b>	<b>2.23%</b>	<b>2.84%</b>	<b>2.87%</b>	-	<b>2.89%</b>	(2/03)
Blmbg U.S. TIPS Index	2.42%	3.48%	3.63%	4.79%	3.83%	(2/03)
<b>Real Estate</b>	<b>4.60%</b>	<b>3.03%</b>	<b>5.66%</b>	<b>6.30%</b>	<b>7.83%</b>	(3/84)
Real Estate Custom Bench (Qtr lag)(7)	7.01%	4.97%	6.89%	7.26%	-	
CPI + 3% (Qtr lag)	5.77%	5.30%	5.57%	5.56%	5.83%	(3/84)
<b>Cash</b>	<b>1.51%</b>	<b>1.11%</b>	<b>1.73%</b>	<b>2.21%</b>	<b>3.44%</b>	(1/87)
3-month Treasury Bill	1.25%	0.87%	1.46%	1.90%	3.17%	(1/87)

\* All returns on this report are shown with 2- decimal precision. This may differ from the decimal precision shown in BNY Mellon reports.

(1) The current total fund benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index. See page 77 for full benchmark history.

(2) The current public equivalent benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 31% Russell 3000, 14% MSCI World ex US IMI Index, 12% Russell 3000+ 3% (Qtr lag), 7% CPI+3% (Qtr Lag), 3% Bloomberg US TIPS Index, 5% MSCI EM IMI Index, 4% MSCI World ex US +3% (Qtr lag), 2% ICE BofAML 3 Mo US T-Bill Index. See page 77 for full benchmark history.

(3) Benchmark consists of 60% MSCI ACW IMI Index and 40% Bloomberg U.S. Agg Bond Index

(4) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

(5) As of 01/01/2020 benchmark consists of 25% MSCI World ex US +3% (Qtr lag) and 75% Russell 3000 + 3% (Qtr lag). Benchmark performance represents the historical benchmark (Russell 3000 +3% Qtr lag) linked to the current benchmark.

(6) Legacy Private Credit performance is included in the total fund starting at the composite's true inception date, 07/01/2022. The history is calculated and shown for informational purposes.

(7) As of 07/01/2022, the benchmark consists of 100% NCREIF NFI-ODCE (Qtr lag). From 03/31/2019 to 07/01/2022 the benchmark consists of 90% NCREIF ODCE Index (Qtr lag) and 10% FTSE NAREIT Index (unlagged).

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	Returns for Periods Ended December 31, 2023					
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Net Performance- Domestic Equity</b>						
<b>U.S. Equity</b>	<b>\$11,668</b>	<b>100.00%</b>	<b>12.23%</b>	<b>25.56%</b>	<b>8.19%</b>	<b>14.90%</b>
Russell 3000 Index (1)	-	-	12.07%	25.96%	8.54%	15.16%
S&P 1500 Index	-	-	11.78%	25.47%	9.83%	15.39%
MCM Russell 1000 Index	10,533	90.28%	11.97%	26.60%	9.16%	15.61%
Russell 1000 Index	-	-	11.96%	26.53%	8.97%	15.52%
S&P 500 Index	-	-	11.69%	26.29%	10.00%	15.69%
MCM Russell 2000 Core Index	368	3.16%	13.97%	17.03%	2.99%	10.30%
Russell 2000 Index	-	-	14.03%	16.93%	2.22%	9.97%
S&P 600 Index	-	-	15.12%	16.05%	7.28%	11.03%
MCM Russell 2000 Val Index	369	3.16%	15.24%	14.69%	8.04%	10.06%
Russell 2000 Value Index	-	-	15.26%	14.65%	7.94%	10.00%
S&P 600 Value Index	-	-	15.84%	14.89%	10.20%	11.31%
Emerald Asset Management	397	3.41%	14.90%	18.59%	(2.39%)	10.56%
Russell 2000 Growth Index	-	-	12.75%	18.66%	(3.50%)	9.22%
S&P 600 Growth Index	-	-	14.28%	17.10%	4.26%	10.42%

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\*\*Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites.

(1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Net Performance- Domestic Equity</b>					
<b>U.S. Equity</b>	<b>10.63%</b>	<b>13.33%</b>	<b>8.96%</b>	<b>7.46%</b>	<b>10.79%</b> <sup>(1/81)</sup>
Russell 3000 Index (1)	11.48%	13.84%	9.67%	7.74%	11.09% <sup>(1/81)</sup>
S&P 1500 Index	11.76%	13.91%	9.74%	7.80%	-
MCM Russell 1000 Index	11.87%	-	-	-	13.85% <sup>(1/12)</sup>
Russell 1000 Index	11.80%	14.02%	9.78%	7.72%	13.83% <sup>(1/12)</sup>
S&P 500 Index	12.03%	13.97%	9.69%	7.56%	13.93% <sup>(1/12)</sup>
MCM Russell 2000 Core Index	-	-	-	-	7.88% <sup>(12/16)</sup>
Russell 2000 Index	7.16%	11.30%	8.11%	7.91%	7.66% <sup>(12/16)</sup>
S&P 600 Index	8.66%	12.74%	9.65%	9.65%	8.72% <sup>(12/16)</sup>
MCM Russell 2000 Val Index	-	-	-	-	6.66% <sup>(12/16)</sup>
Russell 2000 Value Index	6.76%	10.27%	7.68%	8.58%	6.63% <sup>(12/16)</sup>
S&P 600 Value Index	8.17%	12.02%	9.11%	9.49%	7.94% <sup>(12/16)</sup>
Emerald Asset Management	-	-	-	-	9.29% <sup>(12/16)</sup>
Russell 2000 Growth Index	7.16%	12.07%	8.28%	6.75%	8.18% <sup>(12/16)</sup>
S&P 600 Growth Index	8.96%	13.36%	10.09%	9.40%	9.25% <sup>(12/16)</sup>

\* All returns on this report are shown with 2- decimal precision. This may differ from the decimal precision shown in BNY Mellon reports.

\*\*Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites.

(1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	Returns for Periods Ended December 31, 2023					
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Net Performance- International Equity</b>						
<b>Int'l Developed Mkts Equity</b>	<b>\$5,151</b>	<b>100.00%</b>	<b>10.61%</b>	<b>18.99%</b>	<b>4.94%</b>	<b>9.43%</b>
MSCI World ex US IMI	-	-	10.52%	17.18%	3.73%	8.24%
Walter Scott & Partners(1)	761	14.78%	11.74%	22.91%	6.03%	13.61%
MSCI World	-	-	11.42%	23.79%	7.27%	12.80%
BlackRock MSCI World Ex US Index	4,000	77.65%	10.48%	18.40%	4.88%	8.91%
MSCI World ex US	-	-	10.51%	17.94%	4.42%	8.45%
Xponance Non-U.S. Small Cap	235	4.56%	9.01%	15.89%	0.06%	6.12%
MSCI ACWI ex US Small Cap	-	-	10.12%	15.66%	1.49%	7.89%
Harris Assoc Int'l SCV	151	2.94%	11.29%	20.11%	6.99%	11.78%
MSCI World ex US Sm Cap	-	-	10.60%	12.62%	(0.20%)	7.05%
MSCI World ex US Sm Value	-	-	10.04%	14.70%	3.77%	7.08%

\* All returns on this report are shown with 2- decimal precision. This may differ from the decimal precision shown in BNY Mellon reports.

\*\*Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites.

(1) Walter Scott since inception returns were contained in the Global Mandates composite prior to 12/31/2019.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Net Performance- International Equity</b>					
<b>Int'l Developed Mkts Equity</b>	<b>5.10%</b>	<b>8.27%</b>	<b>6.03%</b>	-	<b>6.35%</b> (1/02)
MSCI World ex US IMI	4.35%	7.20%	5.86%	4.92%	6.26% (1/02)
Walter Scott & Partners(1)	10.45%	12.29%	-	-	9.55% (10/06)
MSCI World	8.60%	10.70%	7.79%	6.02%	7.01% (10/06)
BlackRock MSCI World Ex US Index	-	-	-	-	5.93% (6/17)
MSCI World ex US	4.32%	6.97%	5.69%	4.62%	5.47% (6/17)
Xponance Non-U.S. Small Cap	-	-	-	-	3.05% (10/18)
MSCI ACWI ex US Small Cap	4.88%	9.31%	7.45%	7.28%	4.36% (10/18)
Harris Assoc Int'l SCV	5.56%	11.39%	9.10%	-	10.22% (7/03)
MSCI World ex US Sm Cap	4.63%	9.04%	6.91%	-	8.23% (7/03)
MSCI World ex US Sm Value	4.20%	8.76%	7.17%	7.87%	8.41% (7/03)

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\*\*Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites.

(1) Walter Scott since inception returns were contained in the Global Mandates composite prior to 12/31/2019.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	Returns for Periods Ended December 31, 2023					
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Net Performance- Emerging Mkts Equity</b>						
<b>Emerging Mkts Equity</b>	<b>\$1,662</b>	<b>100.00%</b>	<b>8.48%</b>	<b>11.40%</b>	<b>(5.06%)</b>	<b>5.26%</b>
MSCI EM IMI	-	-	8.02%	11.67%	(3.71%)	4.46%
Macquarie Emg Mkts Equity	358	21.54%	12.12%	16.08%	(4.94%)	4.65%
MSCI EM	-	-	7.86%	9.83%	(5.08%)	3.69%
Martin Currie Emg Mkts Equity	358	21.55%	7.78%	6.48%	(8.90%)	4.18%
MSCI EM	-	-	7.86%	9.83%	(5.08%)	3.69%
BlackRock Emg Mkts Index	563	33.86%	7.47%	9.25%	(5.35%)	3.37%
MSCI EM	-	-	7.86%	9.83%	(5.08%)	3.69%
Leading Edge Emg Mkts Fund	232	13.97%	8.31%	8.09%	(6.02%)	3.65%
MSCI EM	-	-	7.86%	9.83%	(5.08%)	3.69%
GlobeFlex Emerging Small Cap	151	9.08%	5.90%	24.23%	10.83%	12.81%
MSCI EM Small Cap	-	-	8.95%	23.92%	6.45%	9.92%

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## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Net Performance- Emerging Mkts Equity</b>					
<b>Emerging Mkts Equity</b>	<b>3.41%</b>	<b>5.97%</b>	<b>5.18%</b>	-	<b>6.43%</b> <sup>(1/02)</sup>
MSCI EM IMI	3.00%	6.97%	7.11%	7.33%	8.22% <sup>(1/02)</sup>
Macquarie Emg Mkts Equity	3.18%	-	-	-	3.54% <sup>(5/13)</sup>
MSCI EM	2.66%	6.56%	6.83%	-	2.33% <sup>(5/13)</sup>
Martin Currie Emg Mkts Equity	3.28%	-	-	-	3.28% <sup>(1/14)</sup>
MSCI EM	2.66%	6.56%	6.83%	-	2.66% <sup>(1/14)</sup>
BlackRock Emg Mkts Index	-	-	-	-	2.38% <sup>(7/17)</sup>
MSCI EM	2.66%	6.56%	6.83%	-	2.67% <sup>(7/17)</sup>
Leading Edge Emg Mkts Fund	-	-	-	-	3.26% <sup>(11/18)</sup>
MSCI EM	2.66%	6.56%	6.83%	-	3.84% <sup>(11/18)</sup>
GlobeFlex Emerging Small Cap	6.98%	-	-	-	7.30% <sup>(8/13)</sup>
MSCI EM Small Cap	5.34%	9.89%	8.71%	8.46%	5.54% <sup>(8/13)</sup>

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	Returns for Periods Ended December 31, 2023					
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Net Performance - Private Equity</b>						
<b>Private Equity</b>	<b>\$6,860</b>	<b>100.00%</b>	<b>0.61%</b>	<b>6.59%</b>	<b>15.64%</b>	<b>14.93%</b>
Burgiss Private Equity Index (Qtr lag)	-	-	0.00%	0.03%	10.79%	10.52%
Global Equity + 3% (Qtr lag)(1)	-	-	(2.57%)	24.90%	12.22%	11.73%
Buyouts	3,743	54.57%	0.18%	7.61%	14.94%	14.80%
Burgiss Buyout Index (Qtr lag)	-	-	0.00%	0.07%	10.63%	9.54%
Special Situations	1,685	24.57%	2.03%	8.78%	21.38%	18.05%
Burgiss Special Situations Idx (Qtr lag)	-	-	0.01%	0.04%	5.22%	4.06%
Growth Equity	1,231	17.94%	0.23%	1.36%	15.73%	21.15%
Burgiss Venture Capital Index (Qtr lag)	-	-	(0.02%)	(0.08%)	14.51%	16.64%
Keystone Legacy (2)	200	2.92%	(0.92%)	1.83%	(2.03%)	(2.89%)

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(1) As of 01/01/2020 benchmark consists of 25% MSCI World ex US and 75% Russell 3000 + 3% with a 1 quarter lag.

(2) As of 09/30/2023, Keystone Legacy SPV consists of 42 non-core funds, prior performance is reflected in previous sub-asset classes.



## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception	
<b>Net Performance - Private Equity</b>						
<b>Private Equity</b>	<b>12.53%</b>	<b>11.24%</b>	<b>12.75%</b>	<b>12.09%</b>	<b>11.46%</b>	(1/86)
Burgiss Private Equity Index (Qtr lag)	11.85%	10.91%	12.91%	12.55%	16.25%	(1/86)
Global Equity + 3% (Qtr lag)(1)	14.15%	14.26%	12.90%	11.39%	14.35%	(1/86)
<b>Buyouts</b>	<b>13.60%</b>	<b>12.61%</b>	<b>14.86%</b>	<b>13.87%</b>	<b>13.46%</b>	(4/86)
Burgiss Buyout Index (Qtr lag)	11.42%	10.62%	13.60%	12.08%	18.52%	(4/86)
<b>Special Situations</b>	<b>12.50%</b>	<b>12.31%</b>	<b>13.91%</b>	<b>12.87%</b>	<b>13.19%</b>	(1/95)
Burgiss Special Situations Idx (Qtr lag)	5.97%	7.24%	8.40%	9.09%	9.57%	(1/95)
<b>Growth Equity</b>	<b>14.79%</b>	<b>11.20%</b>	<b>9.40%</b>	<b>8.07%</b>	<b>8.47%</b>	(1/86)
Burgiss Venture Capital Index (Qtr lag)	16.72%	13.54%	12.29%	13.00%	14.00%	(1/86)
Keystone Legacy (2)	-	-	-	-	(3.26%)	(7/18)

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## Investment Manager Returns

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Returns for Periods Ended December 31, 2023						
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Net Performance - Fixed Income</b>						
<b>Fixed Income (1)</b>	<b>\$6,473</b>	<b>100.00%</b>	<b>6.14%</b>	<b>5.57%</b>	<b>(2.80%)</b>	<b>1.25%</b>
Blmbg U.S. Agg Bond Index	-	-	6.82%	5.53%	(3.31%)	1.10%
<b>Core Fixed Income</b>	<b>\$4,623</b>	<b>71.43%</b>	<b>6.76%</b>	<b>5.76%</b>	<b>(2.86%)</b>	<b>1.44%</b>
Blmbg U.S. Agg Bond Index	-	-	6.82%	5.53%	(3.31%)	1.10%
PIMCO Core Bond Fund	546	8.43%	7.39%	6.80%	(2.78%)	1.67%
Blmbg Agg ex Treasury	-	-	7.64%	6.58%	(2.97%)	1.42%
Mellon Bond Index	4,078	63.00%	6.68%	5.62%	(3.35%)	1.05%
Blmbg U.S. Agg Bond Index (2)	-	-	6.82%	5.53%	(3.31%)	1.10%
<b>Opportunistic Fixed Income</b>	<b>\$882</b>	<b>13.62%</b>	<b>1.75%</b>	<b>7.62%</b>	<b>7.36%</b>	<b>7.13%</b>
BAAM Keystone (3)	882	13.62%	1.75%	7.62%	8.41%	7.75%
HFRI FOF Comp Index	-	-	3.43%	6.37%	2.26%	5.15%
<b>Nominal U.S. Treasuries</b>	<b>\$879</b>	<b>13.58%</b>	<b>8.53%</b>	<b>3.55%</b>	<b>(7.02%)</b>	<b>(0.58%)</b>
Blmbg US Treas Bell 10Y	-	-	6.87%	3.21%	(5.93%)	0.06%
Mellon Intermediate Treasury Index	377	5.83%	3.90%	4.30%	-	-
Blmbg Intmtd Treasury	-	-	3.99%	4.28%	(1.86%)	1.02%
Mellon Long Duration Index	502	7.76%	12.29%	3.46%	(11.57%)	-
Blmbg Long Treasury	-	-	12.70%	3.06%	(11.41%)	(1.24%)
<b>Legacy Fixed Income</b>	<b>\$88</b>	<b>1.36%</b>	<b>(2.71%)</b>	<b>(3.94%)</b>	<b>-</b>	<b>-</b>
Fidelity HY CMBS (4)	88	1.36%	(2.73%)	(4.14%)	(1.36%)	(0.39%)
Blmbg US CMBS Ex AAA Index (5)	-	-	5.71%	3.63%	(2.72%)	1.14%
SEI Str.Credit: HY Bank Loans (6)	0	0.00%	4.25%	15.77%	12.37%	8.25%
FTSE HY Corp (1 month lag)	-	-	2.08%	8.87%	1.57%	4.01%

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(1) Fixed Income included the new fixed income sub-composite from 03/01/2021 to 06/30/2022. On 07/01/2022, the sub-composites of the new fixed income structure was liquidated and the managers reorganized under Core Fixed Income, Opportunistic Fixed Income, Nominal US Treasuries and Legacy Fixed Income sub-composites.

(2) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

(3) Blackstone Keystone since inception returns were included in the Legacy Hedge Fund composite through 9/30/2017, included in the Multi-Strategy composite from 10/01/2017 through 12/31/2019, included in the Opportunistic Fixed composite from 01/01/2020 through 12/31/2020, included in the Private Credit from 01/01/2021 through 09/30/2021 and Opportunistic Fixed composite, thereafter.

(4) Fidelity was included in the Opportunistic Fixed composite prior to 03/01/2021, included in the High Yield under the new fixed income structure from 03/01/2021 through 06/30/2022, and Legacy Fixed Income Structure, thereafter.

(5) Fidelity's blended benchmark consists of FTSE High Yield Market Index prior to 12/31/2009 and Blmbg US CMBS Ex AAA Index, thereafter.

(6) SEI HY Bank Loans has a 1 month lag in valuation. On this chart, SEI's market value of \$15K has been rounded to \$0M

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	Returns for Periods Ended December 31, 2023				
	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Net Performance - Fixed Income</b>					
<b>Fixed Income (1)</b>	<b>1.87%</b>	<b>4.88%</b>	<b>3.97%</b>	<b>4.44%</b>	<b>7.52%</b> <sup>(1/81)</sup>
Blmbg U.S. Agg Bond Index	1.81%	2.68%	3.17%	3.85%	6.83% <sup>(1/81)</sup>
<b>Core Fixed Income</b>	<b>2.02%</b>	<b>3.79%</b>	<b>3.52%</b>	-	<b>3.86%</b> <sup>(1/02)</sup>
Blmbg U.S. Agg Bond Index	1.81%	2.68%	3.17%	3.85%	3.52% <sup>(1/02)</sup>
PIMCO Core Bond Fund	2.18%	-	-	-	1.72% <sup>(1/13)</sup>
Blmbg Agg ex Treasury	2.11%	3.17%	-	-	1.77% <sup>(1/13)</sup>
Mellon Bond Index	1.77%	2.58%	3.07%	3.75%	6.30% <sup>(4/84)</sup>
Blmbg U.S. Agg Bond Index (2)	1.81%	2.68%	3.17%	3.86%	-
<b>Opportunistic Fixed Income</b>	<b>4.86%</b>	-	-	-	<b>5.15%</b> <sup>(10/12)</sup>
BAAM Keystone (3)	6.06%	-	-	-	7.36% <sup>(7/12)</sup>
HFRI FOF Comp Index	3.26%	3.79%	3.32%	4.39%	3.93% <sup>(7/12)</sup>
<b>Nominal U.S. Treasuries</b>	<b>1.17%</b>	-	-	-	<b>0.82%</b> <sup>(9/11)</sup>
Blmbg US Treas Bell 10Y	1.34%	1.52%	2.96%	3.33%	1.08% <sup>(9/11)</sup>
Mellon Intermediate Treasury Index	-	-	-	-	(1.63%) <sup>(3/21)</sup>
Blmbg Intmtd Treasury	1.25%	1.53%	2.48%	3.17%	(1.59%) <sup>(3/21)</sup>
Mellon Long Duration Index	-	-	-	-	(11.57%) <sup>(1/21)</sup>
Blmbg Long Treasury	2.28%	2.28%	4.10%	4.57%	(11.41%) <sup>(1/21)</sup>
<b>Legacy Fixed Income</b>	-	-	-	-	<b>(3.76%)</b> <sup>(7/22)</sup>
Fidelity HY CMBS (4)	2.40%	8.20%	5.34%	6.52%	6.85% <sup>(4/97)</sup>
Blmbg US CMBS Ex AAA Index (5)	2.21%	7.29%	1.00%	2.94%	3.31% <sup>(4/97)</sup>
SEI Str.Credit: HY Bank Loans (6)	7.81%	16.95%	-	-	11.40% <sup>(5/08)</sup>
FTSE HY Corp (1 month lag)	4.05%	9.13%	6.23%	5.95%	6.32% <sup>(5/08)</sup>

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(2) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

(3) Blackstone Keystone since inception returns were included in the Legacy Hedge Fund composite through 9/30/2017, included in the Multi-Strategy composite from 10/01/2017 through 12/31/2019, included in the Opportunistic Fixed composite from 01/01/2020 through 12/31/2020, included in the Private Credit from 01/01/2021 through 09/30/2021 and Opportunistic Fixed composite, thereafter.

(4) Fidelity was included in the Opportunistic Fixed composite prior to 03/01/2021, included in the High Yield under the new fixed income structure from 03/01/2021 through 06/30/2022, and Legacy Fixed Income Structure, thereafter.

(5) Fidelity's blended benchmark consists of FTSE High Yield Market Index prior to 12/31/2009 and Blmbg US CMBS Ex AAA Index, thereafter.

(6) SEI HY Bank Loans has a 1 month lag in valuation.

## Investment Manager Returns

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Returns for Periods Ended December 31, 2023						
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Net Performance - Inflation Protection</b>						
<b>Inflation Protection (TIPS)</b>	<b>\$1,045</b>	<b>100.00%</b>	<b>4.92%</b>	<b>3.85%</b>	<b>(1.69%)</b>	<b>2.72%</b>
Blmbg U.S. TIPS Index	-	-	4.71%	3.90%	(1.00%)	3.15%
NISA Inv Adv TIPS	455	43.52%	4.46%	3.81%	(1.04%)	3.09%
Blmbg U.S. TIPS Index (1)	-	-	4.71%	3.90%	(1.00%)	3.15%
Brown Brothers TIPS	476	45.57%	4.56%	3.51%	(1.10%)	3.02%
Blmbg U.S. TIPS Index	-	-	4.71%	3.90%	(1.00%)	3.15%
New Century Global TIPS	114	10.91%	8.34%	5.43%	(5.89%)	0.66%
Blmbg Wrld Inflation Linked Unhdg	-	-	8.05%	5.47%	(5.27%)	0.69%

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### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Net Performance - Inflation Protection</b>					
<b>Inflation Protection (TIPS)</b>	<b>2.23%</b>	<b>2.84%</b>	<b>2.87%</b>	-	<b>2.89%</b> (2/03)
Blmbg U.S. TIPS Index	2.42%	3.48%	3.63%	4.79%	3.83% (2/03)
NISA Inv Adv TIPS	2.40%	2.82%	-	-	2.83% (4/07)
Blmbg U.S. TIPS Index (1)	2.42%	2.84%	3.09%	4.36%	2.85% (4/07)
Brown Brothers TIPS	2.41%	-	-	-	1.69% (2/12)
Blmbg U.S. TIPS Index	2.42%	3.48%	3.63%	4.79%	1.64% (2/12)
New Century Global TIPS	1.22%	-	-	-	1.04% (2/12)
Blmbg Wrld Inflation Linked Unhdg	1.06%	2.62%	3.11%	4.17%	0.83% (2/12)

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	Returns for Periods Ended December 31, 2023					
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Net Performance - Real Estate</b>						
<b>Real Estate</b>	<b>\$2,518</b>	<b>100.00%</b>	<b>(2.35%)</b>	<b>(11.91%)</b>	<b>3.31%</b>	<b>4.55%</b>
Real Estate Custom Bench (Qtr lag) (1)	-	-	(2.12%)	(13.08%)	6.23%	4.71%
CPI +3% (Qtr lag)	-	-	1.60%	6.70%	8.75%	7.05%
Core/Core Plus Real Estate Funds	1,179	46.81%	(0.96%)	(6.17%)	6.69%	5.22%
NCREIF ODCE Index (Qtr lag)	-	-	(2.12%)	(13.08%)	6.69%	5.22%
Value Add/Opportunistic SMA	437	17.37%	(9.95%)	(31.23%)	(7.88%)	(0.42%)
NCREIF ODCE Index (Qtr lag)	-	-	(2.12%)	(13.08%)	6.69%	5.22%
Value Add/Opportunistic Funds	771	30.62%	(2.45%)	(10.80%)	7.16%	5.05%
NCREIF ODCE Index (Qtr lag)	-	-	(2.12%)	(13.08%)	6.69%	5.22%
REITS	131	5.20%	16.29%	13.21%	7.15%	8.37%
FTSE NAREIT US Index	-	-	15.91%	13.27%	6.72%	6.44%

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(1) As of 07/01/2022, the benchmark consists of 100% NCREIF NFI-ODCE (Qtr lag). From 03/31/2019 to 07/01/2022, the benchmark consists of 90% NCREIF ODCE Index (Qtr lag) and 10% FTSE NAREIT Index (unlagged). Prior to 03/31/2019, benchmark history was provided by RVK.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Net Performance - Real Estate</b>					
<b>Real Estate</b>	<b>4.60%</b>	<b>3.03%</b>	<b>5.66%</b>	<b>6.30%</b>	<b>7.83%</b> (3/84)
Real Estate Custom Bench (Qtr lag) (1)	7.01%	4.97%	6.89%	7.26%	-
CPI +3% (Qtr lag)	5.77%	5.30%	5.57%	5.56%	5.83% (3/84)
Core/Core Plus Real Estate Funds	7.38%	6.12%	7.22%	7.50%	6.93% (9/86)
NCREIF ODCE Index (Qtr lag)	7.55%	4.71%	6.62%	6.94%	5.92% (9/86)
Value Add/Oppportunistic SMA	0.39%	(0.79%)	2.55%	3.80%	4.09% (6/88)
NCREIF ODCE Index (Qtr lag)	7.55%	4.71%	6.62%	6.94%	5.96% (6/88)
Value Add/Oppportunistic Funds	7.36%	4.10%	6.87%	7.58%	7.55% (3/84)
NCREIF ODCE Index (Qtr lag)	7.55%	4.71%	6.62%	6.94%	6.16% (3/84)
REITS	5.91%	6.76%	8.24%	8.92%	9.14% (4/96)
FTSE NAREIT US Index	6.89%	6.41%	8.13%	8.75%	9.44% (4/96)

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## Investment Manager Returns

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	Returns for Periods Ended December 31, 2023					
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Net Performance - DWDO Managers</b>						
Xponance Non-U.S. Small Cap	235	0.64%	9.01%	15.89%	0.06%	6.12%
MSCI ACWI ex US Small Cap	-	-	10.12%	15.66%	1.49%	7.89%
Leading Edge Emg Mkts Fund	232	0.64%	8.31%	8.09%	(6.02%)	3.65%
MSCI EM	-	-	7.86%	9.83%	(5.08%)	3.69%
GlobeFlex Emerging Small Cap	151	0.41%	5.90%	24.23%	10.83%	12.81%
MSCI EM Small Cap	-	-	8.95%	23.92%	6.45%	9.92%
New Century Global TIPS	114	0.31%	8.34%	5.43%	(5.89%)	0.66%
Blmbg Wrld Inflation Linked Unhdg	-	-	8.05%	5.47%	(5.27%)	0.69%

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## Investment Manager Returns

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### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Net Performance - DWDO Managers</b>					
Xponance Non-U.S. Small Cap	-	-	-	-	3.05% (10/18)
MSCI ACWI ex US Small Cap	4.88%	9.31%	7.45%	7.28%	4.36% (10/18)
Leading Edge Emg Mkts Fund	-	-	-	-	3.26% (11/18)
MSCI EM	2.66%	6.56%	6.83%	-	3.84% (11/18)
GlobeFlex Emerging Small Cap	6.98%	-	-	-	7.30% (8/13)
MSCI EM Small Cap	5.34%	9.89%	8.71%	8.46%	5.54% (8/13)
New Century Global TIPS	1.22%	-	-	-	1.04% (2/12)
Blmbg Wrld Inflation Linked Unhdg	1.06%	2.62%	3.11%	4.17%	0.83% (2/12)

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## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2023						
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Gross Performance</b>						
<b>Total Fund (2)</b>	<b>\$36,433</b>	<b>100.00%</b>	<b>6.88%</b>	<b>12.86%</b>	<b>5.82%</b>	<b>-</b>
Total Fund Estimated Gross History (2)	36,433	100.00%	6.88%	12.86%	5.82%	9.62%
Total Fund Custom Benchmark	-	-	7.28%	12.74%	5.34%	9.16%
Public Market Equiv Benchmark	-	-	7.04%	17.12%	4.73%	8.63%
60/40 Index	-	-	9.42%	15.03%	2.04%	7.55%
<b>U.S. Equity</b>	<b>\$11,668</b>	<b>32.03%</b>	<b>12.24%</b>	<b>25.59%</b>	<b>8.23%</b>	<b>14.95%</b>
Russell 3000 Index (1)	-	-	12.07%	25.96%	8.54%	15.16%
S&P 1500 Index	-	-	11.78%	25.47%	9.83%	15.39%
<b>Int'l Developed Mkts Equity</b>	<b>\$5,152</b>	<b>14.14%</b>	<b>10.65%</b>	<b>19.13%</b>	<b>5.07%</b>	<b>9.58%</b>
MSCI World ex US IMI	-	-	10.52%	17.18%	3.73%	8.24%
<b>Emerging Mkts Equity</b>	<b>\$1,662</b>	<b>4.56%</b>	<b>8.60%</b>	<b>11.87%</b>	<b>(4.58%)</b>	<b>5.76%</b>
MSCI EM IMI	-	-	8.02%	11.67%	(3.71%)	4.46%
<b>Private Equity (2)</b>	<b>\$6,860</b>	<b>18.83%</b>	<b>0.91%</b>	<b>8.95%</b>	<b>20.06%</b>	<b>-</b>
Burgiss Private Equity Index (Qtr lag)	-	-	0.00%	0.03%	10.79%	10.52%
Global Equity +3% (Qtr lag)	-	-	(2.57%)	24.90%	12.22%	11.73%
<b>Legacy Private Credit (3)</b>	<b>\$393</b>	<b>1.08%</b>	<b>3.49%</b>	<b>13.01%</b>	<b>16.05%</b>	<b>-</b>
S&P Levered Loan Index +1% (Qtr Lag)	-	-	3.68%	14.18%	7.15%	5.55%
<b>Fixed Income</b>	<b>\$6,473</b>	<b>17.77%</b>	<b>6.19%</b>	<b>5.73%</b>	<b>(2.65%)</b>	<b>1.43%</b>
Blmbg U.S. Agg Bond Index	-	-	6.82%	5.53%	(3.31%)	1.10%
<b>Inflation Protection (TIPS)</b>	<b>\$1,045</b>	<b>2.87%</b>	<b>4.94%</b>	<b>3.96%</b>	<b>(1.59%)</b>	<b>2.84%</b>
Blmbg U.S. TIPS Index	-	-	4.71%	3.90%	(1.00%)	3.15%
<b>Real Estate (2)</b>	<b>\$2,518</b>	<b>6.91%</b>	<b>(2.19%)</b>	<b>(11.25%)</b>	<b>4.85%</b>	<b>-</b>
Real Estate Custom Benchmark (Qtr lag)	-	-	(2.12%)	(13.08%)	6.23%	4.71%
CPI +3% (Qtr lag)	-	-	1.60%	6.70%	8.75%	7.05%
<b>Cash</b>	<b>\$644</b>	<b>1.77%</b>	<b>1.36%</b>	<b>5.14%</b>	<b>2.26%</b>	<b>1.95%</b>
3-month Treasury Bill	-	-	1.37%	5.01%	2.15%	1.88%

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(1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

(2) The Total Fund Estimated Gross History is calculated by BNY Mellon using a gross-up methodology through 12/31/2019. Starting 01/01/2020 gross performance is calculated for all asset classes and the Total Fund, including Private Equity, Legacy Private Credit, and Real Estate, for which gross history was not previously calculated.

(3) Legacy Private Credit performance is included in the total fund starting at the composite's true inception date, 07/01/2022. The history is calculated and shown for informational purposes.

## Investment Manager Returns

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### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Gross Performance</b>					
<b>Total Fund (2)</b>	-	-	-	-	<b>7.34%</b> (1/20)
Total Fund Estimated Gross History (2)	7.38%	8.46%	7.86%	7.33%	8.34% (1/96)
Total Fund Custom Benchmark	7.43%	8.90%	7.95%	6.98%	8.00% (1/96)
Public Market Equiv Benchmark	7.39%	8.98%	8.01%	7.03%	8.04% (1/96)
60/40 Index	5.59%	7.51%	6.16%	5.63%	6.22% (1/96)
<b>U.S. Equity</b>	<b>10.74%</b>	<b>13.45%</b>	<b>9.09%</b>	<b>7.58%</b>	<b>10.86%</b> (1/81)
Russell 3000 Index (1)	11.48%	13.84%	9.67%	7.74%	11.09% (1/81)
S&P 1500 Index	11.76%	13.91%	9.74%	7.80%	-
<b>Int'l Developed Mkts Equity</b>	<b>5.30%</b>	<b>8.52%</b>	<b>6.31%</b>	-	<b>6.63%</b> (1/02)
MSCI World ex US IMI	4.35%	7.20%	5.86%	4.92%	6.26% (1/02)
<b>Emerging Mkts Equity</b>	<b>3.95%</b>	<b>6.43%</b>	<b>5.60%</b>	-	<b>6.82%</b> (1/02)
MSCI EM IMI	3.00%	6.97%	7.11%	7.33%	8.22% (1/02)
<b>Private Equity (2)</b>	-	-	-	-	<b>20.95%</b> (1/20)
Burgiss Private Equity Index (Qtr lag)	11.85%	10.91%	12.91%	12.55%	11.37% (1/20)
Global Equity +3% (Qtr lag)	14.15%	14.26%	12.90%	11.39%	13.04% (1/20)
<b>Legacy Private Credit (3)</b>	-	-	-	-	<b>13.50%</b> (1/20)
S&P Levered Loan Index +1% (Qtr Lag)	-	-	-	-	5.87% (1/20)
<b>Fixed Income</b>	<b>2.09%</b>	<b>5.10%</b>	<b>4.20%</b>	<b>4.67%</b>	<b>6.81%</b> (1/85)
Blmbg U.S. Agg Bond Index	1.81%	2.68%	3.17%	3.85%	6.01% (1/85)
<b>Inflation Protection (TIPS)</b>	<b>2.35%</b>	<b>2.96%</b>	<b>2.99%</b>	-	<b>3.02%</b> (2/03)
Blmbg U.S. TIPS Index	2.42%	3.48%	3.63%	4.79%	3.83% (2/03)
<b>Real Estate (2)</b>	-	-	-	-	<b>4.39%</b> (1/20)
Real Estate Custom Benchmark (Qtr lag)	7.01%	4.97%	6.89%	7.26%	4.70% (1/20)
CPI +3% (Qtr lag)	5.77%	5.30%	5.57%	5.56%	7.64% (1/20)
<b>Cash</b>	<b>1.51%</b>	<b>1.12%</b>	<b>1.76%</b>	<b>2.20%</b>	<b>3.80%</b> (1/87)
3-month Treasury Bill	1.25%	0.87%	1.46%	1.90%	3.17% (1/87)

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(3) Legacy Private Credit performance is included in the total fund starting at the composite's true inception date, 07/01/2022. The history is calculated and shown for informational purposes.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	Returns for Periods Ended December 31, 2023					
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Gross Performance- Domestic Equity</b>						
<b>U.S. Equity</b>	<b>\$11,668</b>	<b>100.00%</b>	<b>12.24%</b>	<b>25.59%</b>	<b>8.23%</b>	<b>14.95%</b>
Russell 3000 Index(1)	-	-	12.07%	25.96%	8.54%	15.16%
S&P 1500 Index	-	-	11.78%	25.47%	9.83%	15.39%
MCM Russell 1000 Index	10,533	90.27%	11.97%	26.61%	9.17%	15.62%
Russell 1000 Index	-	-	11.96%	26.53%	8.97%	15.52%
S&P 500 Index	-	-	11.69%	26.29%	10.00%	15.69%
MCM Russell 2000 Core Index	368	3.16%	13.98%	17.05%	3.01%	10.32%
Russell 2000 Index	-	-	14.03%	16.93%	2.22%	9.97%
S&P 600 Index	-	-	15.12%	16.05%	7.28%	11.03%
MCM Russell 2000 Val Index	369	3.16%	15.25%	14.72%	8.07%	10.09%
Russell 2000 Value Index	-	-	15.26%	14.65%	7.94%	10.00%
S&P 600 Value Index	-	-	15.84%	14.89%	10.20%	11.31%
Emerald Asset Management	398	3.41%	15.02%	19.14%	(1.91%)	11.10%
Russell 2000 Growth Index	-	-	12.75%	18.66%	(3.50%)	9.22%
S&P 600 Growth Index	-	-	14.28%	17.10%	4.26%	10.42%

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### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Gross Performance- Domestic Equity</b>					
<b>U.S. Equity</b>	<b>10.74%</b>	<b>13.45%</b>	<b>9.09%</b>	<b>7.58%</b>	<b>10.86%</b> <sup>(1/81)</sup>
Russell 3000 Index(1)	11.48%	13.84%	9.67%	7.74%	11.09% <sup>(1/81)</sup>
S&P 1500 Index	11.76%	13.91%	9.74%	7.80%	-
MCM Russell 1000 Index	11.88%	-	-	-	13.86% <sup>(1/12)</sup>
Russell 1000 Index	11.80%	14.02%	9.78%	7.72%	13.83% <sup>(1/12)</sup>
S&P 500 Index	12.03%	13.97%	9.69%	7.56%	13.93% <sup>(1/12)</sup>
MCM Russell 2000 Core Index	-	-	-	-	7.90% <sup>(12/16)</sup>
Russell 2000 Index	7.16%	11.30%	8.11%	7.91%	7.66% <sup>(12/16)</sup>
S&P 600 Index	8.66%	12.74%	9.65%	9.65%	8.72% <sup>(12/16)</sup>
MCM Russell 2000 Val Index	-	-	-	-	6.68% <sup>(12/16)</sup>
Russell 2000 Value Index	6.76%	10.27%	7.68%	8.58%	6.63% <sup>(12/16)</sup>
S&P 600 Value Index	8.17%	12.02%	9.11%	9.49%	7.94% <sup>(12/16)</sup>
Emerald Asset Management	-	-	-	-	9.81% <sup>(12/16)</sup>
Russell 2000 Growth Index	7.16%	12.07%	8.28%	6.75%	8.18% <sup>(12/16)</sup>
S&P 600 Growth Index	8.96%	13.36%	10.09%	9.40%	9.25% <sup>(12/16)</sup>

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	Returns for Periods Ended December 31, 2023					
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Gross Performance - International Equity</b>						
<b>Int'l Developed Mkts Equity</b>	<b>\$5,152</b>	<b>100.00%</b>	<b>10.65%</b>	<b>19.13%</b>	<b>5.07%</b>	<b>9.58%</b>
MSCI World ex US IMI	-	-	10.52%	17.18%	3.73%	8.24%
Walter Scott & Partners (1)	762	14.79%	11.84%	23.39%	6.45%	14.11%
MSCI World	-	-	11.42%	23.79%	7.27%	12.80%
BlackRock MSCI World Ex US Index	4,000	77.64%	10.48%	18.41%	4.89%	8.93%
MSCI World ex US	-	-	10.51%	17.94%	4.42%	8.45%
Xponance Non-U.S. Small Cap	235	4.55%	9.20%	16.67%	0.74%	6.77%
MSCI ACWI ex US Small Cap	-	-	10.12%	15.66%	1.49%	7.89%
Harris Assoc Int'l SCV	152	2.94%	11.50%	21.04%	7.85%	12.75%
MSCI World ex US Sm Cap	-	-	10.60%	12.62%	(0.20%)	7.05%
MSCI World ex US Sm Value	-	-	10.04%	14.70%	3.77%	7.08%

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(1) Walter Scott since inception returns were contained in the Global Mandates composite prior to 12/31/2019.

## Investment Manager Returns

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### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception	
<b>Gross Performance - International Equity</b>						
<b>Int'l Developed Mkts Equity</b>	<b>5.30%</b>	<b>8.52%</b>	<b>6.31%</b>	-	<b>6.63%</b>	(1/02)
MSCI World ex US IMI	4.35%	7.20%	5.86%	4.92%	6.26%	(1/02)
Walter Scott & Partners (1)	10.92%	12.77%	-	-	10.01%	(10/06)
MSCI World	8.60%	10.70%	7.79%	6.02%	7.01%	(10/06)
BlackRock MSCI World Ex US Index	-	-	-	-	5.94%	(6/17)
MSCI World ex US	4.32%	6.97%	5.69%	4.62%	5.47%	(6/17)
Xponance Non-U.S. Small Cap	-	-	-	-	3.65%	(10/18)
MSCI ACWI ex US Small Cap	4.88%	9.31%	7.45%	7.28%	4.36%	(10/18)
Harris Assoc Int'l SCV	6.40%	12.23%	9.92%	-	11.04%	(7/03)
MSCI World ex US Sm Cap	4.63%	9.04%	6.91%	-	8.23%	(7/03)
MSCI World ex US Sm Value	4.20%	8.76%	7.17%	7.87%	8.41%	(7/03)

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	Returns for Periods Ended December 31, 2023					
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Gross Performance - Emerging Mkts Equity</b>						
<b>Emerging Mkts Equity</b>	<b>\$1,662</b>	<b>100.00%</b>	<b>8.60%</b>	<b>11.87%</b>	<b>(4.58%)</b>	<b>5.76%</b>
MSCI EM IMI	-	-	8.02%	11.67%	(3.71%)	4.46%
Macquarie Emg Mkts Equity	358	21.53%	12.28%	16.72%	(4.41%)	5.22%
MSCI EM	-	-	7.86%	9.83%	(5.08%)	3.69%
Martin Currie Emg Mkts Equity	358	21.55%	7.95%	6.98%	(8.45%)	4.71%
MSCI EM	-	-	7.86%	9.83%	(5.08%)	3.69%
BlackRock Emg Mkts Index	563	33.86%	7.48%	9.31%	(5.31%)	3.45%
MSCI EM	-	-	7.86%	9.83%	(5.08%)	3.69%
Leading Edge Emg Mkts Fund	232	13.97%	8.53%	8.96%	(5.27%)	4.39%
MSCI EM	-	-	7.86%	9.83%	(5.08%)	3.69%
GlobeFlex Emerging Small Cap	151	9.09%	6.08%	25.01%	11.54%	13.56%
MSCI EM Small Cap	-	-	8.95%	23.92%	6.45%	9.92%

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## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Gross Performance - Emerging Mkts Equity</b>					
<b>Emerging Mkts Equity</b>	<b>3.95%</b>	<b>6.43%</b>	<b>5.60%</b>	-	<b>6.82%</b> <sup>(1/02)</sup>
MSCI EM IMI	3.00%	6.97%	7.11%	7.33%	8.22% <sup>(1/02)</sup>
Macquarie Emg Mkts Equity	3.86%	-	-	-	4.19% <sup>(5/13)</sup>
MSCI EM	2.66%	6.56%	6.83%	-	2.33% <sup>(5/13)</sup>
Martin Currie Emg Mkts Equity	3.82%	-	-	-	3.82% <sup>(1/14)</sup>
MSCI EM	2.66%	6.56%	6.83%	-	2.66% <sup>(1/14)</sup>
BlackRock Emg Mkts Index	-	-	-	-	2.46% <sup>(7/17)</sup>
MSCI EM	2.66%	6.56%	6.83%	-	2.67% <sup>(7/17)</sup>
Leading Edge Emg Mkts Fund	-	-	-	-	3.97% <sup>(11/18)</sup>
MSCI EM	2.66%	6.56%	6.83%	-	3.84% <sup>(11/18)</sup>
GlobeFlex Emerging Small Cap	7.66%	-	-	-	7.96% <sup>(8/13)</sup>
MSCI EM Small Cap	5.34%	9.89%	8.71%	8.46%	5.54% <sup>(8/13)</sup>

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## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	Returns for Periods Ended December 31, 2023					
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Since Inception
<b>Gross Performance - Private Equity</b>						
<b>Private Equity (1)</b>	<b>\$6,860</b>	<b>100.00%</b>	<b>0.91%</b>	<b>8.95%</b>	<b>20.06%</b>	<b>20.95%</b> (1/20)
Burgiss All Private Equity (Qtr Lag)	-	-	0.00%	0.03%	10.79%	11.37% (1/20)
Global Equity +3% (Qtr lag) (2)	-	-	(2.57%)	24.90%	12.22%	13.04% (1/20)
Buyouts	3,743	54.57%	0.43%	9.89%	19.44%	21.36% (1/20)
Burgiss Buyout Index (Qtr Lag)	-	-	0.00%	0.07%	10.63%	10.58% (1/20)
Special Situations	1,685	24.57%	2.56%	11.44%	26.79%	22.63% (1/20)
Burgiss Special Sits Index (Qtr Lag)	-	-	0.01%	0.04%	5.22%	4.49% (1/20)
Growth Equity	1,231	17.94%	0.41%	3.87%	19.93%	25.62% (1/20)
Burgiss Venture Capital Idx (Qtr Lag)	-	-	(0.02%)	(0.08%)	14.51%	17.12% (1/20)
Keystone Legacy (3)	200	2.92%	(0.76%)	2.49%	1.73%	0.21% (1/20)

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(1) Starting 01/01/2020 gross performance is calculated for all asset classes and the Total Fund, including Private Equity, Private Credit, and Real Estate, for which gross history was not previously calculated.

(2) As of 01/01/2020 benchmark is 25% MSCI World ex US Index and 75% Russell 3000 + 3% with a 1 Qtr lag.

(3) As of 09/30/2023, Keystone Legacy SPV consists of 42 non-core funds, prior performance reflected in previous sub-asset classes

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2023						
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Gross Performance - Fixed Income</b>						
<b>Fixed Income (1)</b>	<b>\$6,473</b>	<b>100.00%</b>	<b>6.19%</b>	<b>5.73%</b>	<b>(2.65%)</b>	<b>1.43%</b>
Blmbg U.S. Agg Bond Index	-	-	6.82%	5.53%	(3.31%)	1.10%
<b>Core Fixed Income</b>	<b>\$4,624</b>	<b>71.43%</b>	<b>6.77%</b>	<b>5.78%</b>	<b>(2.82%)</b>	<b>1.50%</b>
Blmbg U.S. Agg Bond Index	-	-	6.82%	5.53%	(3.31%)	1.10%
PIMCO Core Bond Fund	546	8.44%	7.43%	6.92%	(2.56%)	1.92%
Blmbg Agg ex Treasury	-	-	7.64%	6.58%	(2.97%)	1.42%
Mellon Bond Index	4,078	62.99%	6.68%	5.63%	(3.34%)	1.07%
Blmbg U.S. Agg Bond Index (2)	-	-	6.82%	5.53%	(3.31%)	1.10%
<b>Opportunistic Fixed Income</b>	<b>\$882</b>	<b>13.62%</b>	<b>2.00%</b>	<b>8.58%</b>	<b>8.27%</b>	<b>7.92%</b>
BAAM Keystone (3)	882	13.62%	2.00%	8.58%	9.33%	8.53%
HFRI FOF Comp Index	-	-	3.43%	6.37%	2.26%	5.15%
<b>Nominal U.S. Treasuries</b>	<b>\$879</b>	<b>13.58%</b>	<b>8.53%</b>	<b>3.57%</b>	<b>(6.89%)</b>	<b>(0.45%)</b>
Blmbg US Treas Bell 10Y	-	-	6.87%	3.21%	(5.93%)	0.06%
Mellon Intermediate Treasury Index	377	5.83%	3.91%	4.31%	-	-
Blmbg Intrndt Treasury	-	-	3.99%	4.28%	(1.86%)	1.02%
Mellon Long Duration Index	502	7.76%	12.29%	3.47%	(11.56%)	-
Blmbg Long Treasury	-	-	12.70%	3.06%	(11.41%)	(1.24%)
<b>Legacy Fixed Income</b>	<b>\$88</b>	<b>1.36%</b>	<b>(2.53%)</b>	<b>(3.27%)</b>	<b>-</b>	<b>-</b>
Fidelity HY CMBS (4)	88	1.36%	(2.55%)	(3.48%)	(0.76%)	0.29%
Blmbg US CMBS Ex AAA Index (5)	-	-	5.71%	3.63%	(2.72%)	1.14%
SEI Str. Credit: HY Bank Loans	0	0.00%	5.00%	18.05%	14.07%	9.69%
FTSE HY Corp (1 month lag)	-	-	2.08%	8.87%	1.57%	4.01%

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(1) Fixed Income included the new fixed income sub-composite from 03/01/2021 to 06/30/2022. On 07/01/2022, the sub-composites of the new fixed income structure was liquidated and the managers reorganized under Core Fixed Income, Opportunistic Fixed Income, Nominal US Treasuries and Legacy Fixed Income sub-composites.

(2) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

(3) Blackstone Keystone since inception returns were included in the Legacy Hedge Fund composite through 9/30/2017, included in the Multi-Strategy composite from 10/01/2017 through 12/31/2019, included in the Opportunistic Fixed composite from 01/01/2020 through 12/31/2021, included in the Private Credit from 01/01/2021 through 09/30/2021 and Opportunistic Fixed composite, thereafter.

(4) Fidelity was included in the Opportunistic Fixed composite prior to 03/01/2021, included in the High Yield under the new fixed income structure from 03/01/2021 through 06/30/2022, and Legacy Fixed Income Structure, thereafter.

(5) Fidelity's blended benchmark consists of FTSE High Yield Market Index prior to 12/31/2009 and Blmbg US CMBS Ex AAA Index, thereafter.

(6) SEI HY Bank Loans has a 1 month lag in valuation. On this chart, SEI's market value of \$15K has been rounded to \$0M

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Gross Performance - Fixed Income</b>					
<b>Fixed Income (1)</b>	<b>2.09%</b>	<b>5.10%</b>	<b>4.20%</b>	<b>4.67%</b>	<b>6.81%</b> (1/85)
Blmbg U.S. Agg Bond Index	1.81%	2.68%	3.17%	3.85%	6.01% (1/85)
<b>Core Fixed Income</b>	<b>2.11%</b>	<b>3.93%</b>	<b>3.66%</b>	-	<b>4.01%</b> (1/02)
Blmbg U.S. Agg Bond Index	1.81%	2.68%	3.17%	3.85%	3.52% (1/02)
PIMCO Core Bond Fund	2.40%	-	-	-	1.93% (1/13)
Blmbg Agg ex Treasury	2.11%	3.17%	-	-	1.77% (1/13)
Mellon Bond Index	1.79%	2.62%	3.11%	3.80%	4.44% (10/93)
Blmbg U.S. Agg Bond Index (2)	1.81%	2.68%	3.17%	3.86%	4.49% (10/93)
<b>Opportunistic Fixed Income</b>	<b>5.58%</b>	-	-	-	<b>5.88%</b> (10/12)
BAAM Keystone (3)	6.44%	-	-	-	7.69% (7/12)
HFRI FOF Comp Index	3.26%	3.79%	3.32%	4.39%	3.93% (7/12)
<b>Nominal U.S. Treasuries</b>	<b>1.28%</b>	-	-	-	<b>0.92%</b> (9/11)
Blmbg US Treas Bell 10Y	1.34%	1.52%	2.96%	3.33%	1.08% (9/11)
Mellon Intermediate Treasury Index	-	-	-	-	(1.62%) (3/21)
Blmbg Intrndt Treasury	1.25%	1.53%	2.48%	3.17%	(1.59%) (3/21)
Mellon Long Duration Index	-	-	-	-	(11.56%) (1/21)
Blmbg Long Treasury	2.28%	2.28%	4.10%	4.57%	(11.41%) (1/21)
<b>Legacy Fixed Income</b>	-	-	-	-	<b>(3.12%)</b> (7/22)
Fidelity HY CMBS (4)	3.06%	8.90%	6.04%	7.20%	7.52% (4/97)
Blmbg US CMBS Ex AAA Index (5)	2.21%	7.29%	1.00%	2.94%	3.31% (4/97)
SEI Str. Credit: HY Bank Loans (6)	9.01%	18.20%	-	-	12.57% (5/08)
FTSE HY Corp (1 month lag)	4.05%	9.13%	6.23%	5.95%	6.32% (5/08)

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(2) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

(3) Blackstone Keystone since inception returns were included in the Legacy Hedge Fund composite through 9/30/2017, included in the Multi-Strategy composite from 10/01/2017 through 12/31/2019, included in the Opportunistic Fixed composite from 01/01/2020 through 12/31/2021, included in the Private Credit from 01/01/2021 through 09/30/2021 and Opportunistic Fixed composite, thereafter.

(4) Fidelity was included in the Opportunistic Fixed composite prior to 03/01/2021, included in the High Yield under the new fixed income structure from 03/01/2021 through 06/30/2022, and Legacy Fixed Income Structure, thereafter.

(5) Fidelity's blended benchmark consists of FTSE High Yield Market Index prior to 12/31/2009 and Blmbg US CMBS Ex AAA Index, thereafter.

(6) SEI HY Bank Loans has a 1 month lag in valuation.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2023						
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Gross Performance - Inflation Protection</b>						
<b>Inflation Protection (TIPS)</b>	<b>\$1,045</b>	<b>100.00%</b>	<b>4.94%</b>	<b>3.96%</b>	<b>(1.59%)</b>	<b>2.84%</b>
Blmbg U.S. TIPS Index	-	-	4.71%	3.90%	(1.00%)	3.15%
NISA Inv Adv TIPS	455	43.52%	4.48%	3.92%	(0.94%)	3.20%
Blmbg U.S. TIPS Index (1)	-	-	4.71%	3.90%	(1.00%)	3.15%
Brown Brothers TIPS	476	45.57%	4.58%	3.60%	(1.02%)	3.12%
Blmbg U.S. TIPS Index	-	-	4.71%	3.90%	(1.00%)	3.15%
New Century Global TIPS	114	10.91%	8.40%	5.68%	(5.66%)	0.90%
Blmbg Wrld Inflation Linked Unhdg	-	-	8.05%	5.47%	(5.27%)	0.69%

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## Investment Manager Returns

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### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Gross Performance - Inflation Protection</b>					
<b>Inflation Protection (TIPS)</b>	<b>2.35%</b>	<b>2.96%</b>	<b>2.99%</b>	-	<b>3.02%</b> (2/03)
Blmbg U.S. TIPS Index	2.42%	3.48%	3.63%	4.79%	3.83% (2/03)
NISA Inv Adv TIPS	2.50%	2.93%	-	-	2.93% (4/07)
Blmbg U.S. TIPS Index (1)	2.42%	2.84%	3.09%	4.36%	2.85% (4/07)
Brown Brothers TIPS	2.52%	-	-	-	1.81% (2/12)
Blmbg U.S. TIPS Index	2.42%	3.48%	3.63%	4.79%	1.64% (2/12)
New Century Global TIPS	1.47%	-	-	-	1.28% (2/12)
Blmbg Wrld Inflation Linked Unhdg	1.06%	2.62%	3.11%	4.17%	0.83% (2/12)

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(1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2023							
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Since Inception	
<b>Gross Performance - Real Estate</b>							
<b>Real Estate (1)</b>	<b>\$2,518</b>	<b>100.00%</b>	<b>(2.19%)</b>	<b>(11.25%)</b>	<b>4.85%</b>	<b>4.39%</b>	(1/20)
Real Estate Custom Bench (Qtr lag) (2)	-	-	(2.12%)	(13.08%)	6.23%	4.70%	(1/20)
CPI + 3% (Qtr lag)	-	-	1.60%	6.70%	8.75%	7.64%	(1/20)
Core/Core Plus Real Estate Funds	1,179	46.81%	(1.12%)	(6.37%)	7.59%	6.24%	(1/20)
NCREIF ODCE Index (Qtr lag)	-	-	(2.12%)	(13.08%)	6.69%	5.21%	(1/20)
Value Add/Oppportunistic SMA	437	17.37%	(9.15%)	(30.04%)	(6.46%)	(2.66%)	(1/20)
NCREIF ODCE Index (Qtr lag)	-	-	(2.12%)	(13.08%)	6.69%	5.21%	(1/20)
Value Add/Oppportunistic Funds	771	30.61%	(2.24%)	(9.28%)	10.66%	7.99%	(1/20)
NCREIF ODCE Index (Qtr lag)	-	-	(2.12%)	(13.08%)	6.69%	5.21%	(1/20)
REITS	131	5.21%	16.42%	13.68%	7.55%	4.61%	(1/20)
FTSE NAREIT US Index	-	-	15.91%	13.27%	6.72%	2.38%	(1/20)

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(1) Starting 01/01/2020 gross performance is calculated for all asset classes and the Total Fund, including Private Equity, Private Credit, and Real Estate, for which gross history was not previously calculated.

(2) As of 03/31/2019 benchmark consists of 90% NCREIF ODCE Index (Qtr lag) and 10% FTSE NAREIT Index (unlagged). Prior to 03/31/2019, benchmark history was provided by RVK.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	Returns for Periods Ended December 31, 2023					
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last 3 Years	Last 5 Years
<b>Gross Performance - DWDO Managers</b>						
Xponance Non-U.S. Small Cap	235	0.64%	9.20%	16.67%	0.74%	6.77%
MSCI ACWI ex US Small Cap	-	-	10.12%	15.66%	1.49%	7.89%
Leading Edge Emg Mkts Fund	232	0.64%	8.53%	8.96%	(5.27%)	4.39%
MSCI EM	-	-	7.86%	9.83%	(5.08%)	3.69%
GlobeFlex Emerging Small Cap	151	0.41%	6.08%	25.01%	11.54%	13.56%
MSCI EM Small Cap	-	-	8.95%	23.92%	6.45%	9.92%
New Century Global TIPS	114	0.31%	8.40%	5.68%	(5.66%)	0.90%
Blmbg Wrld Inflation Linked Unhdg	-	-	8.05%	5.47%	(5.27%)	0.69%

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## Investment Manager Returns

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### Returns for Periods Ended December 31, 2023

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
<b>Gross Performance - DWDO Managers</b>					
Xponance Non-U.S. Small Cap	-	-	-	-	3.65% (10/18)
MSCI ACWI ex US Small Cap	4.88%	9.31%	7.45%	7.28%	4.36% (10/18)
Leading Edge Emg Mkts Fund	-	-	-	-	3.97% (11/18)
MSCI EM	2.66%	6.56%	6.83%	-	3.84% (11/18)
GlobeFlex Emerging Small Cap	7.66%	-	-	-	7.96% (8/13)
MSCI EM Small Cap	5.34%	9.89%	8.71%	8.46%	5.54% (8/13)
New Century Global TIPS	1.47%	-	-	-	1.28% (2/12)
Blmbg Wrld Inflation Linked Unhdg	1.06%	2.62%	3.11%	4.17%	0.83% (2/12)

\* All returns on this report are shown with 2- decimal precision. This may differ from the decimal precision shown in BNY Mellon reports.

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## Benchmark Definitions

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### Total Fund Benchmark Definition:

- The Total Fund Custom Benchmark returns were provided by RVK prior to 12/31/2018.
- Starting 01/01/2020, benchmark consists of: 26% Bloomberg U.S. Agg Bond Index, 14% SERS Private Equity Composite, 25% Russell 3000 Index, 13% MSCI World ex US IMI Index, 8% Real Estate Custom Benchmark, 4% S&P/LSTA Leveraged Loan Index + 1% (Qtr lag), 4% MSCI Emerging Markets IMI Index, 4% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.
- Starting 07/01/2021, benchmark consists of: 26% Bloomberg U.S. Agg Bond Index, 12% SERS Private Equity Composite, 27% Russell 3000 Index, 13% MSCI World ex US IMI Index, 8% Real Estate Custom Benchmark, 4% S&P/LSTA Leveraged Loan Index + 1% (Qtr lag), 4% MSCI Emerging Markets IMI Index, 4% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.
- Starting 10/01/2021, benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 12% SERS Private Equity Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% Real Estate Custom Benchmark, 4% S&P/LSTA Leveraged Loan Index + 1% (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.
- Starting 07/01/2022, benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.

### Public Market Equivalent Benchmark Definition:

- The Public Market Equivalent Benchmark returns provided by RVK prior to 12/31/2018.
- As of 01/01/2020, benchmark consists of: 26% Bloomberg U.S. Agg Bond Index, 25% Russell 3000, 13% MSCI World ex US Index, 10.5% Russell 3000+ 3% (Qtr lag), 8% CPI+3% (Qtr Lag), 4% S&P/LSTA Levered Loan Index +1% (Qtr lag), 4% Bloomberg US TIPS Index, 4% MSCI Emerging Markets Index, 3.5% MSCI World ex US +3% (Qtr lag), 2% ICE BofAML 3 Mo US T-Bill Index.
- Starting 07/01/2021, benchmark consists of 26% Bloomberg U.S. Agg Bond Index, 27% Russell 3000, 13% MSCI World IMI ex US, 9% Russell 3000+ 3% (Qtr lag), 8% CPI+3% (Qtr lag), 4% S&P/LSTA Lev. + 1% (Qtr Lag), 4% US TIPS Index, 4% MSCI EM IMI Index, 3% MSCI World ex US +3% (Qtr lag), 2% ICE BofAML 3 Mo US T-Bill Index.
- Starting 10/01/2021, benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 31% Russell 3000, 14% MSCI World ex US IMI Index, 9% Russell 3000+ 3% (Qtr lag), 7% CPI+3% (Qtr Lag), 4% S&P/LSTA Levered Loan Index +1% (Qtr lag), 3% Bloomberg US TIPS Index, 5% MSCI EM IMI Index, 3% MSCI World ex US +3% (Qtr lag), 2% ICE BofAML 3 Mo US T-Bill Index.
- Starting 07/01/2021, benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 31% Russell 3000, 14% MSCI World ex US IMI Index, 12% Russell 3000+ 3% (Qtr lag), 7% CPI+3% (Qtr Lag), 3% Bloomberg US TIPS Index, 5% MSCI EM IMI Index, 4% MSCI World ex US +3% (Qtr lag), 2% ICE BofAML 3 Mo US T-Bill Index.

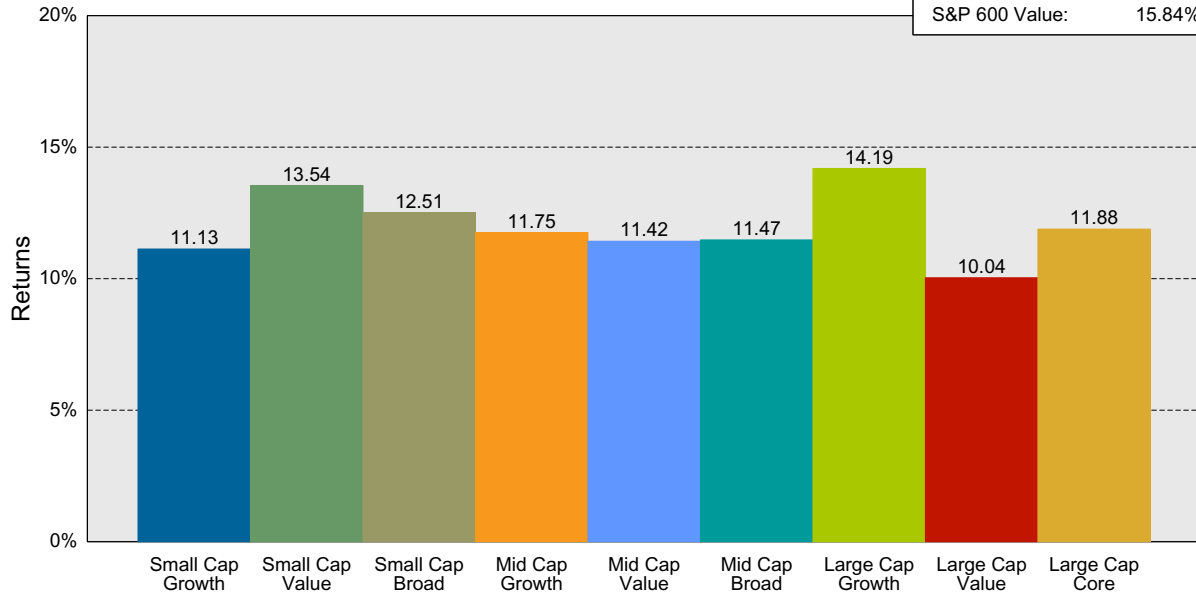


## Domestic Equity Active Management Overview

The S&P 500 Index approached a record high as the year closed. Of note, 2023 was the first year since 2012 that the S&P failed to reach a high-water mark. That said, the index was up an impressive 11.7% in 4Q and 26.3% for the year. The tech sector was the clear winner for the quarter and the year (+17.2%; +57.8%) while Energy (-6.9%; -1.3%) was the only sector to register both a 4Q and 2023 decline. Small caps (R2000: +14.0%; R1000: +12.0%) outperformed large caps for the quarter but lagged for the year (R2000: +16.9%; R1000: +26.5%). Growth outperformed value in 4Q (R1000 Growth: +14.2%; R1000 Value: +9.5%) and even more substantially for the year (R1000 Growth: +42.7%; R1000 Value: +11.5%). Index concentration continued to have a notable impact on returns in 4Q. The "Magnificent Seven," which comprise over 25% of the S&P 500, accounted for 76% of the 2023 return for the index. The index would have been up only about 10% for the year without these stocks, and the equal-weighted S&P 500 returned 11.9% in 4Q and 13.9% in 2023

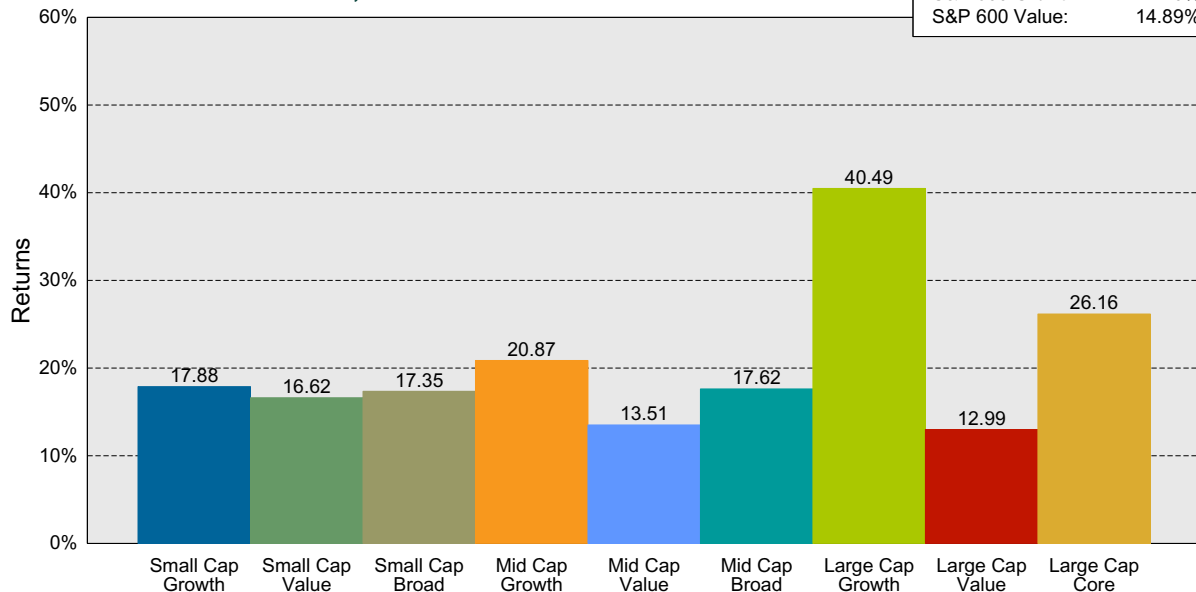
S&P 500:	11.69%
S&P 500 Growth:	10.09%
S&P 500 Value:	13.63%
S&P Mid Cap:	11.67%
S&P 600:	15.12%
S&P 600 Growth:	14.28%
S&P 600 Value:	15.84%

### Separate Account Style Group Median Returns for Quarter Ended December 31, 2023



S&P 500:	26.29%
S&P 500 Growth:	30.03%
S&P 500 Value:	22.23%
S&P Mid Cap:	16.44%
S&P 600:	16.05%
S&P 600 Growth:	17.10%
S&P 600 Value:	14.89%

### Separate Account Style Group Median Returns for One Year Ended December 31, 2023



# U.S. Equity Period Ended December 31, 2023

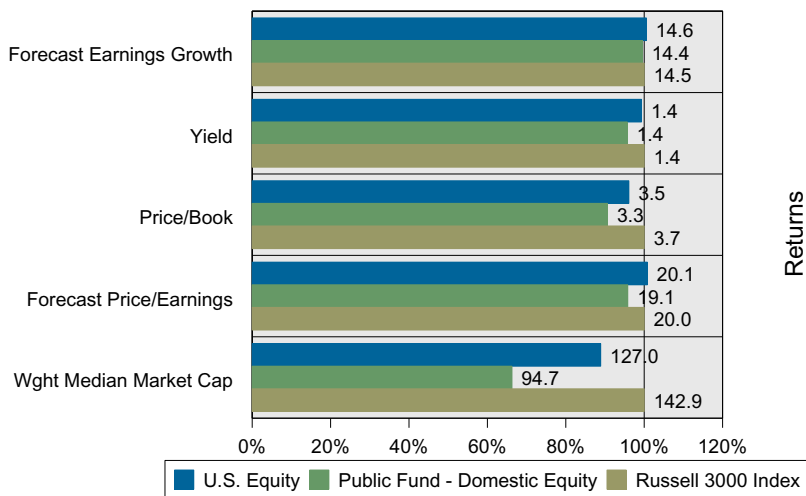
## Quarterly Summary and Highlights

- U.S. Equity's portfolio posted a 12.24% return for the quarter placing it in the 25 percentile of the Public Fund - Domestic Equity group for the quarter and in the 20 percentile for the last year.
- U.S. Equity's portfolio outperformed the Russell 3000 Index by 0.16% for the quarter and underperformed the Russell 3000 Index for the year by 0.37%.

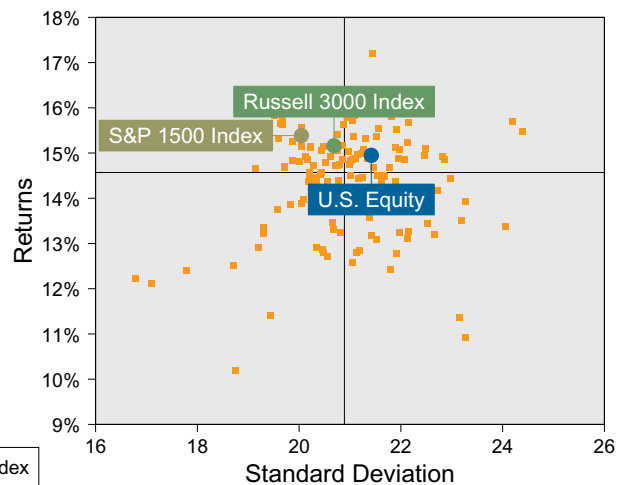
## Performance vs Public Fund - Domestic Equity (Gross)



## Portfolio Characteristics as a Percentage of the Russell 3000 Index



## Public Fund - Domestic Equity (Gross) Annualized Five Year Risk vs Return

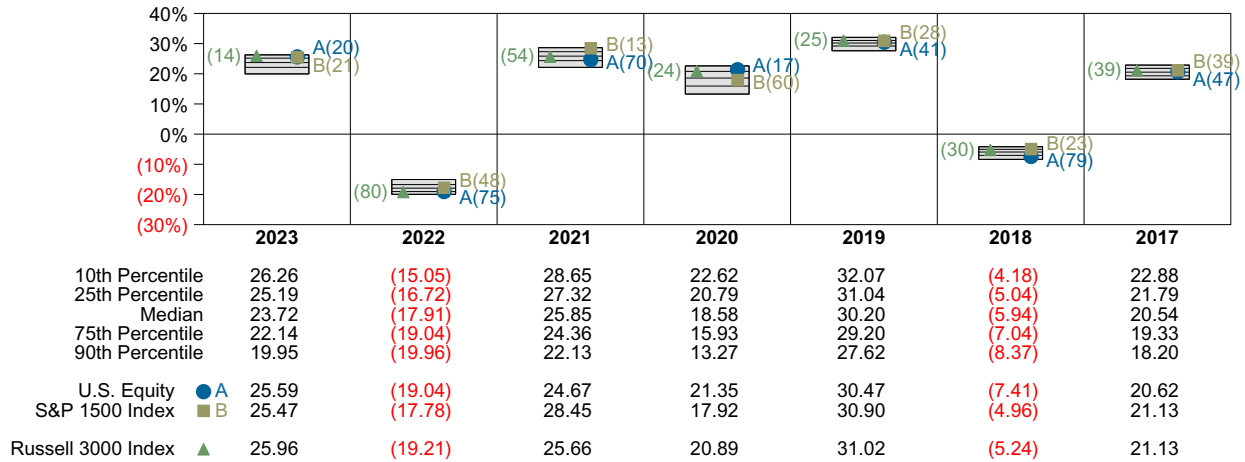


# U.S. Equity Return Analysis Summary

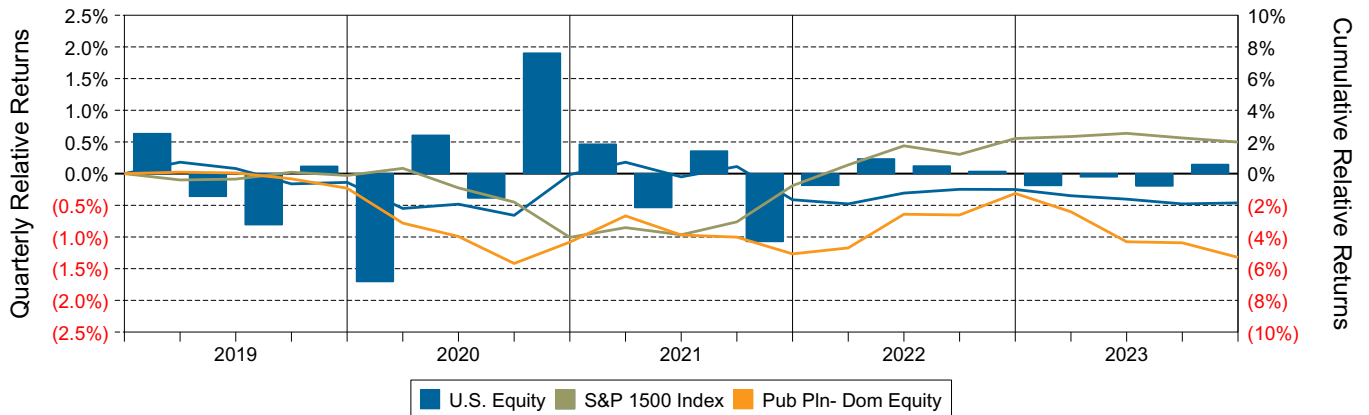
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

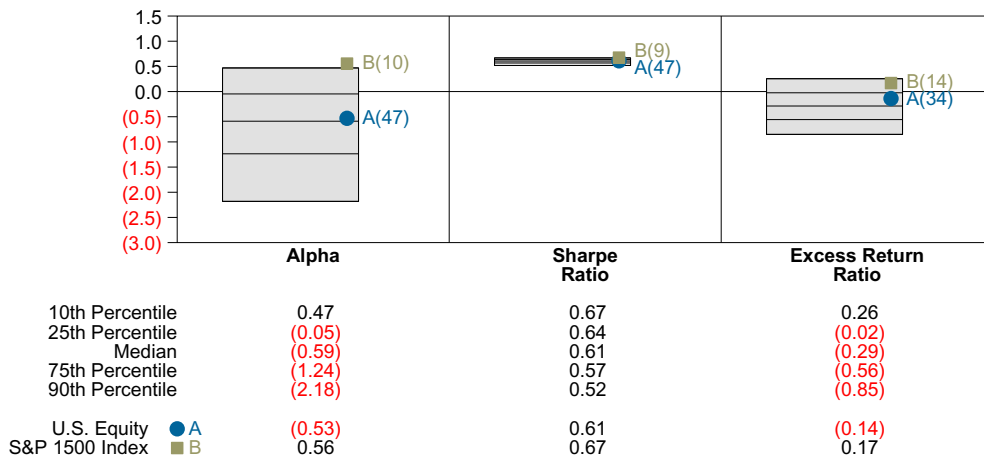
### Performance vs Public Fund - Domestic Equity (Gross)



### Cumulative and Quarterly Relative Returns vs Russell 3000 Index



### Risk Adjusted Return Measures vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended December 31, 2023

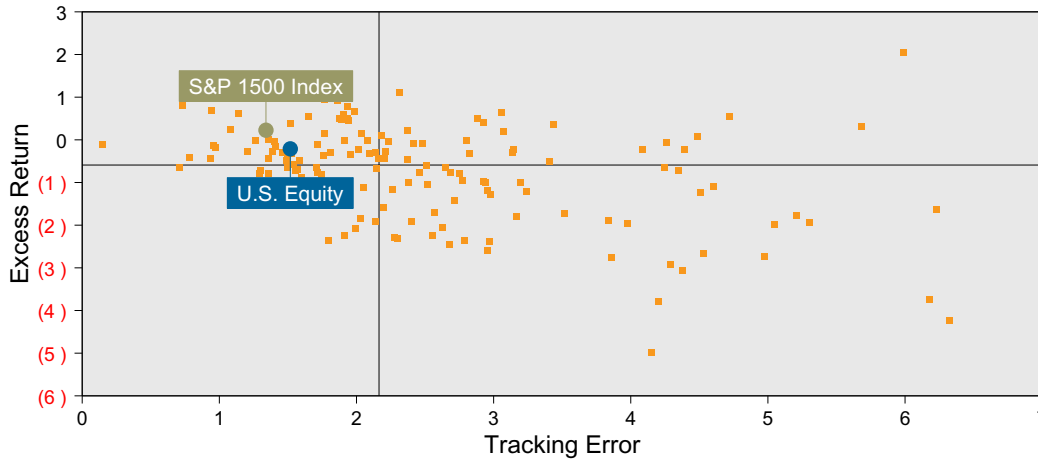


# U.S. Equity Risk Analysis Summary

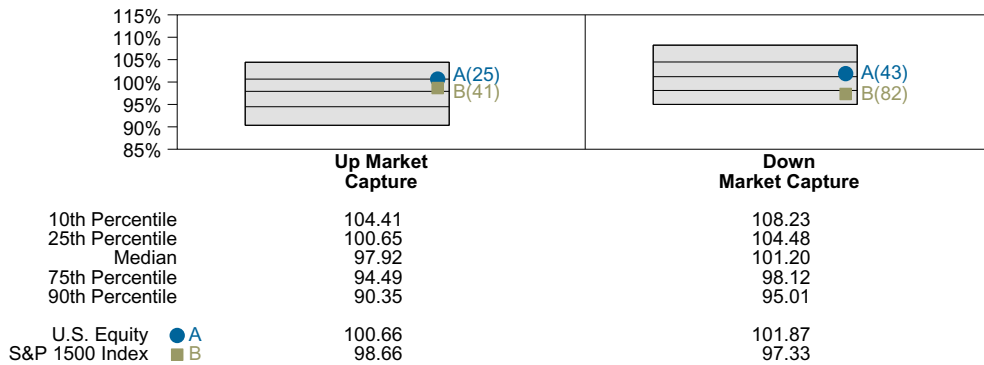
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

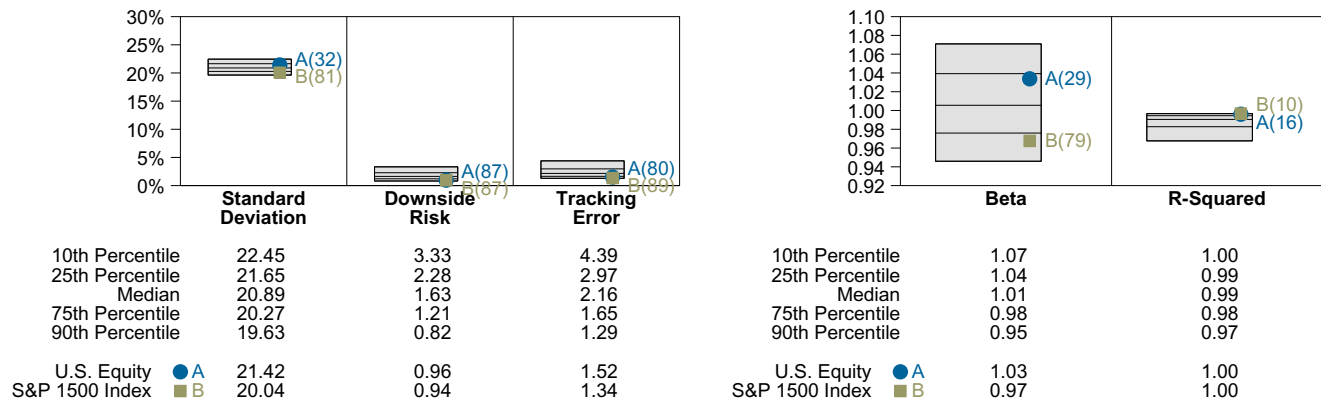
### Risk Analysis vs Public Fund - Domestic Equity (Gross) Five Years Ended December 31, 2023



### Market Capture vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended December 31, 2023



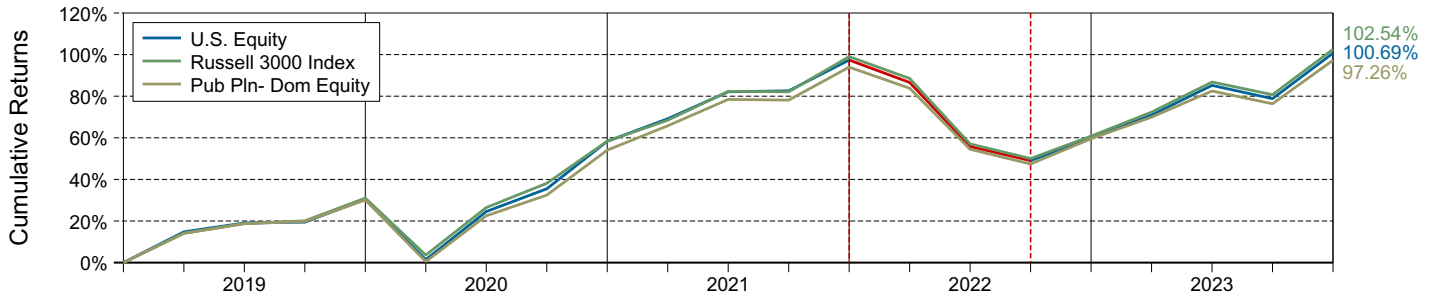
### Risk Statistics Rankings vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended December 31, 2023



# U.S. Equity Drawdown Analysis for Five Years Ended December 31, 2023

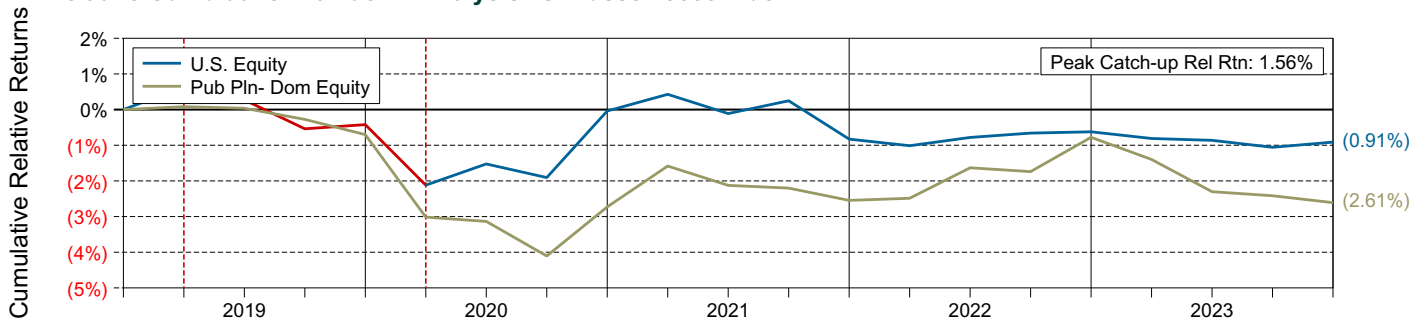
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute Drawdown as well as the Current Drawdown (cumulative return from high-water mark to now). The second chart focuses on Relative Drawdown (negative excess return vs. index). The bottom charts highlight the portfolio's peer rankings during drawdown periods.

## Absolute Cumulative Drawdown Analysis



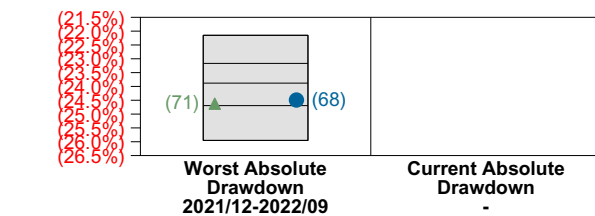
	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
U.S. Equity	(24.49)%	0.75	2021/12-2022/09	(24.62)%	(24.00)%	-	-	-	-	-
Recovery from Trough	34.66%	1.25+	2022/09-2023/12	35.00%	33.81%	-	-	-	-	-
Russell 3000 Index	(24.62)%	0.75	2021/12-2022/09	-	-	-	-	-	-	-
Pub Pln- Dom Equity	(24.00)%	0.75	2021/12-2022/09	-	-	-	-	-	-	-

## Relative Cumulative Drawdown Analysis vs. Russell 3000 Index

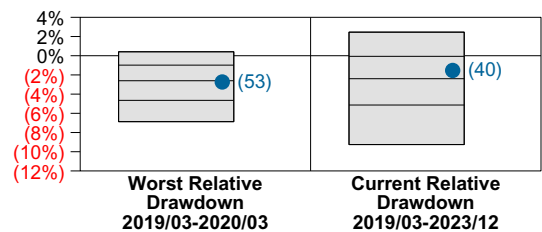


	Worst Relative Drawdown				Current Relative Drawdown			
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
U.S. Equity	(2.74)%	1.00	2019/03-2020/03	(3.09)%	(1.54)%	4.75	2019/03-2023/12	(2.69)%
Recovery from Trough	1.23%	3.75+	2020/03-2023/12	0.42%	1.23%	3.75+	2020/03-2023/12	0.42%
Pub Pln- Dom Equity	(4.18)%	1.50	2019/03-2020/09	-	(2.69)%	4.75	2019/03-2023/12	-

## Drawdown Rankings vs. Russell 3000 Index Rankings against Public Fund - Domestic Equity Five Years Ended December 31, 2023



	Percentile	Value	Peer
10th Percentile	(22.15)	-	-
25th Percentile	(23.17)	-	-
Median	(23.88)	-	-
75th Percentile	(24.69)	-	-
90th Percentile	(25.95)	-	-
<b>U.S. Equity</b>	<b>(24.49)</b>	<b>(71)</b>	<b>(68)</b>
Russell 3000 Index	(24.62)	(68)	(71)



	Percentile	Value	Peer
10th Percentile	0.41	-	-
25th Percentile	(0.98)	-	-
Median	(2.60)	-	-
75th Percentile	(4.65)	-	-
90th Percentile	(6.87)	-	-
<b>U.S. Equity</b>	<b>(2.74)</b>	<b>(53)</b>	<b>(40)</b>
Russell 3000 Index	(1.54)	(40)	(53)



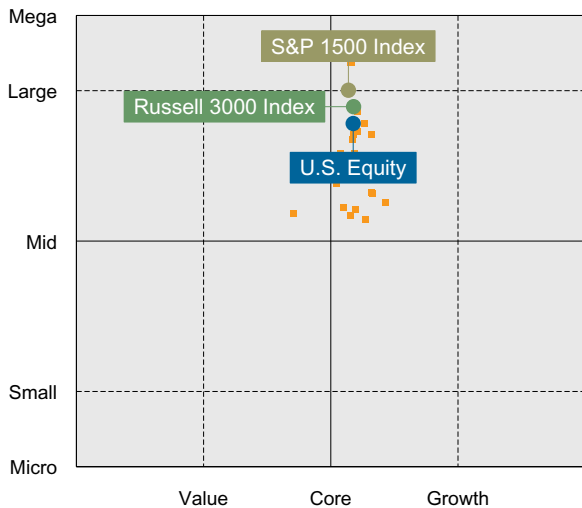
# Current Holdings Based Style Analysis

## U.S. Equity

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

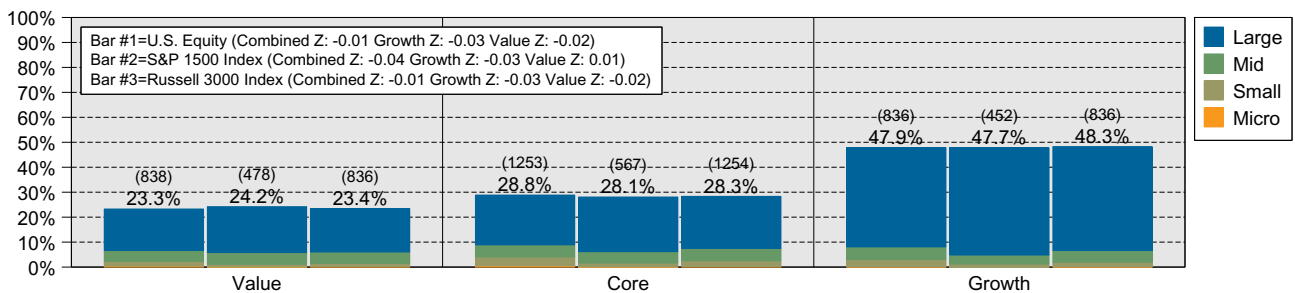
**Style Map vs Pub Pln- Dom Equity Holdings as of December 31, 2023**



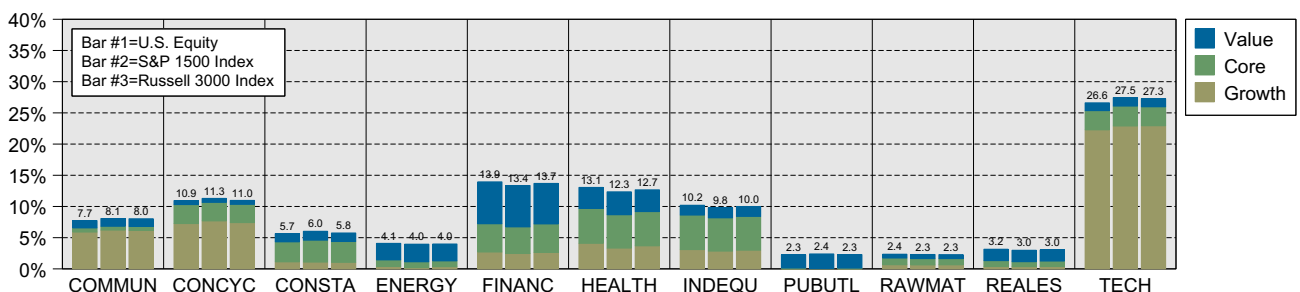
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Large	16.6% (96)	19.9% (96)	39.8% (100)	76.3% (292)
	18.4% (96)	21.9% (94)	42.9% (83)	83.2% (273)
	17.3% (96)	20.9% (96)	41.7% (100)	79.9% (292)
Mid	4.4% (166)	4.9% (206)	5.1% (213)	14.4% (585)
	4.7% (154)	4.6% (163)	3.6% (156)	12.9% (473)
	4.6% (166)	5.0% (207)	4.7% (213)	14.3% (586)
Small	1.9% (282)	3.5% (527)	2.9% (362)	8.3% (1171)
	1.1% (201)	1.6% (277)	1.2% (201)	3.8% (679)
	1.3% (282)	2.2% (528)	1.8% (362)	5.3% (1172)
Micro	0.4% (294)	0.5% (424)	0.1% (161)	1.0% (879)
	0.0% (27)	0.0% (33)	0.0% (12)	0.1% (72)
	0.2% (292)	0.3% (423)	0.1% (161)	0.6% (876)
Total	23.3% (838)	28.8% (1253)	47.9% (836)	100.0% (2927)
	24.2% (478)	28.1% (567)	47.7% (452)	100.0% (1497)
	23.4% (836)	28.3% (1254)	48.3% (836)	100.0% (2926)

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

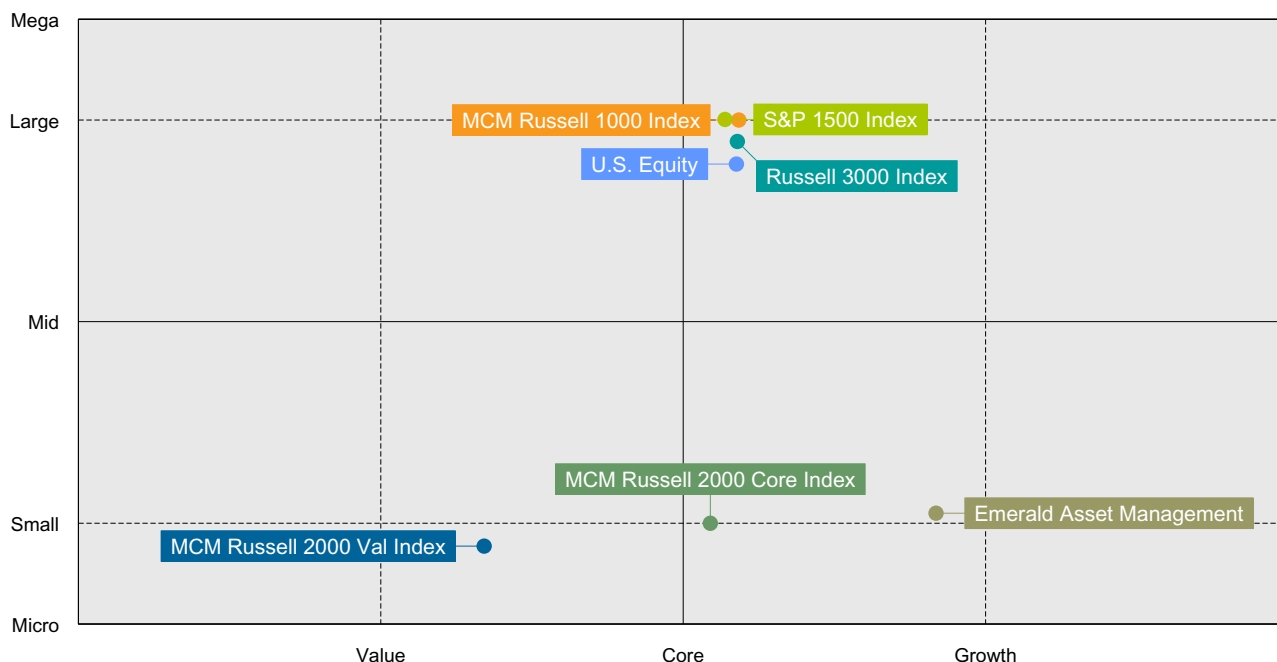


## Holdings Based Style Analysis For One Quarter Ended December 31, 2023

This page analyzes and compares the investment styles of multiple portfolios using a detailed holdings-based style analysis methodology. The size component of style is measured by the weighted median market capitalization of the holdings. The value/core/growth style dimension is captured by the "Combined Z-Score" of the portfolio. This score is based on eight fundamental factors used in the MSCI stock style scoring system. The table below gives a more detailed breakdown of several relevant style metrics on the portfolios.

### Style Map

#### Holdings for One Quarter Ended December 31, 2023



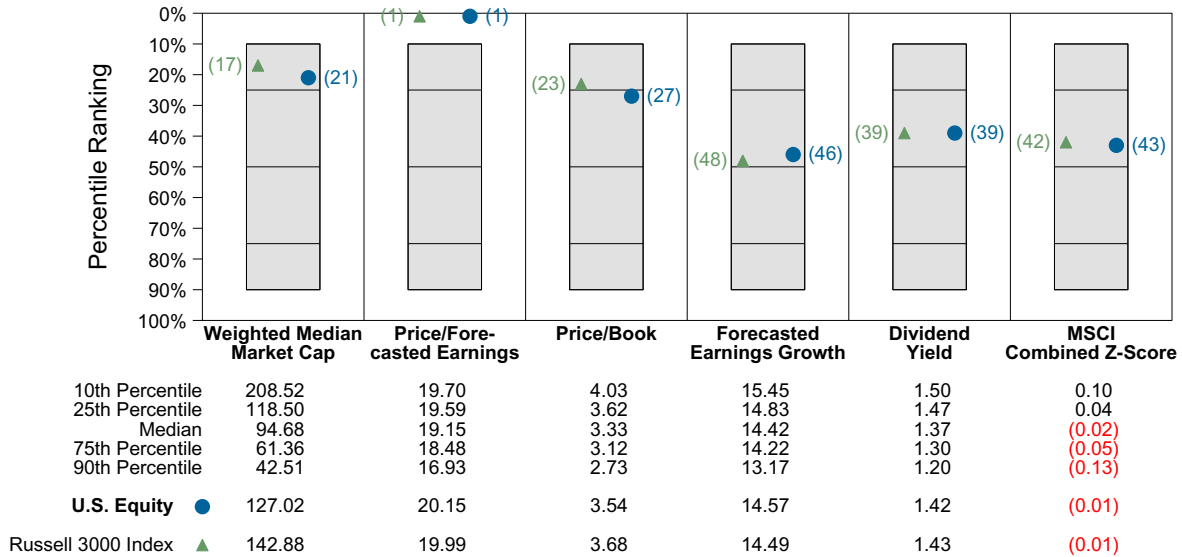
	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities	Security Diversification
MCM Russell 2000 Val Index	3.16%	2.30	(0.68)	(0.27)	0.41	1435	204.51
MCM Russell 2000 Core Index	3.16%	2.83	(0.08)	(0.10)	(0.02)	1972	312.45
Emerald Asset Management	3.41%	3.50	0.49	0.02	(0.47)	118	33.95
MCM Russell 1000 Index	90.27%	157.95	(0.01)	(0.02)	(0.02)	1010	46.87
U.S. Equity	100.00%	127.02	(0.01)	(0.03)	(0.02)	2987	63.56
Russell 3000 Index	-	142.88	(0.01)	(0.03)	(0.02)	2974	55.35
S&P 1500 Index	-	158.72	(0.04)	(0.03)	0.01	1506	46.13

# U.S. Equity Equity Characteristics Analysis Summary

## Portfolio Characteristics

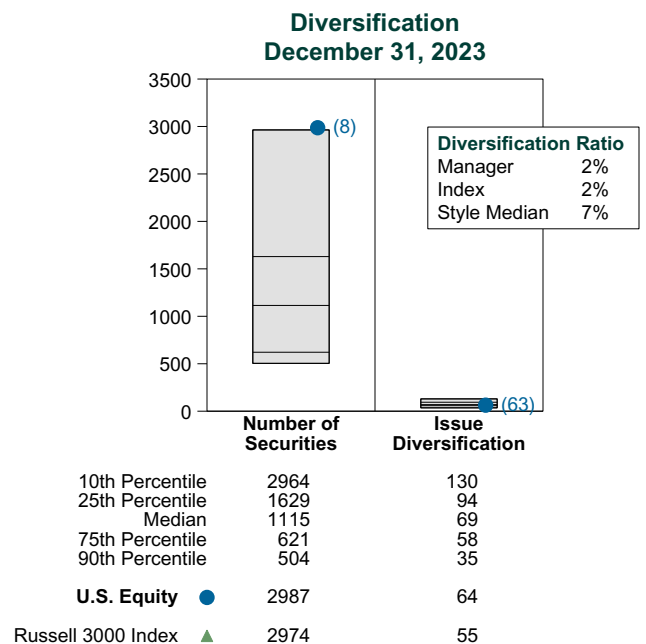
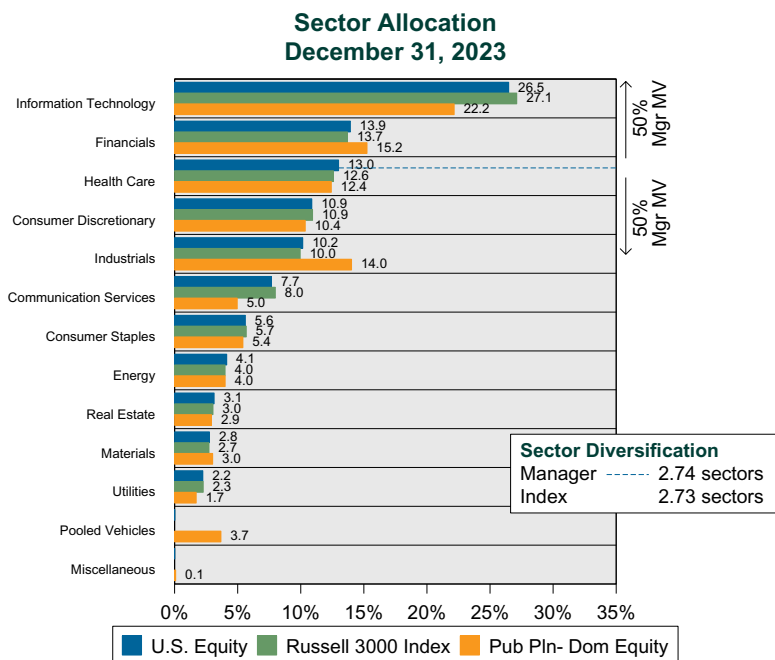
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Public Fund - Domestic Equity as of December 31, 2023



## Sector Weights

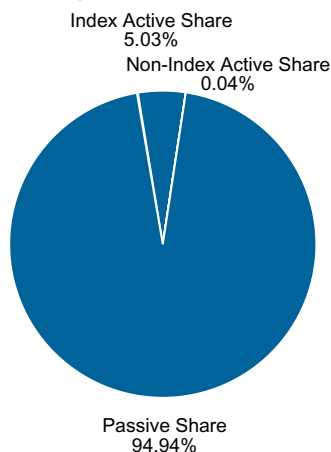
The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



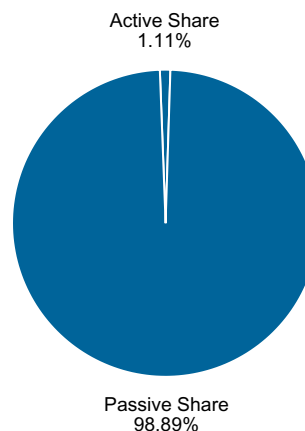
## U.S. Equity Active Share Analysis as of December 31, 2023 vs. Russell 3000 Index

Active Share analysis compares the holdings of a portfolio to an index to measure how aggressively it differs from the index. Active share is measured at the individual stock level ("holdings-level active share") and using sector weights ("sector exposure active share"). Holdings-level active share comes from: 1) Index Active Share - over/under weighting of stocks in the index, and 2) Non-Index Active Share - positions in stocks not in the index. This analysis displays active share by sector and compares the portfolio to a relevant peer group.

### Holdings-Level Active Share



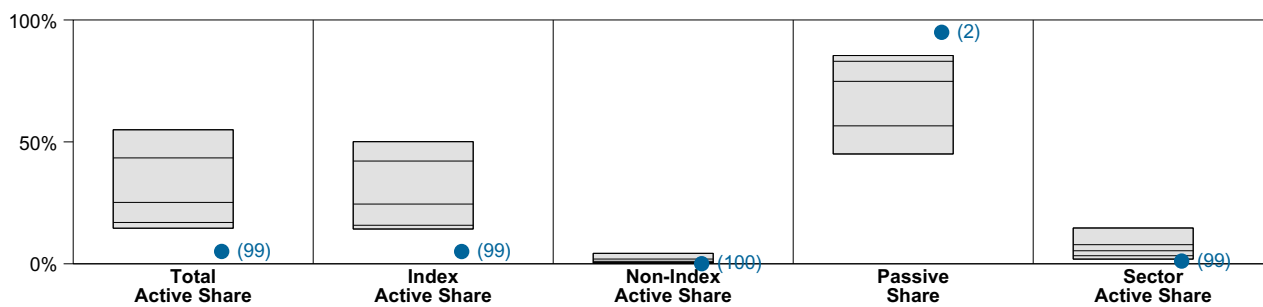
### Sector Exposure Active Share



**Total Active Share: 5.06%**

	Index Active Share Within Sector	Non-Index Active Share Within Sector	Total Active Share Within Sector	Index Weight	Manager Weight	Contribution to Total Portfolio Active Share
Communication Services	1.14%	0.00%	1.14%	7.99%	7.68%	0.23%
Consumer Discretionary	4.68%	0.11%	4.80%	10.93%	10.87%	0.54%
Consumer Staples	3.47%	0.00%	3.47%	5.68%	5.61%	0.24%
Energy	7.12%	0.00%	7.12%	4.00%	4.13%	0.24%
Financials	6.09%	0.06%	6.15%	13.70%	13.93%	0.75%
Health Care	8.16%	0.06%	8.22%	12.59%	13.00%	0.89%
Industrials	7.49%	0.00%	7.49%	9.95%	10.16%	0.68%
Information Technology	2.77%	0.00%	2.77%	27.12%	26.48%	1.04%
Materials	6.97%	0.00%	6.97%	2.73%	2.76%	0.17%
Miscellaneous	0.00%	100.00%	100.00%	-	0.00%	0.00%
Pooled Vehicles	0.00%	100.00%	100.00%	-	0.01%	0.01%
Real Estate	7.22%	0.00%	7.22%	3.04%	3.13%	0.18%
Utilities	3.07%	0.00%	3.07%	2.27%	2.24%	0.09%
<b>Total</b>	<b>5.03%</b>	<b>0.04%</b>	<b>5.06%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>5.06%</b>

### Active Share vs. Pub Pln- Dom Equity



10th Percentile	54.97	50.09	4.29	85.41	14.69
25th Percentile	43.43	42.13	1.95	83.05	7.85
Median	25.17	24.50	1.00	74.83	5.35
75th Percentile	16.95	15.80	0.50	56.57	3.31
90th Percentile	14.59	14.26	0.27	45.03	1.93
<b>U.S. Equity</b>	<b>5.06</b>	<b>5.03</b>	<b>0.04</b>	<b>94.94</b>	<b>1.11</b>



# MCM Russell 1000 Index Period Ended December 31, 2023

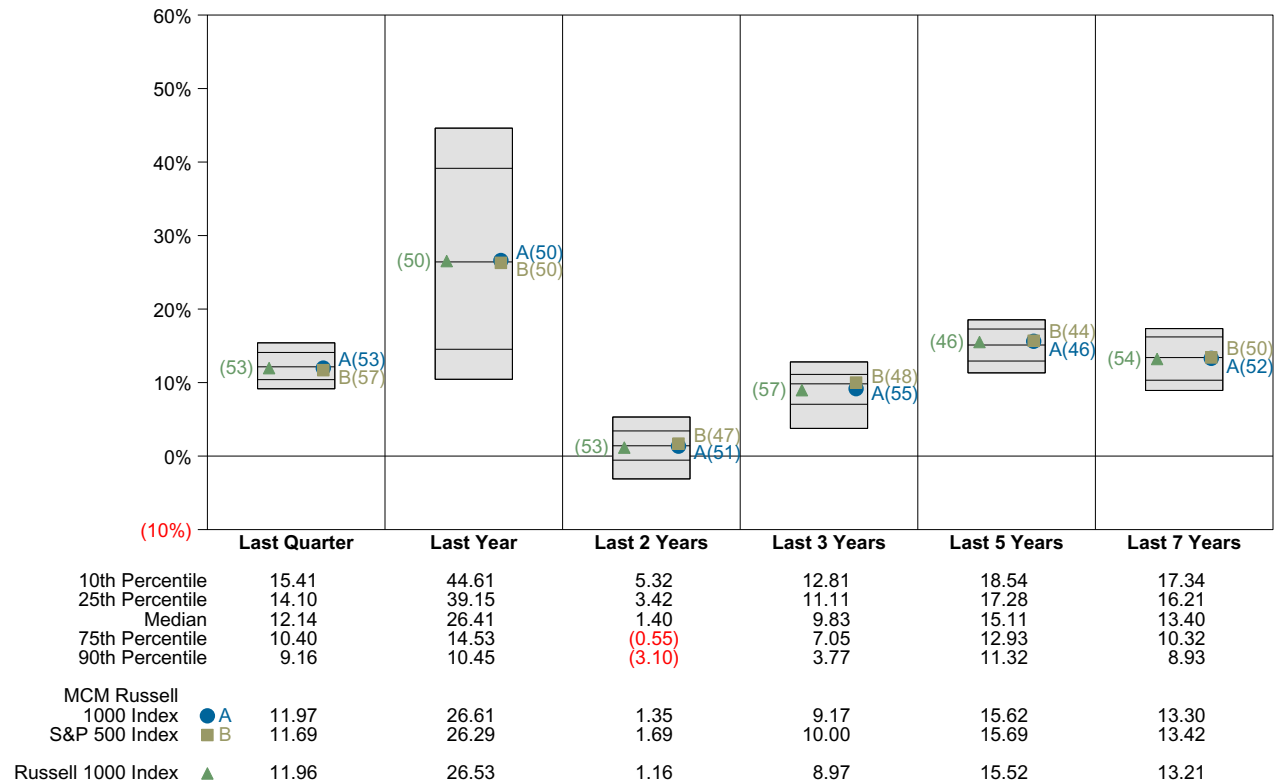
## Investment Philosophy

The Russell 1000 Stock Index Fund attempts to replicate the performance and portfolio characteristics of the Russell 1000 Index.

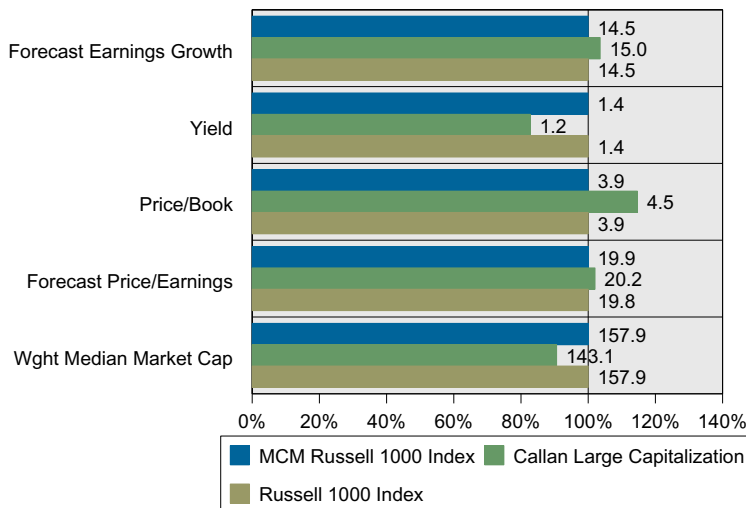
## Quarterly Summary and Highlights

- MCM Russell 1000 Index's portfolio posted a 11.97% return for the quarter placing it in the 53 percentile of the Callan Large Capitalization group for the quarter and in the 50 percentile for the last year.
- MCM Russell 1000 Index's portfolio outperformed the Russell 1000 Index by 0.01% for the quarter and outperformed the Russell 1000 Index for the year by 0.08%.

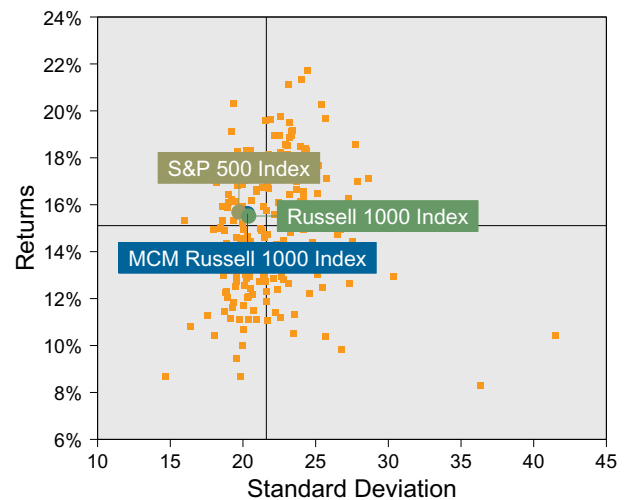
## Performance vs Callan Large Capitalization (Gross)



## Portfolio Characteristics as a Percentage of the Russell 1000 Index



## Callan Large Capitalization (Gross) Annualized Five Year Risk vs Return

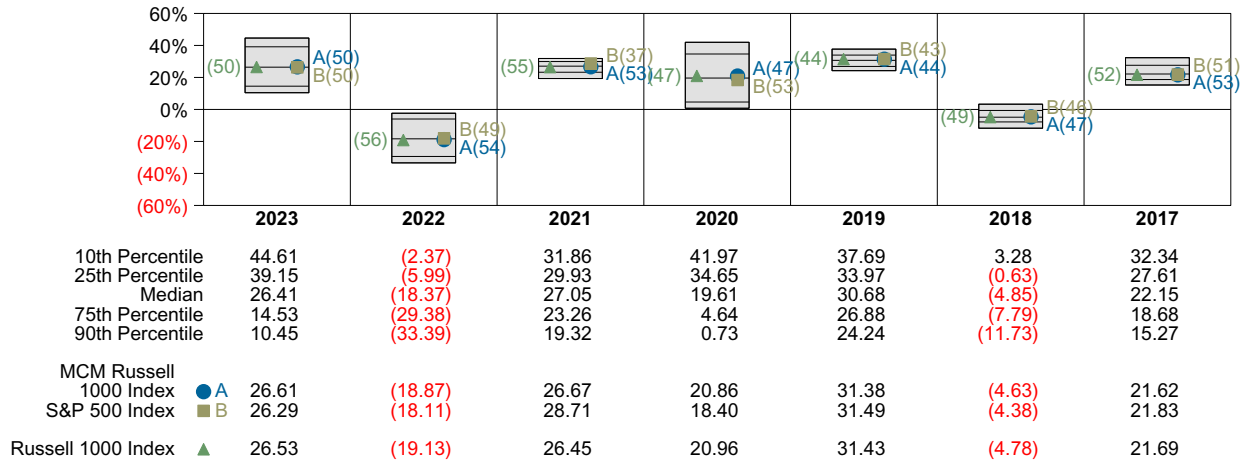


# MCM Russell 1000 Index Return Analysis Summary

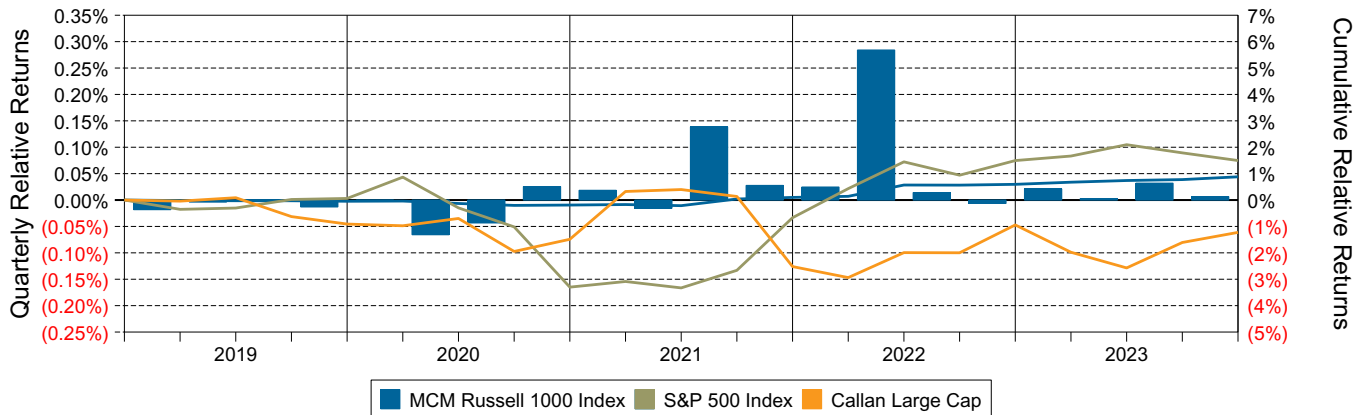
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

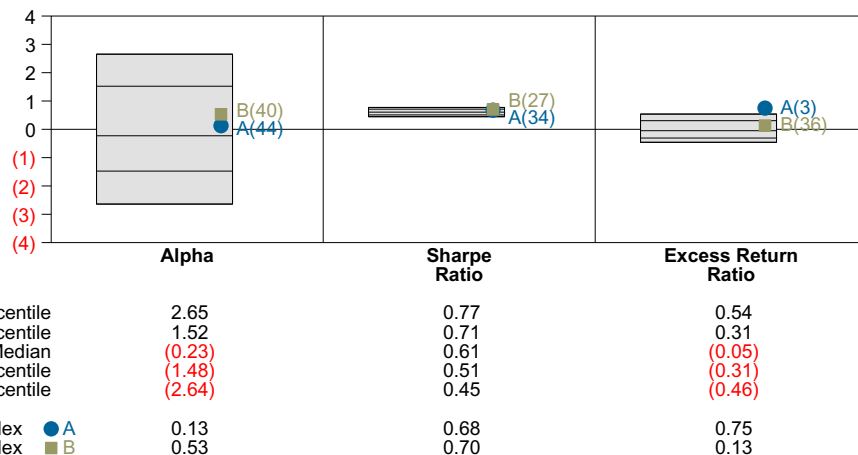
### Performance vs Callan Large Capitalization (Gross)



### Cumulative and Quarterly Relative Returns vs Russell 1000 Index



### Risk Adjusted Return Measures vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Five Years Ended December 31, 2023

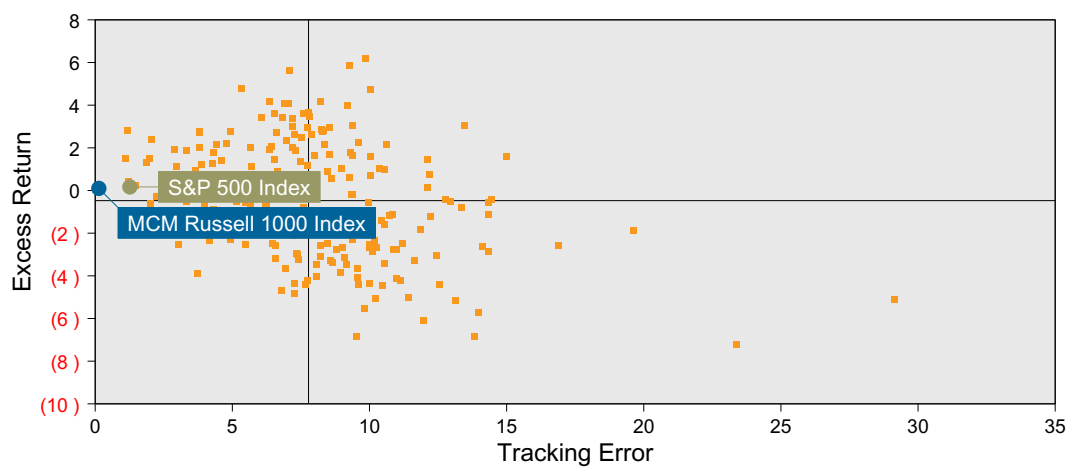


# MCM Russell 1000 Index Risk Analysis Summary

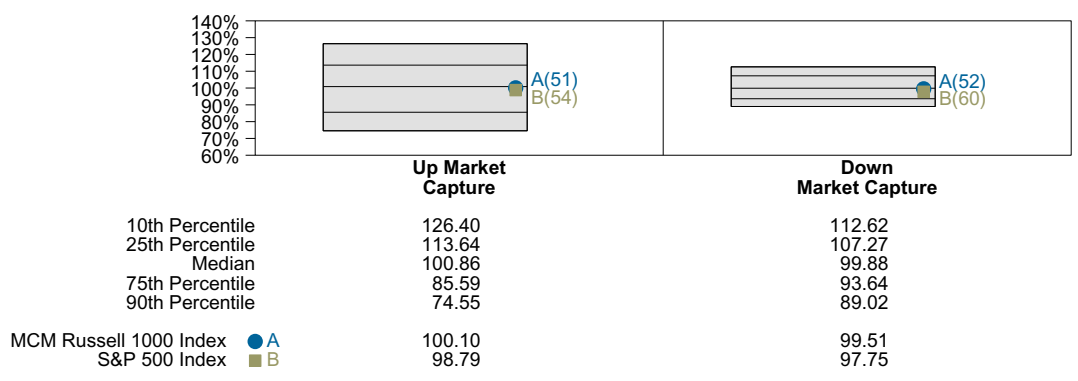
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

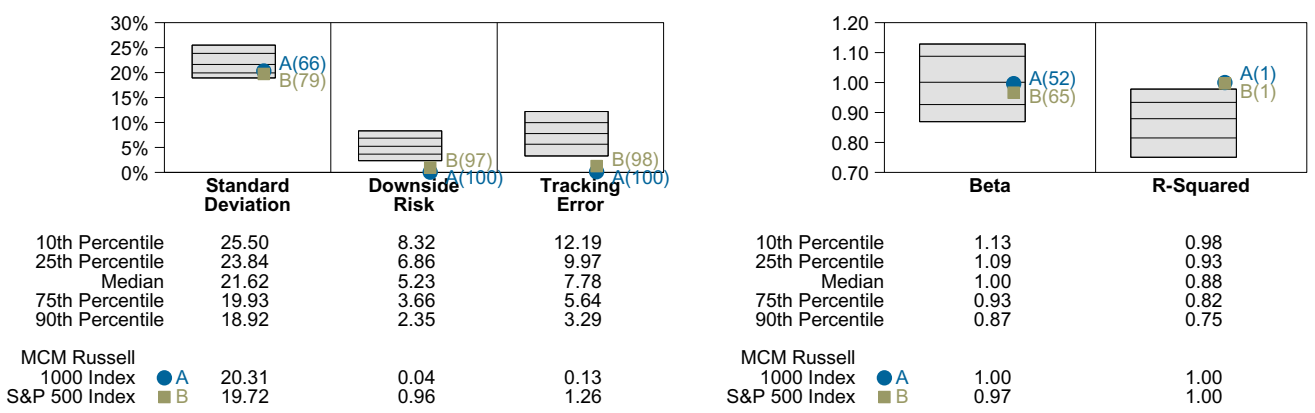
### Risk Analysis vs Callan Large Capitalization (Gross) Five Years Ended December 31, 2023



### Market Capture vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Five Years Ended December 31, 2023



### Risk Statistics Rankings vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Five Years Ended December 31, 2023





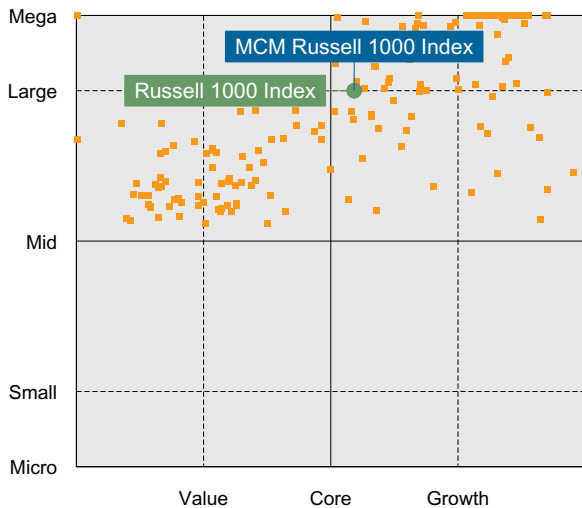
# Current Holdings Based Style Analysis

## MCM Russell 1000 Index

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

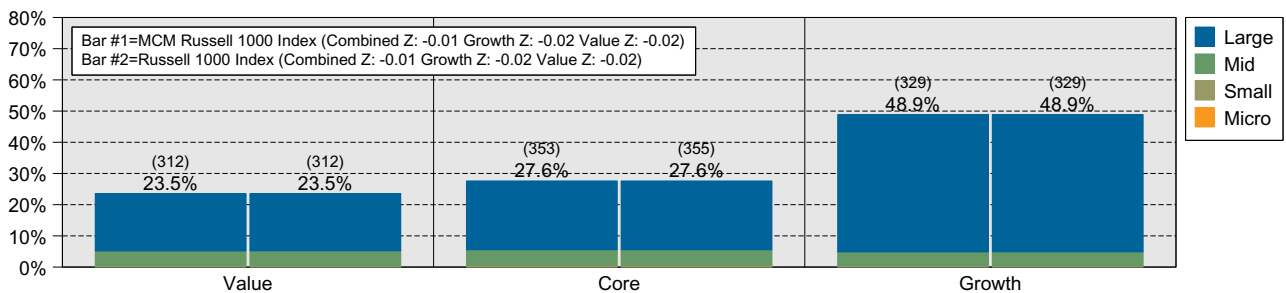
**Style Map vs Callan Large Cap Holdings as of December 31, 2023**



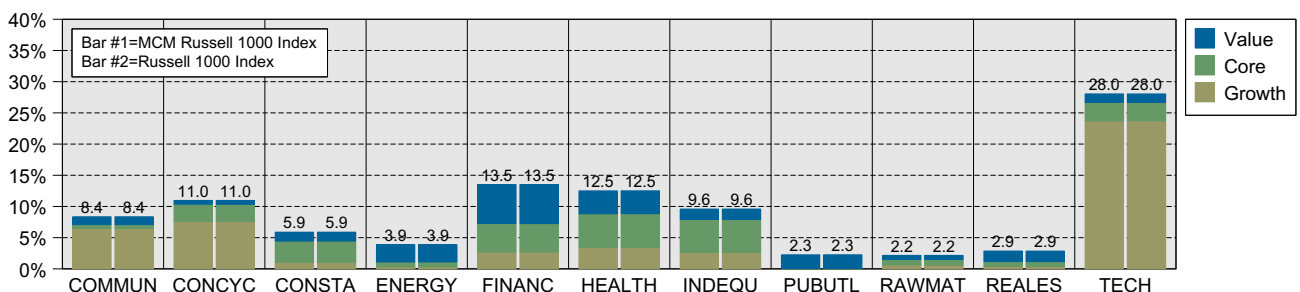
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Large	18.3% (96)	22.1% (96)	44.0% (100)	84.4% (292)
Mid	4.8% (162)	5.0% (186)	4.5% (180)	14.3% (528)
Small	0.4% (54)	0.5% (71)	0.4% (49)	1.3% (174)
Micro	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
<b>Total</b>	<b>23.5% (312)</b>	<b>27.6% (353)</b>	<b>48.9% (329)</b>	<b>100.0% (994)</b>
	23.5% (312)	27.6% (355)	48.9% (329)	100.0% (996)

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

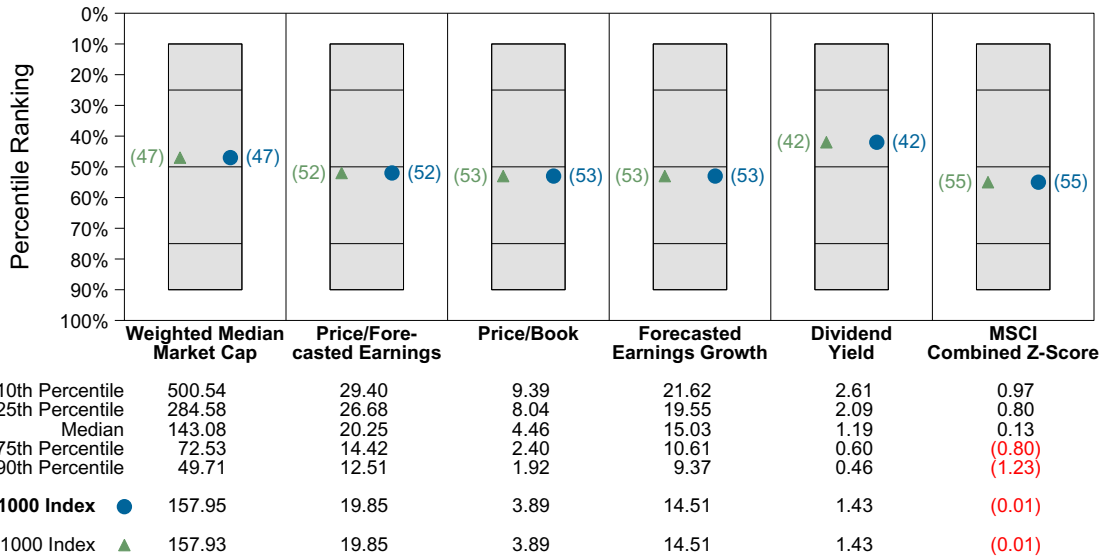


# MCM Russell 1000 Index Equity Characteristics Analysis Summary

## Portfolio Characteristics

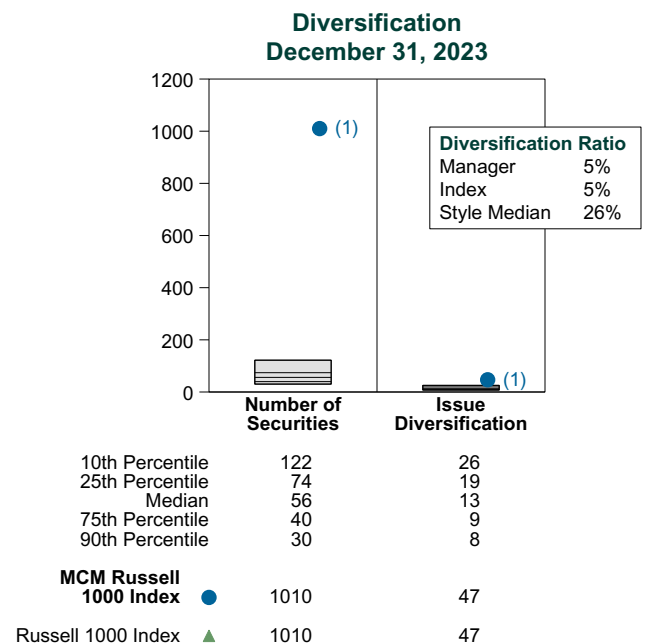
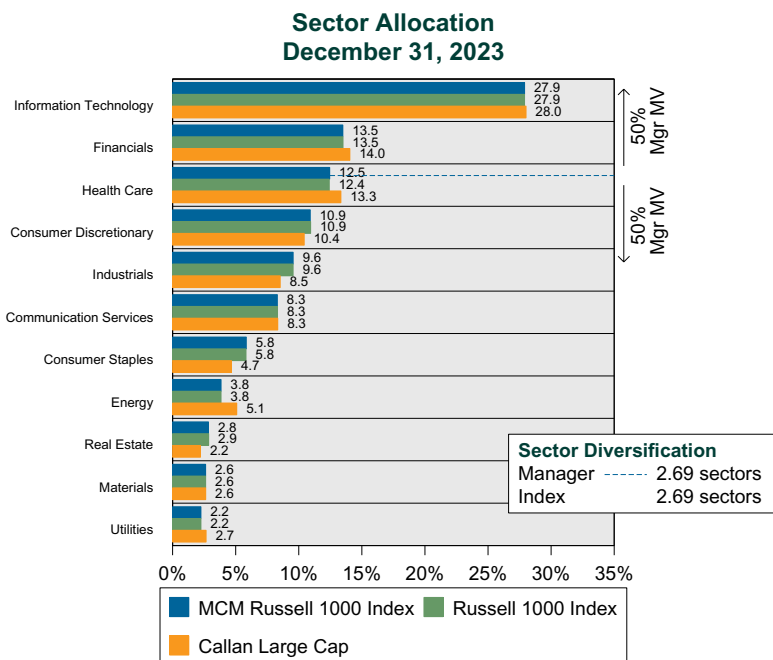
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Capitalization as of December 31, 2023



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

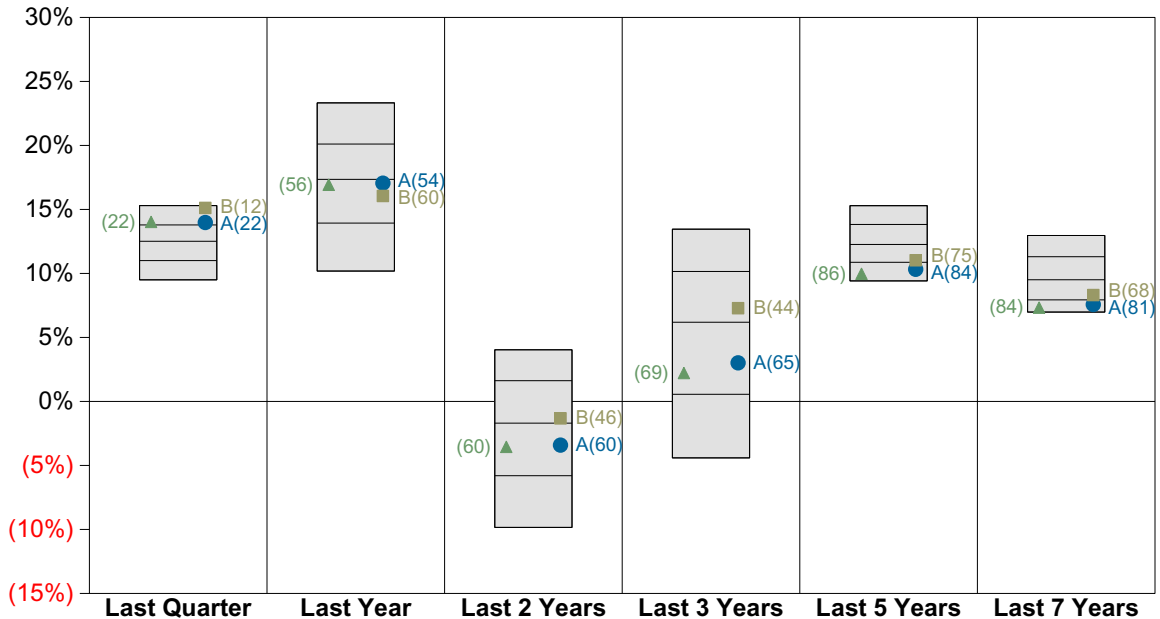


# MCM Russell 2000 Core Index Period Ended December 31, 2023

## Quarterly Summary and Highlights

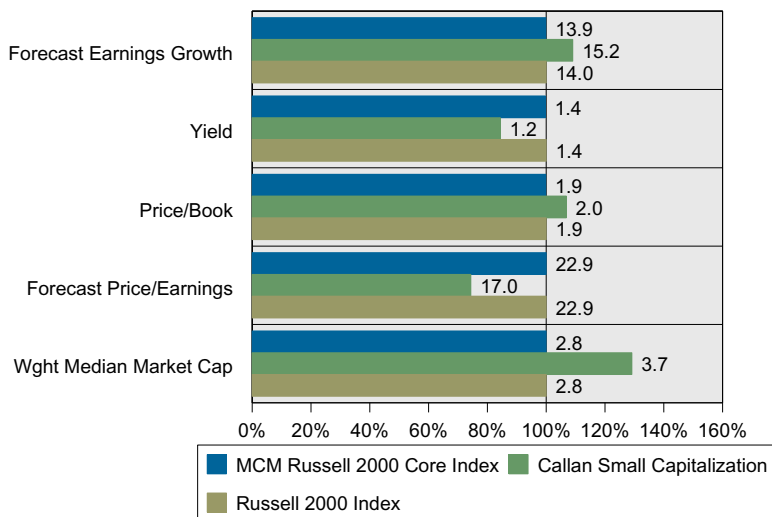
- MCM Russell 2000 Core Index's portfolio posted a 13.98% return for the quarter placing it in the 22 percentile of the Callan Small Capitalization group for the quarter and in the 54 percentile for the last year.
- MCM Russell 2000 Core Index's portfolio underperformed the Russell 2000 Index by 0.05% for the quarter and outperformed the Russell 2000 Index for the year by 0.12%.

## Performance vs Callan Small Capitalization (Gross)

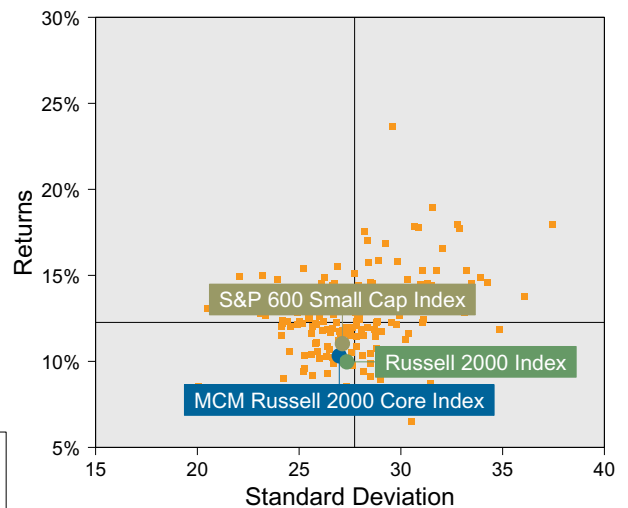


		Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
MCM Russell 2000 Core Index	● A	13.98	17.05	(3.41)	3.01	10.32	7.57
S&P 600 Small Cap Index	■ B	15.12	16.05	(1.32)	7.28	11.03	8.31
Russell 2000 Index	▲	14.03	16.93	(3.55)	2.22	9.97	7.33

## Portfolio Characteristics as a Percentage of the Russell 2000 Index



## Callan Small Capitalization (Gross) Annualized Five Year Risk vs Return

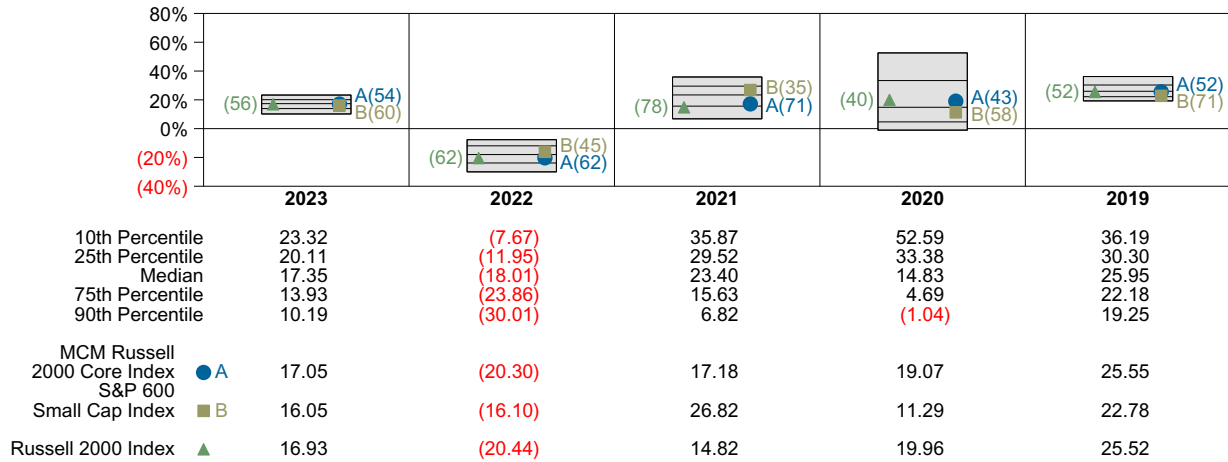


# MCM Russell 2000 Core Index Return Analysis Summary

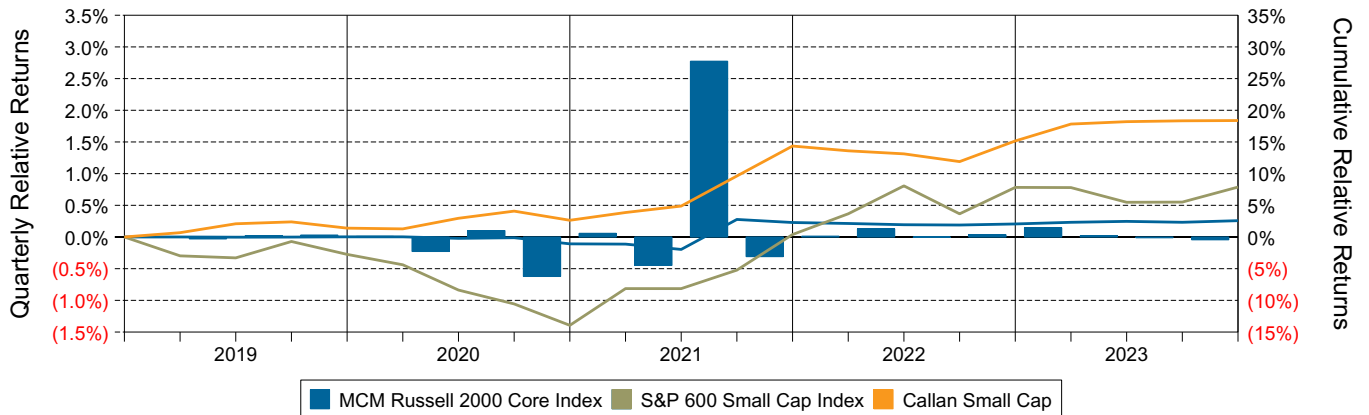
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

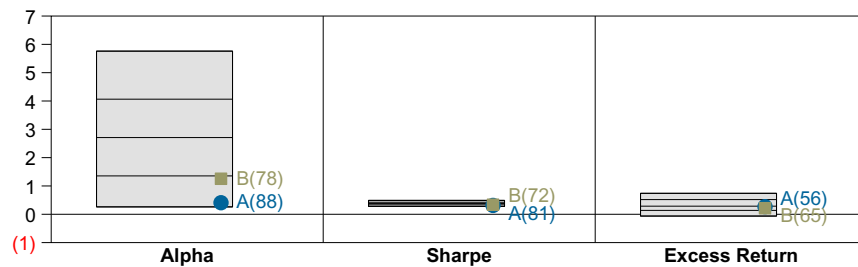
### Performance vs Callan Small Capitalization (Gross)



### Cumulative and Quarterly Relative Returns vs Russell 2000 Index



### Risk Adjusted Return Measures vs Russell 2000 Index Rankings Against Callan Small Capitalization (Gross) Five Years Ended December 31, 2023



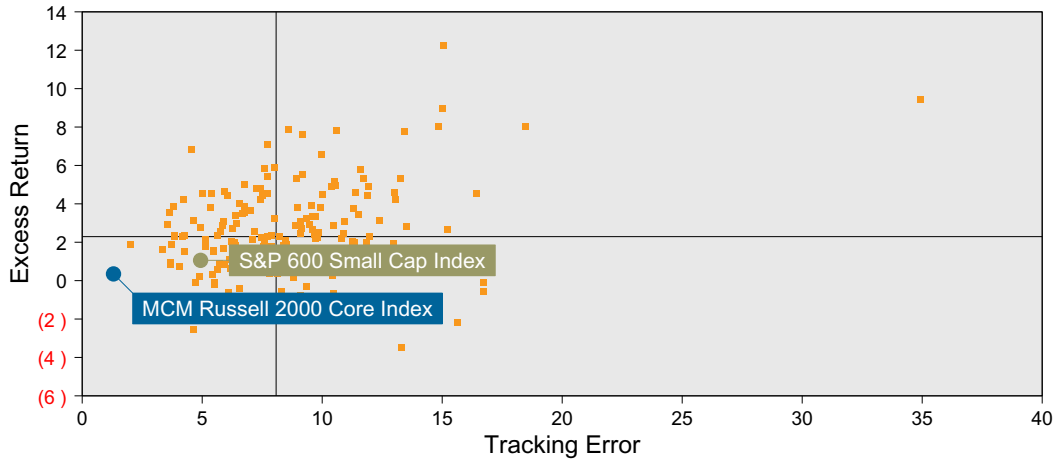
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	5.76	0.49	0.74
25th Percentile	4.06	0.42	0.52
Median	2.71	0.38	0.29
75th Percentile	1.36	0.33	0.14
90th Percentile	0.26	0.28	(0.06)
MCM Russell 2000 Core Index	● A 0.41	0.31	0.27
S&P 600 Small Cap Index	■ B 1.25	0.34	0.21

# MCM Russell 2000 Core Index Risk Analysis Summary

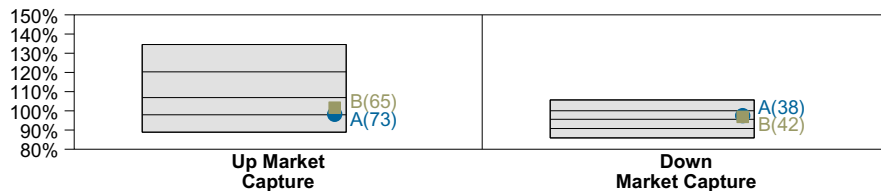
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Callan Small Capitalization (Gross) Five Years Ended December 31, 2023



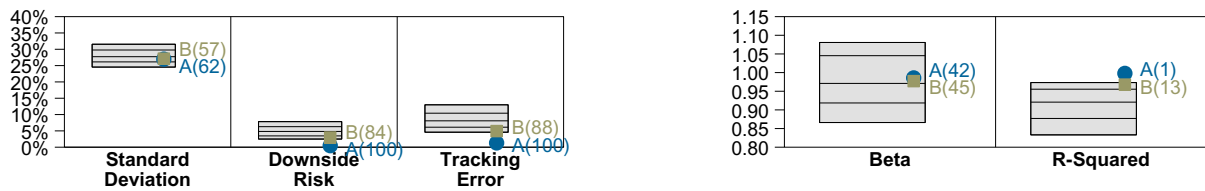
### Market Capture vs Russell 2000 Index Rankings Against Callan Small Capitalization (Gross) Five Years Ended December 31, 2023



	Up Market Capture	Down Market Capture
10th Percentile	134.54	105.68
25th Percentile	120.31	100.05
Median	106.91	95.60
75th Percentile	97.95	90.80
90th Percentile	88.88	85.90

MCM Russell 2000 Core Index	● A	98.19	97.50
S&P 600 Small Cap Index	■ B	101.64	96.86

### Risk Statistics Rankings vs Russell 2000 Index Rankings Against Callan Small Capitalization (Gross) Five Years Ended December 31, 2023



	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	31.54	7.83	12.99	1.08	0.97
25th Percentile	29.78	6.29	10.41	1.05	0.96
Median	27.73	4.83	8.08	0.97	0.92
75th Percentile	26.14	3.46	6.12	0.92	0.88
90th Percentile	24.54	2.49	4.59	0.87	0.83

MCM Russell 2000 Core Index	● A	26.97	0.46	1.30	0.99	1.00
S&P 600 Small Cap Index	■ B	27.13	2.95	4.93	0.98	0.97

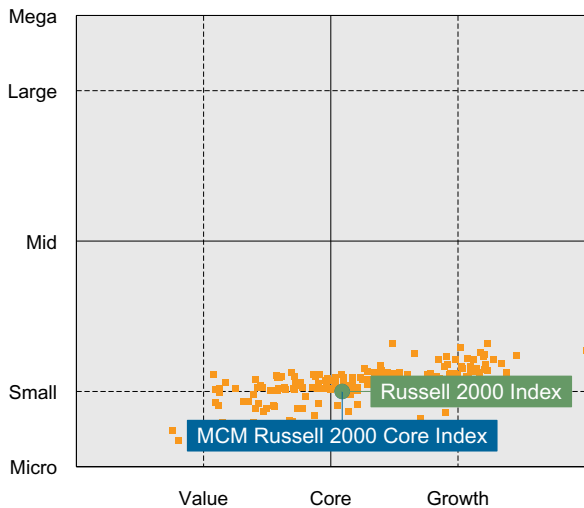
# Current Holdings Based Style Analysis

## MCM Russell 2000 Core Index

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

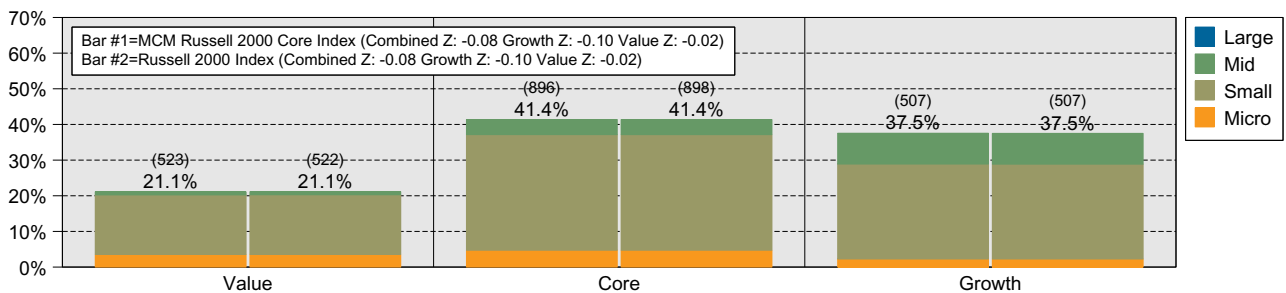
**Style Map vs Callan Small Cap Holdings as of December 31, 2023**



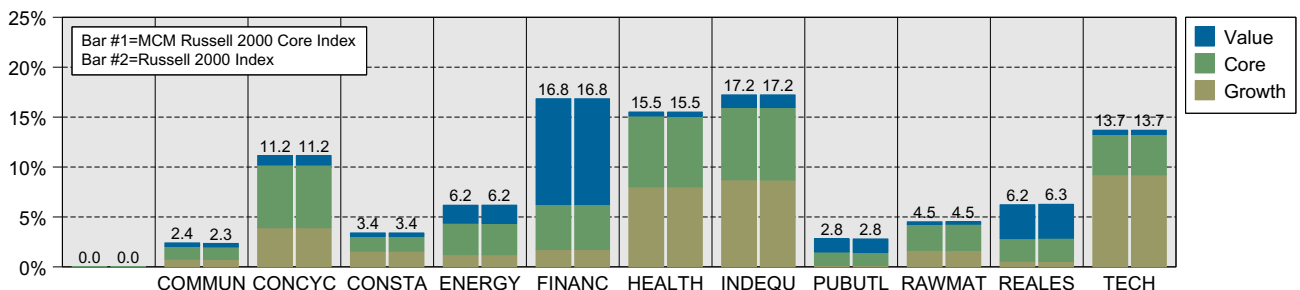
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Mid	0.8% (4)	4.2% (20)	8.6% (33)	13.7% (57)
Small	16.7% (228)	32.4% (456)	26.6% (313)	75.8% (996)
Micro	3.5% (291)	4.7% (421)	2.3% (161)	10.5% (873)
<b>Total</b>	<b>21.1% (523)</b>	<b>41.4% (896)</b>	<b>37.5% (507)</b>	<b>100.0% (1926)</b>

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

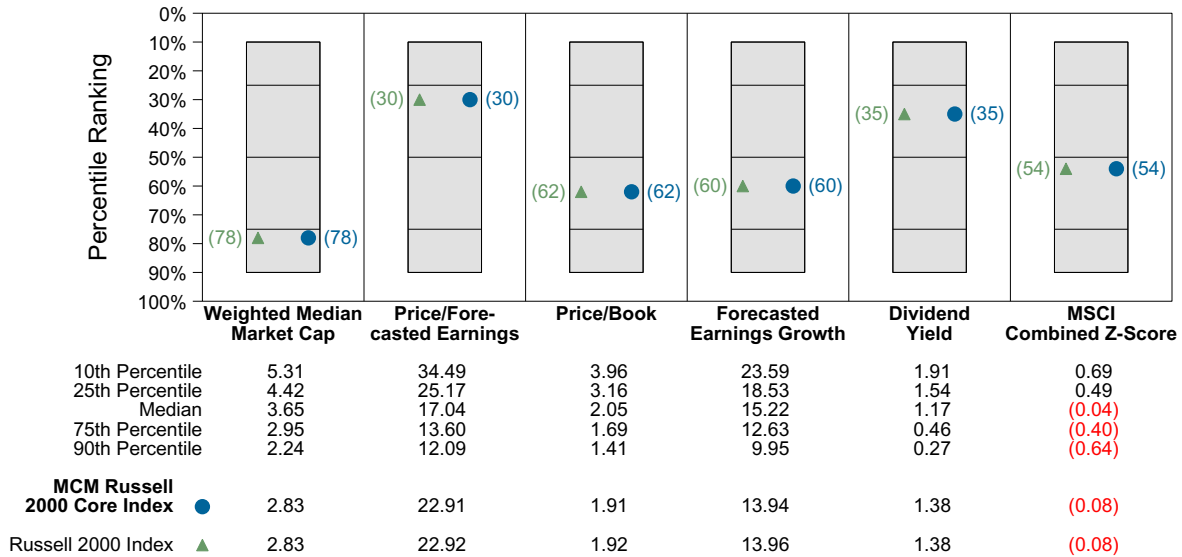


# MCM Russell 2000 Core Index Equity Characteristics Analysis Summary

## Portfolio Characteristics

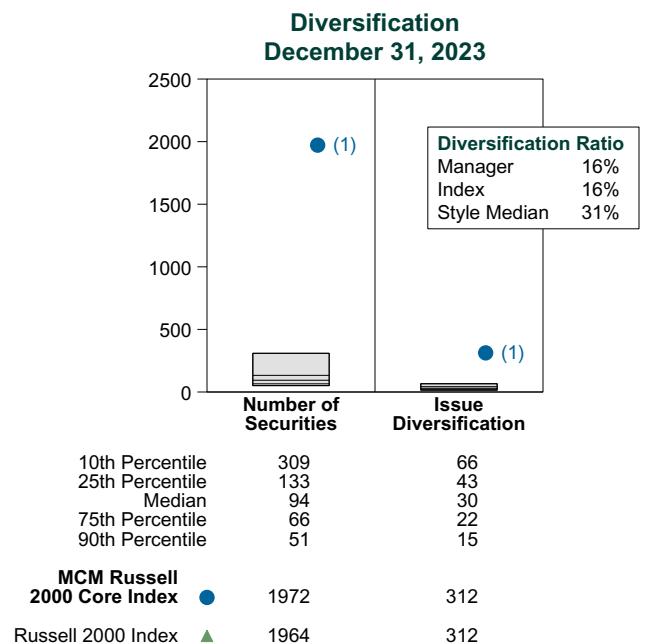
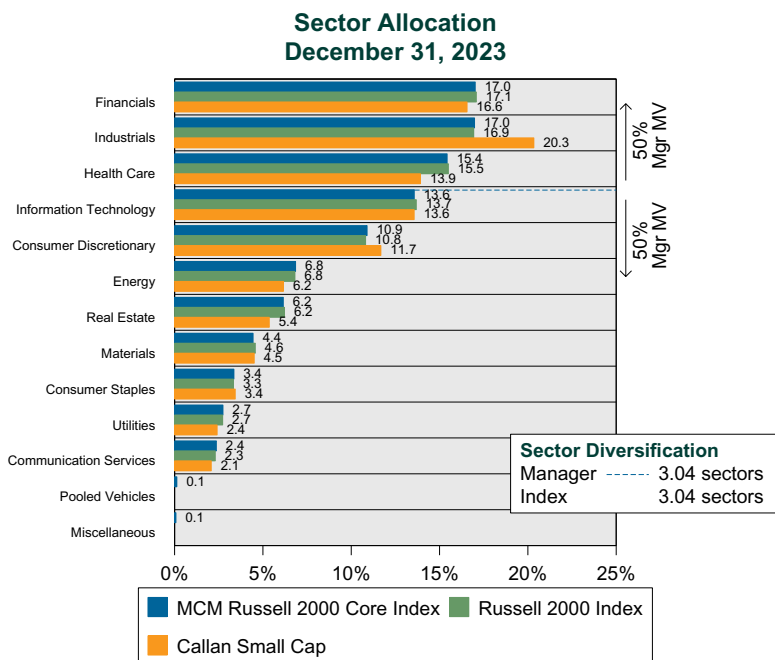
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Capitalization as of December 31, 2023



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

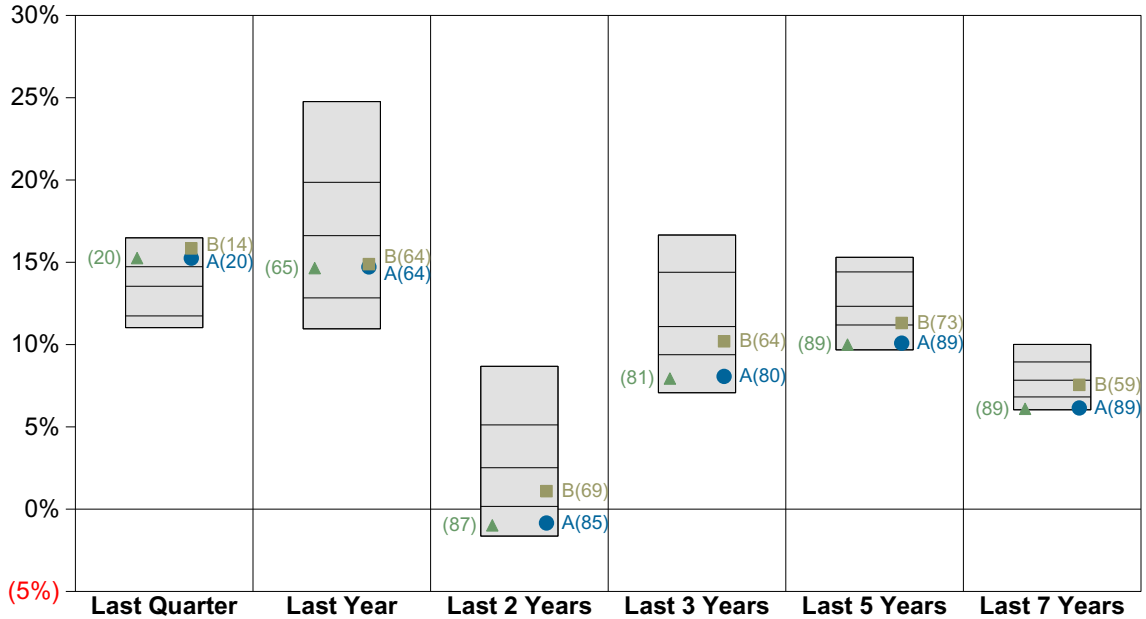


# MCM Russell 2000 Val Index Period Ended December 31, 2023

## Quarterly Summary and Highlights

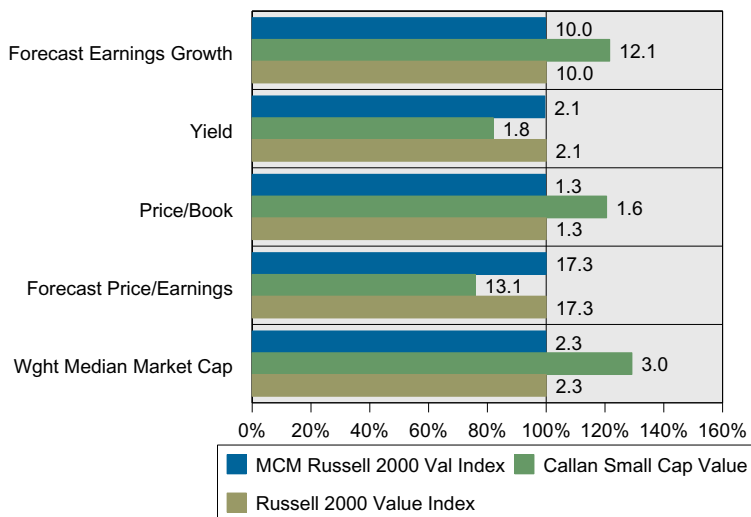
- MCM Russell 2000 Val Index's portfolio posted a 15.25% return for the quarter placing it in the 20 percentile of the Callan Small Cap Value group for the quarter and in the 64 percentile for the last year.
- MCM Russell 2000 Val Index's portfolio underperformed the Russell 2000 Value Index by 0.01% for the quarter and outperformed the Russell 2000 Value Index for the year by 0.07%.

## Performance vs Callan Small Cap Value (Gross)

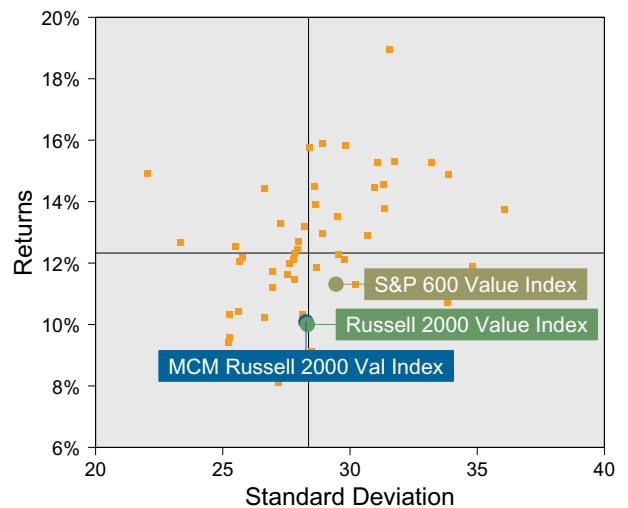


	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	16.49	24.77	8.68	16.66	15.30	10.01
25th Percentile	14.73	19.86	5.12	14.39	14.41	8.94
Median	13.54	16.62	2.52	11.09	12.33	7.83
75th Percentile	11.74	12.84	0.17	9.38	11.19	6.82
90th Percentile	11.03	10.96	(1.64)	7.07	9.68	6.04
MCM Russell 2000 Val Index	● A 15.25	14.72	(0.84)	8.07	10.09	6.15
S&P 600 Value Index	■ B 15.84	14.89	1.09	10.20	11.31	7.55
Russell 2000 Value Index	▲ 15.26	14.65	(0.98)	7.94	10.00	6.10

## Portfolio Characteristics as a Percentage of the Russell 2000 Value Index



## Callan Small Cap Value (Gross) Annualized Five Year Risk vs Return



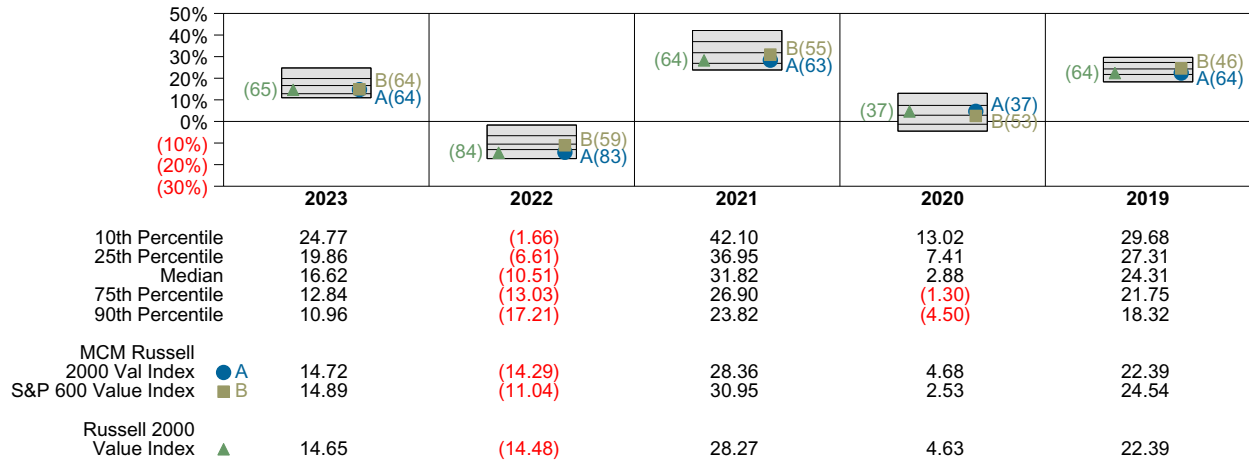


# MCM Russell 2000 Val Index Return Analysis Summary

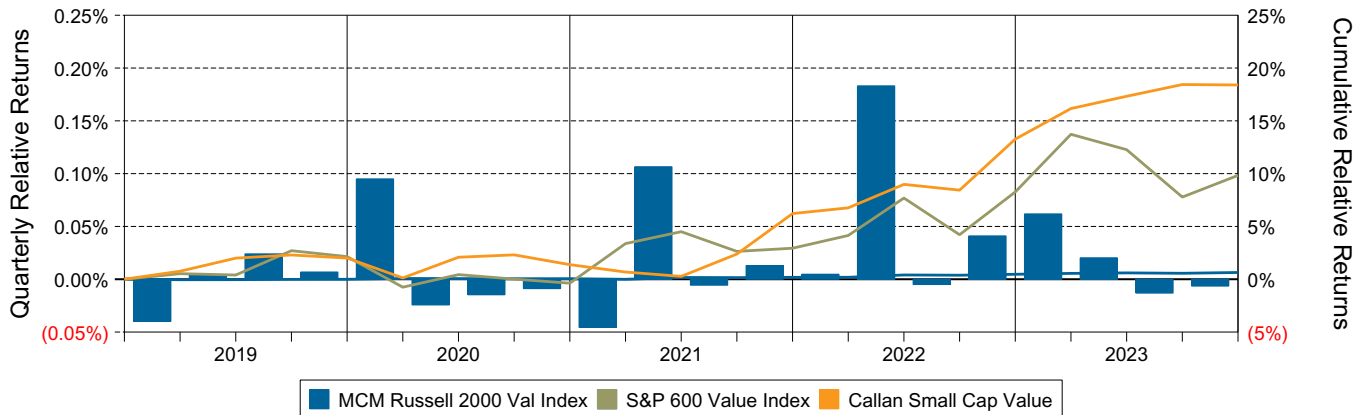
## Return Analysis

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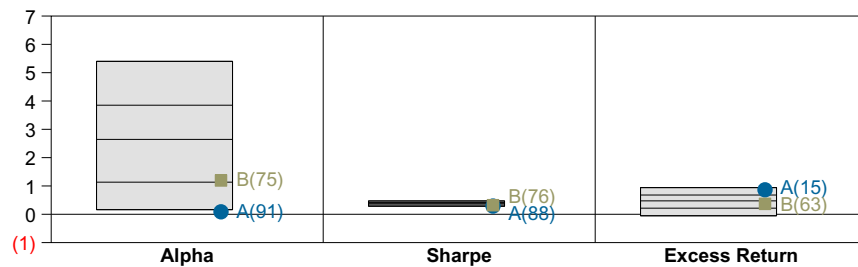
### Performance vs Callan Small Cap Value (Gross)



### Cumulative and Quarterly Relative Returns vs Russell 2000 Value Index



### Risk Adjusted Return Measures vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Five Years Ended December 31, 2023



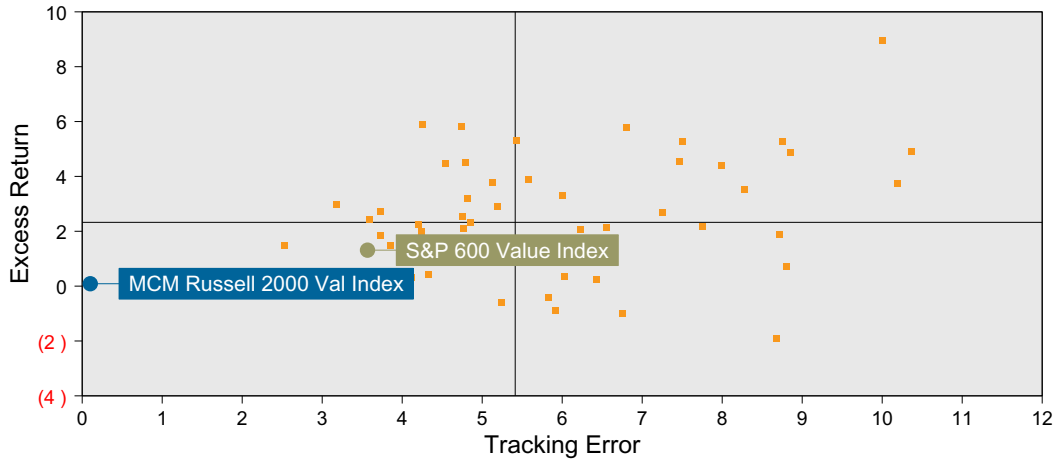
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	5.40	0.47	0.94
25th Percentile	3.85	0.42	0.68
Median	2.64	0.38	0.47
75th Percentile	1.13	0.33	0.22
90th Percentile	0.16	0.29	(0.05)
MCM Russell 2000 Val Index (A)	0.09	0.29	0.86
S&P 600 Value Index (B)	1.19	0.32	0.37

# MCM Russell 2000 Val Index Risk Analysis Summary

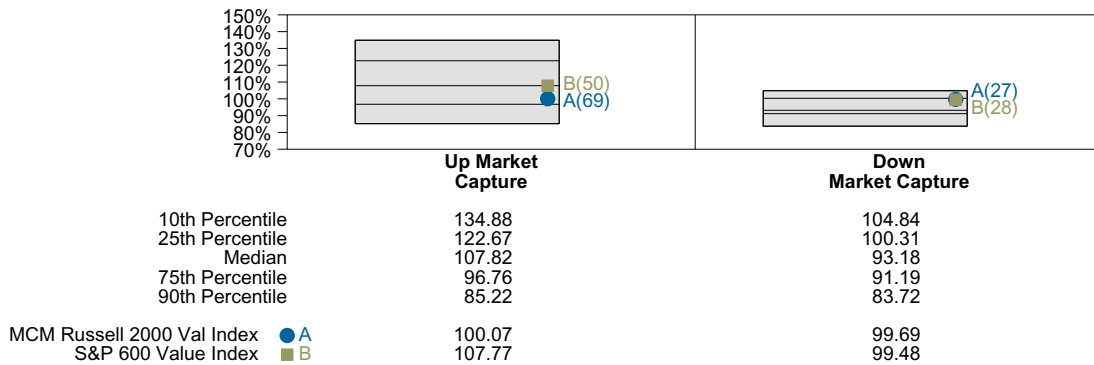
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

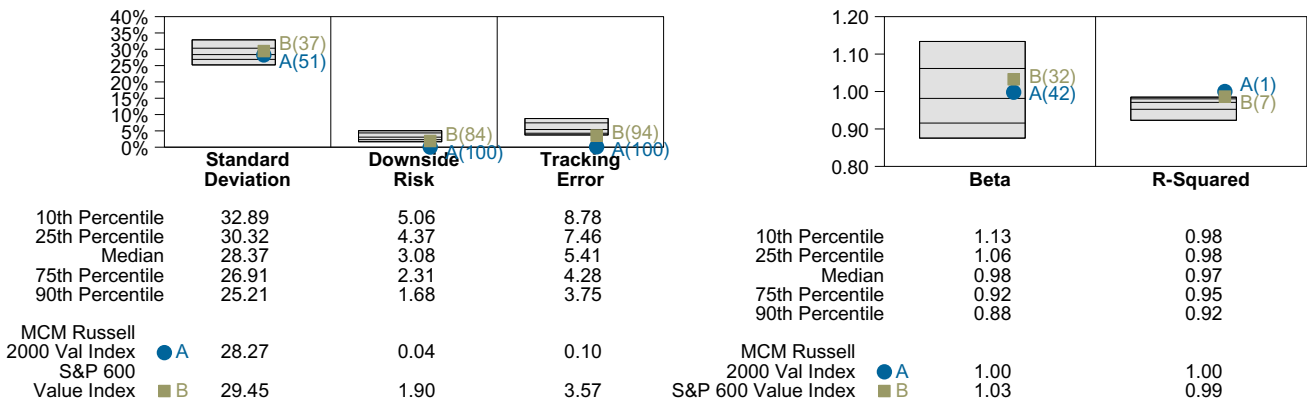
### Risk Analysis vs Callan Small Cap Value (Gross) Five Years Ended December 31, 2023



### Market Capture vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Five Years Ended December 31, 2023



### Risk Statistics Rankings vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Five Years Ended December 31, 2023



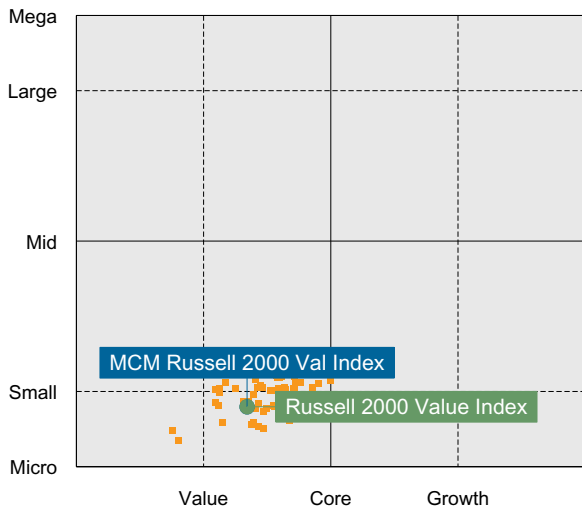
# Current Holdings Based Style Analysis

## MCM Russell 2000 Val Index

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

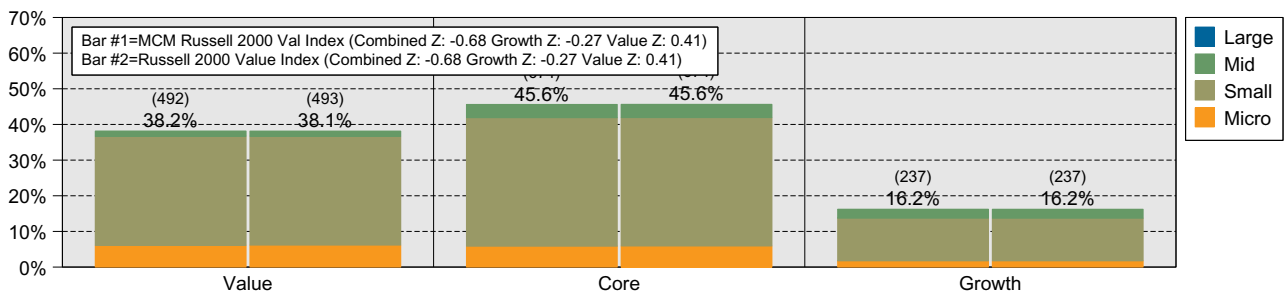
**Style Map vs Callan Small Cap Value Holdings as of December 31, 2023**



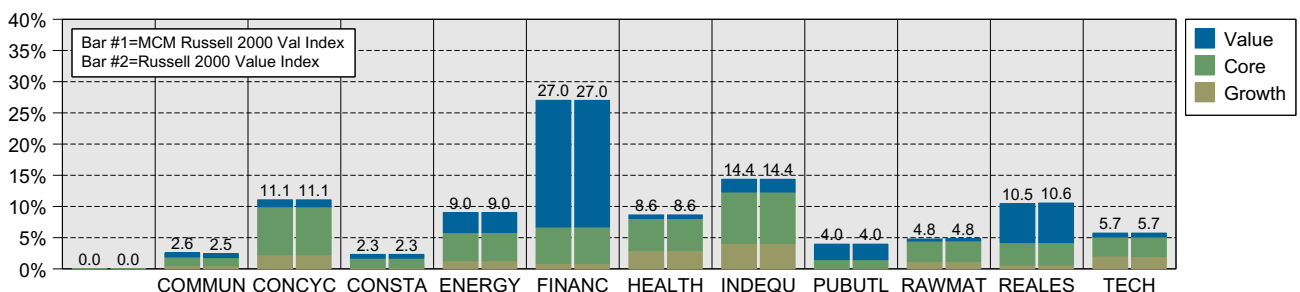
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Mid	1.4% (3)	3.7% (12)	2.5% (10)	7.7% (25)
Small	30.6% (222)	36.0% (332)	12.0% (136)	78.6% (690)
Micro	6.1% (267)	5.9% (330)	1.8% (91)	13.8% (688)
<b>Total</b>	<b>38.2% (492)</b>	<b>45.6% (674)</b>	<b>16.2% (237)</b>	<b>100.0% (1403)</b>

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

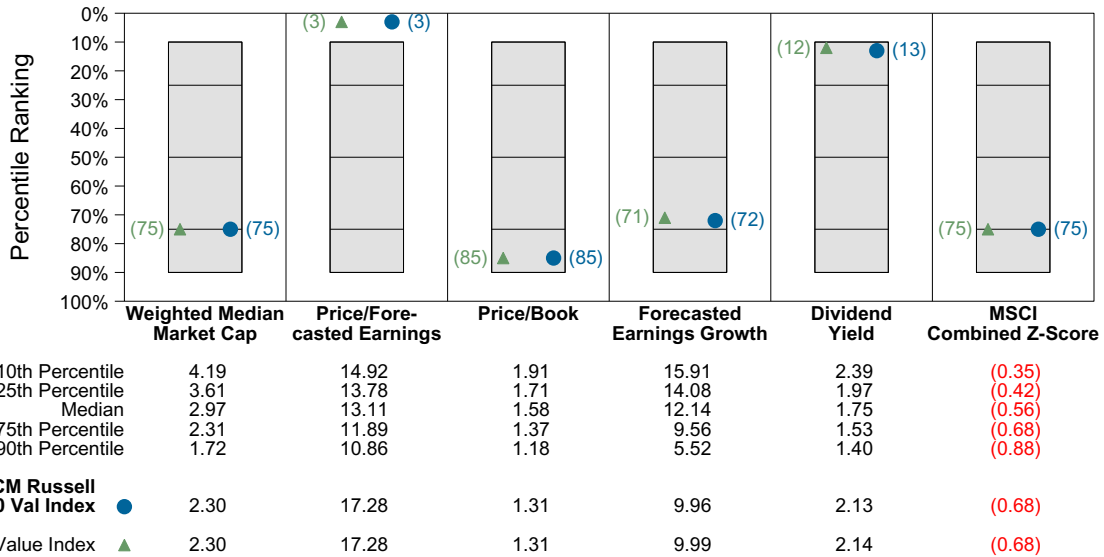


# MCM Russell 2000 Val Index Equity Characteristics Analysis Summary

## Portfolio Characteristics

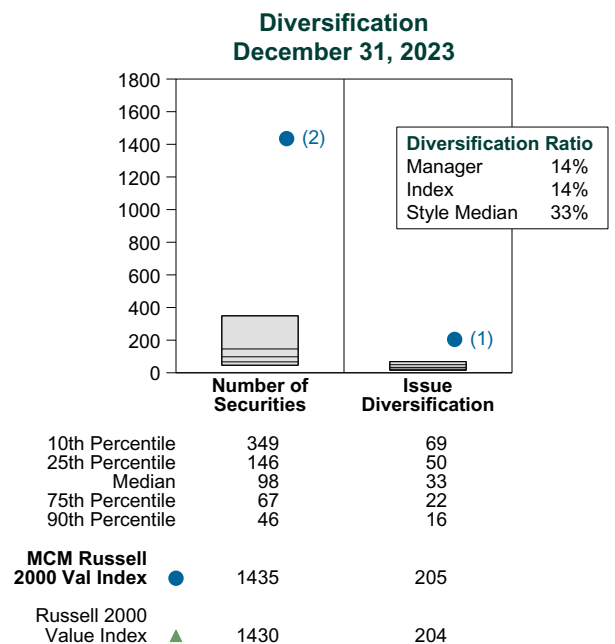
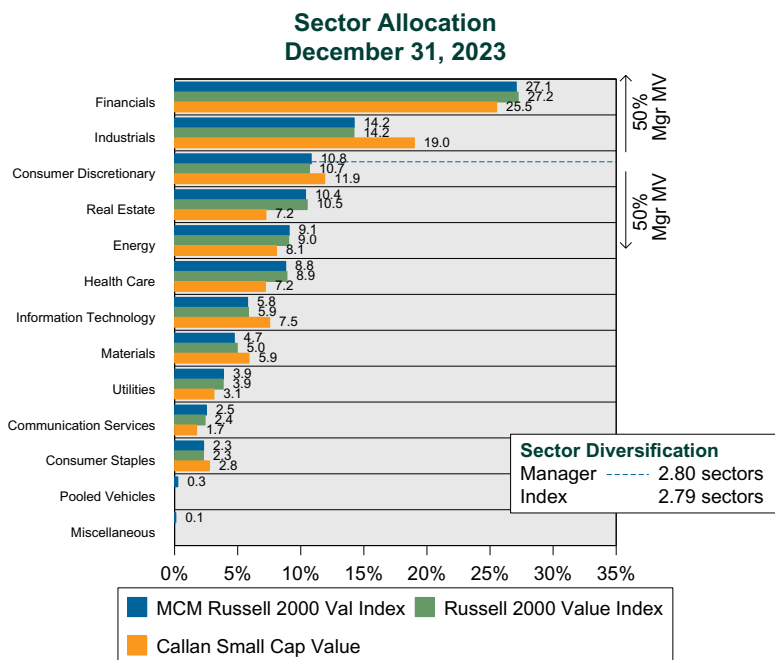
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Cap Value as of December 31, 2023



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



# Emerald Asset Management Period Ended December 31, 2023

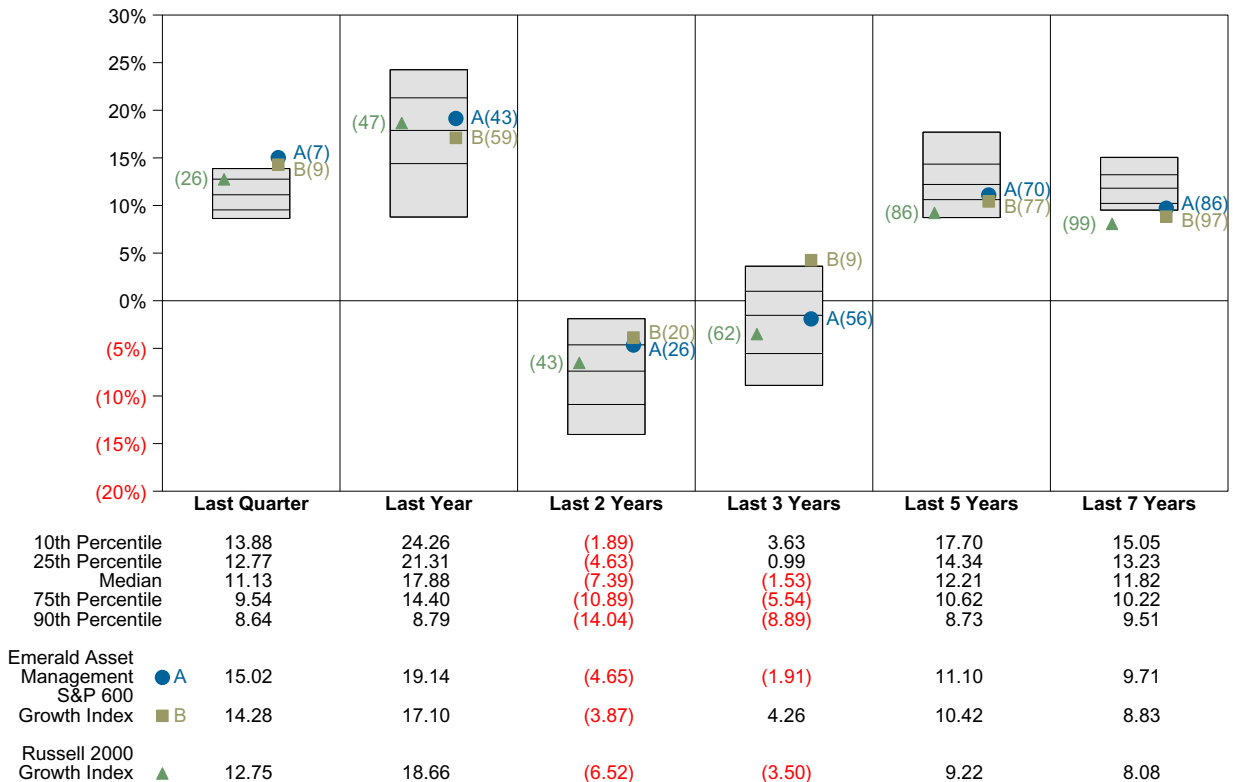
## Investment Philosophy

Emerald is dedicated to fundamental, bottom-up research designed to identify unrecognized, under-researched and undervalued growth companies.

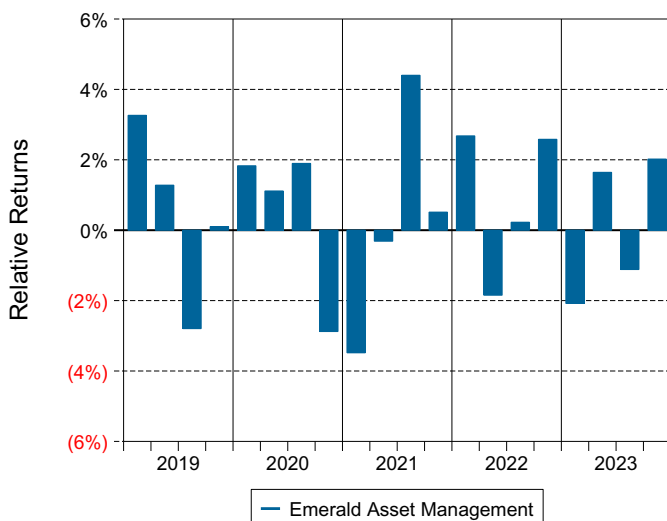
## Quarterly Summary and Highlights

- Emerald Asset Management's portfolio posted a 15.02% return for the quarter placing it in the 7 percentile of the Callan Small Cap Growth group for the quarter and in the 43 percentile for the last year.
- Emerald Asset Management's portfolio outperformed the Russell 2000 Growth Index by 2.28% for the quarter and outperformed the Russell 2000 Growth Index for the year by 0.48%.

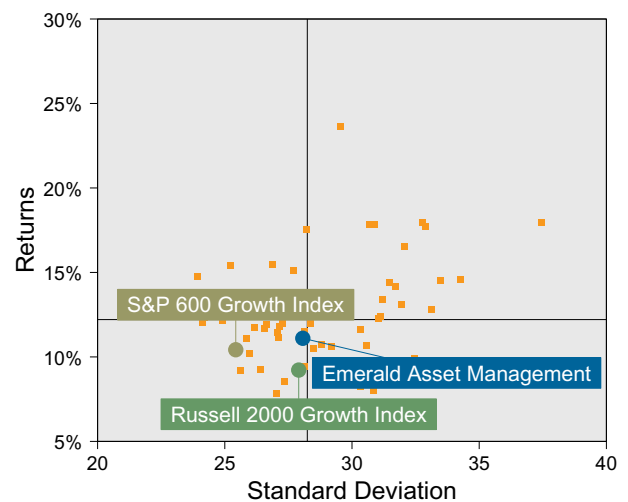
## Performance vs Callan Small Cap Growth (Gross)



## Relative Return vs Russell 2000 Growth Index



## Callan Small Cap Growth (Gross) Annualized Five Year Risk vs Return

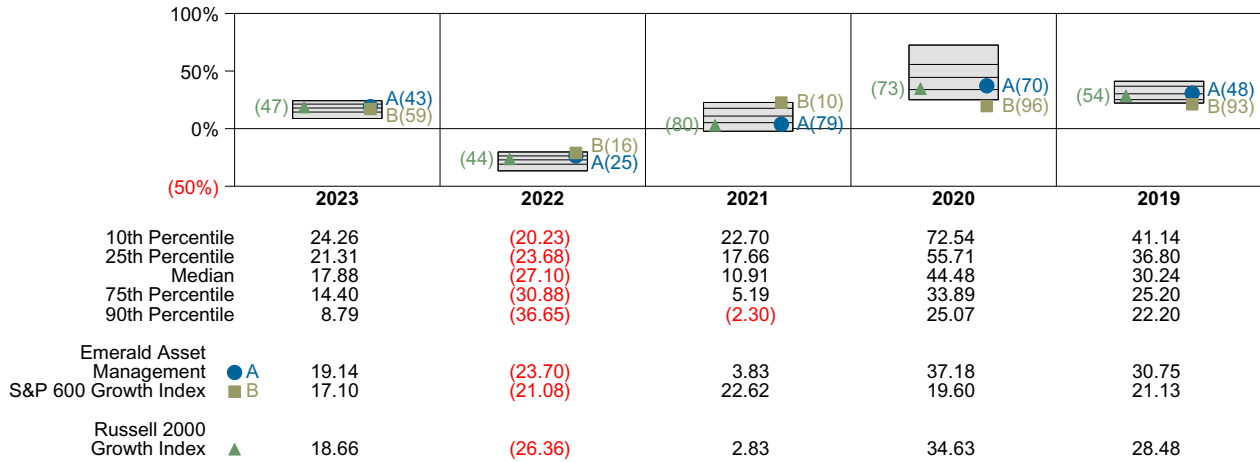


# Emerald Asset Management Return Analysis Summary

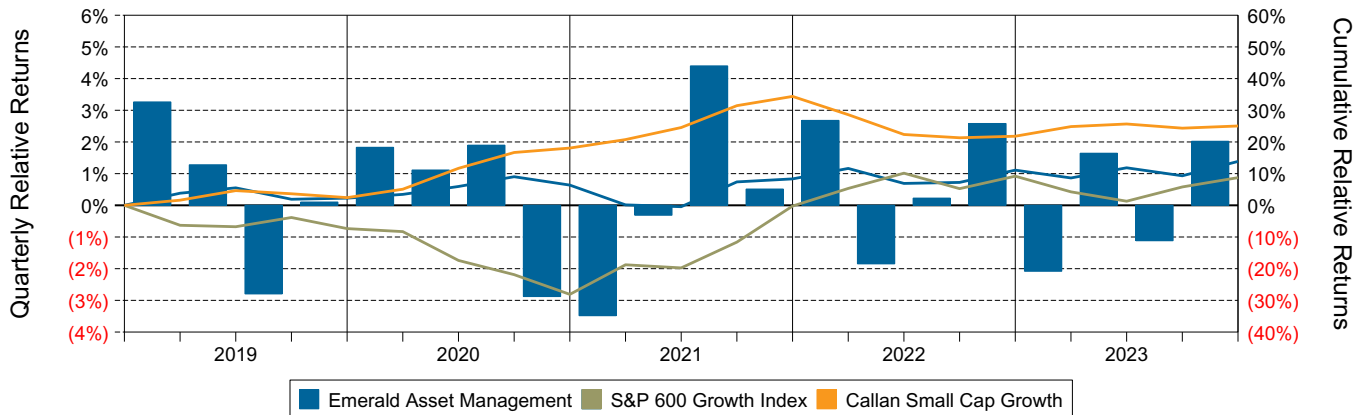
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

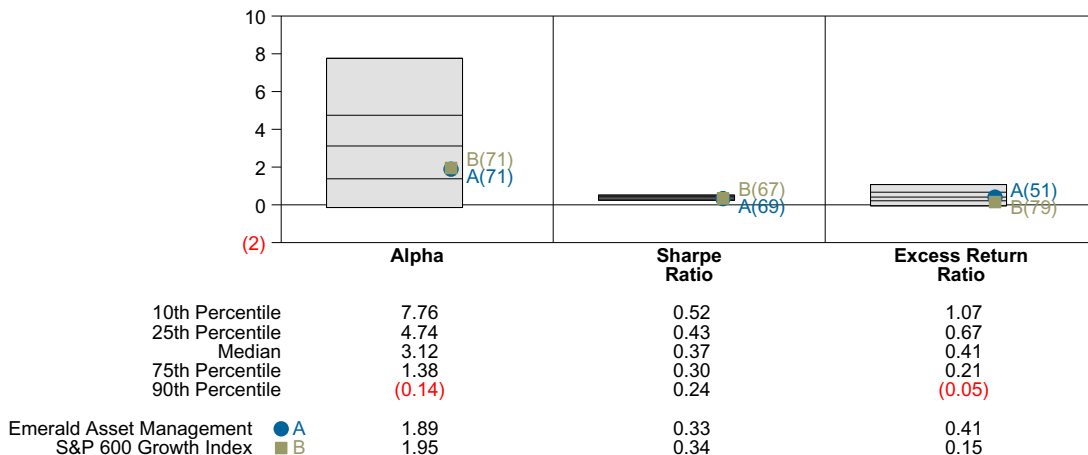
### Performance vs Callan Small Cap Growth (Gross)



### Cumulative and Quarterly Relative Returns vs Russell 2000 Growth Index



### Risk Adjusted Return Measures vs Russell 2000 Growth Index Rankings Against Callan Small Cap Growth (Gross) Five Years Ended December 31, 2023

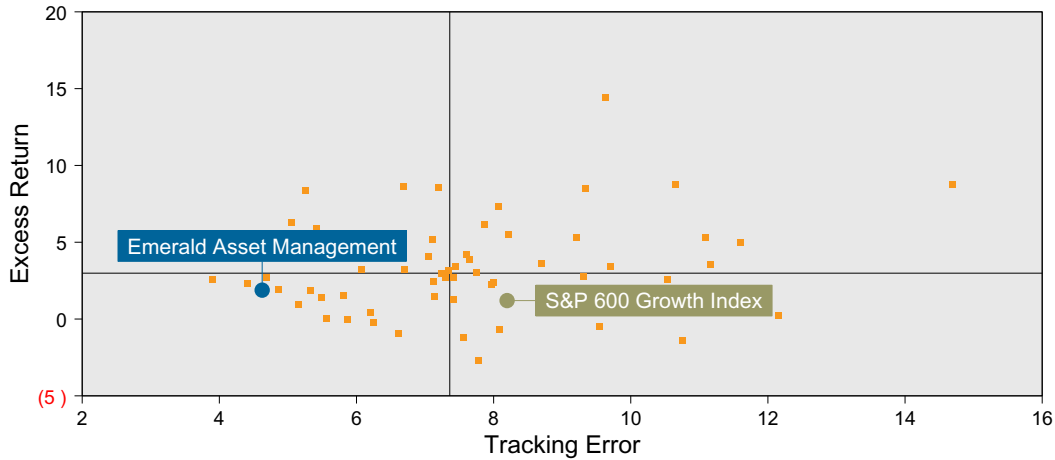


# Emerald Asset Management Risk Analysis Summary

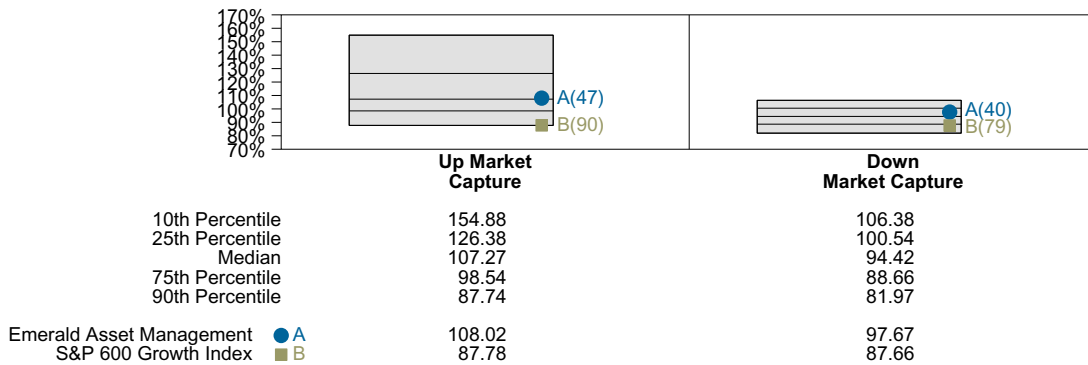
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

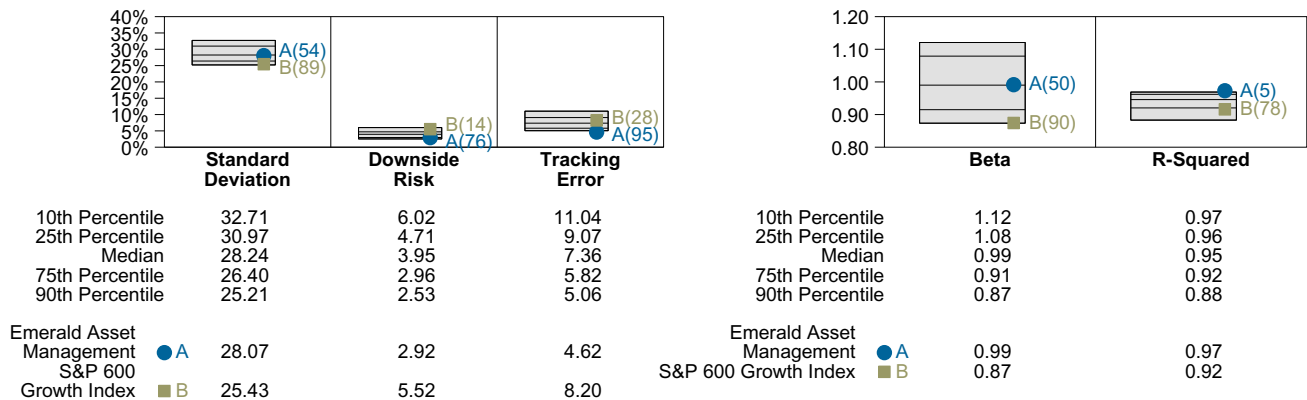
### Risk Analysis vs Callan Small Cap Growth (Gross) Five Years Ended December 31, 2023



### Market Capture vs Russell 2000 Growth Index Rankings Against Callan Small Cap Growth (Gross) Five Years Ended December 31, 2023



### Risk Statistics Rankings vs Russell 2000 Growth Index Rankings Against Callan Small Cap Growth (Gross) Five Years Ended December 31, 2023



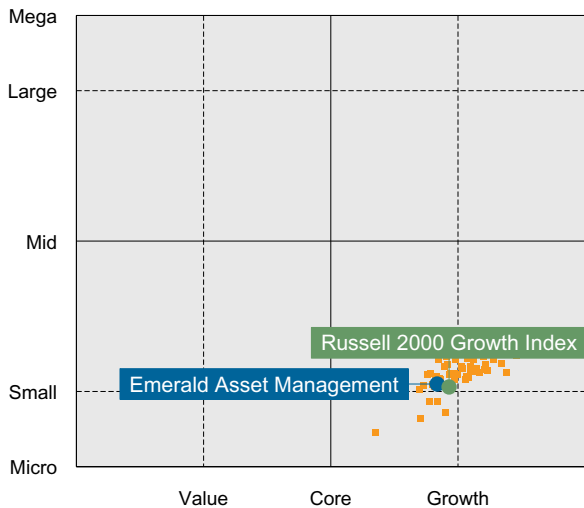
# Current Holdings Based Style Analysis

## Emerald Asset Management

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

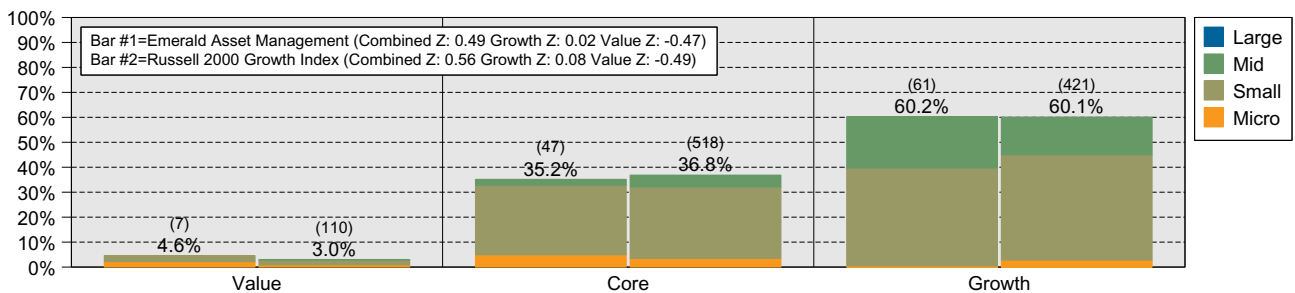
**Style Map vs Callan Small Cap Growth Holdings as of December 31, 2023**



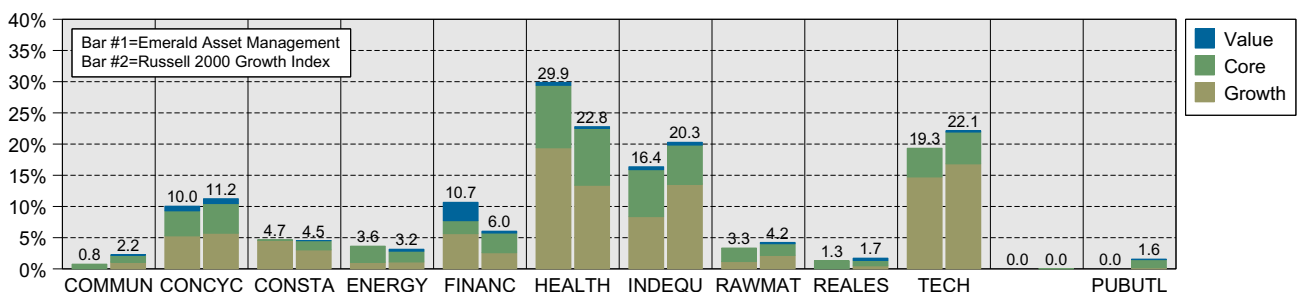
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Mid	0.0% (0)	2.4% (5)	20.6% (16)	22.9% (21)
Small	2.5% (4)	27.9% (31)	39.2% (44)	69.5% (79)
Micro	2.2% (3)	4.9% (11)	0.5% (1)	7.5% (15)
<b>Total</b>	<b>4.6% (7)</b>	<b>35.2% (47)</b>	<b>60.2% (61)</b>	<b>100.0% (115)</b>
	3.0% (110)	36.8% (518)	60.1% (421)	100.0% (1049)

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**



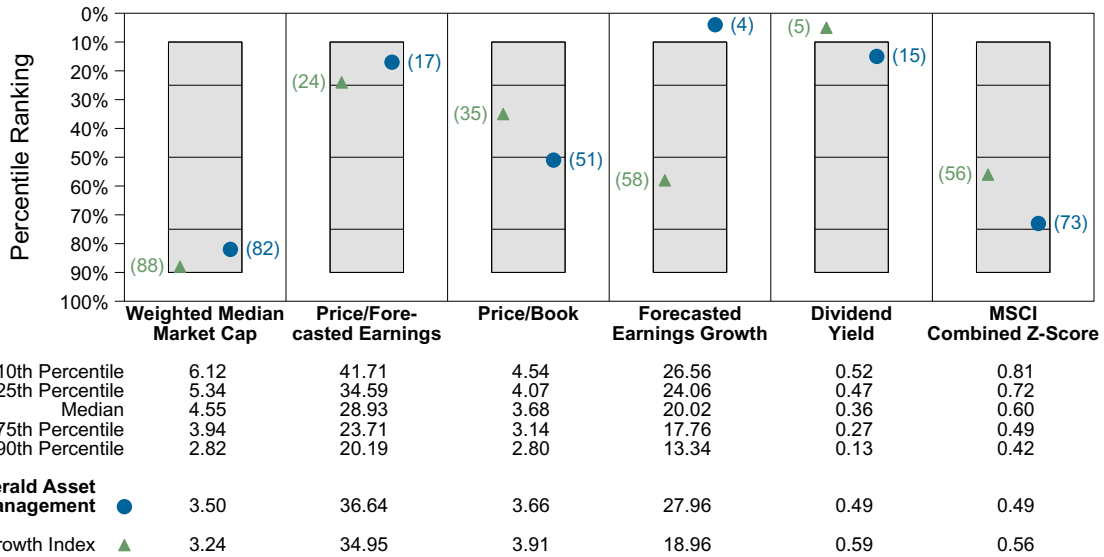


# Emerald Asset Management Equity Characteristics Analysis Summary

## Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

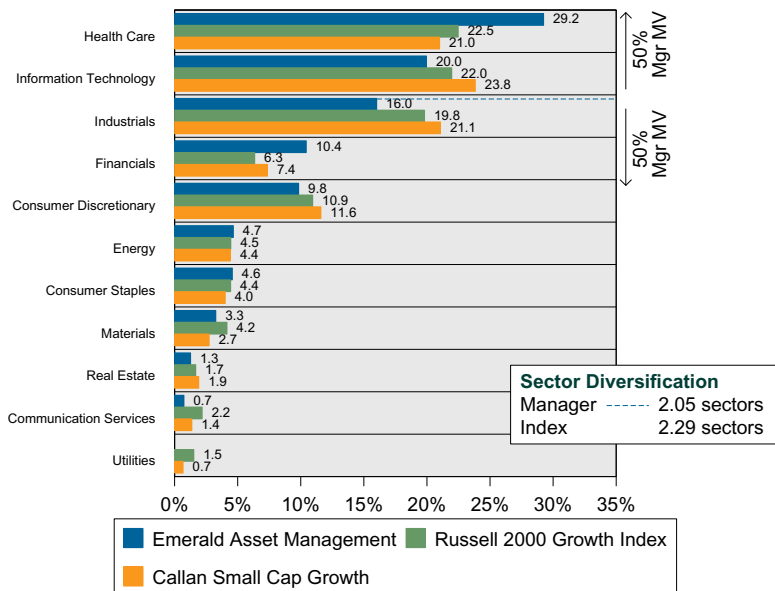
## Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Cap Growth as of December 31, 2023



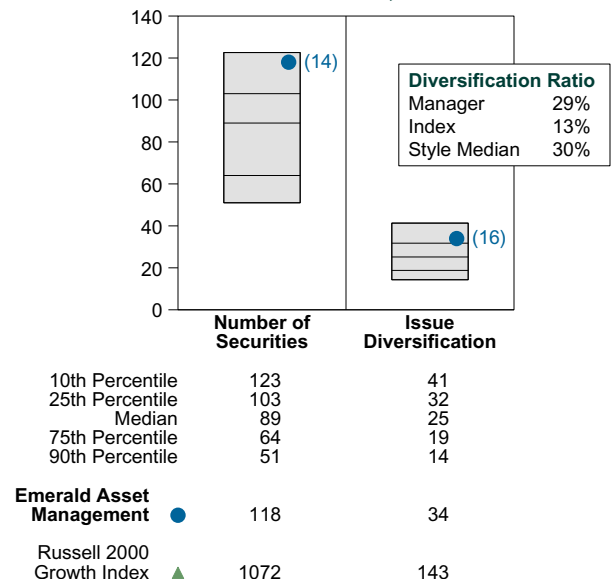
## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

### Sector Allocation December 31, 2023



### Diversification December 31, 2023

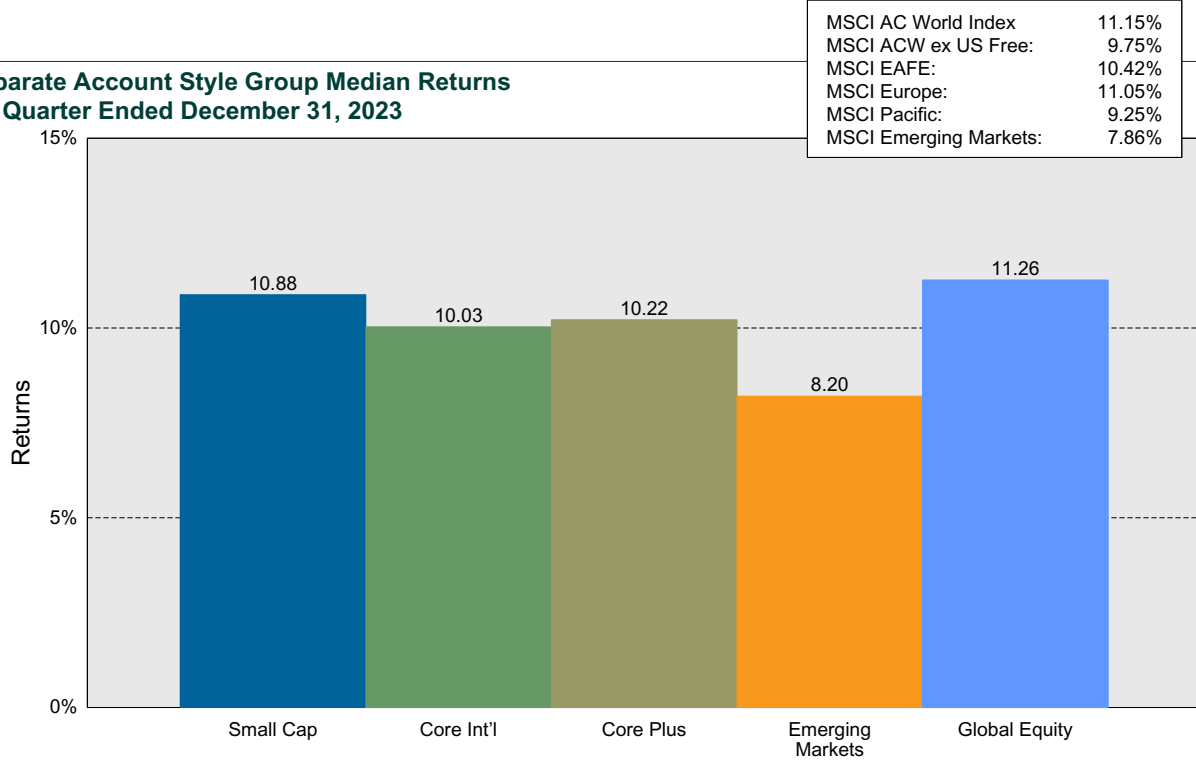




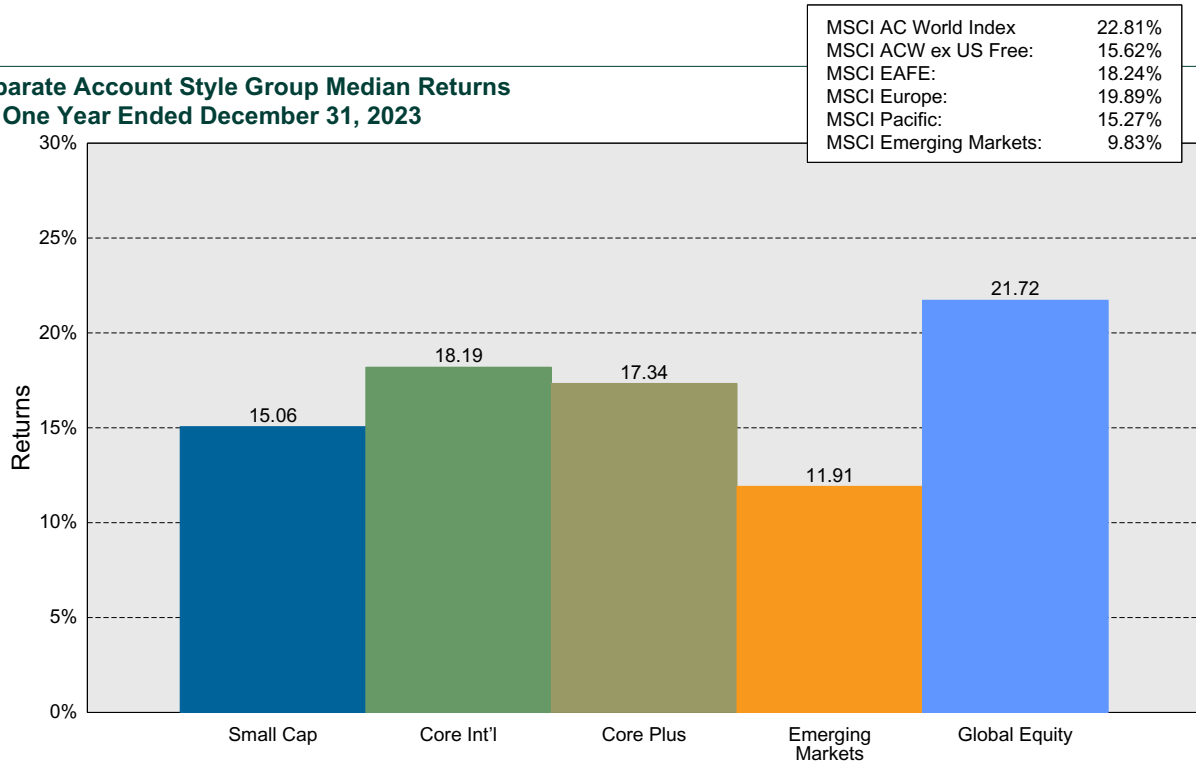
## International Equity Active Management Overview

Global ex-U.S. equities (MSCI ACWI ex USA: +9.8%) performed well in 4Q and for the year (+15.6%) but lagged the U.S. Weakness in the U.S. dollar helped 4Q returns across developed markets (MSCI EAFE: +10.4%; MSCI EAFE Local: +5.0%). As in the U.S., growth outperformed value in the quarter (MSCI ACWI ex USA Growth: +11.1%; MSCI ACWI ex USA Value: +8.4%). However, value outperformed growth for the full year (MSCI ACWI ex USA Growth: +14.0%; MSCI ACWI ex USA Value: +17.3%). Mirroring the U.S., Technology was the strongest sector for both the quarter and the year (MSCI ACWI ex USA Information Technology: +20.0%; +36.3%).

### Separate Account Style Group Median Returns for Quarter Ended December 31, 2023



### Separate Account Style Group Median Returns for One Year Ended December 31, 2023



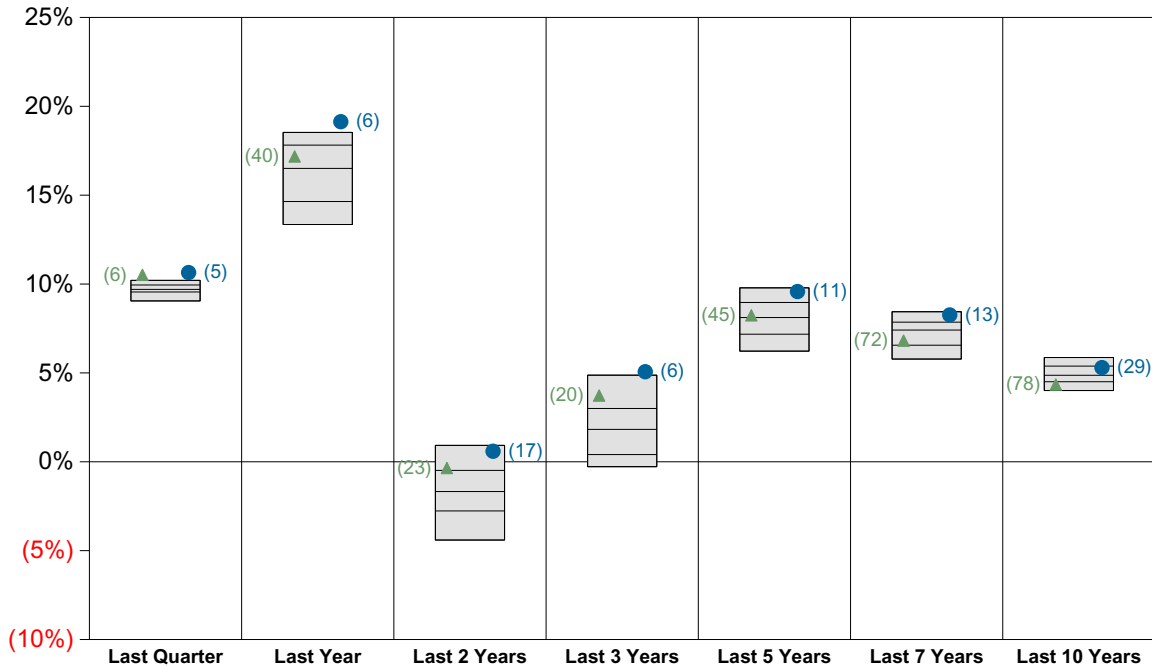


# Int'l Developed Markets Equity Period Ended December 31, 2023

## Quarterly Summary and Highlights

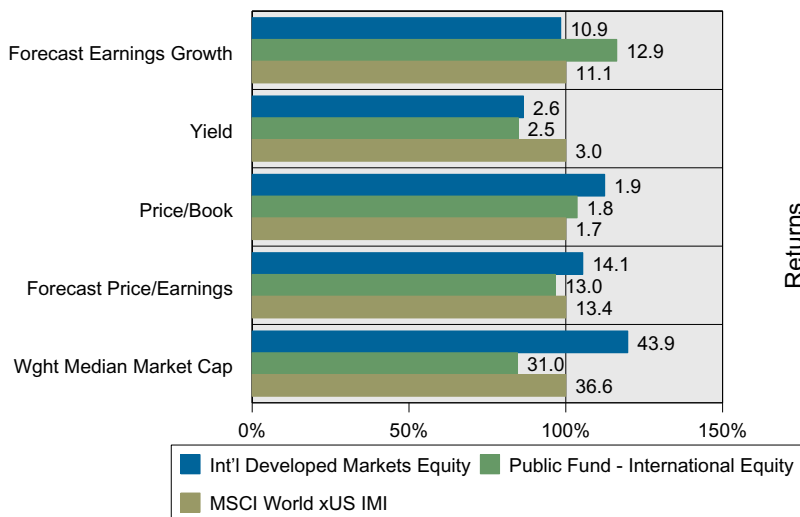
- Int'l Developed Markets Equity's portfolio posted a 10.65% return for the quarter placing it in the 5 percentile of the Public Fund - International Equity group for the quarter and in the 6 percentile for the last year.
- Int'l Developed Markets Equity's portfolio outperformed the MSCI World xUS IMI by 0.12% for the quarter and outperformed the MSCI World xUS IMI for the year by 1.95%.

## Performance vs Public Fund - International Equity (Gross)

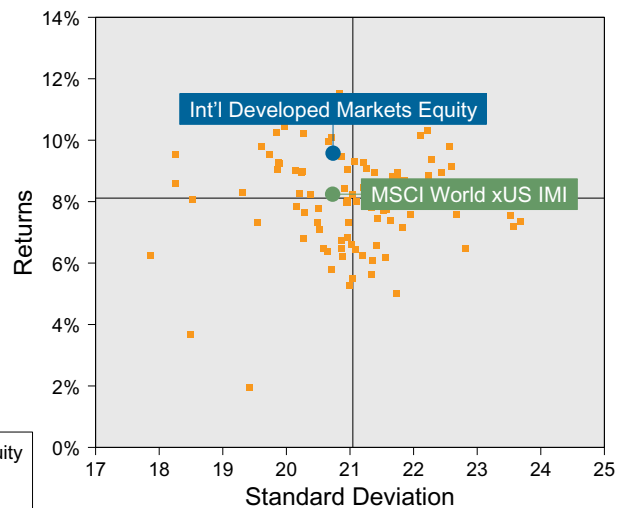


	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	10.21	18.53	0.92	4.87	9.79	8.44	5.87
25th Percentile	9.95	17.82	(0.48)	3.00	8.96	7.86	5.38
Median	9.70	16.51	(1.67)	1.82	8.11	7.41	4.87
75th Percentile	9.55	14.64	(2.76)	0.41	7.18	6.56	4.50
90th Percentile	9.05	13.35	(4.40)	(0.28)	6.23	5.78	4.01
<b>Int'l Developed Markets Equity</b>	● 10.65	19.13	0.59	5.07	9.58	8.26	5.30
MSCI World xUS IMI	▲ 10.52	17.18	(0.35)	3.73	8.24	6.82	4.35

## Portfolio Characteristics as a Percentage of the MSCI World xUS IMI



## Public Fund - International Equity (Gross) Annualized Five Year Risk vs Return

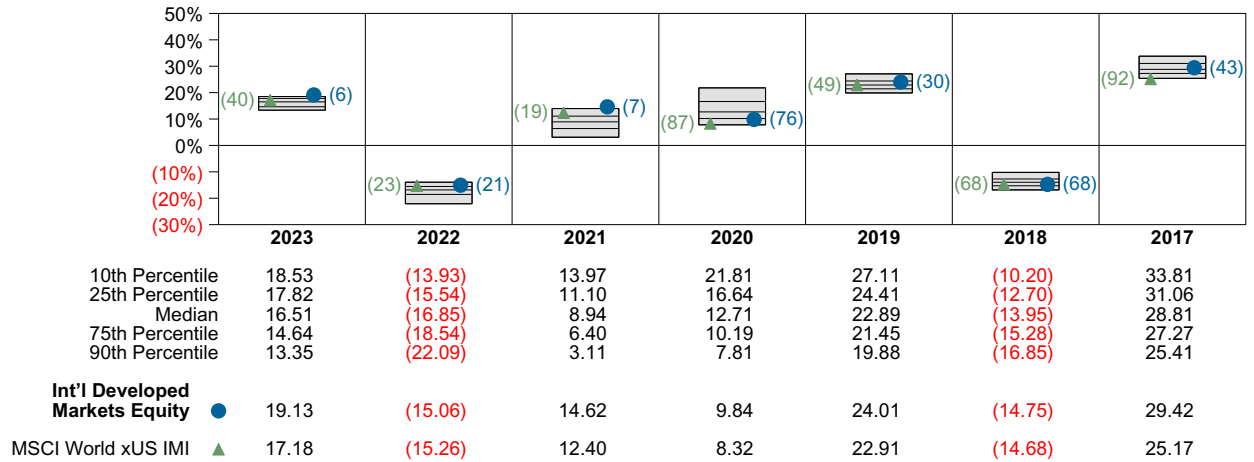


# Int'l Developed Markets Equity Return Analysis Summary

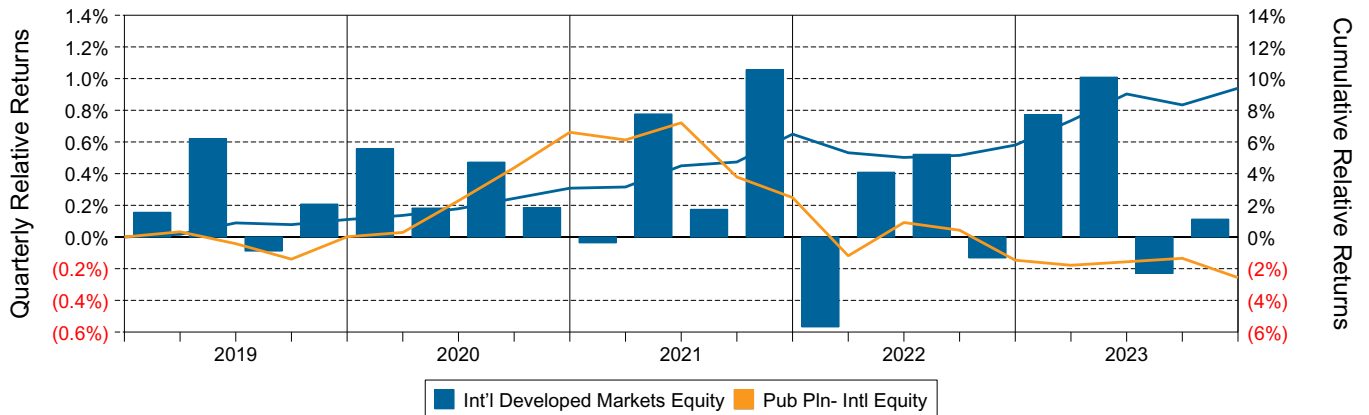
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

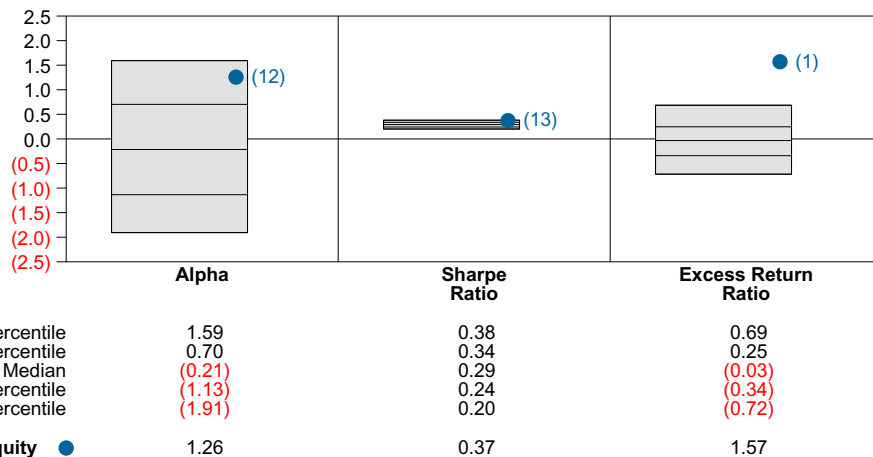
### Performance vs Public Fund - International Equity (Gross)



### Cumulative and Quarterly Relative Returns vs MSCI World xUS IMI



### Risk Adjusted Return Measures vs MSCI World xUS IMI Rankings Against Public Fund - International Equity (Gross) Five Years Ended December 31, 2023

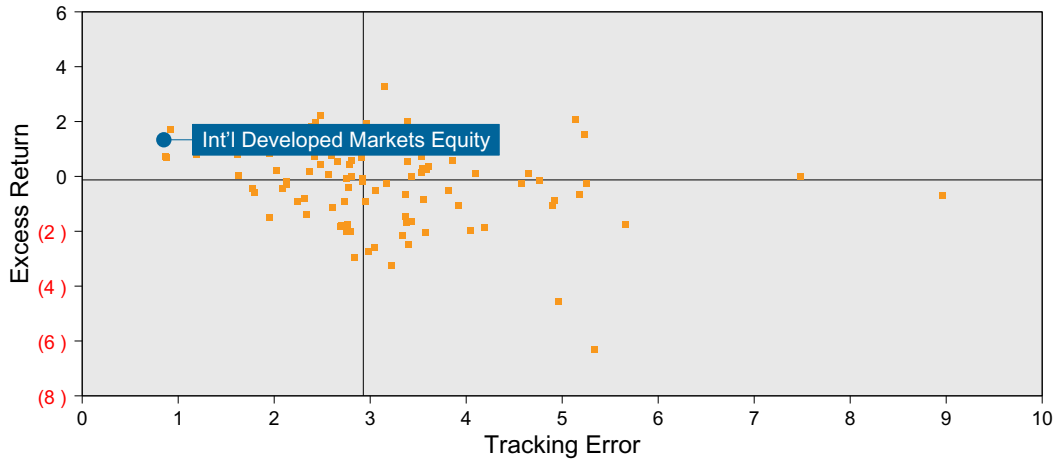


# Int'l Developed Markets Equity Risk Analysis Summary

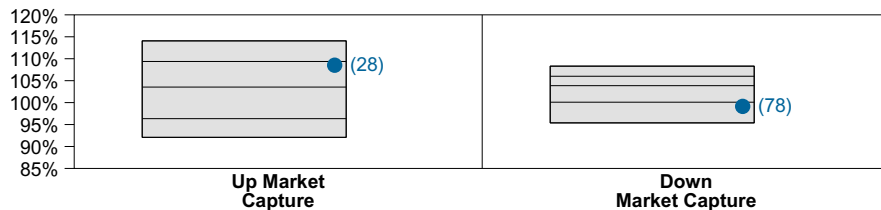
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Public Fund - International Equity (Gross) Five Years Ended December 31, 2023

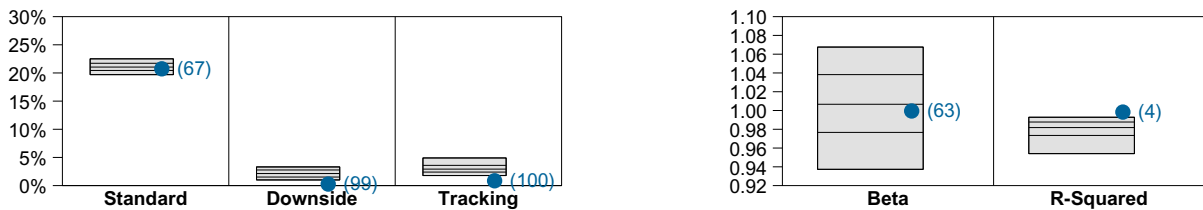


### Market Capture vs MSCI World xUS IMI (Net) Rankings Against Public Fund - International Equity (Gross) Five Years Ended December 31, 2023



	Up Market Capture	Down Market Capture
10th Percentile	114.07	108.31
25th Percentile	109.37	106.01
Median	103.54	103.86
75th Percentile	96.34	100.09
90th Percentile	92.09	95.38
<b>Int'l Developed Markets Equity</b>	<b>108.52</b>	<b>99.14</b>

### Risk Statistics Rankings vs MSCI World xUS IMI (Net) Rankings Against Public Fund - International Equity (Gross) Five Years Ended December 31, 2023

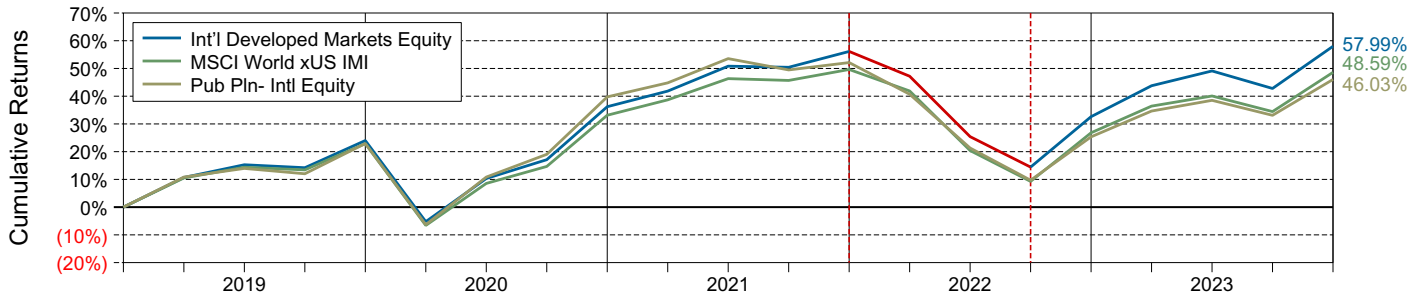


	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	22.51	3.31	4.91	1.07	0.99
25th Percentile	21.72	2.77	3.59	1.04	0.99
Median	21.04	2.14	2.93	1.01	0.98
75th Percentile	20.45	1.52	2.40	0.98	0.97
90th Percentile	19.70	1.00	1.78	0.94	0.95
<b>Int'l Developed Markets Equity</b>	<b>20.73</b>	<b>0.27</b>	<b>0.85</b>	<b>1.00</b>	<b>1.00</b>

# Int'l Developed Markets Equity Drawdown Analysis for Five Years Ended December 31, 2023

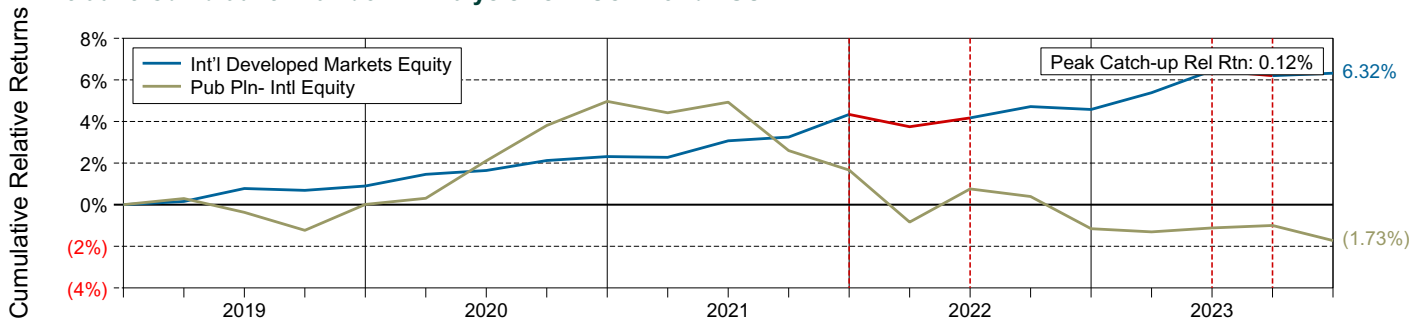
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute Drawdown as well as the Current Drawdown (cumulative return from high-water mark to now). The second chart focuses on Relative Drawdown (negative excess return vs. index). The bottom charts highlight the portfolio's peer rankings during drawdown periods.

## Absolute Cumulative Drawdown Analysis



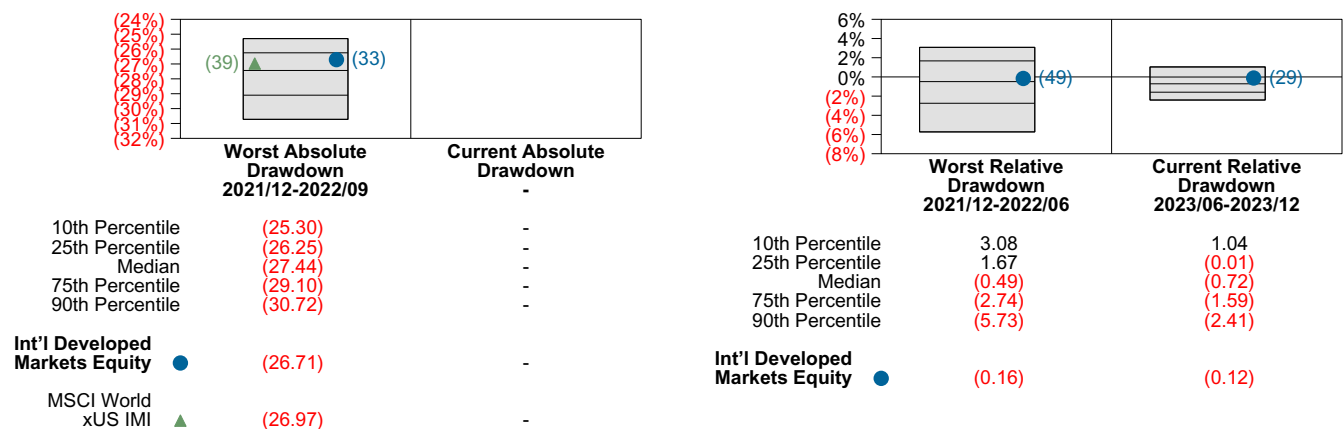
	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Int'l Developed Markets Equity	(26.71)%	0.75	2021/12-2022/09	(26.97)%	(27.88)%	-	-	-	-	-
Recovery from Trough	38.06%	1.25+	2022/09-2023/12	35.98%	33.11%					
MSCI World xUS IMI	(26.97)%	0.75	2021/12-2022/09			(0.70)%	2.00	2021/12-2023/12		
Pub Pln- Intl Equity	(28.55)%	1.25	2021/06-2022/09			(4.90)%	2.50	2021/06-2023/12		

## Relative Cumulative Drawdown Analysis vs. MSCI World xUS IMI



	Worst Relative Drawdown				Current Relative Drawdown			
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Int'l Developed Markets Equity	(0.16)%	0.50	2021/12-2022/06	(0.89)%	(0.12)%	0.50	2023/06-2023/12	(0.61)%
Recovery from Trough	0.52%	0.25	2022/06-2022/09	(0.36)%	0.11%	0.25+	2023/09-2023/12	(0.73)%
Pub Pln- Intl Equity	(6.38)%	3.00	2020/12-2023/12		(6.38)%	3.00	2020/12-2023/12	

## Drawdown Rankings vs. MSCI World xUS IMI Rankings against Public Fund - International Equity Five Years Ended December 31, 2023

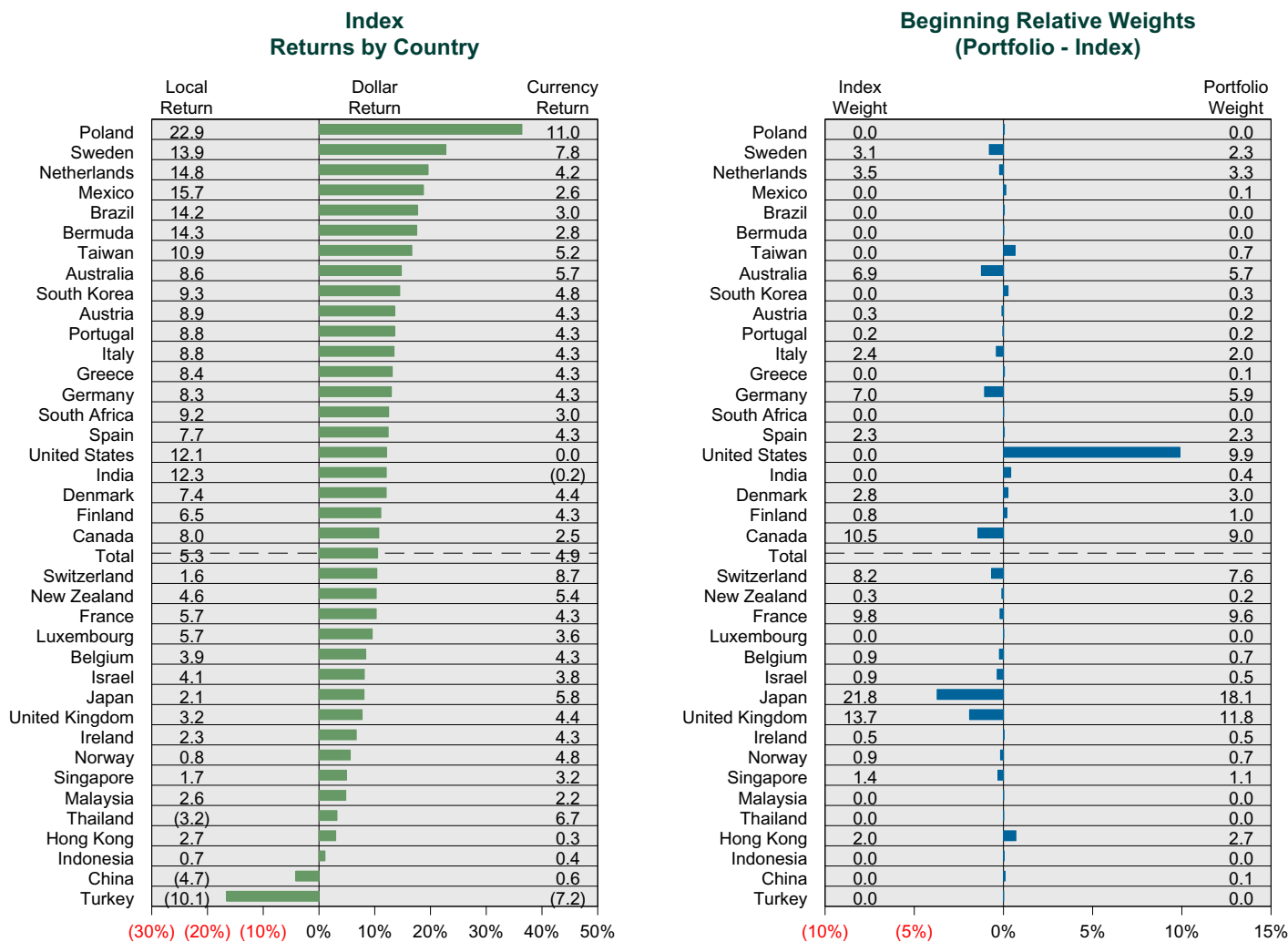




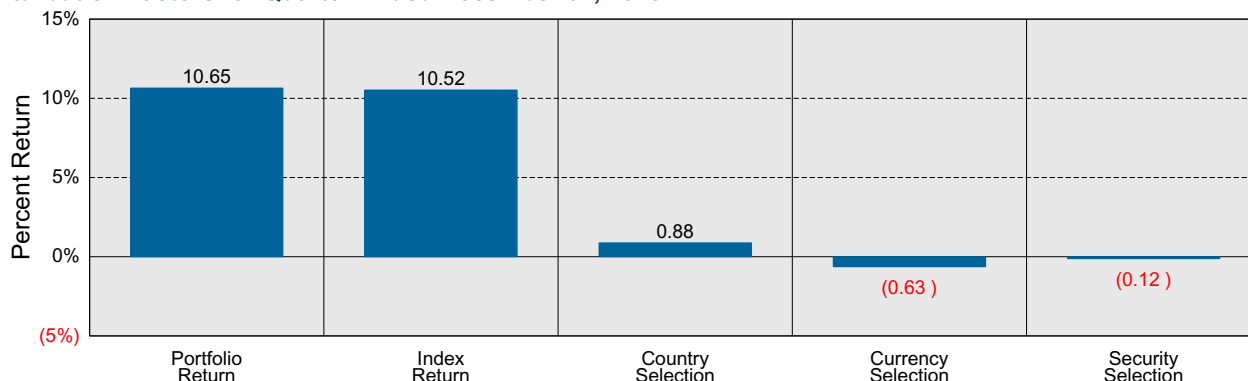
# Int'l Developed Markets Equity vs MSCI World xUS IMI Attribution for Quarter Ended December 31, 2023

## International Attribution

The first chart below illustrates the return for each country in the index sorted from high to low. The total return for the index is highlighted with a dotted line. The second chart (countries presented in the same order) illustrates the manager's country allocation decisions relative to the index. To the extent that the manager over-weighted a country that had a higher return than the total return for the index (above the dotted line) it contributes positively to the manager's country (or currency) selection effect. The last chart details the manager return, the index return, and the attribution factors for the quarter.



## Attribution Factors for Quarter Ended December 31, 2023



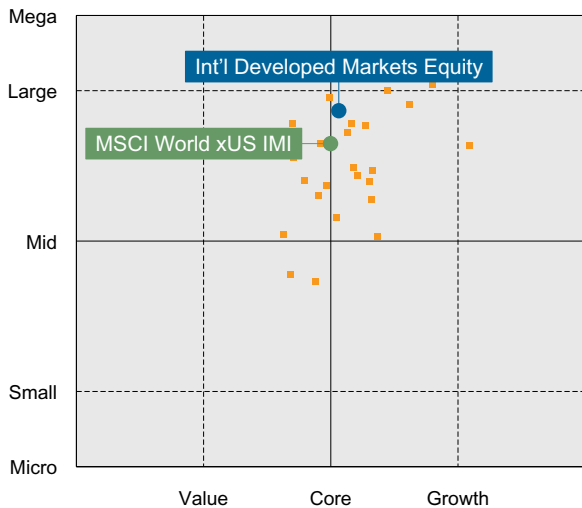
# Current Holdings Based Style Analysis

## Int'l Developed Markets Equity

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

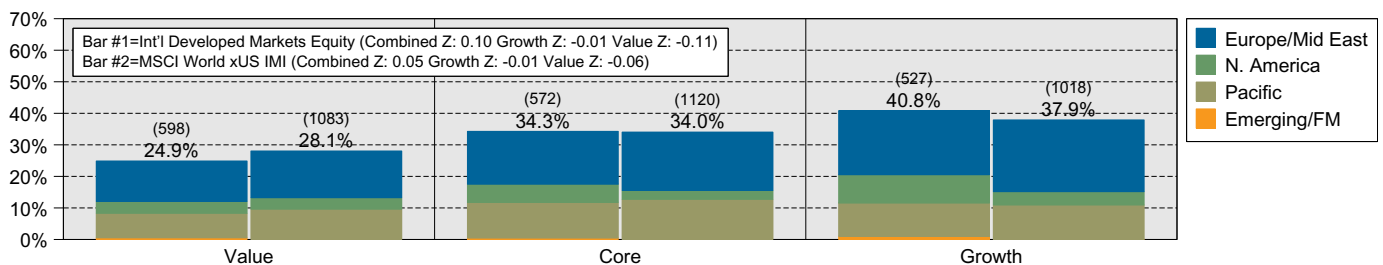
**Style Map vs Pub Pln- Intl Equity Holdings as of December 31, 2023**



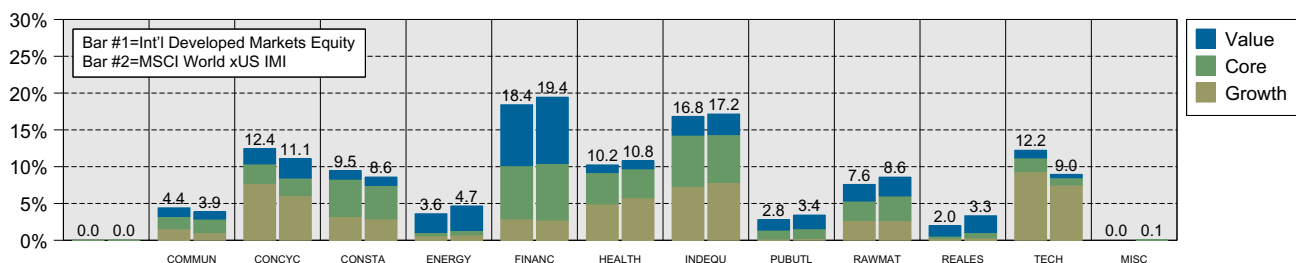
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Europe/ Mid East	12.8% (211)	16.8% (224)	20.3% (213)	49.9% (648)
N. America	14.8% (461)	18.5% (506)	22.7% (450)	56.0% (1417)
Pacific	3.8% (60)	5.8% (70)	9.0% (68)	18.5% (198)
Emerging/ FM	3.6% (95)	2.9% (114)	4.2% (96)	10.7% (305)
<b>Total</b>	<b>24.9% (598)</b>	<b>34.3% (572)</b>	<b>40.8% (527)</b>	<b>100.0% (1697)</b>
	28.1% (1083)	34.0% (1120)	37.9% (1018)	100.0% (3221)

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

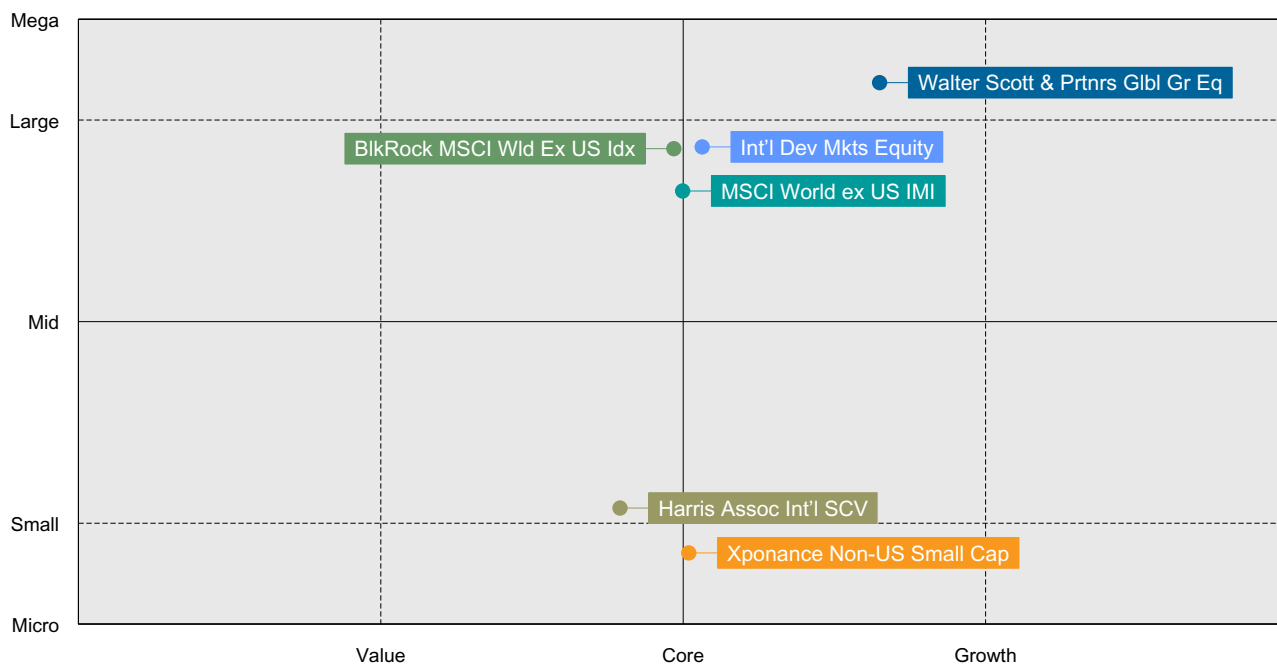


## International Holdings Based Style Analysis For One Quarter Ended December 31, 2023

This page analyzes and compares the investment styles of multiple portfolios using a detailed holdings-based style analysis methodology. The size component of style is measured by the weighted median market capitalization of the holdings. The value/core/growth style dimension is captured by the "Combined Z-Score" of the portfolio. This score is based on eight fundamental factors used in the MSCI stock style scoring system. The table below gives a more detailed breakdown of several relevant style metrics on the portfolios.

### Style Map

#### Holdings for One Quarter Ended December 31, 2023



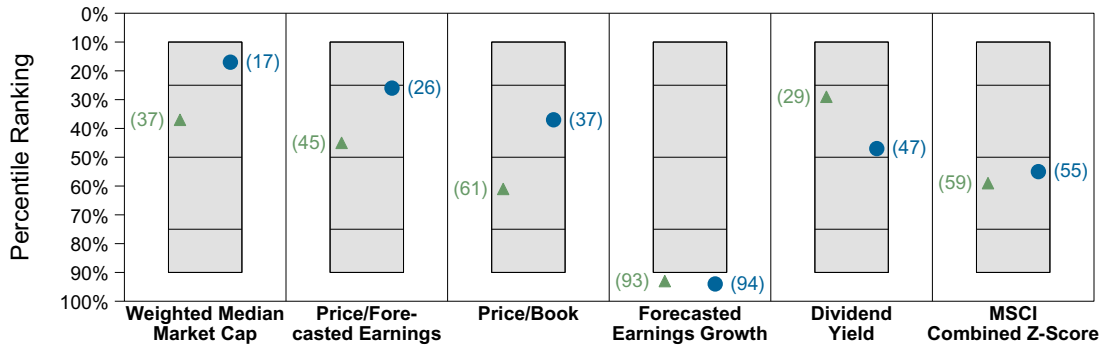
	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities	Security Diversification
Walter Scott & Prtnrs Gbl Gr Eq	4.79%	106.99	0.58	0.04	(0.54)	46	16.63
BlkRock MSCI Wld Ex US Idx	77.64%	43.59	0.02	(0.03)	(0.05)	869	102.72
Harris Assoc Int'l SCV	2.94%	3.48	(0.14)	(0.05)	0.09	63	19.49
Xponance Non-US Small Cap	4.55%	2.16	0.06	0.06	(0.00)	849	111.15
Int'l Dev Mkts Equity	100.00%	43.88	0.10	(0.01)	(0.11)	1760	112.21
MSCI World ex US IMI	-	36.64	0.05	(0.01)	(0.06)	3256	139.88

# Int'l Developed Markets Equity Equity Characteristics Analysis Summary

## Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

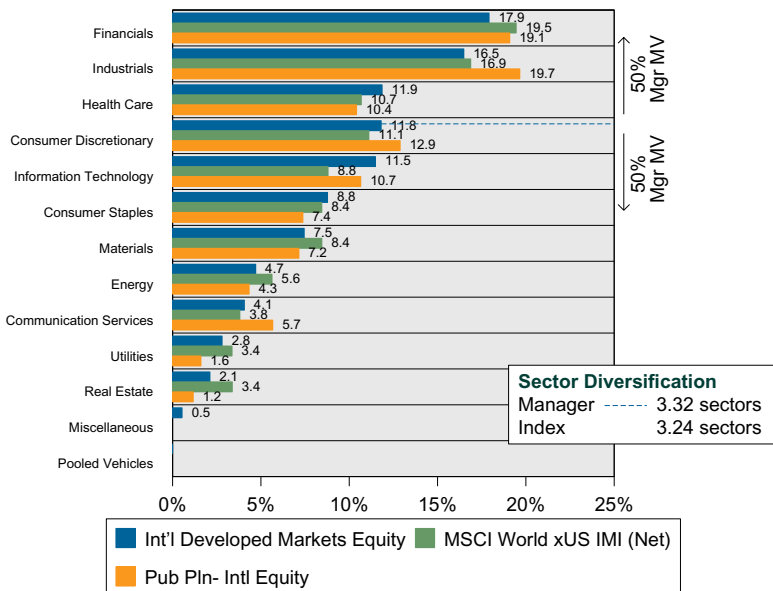
## Portfolio Characteristics Percentile Rankings Rankings Against Public Fund - International Equity as of December 31, 2023



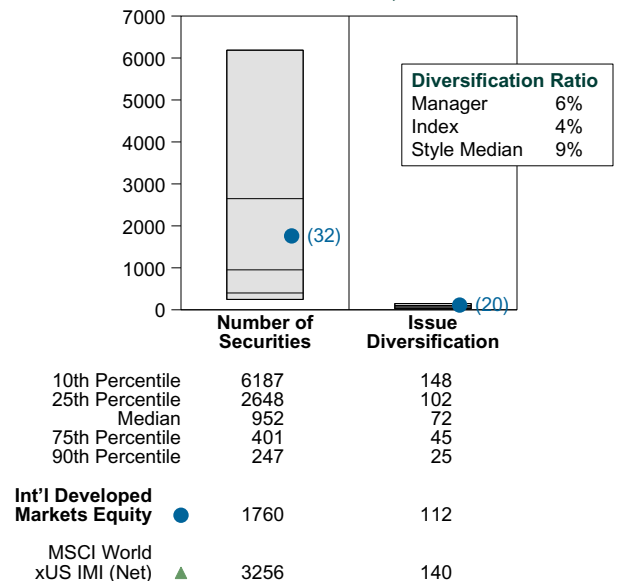
## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

### Sector Allocation December 31, 2023



### Diversification December 31, 2023



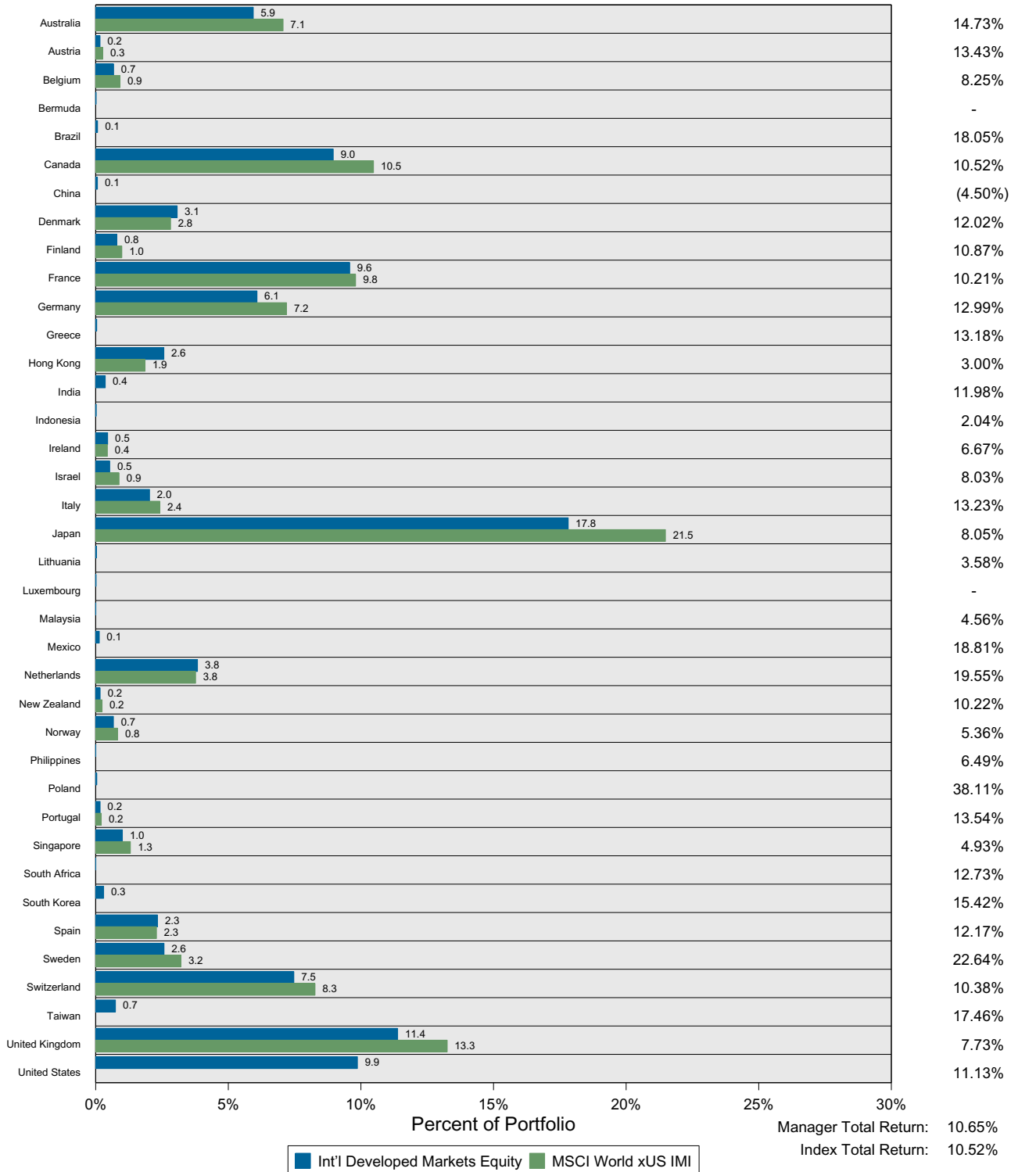
# Country Allocation

## Int'l Developed Markets Equity VS MSCI World xUS IMI (Net)

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

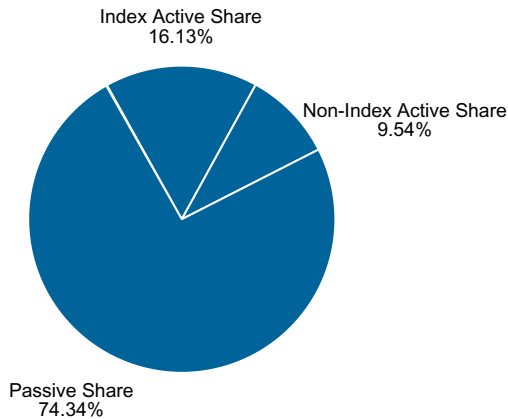
Country Weights as of December 31, 2023



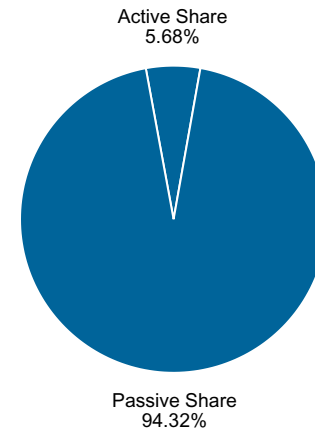
# Int'l Developed Markets Equity Active Share Analysis as of December 31, 2023 vs. MSCI World xUS IMI (Net)

Active Share analysis compares the holdings of a portfolio to an index to measure how aggressively it differs from the index. Active share is measured at the individual stock level ("holdings-level active share") and using sector weights ("sector exposure active share"). Holdings-level active share comes from: 1) Index Active Share - over/under weighting of stocks in the index, and 2) Non-Index Active Share - positions in stocks not in the index. This analysis displays active share by sector and compares the portfolio to a relevant peer group.

## Holdings-Level Active Share



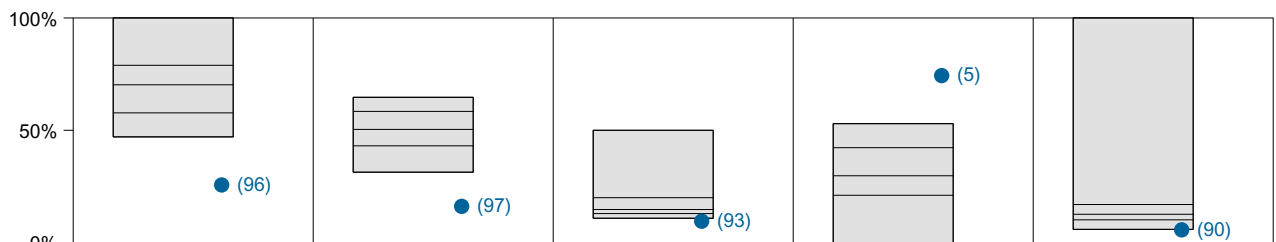
## Sector Exposure Active Share



**Total Active Share: 25.66%**

	Index Active Share Within Sector	Non-Index Active Share Within Sector	Total Active Share Within Sector	Index Weight	Manager Weight	Contribution to Total Portfolio Active Share
Communication Services	14.67%	8.80%	23.46%	3.81%	4.06%	0.84%
Consumer Discretionary	19.22%	9.19%	28.42%	11.11%	11.81%	3.11%
Consumer Staples	12.23%	7.22%	19.45%	8.44%	8.77%	1.59%
Energy	22.32%	14.95%	37.27%	5.63%	4.71%	1.93%
Financials	8.72%	3.72%	12.44%	19.45%	17.92%	2.91%
Health Care	20.74%	17.37%	38.10%	10.68%	11.86%	4.05%
Industrials	18.17%	7.91%	26.07%	16.88%	16.49%	4.46%
Information Technology	20.45%	16.06%	36.52%	8.80%	11.48%	3.23%
Materials	14.22%	3.97%	18.19%	8.45%	7.45%	1.61%
Miscellaneous	50.00%	50.00%	100.00%	-	0.54%	0.27%
Pooled Vehicles	0.00%	100.00%	100.00%	-	0.00%	0.00%
Real Estate	35.85%	8.90%	44.74%	3.38%	2.11%	1.05%
Utilities	14.01%	4.60%	18.62%	3.36%	2.80%	0.59%
<b>Total</b>	<b>16.13%</b>	<b>9.54%</b>	<b>25.66%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>25.65%</b>

## Active Share vs. Pub Pln- Intl Equity



Int'l Developed Markets Equity ●



# Walter Scott & Prtnrs Gbl Gr Eq Period Ended December 31, 2023

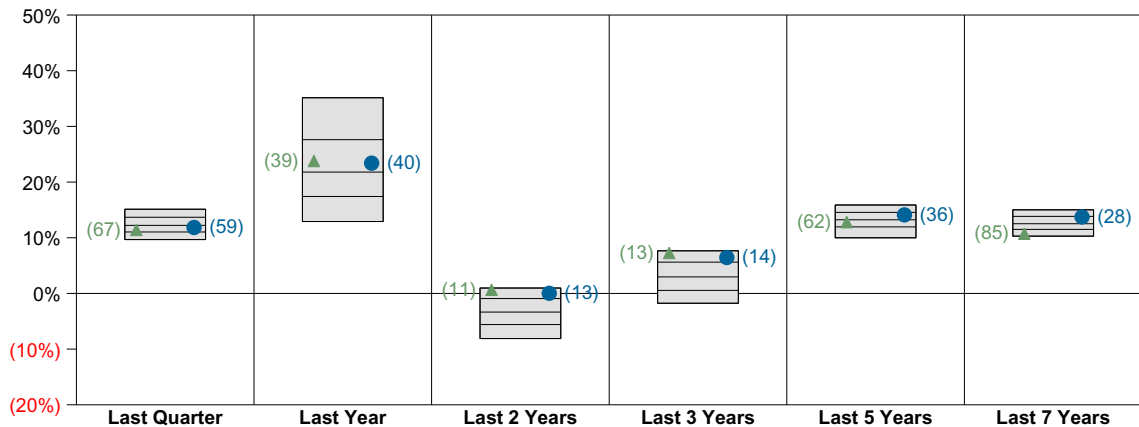
## Investment Philosophy

Walter Scott was founded in 1983 and is based in Edinburgh, Scotland. The firm-wide philosophy is centered on the belief that companies with sustainable wealth generation, as defined by 1) cash return on capital employed, 2) return on equity, and 3) growth in earnings per share, will outperform over the long-term. The 24-person investment team of regional experts identifies these opportunities through in-house, bottom-up research. Walter Scott seeks high-quality and competitively-positioned companies that generate strong cash flows and are led by prudent management teams. The Global Equity portfolio holds 40 to 60 stocks with opportunistic exposure to emerging markets. The consistently-applied process is reflected in the strategy's compelling longer-term investment performance.

## Quarterly Summary and Highlights

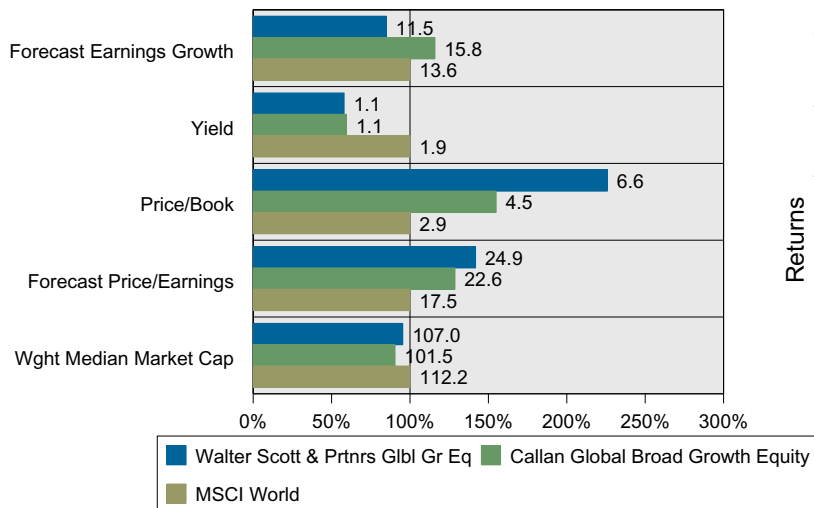
- Walter Scott & Prtnrs Gbl Gr Eq's portfolio posted a 11.84% return for the quarter placing it in the 59 percentile of the Callan Global Broad Growth Equity group for the quarter and in the 40 percentile for the last year.
- Walter Scott & Prtnrs Gbl Gr Eq's portfolio outperformed the MSCI World by 0.43% for the quarter and underperformed the MSCI World for the year by 0.39%.

## Performance vs Callan Global Broad Growth Equity (Gross)

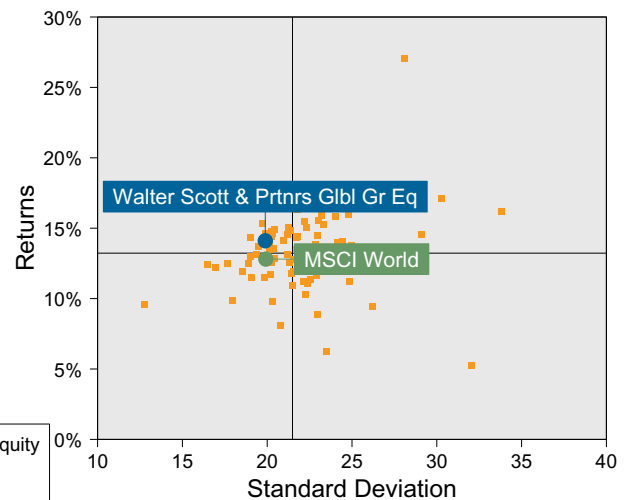


	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	15.12	35.15	0.97	7.66	15.88	15.02
25th Percentile	13.68	27.62	(0.92)	5.62	14.56	13.84
Median	12.23	21.79	(3.35)	2.97	13.23	12.52
75th Percentile	11.04	17.42	(5.59)	0.55	11.95	11.51
90th Percentile	9.68	12.92	(8.11)	(1.76)	9.99	10.29
Walter Scott & Prtnrs Gbl Gr Eq	11.84	23.39	0.02	6.45	14.11	13.73
MSCI World	11.42	23.79	0.66	7.27	12.80	10.73

## Portfolio Characteristics as a Percentage of the MSCI World



## Callan Global Broad Growth Equity (Gross) Annualized Five Year Risk vs Return



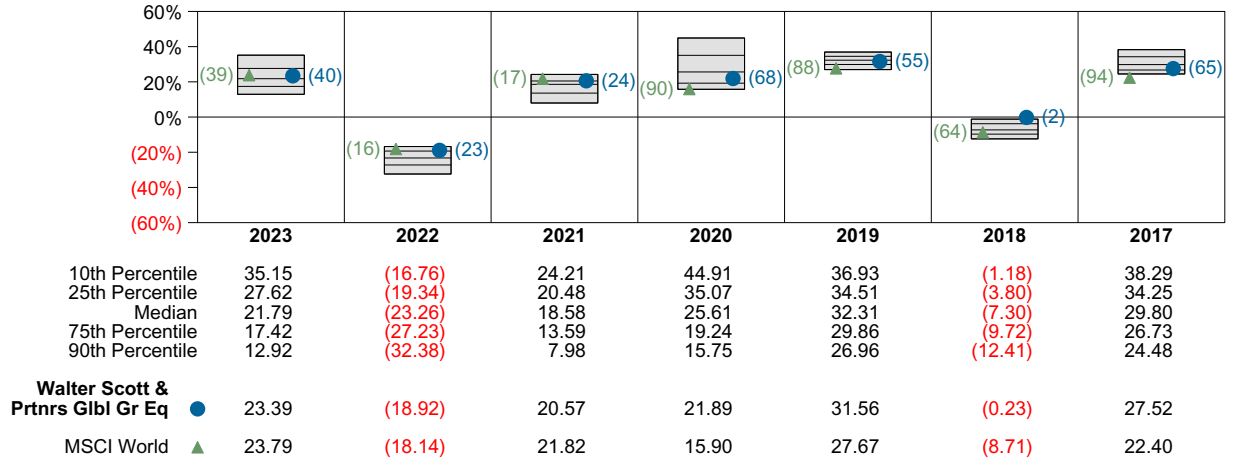


# Walter Scott & Prtnrs Gbl Gr Eq Return Analysis Summary

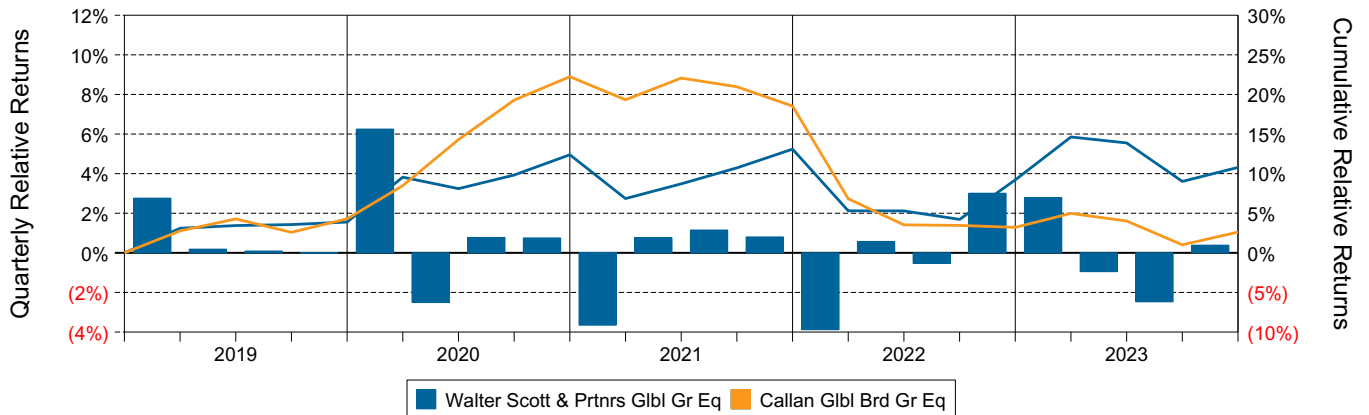
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

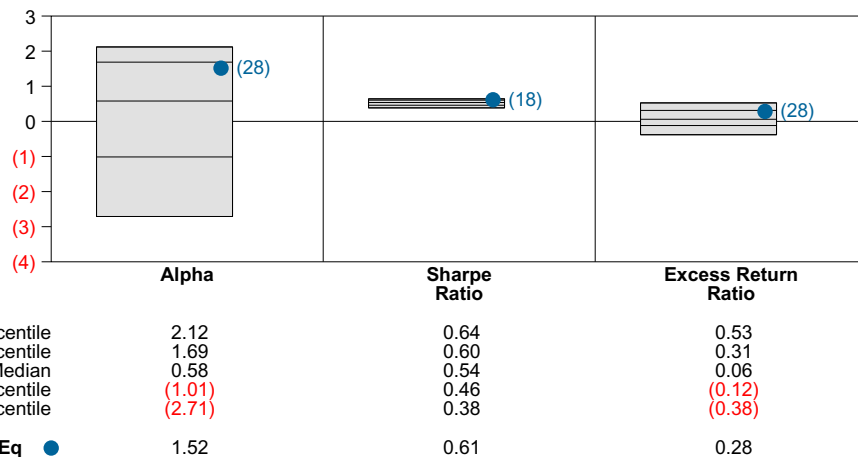
### Performance vs Callan Global Broad Growth Equity (Gross)



### Cumulative and Quarterly Relative Returns vs MSCI World



### Risk Adjusted Return Measures vs MSCI World Rankings Against Callan Global Broad Growth Equity (Gross) Five Years Ended December 31, 2023

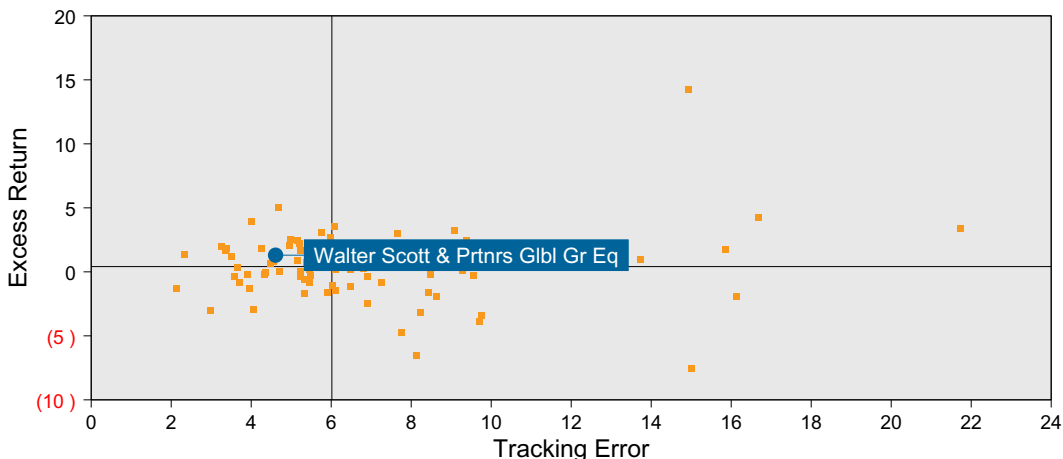


# Walter Scott & Prtnrs Gbl Gr Eq Risk Analysis Summary

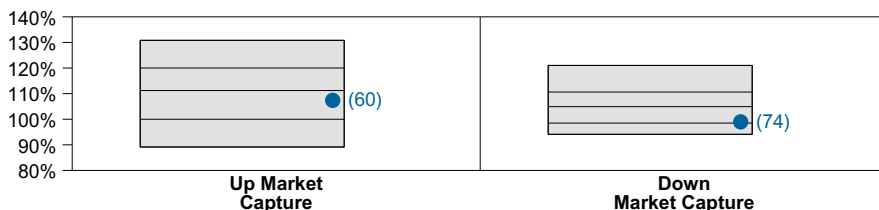
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Callan Global Broad Growth Equity (Gross) Five Years Ended December 31, 2023

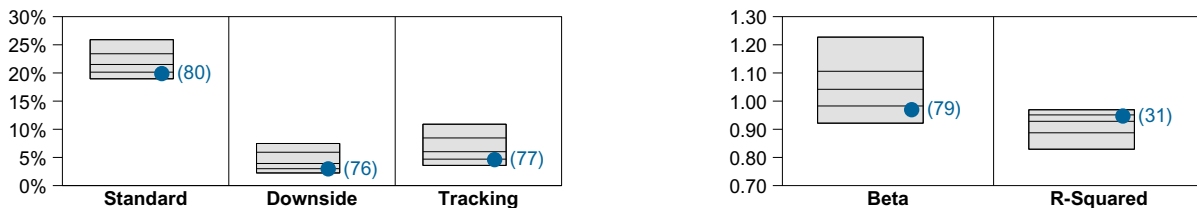


### Market Capture vs MSCI World (Net) Rankings Against Callan Global Broad Growth Equity (Gross) Five Years Ended December 31, 2023



	Up Market Capture	Down Market Capture
10th Percentile	130.82	121.02
25th Percentile	120.01	110.63
Median	111.21	104.91
75th Percentile	99.99	98.50
90th Percentile	89.15	94.11
<b>Walter Scott &amp; Prtnrs Gbl Gr Eq</b>	<b>107.37</b>	<b>98.97</b>

### Risk Statistics Rankings vs MSCI World (Net) Rankings Against Callan Global Broad Growth Equity (Gross) Five Years Ended December 31, 2023



	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	25.91	7.48	10.90	1.23	0.97
25th Percentile	23.41	5.92	8.46	1.11	0.95
Median	21.50	3.93	6.02	1.04	0.93
75th Percentile	20.14	3.00	4.69	0.98	0.89
90th Percentile	18.96	2.24	3.58	0.92	0.83
<b>Walter Scott &amp; Prtnrs Gbl Gr Eq</b>	<b>19.89</b>	<b>2.97</b>	<b>4.61</b>	<b>0.97</b>	<b>0.95</b>

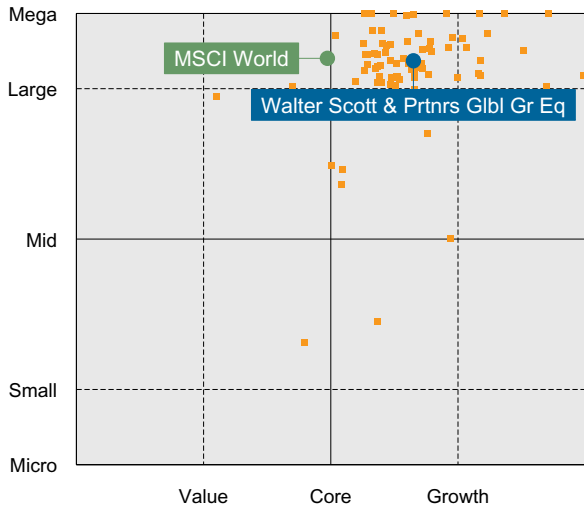
# Current Holdings Based Style Analysis

## Walter Scott & Prtnrs Gbl Gr Eq

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left chart illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

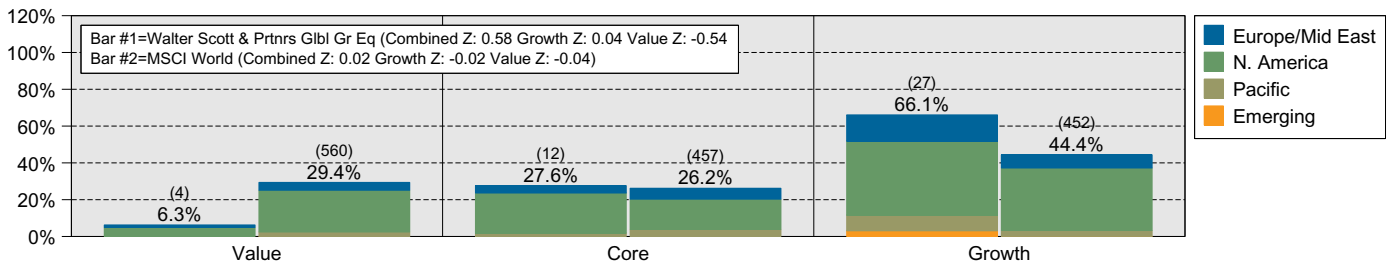
**Style Map vs Callan Gbl Brd Gr Eq Holdings as of December 31, 2023**



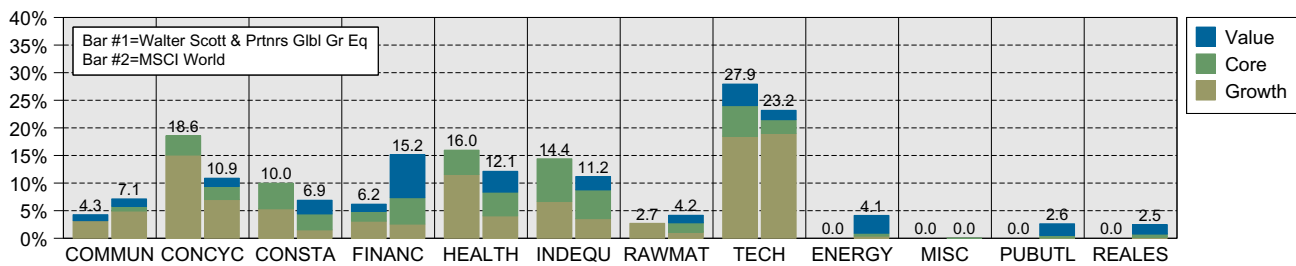
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Europe/Mid East	1.3% (1) 4.3% (140)	4.0% (3) 5.9% (144)	14.4% (6) 7.2% (153)	19.7% (10) 17.4% (437)
N. America	5.0% (3) 22.7% (293)	21.8% (8) 16.4% (201)	40.2% (16) 34.0% (191)	67.0% (27) 73.1% (685)
Pacific	0.0% (0) 2.4% (126)	1.8% (1) 3.9% (112)	8.4% (4) 3.2% (107)	10.2% (5) 9.5% (345)
Emerging	0.0% (0) 0.0% (1)	0.0% (0) 0.0% (0)	3.1% (1) 0.0% (1)	3.1% (1) 0.1% (2)
<b>Total</b>	<b>6.3% (4)</b> <b>29.4% (560)</b>	<b>27.6% (12)</b> <b>26.2% (457)</b>	<b>66.1% (27)</b> <b>44.4% (452)</b>	<b>100.0% (43)</b> <b>100.0% (1469)</b>

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

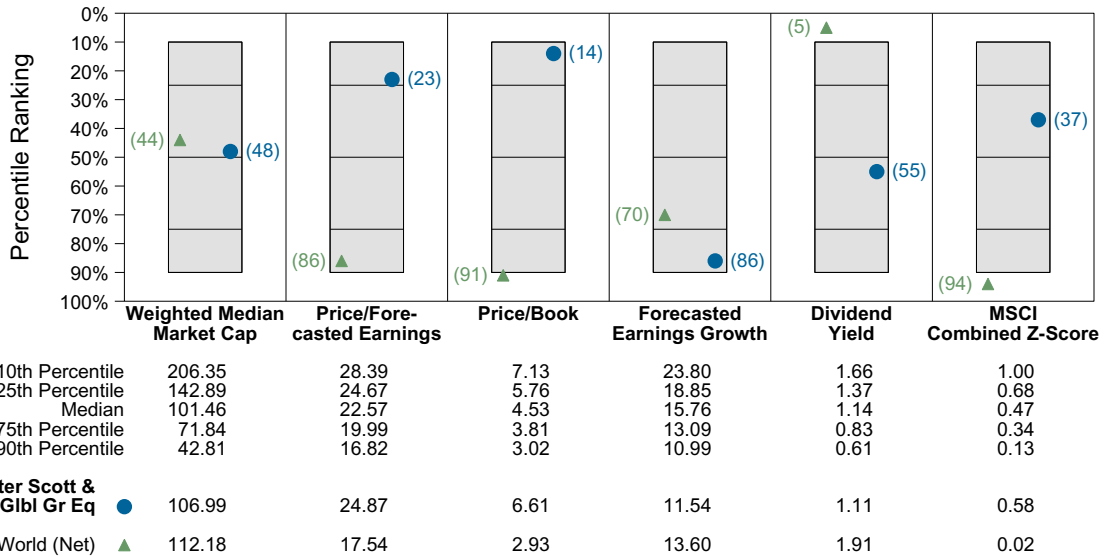


# Walter Scott & Prtnrs Gbl Gr Eq Equity Characteristics Analysis Summary

## Portfolio Characteristics

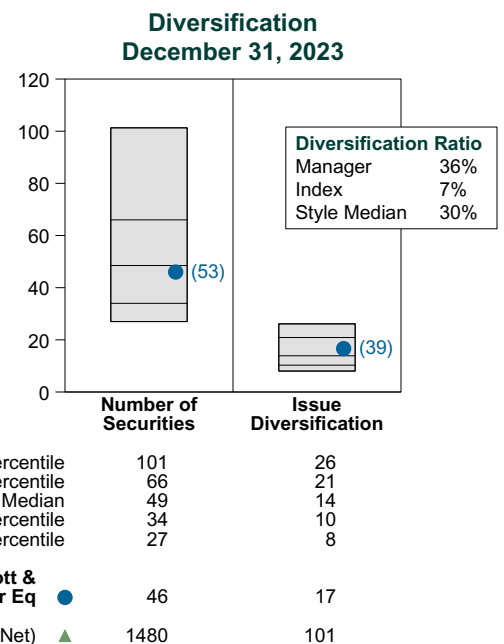
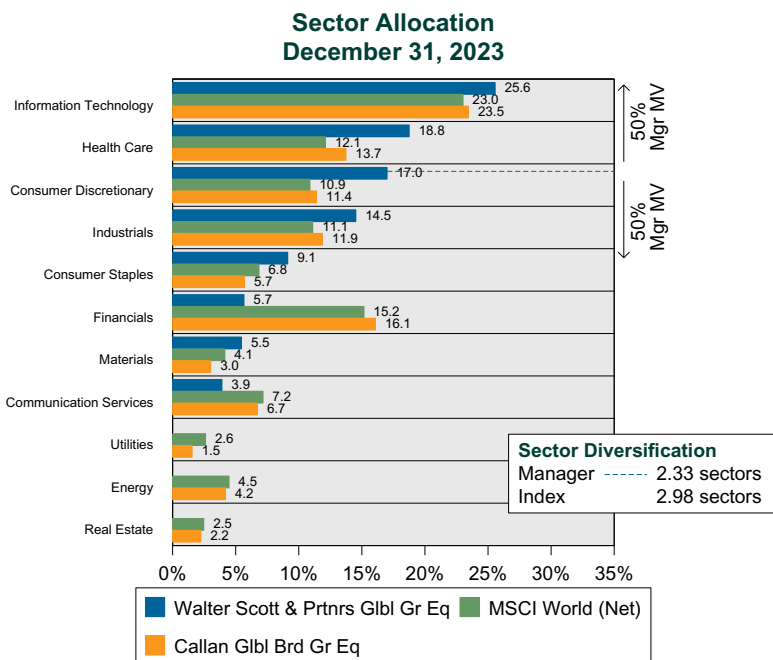
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Global Broad Growth Equity as of December 31, 2023



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



# BlackRock MSCI World Ex US Index Period Ended December 31, 2023

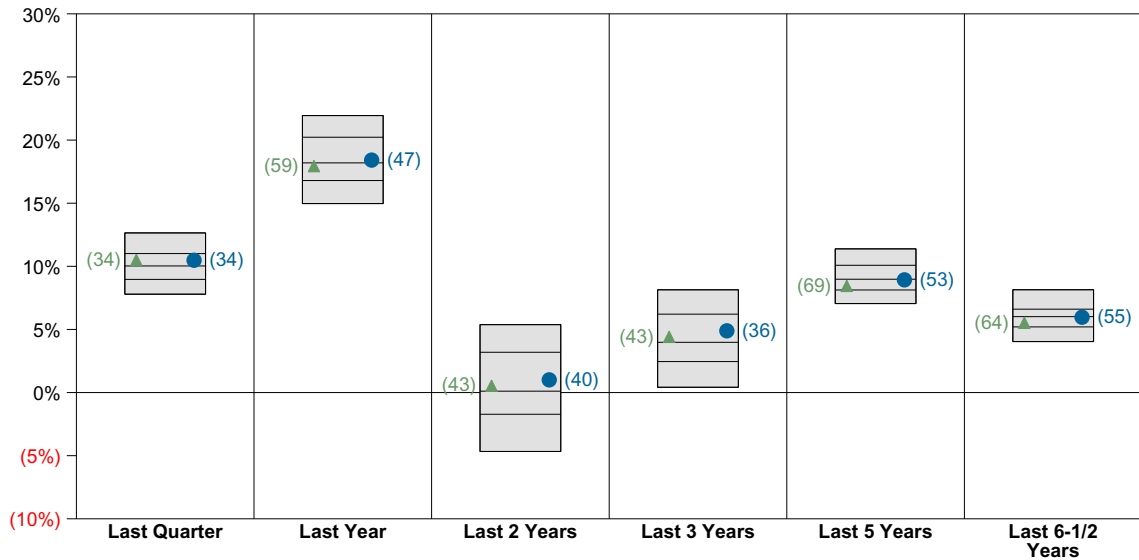
## Investment Philosophy

The objective of the World ex-U.S. Index Fund is to track the performance of the MSCI World ex-U.S. Index. The Fund fully replicates the index, holding every stock in the index in its market capitalization weight to ensure close tracking and minimize transaction costs.

## Quarterly Summary and Highlights

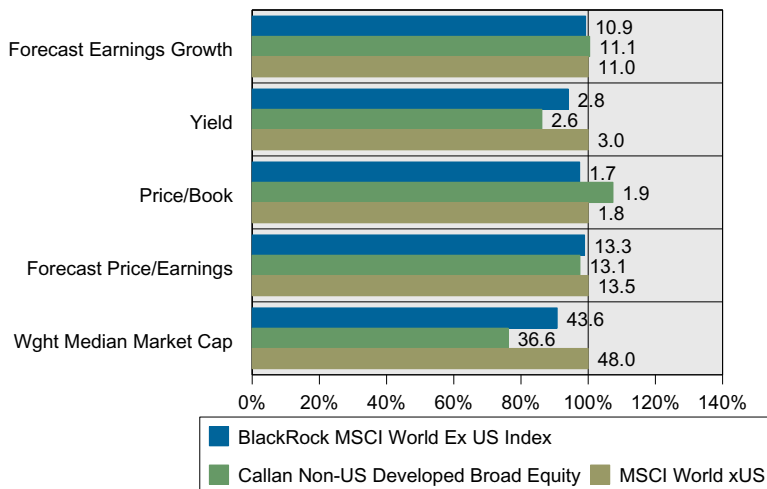
- BlackRock MSCI World Ex US Index's portfolio posted a 10.48% return for the quarter placing it in the 34 percentile of the Callan Non-US Developed Broad Equity group for the quarter and in the 47 percentile for the last year.
- BlackRock MSCI World Ex US Index's portfolio underperformed the MSCI World xUS by 0.03% for the quarter and outperformed the MSCI World xUS for the year by 0.47%.

## Performance vs Callan Non-US Developed Broad Equity (Gross)

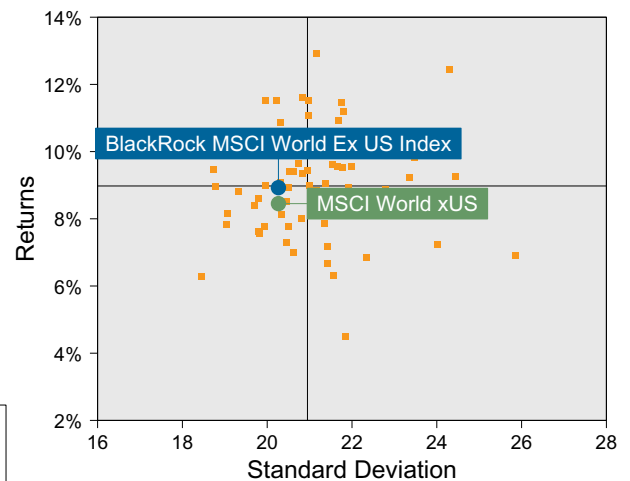


10th Percentile	12.65	21.94	5.38	8.14	11.38	8.14
25th Percentile	11.01	20.23	3.19	6.21	10.08	6.60
Median	10.03	18.19	0.11	3.98	8.98	6.01
75th Percentile	8.96	16.80	(1.72)	2.45	8.13	5.20
90th Percentile	7.79	14.97	(4.67)	0.42	7.05	4.04
<b>BlackRock MSCI World Ex US Index</b>	● 10.48	18.41	1.00	4.89	8.93	5.97
MSCI World xUS	▲ 10.51	17.94	0.54	4.42	8.45	5.53

## Portfolio Characteristics as a Percentage of the MSCI World xUS



## Callan Non-US Developed Broad Equity (Gross) Annualized Five Year Risk vs Return

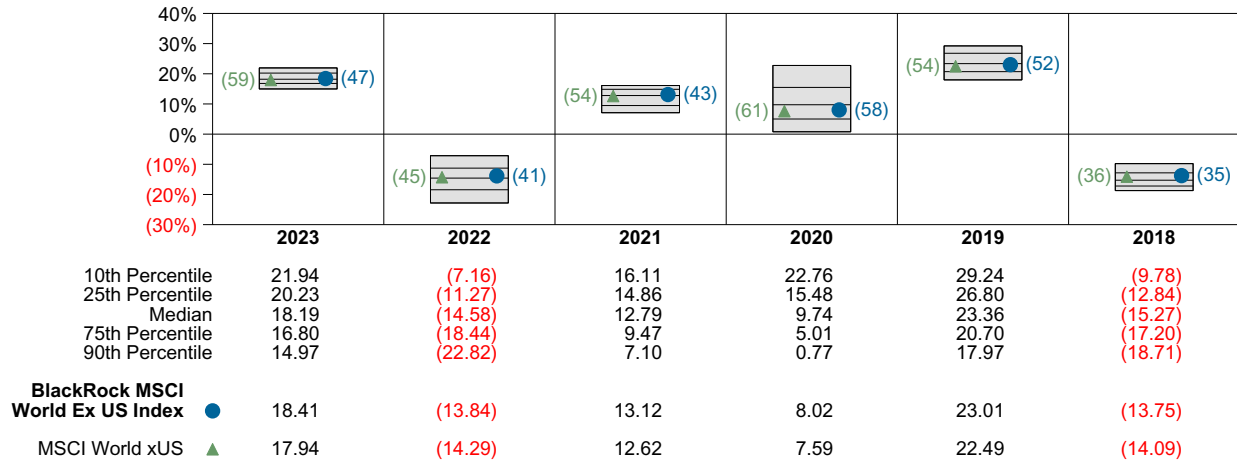


# BlackRock MSCI World Ex US Index Return Analysis Summary

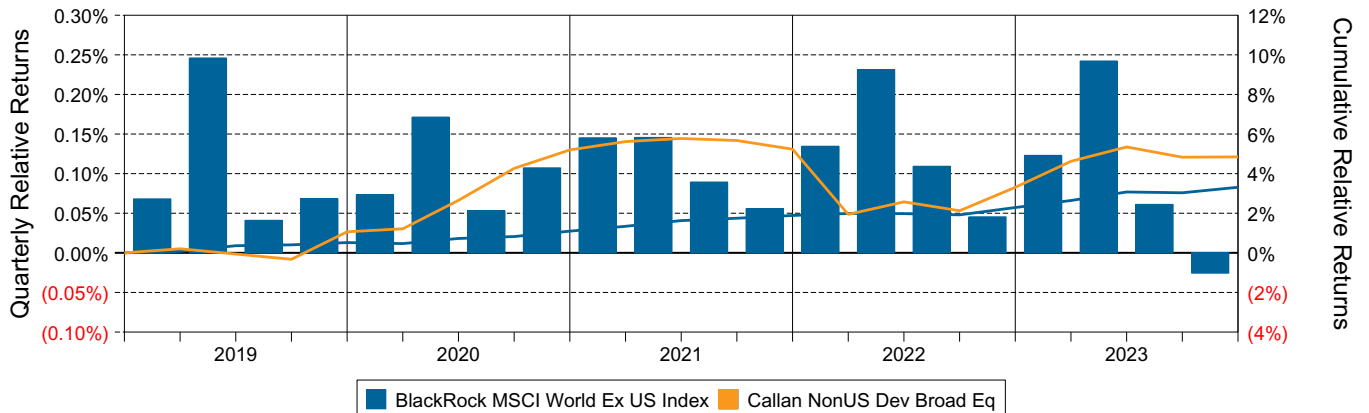
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

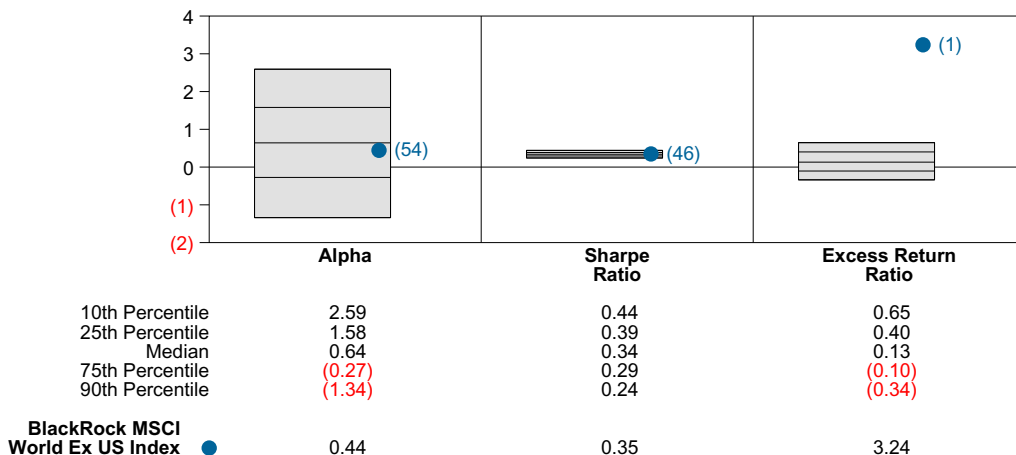
### Performance vs Callan Non-US Developed Broad Equity (Gross)



### Cumulative and Quarterly Relative Returns vs MSCI World xUS



### Risk Adjusted Return Measures vs MSCI World xUS Rankings Against Callan Non-US Developed Broad Equity (Gross) Five Years Ended December 31, 2023

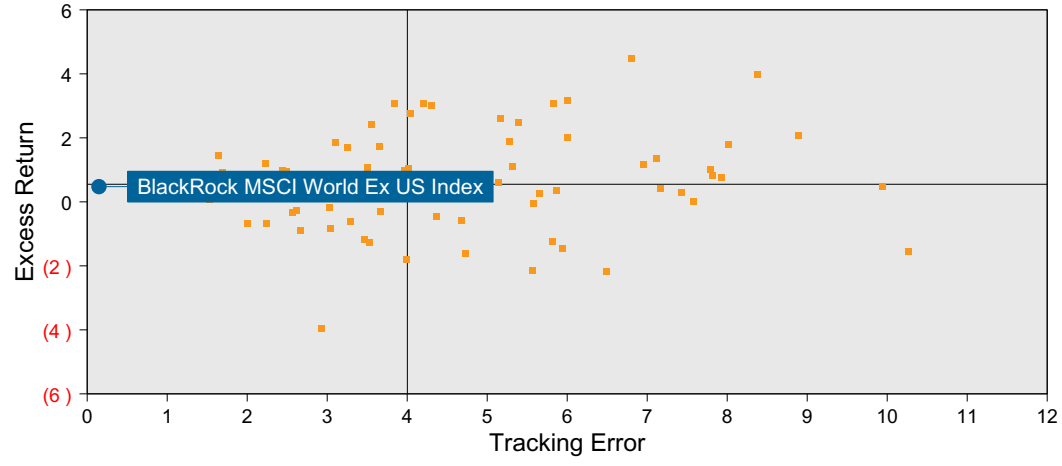


# BlackRock MSCI World Ex US Index Risk Analysis Summary

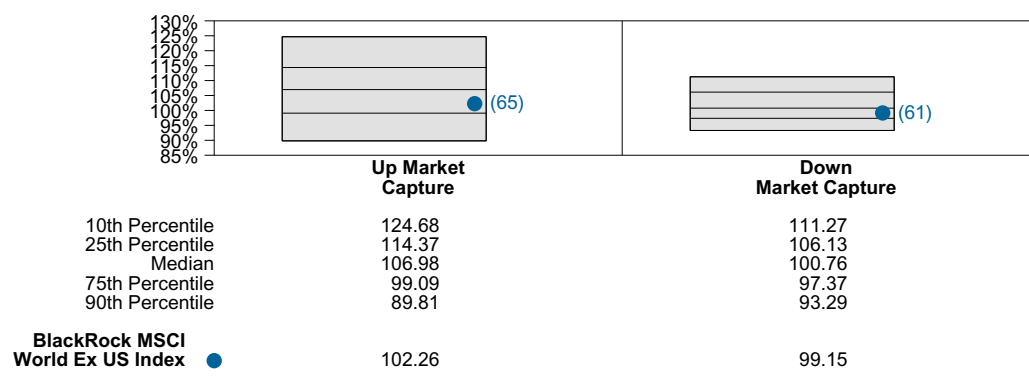
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

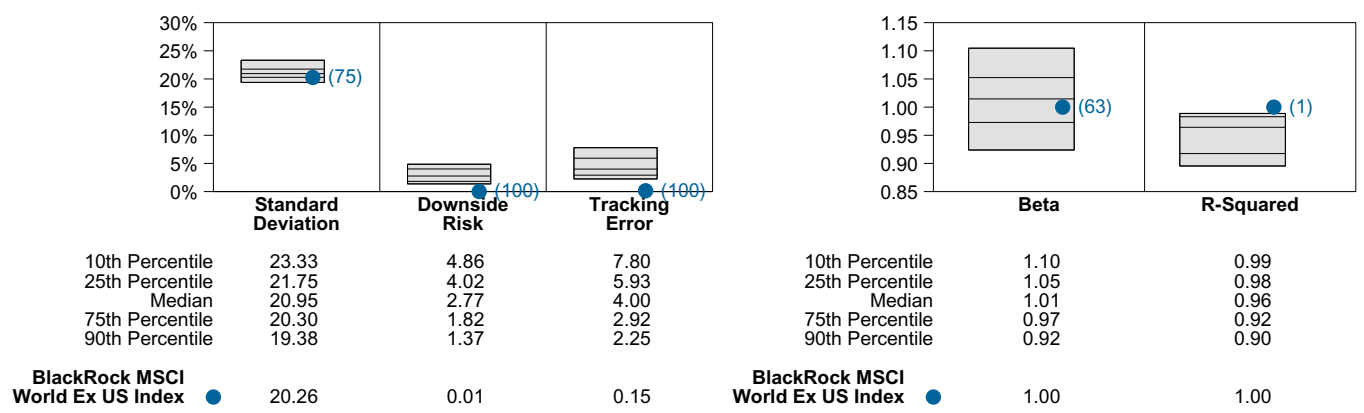
### Risk Analysis vs Callan Non-US Developed Broad Equity (Gross) Five Years Ended December 31, 2023



### Market Capture vs MSCI World xUS (Net) Rankings Against Callan Non-US Developed Broad Equity (Gross) Five Years Ended December 31, 2023



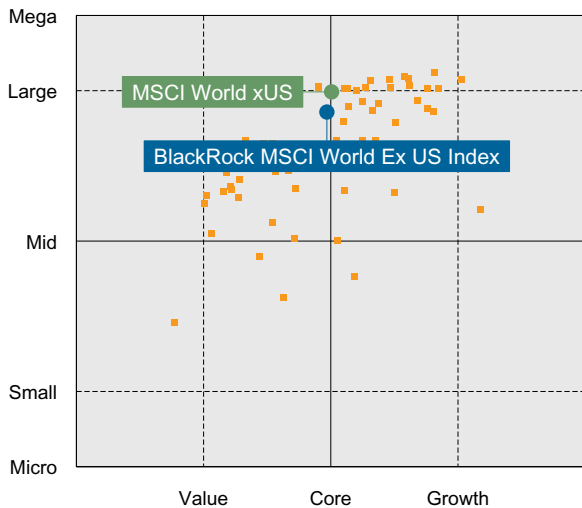
### Risk Statistics Rankings vs MSCI World xUS (Net) Rankings Against Callan Non-US Developed Broad Equity (Gross) Five Years Ended December 31, 2023



# Current Holdings Based Style Analysis BlackRock MSCI World Ex US Index As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

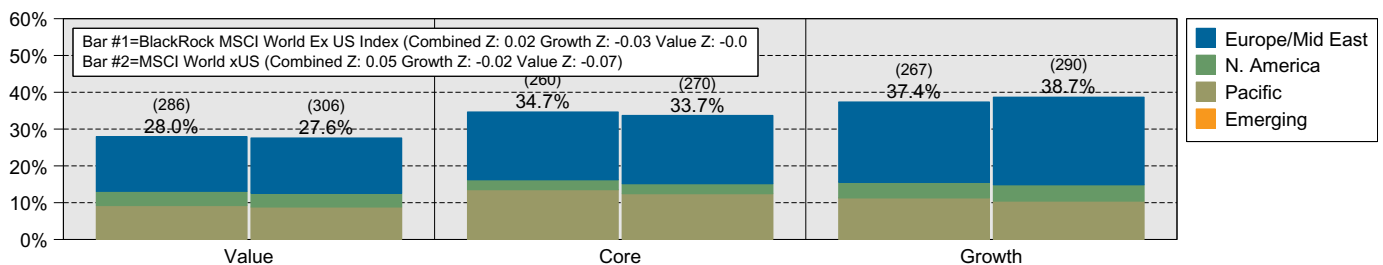
**Style Map vs Callan NonUS Dev Broad Eq Holdings as of December 31, 2023**



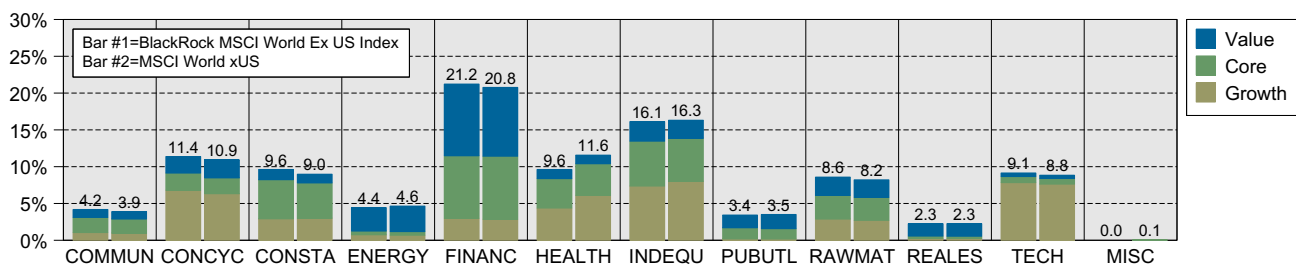
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Europe/ Mid East	14.9% (135)	18.4% (129)	21.8% (130)	55.2% (394)
N. America	15.0% (147)	18.6% (137)	23.8% (149)	57.4% (433)
Pacific	3.9% (25)	2.7% (23)	4.3% (32)	10.8% (80)
Emerging	3.8% (27)	2.7% (26)	4.4% (36)	10.9% (89)
<b>Total</b>	<b>28.0% (286)</b>	<b>34.7% (260)</b>	<b>37.4% (267)</b>	<b>100.0% (813)</b>
	27.6% (306)	33.7% (270)	38.7% (290)	100.0% (866)

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**



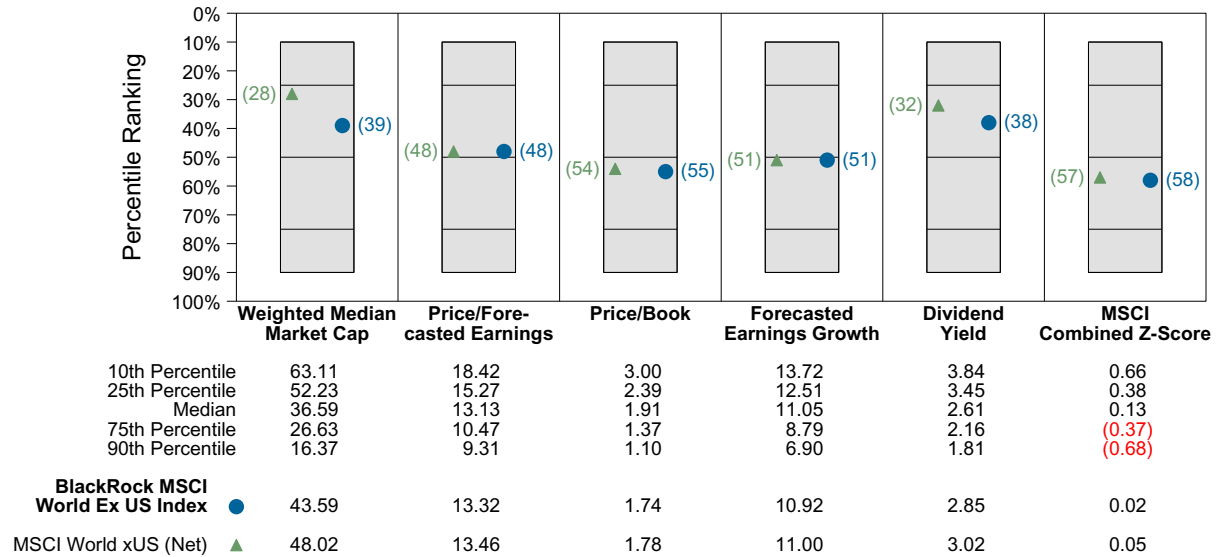


# BlackRock MSCI World Ex US Index Equity Characteristics Analysis Summary

## Portfolio Characteristics

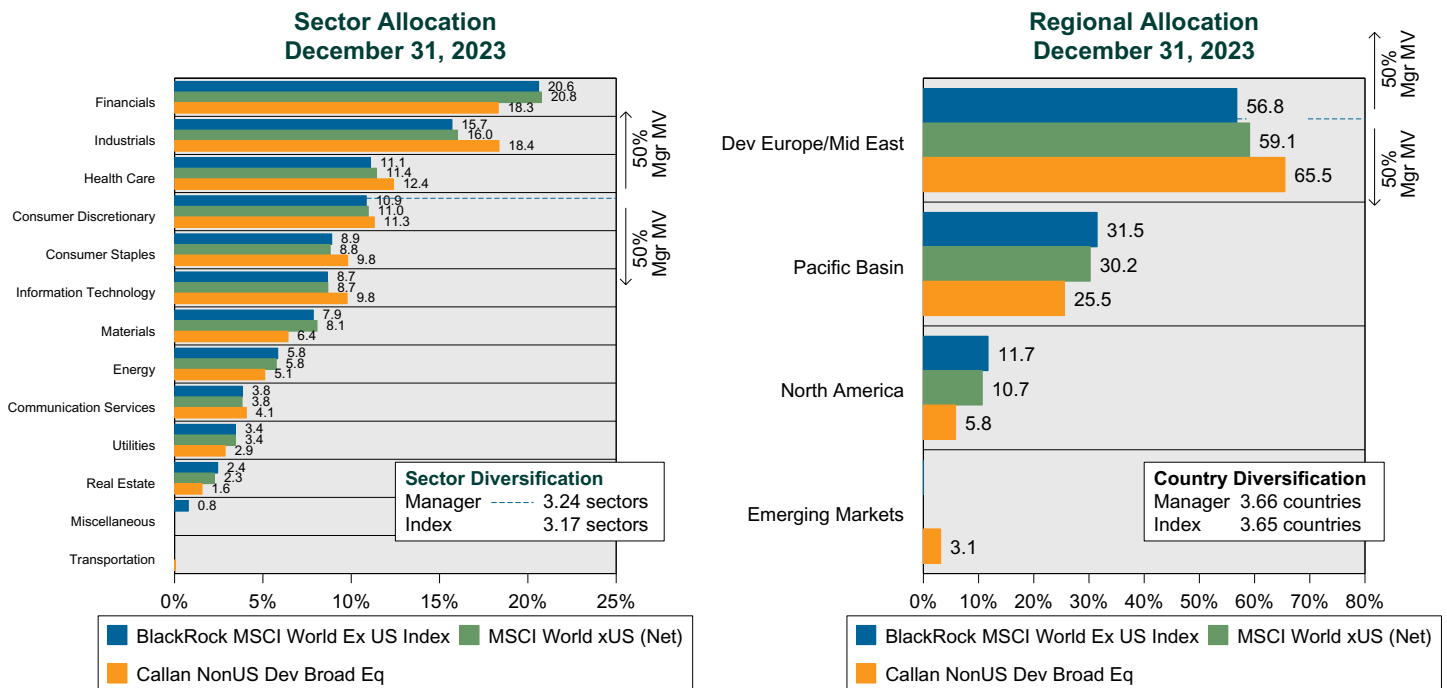
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Non-US Developed Broad Equity as of December 31, 2023



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.



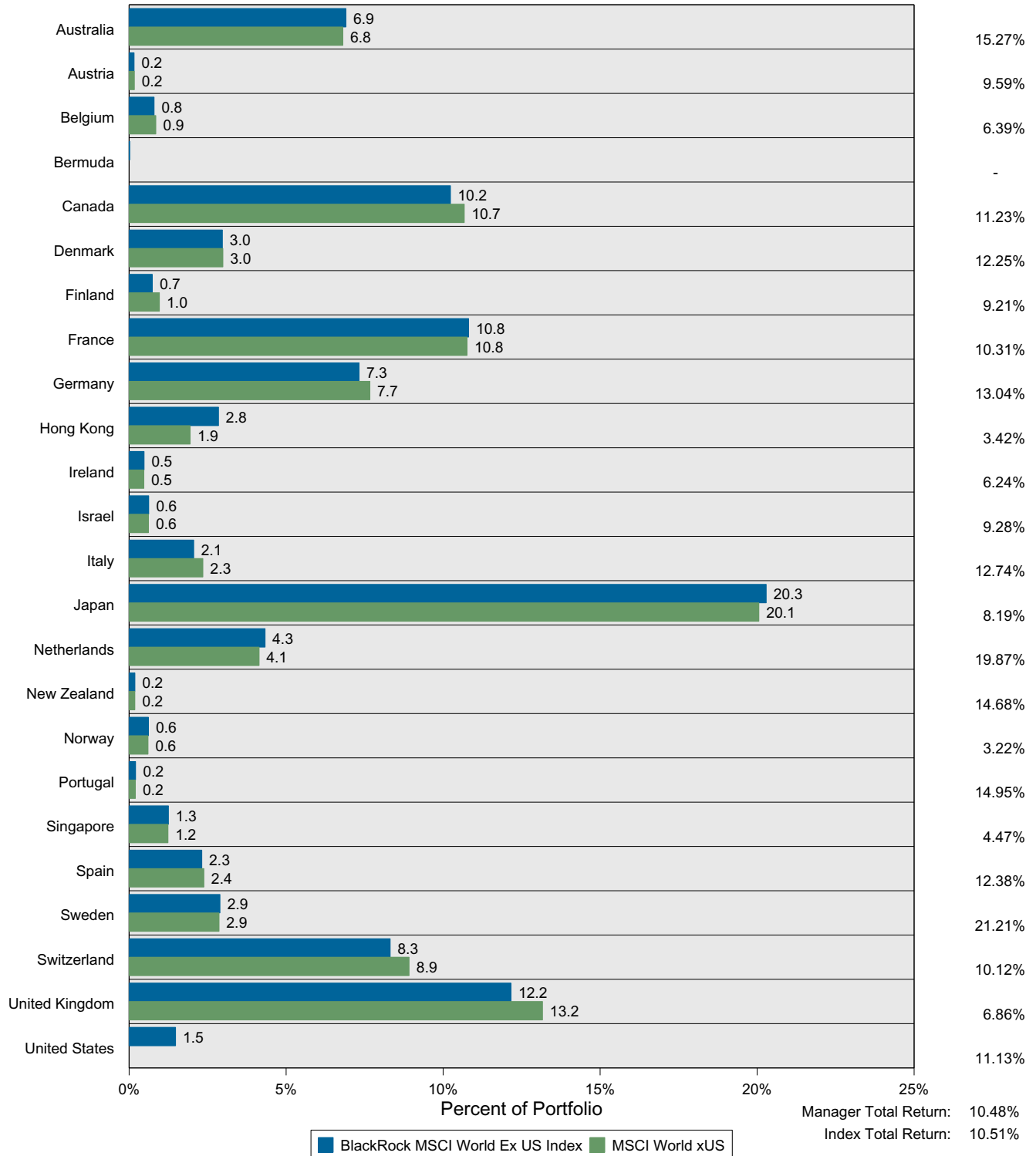
## Country Allocation BlackRock MSCI World Ex US Index VS MSCI World xUS (Net)

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

### Country Weights as of December 31, 2023

### Index Rtns



# Xpance Non-U.S. Small Cap Period Ended December 31, 2023

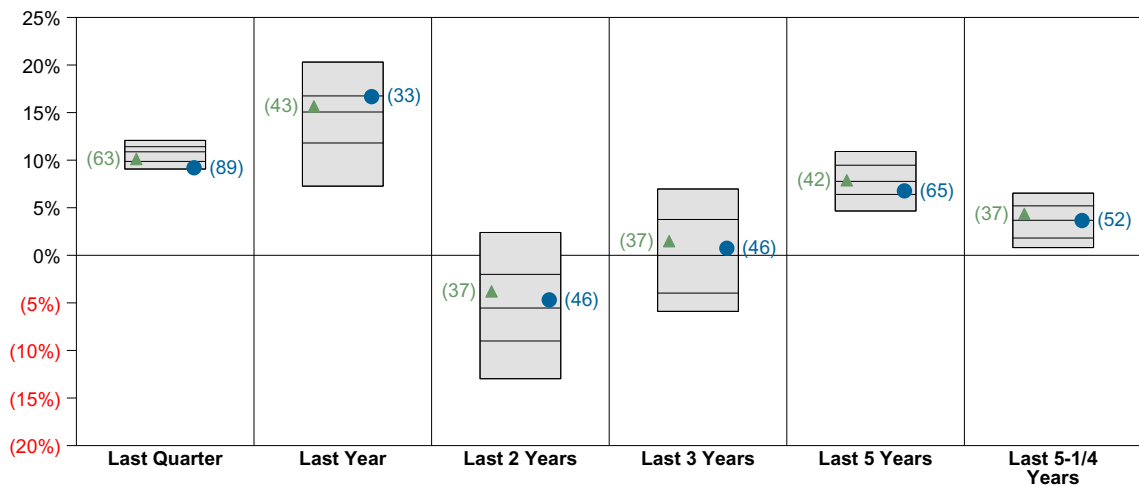
## Investment Philosophy

Xpance utilizes an integrated investment process to actively generate investment alpha across its offerings. 25%-50% of outperformance is driven by top-down investment strategy implementation that informs risk management and portfolio construction and provides context to the market environment. Bottom up analysis through manager selection drives 50-75% of outperformance. Xpance uses a forward-looking proprietary factor scoring system in their manager due diligence process to help identify which managers are most likely to produce positive long-term outperformance.

## Quarterly Summary and Highlights

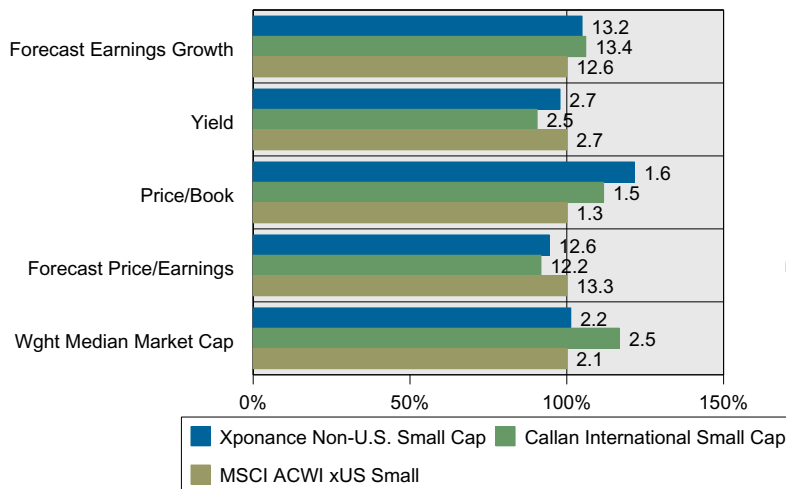
- Xpance Non-U.S. Small Cap's portfolio posted a 9.20% return for the quarter placing it in the 89 percentile of the Callan International Small Cap group for the quarter and in the 33 percentile for the last year.
- Xpance Non-U.S. Small Cap's portfolio underperformed the MSCI ACWI xUS Small by 0.92% for the quarter and outperformed the MSCI ACWI xUS Small for the year by 1.01%.

## Performance vs Callan International Small Cap (Gross)

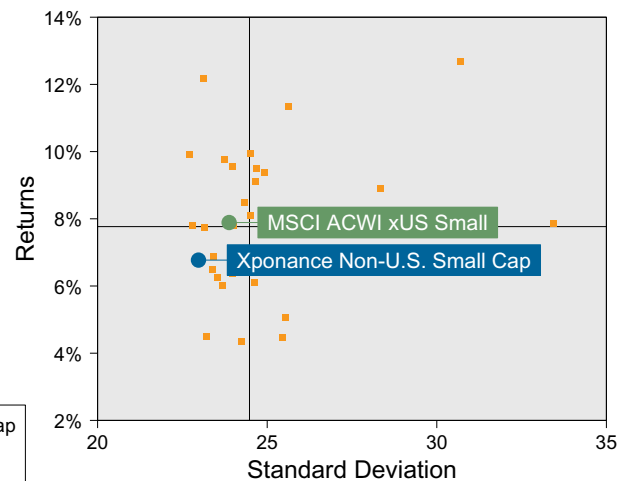


10th Percentile	12.08	20.31	2.40	6.97	10.91	6.53
25th Percentile	11.42	16.75	(2.00)	3.76	9.47	5.20
Median	10.88	15.06	(5.54)	(0.01)	7.77	3.68
75th Percentile	9.87	11.81	(9.01)	(3.97)	6.40	1.82
90th Percentile	9.07	7.27	(12.97)	(5.89)	4.66	0.81
<b>Xpance Non-U.S. Small Cap</b>	● 9.20	16.67	(4.69)	0.74	6.77	3.65
<b>MSCI ACWI xUS Small</b>	▲ 10.12	15.66	(3.79)	1.49	7.89	4.36

## Portfolio Characteristics as a Percentage of the MSCI ACWI xUS Small



## Callan International Small Cap (Gross) Annualized Five Year Risk vs Return

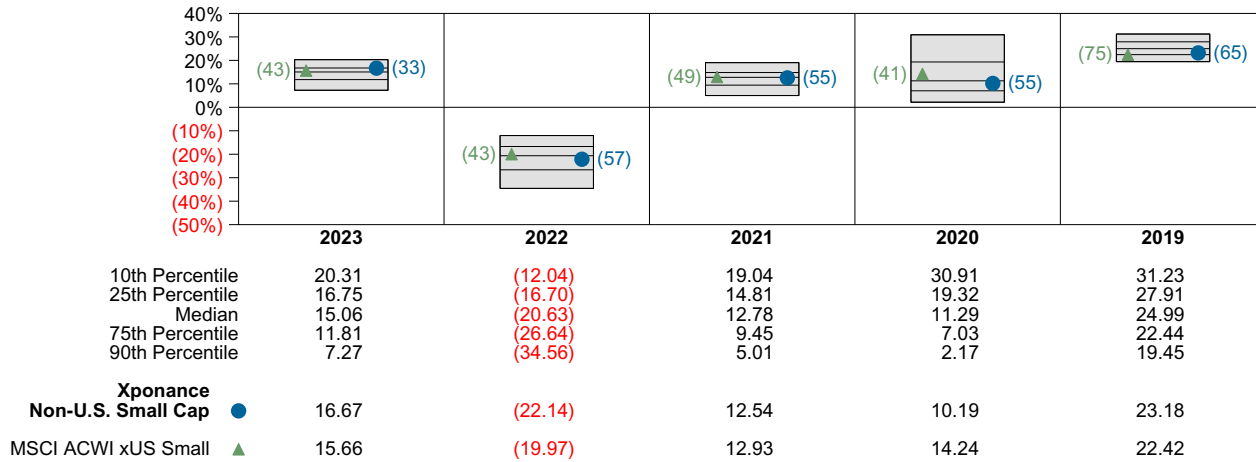


# Xponance Non-U.S. Small Cap Return Analysis Summary

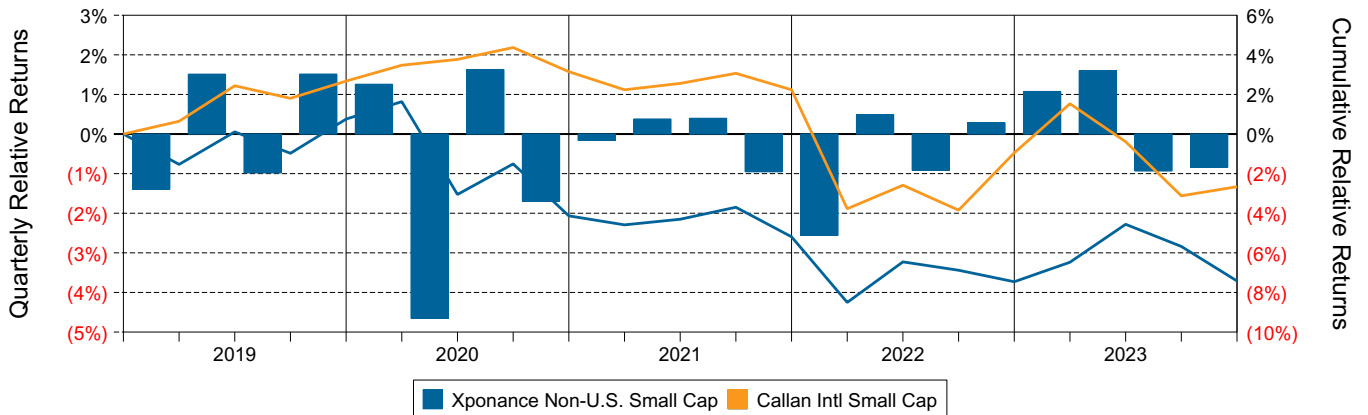
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

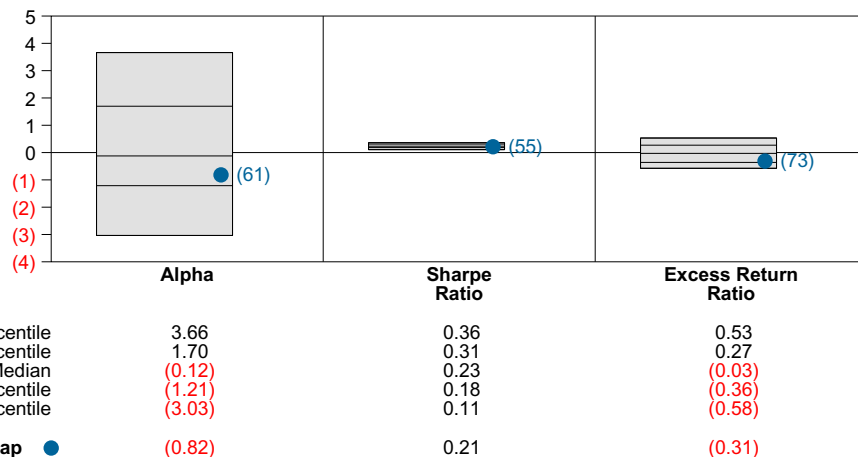
### Performance vs Callan International Small Cap (Gross)



### Cumulative and Quarterly Relative Returns vs MSCI ACWI xUS Small



### Risk Adjusted Return Measures vs MSCI ACWI xUS Small Rankings Against Callan International Small Cap (Gross) Five Years Ended December 31, 2023

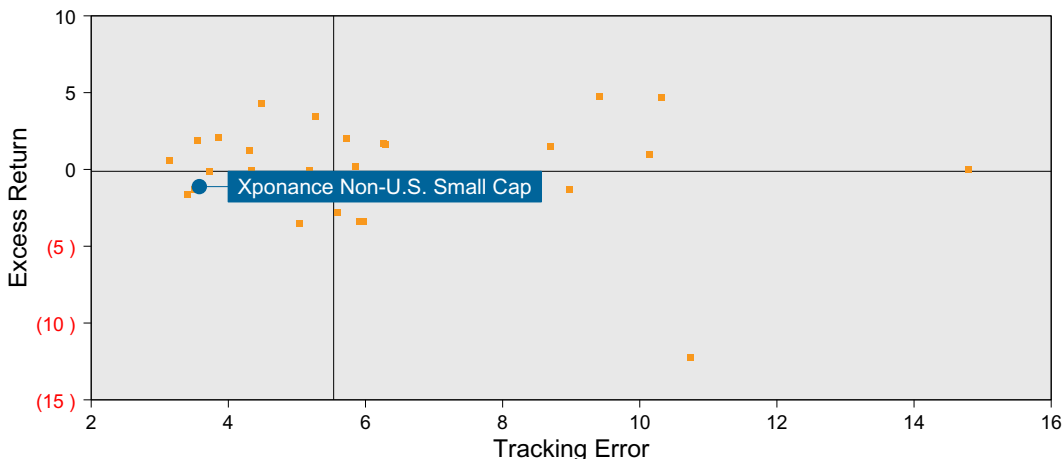


# Xponance Non-U.S. Small Cap Risk Analysis Summary

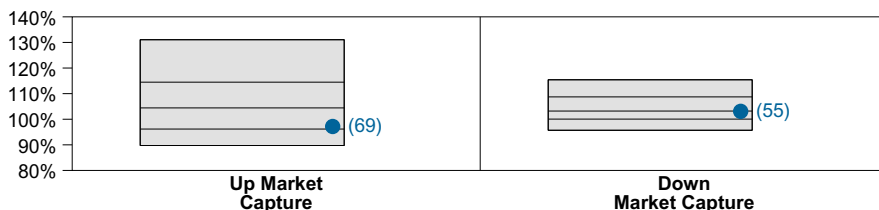
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Callan International Small Cap (Gross) Five Years Ended December 31, 2023

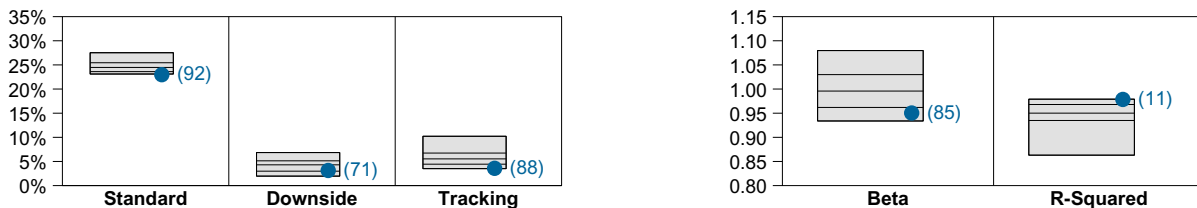


### Market Capture vs MSCI ACWI xUS Small (Net) Rankings Against Callan International Small Cap (Gross) Five Years Ended December 31, 2023



	Up Market Capture	Down Market Capture
10th Percentile	131.06	115.42
25th Percentile	114.47	108.73
Median	104.43	103.19
75th Percentile	96.17	100.05
90th Percentile	89.74	95.69
<b>Xponance Non-U.S. Small Cap</b>	<b>97.16</b>	<b>103.08</b>

### Risk Statistics Rankings vs MSCI ACWI xUS Small (Net) Rankings Against Callan International Small Cap (Gross) Five Years Ended December 31, 2023



	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	27.52	6.85	10.22	1.08	0.98
25th Percentile	25.45	5.13	6.74	1.03	0.97
Median	24.48	4.30	5.54	1.00	0.95
75th Percentile	23.61	2.99	4.44	0.96	0.93
90th Percentile	23.11	1.96	3.51	0.93	0.86
<b>Xponance Non-U.S. Small Cap</b>	<b>22.97</b>	<b>3.13</b>	<b>3.58</b>	<b>0.95</b>	<b>0.98</b>

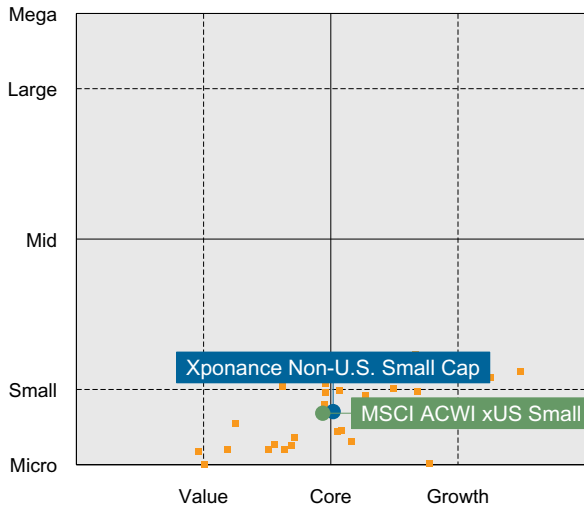
# Current Holdings Based Style Analysis

## Xpance Non-U.S. Small Cap

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left chart map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

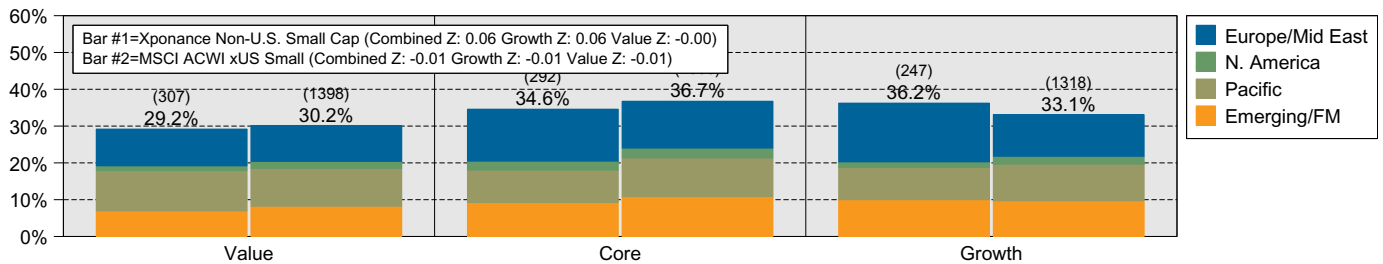
**Style Map vs Callan Intl Small Cap Holdings as of December 31, 2023**



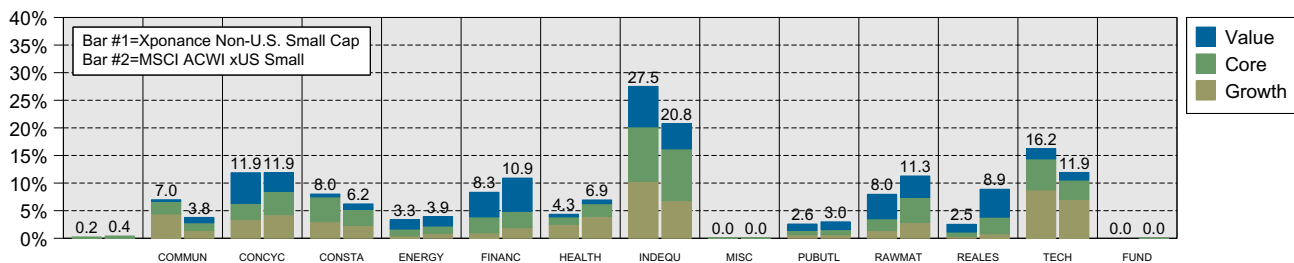
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Europe/ Mid East	10.0% (75) 9.8% (314)	14.1% (83) 12.7% (370)	16.0% (87) 11.3% (301)	40.1% (245) 33.8% (985)
N. America	1.3% (32) 1.9% (68)	2.4% (38) 2.7% (92)	1.5% (23) 2.2% (60)	5.2% (93) 6.7% (220)
Pacific	10.9% (108) 10.3% (395)	8.8% (83) 10.5% (411)	8.8% (54) 9.9% (367)	28.5% (245) 30.7% (1173)
Emerging/ FM	7.0% (92) 8.2% (621)	9.3% (88) 10.9% (735)	10.0% (83) 9.7% (590)	26.2% (263) 28.8% (1946)
<b>Total</b>	<b>29.2% (307)</b> 30.2% (1398)	<b>34.6% (292)</b> 36.7% (1608)	<b>36.2% (247)</b> 33.1% (1318)	<b>100.0% (846)</b> 100.0% (4324)

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

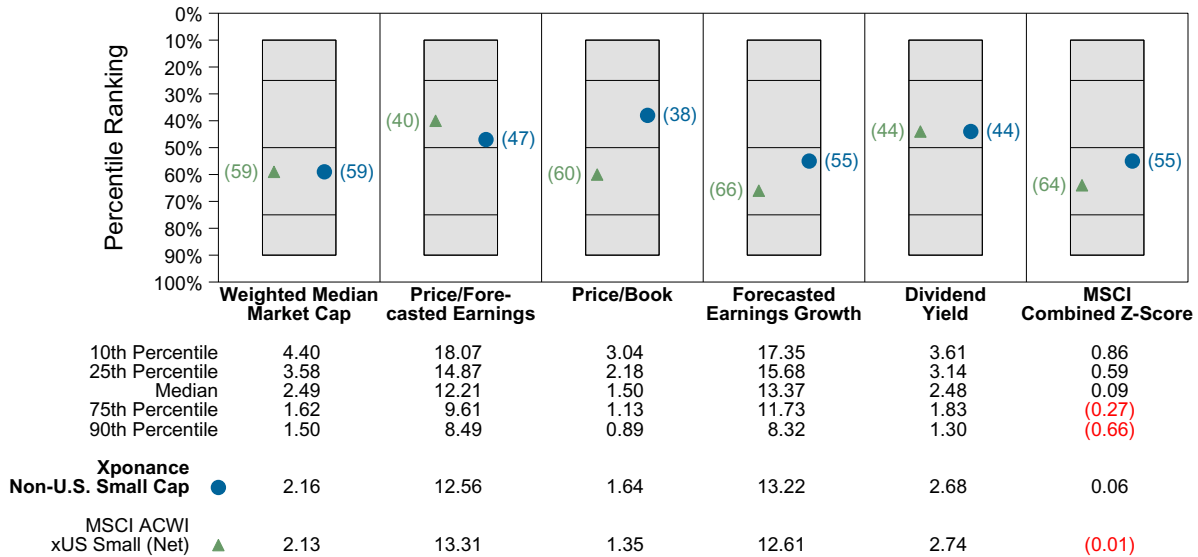


# Xponance Non-U.S. Small Cap Equity Characteristics Analysis Summary

## Portfolio Characteristics

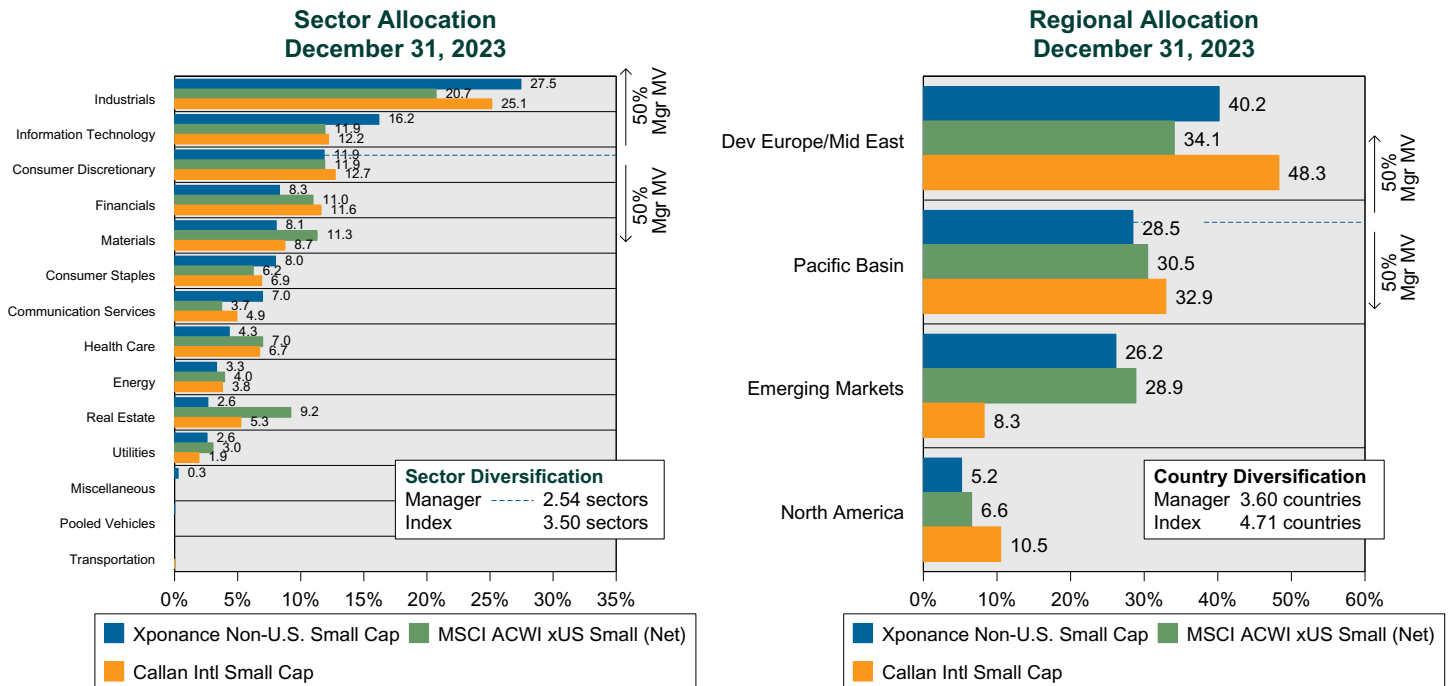
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan International Small Cap as of December 31, 2023



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.



# Country Allocation

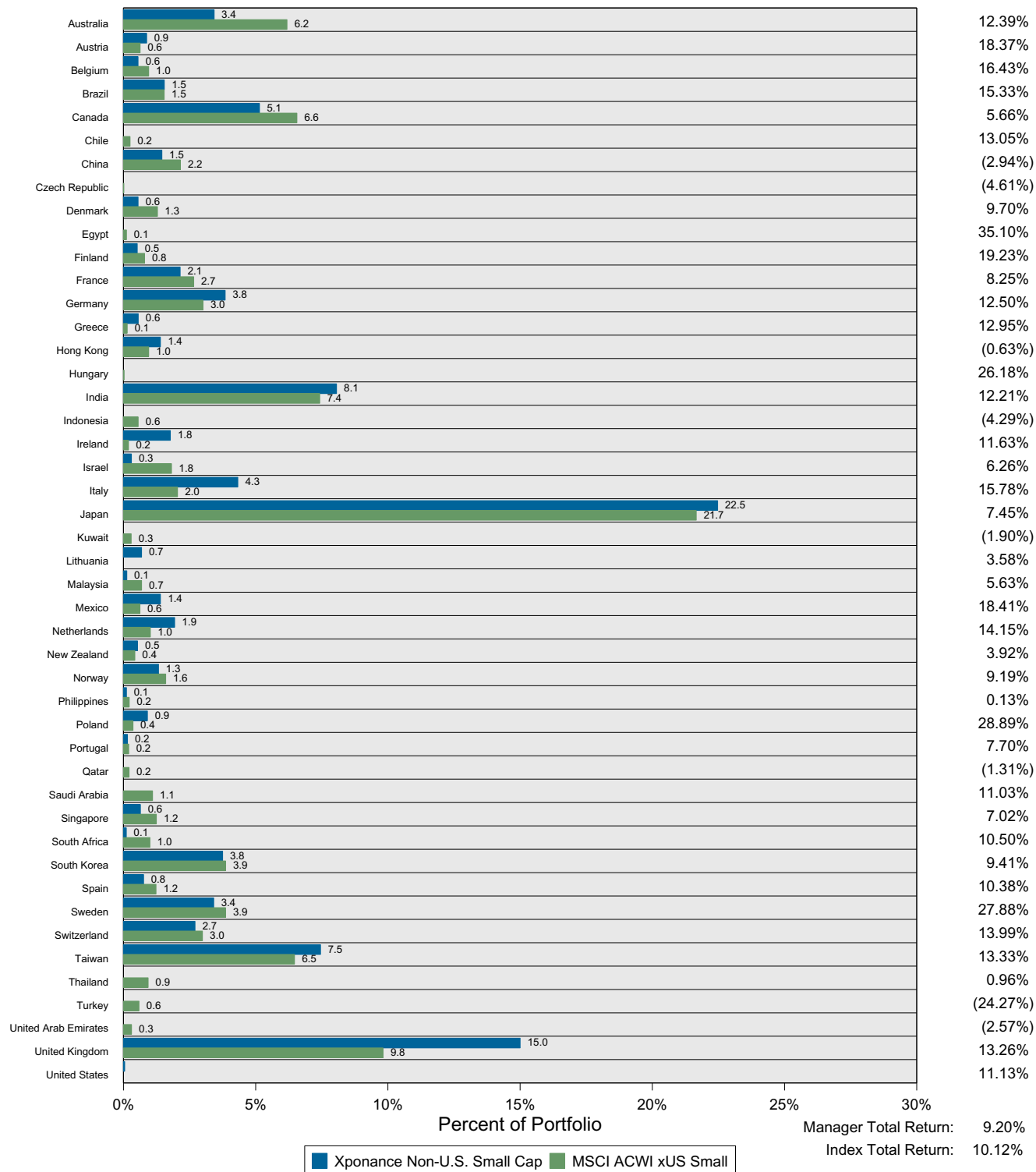
## Xponance Non-U.S. Small Cap VS MSCI ACWI xUS Small (Net)

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of December 31, 2023

Index Rtns





# Harris Assoc Int'l SCV Period Ended December 31, 2023

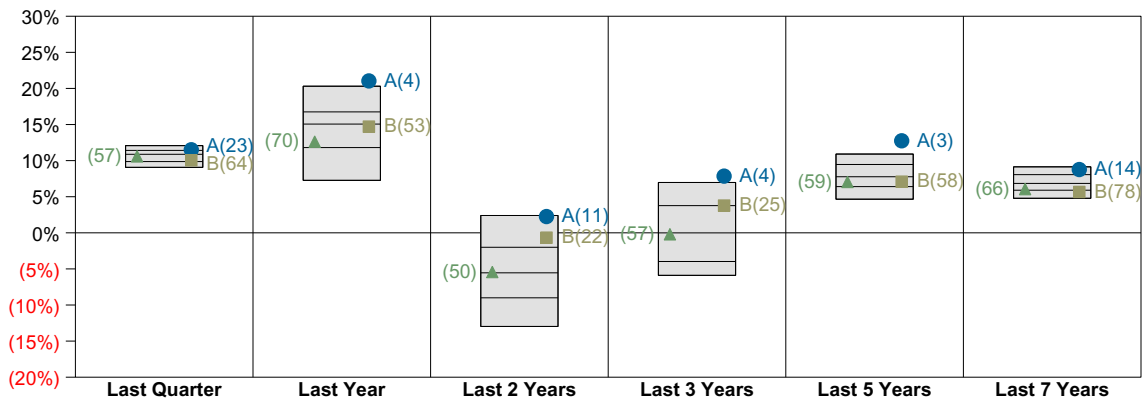
## Investment Philosophy

Harris Oakmark employs a value approach to investing and relies on its in-house research capabilities to build focused portfolios. The investment team purchases international stocks in both established and emerging markets that are selling at a substantial discount to intrinsic value. A company must be selling at a 30% or greater discount to its value to be a candidate for purchase. Unlike some value managers, Harris places particular emphasis on a company's ability to generate free cash flow as well as the strength of company management. Stocks are also analyzed in terms of financial strength, the position of the company in its industry, and the attractiveness of the industry.

## Quarterly Summary and Highlights

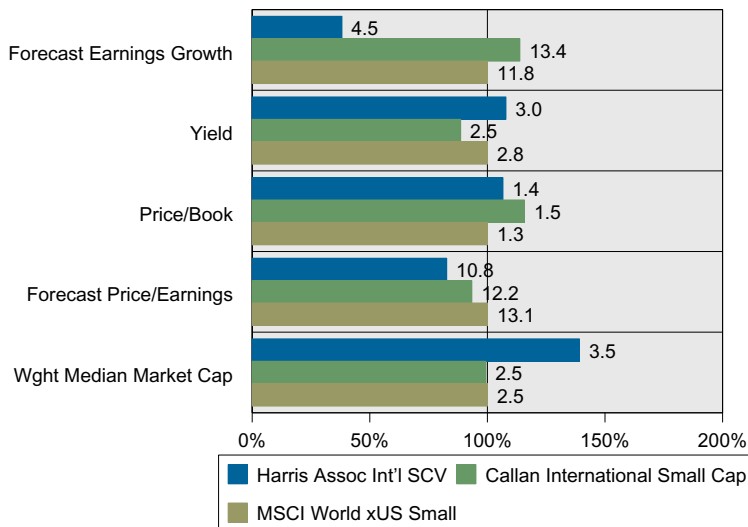
- Harris Assoc Int'l SCV's portfolio posted a 11.50% return for the quarter placing it in the 23 percentile of the Callan International Small Cap group for the quarter and in the 4 percentile for the last year.
- Harris Assoc Int'l SCV's portfolio outperformed the MSCI World xUS Small by 0.90% for the quarter and outperformed the MSCI World xUS Small for the year by 8.41%.

## Performance vs Callan International Small Cap (Gross)

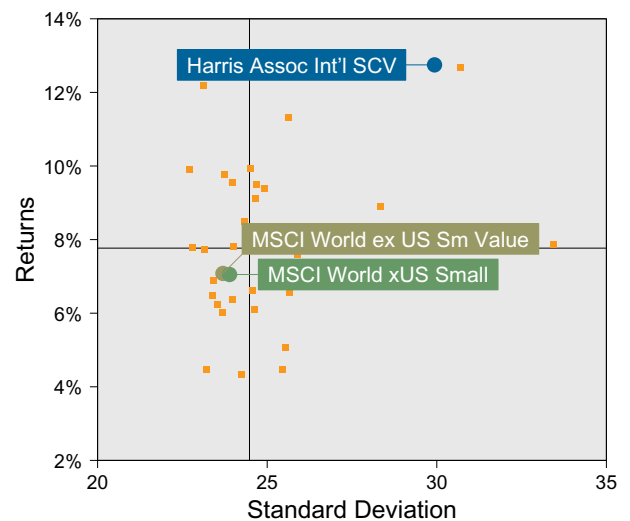


	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	12.08	20.31	2.40	6.97	10.91	9.14
25th Percentile	11.42	16.75	(2.00)	3.76	9.47	8.06
Median	10.88	15.06	(5.54)	(0.01)	7.77	6.84
75th Percentile	9.87	11.81	(9.01)	(3.97)	6.40	5.90
90th Percentile	9.07	7.27	(12.97)	(5.89)	4.66	4.78
Harris Assoc Int'l SCV (A)	11.50	21.04	2.25	7.85	12.75	8.76
MSCI World ex US Sm Value (B)	10.04	14.70	(0.68)	3.77	7.08	5.66
MSCI World xUS Small (A)	10.60	12.62	(5.43)	(0.20)	7.05	6.06

## Portfolio Characteristics as a Percentage of the MSCI World xUS Small



## Callan International Small Cap (Gross) Annualized Five Year Risk vs Return

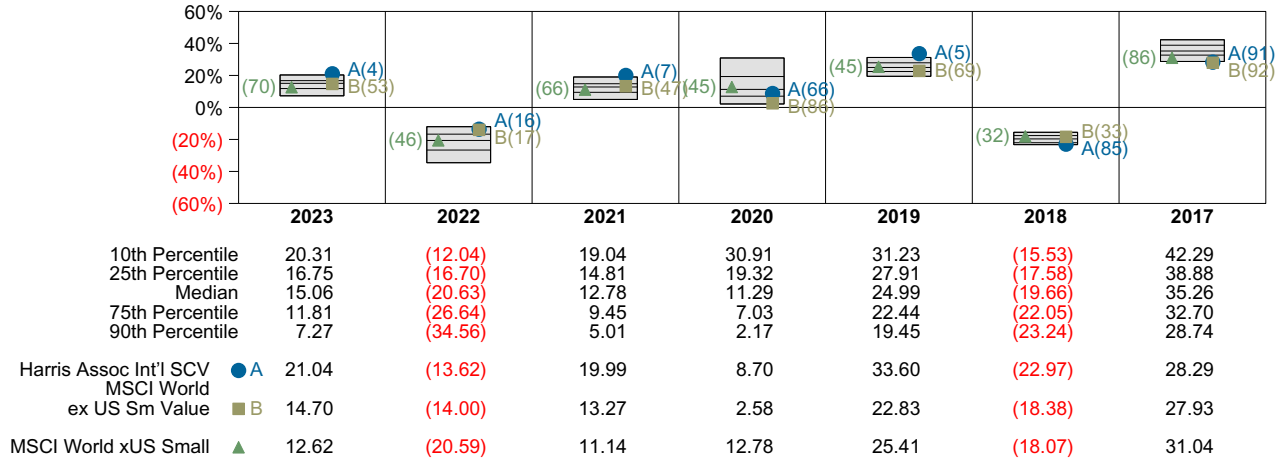


# Harris Assoc Int'l SCV Return Analysis Summary

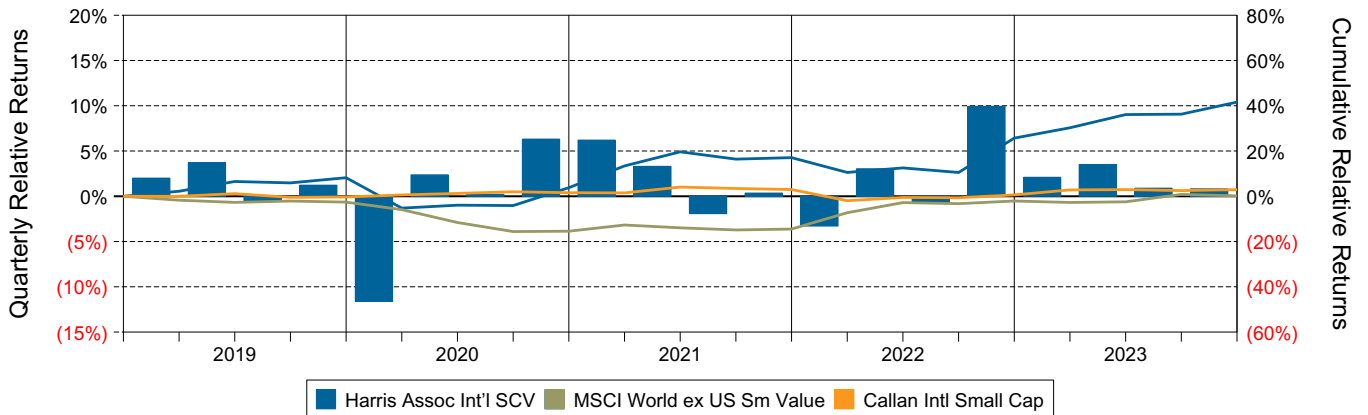
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

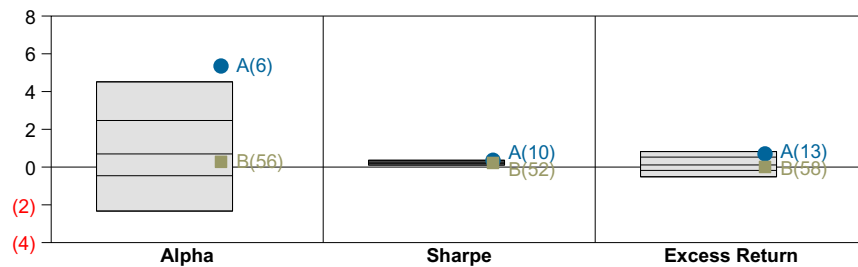
### Performance vs Callan International Small Cap (Gross)



### Cumulative and Quarterly Relative Returns vs MSCI World xUS Small



### Risk Adjusted Return Measures vs MSCI World xUS Small Rankings Against Callan International Small Cap (Gross) Five Years Ended December 31, 2023



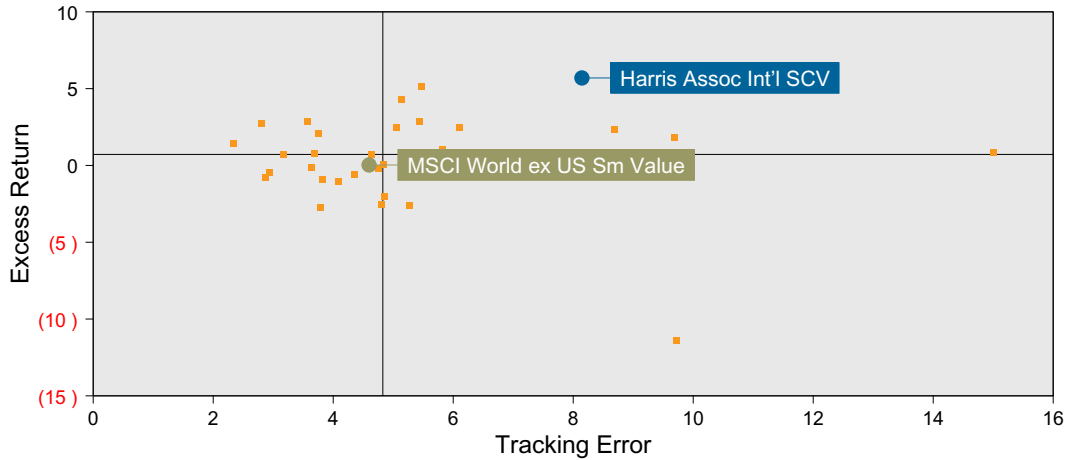
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	4.52	0.36	0.82
25th Percentile	2.47	0.31	0.53
Median	0.70	0.23	0.11
75th Percentile	(0.46)	0.18	(0.18)
90th Percentile	(2.33)	0.11	(0.51)
Harris Assoc Int'l SCV	5.35	0.36	0.70
MSCI World ex US Sm Value	0.28	0.22	0.01

# Harris Assoc Int'l SCV Risk Analysis Summary

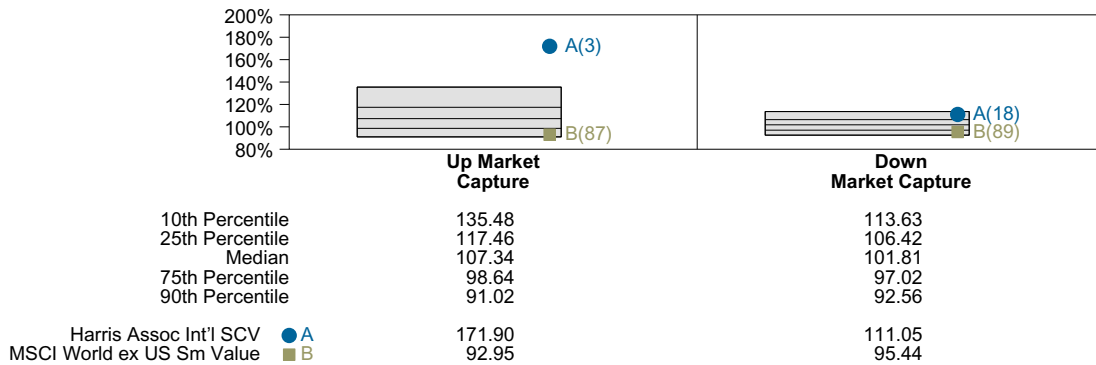
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

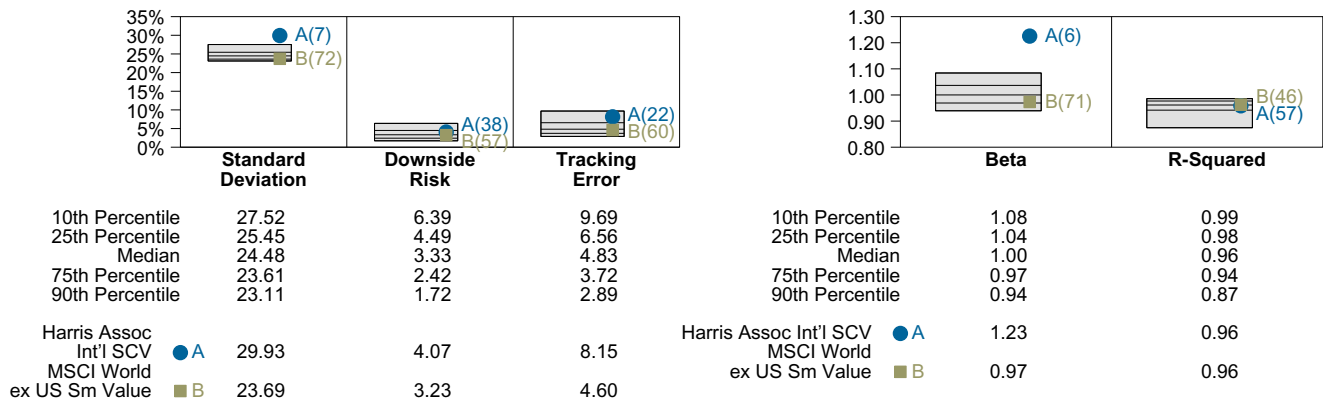
### Risk Analysis vs Callan International Small Cap (Gross) Five Years Ended December 31, 2023



### Market Capture vs MSCI World xUS Small (Net) Rankings Against Callan International Small Cap (Gross) Five Years Ended December 31, 2023



### Risk Statistics Rankings vs MSCI World xUS Small (Net) Rankings Against Callan International Small Cap (Gross) Five Years Ended December 31, 2023



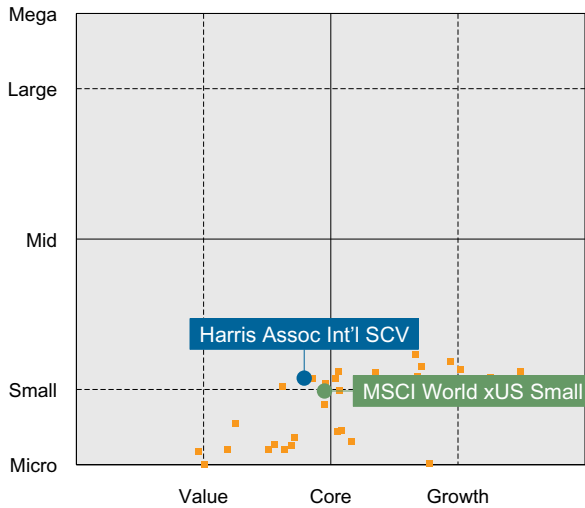
# Current Holdings Based Style Analysis

## Harris Assoc Int'l SCV

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

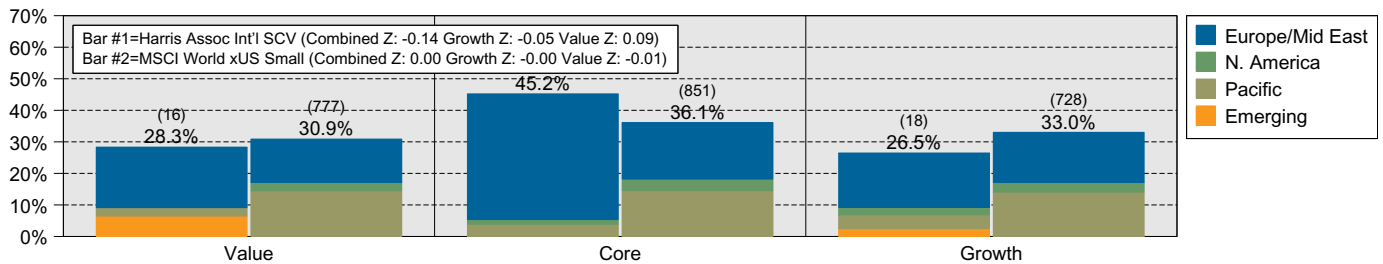
**Style Map vs Callan Intl Small Cap Holdings as of December 31, 2023**



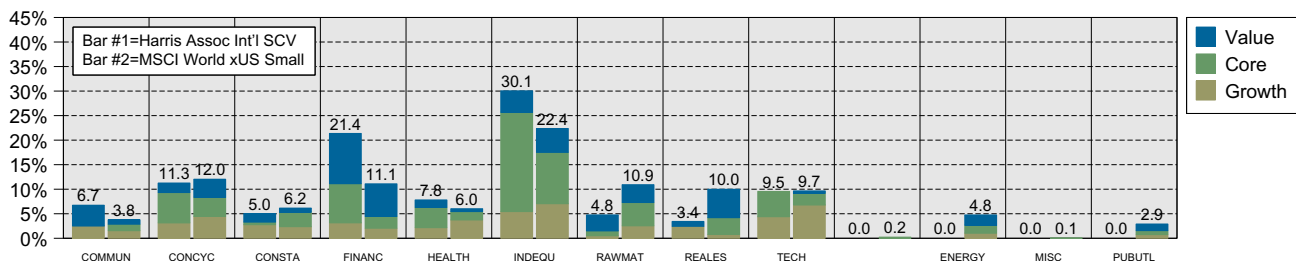
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Europe/ Mid East	19.2% (11)	39.8% (23)	17.2% (10)	76.2% (44)
N. America	13.7% (314)	17.9% (370)	15.9% (301)	47.5% (985)
Pacific	0.0% (0)	1.5% (1)	2.4% (2)	3.9% (3)
Emerging	2.7% (68)	3.7% (88)	3.0% (60)	9.4% (216)
<b>Total</b>	<b>28.3% (16)</b>	<b>45.2% (26)</b>	<b>26.5% (18)</b>	<b>100.0% (60)</b>
	30.9% (777)	36.1% (851)	33.0% (728)	100.0% (2356)

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

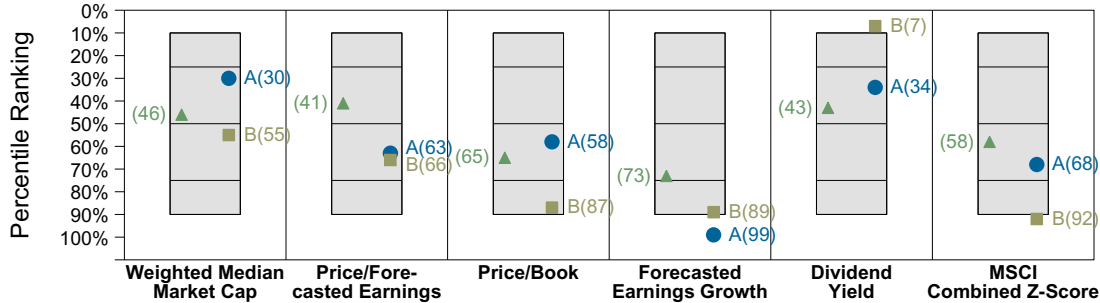


# Harris Assoc Int'l SCV Equity Characteristics Analysis Summary

## Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan International Small Cap as of December 31, 2023

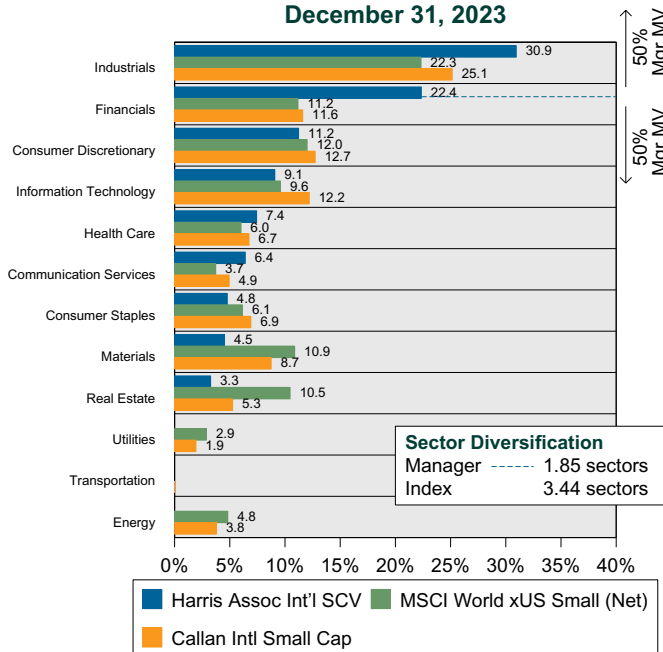


	Weighted Median Market Cap	Price/Forecasted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	4.40	18.07	3.04	17.35	3.61	0.86
25th Percentile	3.58	14.87	2.18	15.68	3.14	0.59
Median	2.49	12.21	1.50	13.37	2.48	0.09
75th Percentile	1.62	9.61	1.13	11.73	1.83	(0.27)
90th Percentile	1.50	8.49	0.89	8.32	1.30	(0.66)
Harris Assoc Int'l SCV	● A (30)	10.81	1.39	4.48	3.02	(0.14)
MSCI World ex US Sm Value	■ B (55)	10.46	0.93	9.20	3.89	(0.75)
MSCI World xUS Small (Net)	▲ 2.50	13.07	1.30	11.75	2.80	0.00

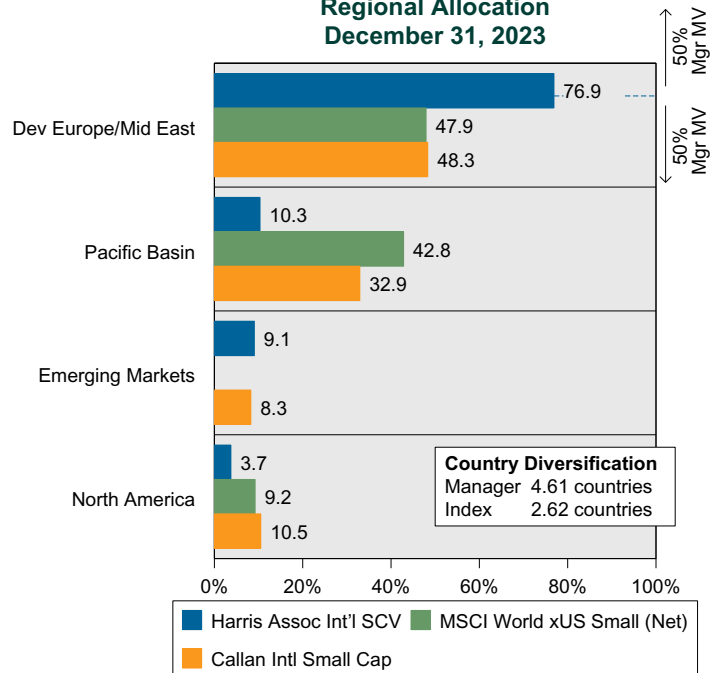
## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.

### Sector Allocation December 31, 2023



### Regional Allocation December 31, 2023



## Country Allocation

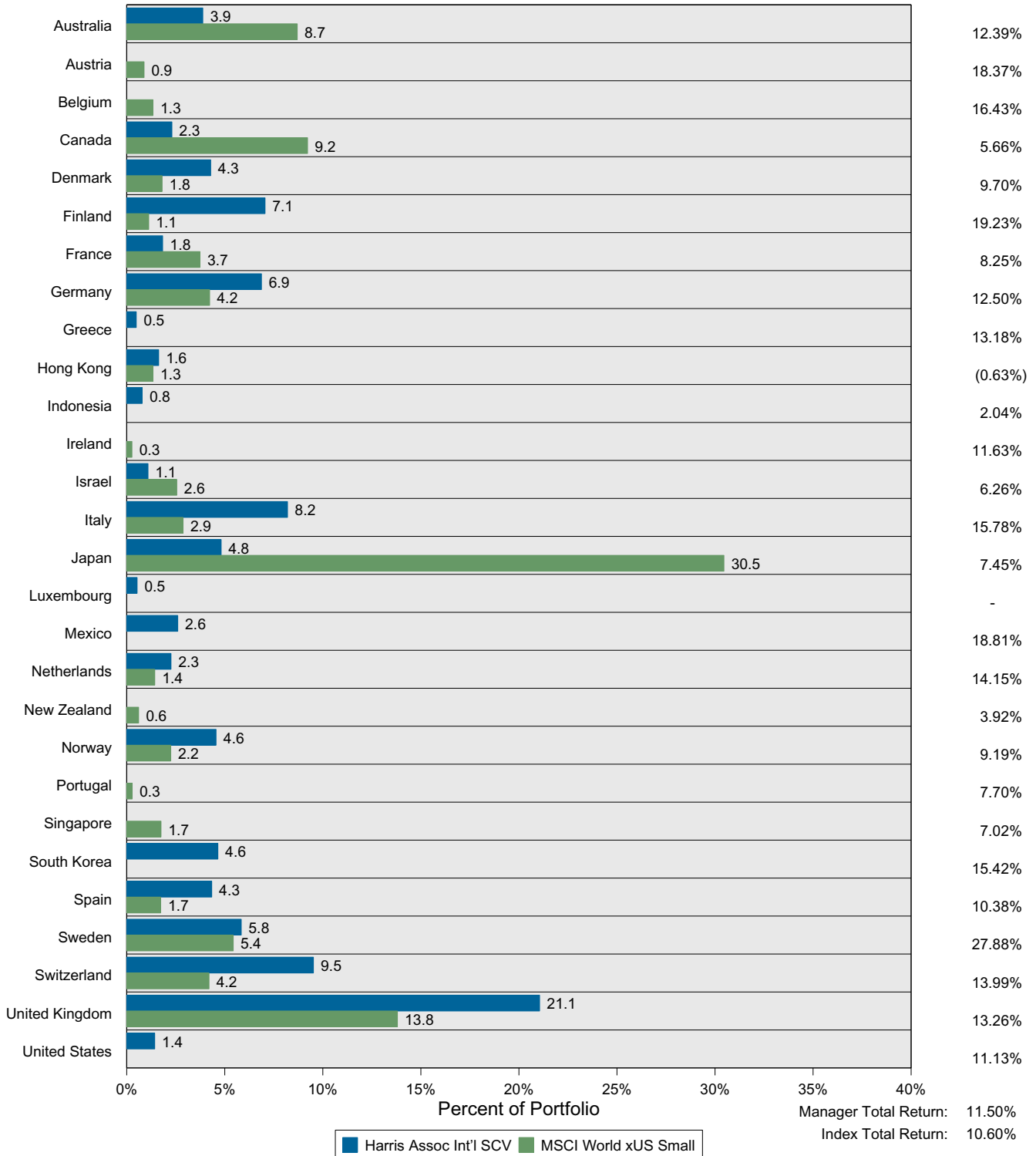
### Harris Assoc Int'l SCV VS MSCI World xUS Small (Net)

#### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

#### Country Weights as of December 31, 2023

#### Index Rtns





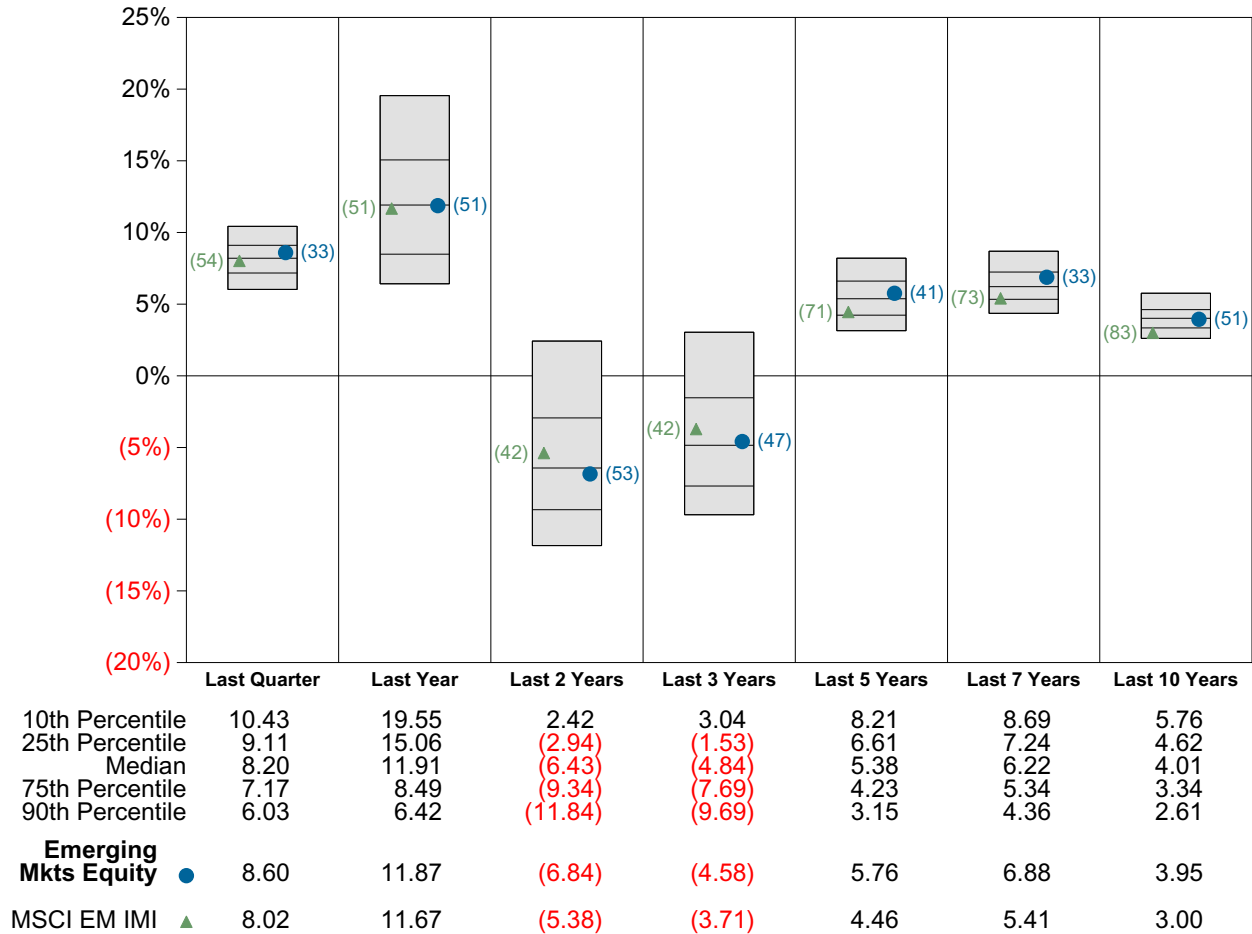
# Emerging Mkts Equity

## Period Ended December 31, 2023

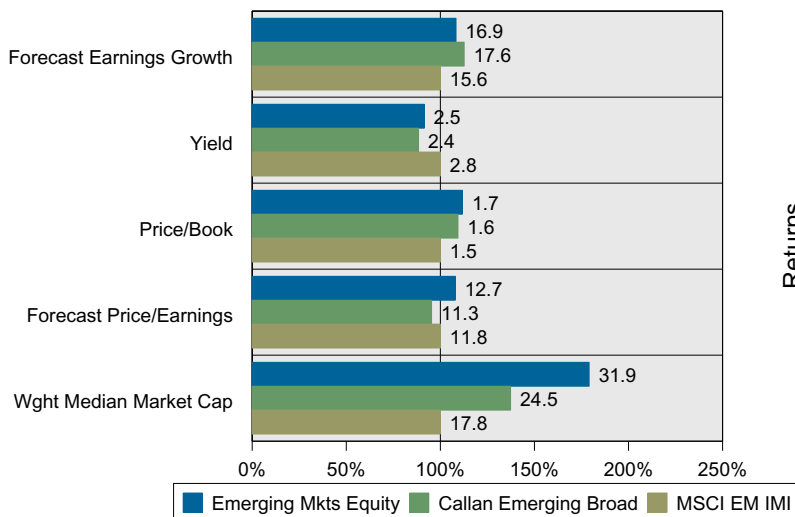
### Quarterly Summary and Highlights

- Emerging Mkts Equity's portfolio posted a 8.60% return for the quarter placing it in the 33 percentile of the Callan Emerging Broad group for the quarter and in the 51 percentile for the last year.
- Emerging Mkts Equity's portfolio outperformed the MSCI EM IMI by 0.58% for the quarter and outperformed the MSCI EM IMI for the year by 0.20%.

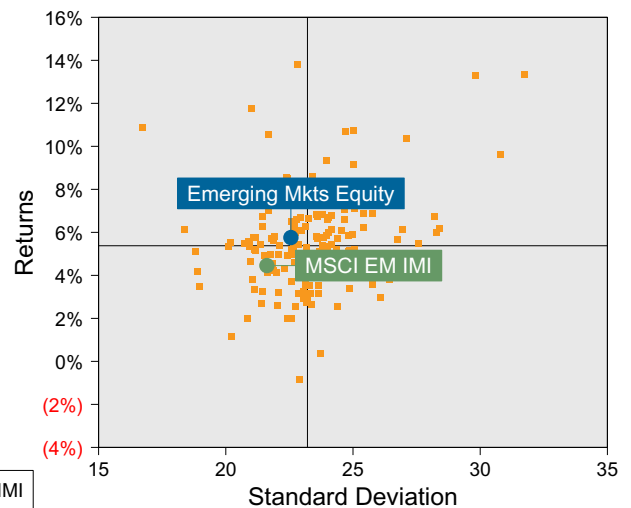
### Performance vs Callan Emerging Broad (Gross)



### Portfolio Characteristics as a Percentage of the MSCI EM IMI



### Callan Emerging Broad (Gross) Annualized Five Year Risk vs Return



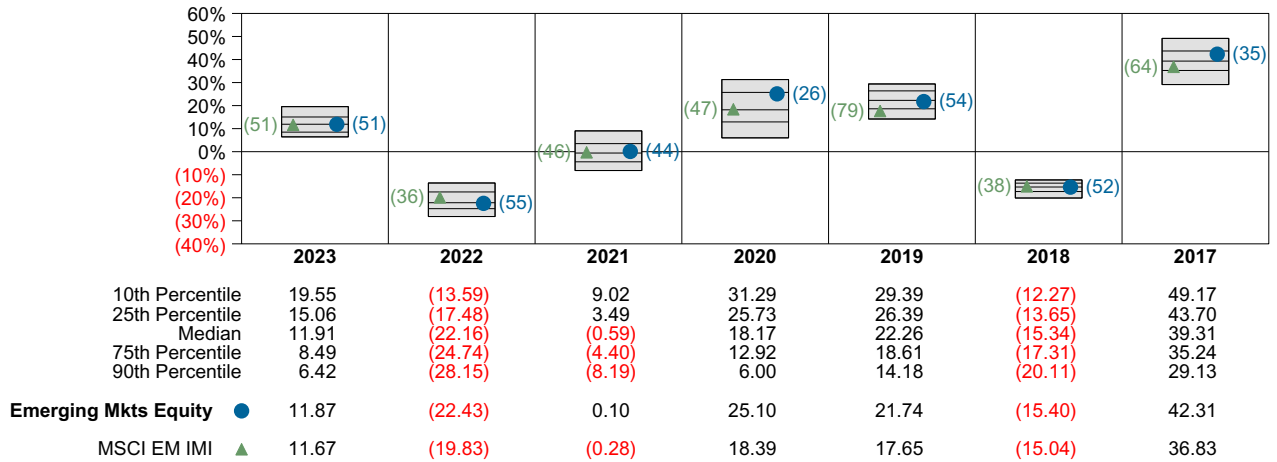


# Emerging Mkts Equity Return Analysis Summary

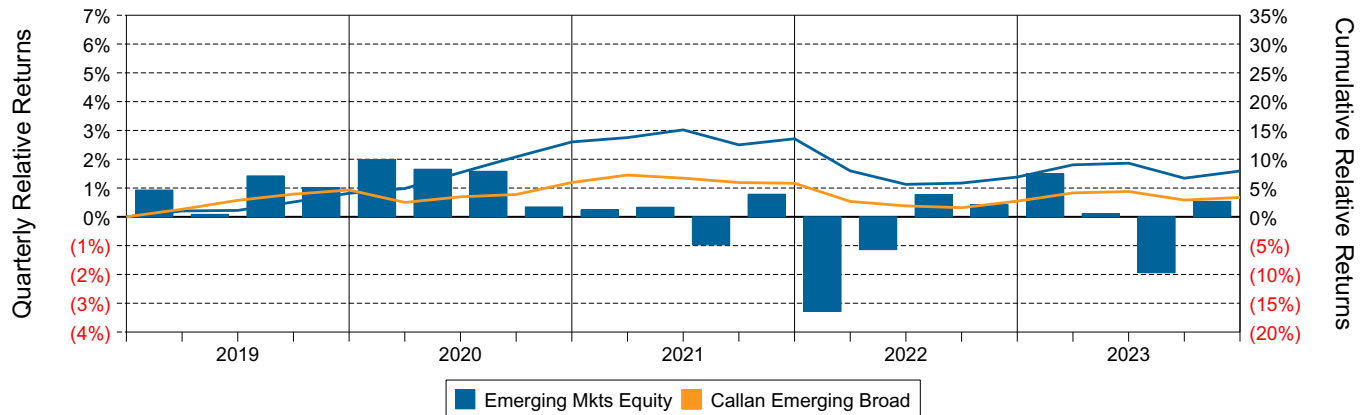
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

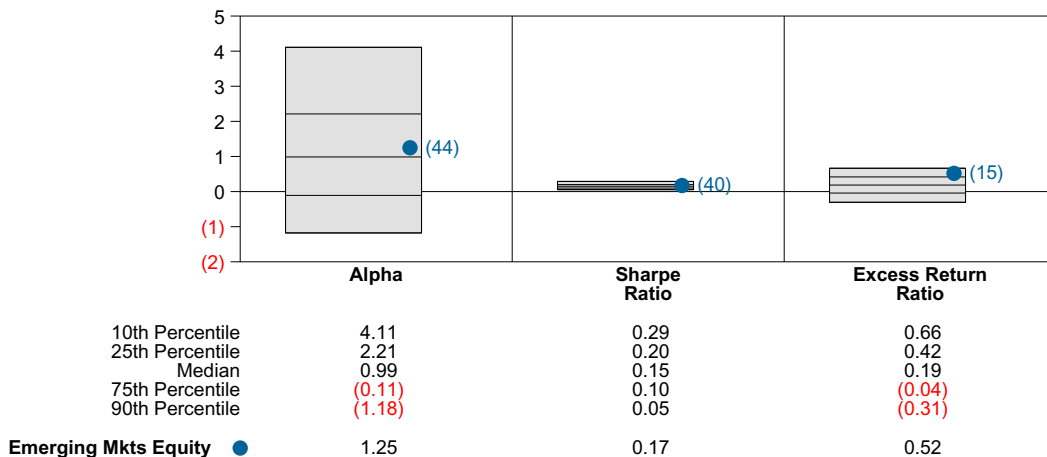
### Performance vs Callan Emerging Broad (Gross)



### Cumulative and Quarterly Relative Returns vs MSCI EM IMI



### Risk Adjusted Return Measures vs MSCI EM IMI Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023

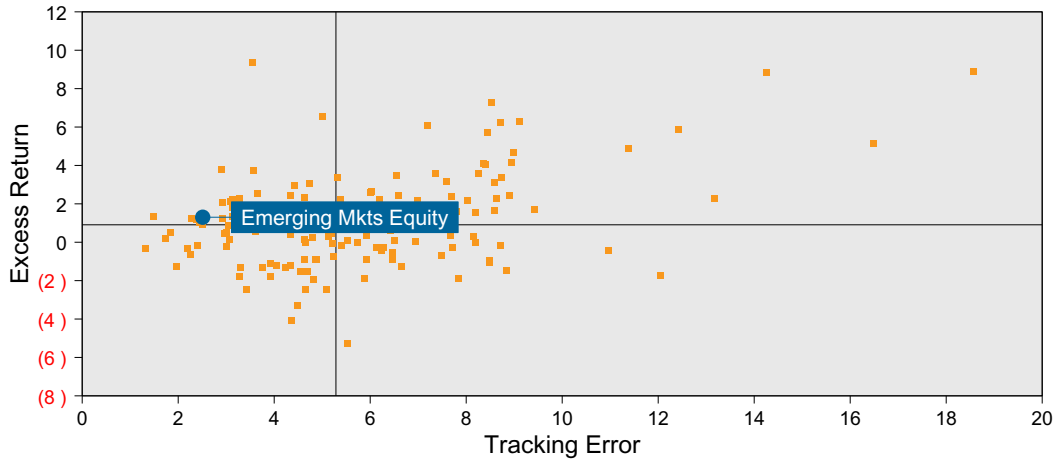


# Emerging Mkts Equity Risk Analysis Summary

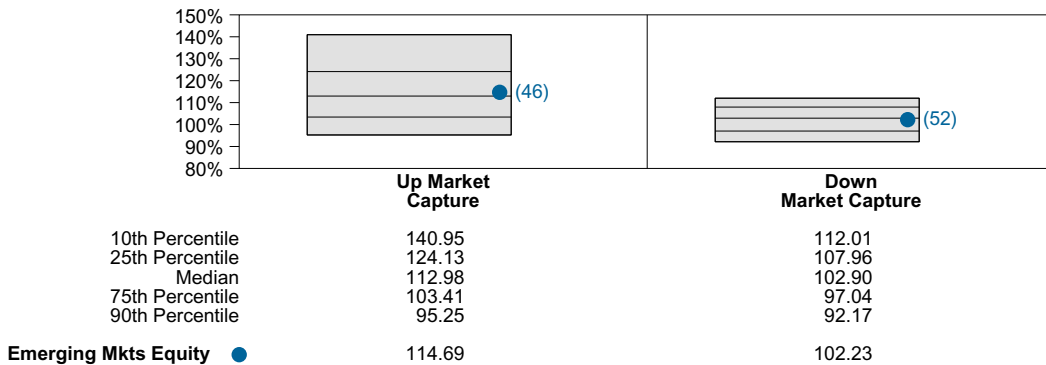
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

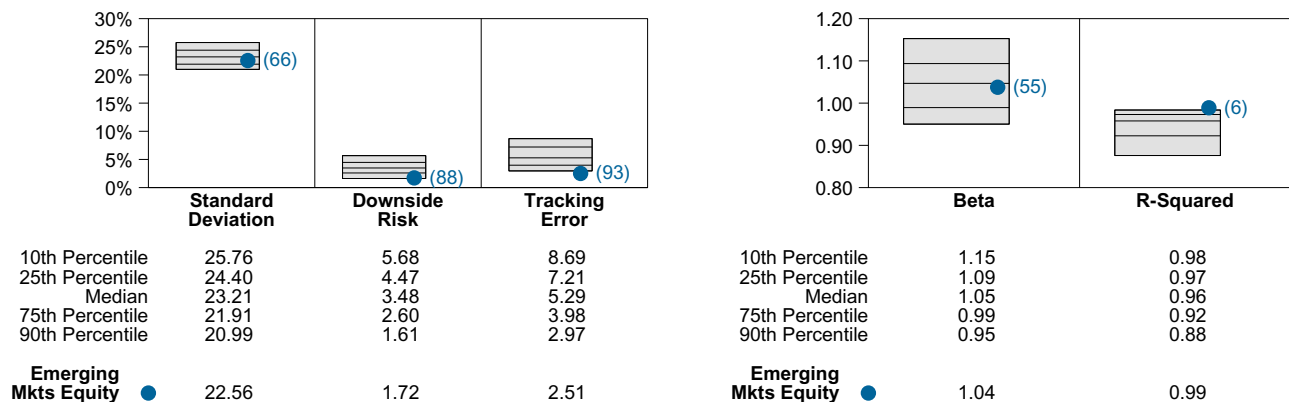
### Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



### Market Capture vs MSCI EM IMI (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



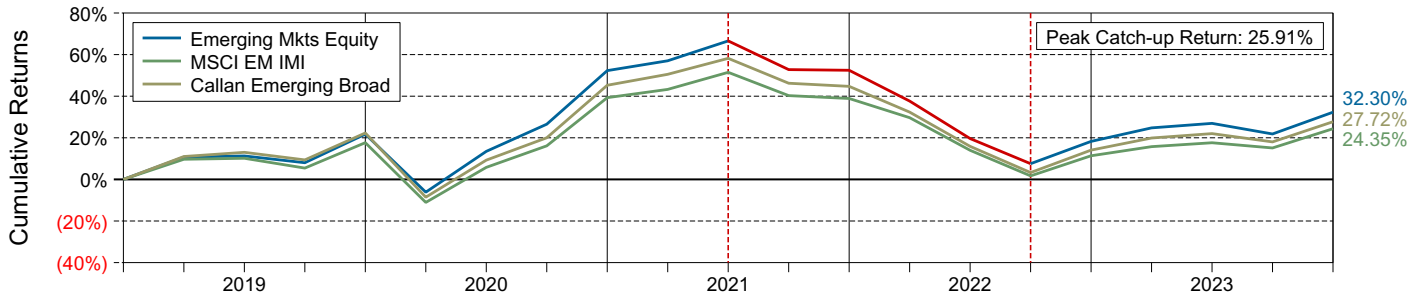
### Risk Statistics Rankings vs MSCI EM IMI (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



# Emerging Mkts Equity Drawdown Analysis for Five Years Ended December 31, 2023

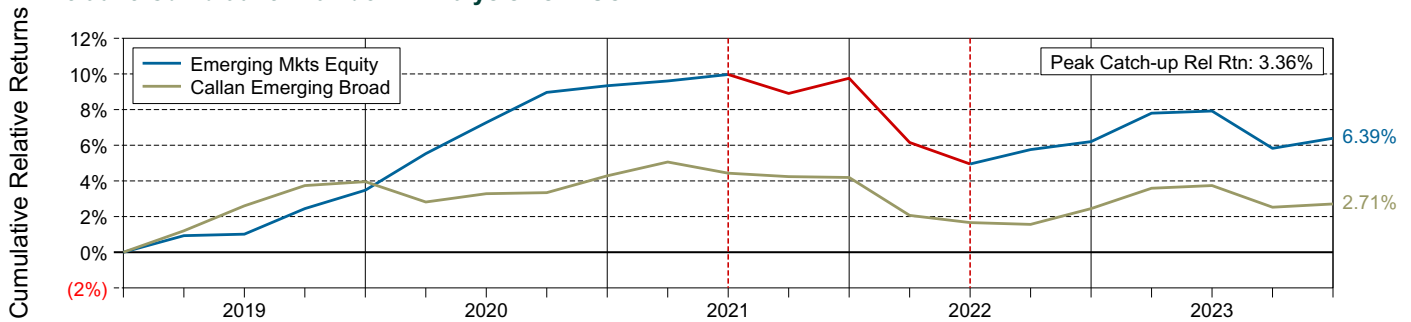
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute Drawdown as well as the Current Drawdown (cumulative return from high-water mark to now). The second chart focuses on Relative Drawdown (negative excess return vs. index). The bottom charts highlight the portfolio's peer rankings during drawdown periods.

## Absolute Cumulative Drawdown Analysis



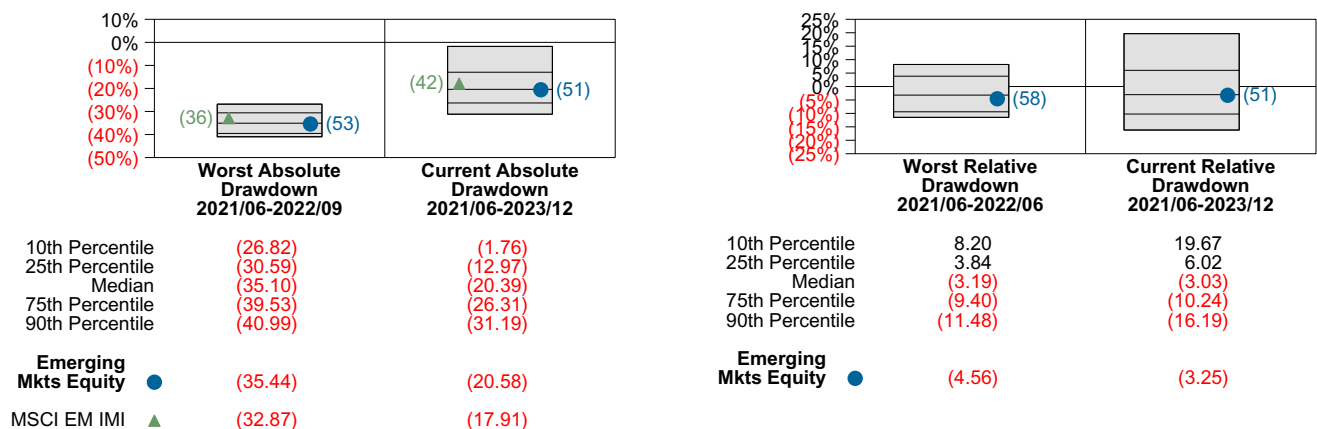
	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Emerging Mkts Equity	(35.44)%	1.25	2021/06-2022/09	(32.87)%	(34.71)%	(20.58)%	2.50	2021/06-2023/12	(17.91)%	(19.26)%
Recovery from Trough	23.02%	1.25+	2022/09-2023/12	22.28%	23.66%	23.02%	1.25+	2022/09-2023/12	22.28%	23.66%
MSCI EM IMI	(32.87)%	1.25	2021/06-2022/09			(17.91)%	2.50	2021/06-2023/12		
Callan Emerging Broad	(34.71)%	1.25	2021/06-2022/09			(19.26)%	2.50	2021/06-2023/12		

## Relative Cumulative Drawdown Analysis vs. MSCI EM IMI



	Worst Relative Drawdown				Current Relative Drawdown			
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Emerging Mkts Equity	(4.56)%	1.00	2021/06-2022/06	(2.65)%	(3.25)%	2.50	2021/06-2023/12	(1.65)%
Recovery from Trough	1.38%	1.50+	2022/06-2023/12	1.03%	1.38%	1.50+	2022/06-2023/12	1.03%
Callan Emerging Broad	(3.33)%	1.50	2021/03-2022/09		(2.24)%	2.75	2021/03-2023/12	

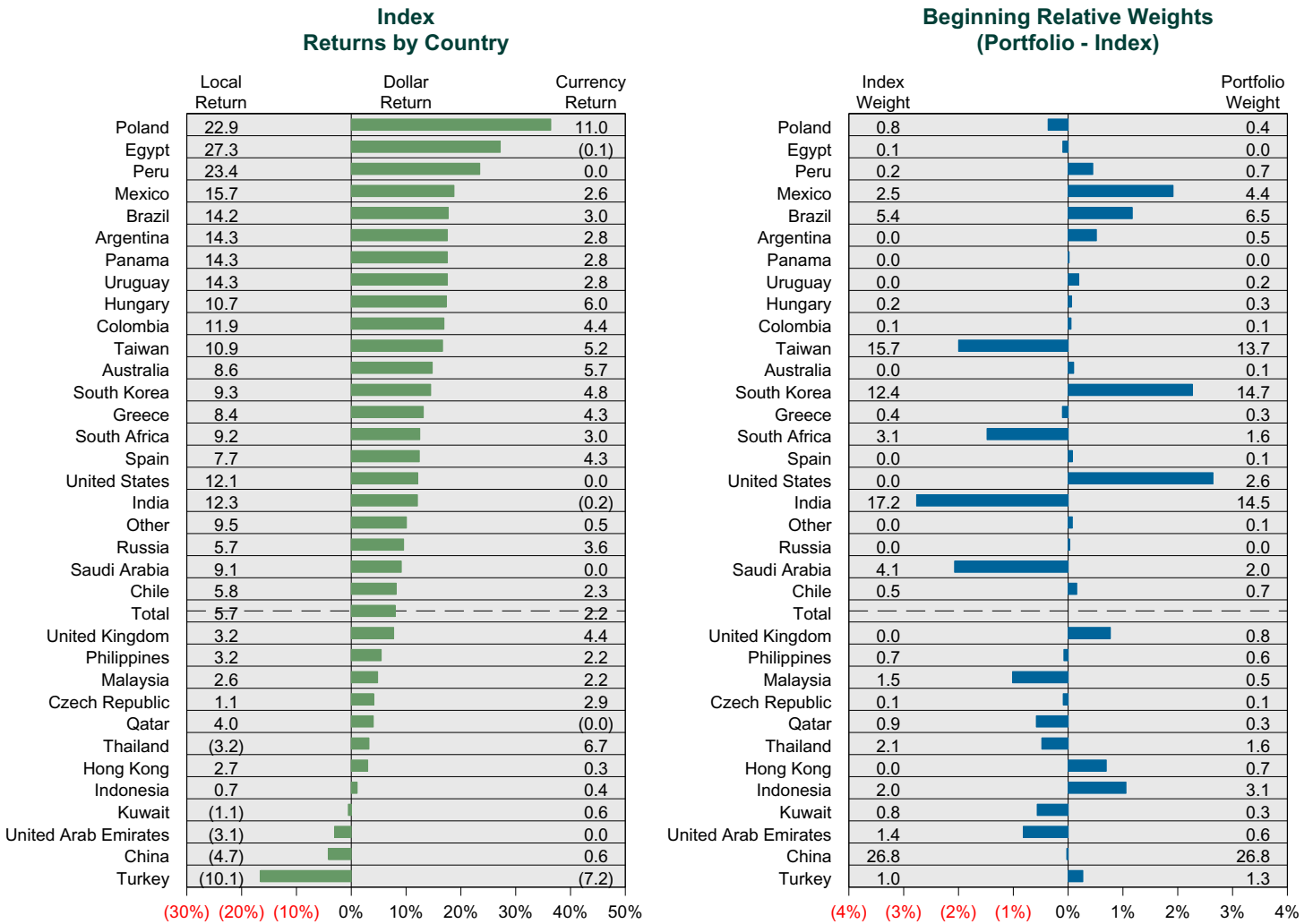
## Drawdown Rankings vs. MSCI EM IMI Rankings against Callan Emerging Broad Five Years Ended December 31, 2023



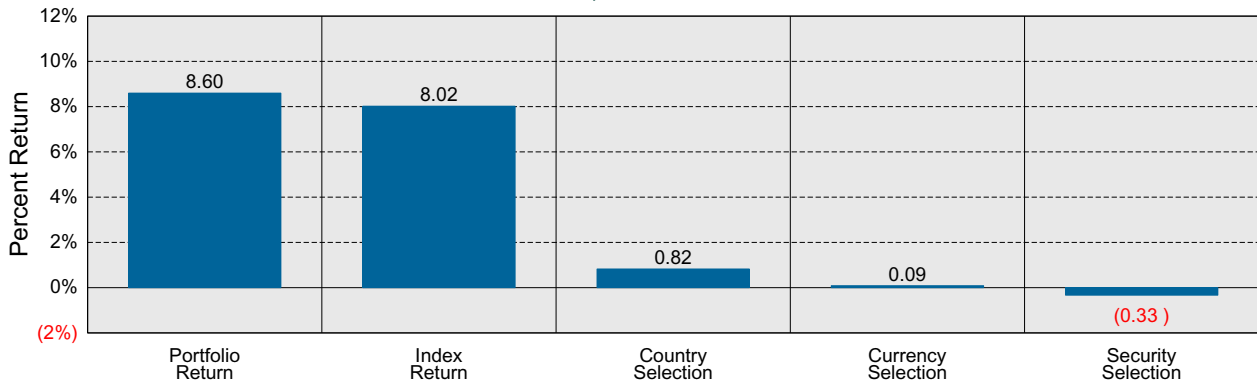
# Emerging Mkts Equity vs MSCI EM IMI Attribution for Quarter Ended December 31, 2023

## International Attribution

The first chart below illustrates the return for each country in the index sorted from high to low. The total return for the index is highlighted with a dotted line. The second chart (countries presented in the same order) illustrates the manager's country allocation decisions relative to the index. To the extent that the manager over-weighted a country that had a higher return than the total return for the index (above the dotted line) it contributes positively to the manager's country (or currency) selection effect. The last chart details the manager return, the index return, and the attribution factors for the quarter.



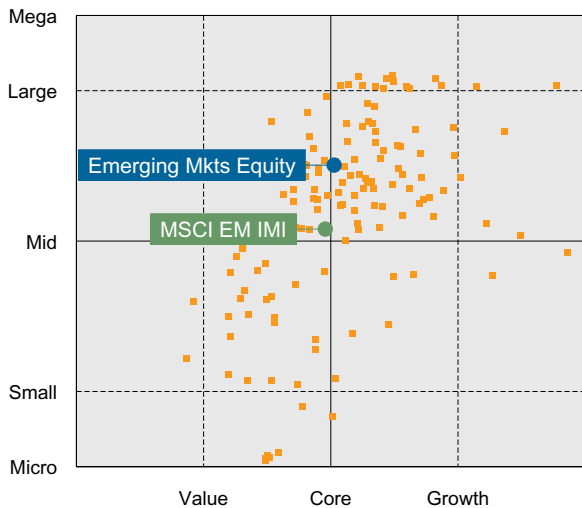
## Attribution Factors for Quarter Ended December 31, 2023



# Current Holdings Based Style Analysis Emerging Mkts Equity As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

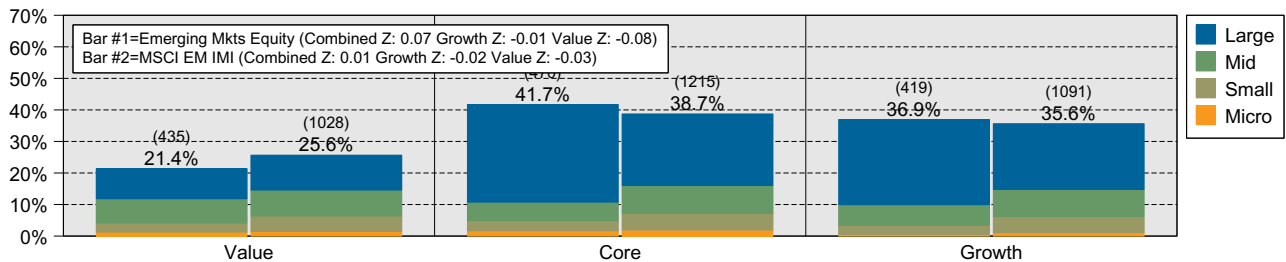
**Style Map vs Callan Emerging Broad Holdings as of December 31, 2023**



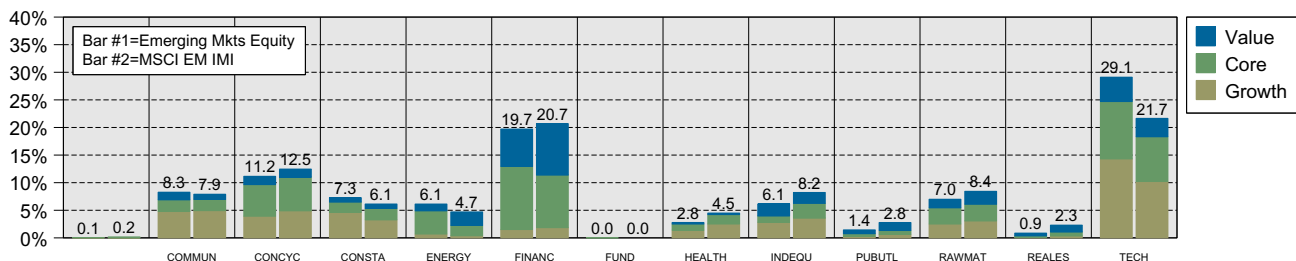
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Large	9.5% (90)	30.9% (100)	27.0% (86)	67.4% (276)
	11.0% (88)	22.6% (80)	20.9% (98)	54.5% (266)
Mid	7.7% (176)	5.8% (208)	6.5% (202)	20.1% (586)
	8.2% (184)	9.0% (258)	8.6% (269)	25.8% (711)
Small	2.8% (137)	3.2% (140)	2.9% (115)	8.9% (392)
	4.9% (389)	5.2% (472)	5.0% (458)	15.1% (1319)
Micro	1.3% (32)	1.7% (22)	0.6% (16)	3.5% (70)
	1.5% (367)	1.9% (405)	1.1% (266)	4.6% (1038)
Total	21.4% (435)	41.7% (470)	36.9% (419)	100.0% (1324)
	25.6% (1028)	38.7% (1215)	35.6% (1091)	100.0% (3334)

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



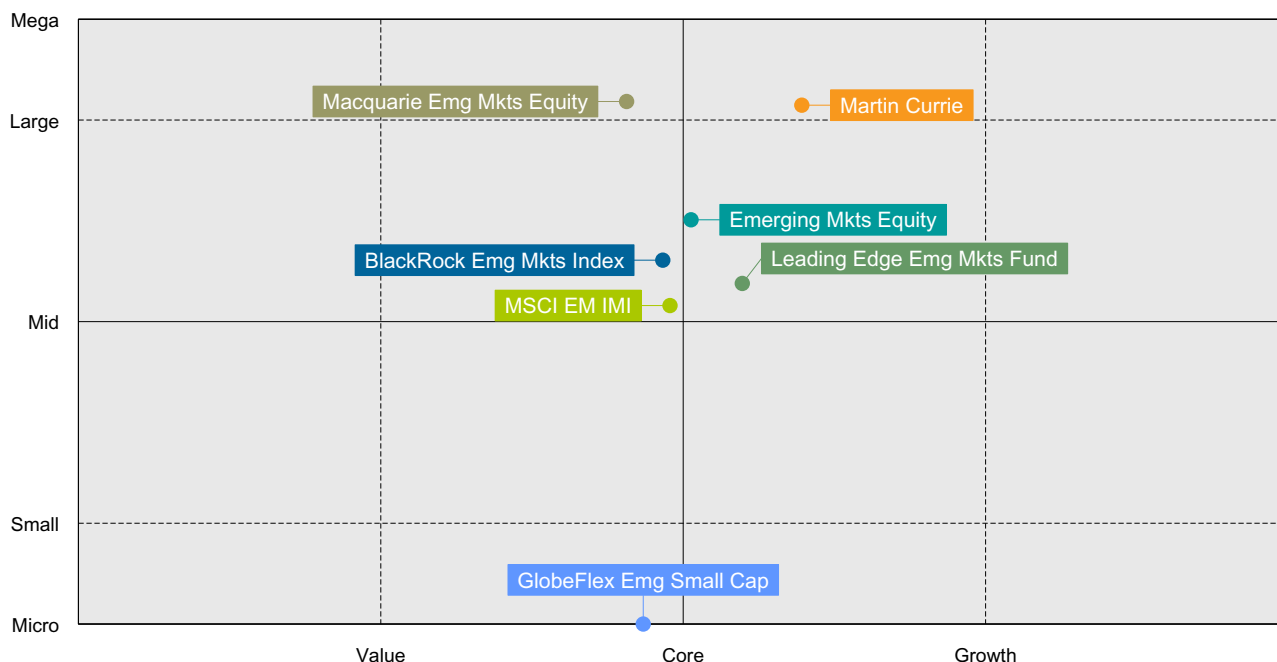
**Sector Weights Distribution Holdings as of December 31, 2023**



## International Holdings Based Style Analysis For One Quarter Ended December 31, 2023

This page analyzes and compares the investment styles of multiple portfolios using a detailed holdings-based style analysis methodology. The size component of style is measured by the weighted median market capitalization of the holdings. The value/core/growth style dimension is captured by the "Combined Z-Score" of the portfolio. This score is based on eight fundamental factors used in the MSCI stock style scoring system. The table below gives a more detailed breakdown of several relevant style metrics on the portfolios.

### Style Map Holdings for One Quarter Ended December 31, 2023



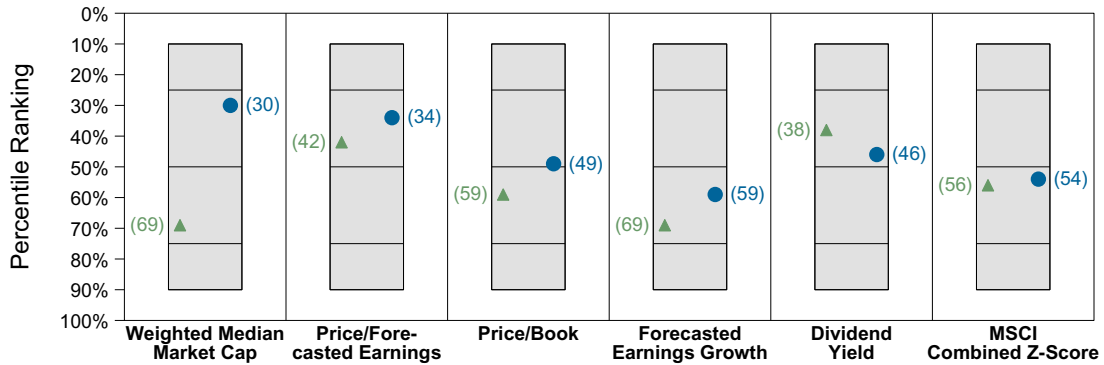
	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities	Security Diversification
BlackRock Emg Mkts Index	33.86%	25.28	(0.01)	(0.02)	(0.01)	1443	87.30
Leading Edge Emg Mkts Fund	13.97%	21.45	0.21	0.07	(0.14)	229	37.83
Macquarie Emg Mkts Equity	21.53%	77.37	(0.12)	(0.13)	(0.01)	83	8.47
Martin Currie	21.55%	71.60	0.37	0.06	(0.31)	53	11.46
GlobeFlex Emg Small Cap	9.09%	0.69	(0.07)	0.03	0.10	127	11.07
Emerging Mkts Equity	100.00%	31.91	0.07	(0.01)	(0.08)	1693	43.85
MSCI EM IMI	-	17.82	0.01	(0.02)	(0.03)	3423	135.81

# Emerging Mkts Equity Equity Characteristics Analysis Summary

## Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of December 31, 2023

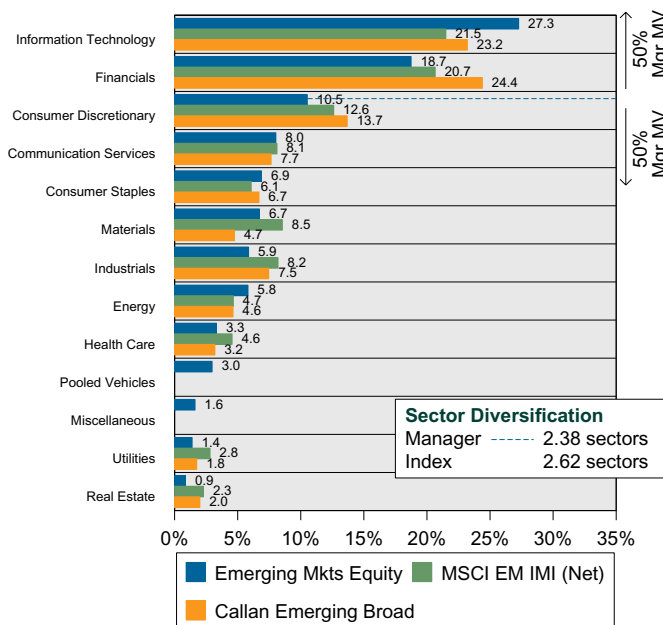


	Weighted Median Market Cap	Price/Forecasted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	53.70	17.26	3.40	24.05	4.25	0.70
25th Percentile	35.03	13.75	2.31	20.31	3.37	0.39
Median	24.47	11.26	1.63	17.56	2.44	0.12
75th Percentile	13.44	9.41	1.33	14.44	1.75	(0.24)
90th Percentile	6.15	7.81	1.00	11.61	1.24	(0.54)
<b>Emerging Mkts Equity</b>	31.91	12.74	1.67	16.88	2.52	0.07
MSCI EM IMI (Net)	17.82	11.81	1.49	15.59	2.76	0.01

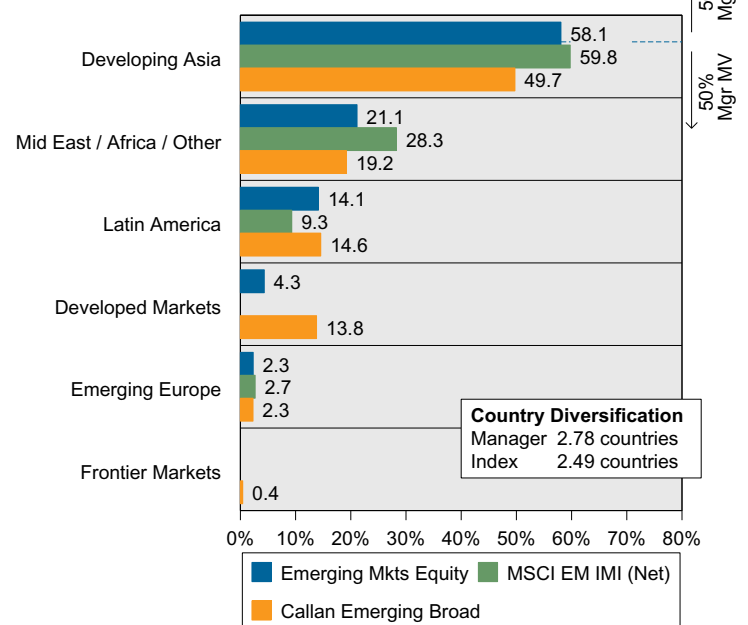
## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.

### Sector Allocation December 31, 2023



### Regional Allocation December 31, 2023



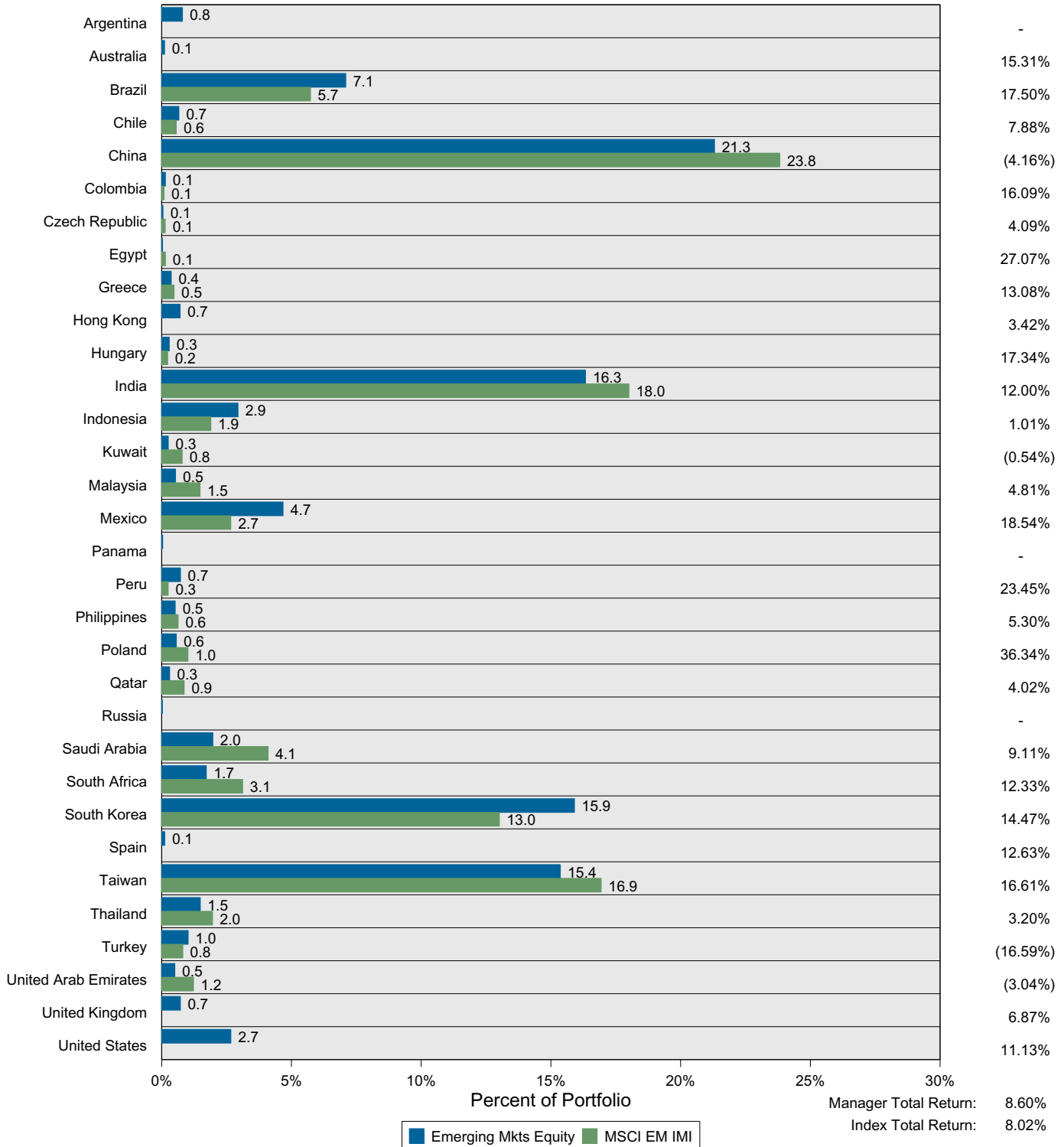
## Country Allocation Emerging Mkts Equity VS MSCI EM IMI (Net)

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

### Country Weights as of December 31, 2023

### Index Rtns

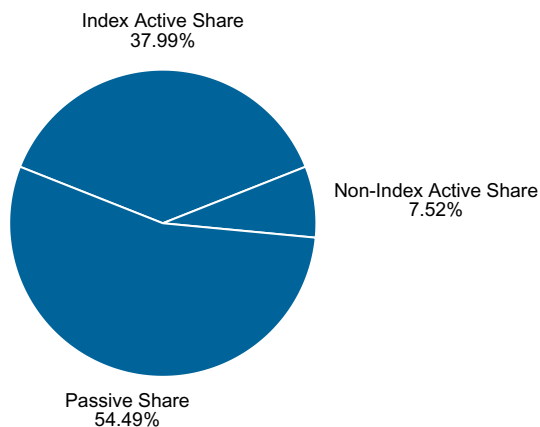




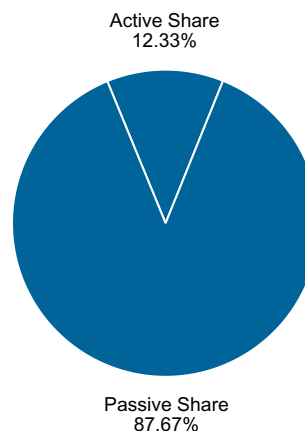
## Emerging Mkts Equity Active Share Analysis as of December 31, 2023 vs. MSCI EM IMI (Net)

Active Share analysis compares the holdings of a portfolio to an index to measure how aggressively it differs from the index. Active share is measured at the individual stock level ("holdings-level active share") and using sector weights ("sector exposure active share"). Holdings-level active share comes from: 1) Index Active Share - over/under weighting of stocks in the index, and 2) Non-Index Active Share - positions in stocks not in the index. This analysis displays active share by sector and compares the portfolio to a relevant peer group.

### Holdings-Level Active Share



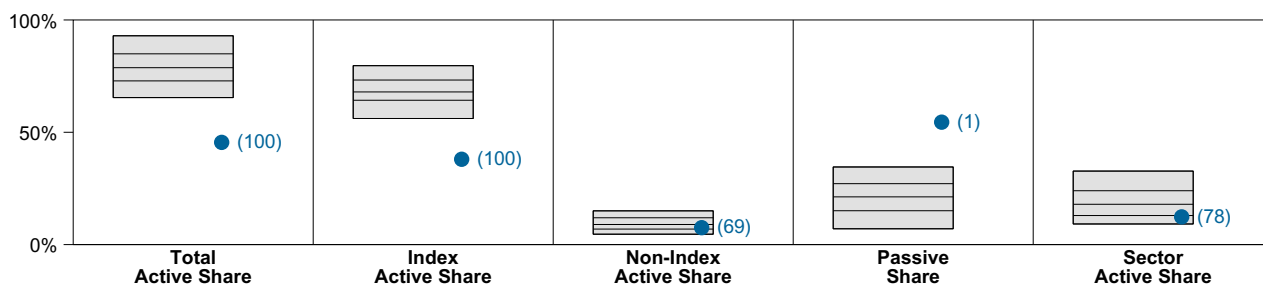
### Sector Exposure Active Share



**Total Active Share: 45.51%**

	Index Active Share Within Sector	Non-Index Active Share Within Sector	Total Active Share Within Sector	Index Weight	Manager Weight	Contribution to Total Portfolio Active Share
Communication Services	42.32%	4.90%	47.22%	8.11%	8.03%	3.83%
Consumer Discretionary	33.10%	13.23%	46.33%	12.61%	10.52%	5.72%
Consumer Staples	46.69%	4.27%	50.97%	6.07%	6.88%	3.25%
Energy	32.81%	6.21%	39.03%	4.66%	5.82%	1.75%
Financials	35.81%	4.32%	40.13%	20.66%	18.74%	8.20%
Health Care	46.92%	10.57%	57.49%	4.56%	3.32%	2.39%
Industrials	51.57%	3.73%	55.30%	8.20%	5.86%	4.19%
Information Technology	30.06%	2.89%	32.95%	21.50%	27.27%	7.93%
Materials	38.91%	8.10%	47.01%	8.54%	6.72%	3.83%
Miscellaneous	50.00%	50.27%	100.27%	-	1.62%	0.79%
Pooled Vehicles	50.00%	50.00%	100.00%	-	2.97%	1.49%
Real Estate	36.30%	5.49%	41.79%	2.29%	0.86%	0.94%
Utilities	34.29%	2.71%	36.99%	2.81%	1.39%	1.12%
<b>Total</b>	<b>37.99%</b>	<b>7.52%</b>	<b>45.51%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>45.42%</b>

### Active Share vs. Callan Emerging Broad



10th Percentile	92.96	79.65	15.02	34.55	32.72
25th Percentile	84.93	73.25	11.95	27.12	23.98
Median	78.75	67.96	8.95	21.25	17.95
75th Percentile	72.88	64.25	6.90	15.07	12.94
90th Percentile	65.45	56.14	4.63	7.04	9.18
<b>Emerging Mkts Equity</b>	<b>45.51</b>	<b>37.99</b>	<b>7.52</b>	<b>54.49</b>	<b>12.33</b>



# BlackRock Emg Mkts Index Period Ended December 31, 2023

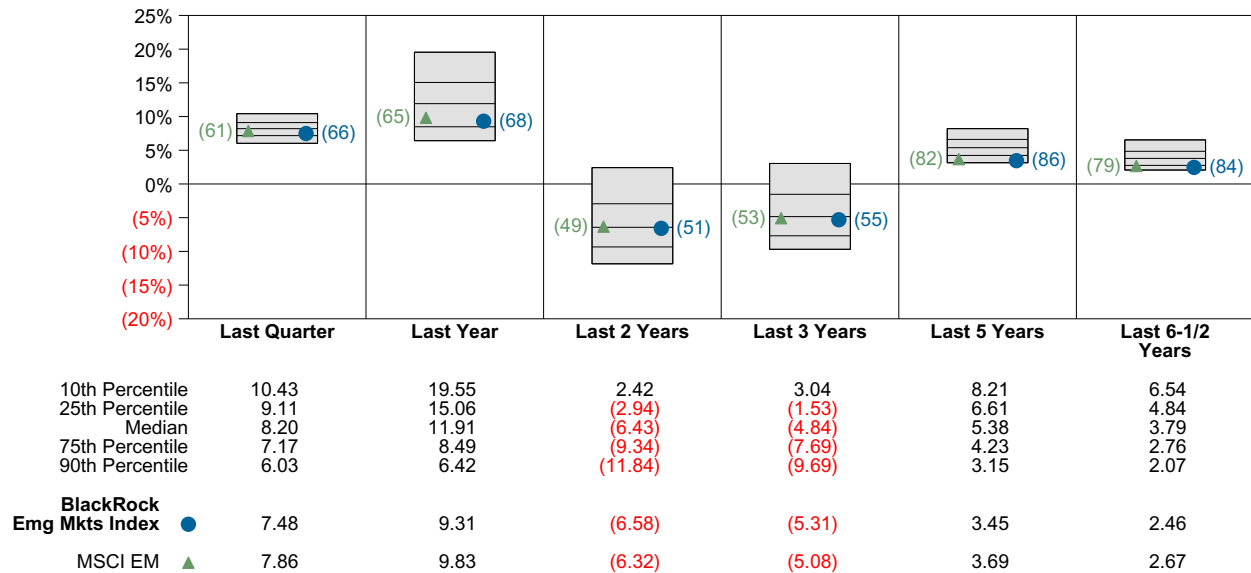
## Investment Philosophy

As with all indexing strategies, the objective of the Emerging Markets Index Funds is to match the performance of the benchmark, the MSCI EM indexes. BlackRock's objective in managing the fund is to deliver a high quality and cost-effective index-based portfolio available to institutional investors. BlackRock's goal in the management of its emerging market country funds is to provide cost-effective and risk controlled exposure with close benchmark tracking. As such, country selection is dictated by the index, and BlackRock's funds approximate the sector and industry breakdowns of the respective country index. The team seeks to construct its country funds using the widest possible range of index constituent stocks to allow for replication of index returns while minimizing transaction costs. Therefore stock selection and weighting is generally dictated by the composition of the index. However, where investment restrictions exist, BlackRock may choose to use alternative investment approaches. In general, BlackRock aims to cover a significant percentage of the security market capitalization of each country index.

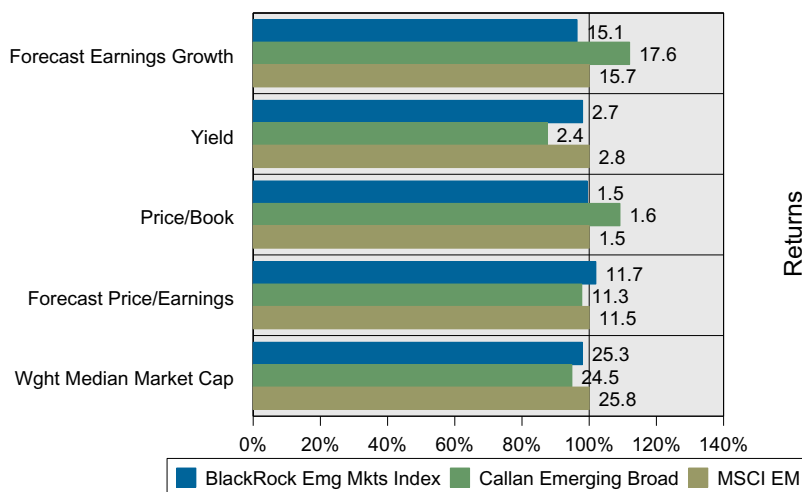
## Quarterly Summary and Highlights

- BlackRock Emg Mkts Index's portfolio posted a 7.48% return for the quarter placing it in the 66 percentile of the Callan Emerging Broad group for the quarter and in the 68 percentile for the last year.
- BlackRock Emg Mkts Index's portfolio underperformed the MSCI EM by 0.38% for the quarter and underperformed the MSCI EM for the year by 0.52%.

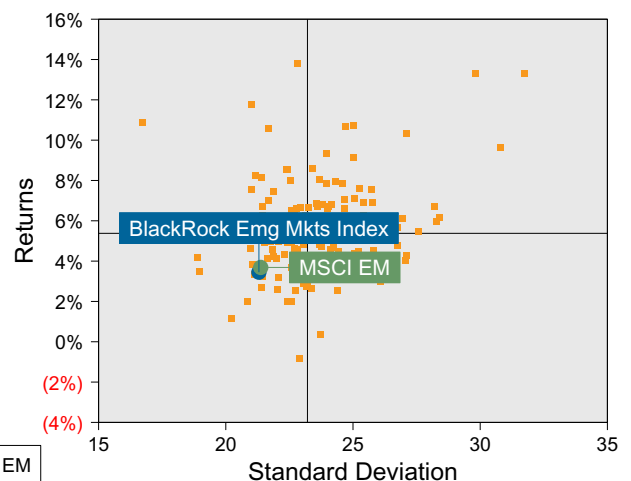
## Performance vs Callan Emerging Broad (Gross)



## Portfolio Characteristics as a Percentage of the MSCI EM



## Callan Emerging Broad (Gross) Annualized Five Year Risk vs Return

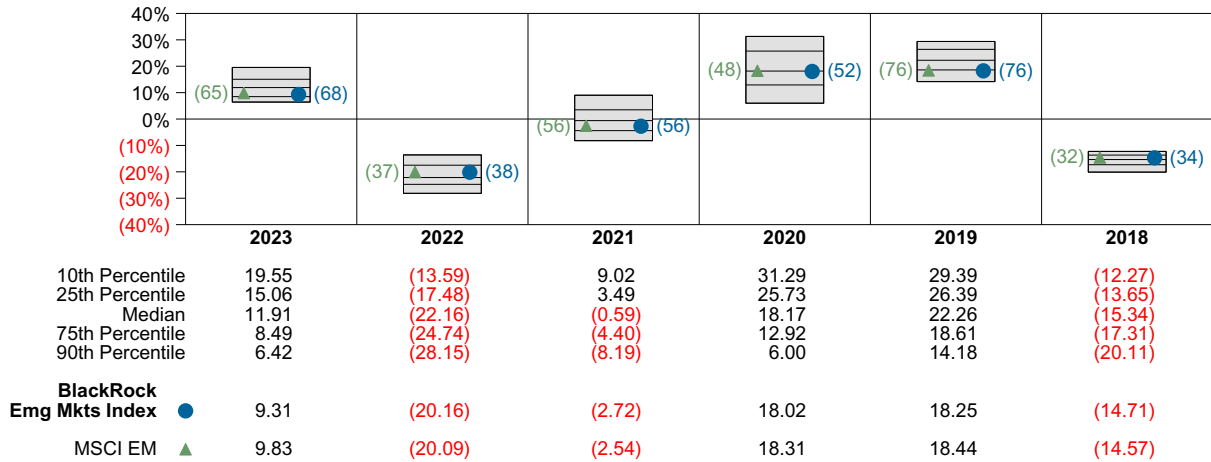


# BlackRock Emg Mkts Index Return Analysis Summary

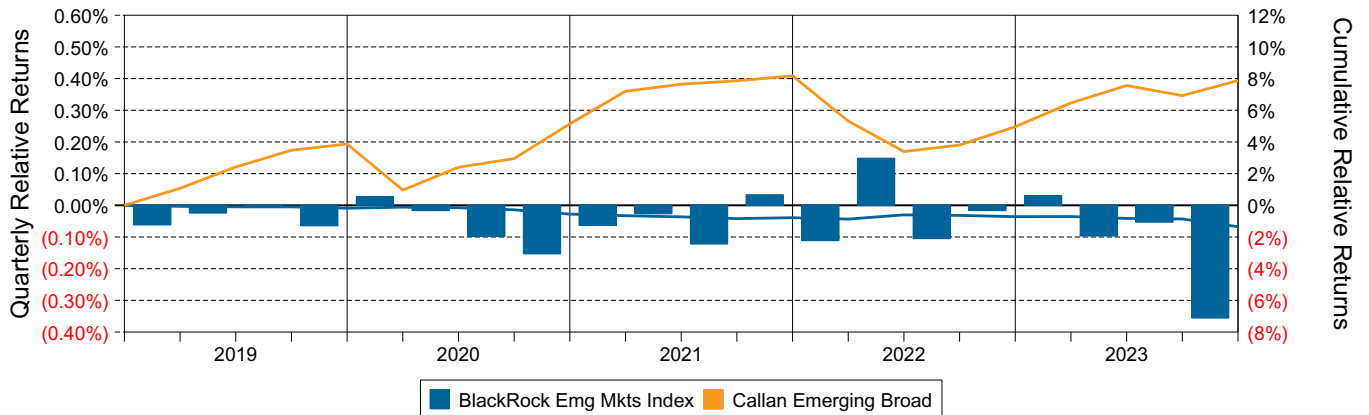
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

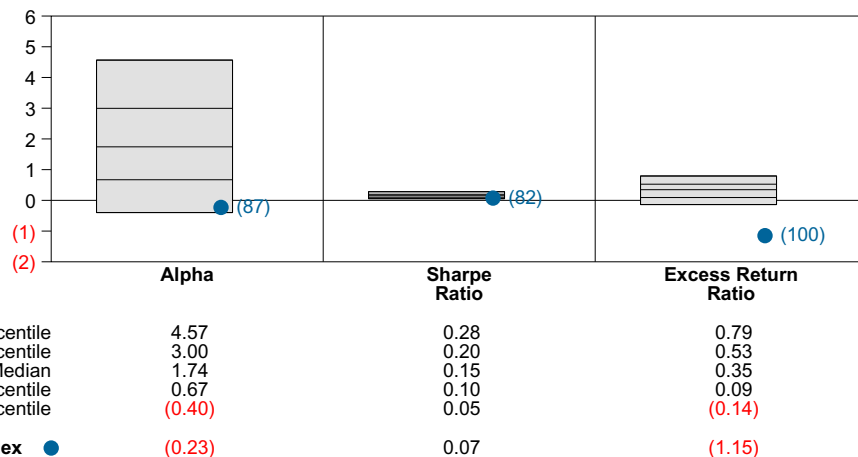
### Performance vs Callan Emerging Broad (Gross)



### Cumulative and Quarterly Relative Returns vs MSCI EM



### Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023

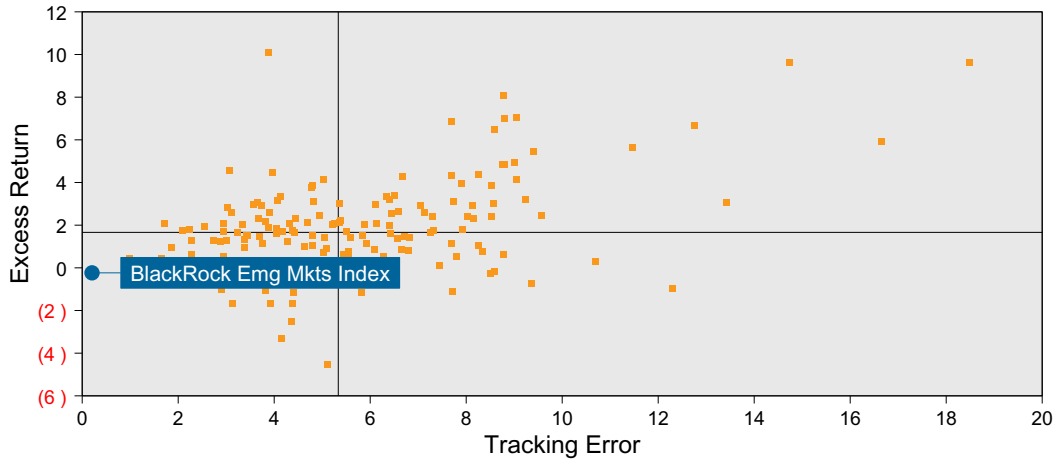


# BlackRock Emg Mkts Index Risk Analysis Summary

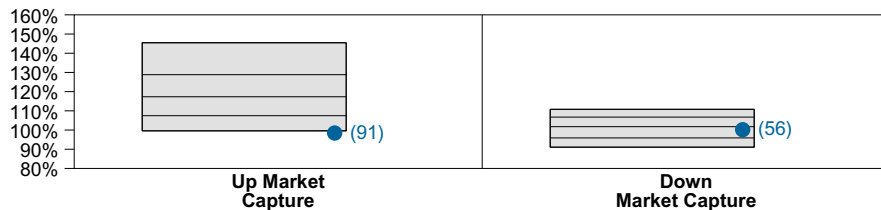
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



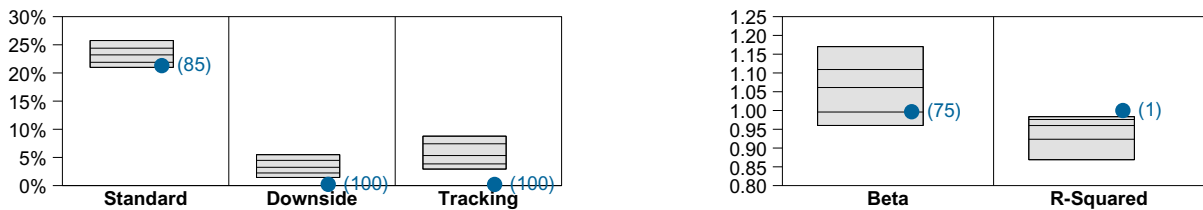
### Market Capture vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



	Up Market Capture	Down Market Capture
10th Percentile	145.46	110.79
25th Percentile	128.83	106.74
Median	117.33	101.75
75th Percentile	107.47	95.91
90th Percentile	99.58	91.06

**BlackRock Emg Mkts Index** ● 98.45 (Up Market Capture)      100.17 (Down Market Capture)

### Risk Statistics Rankings vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	25.76	5.49	8.78	1.17	0.98
25th Percentile	24.40	4.48	7.42	1.11	0.98
Median	23.21	3.25	5.33	1.06	0.96
75th Percentile	21.89	2.25	3.86	1.00	0.92
90th Percentile	20.99	1.45	2.93	0.96	0.87

**BlackRock Emg Mkts Index** ● 21.30 (Standard Deviation)      0.22 (Downside Risk)      0.20 (Tracking Error)      1.00 (Beta)      1.00 (R-Squared)

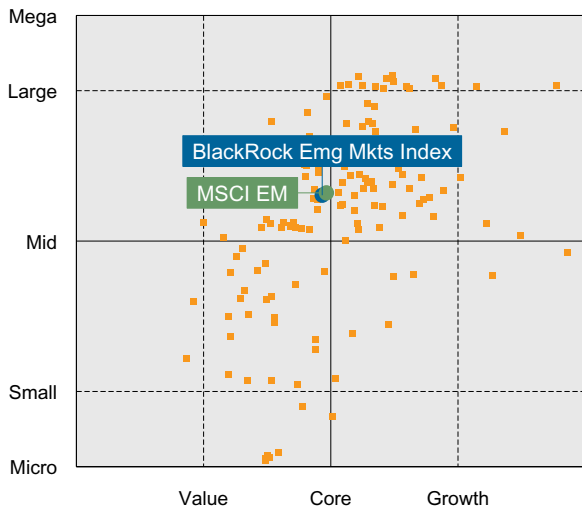
# Current Holdings Based Style Analysis

## BlackRock Emg Mkts Index

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

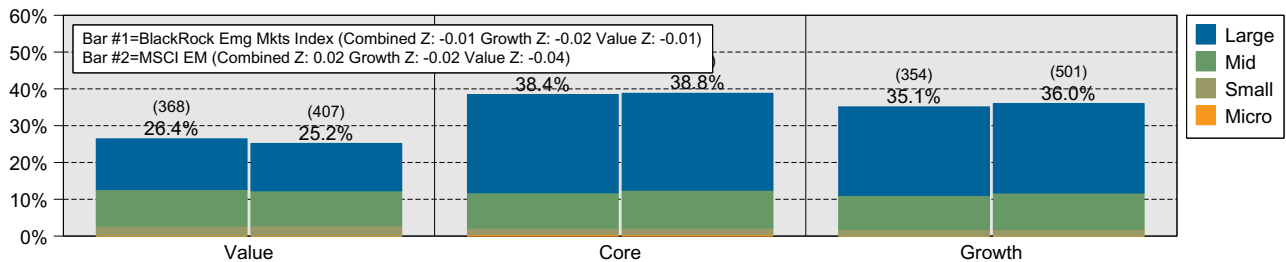
**Style Map vs Callan Emerging Broad Holdings as of December 31, 2023**



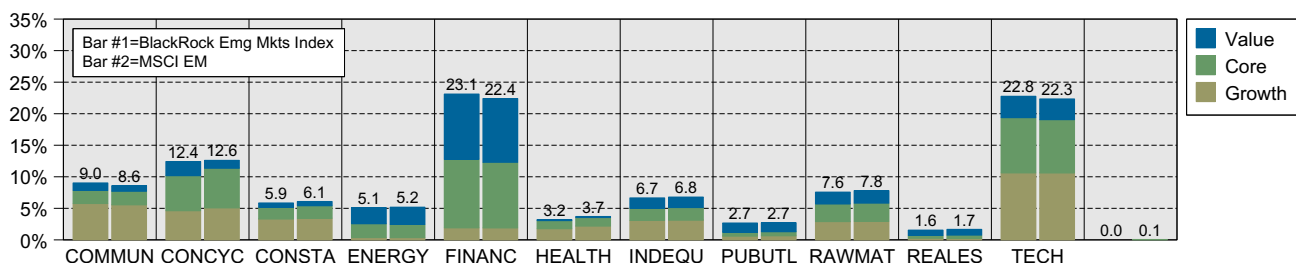
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Large	13.8% (79)	26.7% (74)	24.1% (76)	64.5% (229)
	12.9% (88)	26.3% (80)	24.3% (98)	63.5% (266)
Mid	10.0% (170)	9.6% (203)	9.3% (190)	28.9% (563)
	9.5% (181)	10.3% (250)	9.8% (259)	29.6% (690)
Small	2.6% (116)	1.8% (99)	1.8% (87)	6.1% (302)
	2.7% (135)	1.8% (127)	1.9% (142)	6.4% (404)
Micro	0.1% (3)	0.4% (1)	0.0% (1)	0.5% (5)
	0.1% (3)	0.4% (1)	0.0% (2)	0.5% (6)
<b>Total</b>	<b>26.4% (368)</b>	<b>38.4% (377)</b>	<b>35.1% (354)</b>	<b>100.0% (1099)</b>
	<b>25.2% (407)</b>	<b>38.8% (458)</b>	<b>36.0% (501)</b>	<b>100.0% (1366)</b>

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

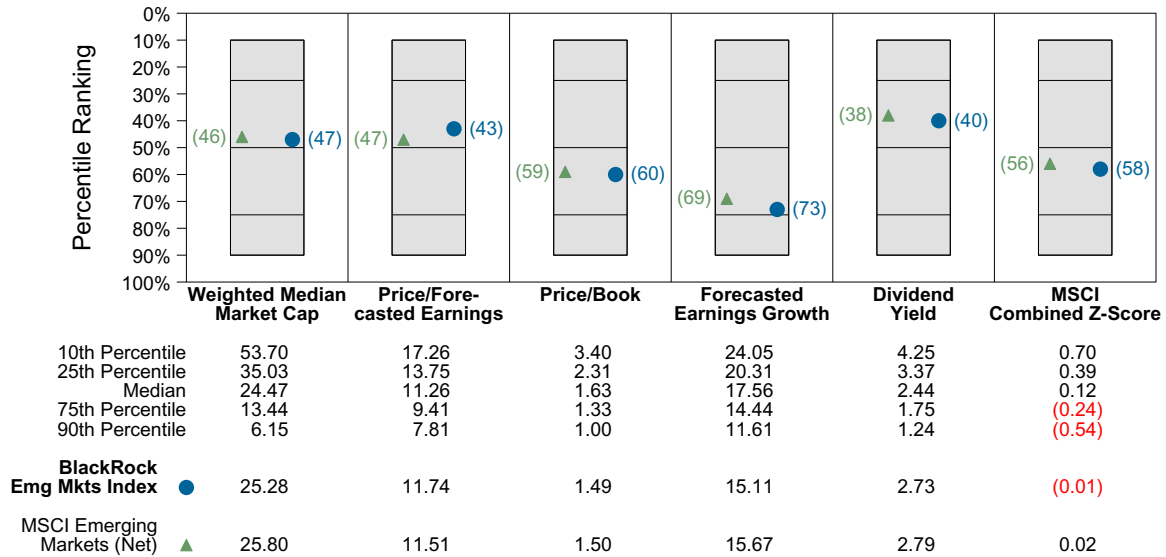


# BlackRock Emg Mkts Index Equity Characteristics Analysis Summary

## Portfolio Characteristics

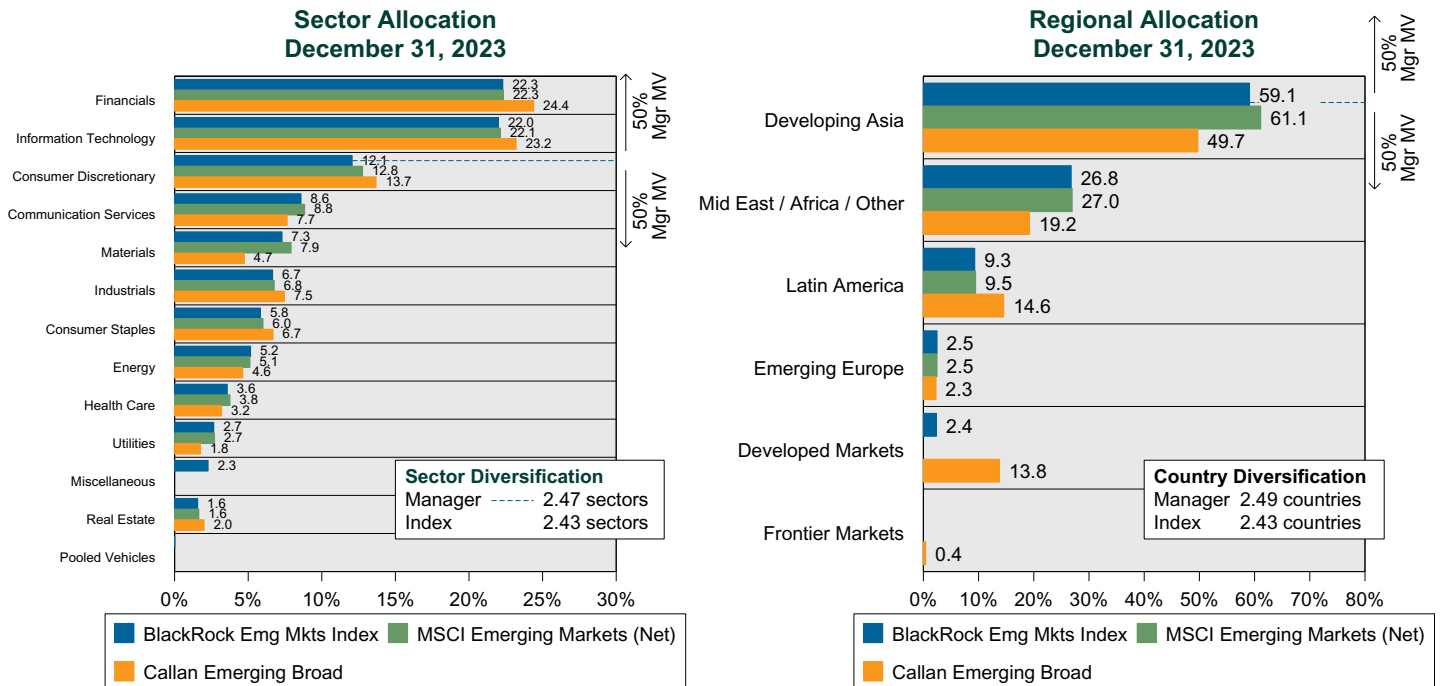
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of December 31, 2023



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.



# Country Allocation

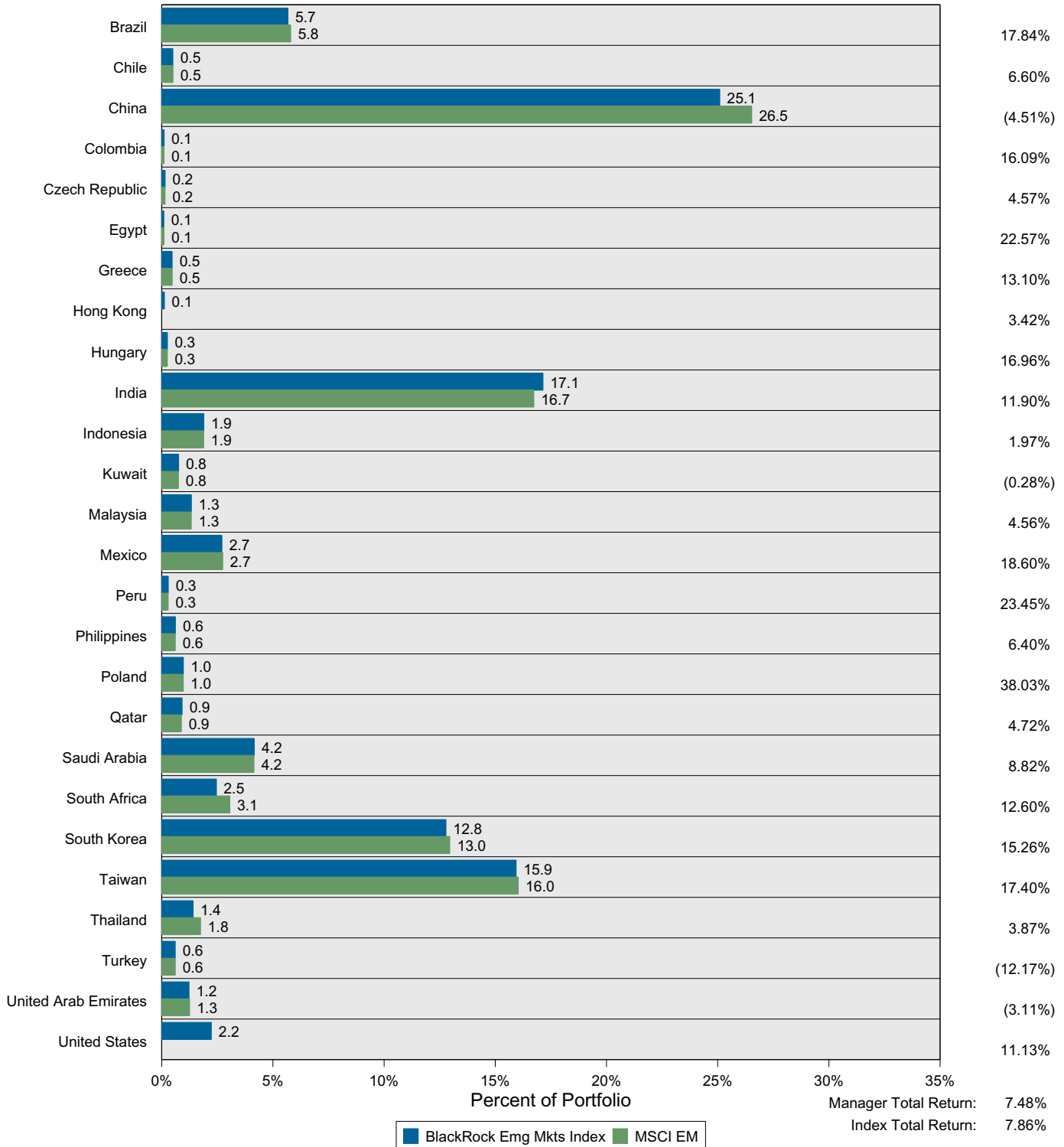
## BlackRock Emg Mkts Index VS MSCI Emerging Markets (Net)

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

### Country Weights as of December 31, 2023

### Index Rtns





# Leading Edge Emg Mkts Fund Period Ended December 31, 2023

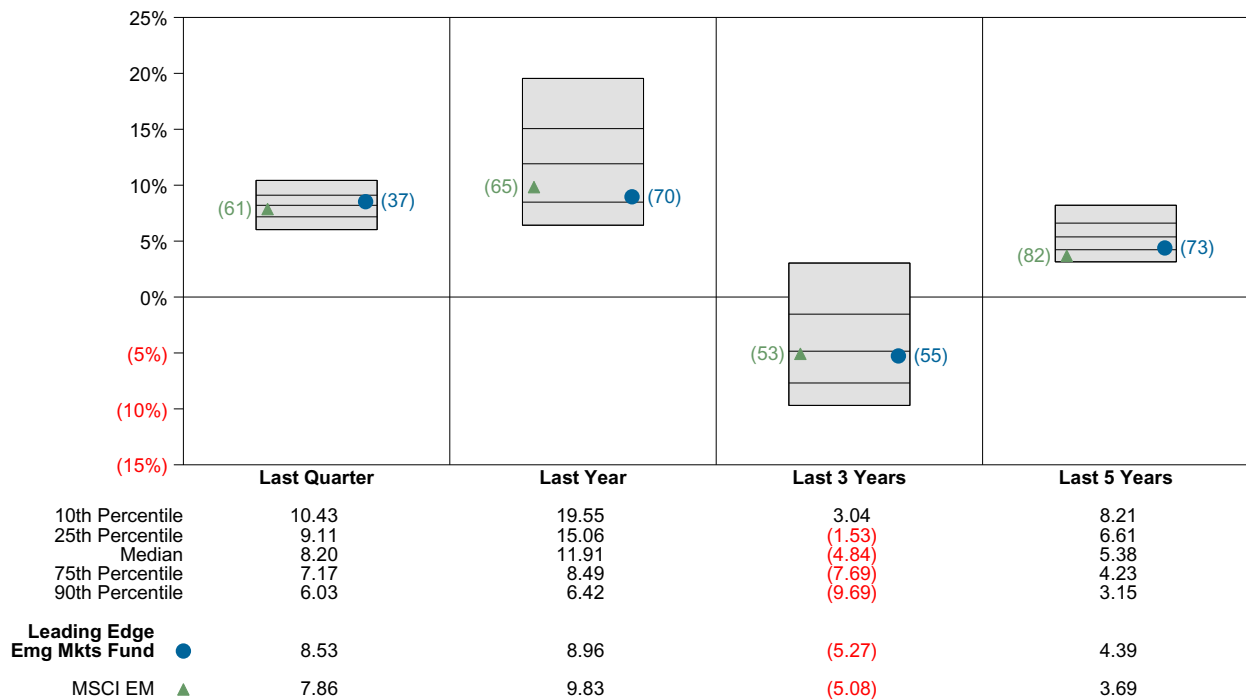
## Investment Philosophy

Leading Edge Investment Advisors pursues innovation in research and investment technology to define how managers are discovered, evaluated and selected. They believe smaller, specialized managers are more innovative than their larger peers, thus producing better risk-adjusted performance. They utilize long-term, ongoing proprietary research to quantify and qualify characteristics that make managers competitive and structure these managers into an optimized, risk-managed Emerging Markets portfolio.

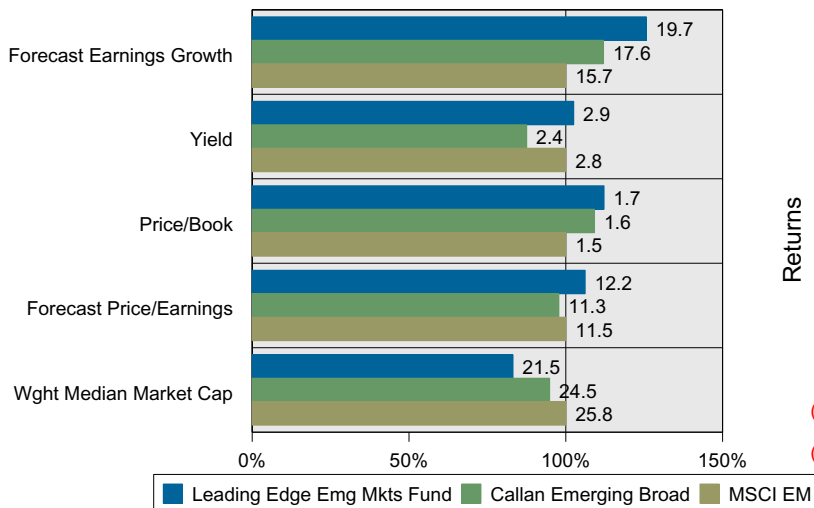
## Quarterly Summary and Highlights

- Leading Edge Emg Mkts Fund's portfolio posted a 8.53% return for the quarter placing it in the 37 percentile of the Callan Emerging Broad group for the quarter and in the 70 percentile for the last year.
- Leading Edge Emg Mkts Fund's portfolio outperformed the MSCI EM by 0.66% for the quarter and underperformed the MSCI EM for the year by 0.87%.

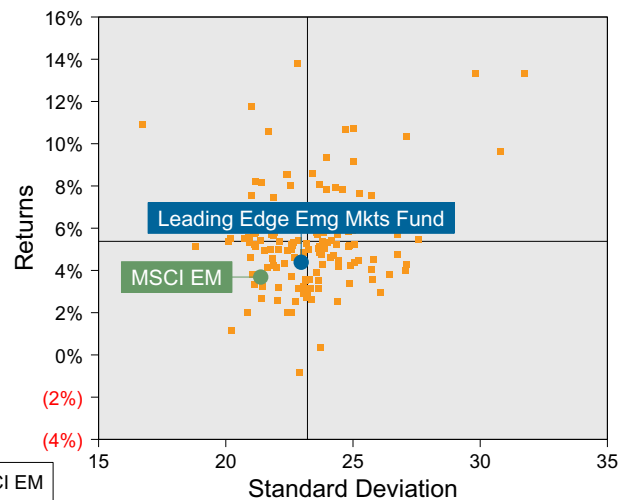
## Performance vs Callan Emerging Broad (Gross)



## Portfolio Characteristics as a Percentage of the MSCI EM



## Callan Emerging Broad (Gross) Annualized Five Year Risk vs Return

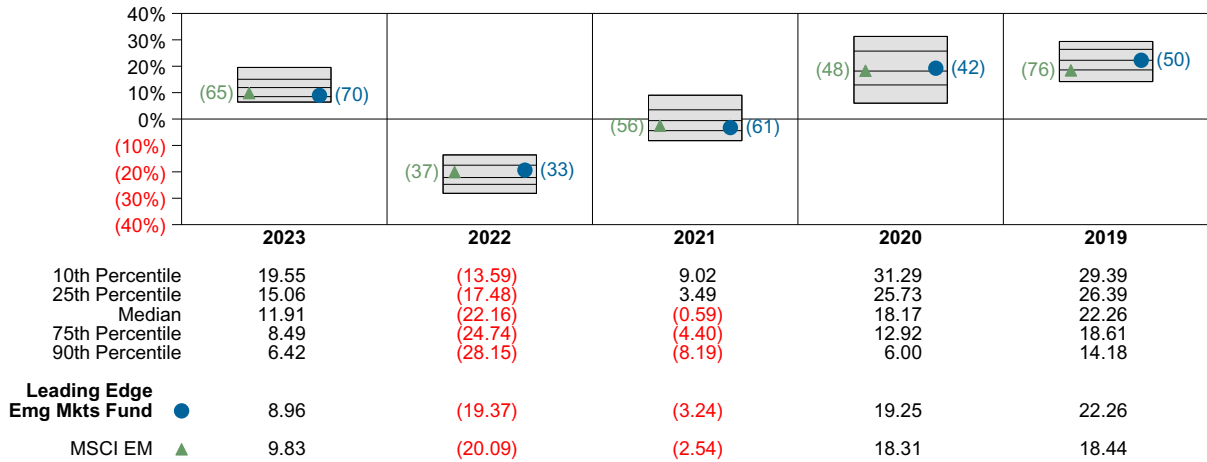


# Leading Edge Emg Mkts Fund Return Analysis Summary

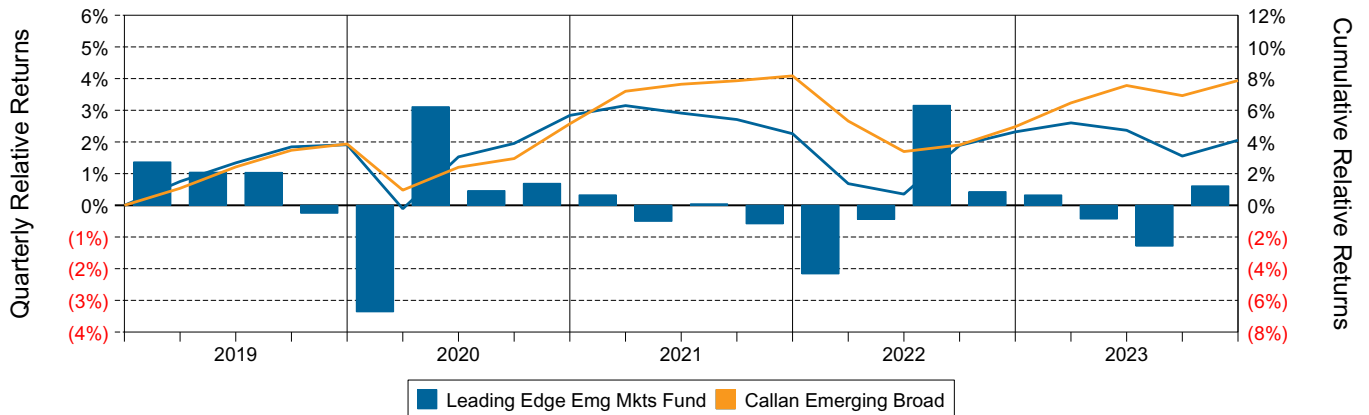
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

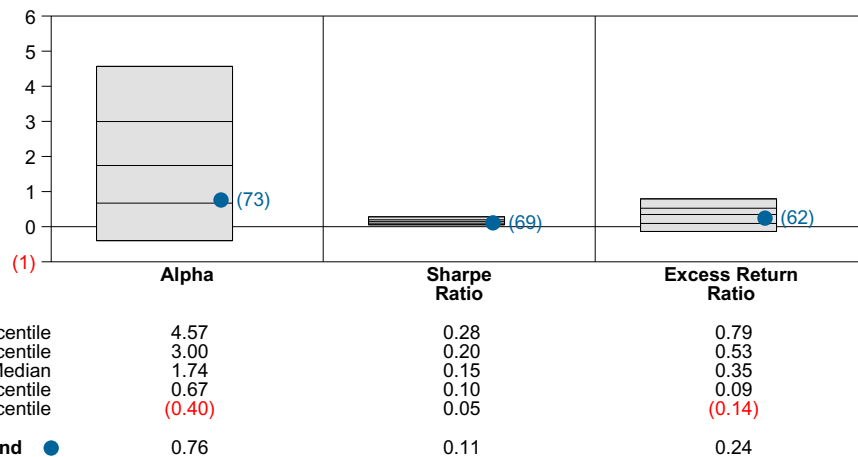
### Performance vs Callan Emerging Broad (Gross)



### Cumulative and Quarterly Relative Returns vs MSCI EM



### Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023

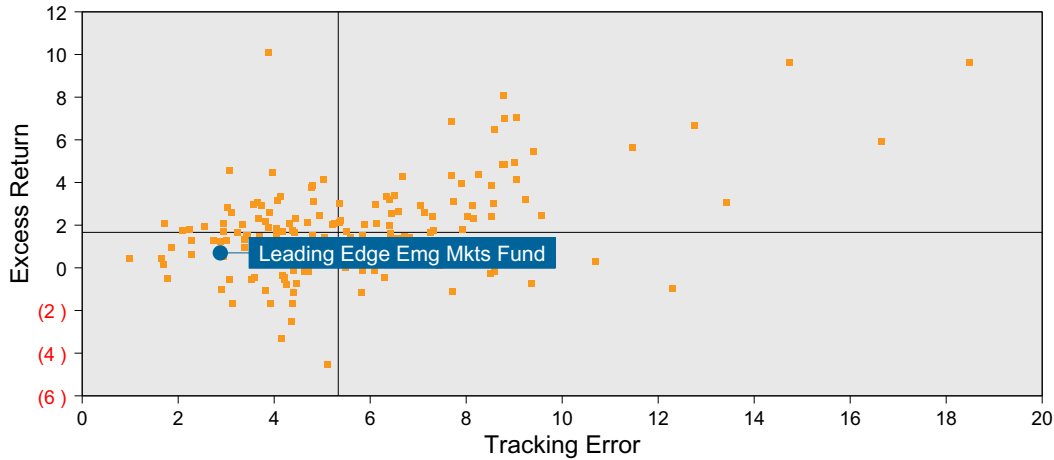


# Leading Edge Emg Mkts Fund Risk Analysis Summary

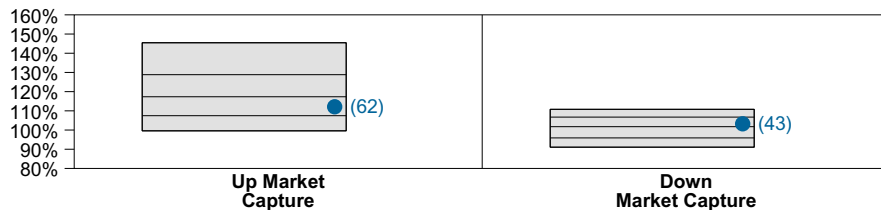
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended December 31, 2023

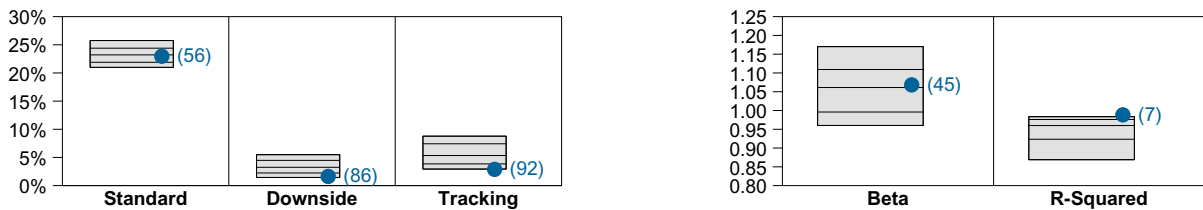


### Market Capture vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



	Up Market Capture	Down Market Capture
10th Percentile	145.46	110.79
25th Percentile	128.83	106.74
Median	117.33	101.75
75th Percentile	107.47	95.91
90th Percentile	99.58	91.06
<b>Leading Edge Emg Mkts Fund</b>	<b>112.12</b>	<b>103.25</b>

### Risk Statistics Rankings vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	25.76	5.49	8.78	1.17	0.98
25th Percentile	24.40	4.48	7.42	1.11	0.98
Median	23.21	3.25	5.33	1.06	0.96
75th Percentile	21.89	2.25	3.86	1.00	0.92
90th Percentile	20.99	1.45	2.93	0.96	0.87
<b>Leading Edge Emg Mkts Fund</b>	<b>22.96</b>	<b>1.63</b>	<b>2.88</b>	<b>1.07</b>	<b>0.99</b>

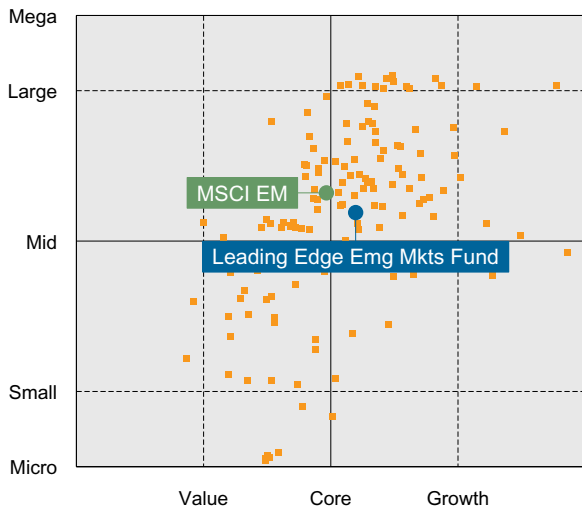
# Current Holdings Based Style Analysis

## Leading Edge Emg Mkts Fund

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left chart illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right chart displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

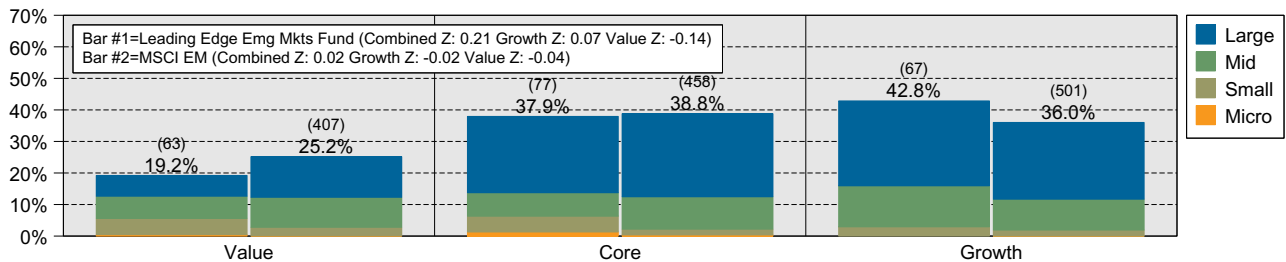
**Style Map vs Callan Emerging Broad Holdings as of December 31, 2023**



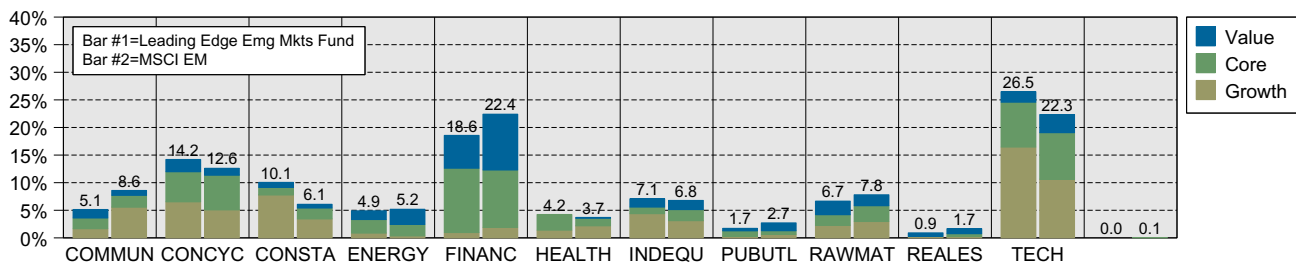
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Large	6.6% (18)	24.2% (36)	26.9% (23)	57.7% (77)
	12.9% (88)	26.3% (80)	24.3% (98)	63.5% (266)
Mid	7.0% (23)	7.5% (21)	13.0% (35)	27.5% (79)
	9.5% (181)	10.3% (250)	9.8% (259)	29.6% (690)
Small	5.2% (19)	5.0% (18)	2.9% (9)	13.1% (46)
	2.7% (135)	1.8% (127)	1.9% (142)	6.4% (404)
Micro	0.5% (3)	1.3% (2)	0.0% (0)	1.8% (5)
	0.1% (3)	0.4% (1)	0.0% (2)	0.5% (6)
<b>Total</b>	<b>19.2% (63)</b>	<b>37.9% (77)</b>	<b>42.8% (67)</b>	<b>100.0% (207)</b>
	<b>25.2% (407)</b>	<b>38.8% (458)</b>	<b>36.0% (501)</b>	<b>100.0% (1366)</b>

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

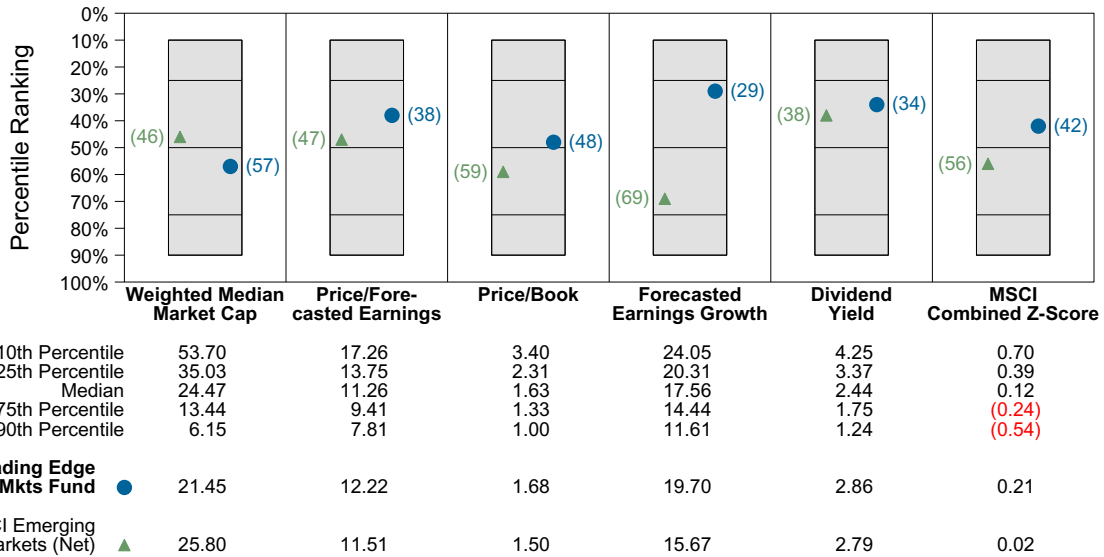


# Leading Edge Emg Mkts Fund Equity Characteristics Analysis Summary

## Portfolio Characteristics

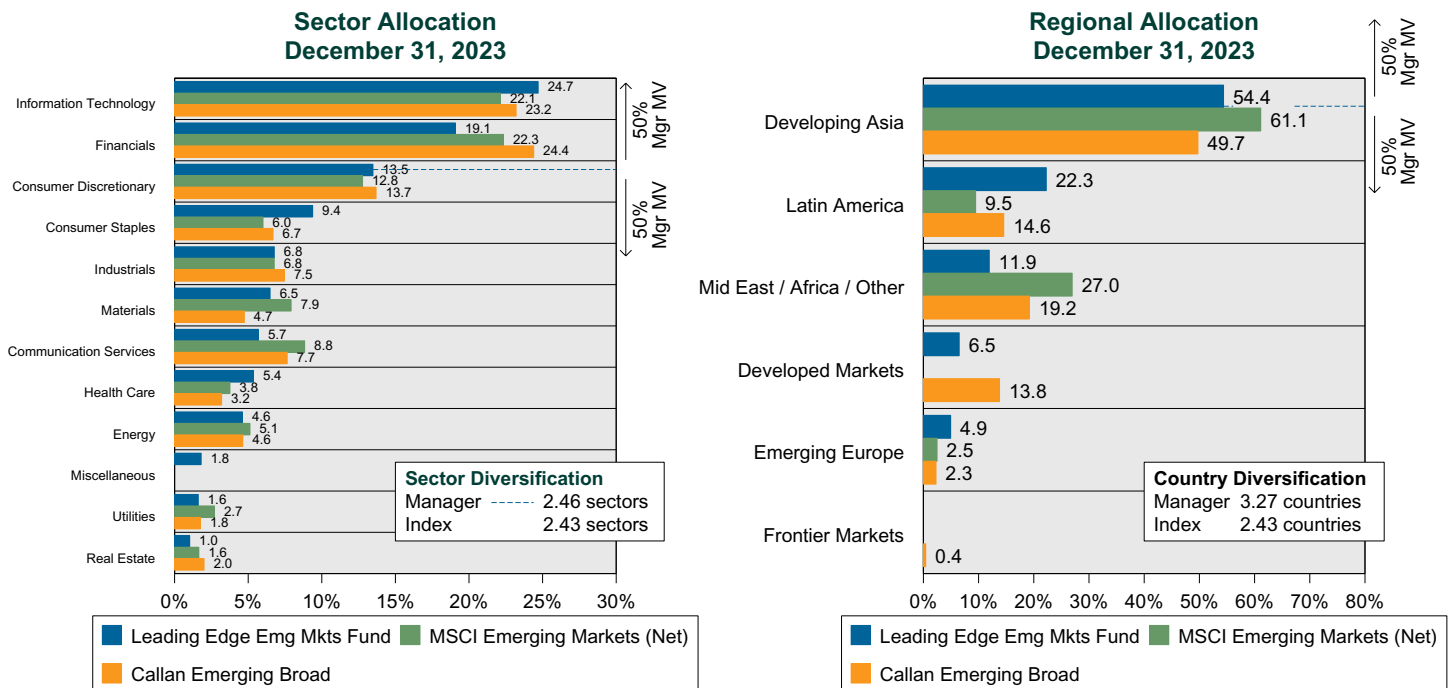
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of December 31, 2023



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.



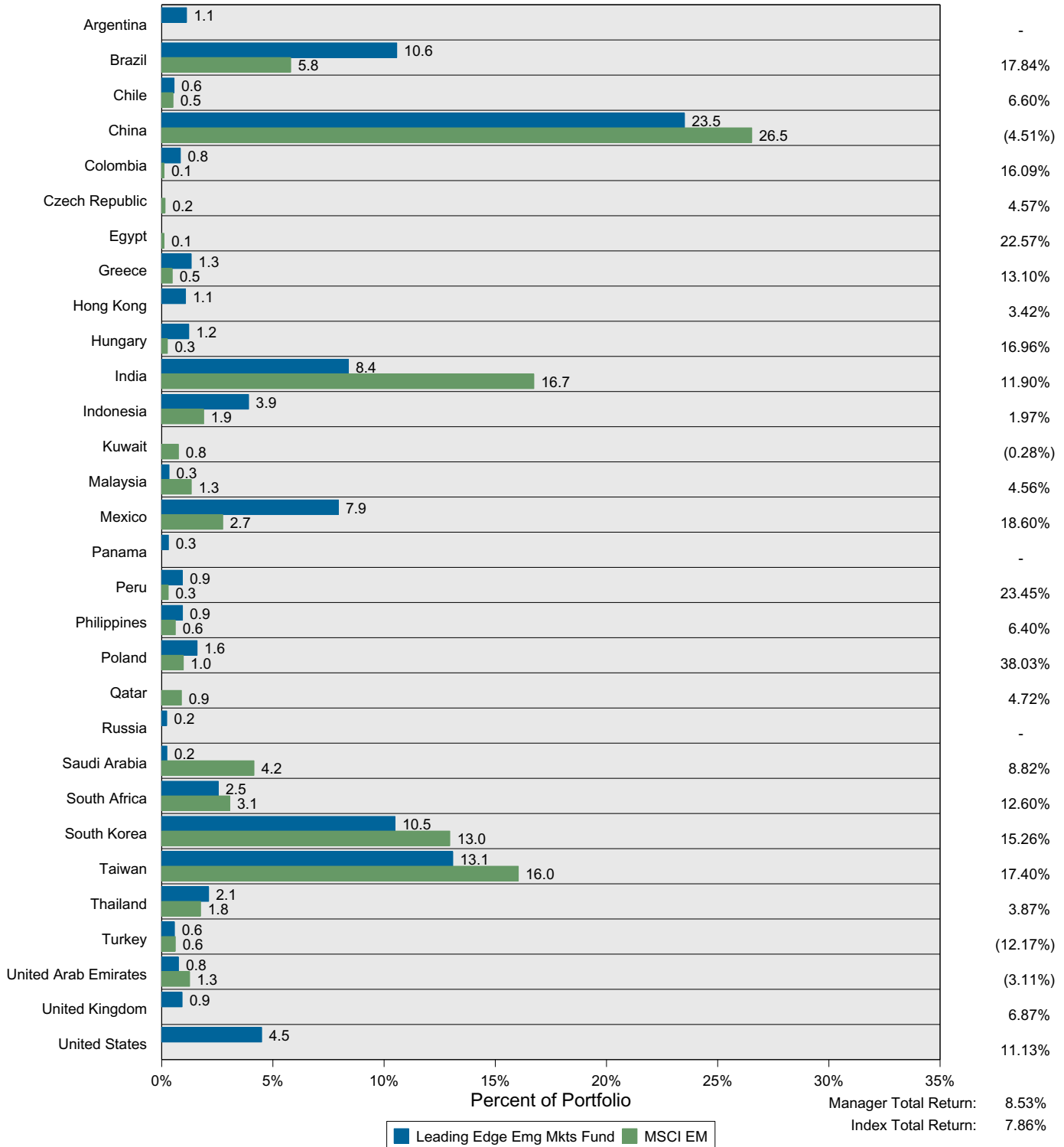
## Country Allocation Leading Edge Emg Mkts Fund VS MSCI Emerging Markets (Net)

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

### Country Weights as of December 31, 2023

### Index Rtns



# Macquarie Emerging Markets Equity Period Ended December 31, 2023

## Investment Philosophy

Macquarie believes that market price and intrinsic business value are correlated in the long-run and short-term divergences offer disciplined, bottom-up, fundamental investors, attractive risk-adjusted opportunities. The team defines intrinsic value as the appropriately discounted value of a business' cash flow stream. They buy only when the business trades at a significant discount to their intrinsic value estimate. The team focuses resources on franchises, defined as those companies with high potential to earn excess returns above their cost of capital over the long-run. The team aims to capture market inefficiencies by: 1. Judging a franchise's sustainability and secular growth prospects better than the market 2. Maintaining a long-term, structural bias to capture franchises oversold due to temporary setbacks 3. Exploiting public market and private market valuation discrepancies 4. Buying assets below their replacement costs.

## Quarterly Summary and Highlights

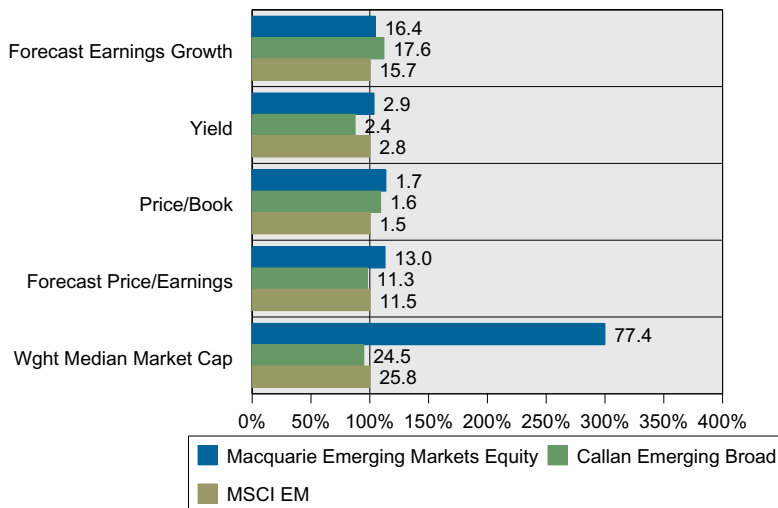
- Macquarie Emerging Markets Equity's portfolio posted a 12.28% return for the quarter placing it in the 5 percentile of the Callan Emerging Broad group for the quarter and in the 18 percentile for the last year.
- Macquarie Emerging Markets Equity's portfolio outperformed the MSCI EM by 4.41% for the quarter and outperformed the MSCI EM for the year by 6.89%.

## Performance vs Callan Emerging Broad (Gross)

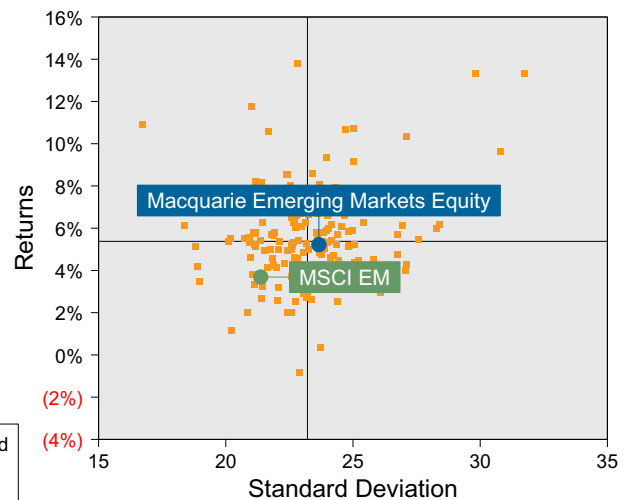


	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	10.43	19.55	2.42	3.04	8.21	8.69
25th Percentile	9.11	15.06	(2.94)	(1.53)	6.61	7.24
Median	8.20	11.91	(6.43)	(4.84)	5.38	6.22
75th Percentile	7.17	8.49	(9.34)	(7.69)	4.23	5.34
90th Percentile	6.03	6.42	(11.84)	(9.69)	3.15	4.36
Macquarie Emerging Markets Equity	12.28	16.72	(6.74)	(4.41)	5.22	6.97
MSCI EM	7.86	9.83	(6.32)	(5.08)	3.69	4.98

## Portfolio Characteristics as a Percentage of the MSCI EM



## Callan Emerging Broad (Gross) Annualized Five Year Risk vs Return

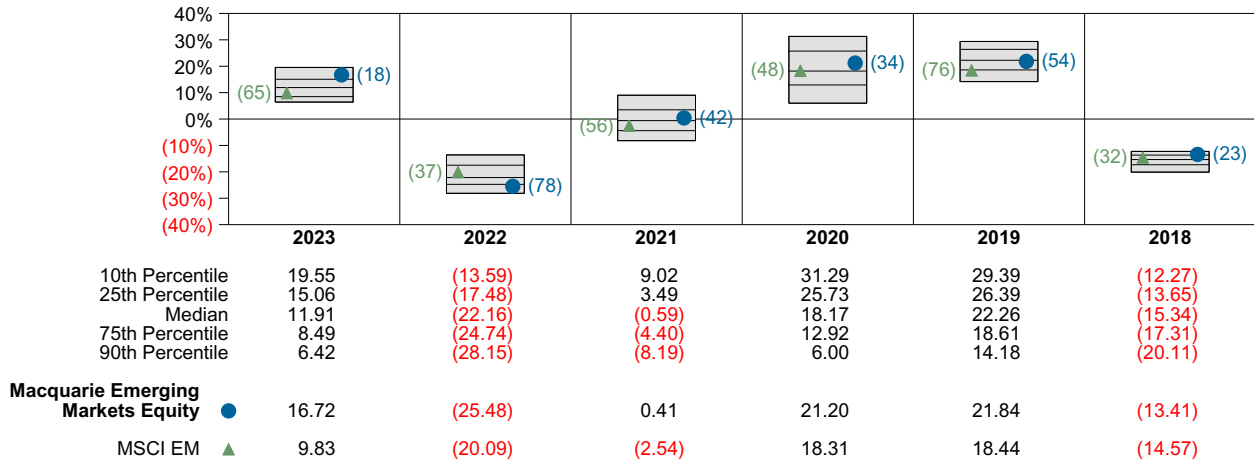


# Macquarie Emerging Markets Equity Return Analysis Summary

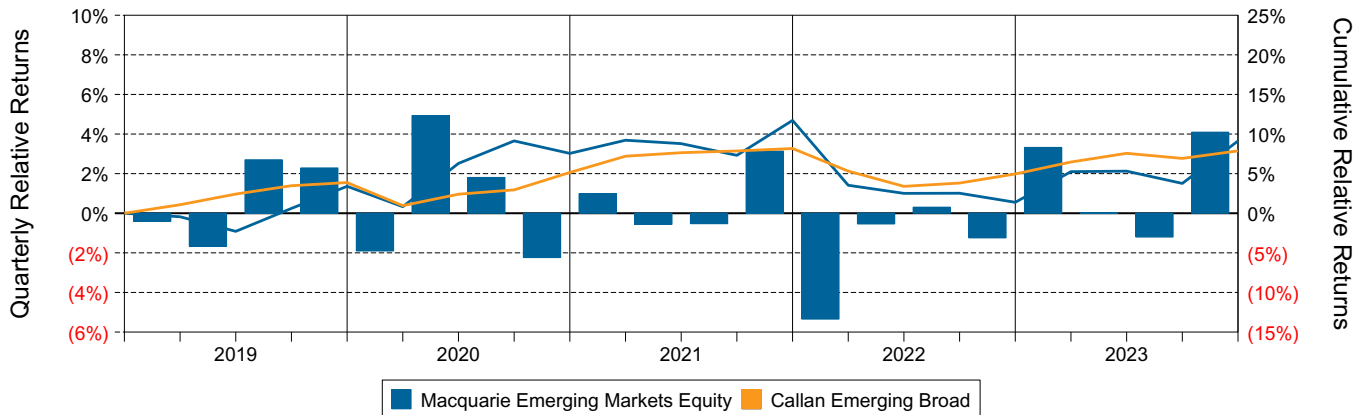
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

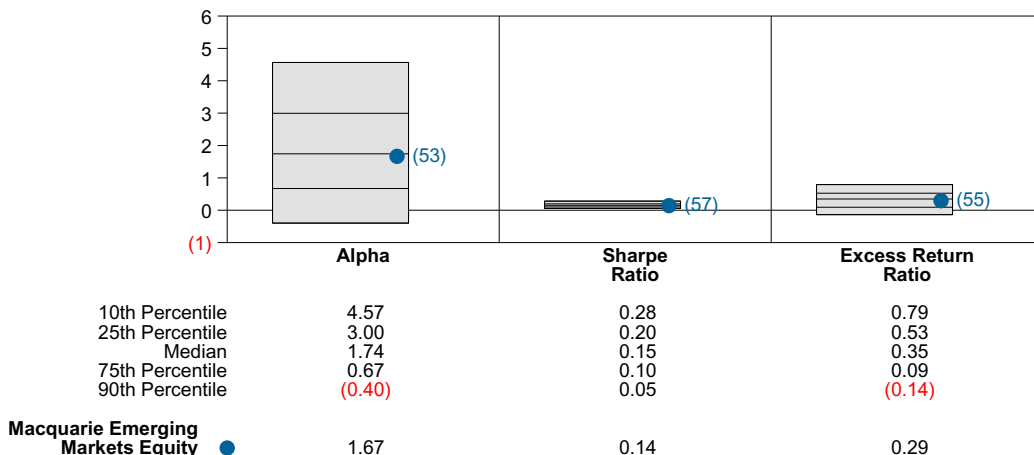
### Performance vs Callan Emerging Broad (Gross)



### Cumulative and Quarterly Relative Returns vs MSCI EM



### Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



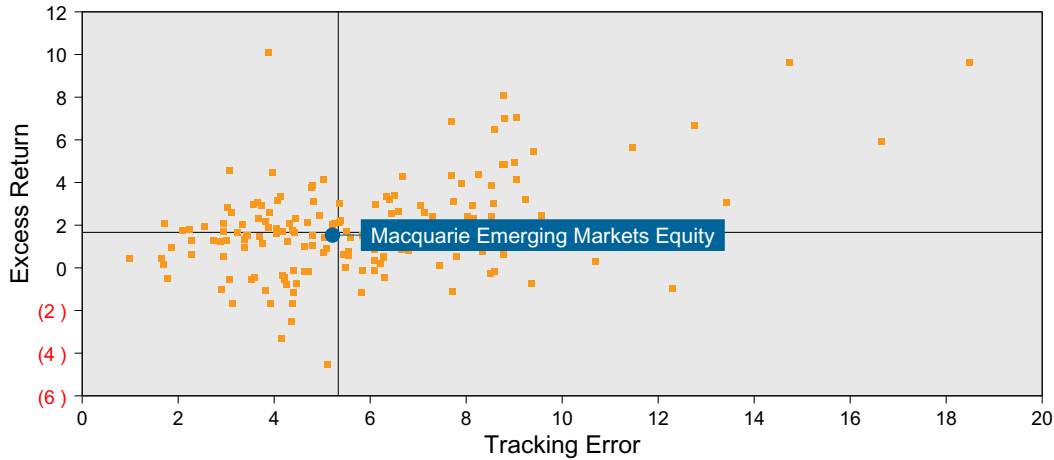


# Macquarie Emerging Markets Equity Risk Analysis Summary

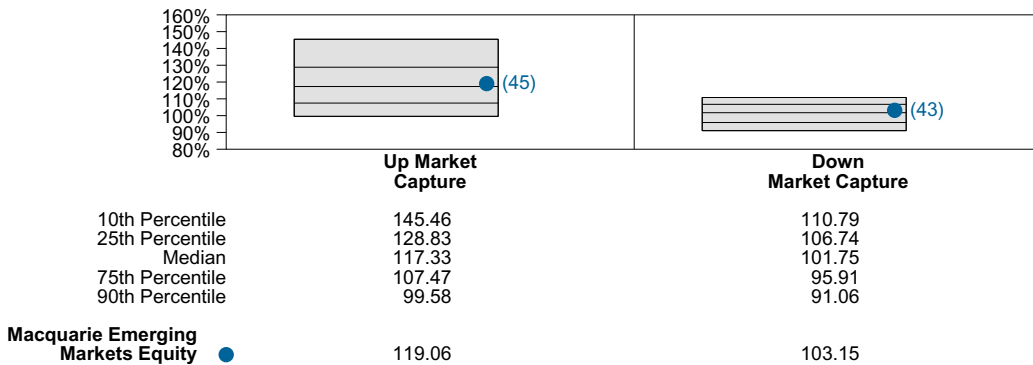
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

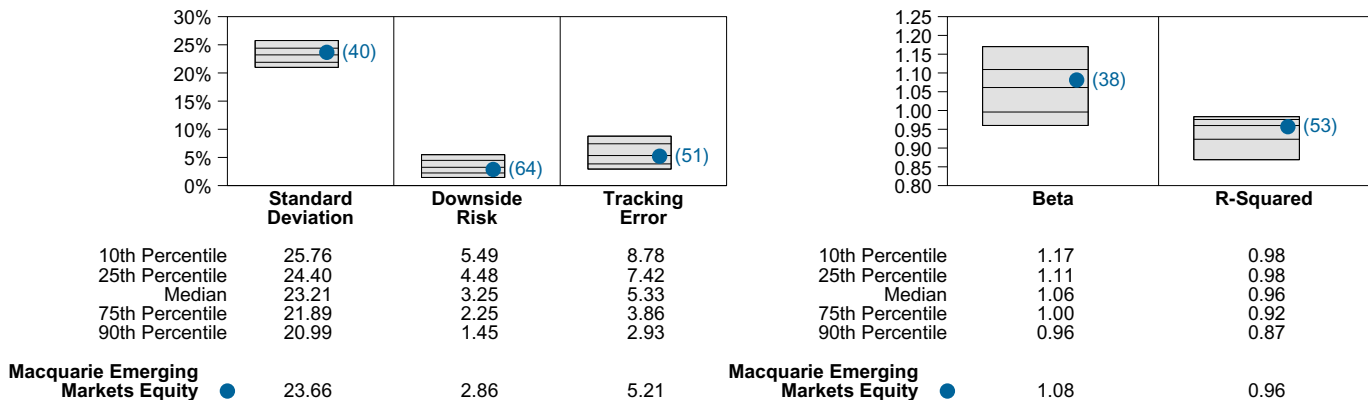
### Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



### Market Capture vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



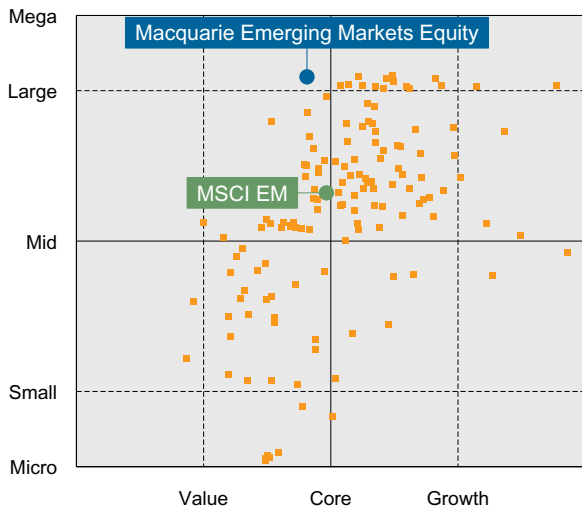
### Risk Statistics Rankings vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



# Current Holdings Based Style Analysis Macquarie Emerging Markets Equity As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

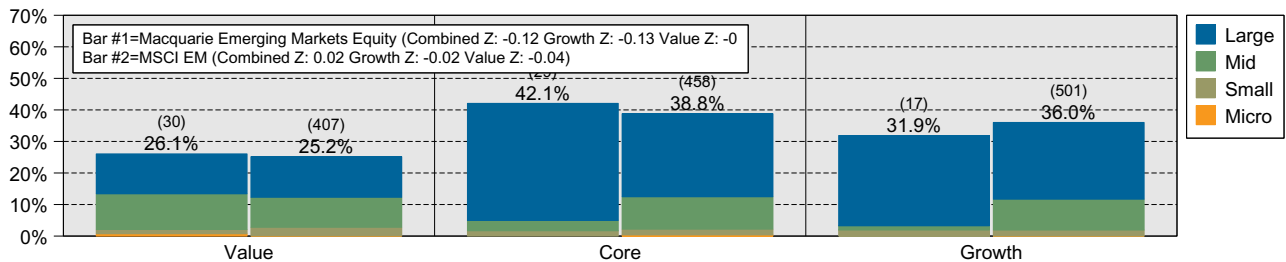
**Style Map vs Callan Emerging Broad Holdings as of December 31, 2023**



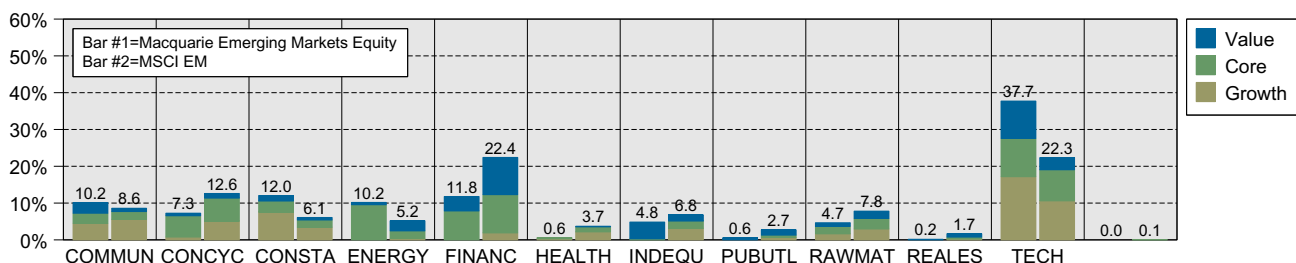
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Large	12.7% (9) 12.9% (88)	37.1% (21) 26.3% (80)	28.6% (8) 24.3% (98)	78.4% (38) 63.5% (266)
Mid	11.3% (13) 9.5% (181)	3.3% (3) 10.3% (250)	1.3% (3) 9.8% (259)	15.9% (19) 29.6% (690)
Small	1.4% (4) 2.7% (135)	1.7% (5) 1.8% (127)	1.9% (6) 1.9% (142)	5.0% (15) 6.4% (404)
Micro	0.7% (4) 0.1% (3)	0.0% (0) 0.4% (1)	0.0% (0) 0.0% (2)	0.7% (4) 0.5% (6)
<b>Total</b>	<b>26.1% (30)</b> <b>25.2% (407)</b>	<b>42.1% (29)</b> <b>38.8% (458)</b>	<b>31.9% (17)</b> <b>36.0% (501)</b>	<b>100.0% (76)</b> <b>100.0% (1366)</b>

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

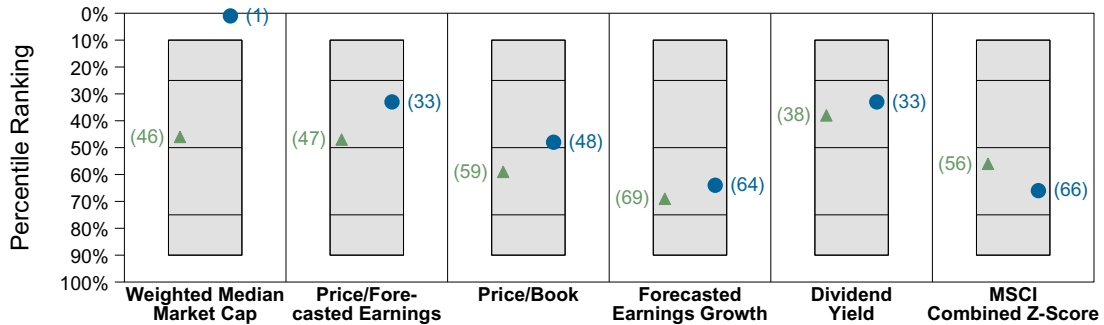


# Macquarie Emerging Markets Equity Equity Characteristics Analysis Summary

## Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of December 31, 2023

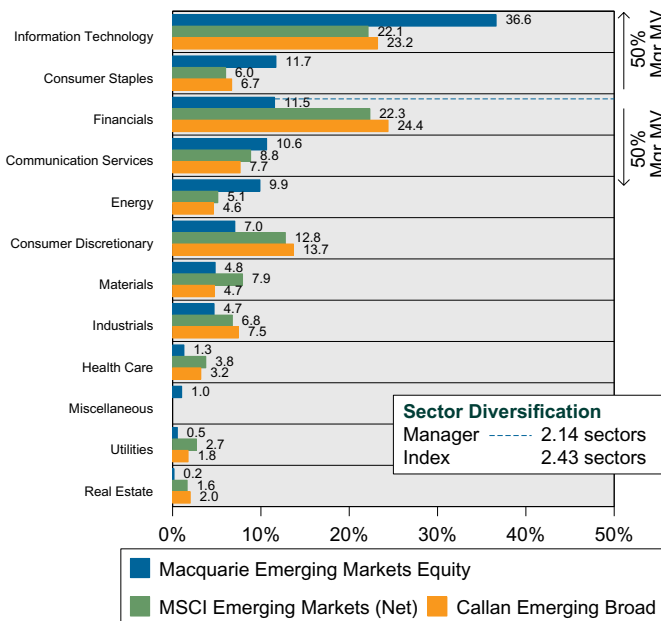


	Weighted Median Market Cap	Price/Forecasted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	53.70	17.26	3.40	24.05	4.25	0.70
25th Percentile	35.03	13.75	2.31	20.31	3.37	0.39
Median	24.47	11.26	1.63	17.56	2.44	0.12
75th Percentile	13.44	9.41	1.33	14.44	1.75	(0.24)
90th Percentile	6.15	7.81	1.00	11.61	1.24	(0.54)
<b>Macquarie Emerging Markets Equity</b>	<b>77.37</b>	<b>13.01</b>	<b>1.70</b>	<b>16.40</b>	<b>2.89</b>	<b>(0.12)</b>
MSCI Emerging Markets (Net)	25.80	11.51	1.50	15.67	2.79	0.02

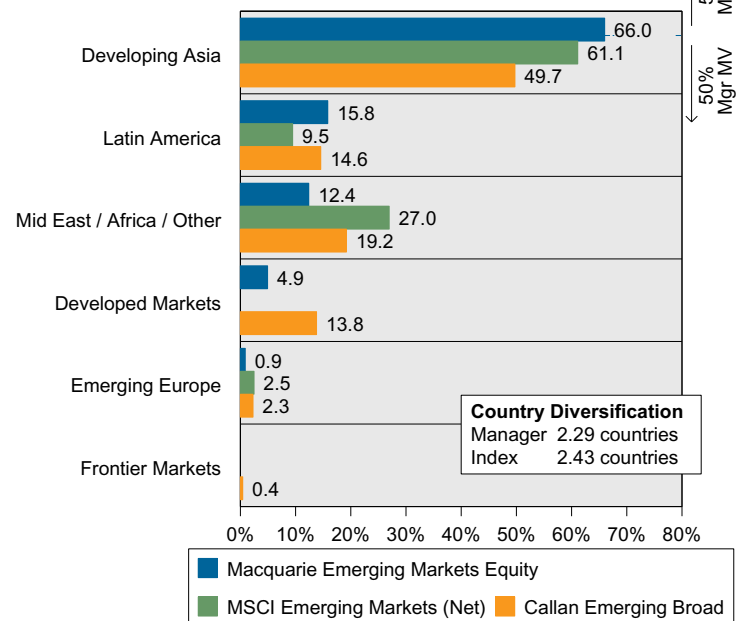
## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.

### Sector Allocation December 31, 2023



### Regional Allocation December 31, 2023



# Country Allocation

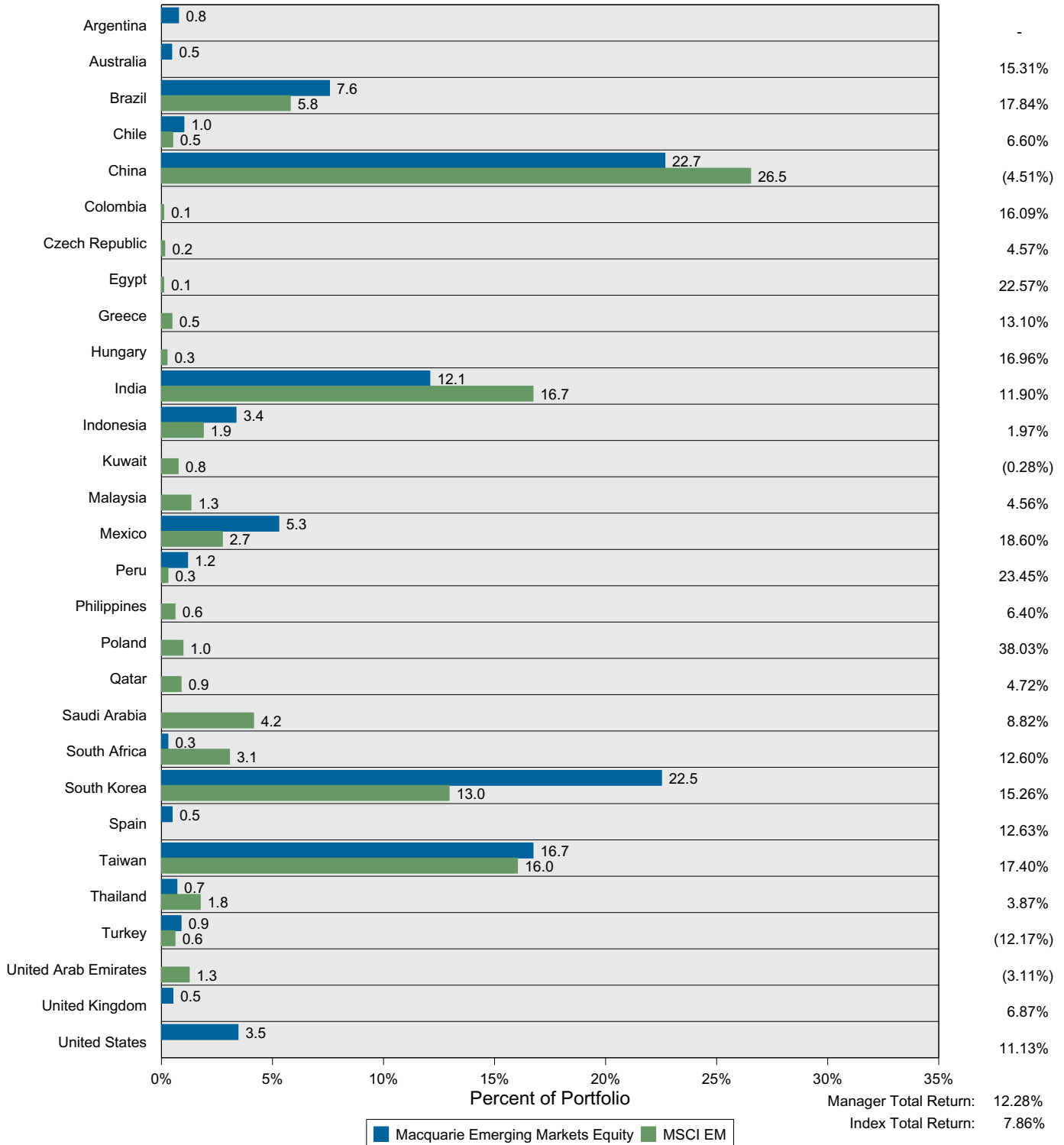
## Macquarie Emerging Markets Equity VS MSCI Emerging Markets (Net)

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of December 31, 2023

Index Rtns



# Martin Currie

## Period Ended December 31, 2023

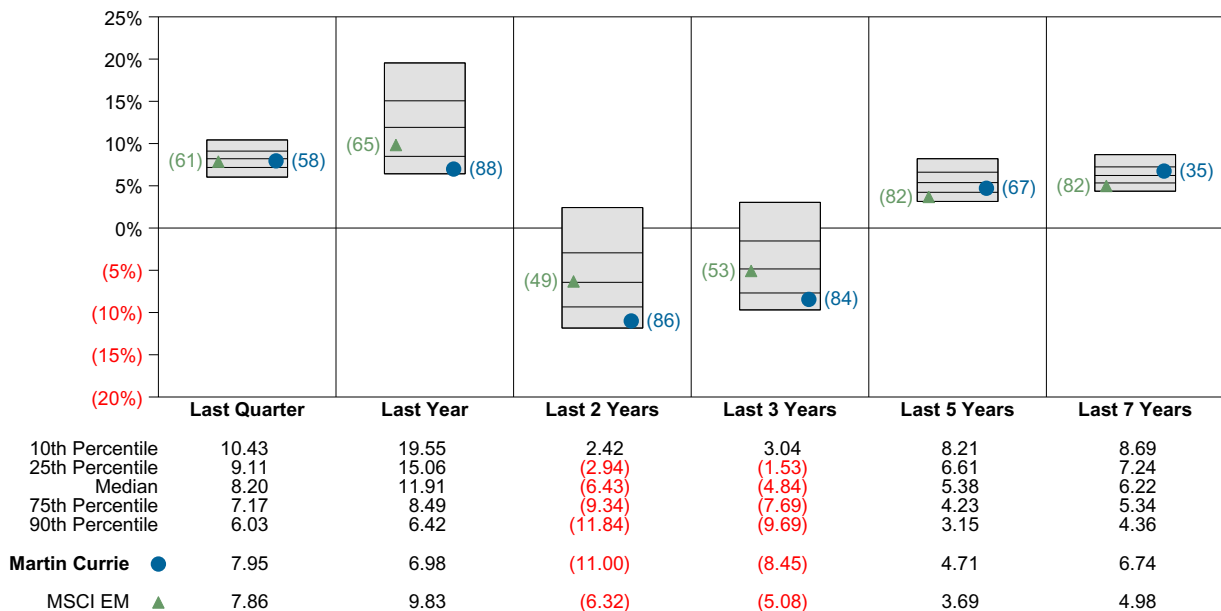
### Investment Philosophy

The Martin Currie GEMs team builds long-term, high conviction stock-focused portfolios, driven by fundamental research within an appropriate risk framework. Their primary belief with regard to GEMs investing is that sustainable cash flows and the effective allocation of capital are the main determinants of share-price movement over the long term. They seek to identify those emerging-market companies that can sustain cash-flow growth and generate returns in excess of their cost of capital. They believe that it takes a long time for the success of a business model to become fully apparent, so they typically invest with a three-to-five-year horizon. The Martin Currie GEMs team believes that an assessment of a company environmental, social and governance (ESG) performance, or sustainability, can help identify those business models that are most likely to sustain high returns and resist competitive pressures.

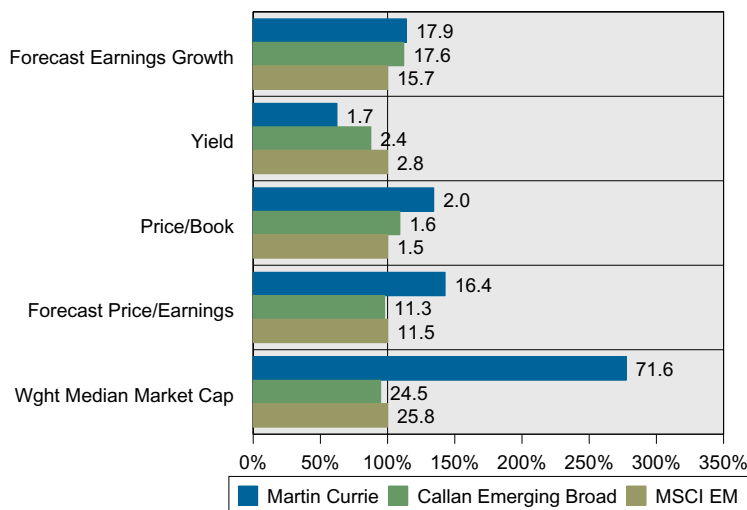
### Quarterly Summary and Highlights

- Martin Currie's portfolio posted a 7.95% return for the quarter placing it in the 58 percentile of the Callan Emerging Broad group for the quarter and in the 88 percentile for the last year.
- Martin Currie's portfolio outperformed the MSCI EM by 0.08% for the quarter and underperformed the MSCI EM for the year by 2.85%.

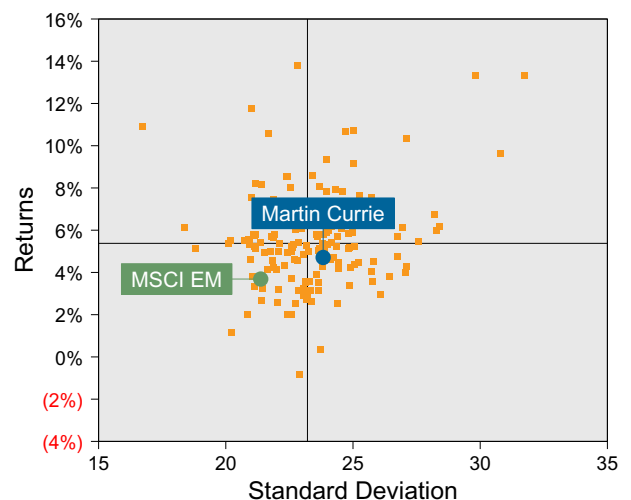
### Performance vs Callan Emerging Broad (Gross)



### Portfolio Characteristics as a Percentage of the MSCI EM



### Callan Emerging Broad (Gross) Annualized Five Year Risk vs Return

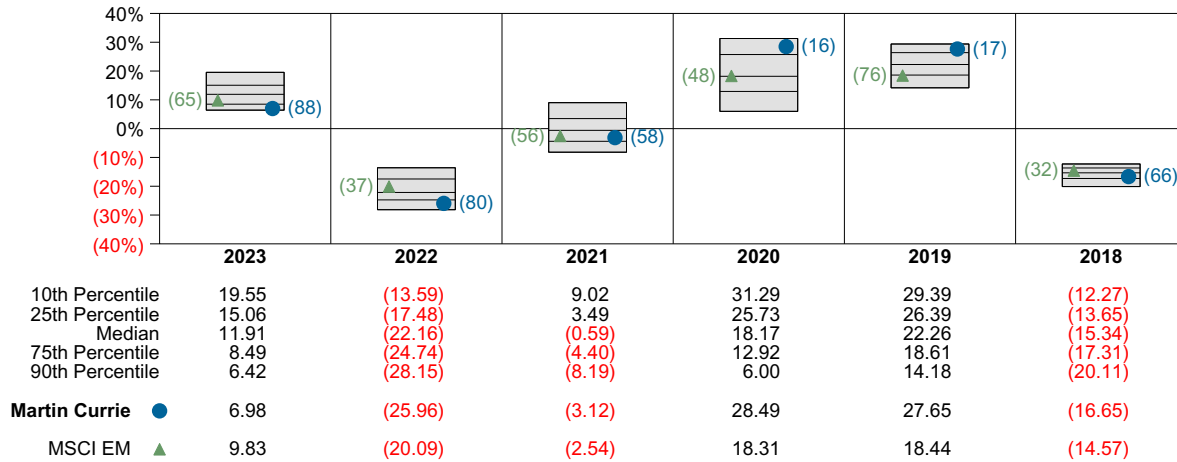


# Martin Currie Return Analysis Summary

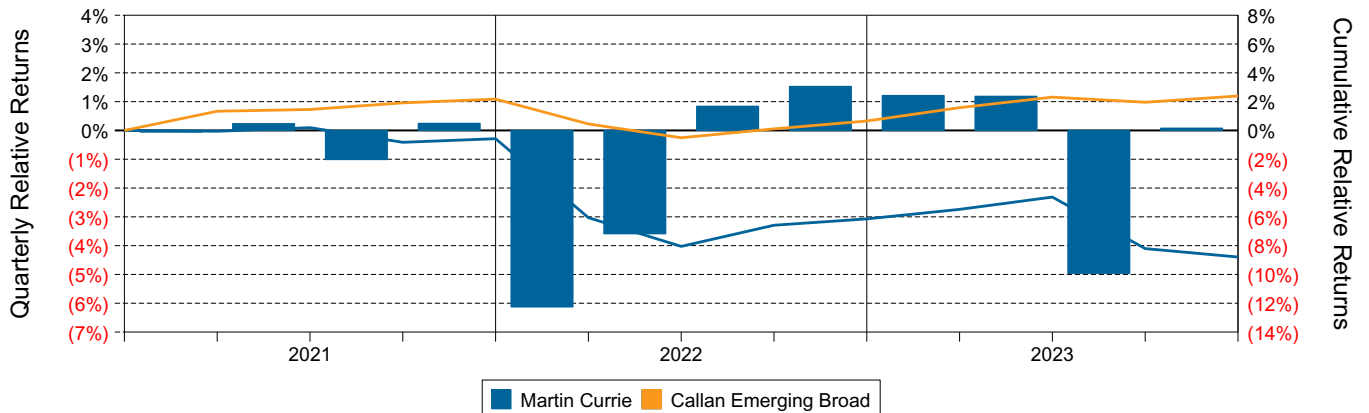
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

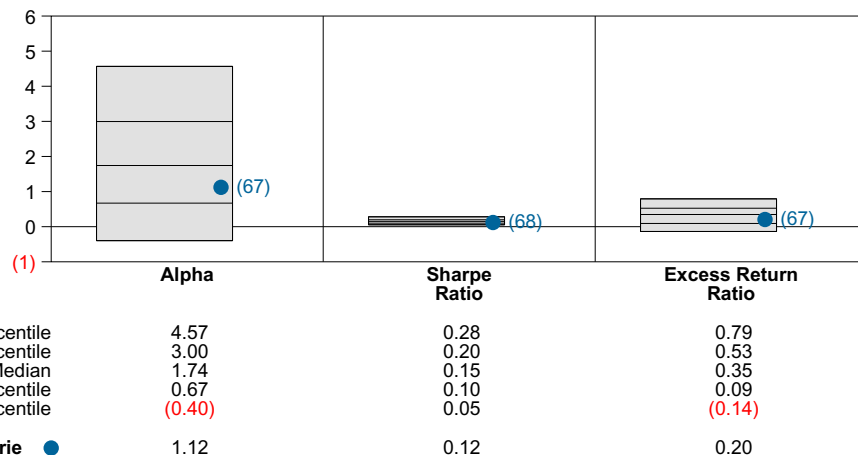
### Performance vs Callan Emerging Broad (Gross)



### Cumulative and Quarterly Relative Returns vs MSCI EM



### Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023

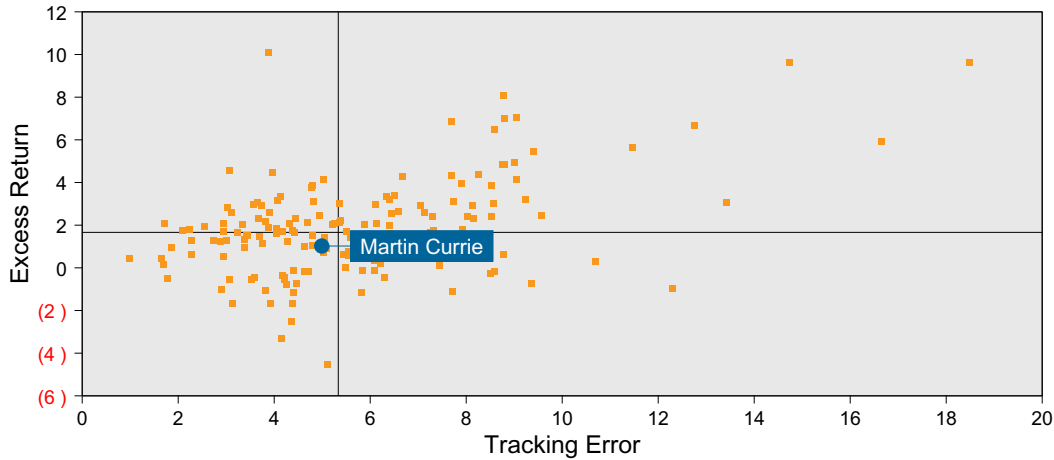


# Martin Currie Risk Analysis Summary

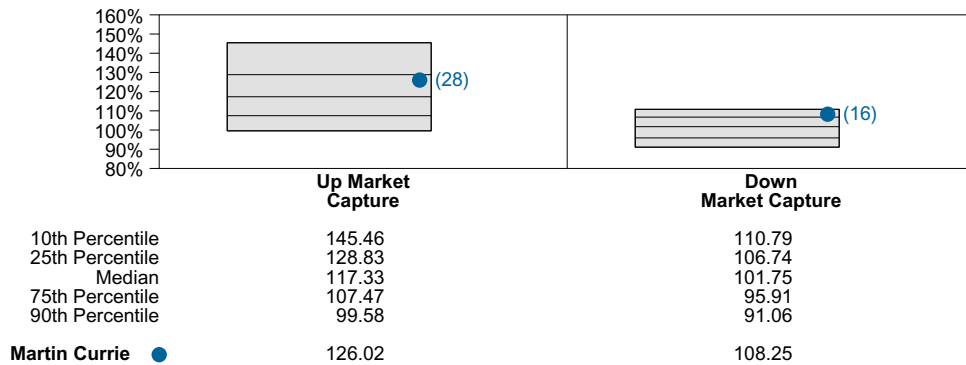
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

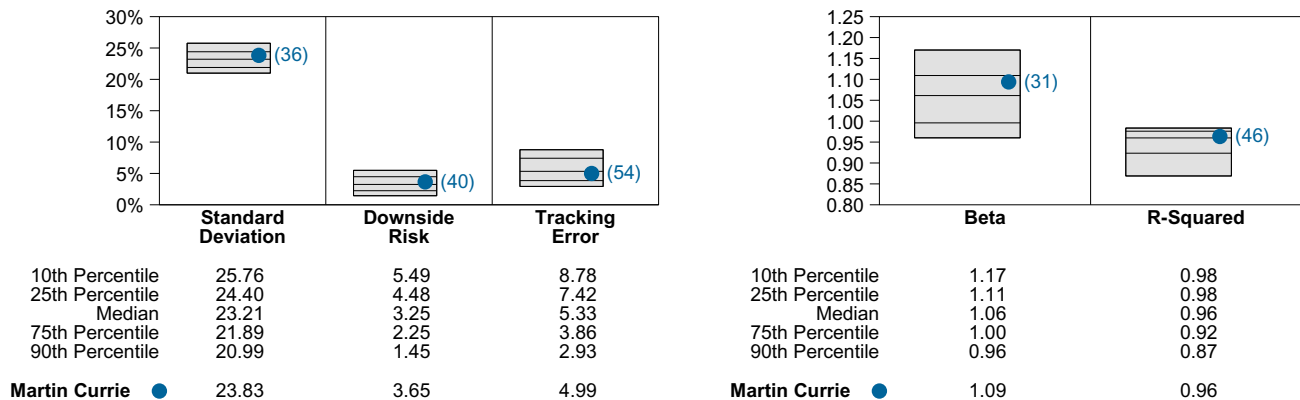
### Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



### Market Capture vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



### Risk Statistics Rankings vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended December 31, 2023



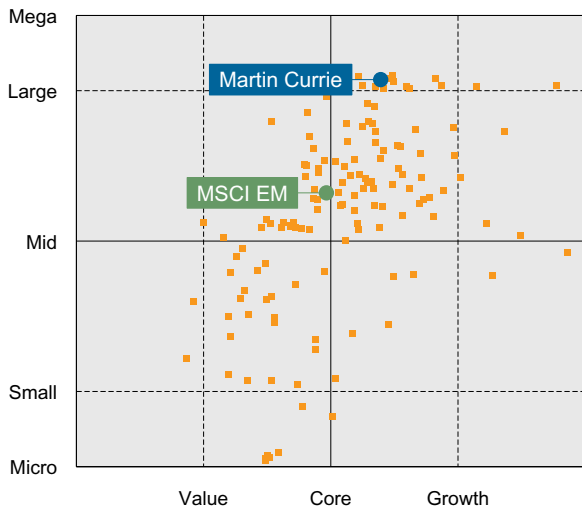
# Current Holdings Based Style Analysis

## Martin Currie

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left chart illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

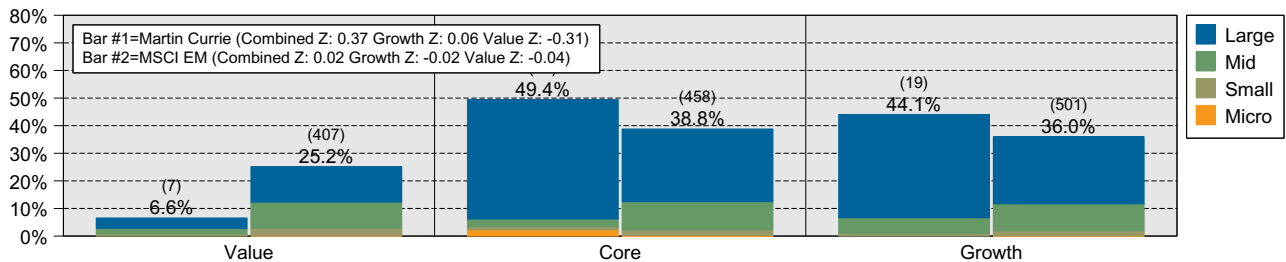
**Style Map vs Callan Emerging Broad Holdings as of December 31, 2023**



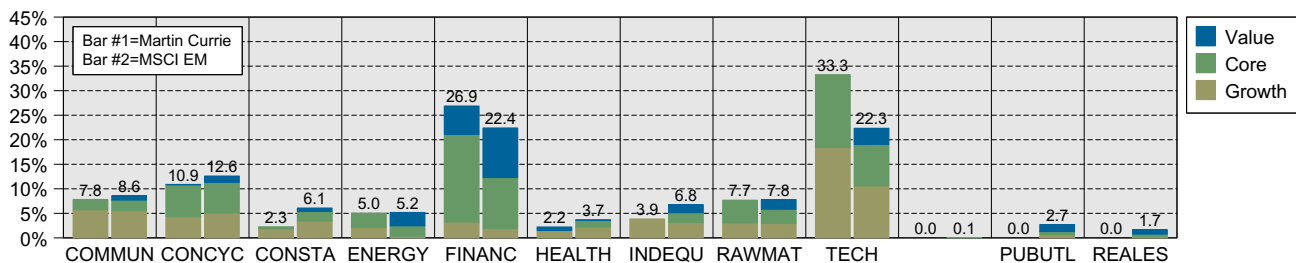
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
<b>Large</b>	3.7% (4) 12.9% (88)	43.2% (18) 26.3% (80)	37.4% (15) 24.3% (98)	<b>84.4% (37)</b> <b>63.5% (266)</b>
<b>Mid</b>	2.1% (2) 9.5% (181)	2.9% (3) 10.3% (250)	5.7% (3) 9.8% (259)	<b>10.7% (8)</b> <b>29.6% (690)</b>
<b>Small</b>	0.7% (1) 2.7% (135)	1.0% (2) 1.8% (127)	0.9% (1) 1.9% (142)	<b>2.7% (4)</b> <b>6.4% (404)</b>
<b>Micro</b>	0.0% (0) 0.1% (3)	2.3% (1) 0.4% (1)	0.0% (0) 0.0% (2)	<b>2.3% (1)</b> <b>0.5% (6)</b>
<b>Total</b>	<b>6.6% (7)</b> <b>25.2% (407)</b>	<b>49.4% (24)</b> <b>38.8% (458)</b>	<b>44.1% (19)</b> <b>36.0% (501)</b>	<b>100.0% (50)</b> <b>100.0% (1366)</b>

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**



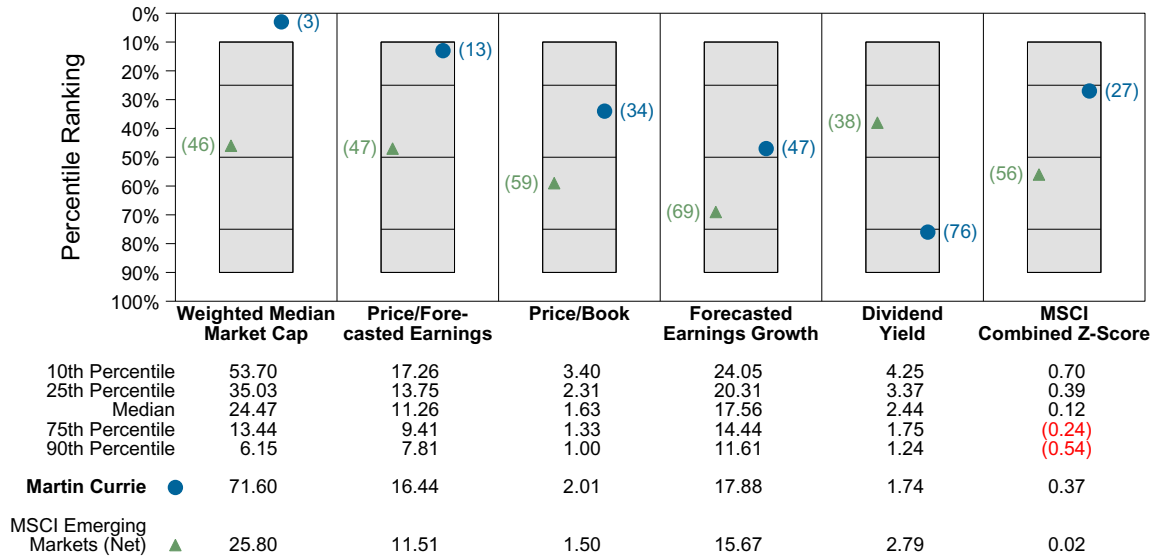


# Martin Currie Equity Characteristics Analysis Summary

## Portfolio Characteristics

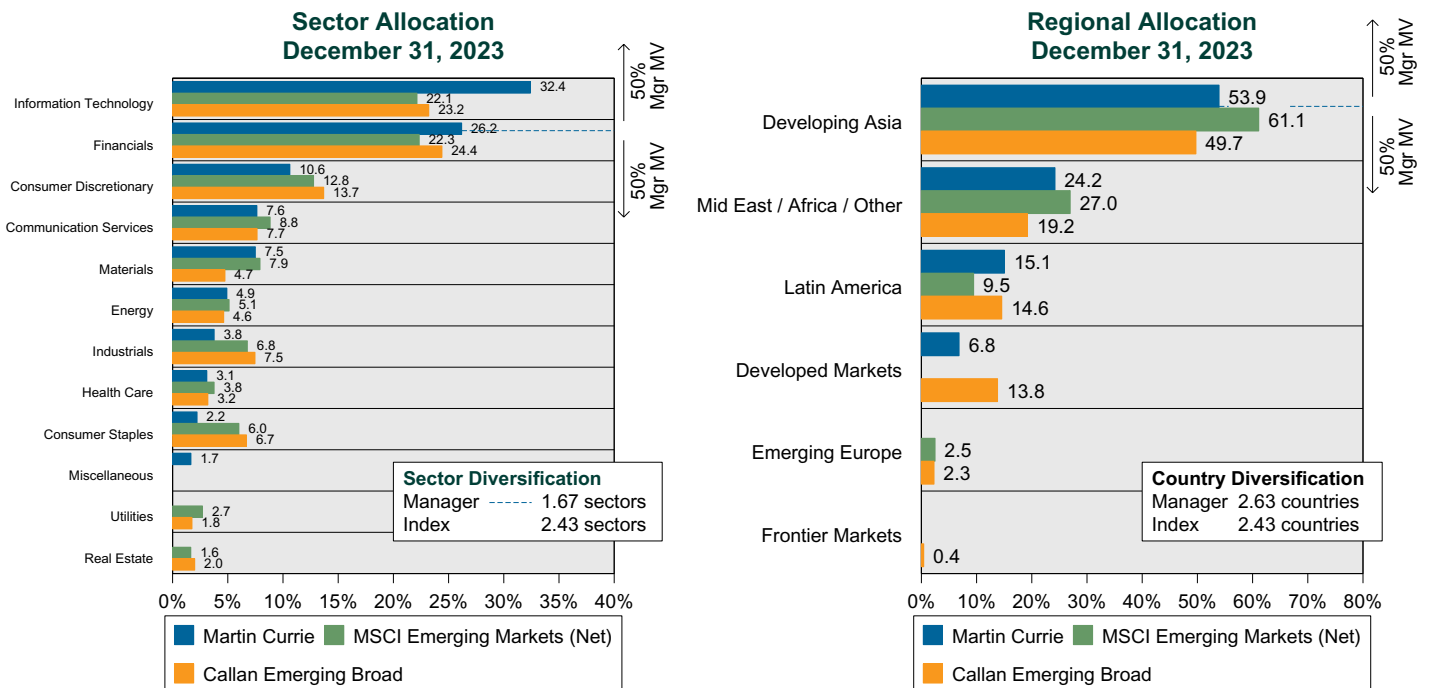
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of December 31, 2023



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.



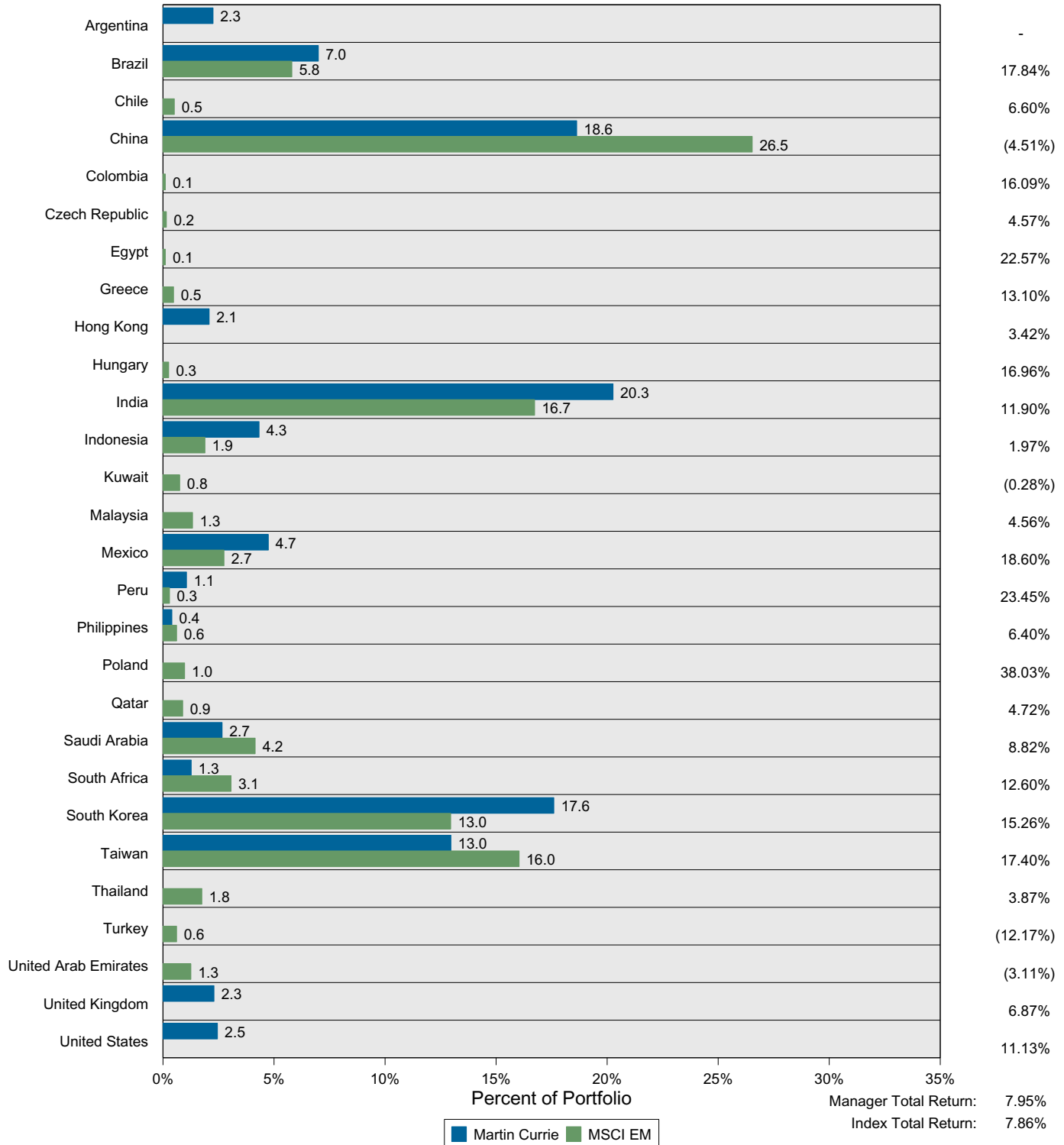
## Country Allocation Martin Currie VS MSCI Emerging Markets (Net)

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

### Country Weights as of December 31, 2023

### Index Rtns



# GlobeFlex Emerging Small Cap Period Ended December 31, 2023

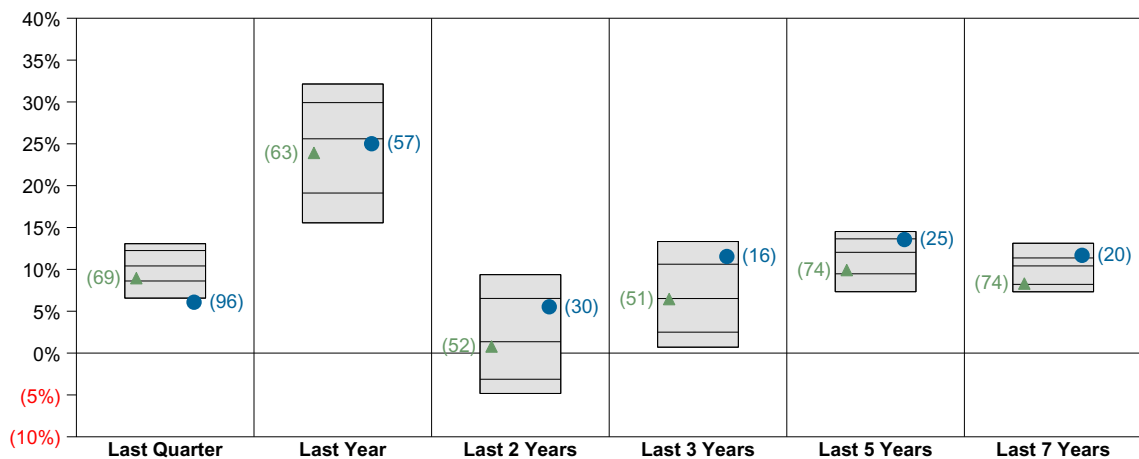
## Investment Philosophy

GlobeFlex is an active equity manager focused on bottom-up, stock selection. Their philosophy is based on the early identification of fundamental growth before it is recognized by other investors, defined by: Business Improvement: Finding companies with accelerating business conditions to identify early signs of growth; Management Quality: Evaluating the long-term growth sustainability through in-depth analysis of prospective operating performance and management's skill to increase shareholder wealth; and Relative Value: Recognizing accelerating business conditions early, buying and holding companies below fair market value given future growth prospects.

## Quarterly Summary and Highlights

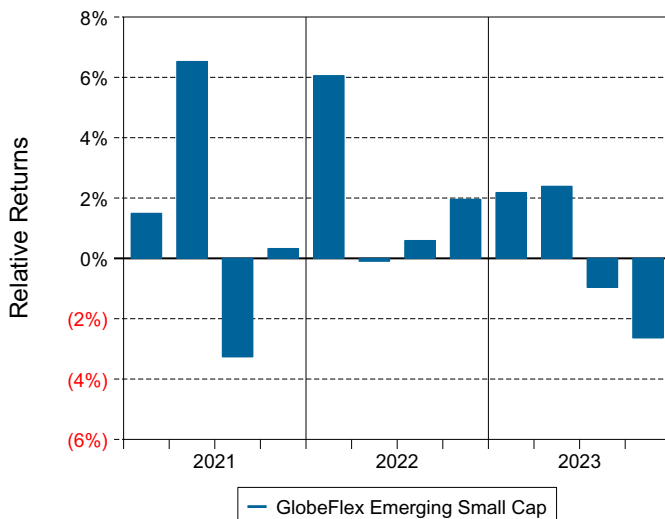
- GlobeFlex Emerging Small Cap's portfolio posted a 6.08% return for the quarter placing it in the 96 percentile of the Callan Emerging Small group for the quarter and in the 57 percentile for the last year.
- GlobeFlex Emerging Small Cap's portfolio underperformed the MSCI EM Small by 2.87% for the quarter and outperformed the MSCI EM Small for the year by 1.09%.

## Performance vs Callan Emerging Small (Gross)

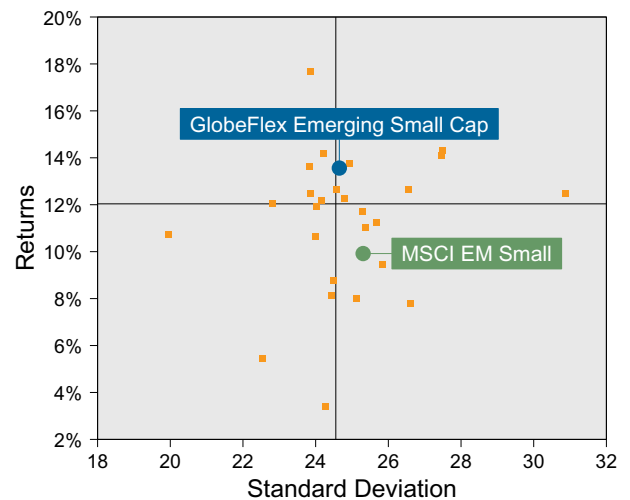


	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	13.07	32.14	9.37	13.33	14.52	13.12
25th Percentile	12.25	29.92	6.53	10.62	13.65	11.37
Median	10.41	25.60	1.36	6.52	12.04	10.41
75th Percentile	8.61	19.12	(3.13)	2.50	9.47	8.21
90th Percentile	6.56	15.56	(4.82)	0.70	7.33	7.32
<b>GlobeFlex Emerging Small Cap</b>	● 6.08	25.01	5.53	11.54	13.56	11.68
<b>MSCI EM Small</b>	▲ 8.95	23.92	0.79	6.45	9.92	8.31

## Relative Return vs MSCI EM Small



## Callan Emerging Small (Gross) Annualized Five Year Risk vs Return

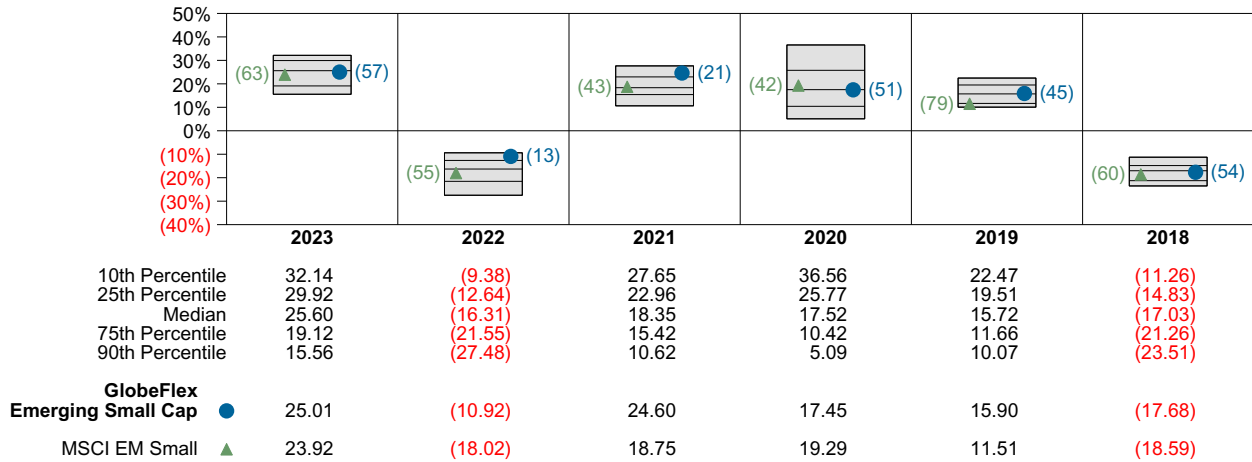


# GlobeFlex Emerging Small Cap Return Analysis Summary

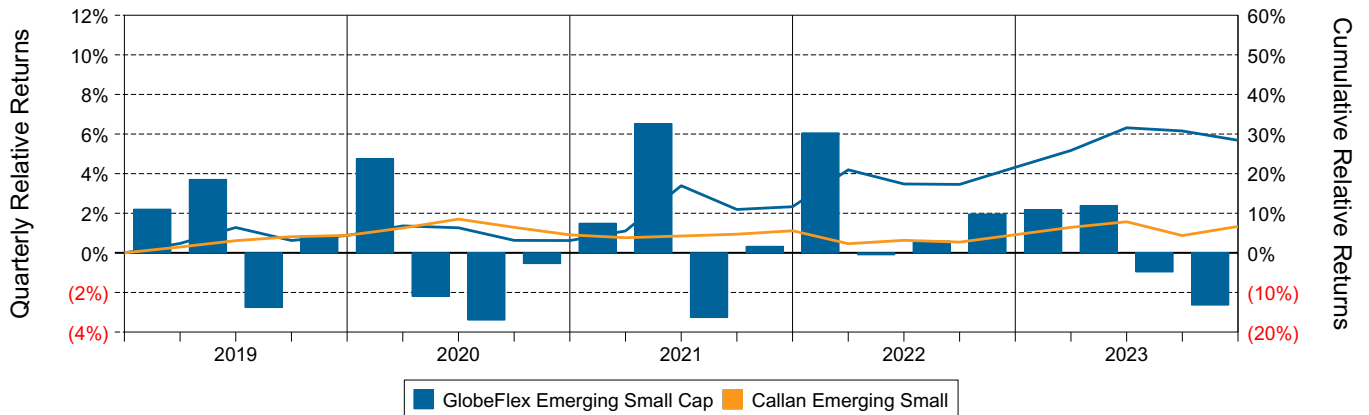
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

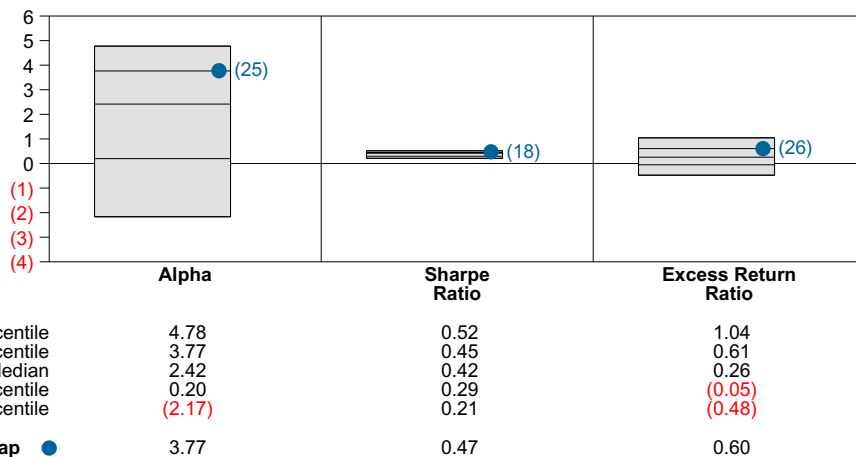
### Performance vs Callan Emerging Small (Gross)



### Cumulative and Quarterly Relative Returns vs MSCI EM Small



### Risk Adjusted Return Measures vs MSCI EM Small Rankings Against Callan Emerging Small (Gross) Five Years Ended December 31, 2023

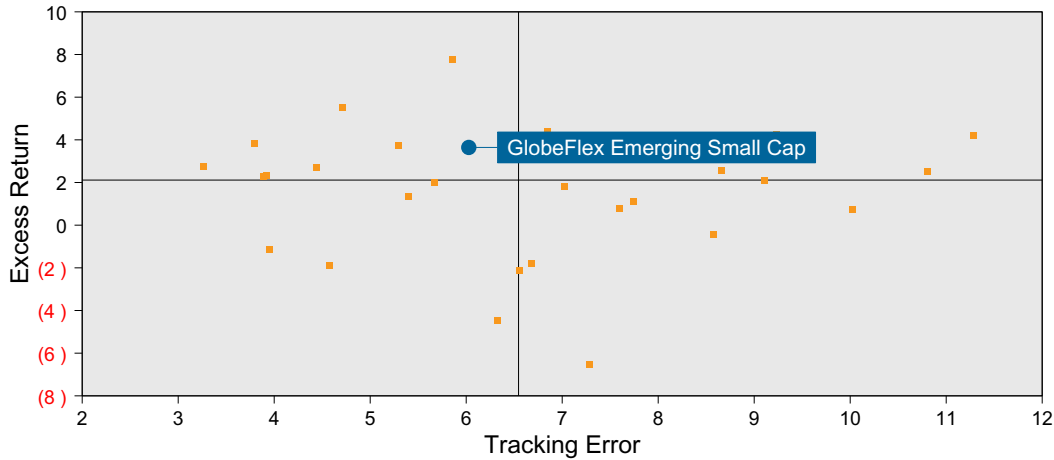


# GlobeFlex Emerging Small Cap Risk Analysis Summary

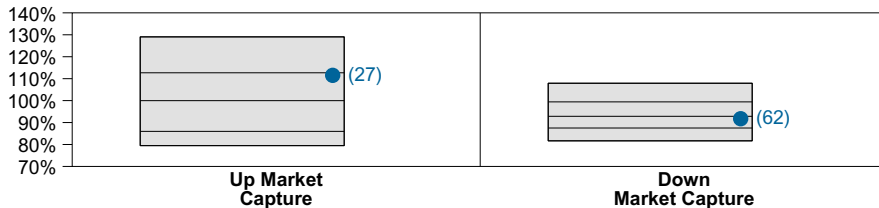
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

### Risk Analysis vs Callan Emerging Small (Gross) Five Years Ended December 31, 2023

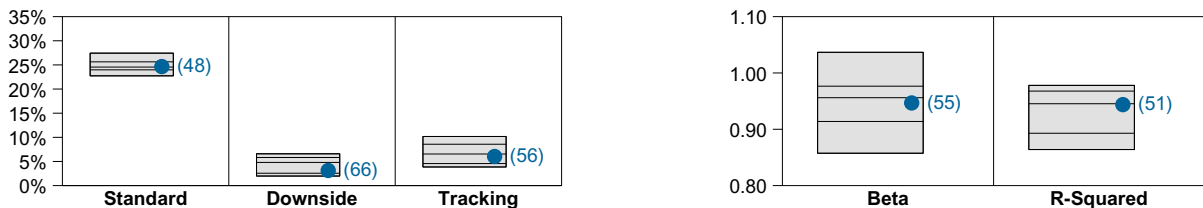


### Market Capture vs MSCI EM Small (Net) Rankings Against Callan Emerging Small (Gross) Five Years Ended December 31, 2023



	Up Market Capture	Down Market Capture
10th Percentile	129.05	107.92
25th Percentile	112.68	99.43
Median	99.98	92.85
75th Percentile	85.98	87.52
90th Percentile	79.47	81.66
<b>GlobeFlex Emerging Small Cap</b>	<b>111.52</b>	<b>91.74</b>

### Risk Statistics Rankings vs MSCI EM Small (Net) Rankings Against Callan Emerging Small (Gross) Five Years Ended December 31, 2023



	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	27.44	6.59	10.17	1.04	0.98
25th Percentile	25.64	5.82	8.57	0.98	0.97
Median	24.55	4.80	6.55	0.96	0.95
75th Percentile	23.98	2.56	4.56	0.91	0.89
90th Percentile	22.74	1.98	3.86	0.86	0.86
<b>GlobeFlex Emerging Small Cap</b>	<b>24.65</b>	<b>3.13</b>	<b>6.03</b>	<b>0.95</b>	<b>0.94</b>

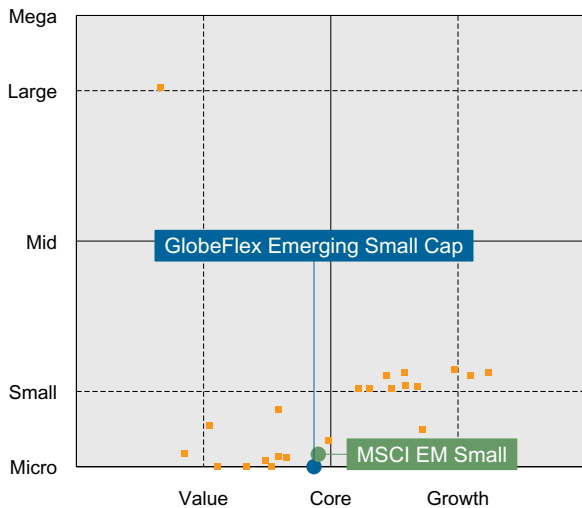
# Current Holdings Based Style Analysis

## GlobeFlex Emerging Small Cap

### As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

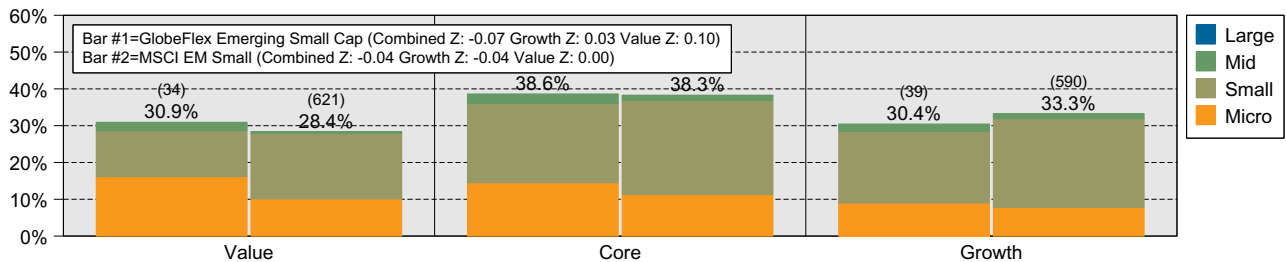
**Style Map vs Callan Emerging Small Holdings as of December 31, 2023**



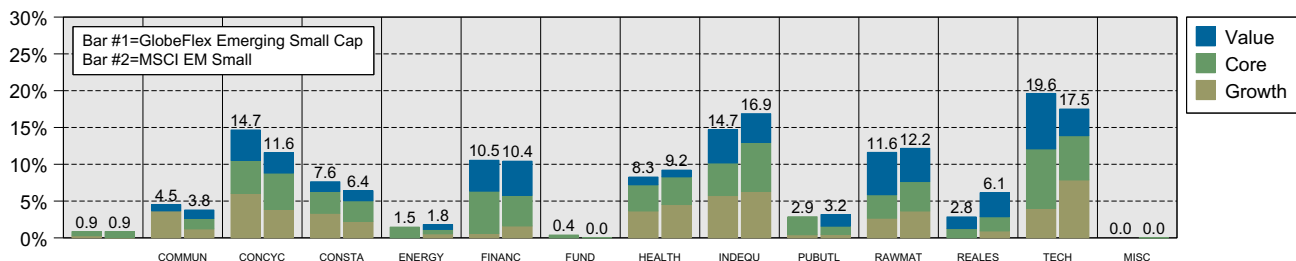
**Style Exposure Matrix Holdings as of December 31, 2023**

	Value	Core	Growth	Total
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Mid	2.3% (1)	2.6% (3)	2.1% (3)	7.0% (7)
	0.5% (3)	1.5% (8)	1.4% (10)	3.4% (21)
Small	12.5% (11)	21.5% (26)	19.4% (21)	53.4% (58)
	17.8% (254)	25.5% (345)	24.0% (316)	67.4% (915)
Micro	16.2% (22)	14.5% (20)	9.0% (15)	39.6% (57)
	10.1% (364)	11.3% (404)	7.8% (264)	29.2% (1032)
<b>Total</b>	<b>30.9% (34)</b>	<b>38.6% (49)</b>	<b>30.4% (39)</b>	<b>100.0% (122)</b>
	28.4% (621)	38.3% (757)	33.3% (590)	100.0% (1968)

**Combined Z-Score Style Distribution Holdings as of December 31, 2023**



**Sector Weights Distribution Holdings as of December 31, 2023**

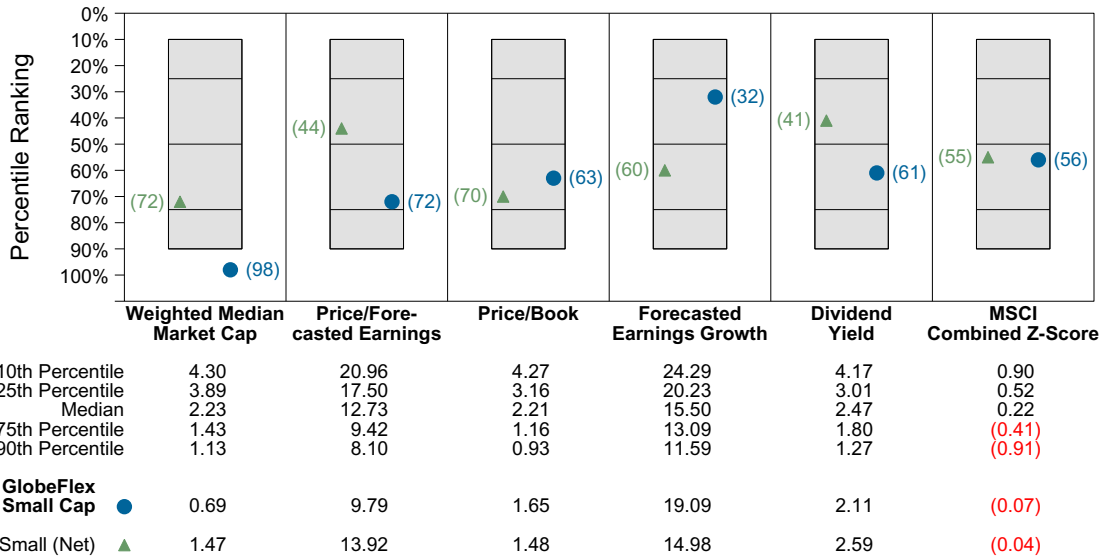


# GlobeFlex Emerging Small Cap Equity Characteristics Analysis Summary

## Portfolio Characteristics

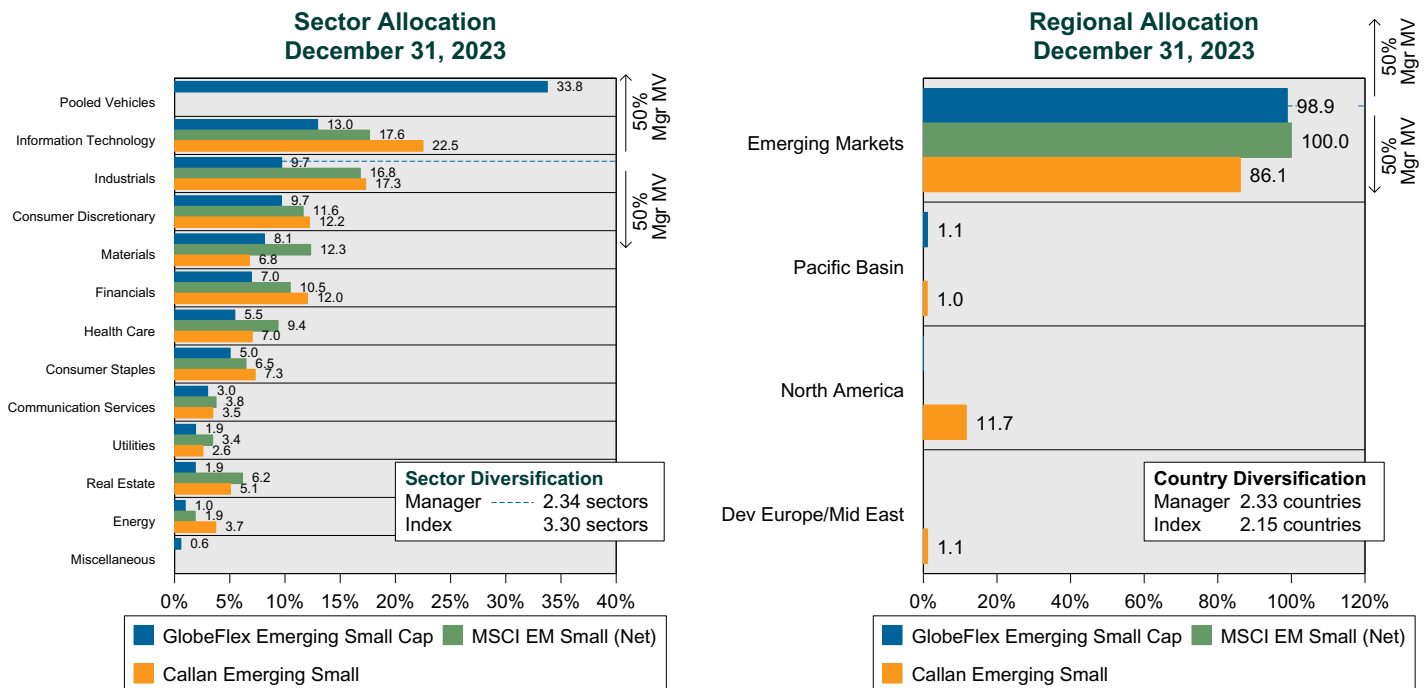
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Small as of December 31, 2023



## Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.



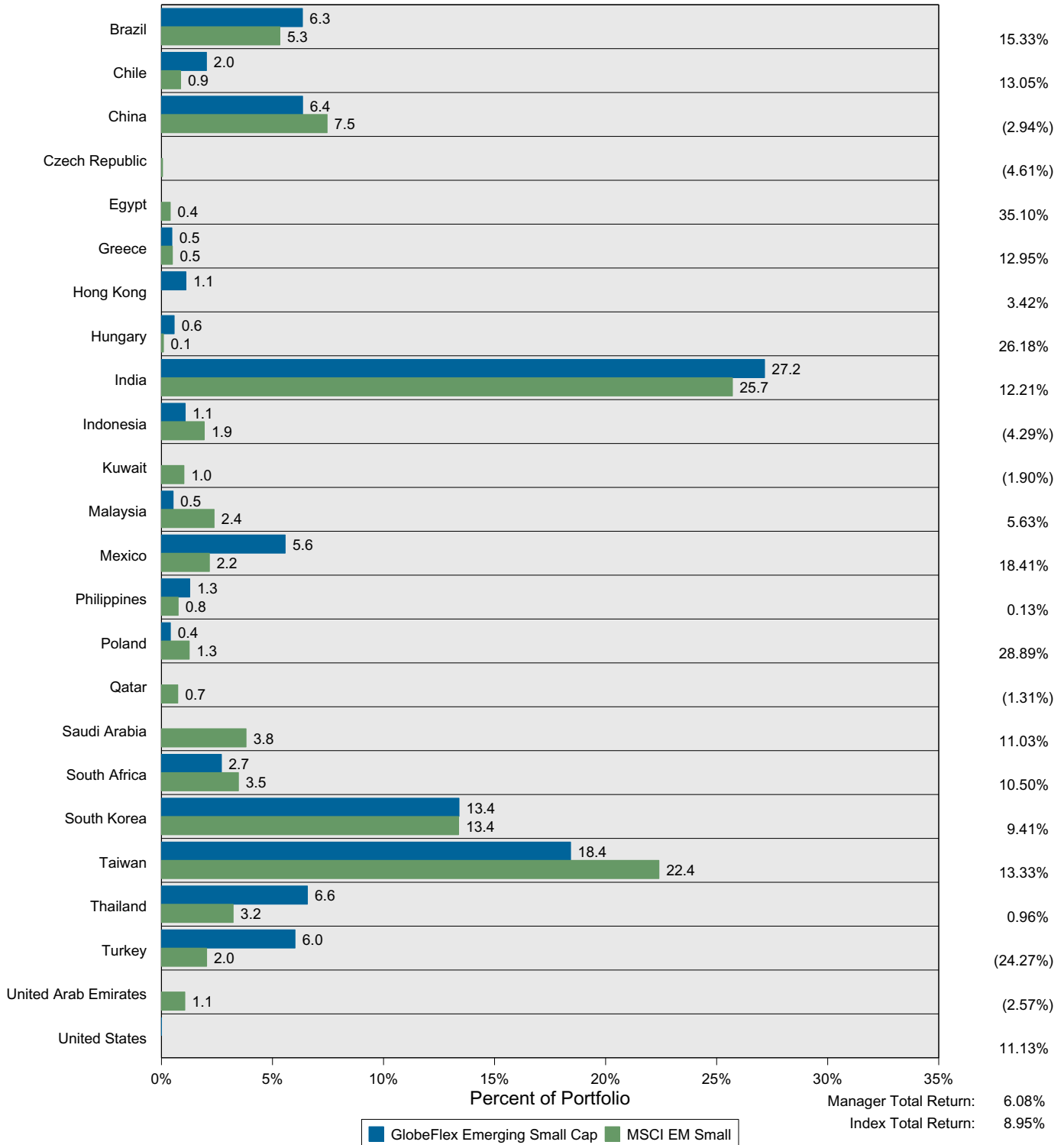
## Country Allocation GlobeFlex Emerging Small Cap VS MSCI EM Small (Net)

### Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

### Country Weights as of December 31, 2023

### Index Rtns







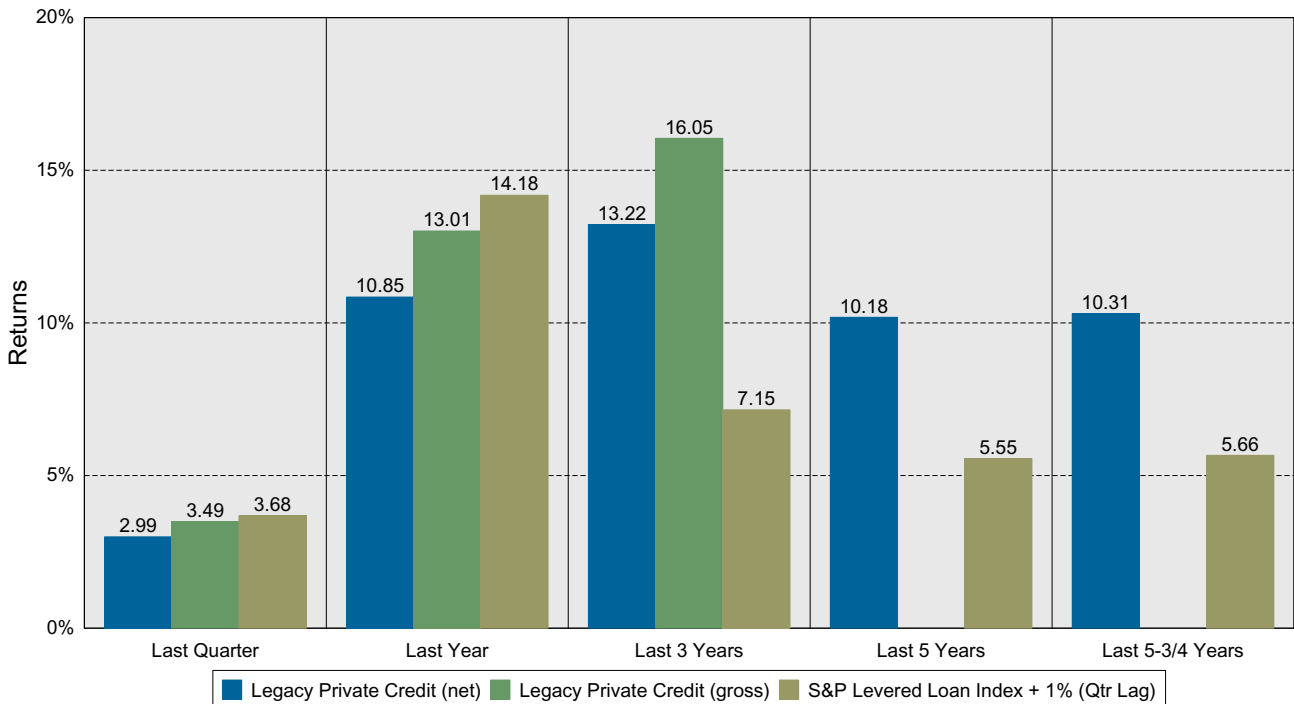
# Legacy Private Credit Period Ended December 31, 2023

## Asset Class Membership Changes

Legacy Private Credit performance is included in the total fund starting at the composite's true inception date, 07/01/2022. The history of this composite is calculated and shown for informational purposes.

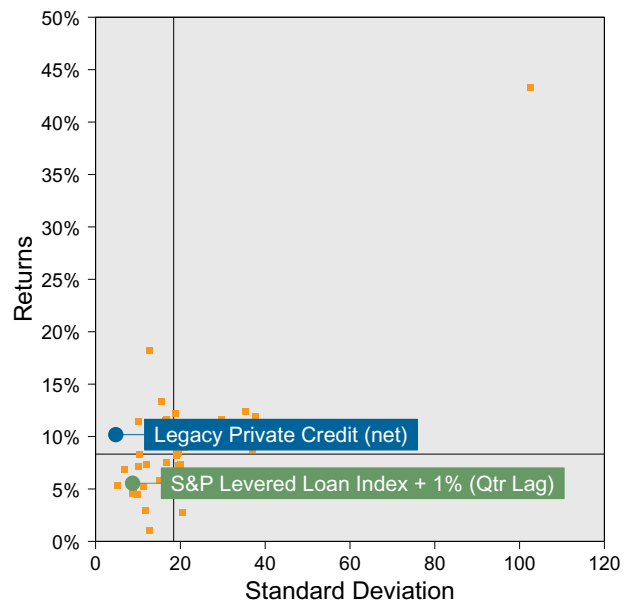
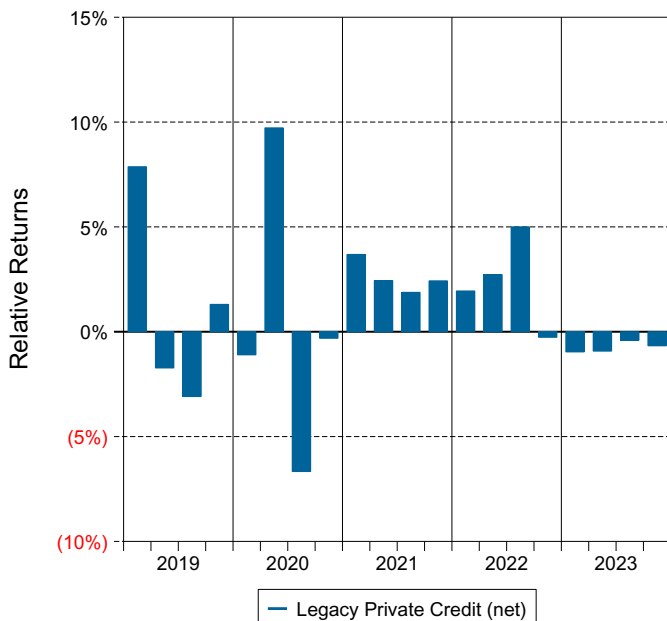
## Quarterly Summary and Highlights

- Legacy Private Credit (net)'s portfolio posted a 2.99% return for the quarter placing it in the 35 percentile of the Callan Alternative Inv DB group for the quarter and in the 33 percentile for the last year.
- Legacy Private Credit (net)'s portfolio underperformed the S&P Levered Loan Index + 1% (Qtr Lag) by 0.69% for the quarter and underperformed the S&P Levered Loan Index + 1% (Qtr Lag) for the year by 3.33%.



**Relative Returns vs S&P Levered Loan Index + 1% (Qtr Lag)**

**Callan Alternative Inv DB (Gross) Annualized Five Year Risk vs Return**

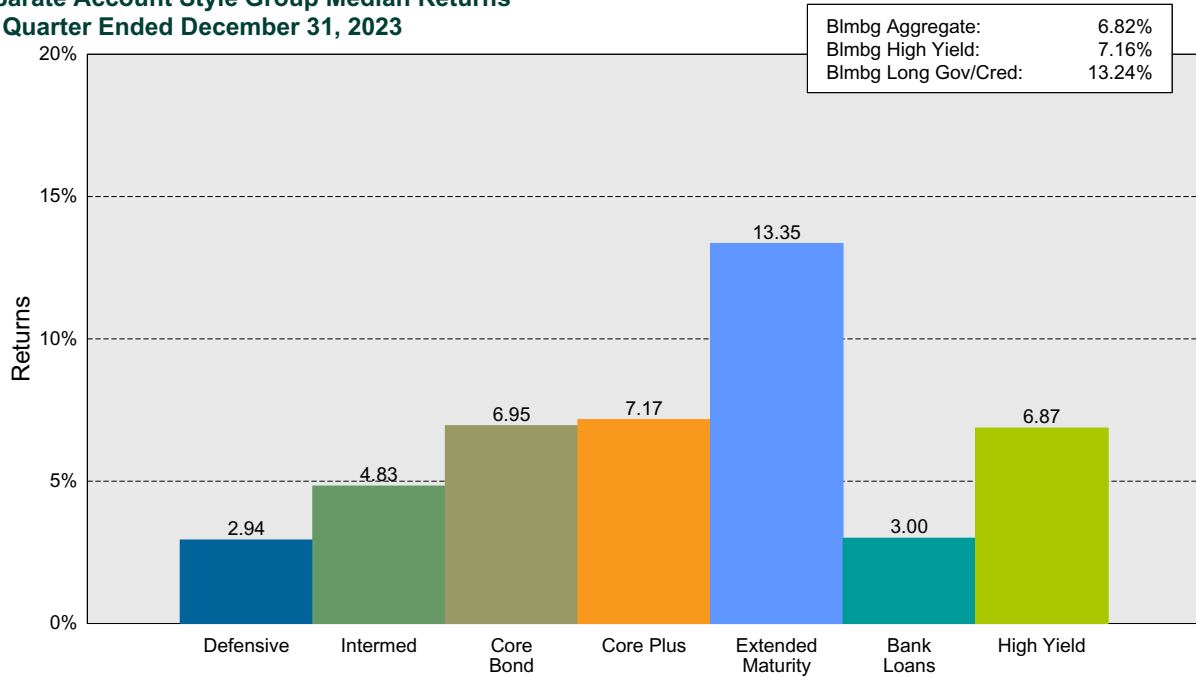




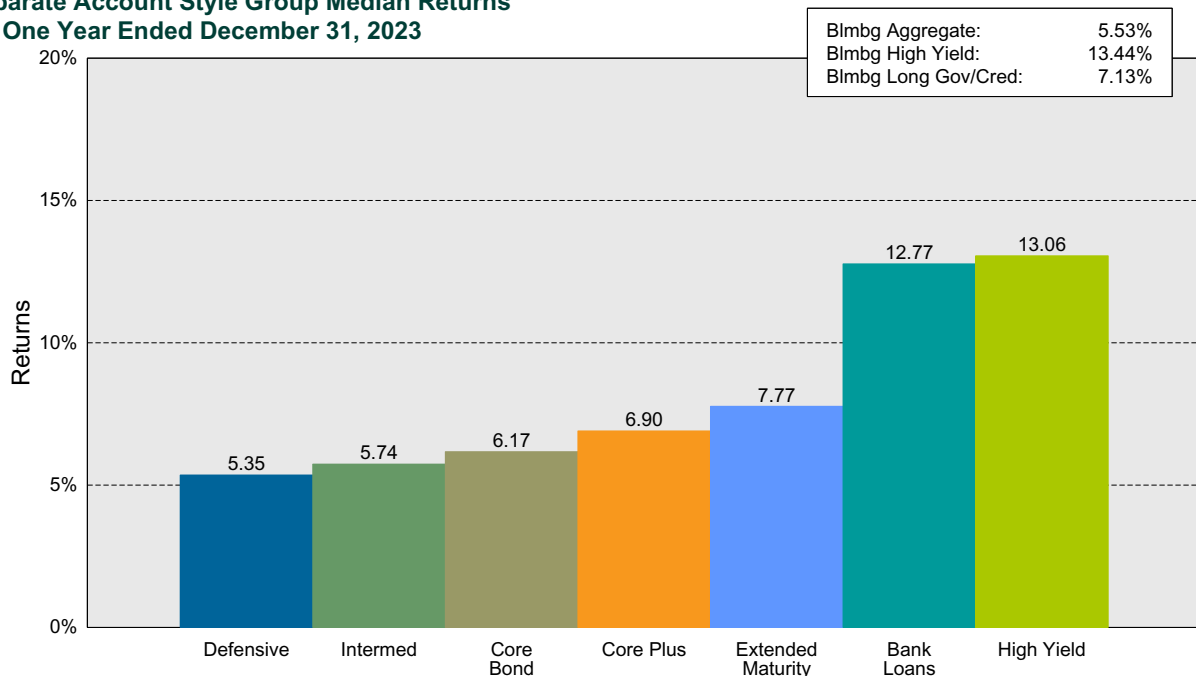
## Domestic Fixed Income Active Management Overview

The 10-year U.S. Treasury yield was volatile in 2023. It began the year at 3.88%; the same place it closed at the end of 2022. During 2023, it hit an April low of 3.31% post the regional banking crisis and a high in October of 4.99%. Falling rates in November and December drove returns for the Bloomberg US Aggregate to a lofty +6.8% in 4Q and a solid +5.5% for the year. Corporate credit strongly outperformed U.S. Treasuries in 4Q (excess returns of 203 bps) and for the year (455 bps). High yield (Bloomberg US High Yield Corporate Index) climbed 7.2% for the quarter and was up an equity-like 13.4% for the year. Credit spreads for investment grade and high yield corporates ended the year below 10-year averages.

### Separate Account Style Group Median Returns for Quarter Ended December 31, 2023



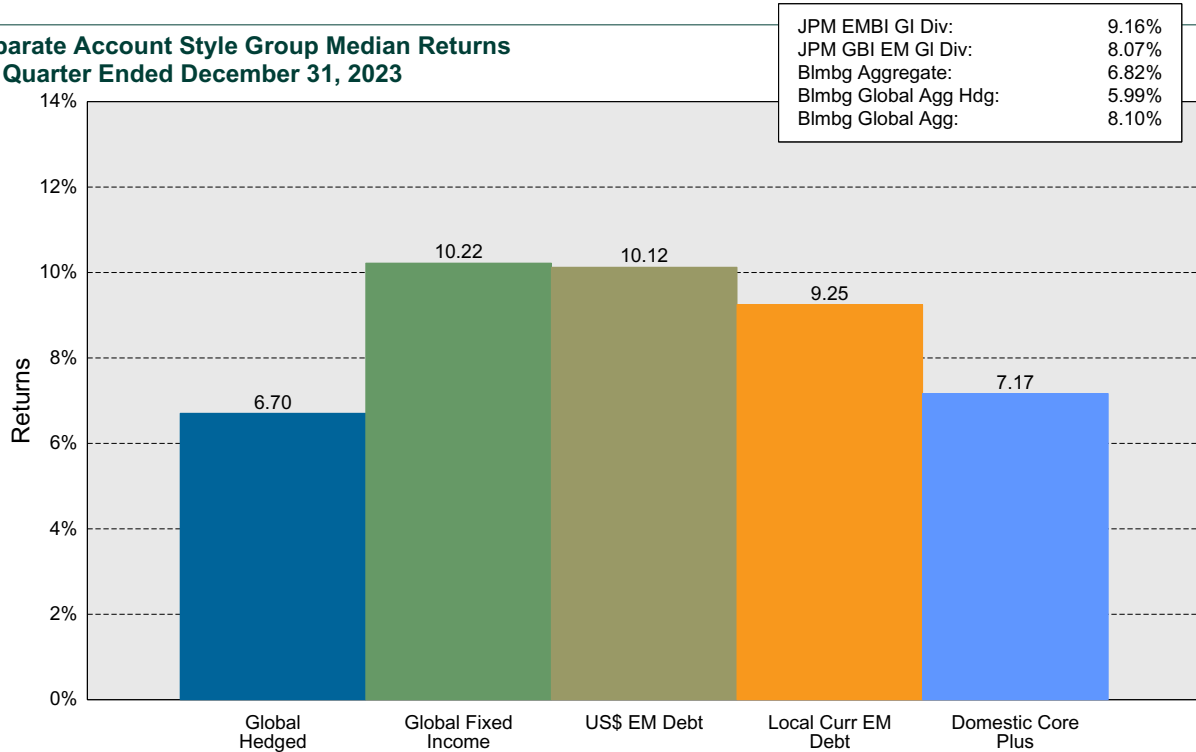
### Separate Account Style Group Median Returns for One Year Ended December 31, 2023



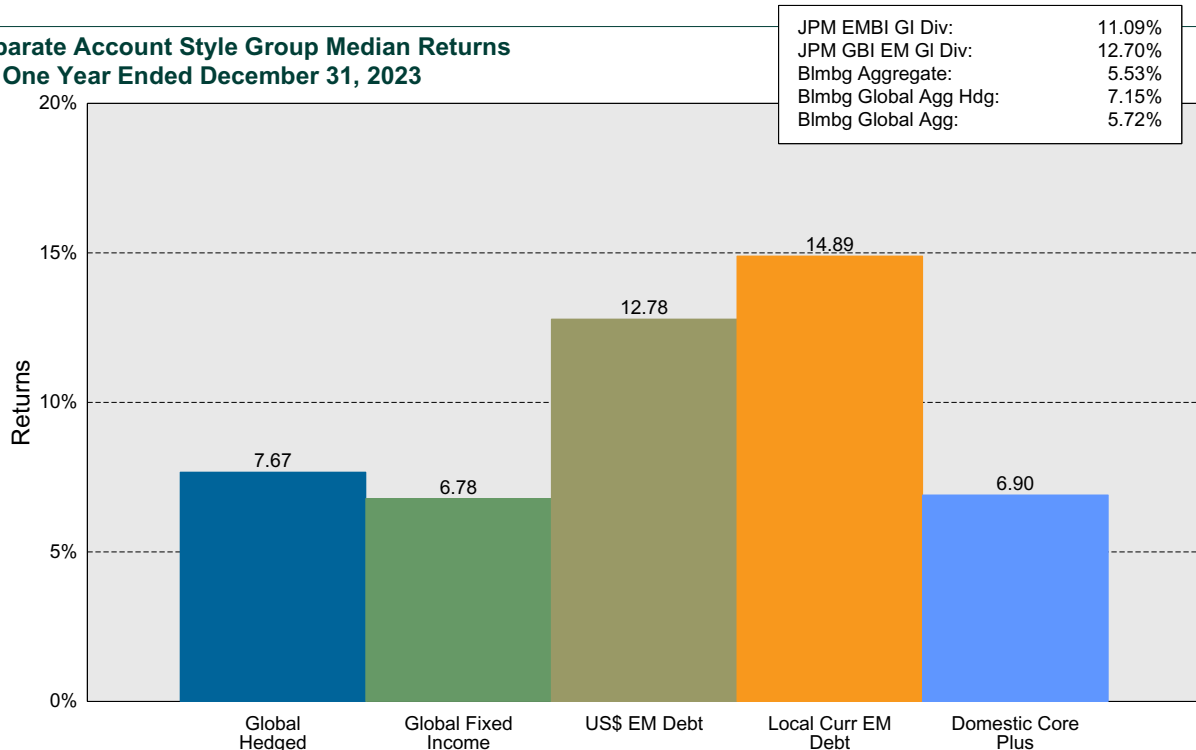
## Global Fixed Income Active Management Overview

Rates fell in the final quarter of the year as central banks shifted away from rate hikes and inflation moderated. The Bloomberg ex USD Index rose 9.2% (hedged: +5.4%). The index was up 5.7% (+8.3% hedged) for the year. The US dollar weakened versus most currencies during the quarter but results were mixed for the year. Gains (hedged and unhedged) for the quarter and the year were broad-based across developed markets with no country posting a negative return.

**Separate Account Style Group Median Returns  
for Quarter Ended December 31, 2023**



**Separate Account Style Group Median Returns  
for One Year Ended December 31, 2023**

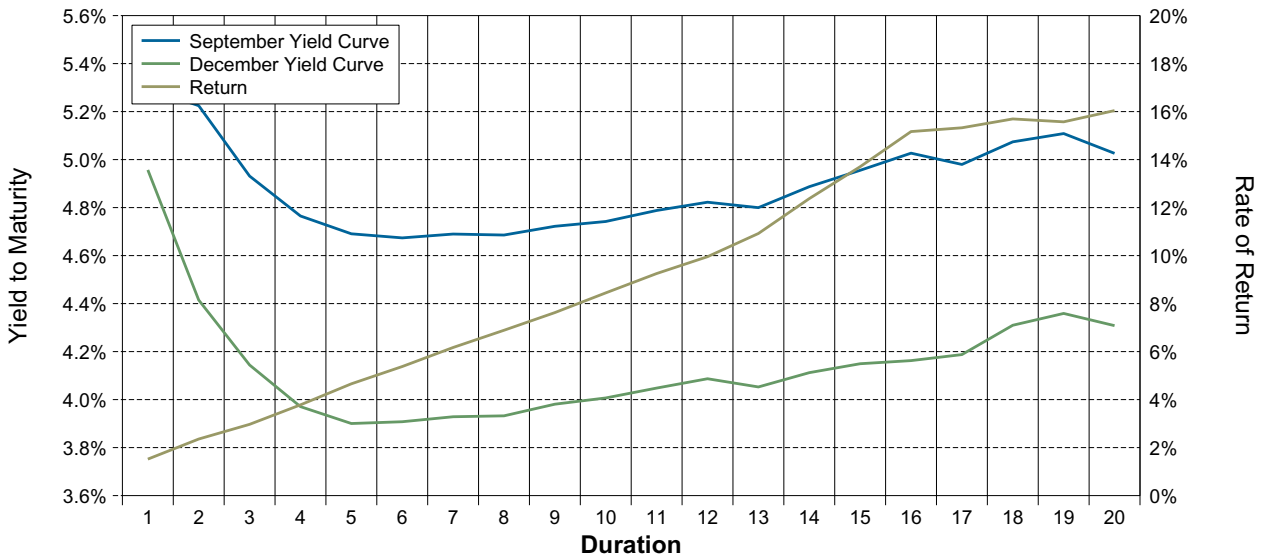


## Bond Market Environment

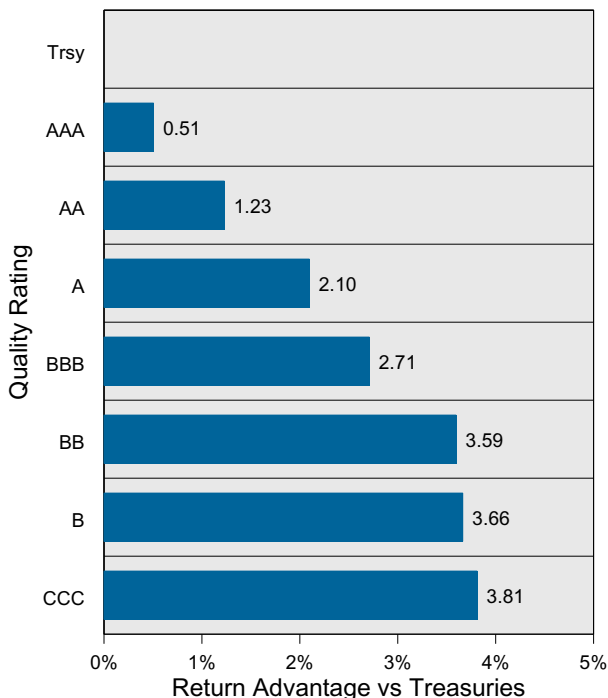
### Factors Influencing Bond Returns

The charts below are designed to give you an overview of the factors that influenced bond market returns for the quarter. The first chart shows the shift in the Treasury yield curve and the resulting returns by duration. The second chart shows the average return premium (relative to Treasuries) for bonds with different quality ratings. The final chart shows the average return premium of the different sectors relative to Treasuries. These sector premiums are calculated after differences in quality and term structure have been accounted for across the sectors. They are typically explained by differences in convexity, sector specific supply and demand considerations, or other factors that influence the perceived risk of the sector.

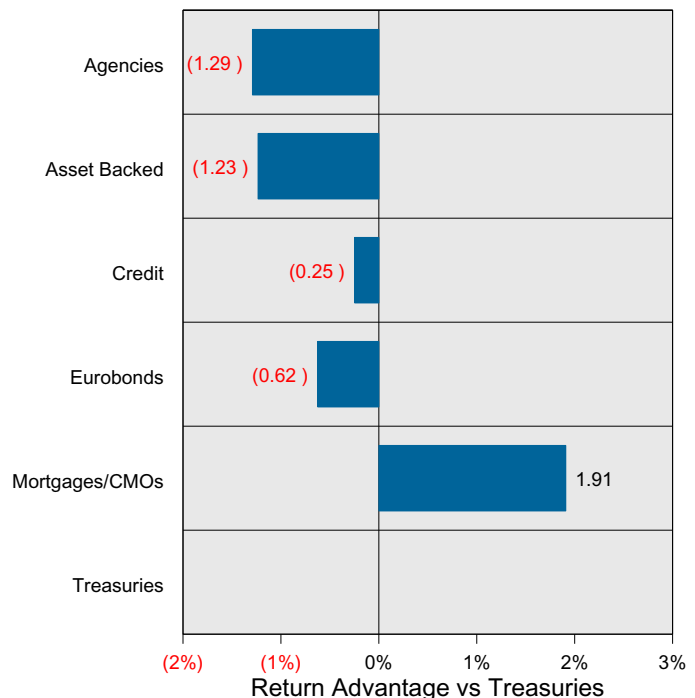
### Yield Curve Change and Rate of Return One Quarter Ended December 31, 2023



### Duration Adjusted Return Premium to Quality One Quarter Ended December 31, 2023



### Quality and Duration Adjusted Return Premium by Sector One Quarter Ended December 31, 2023



# Fixed Income

## Period Ended December 31, 2023

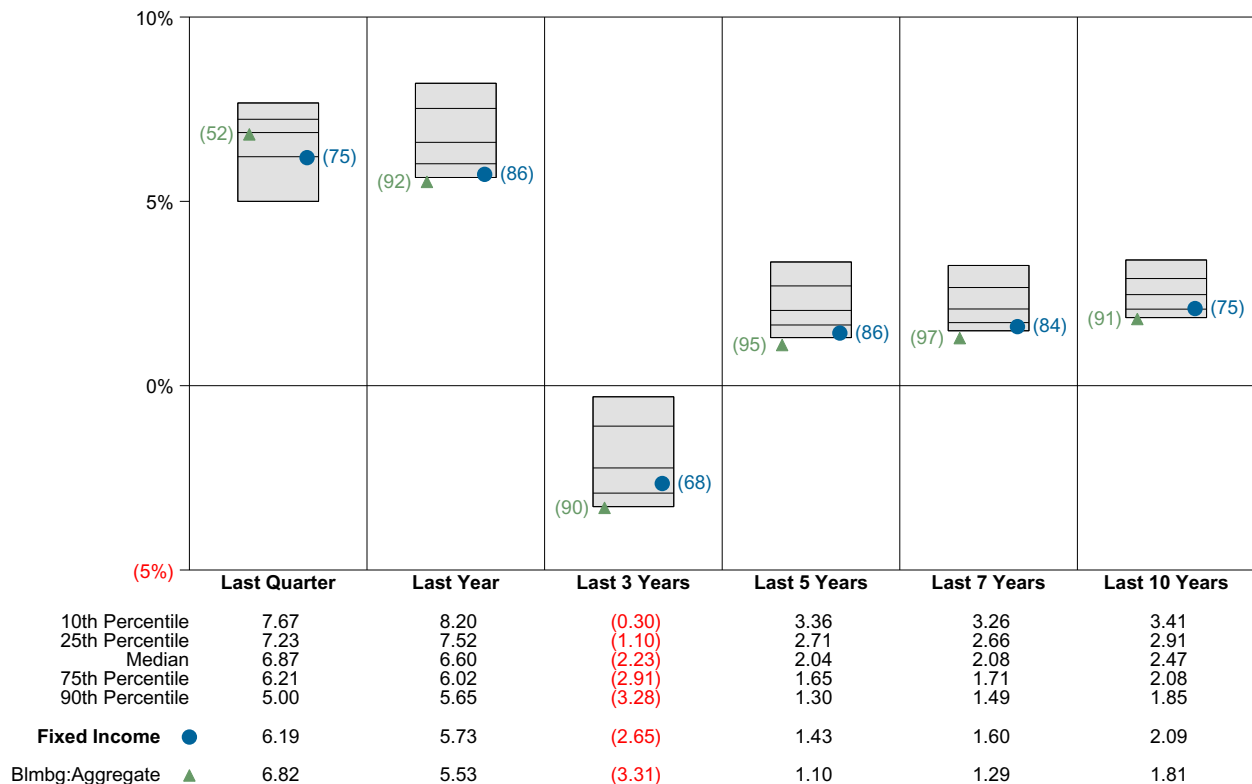
### Asset Class Membership Changes

Fixed Income also includes the new fixed income sub-composite which was funded in 03/01/2021 and ended in 06/30/2022.

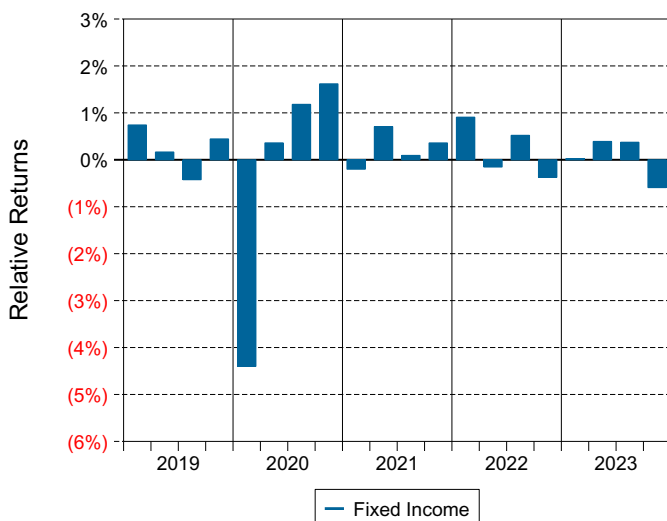
### Quarterly Summary and Highlights

- Fixed Income's portfolio posted a 6.19% return for the quarter placing it in the 75 percentile of the Public Fund - Domestic Fixed group for the quarter and in the 86 percentile for the last year.
- Fixed Income's portfolio underperformed the Blmbg:Aggregate by 0.63% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.20%.

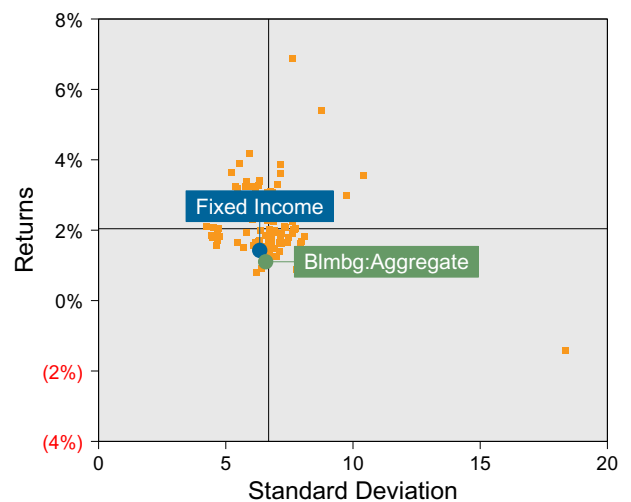
### Performance vs Public Fund - Domestic Fixed (Gross)



### Relative Return vs Blmbg:Aggregate



### Public Fund - Domestic Fixed (Gross) Annualized Five Year Risk vs Return

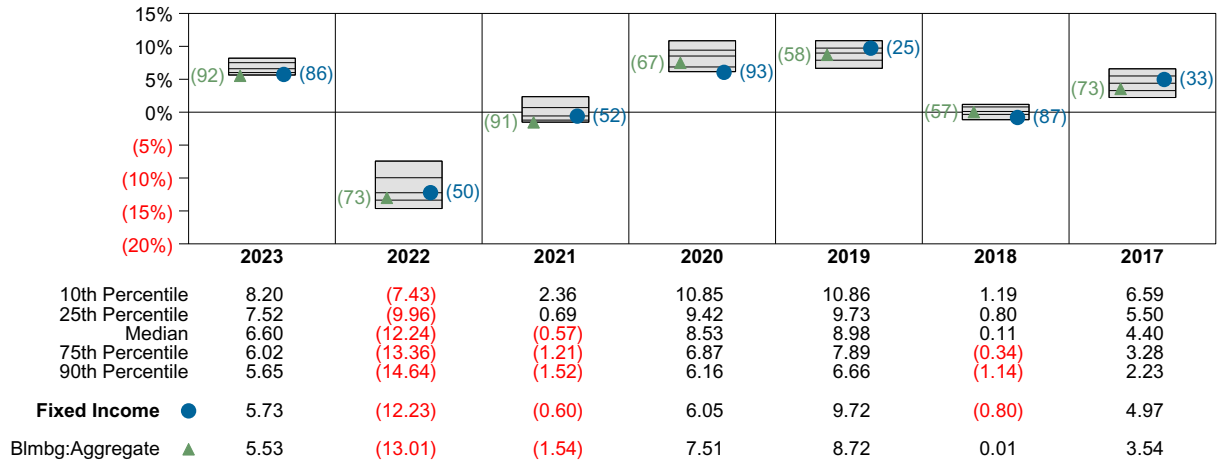


# Fixed Income Return Analysis Summary

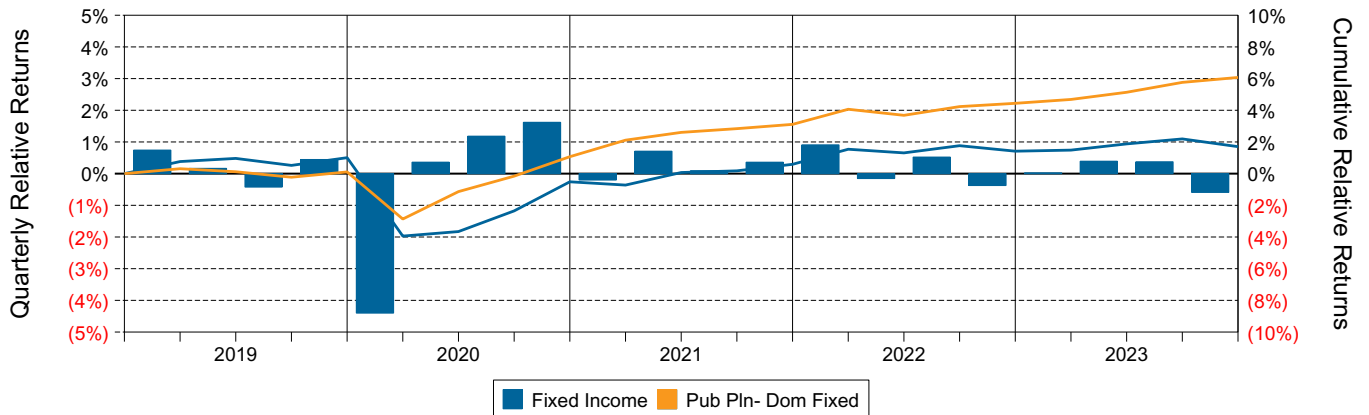
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

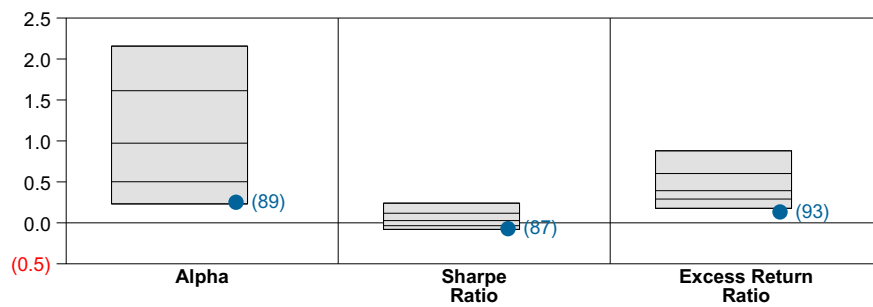
### Performance vs Public Fund - Domestic Fixed (Gross)



### Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



### Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Public Fund - Domestic Fixed (Gross) Five Years Ended December 31, 2023



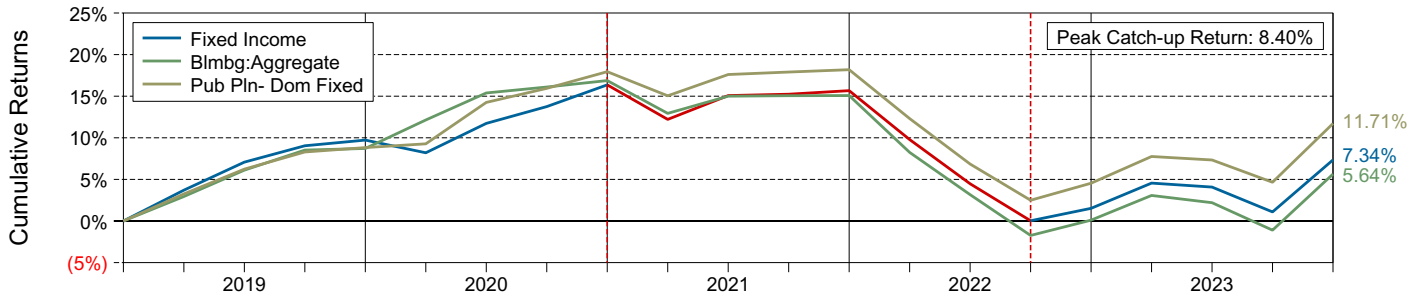
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	2.16	0.24	0.88
25th Percentile	1.61	0.12	0.60
Median	0.97	0.03	0.39
75th Percentile	0.50	(0.03)	0.29
90th Percentile	0.23	(0.08)	0.18
<b>Fixed Income</b> ●	0.25	(0.07)	0.13



# Fixed Income Drawdown Analysis for Five Years Ended December 31, 2023

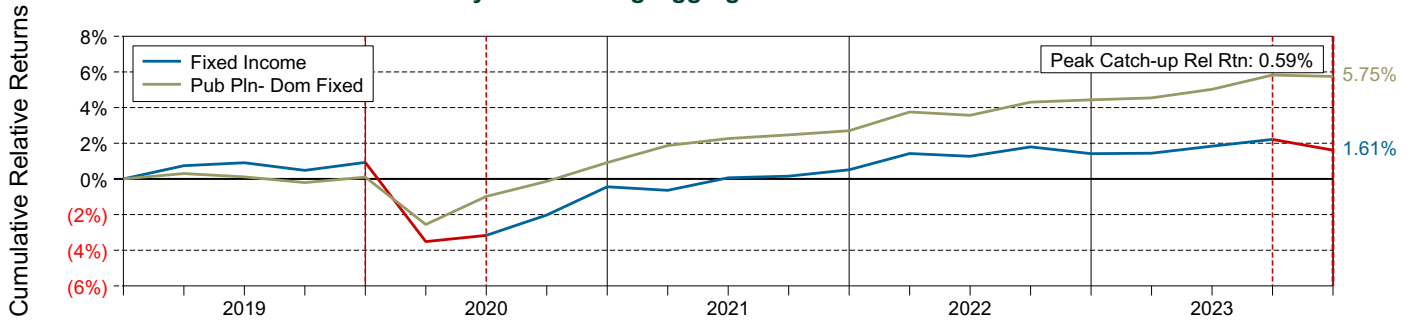
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute Drawdown as well as the Current Drawdown (cumulative return from high-water mark to now). The second chart focuses on Relative Drawdown (negative excess return vs. index). The bottom charts highlight the portfolio's peer rankings during drawdown periods.

## Absolute Cumulative Drawdown Analysis



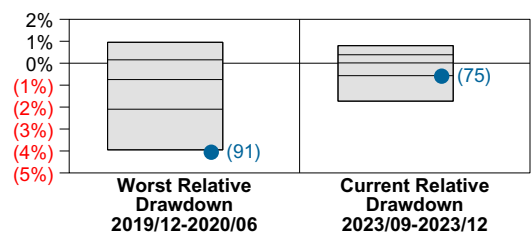
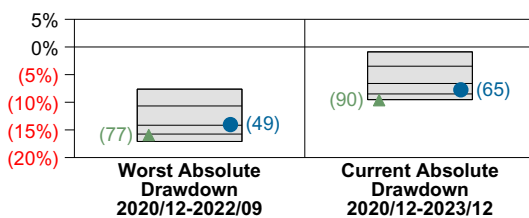
	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Fixed Income	(14.04)%	1.75	2020/12-2022/09	(15.93)%	(13.10)%	(7.75)%	3.00	2020/12-2023/12	(9.62)%	(5.29)%
Recovery from Trough	7.31%	1.25+	2022/09-2023/12	7.51%	8.99%	7.31%	1.25+	2022/09-2023/12	7.51%	8.99%
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(9.62)%	3.00	2020/12-2023/12		
Pub Pln- Dom Fixed	(13.28)%	0.75	2021/12-2022/09			(5.48)%	2.00	2021/12-2023/12		

## Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate



	Worst Relative Drawdown				Current Relative Drawdown			
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Fixed Income	(4.06)%	0.50	2019/12-2020/06	(1.08)%	(0.59)%	0.25	2023/09-2023/12	(0.07)%
Recovery from Trough	4.74%	1.75	2020/06-2022/03	4.78%	-	-	-	-
Pub Pln- Dom Fixed	(2.85)%	1.00	2019/03-2020/03		(0.07)%	0.25	2023/09-2023/12	

## Drawdown Rankings vs. Blmbg:Aggregate Rankings against Public Fund - Domestic Fixed Five Years Ended December 31, 2023



10th Percentile  
25th Percentile  
Median  
75th Percentile  
90th Percentile

	Worst Absolute Drawdown 2020/12-2022/09	Current Absolute Drawdown 2020/12-2023/12
10th Percentile	(7.63)	(0.89)
25th Percentile	(10.67)	(3.48)
Median	(14.15)	(6.60)
75th Percentile	(15.75)	(8.49)
90th Percentile	(17.09)	(9.52)

	Worst Relative Drawdown 2019/12-2020/06	Current Relative Drawdown 2023/09-2023/12
10th Percentile	0.95	0.80
25th Percentile	0.15	0.38
Median	(0.75)	0.01
75th Percentile	(2.10)	(0.57)
90th Percentile	(3.95)	(1.73)

**Fixed Income** ● (14.04) (7.75)  
Blmbg:Aggregate ▲ (15.93) (9.62)

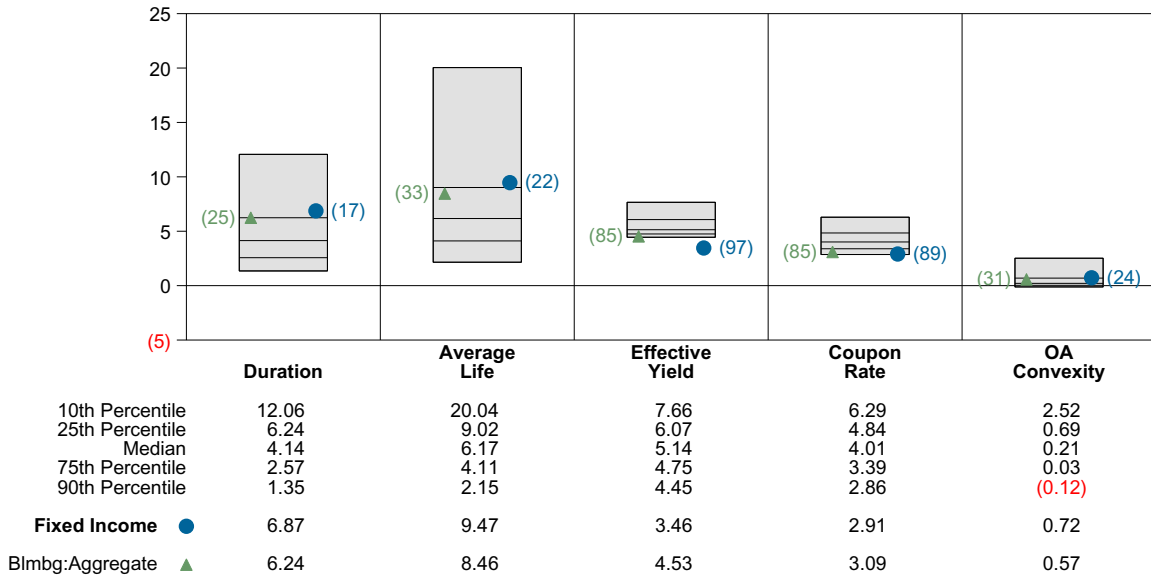
**Fixed Income** ● (4.06) (0.59)

# Fixed Income Bond Characteristics Analysis Summary

## Portfolio Characteristics

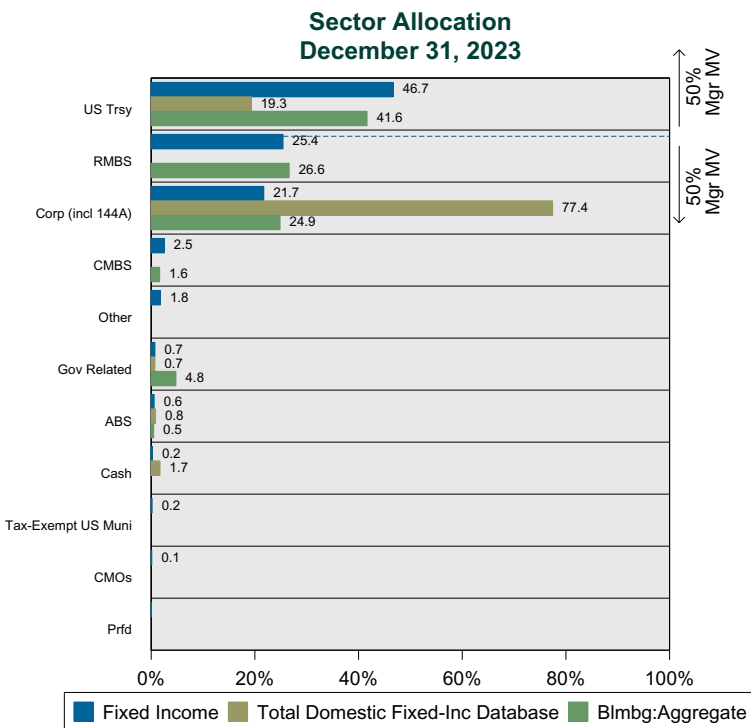
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Total Domestic Fixed-Inc Database as of December 31, 2023

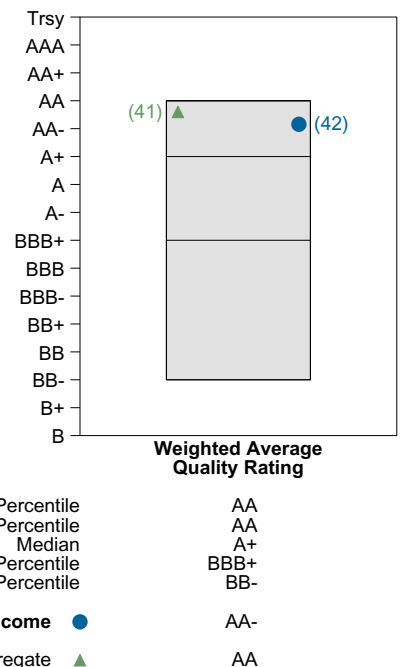


## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



### Quality Ratings vs Total Domestic Fixed-Inc Database



# Fixed Income Portfolio Characteristics Summary As of December 31, 2023

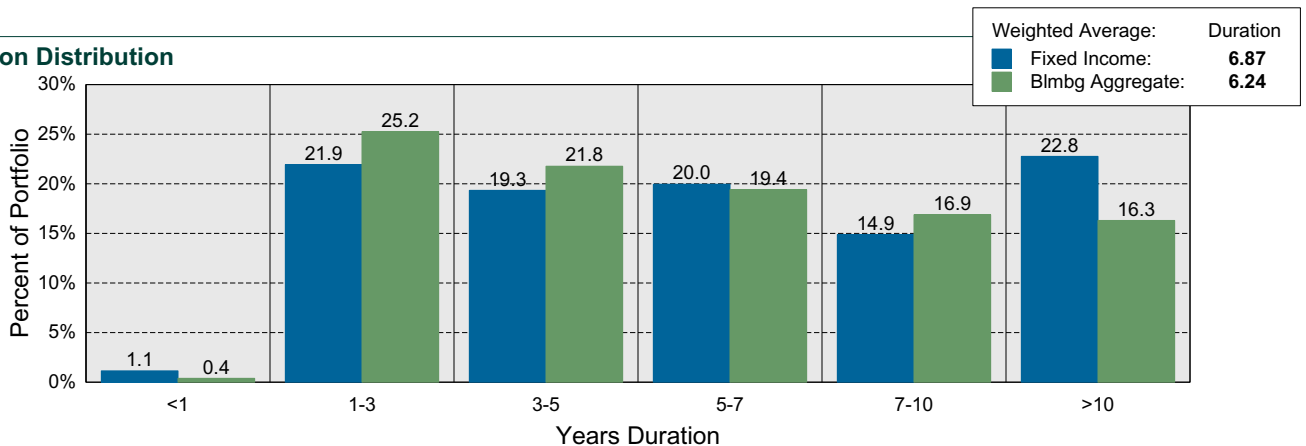
## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

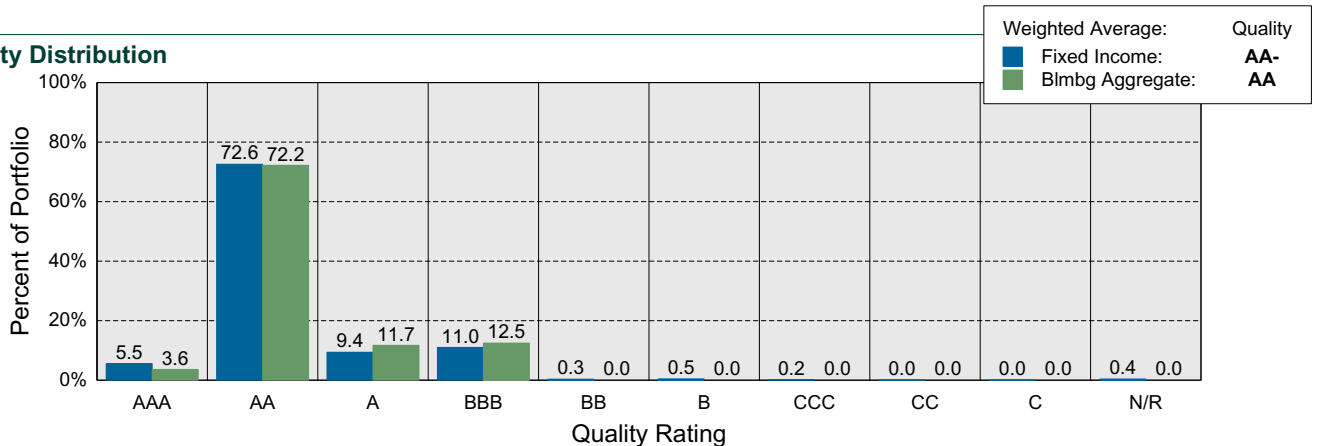
### Sector Distribution



### Duration Distribution



### Quality Distribution





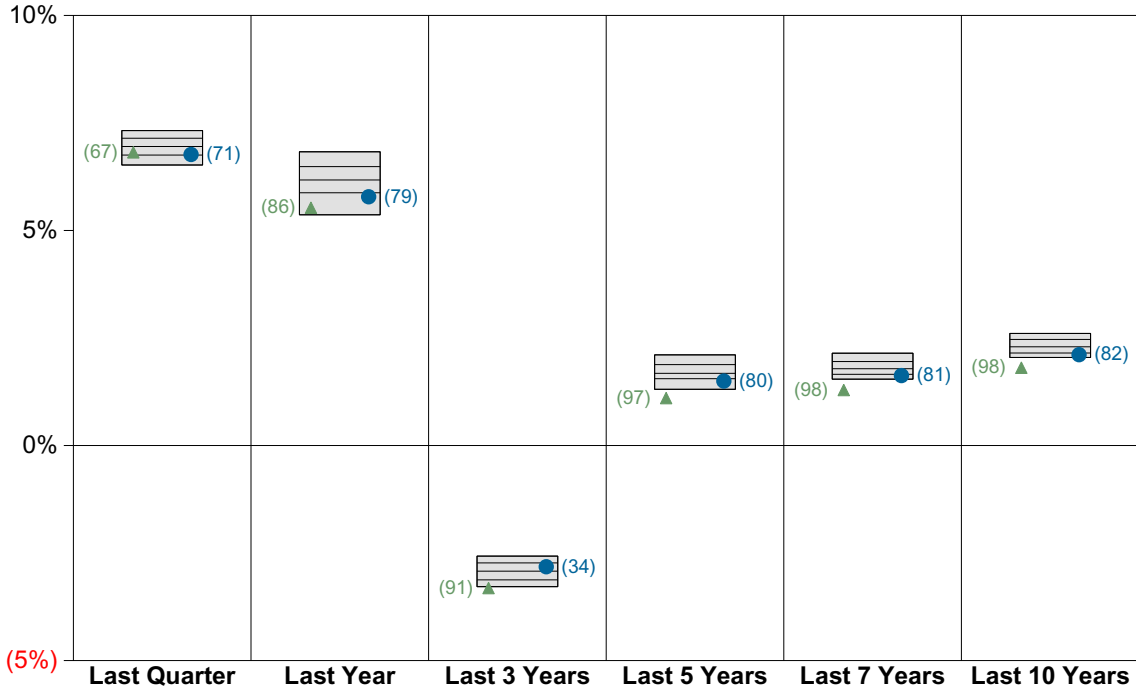
# Core Fixed Income

## Period Ended December 31, 2023

### Quarterly Summary and Highlights

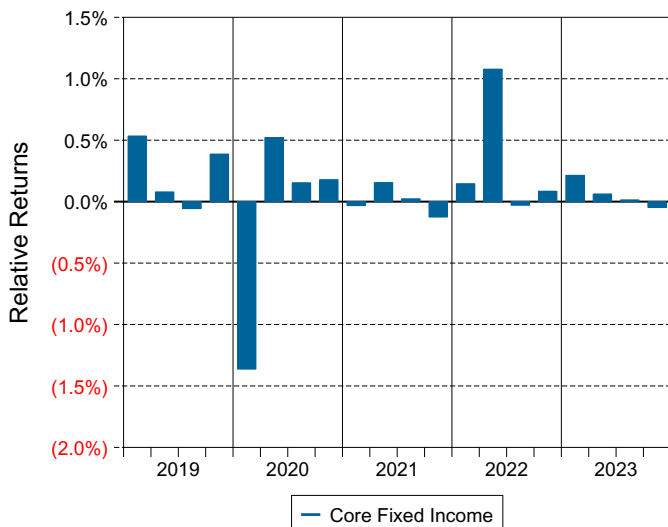
- Core Fixed Income's portfolio posted a 6.77% return for the quarter placing it in the 71 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 79 percentile for the last year.
- Core Fixed Income's portfolio underperformed the Blmbg:Aggregate by 0.05% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.25%.

### Performance vs Callan Core Bond Fixed Income (Gross)

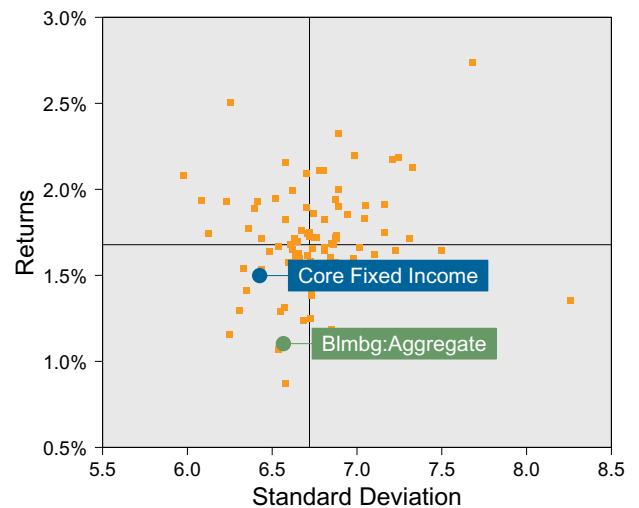


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	7.32	6.83	(2.57)	2.11	2.15	2.61
25th Percentile	7.14	6.49	(2.73)	1.88	1.95	2.47
Median	6.95	6.17	(2.92)	1.68	1.79	2.30
75th Percentile	6.75	5.88	(3.12)	1.55	1.66	2.15
90th Percentile	6.52	5.36	(3.28)	1.31	1.54	2.05
<b>Core Fixed Income</b> ●	6.77	5.78	(2.82)	1.50	1.63	2.11
Blmbg:Aggregate ▲	6.82	5.53	(3.31)	1.10	1.29	1.81

### Relative Return vs Blmbg:Aggregate



### Callan Core Bond Fixed Income (Gross) Annualized Five Year Risk vs Return

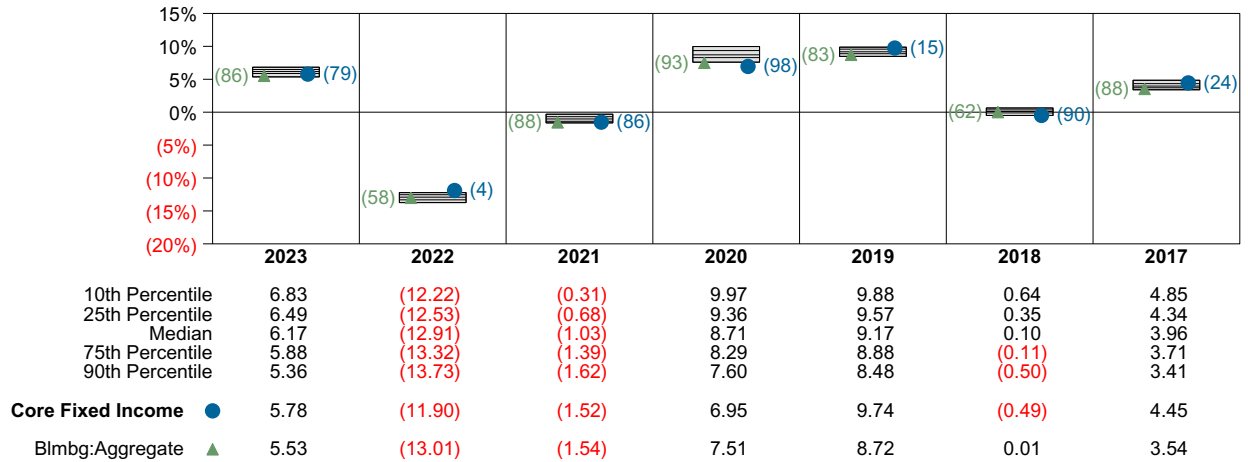


# Core Fixed Income Return Analysis Summary

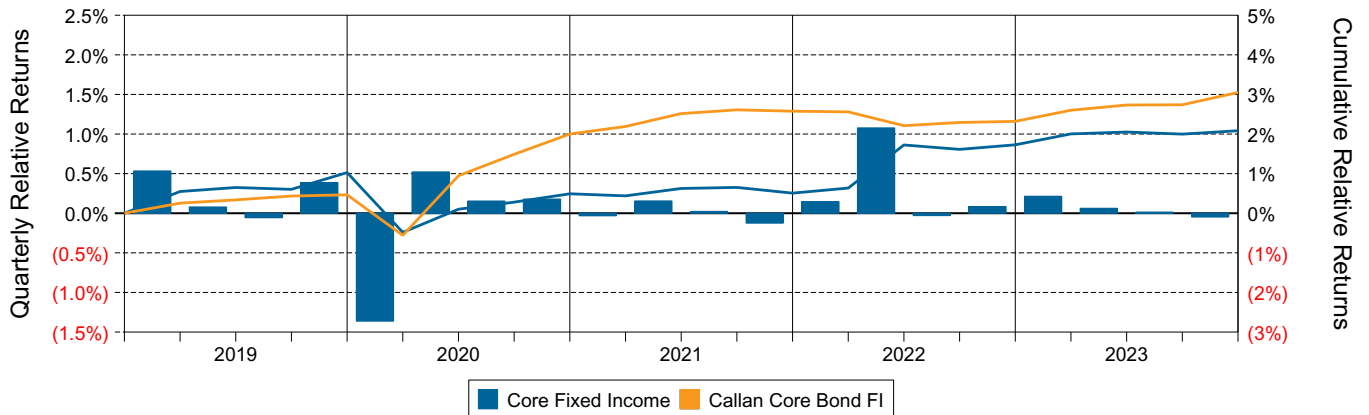
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

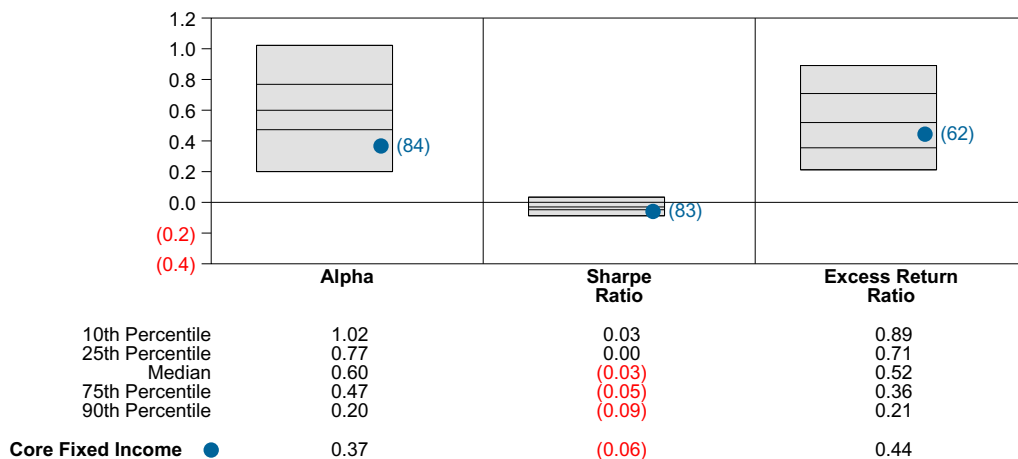
### Performance vs Callan Core Bond Fixed Income (Gross)



### Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



### Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended December 31, 2023

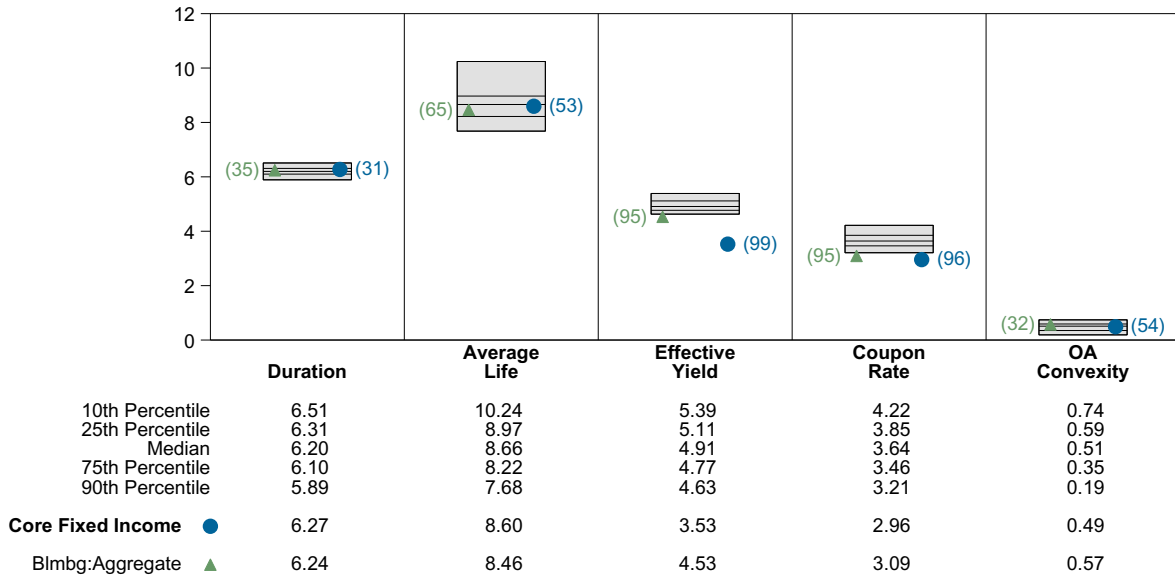


# Core Fixed Income Bond Characteristics Analysis Summary

## Portfolio Characteristics

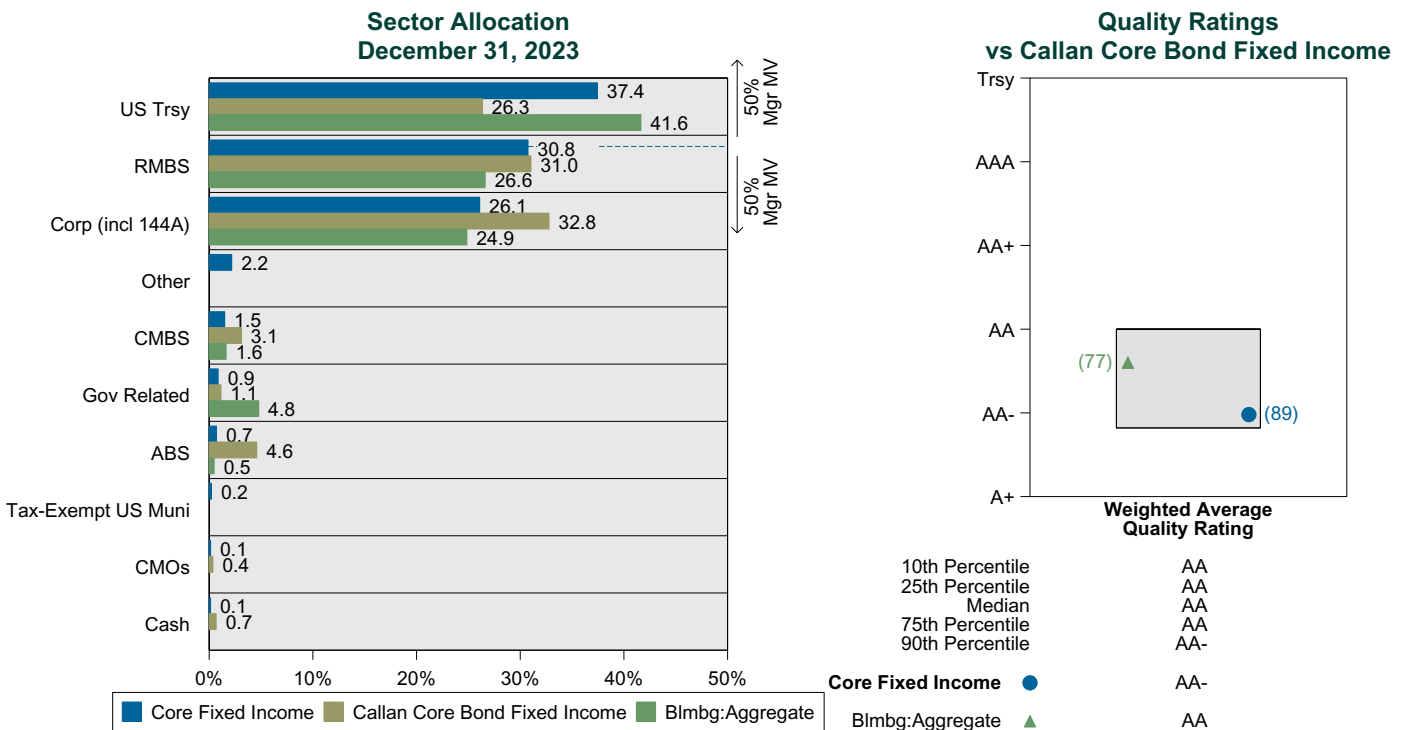
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income as of December 31, 2023



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

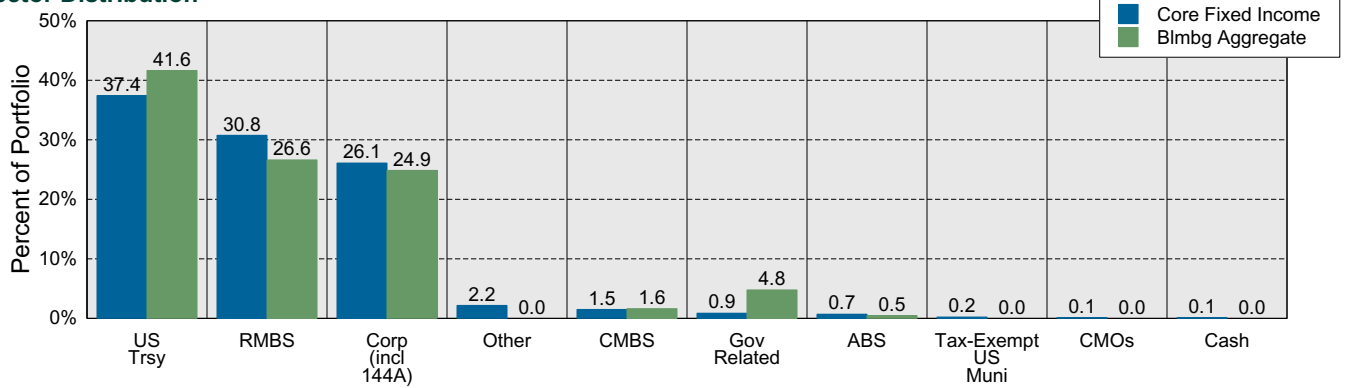


# Core Fixed Income Portfolio Characteristics Summary As of December 31, 2023

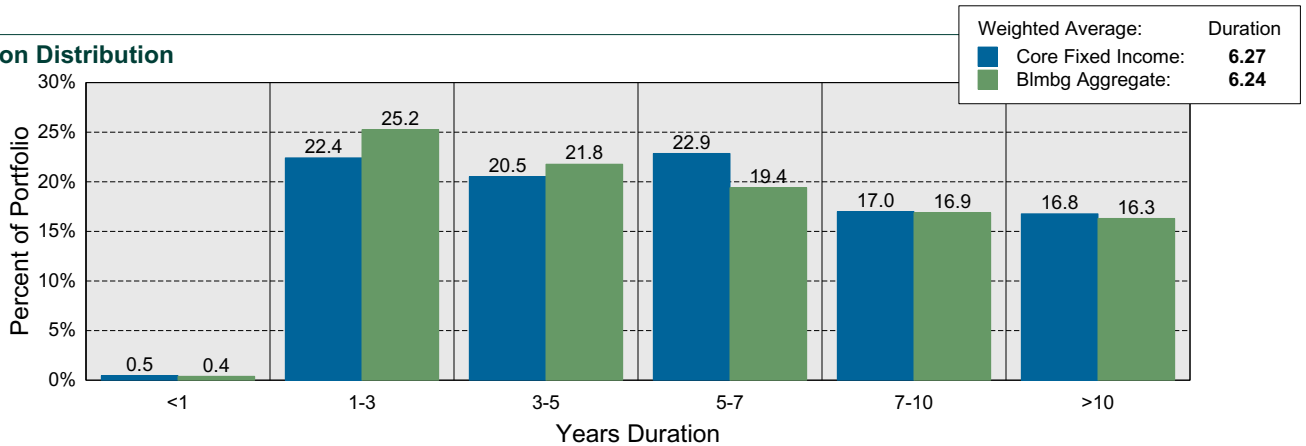
## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

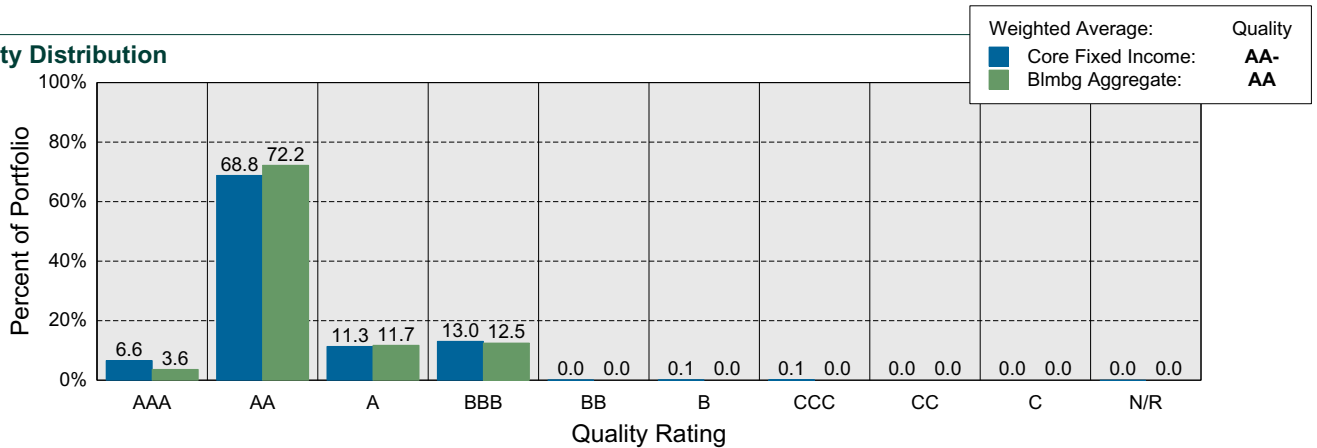
### Sector Distribution



### Duration Distribution



### Quality Distribution







# MCM Bond Index

## Period Ended December 31, 2023

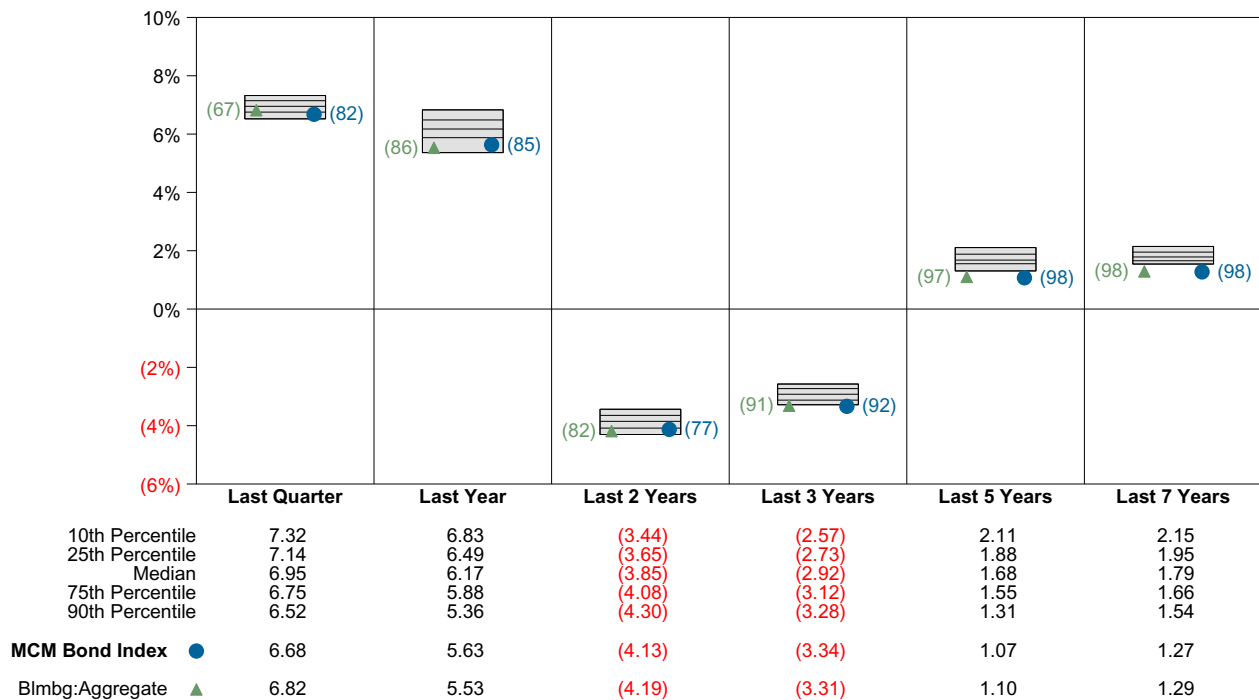
### Investment Philosophy

Fixed income indexing offers a cost-effective, sensible investment approach to gaining diversified market exposure and receiving competitive relative returns over the long-term. Mellon Capital's Aggregate Bond Index Strategy employs a stratified sampling approach that has consistently added value with very little tracking error versus the Barclays Capital Aggregate Bond Index. We emphasize low turnover (low transaction costs) and strict risk control in the structuring of our portfolios.

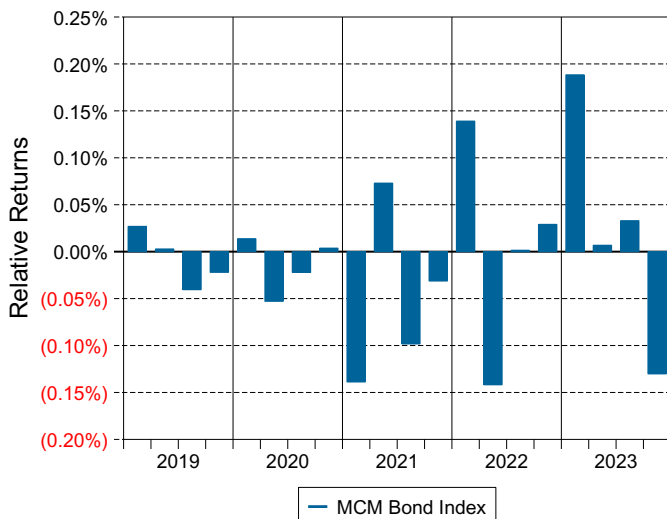
### Quarterly Summary and Highlights

- MCM Bond Index's portfolio posted a 6.68% return for the quarter placing it in the 82 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 85 percentile for the last year.
- MCM Bond Index's portfolio underperformed the Blmbg:Aggregate by 0.14% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.10%.

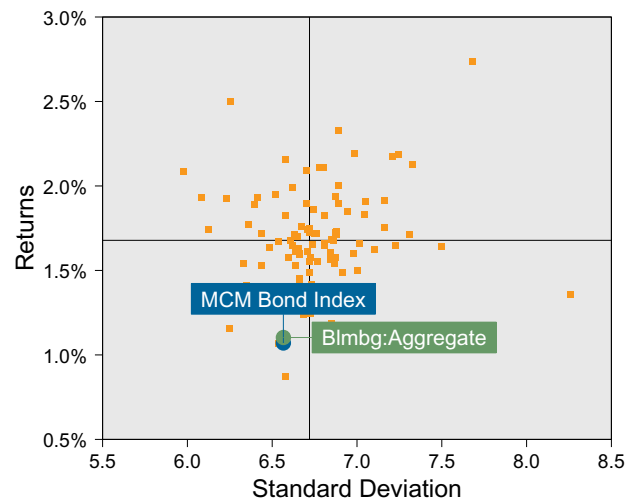
### Performance vs Callan Core Bond Fixed Income (Gross)



### Relative Return vs Blmbg:Aggregate



### Callan Core Bond Fixed Income (Gross) Annualized Five Year Risk vs Return

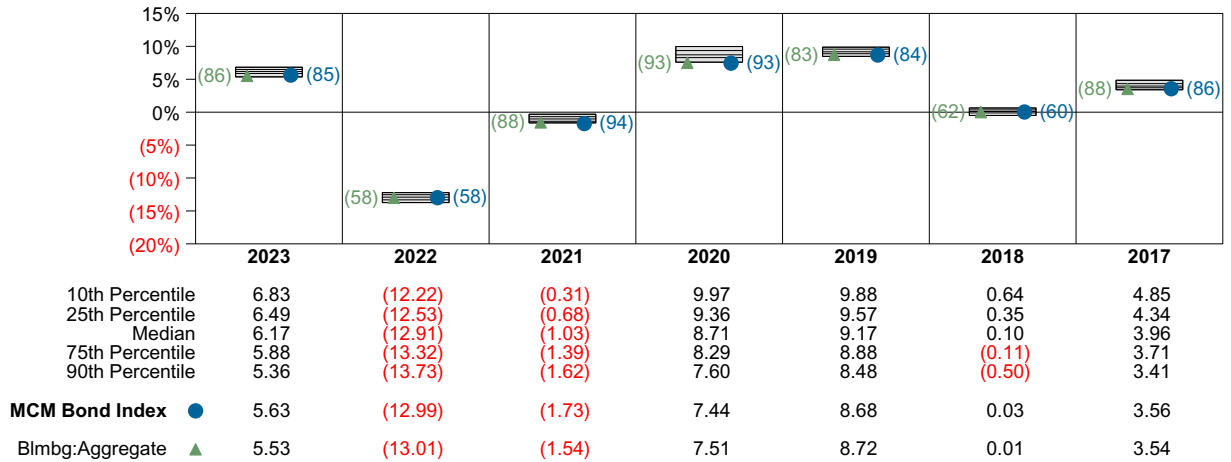


# MCM Bond Index Return Analysis Summary

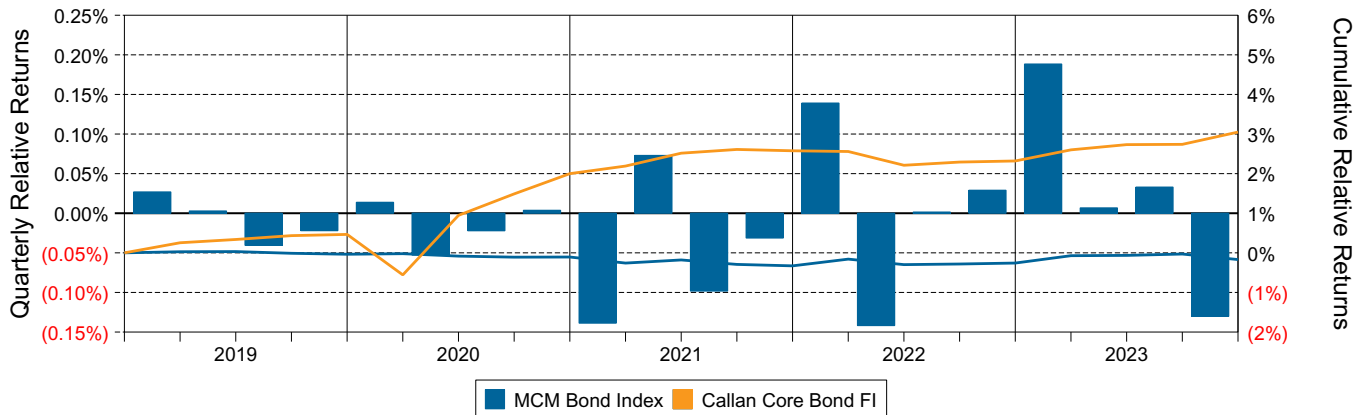
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

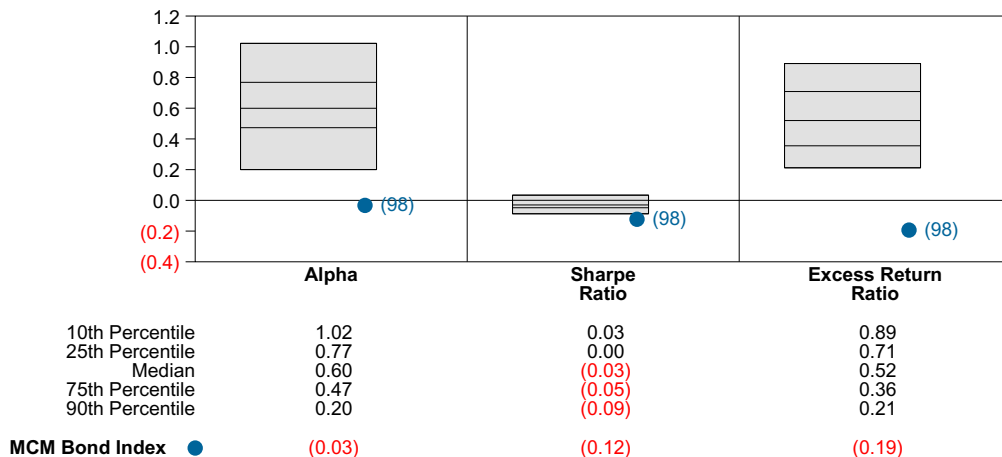
### Performance vs Callan Core Bond Fixed Income (Gross)



### Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



### Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended December 31, 2023

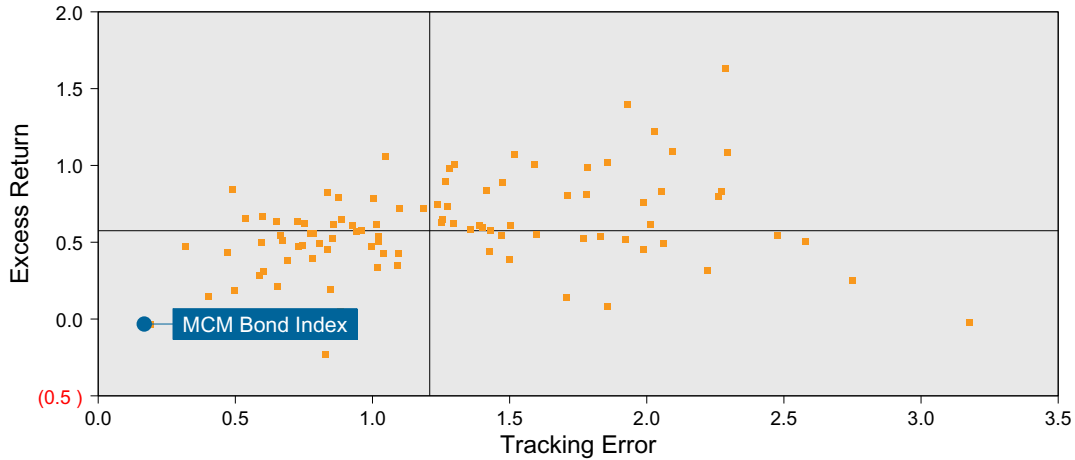


# MCM Bond Index Risk Analysis Summary

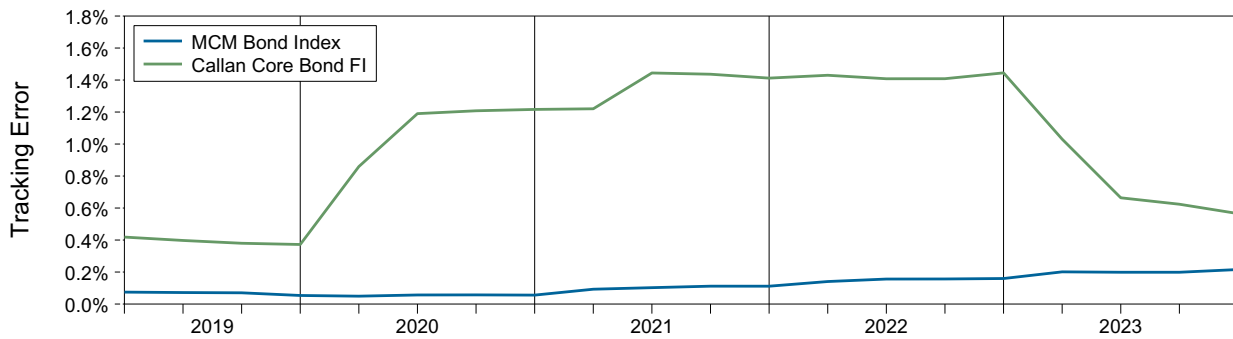
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

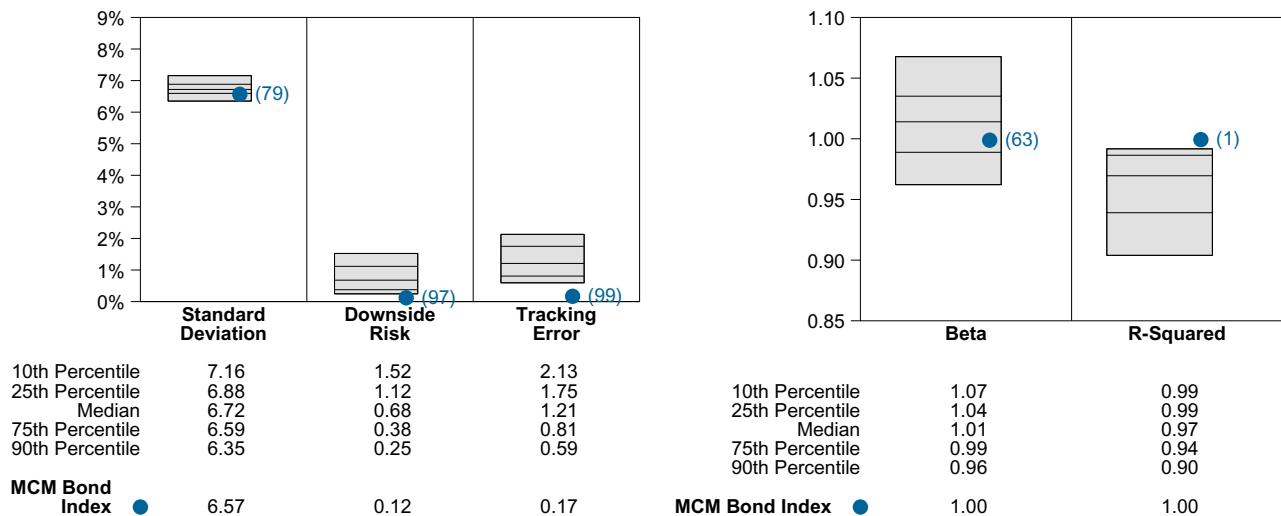
### Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended December 31, 2023



### Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate



### Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended December 31, 2023

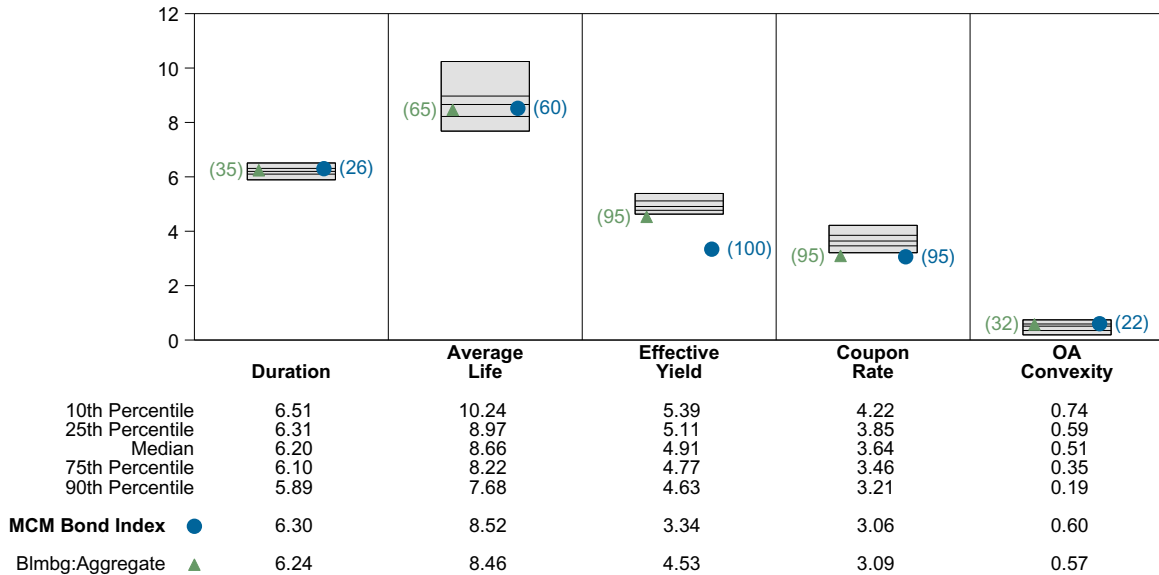


# MCM Bond Index Bond Characteristics Analysis Summary

## Portfolio Characteristics

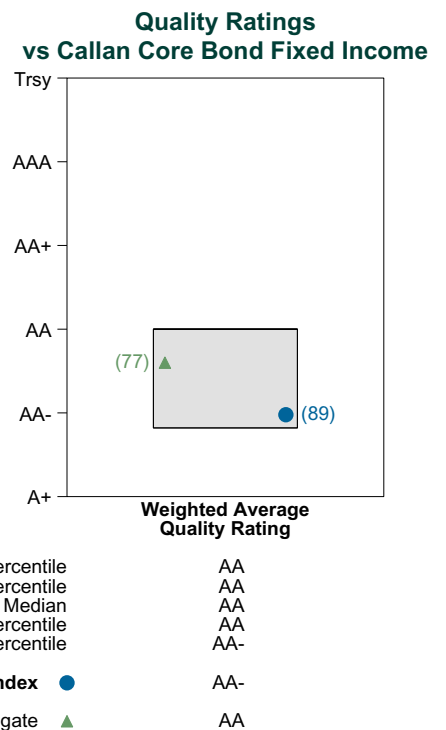
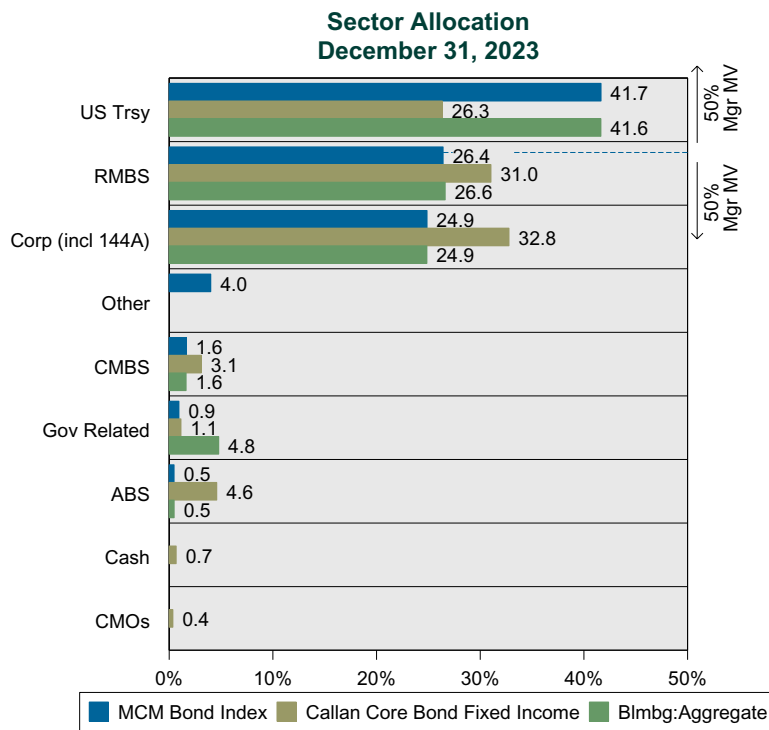
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income as of December 31, 2023



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

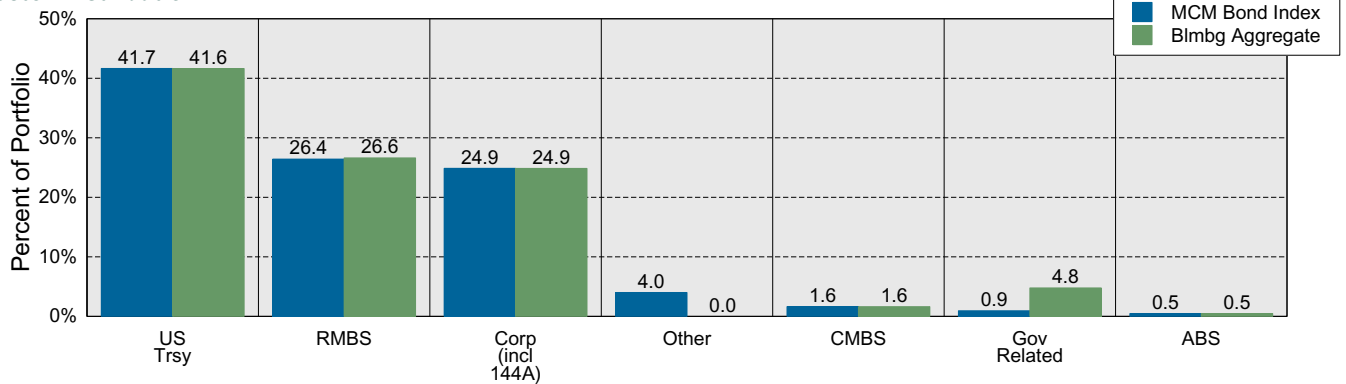


# MCM Bond Index Portfolio Characteristics Summary As of December 31, 2023

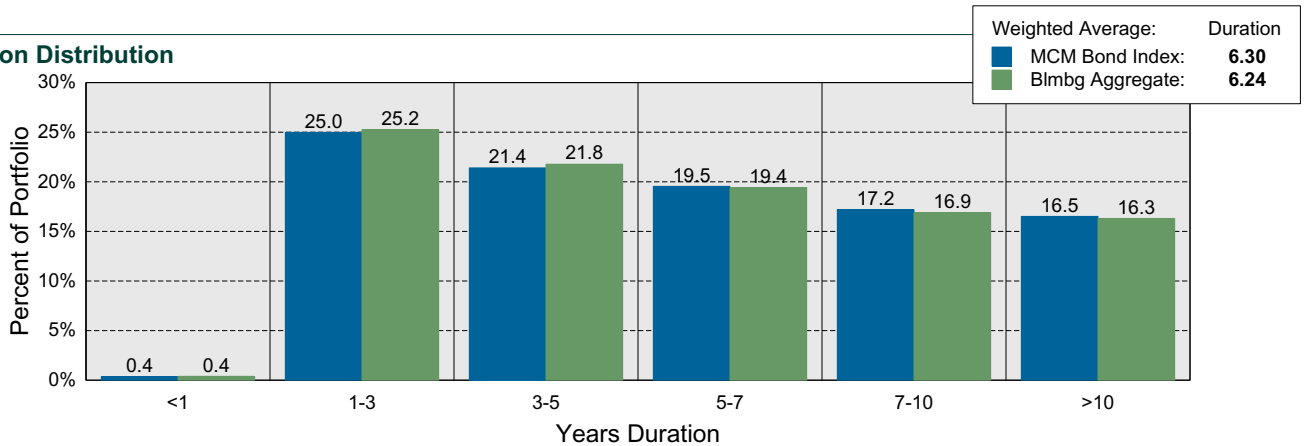
## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

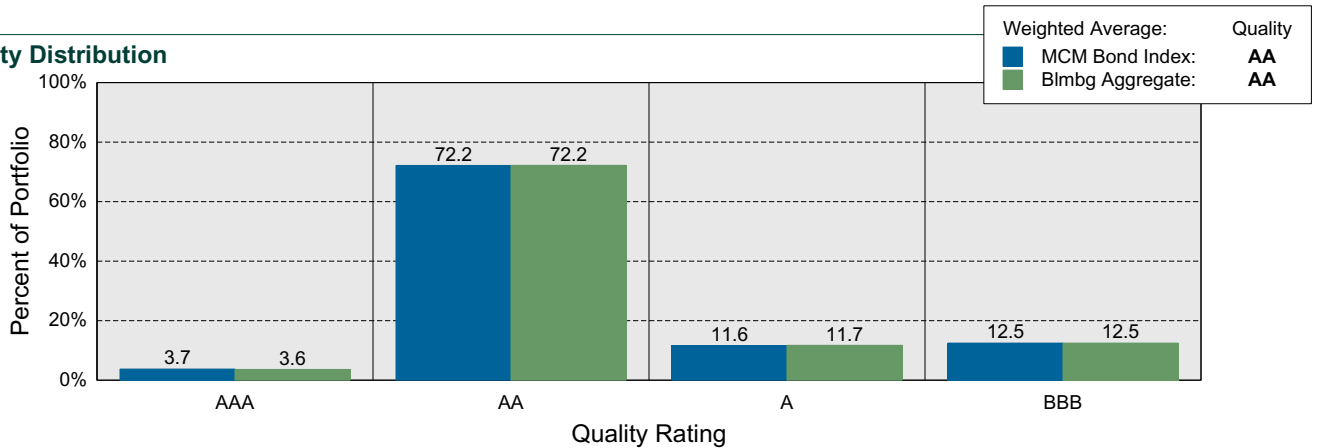
### Sector Distribution



### Duration Distribution



### Quality Distribution



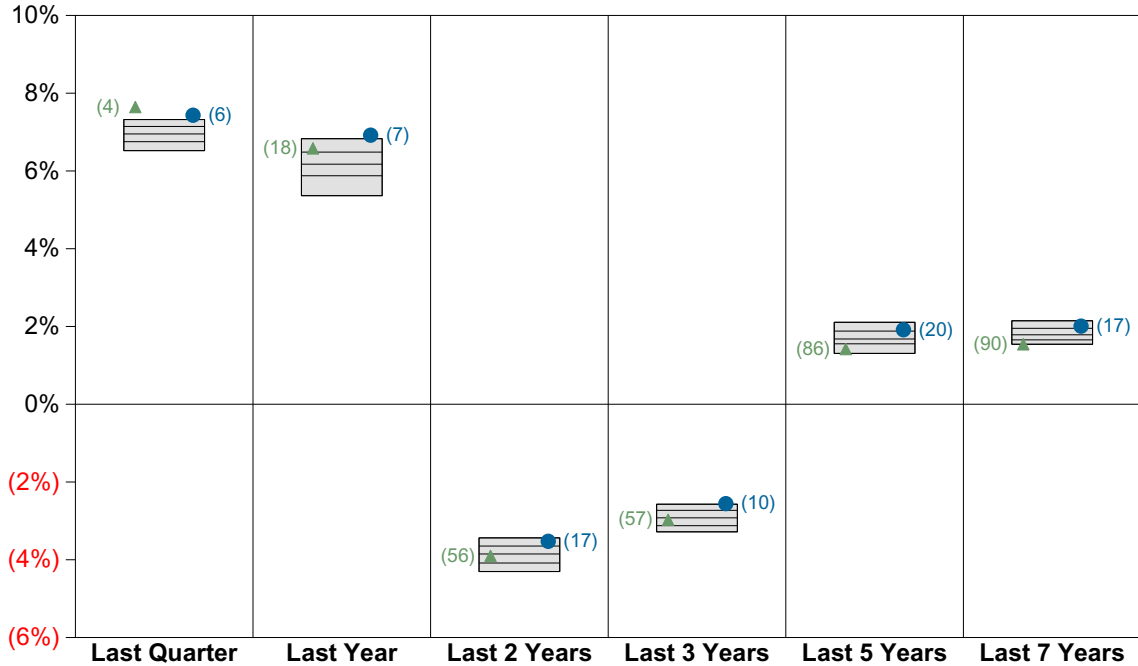
# PIMCO Core Bond Fund

## Period Ended December 31, 2023

### Quarterly Summary and Highlights

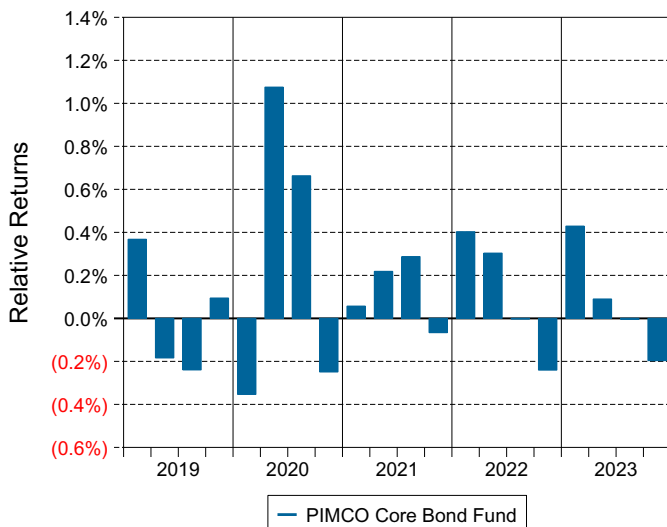
- PIMCO Core Bond Fund's portfolio posted a 7.43% return for the quarter placing it in the 6 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 7 percentile for the last year.
- PIMCO Core Bond Fund's portfolio underperformed the Blmbg Aggregate xTreas by 0.21% for the quarter and outperformed the Blmbg Aggregate xTreas for the year by 0.34%.

### Performance vs Callan Core Bond Fixed Income (Gross)

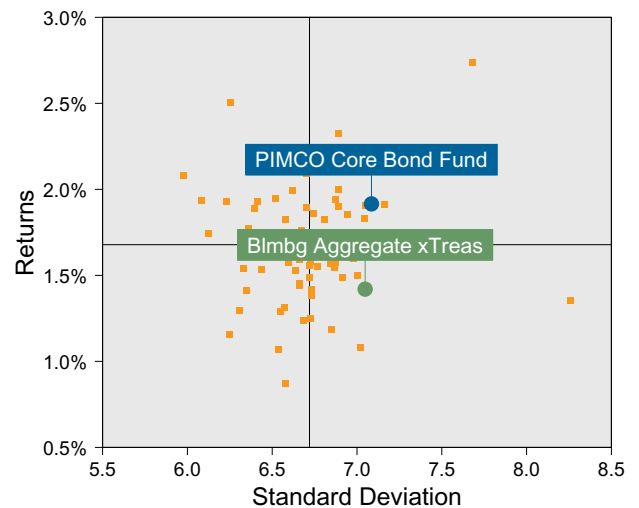


	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	7.32	6.83	(3.44)	(2.57)	2.11	2.15
25th Percentile	7.14	6.49	(3.65)	(2.73)	1.88	1.95
Median	6.95	6.17	(3.85)	(2.92)	1.68	1.79
75th Percentile	6.75	5.88	(4.08)	(3.12)	1.55	1.66
90th Percentile	6.52	5.36	(4.30)	(3.28)	1.31	1.54
<b>PIMCO Core Bond Fund</b>	● 7.43	6.92	(3.53)	(2.56)	1.92	2.01
Blmbg Aggregate xTreas	▲ 7.64	6.58	(3.90)	(2.97)	1.42	1.54

### Relative Return vs Blmbg Aggregate xTreas



### Callan Core Bond Fixed Income (Gross) Annualized Five Year Risk vs Return

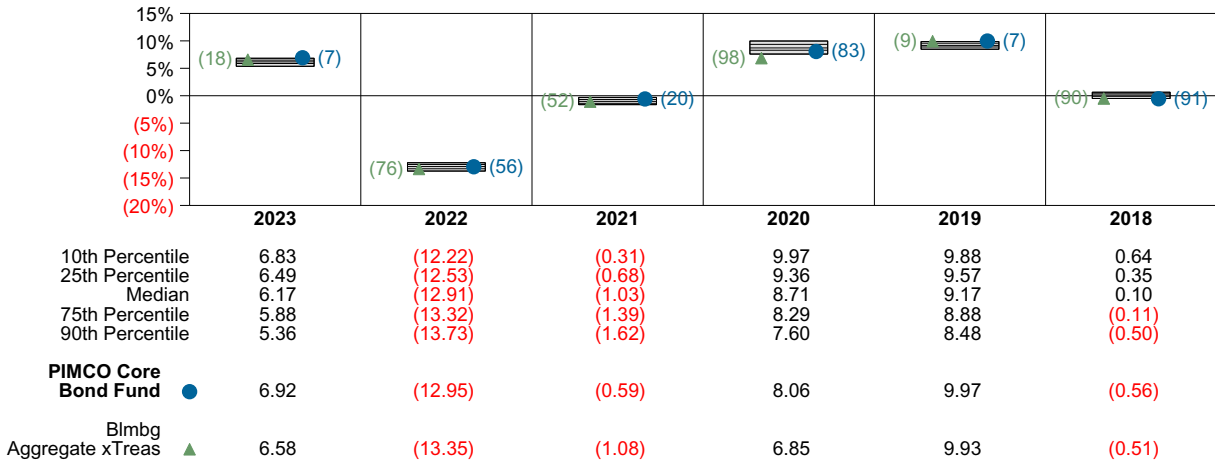


# PIMCO Core Bond Fund Return Analysis Summary

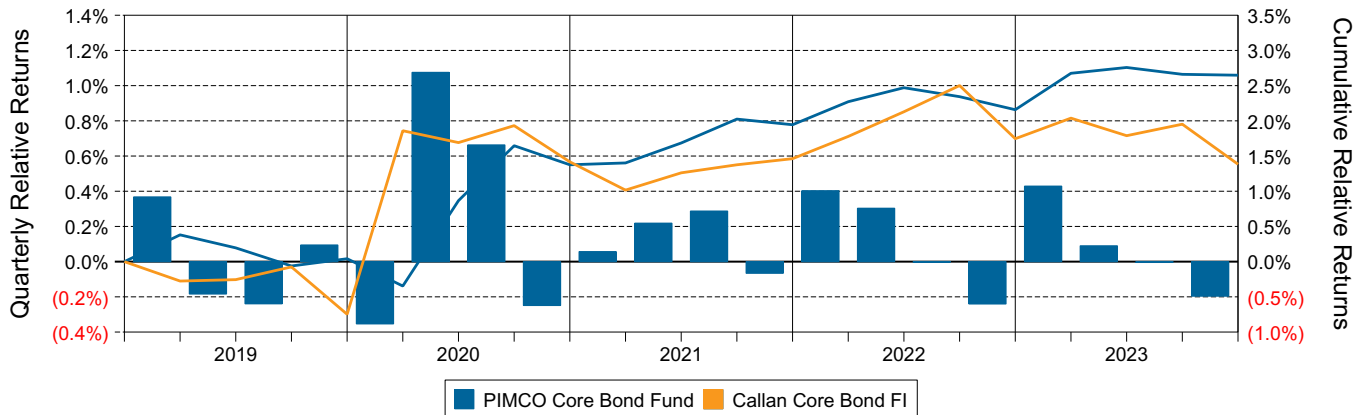
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

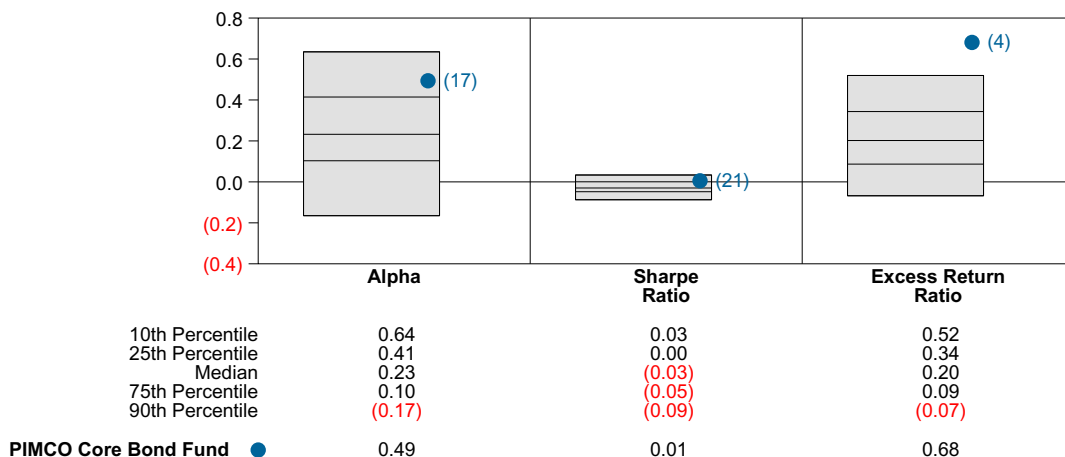
### Performance vs Callan Core Bond Fixed Income (Gross)



### Cumulative and Quarterly Relative Returns vs Blmbg Aggregate xTreas



### Risk Adjusted Return Measures vs Blmbg Aggregate xTreas Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended December 31, 2023



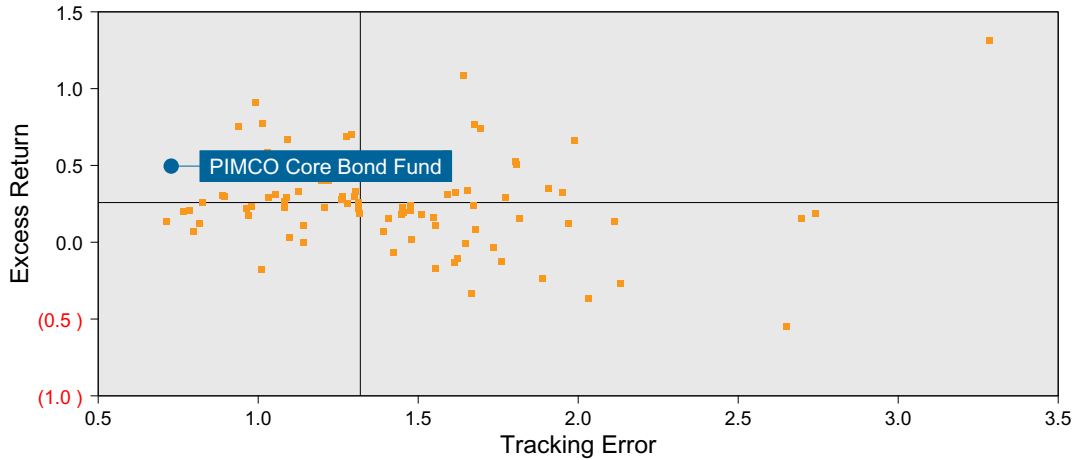


# PIMCO Core Bond Fund Risk Analysis Summary

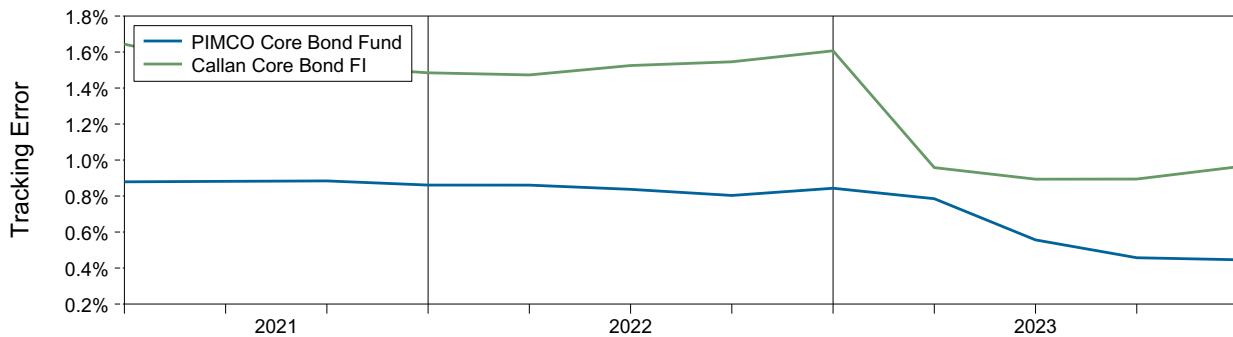
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

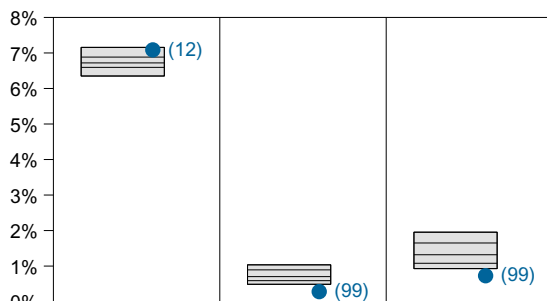
### Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended December 31, 2023



### Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate xTreasury



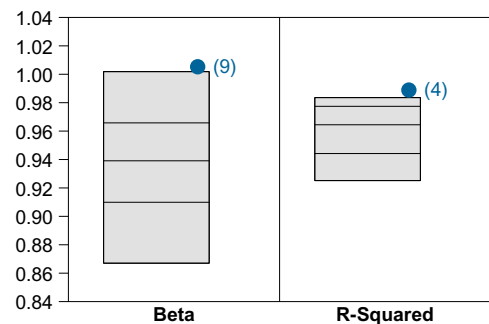
### Risk Statistics Rankings vs Bloomberg Aggregate xTreasury Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended December 31, 2023



	Standard Deviation	Downside Risk	Tracking Error
10th Percentile	7.16	1.04	1.95
25th Percentile	6.88	0.89	1.65
Median	6.72	0.70	1.32
75th Percentile	6.59	0.59	1.08
90th Percentile	6.35	0.49	0.93

**PIMCO Core Bond Fund** ●

7.09      0.28      0.73



	Beta	R-Squared
10th Percentile	1.00	0.98
25th Percentile	0.97	0.98
Median	0.94	0.96
75th Percentile	0.91	0.94
90th Percentile	0.87	0.93

**PIMCO Core Bond Fund** ●

1.01      0.99

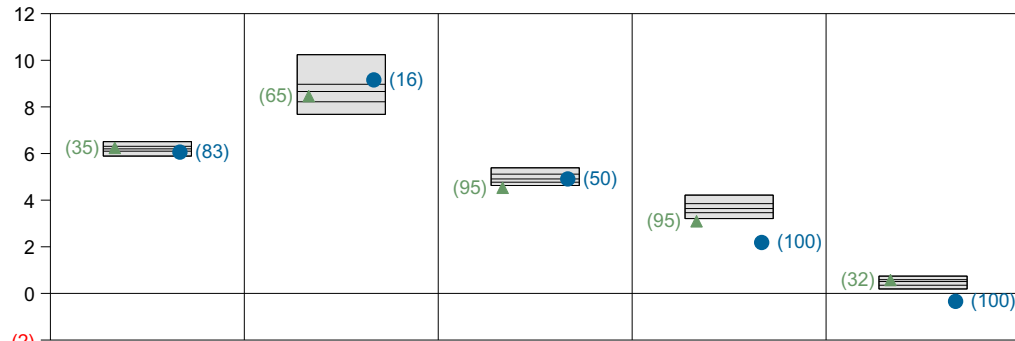
# PIMCO Core Bond Fund

## Bond Characteristics Analysis Summary

### Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

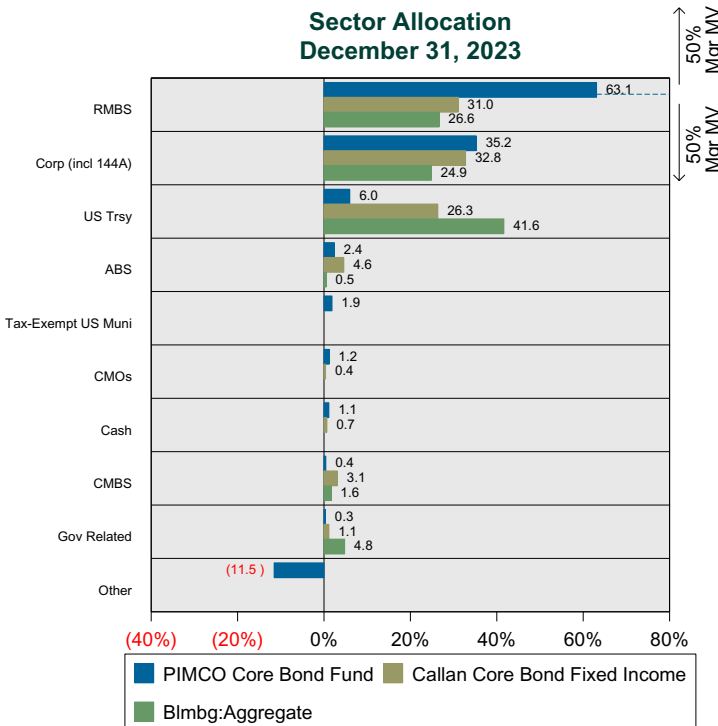
### Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income as of December 31, 2023



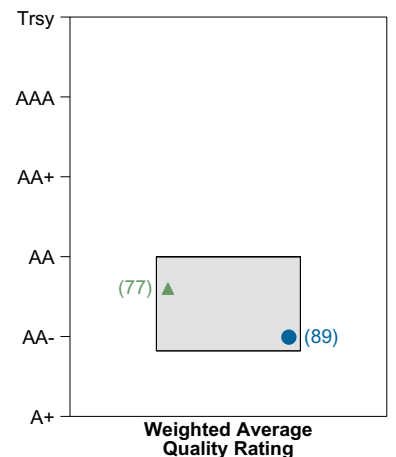
	Duration	Average Life	Effective Yield	Coupon Rate	OA Convexity
10th Percentile	6.51	10.24	5.39	4.22	0.74
25th Percentile	6.31	8.97	5.11	3.85	0.59
Median	6.20	8.66	4.91	3.64	0.51
75th Percentile	6.10	8.22	4.77	3.46	0.35
90th Percentile	5.89	7.68	4.63	3.21	0.19
<b>PIMCO Core Bond Fund</b>	6.06	9.16	4.91	2.18	(0.34)
<b>Blmbg:Aggregate</b>	6.24	8.46	4.53	3.09	0.57

### Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



#### Quality Ratings vs Callan Core Bond Fixed Income



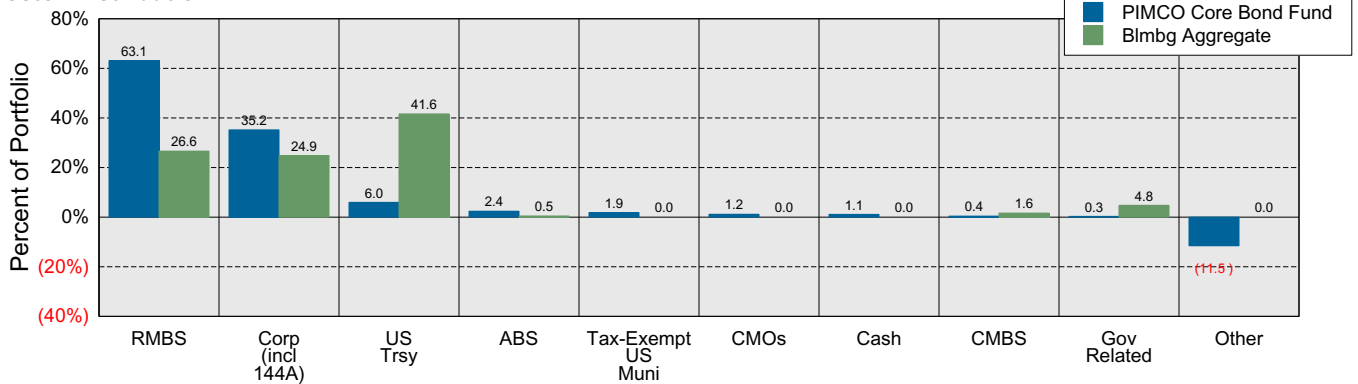
10th Percentile	AA
25th Percentile	AA
Median	AA
75th Percentile	AA
90th Percentile	AA-
<b>PIMCO Core Bond Fund</b>	AA-
<b>Blmbg:Aggregate</b>	AA

# PIMCO Core Bond Fund Portfolio Characteristics Summary As of December 31, 2023

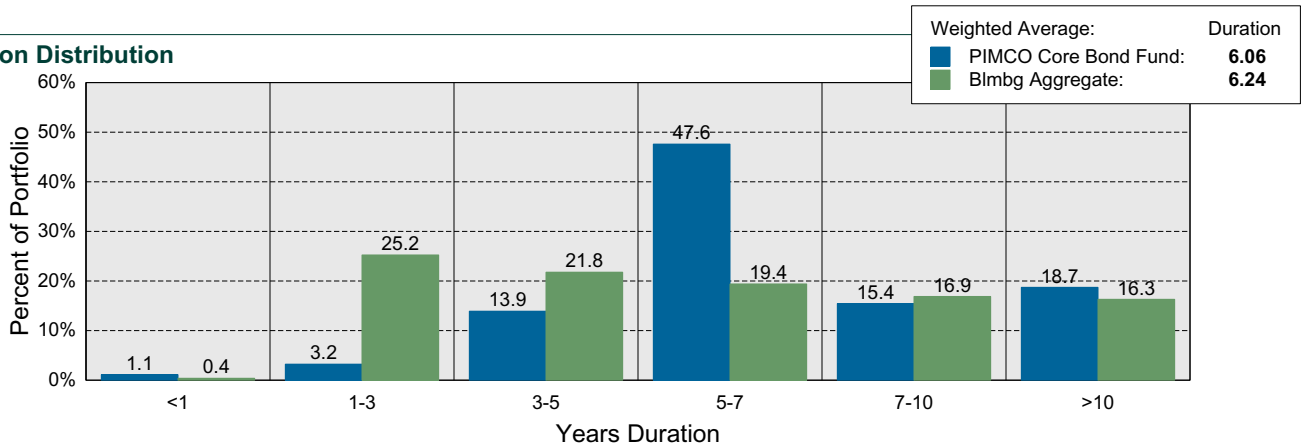
## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

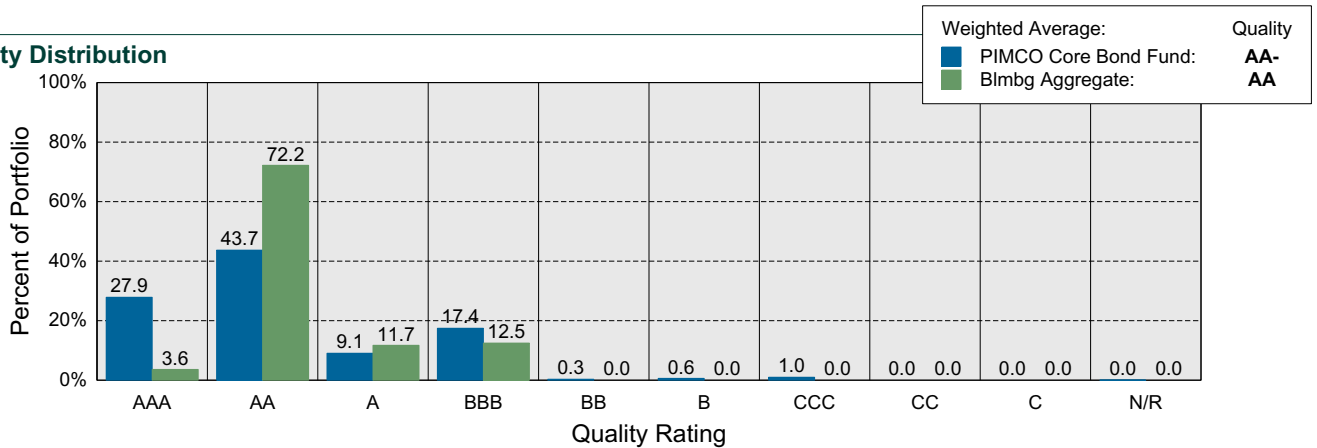
### Sector Distribution



### Duration Distribution



### Quality Distribution





# Blackstone Keystone

## Period Ended December 31, 2023

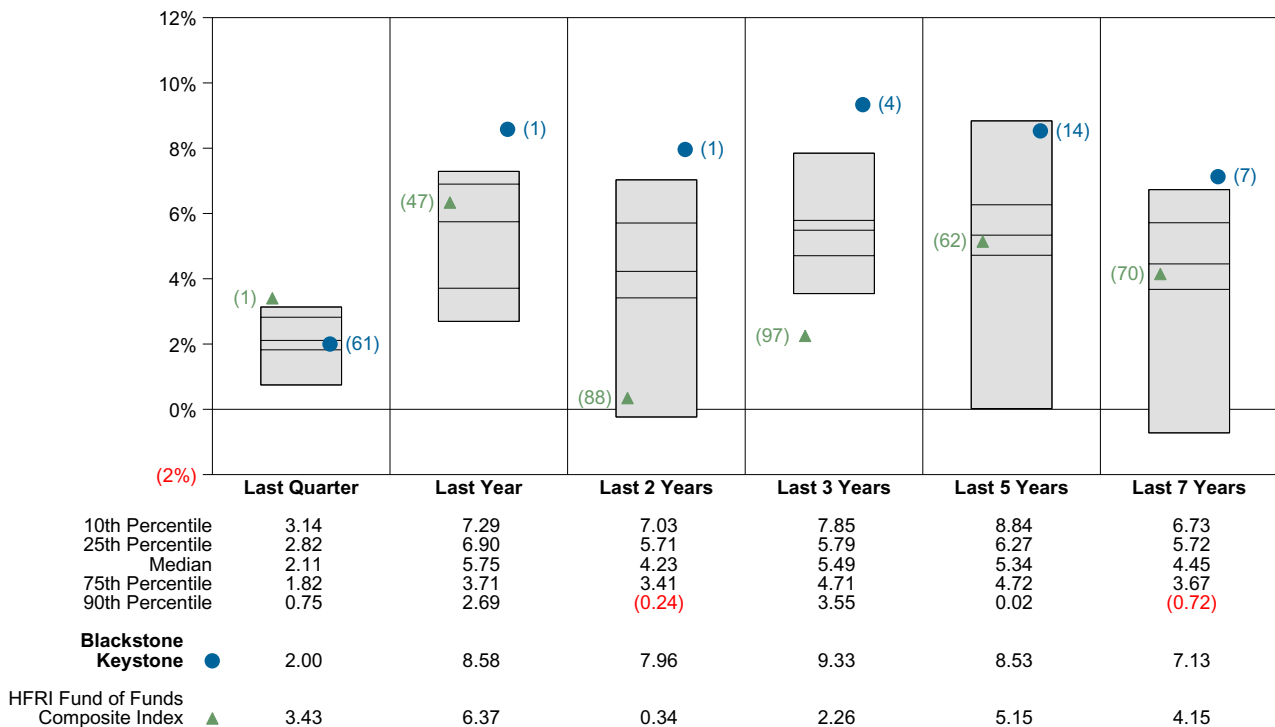
### Asset Class Membership Changes

Blackstone Keystone since inception returns were included in the Legacy Hedge Fund composite through 9/30/2017, included in the Multi-Strategy composite from 10/01/2017 through 12/31/2019, included in the Opportunistic Fixed composite from 01/01/2020 through 12/31/2020, included in the Private Credit from 01/01/2021 through 09/30/2021 and Opportunistic Fixed composite, thereafter.

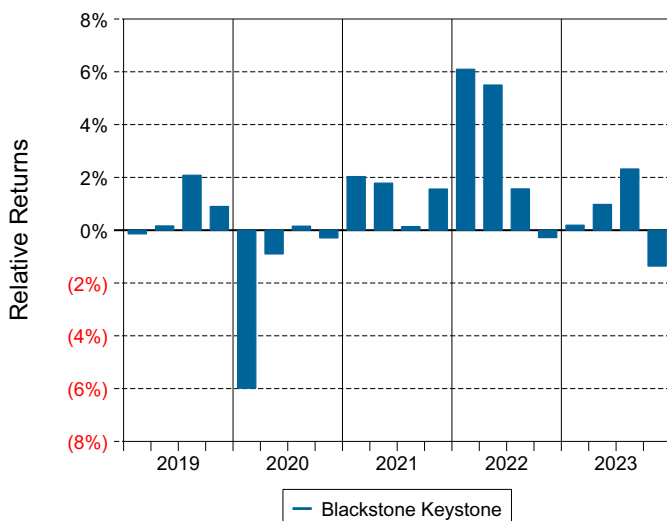
### Quarterly Summary and Highlights

- Blackstone Keystone's portfolio posted a 2.00% return for the quarter placing it in the 61 percentile of the Callan Absolute Rtn Hedge Fund of Funds group for the quarter and in the 1 percentile for the last year.
- Blackstone Keystone's portfolio underperformed the HFRI Fund of Funds Composite Index by 1.41% for the quarter and outperformed the HFRI Fund of Funds Composite Index for the year by 2.24%.

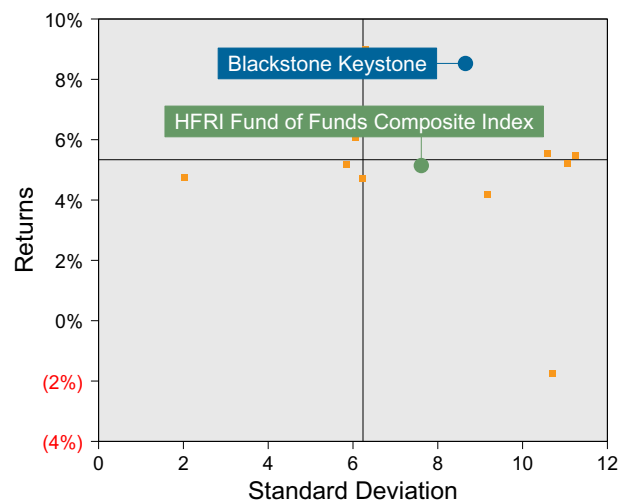
### Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)



### Relative Returns vs HFRI Fund of Funds Composite Index



### Callan Absolute Rtn Hedge Fund of Funds (Net) Annualized Five Year Risk vs Return

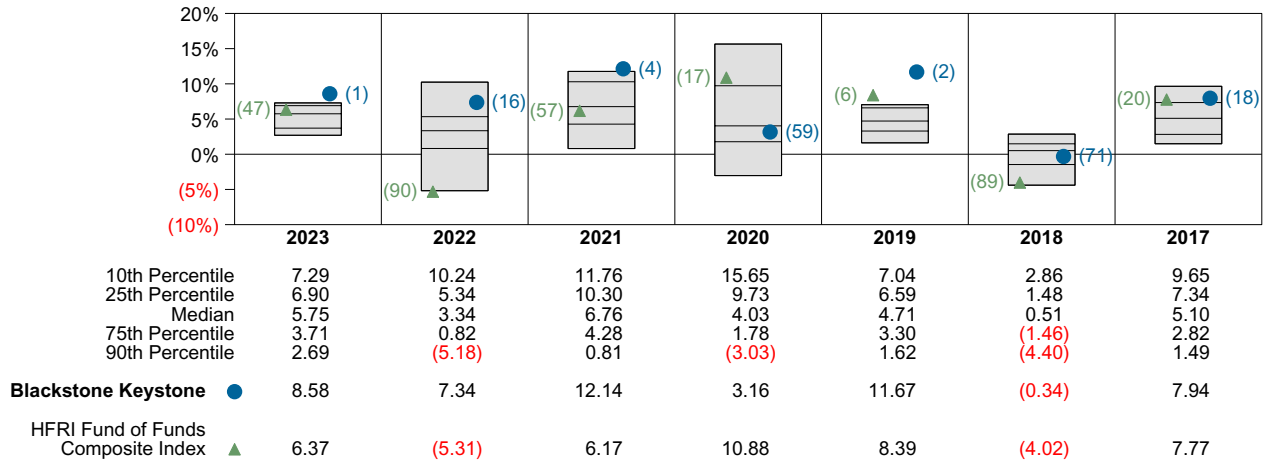


# Blackstone Keystone Return Analysis Summary

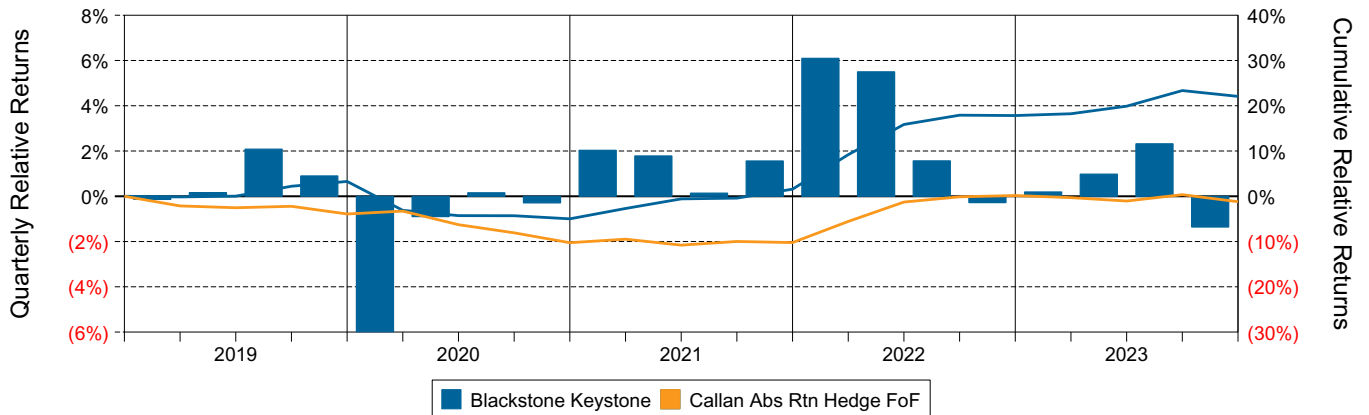
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

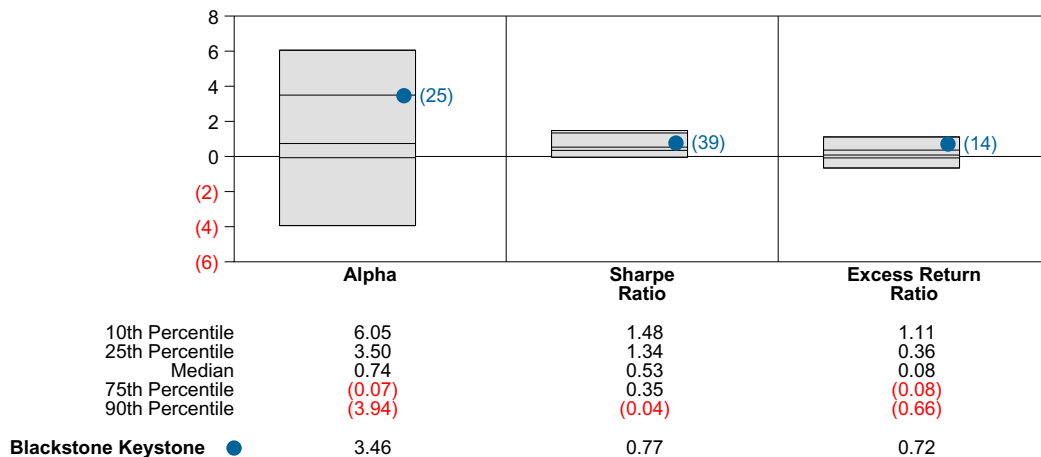
### Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)



### Cumulative and Quarterly Relative Returns vs HFRI Fund of Funds Composite Index



### Risk Adjusted Return Measures vs HFRI Fund of Funds Composite Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended December 31, 2023

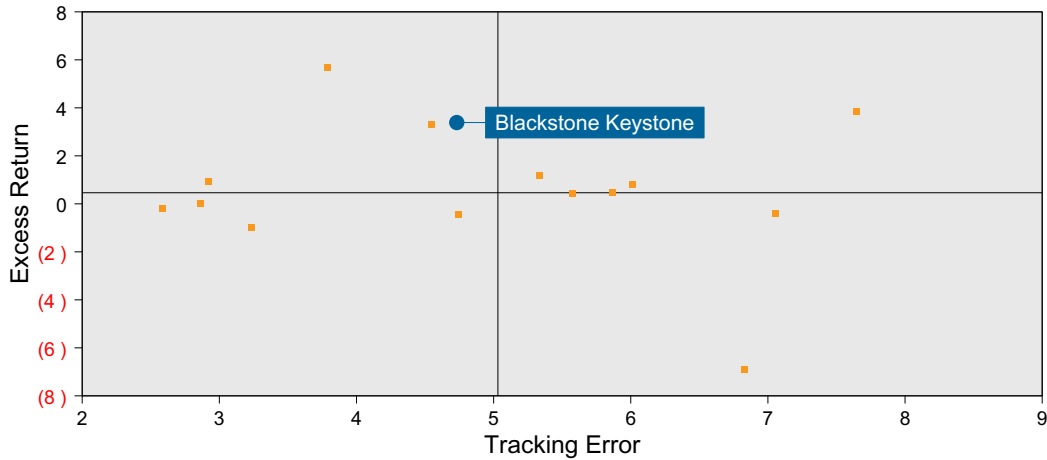


# Blackstone Keystone Risk Analysis Summary

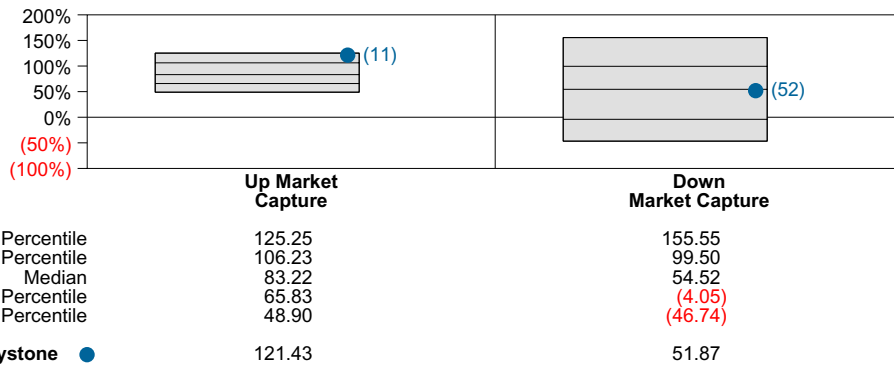
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

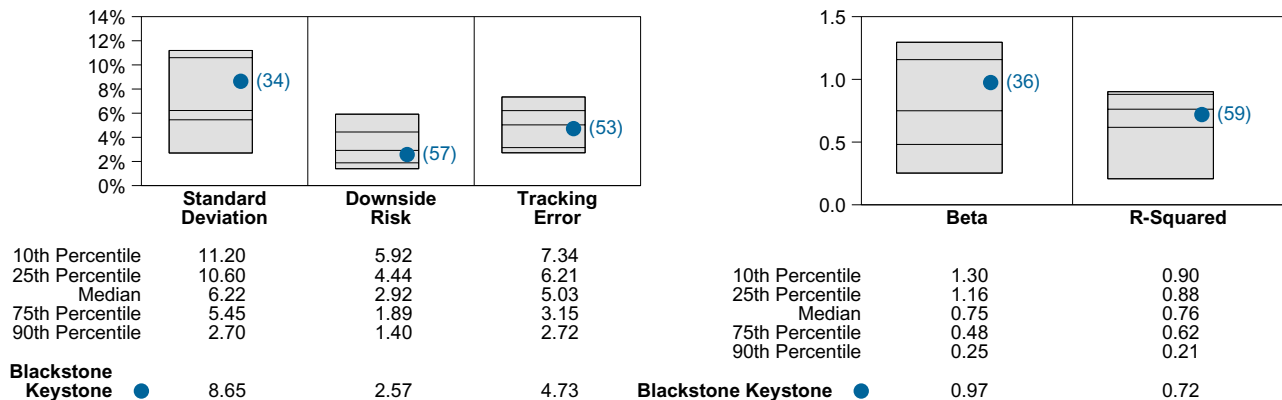
### Risk Analysis vs Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended December 31, 2023



### Market Capture vs HFRI Fund of Funds Composite Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended December 31, 2023



### Risk Statistics Rankings vs HFRI Fund of Funds Composite Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended December 31, 2023







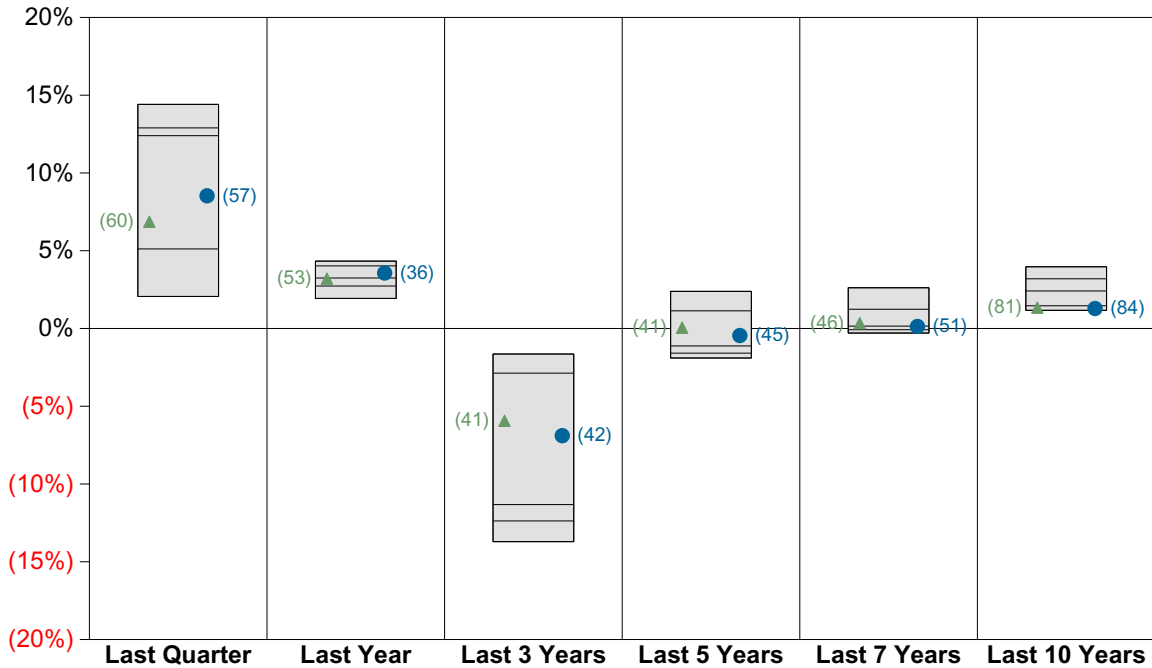
# Nominal U.S. Treasuries

## Period Ended December 31, 2023

### Quarterly Summary and Highlights

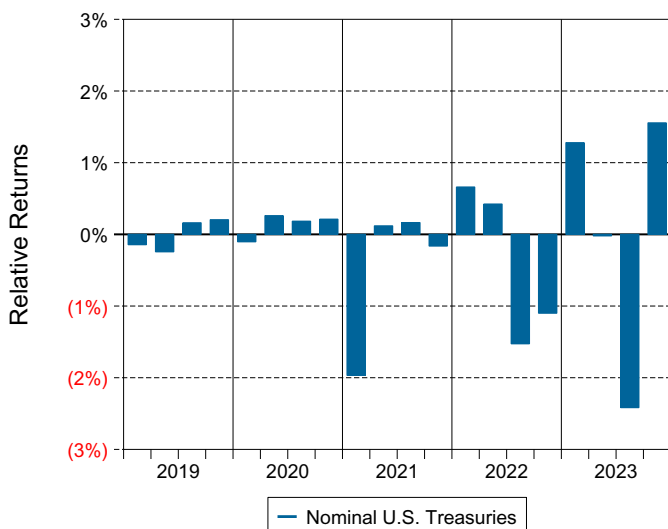
- Nominal U.S. Treasuries's portfolio posted a 8.53% return for the quarter placing it in the 57 percentile of the Callan US Treas Bond Funds group for the quarter and in the 36 percentile for the last year.
- Nominal U.S. Treasuries's portfolio outperformed the Blmbg Treas Bellwethr 10Y by 1.66% for the quarter and outperformed the Blmbg Treas Bellwethr 10Y for the year by 0.36%.

### Performance vs Callan US Treas Bond Funds (Gross)

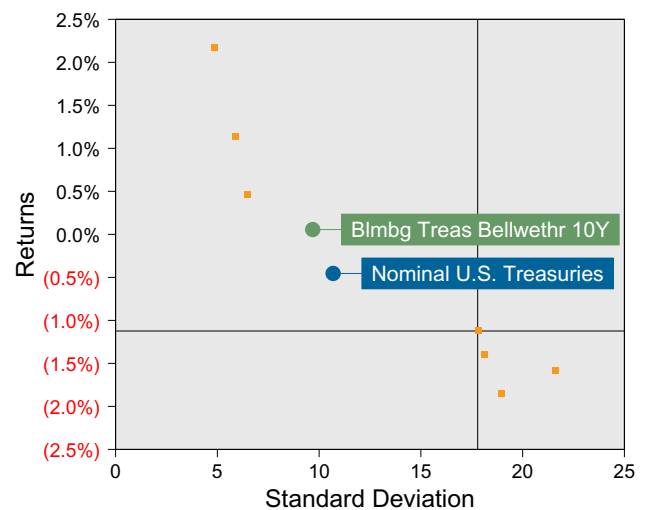


10th Percentile	14.41	4.33	(1.64)	2.39	2.62	3.97
25th Percentile	12.90	4.02	(2.87)	1.13	1.24	3.20
Median	12.40	3.25	(11.32)	(1.12)	0.15	2.41
75th Percentile	5.12	2.73	(12.37)	(1.59)	(0.08)	1.46
90th Percentile	2.06	1.93	(13.71)	(1.90)	(0.30)	1.17
<b>Nominal U.S. Treasuries</b> ●	8.53	3.57	(6.89)	(0.45)	0.13	1.28
Blmbg Treas Bellwethr 10Y ▲	6.87	3.21	(5.93)	0.06	0.34	1.34

### Relative Return vs Blmbg Treas Bellwethr 10Y



### Callan US Treas Bond Funds (Gross) Annualized Five Year Risk vs Return

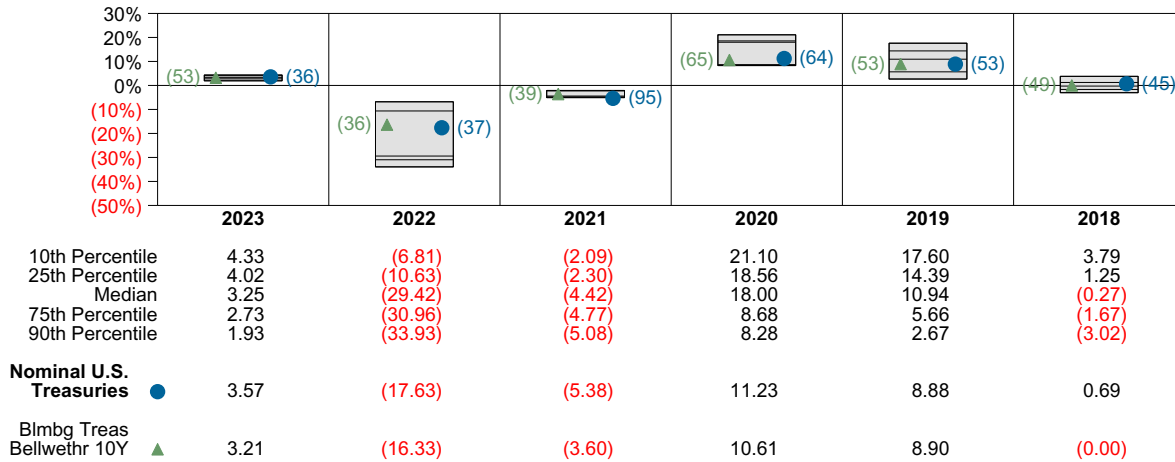


# Nominal U.S. Treasuries Return Analysis Summary

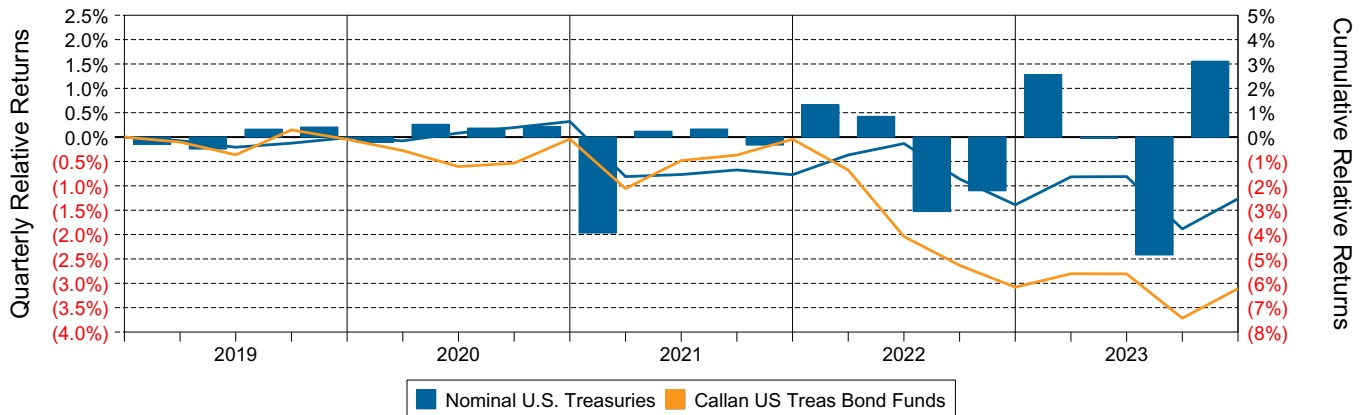
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

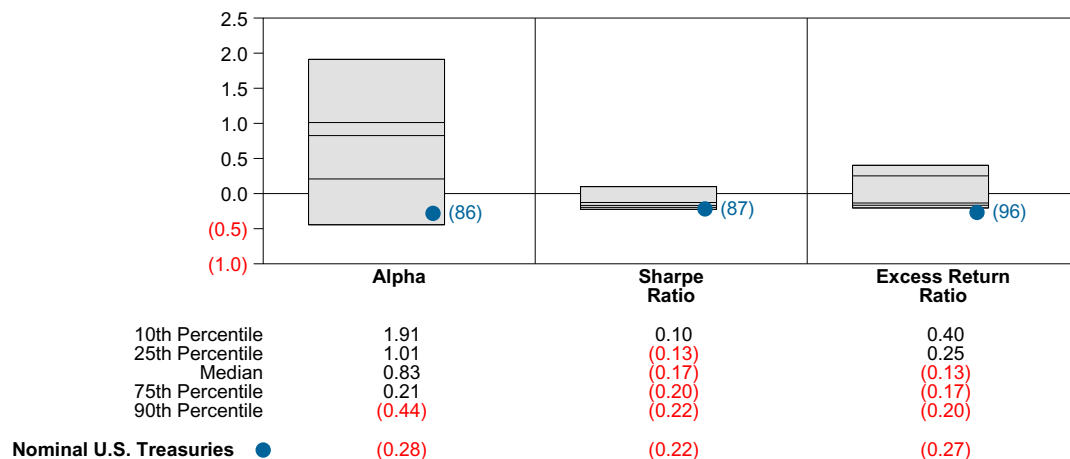
### Performance vs Callan US Treas Bond Funds (Gross)



### Cumulative and Quarterly Relative Returns vs Blmbg Treas Bellwthr 10Y



### Risk Adjusted Return Measures vs Blmbg Treas Bellwthr 10Y Rankings Against Callan US Treas Bond Funds (Gross) Five Years Ended December 31, 2023

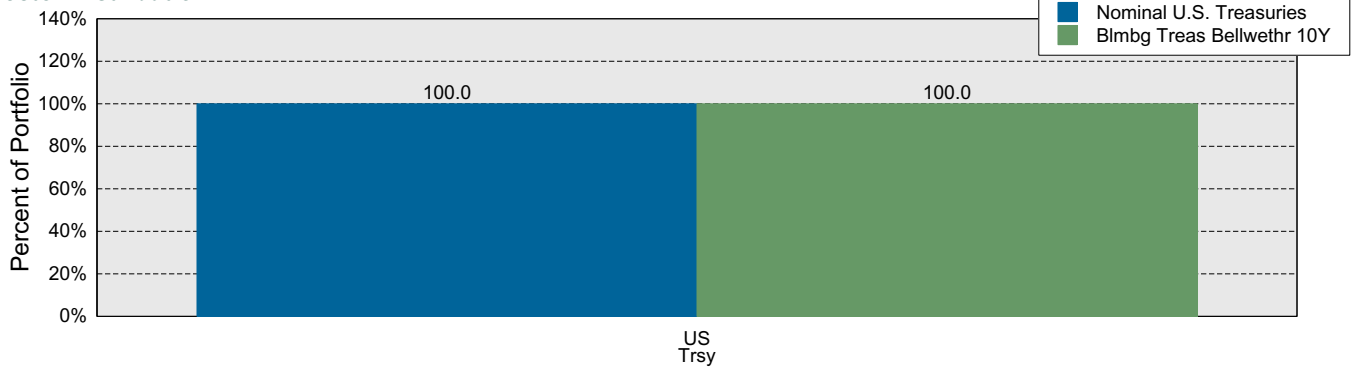


# Nominal U.S. Treasuries Portfolio Characteristics Summary As of December 31, 2023

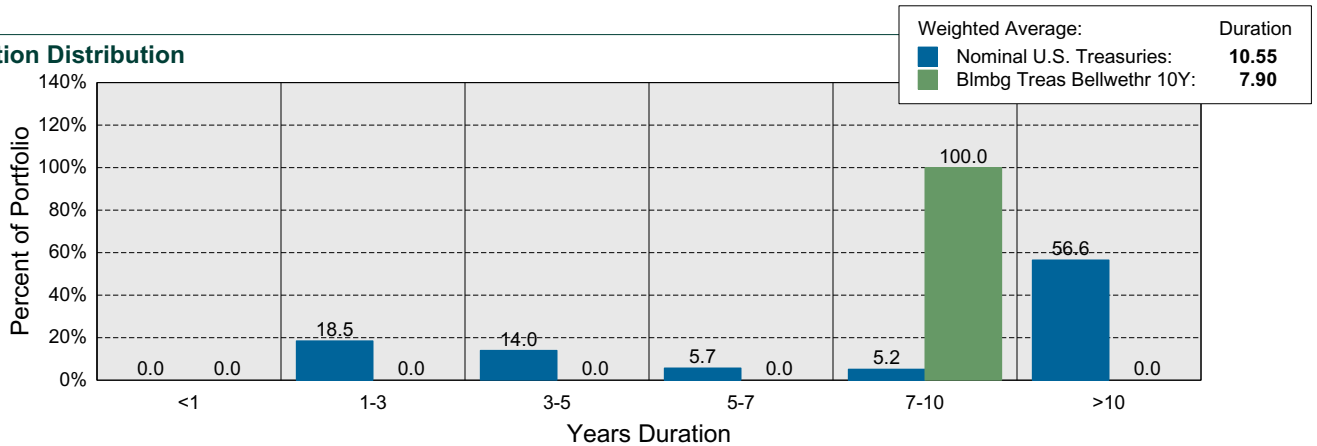
## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

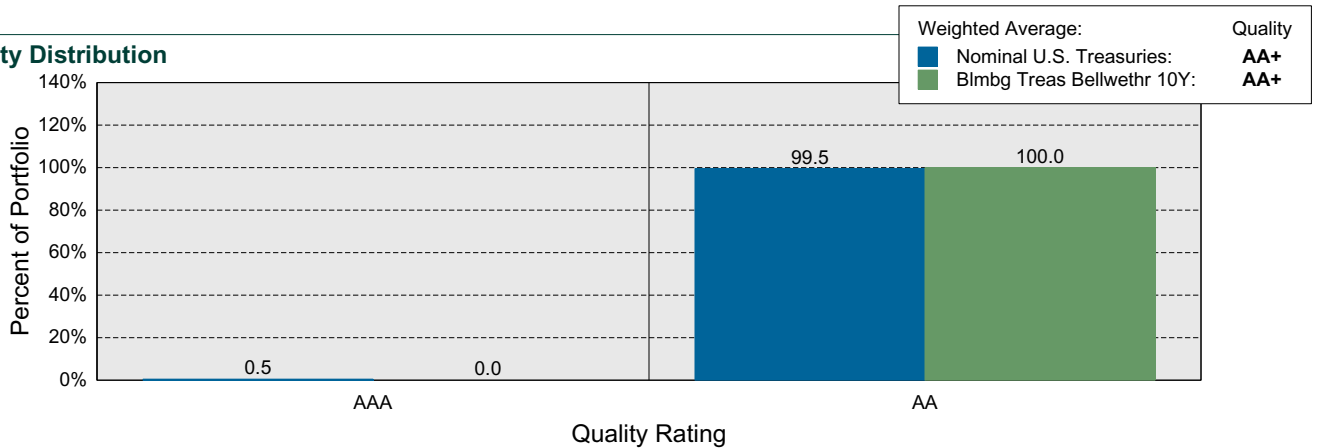
### Sector Distribution



### Duration Distribution



### Quality Distribution





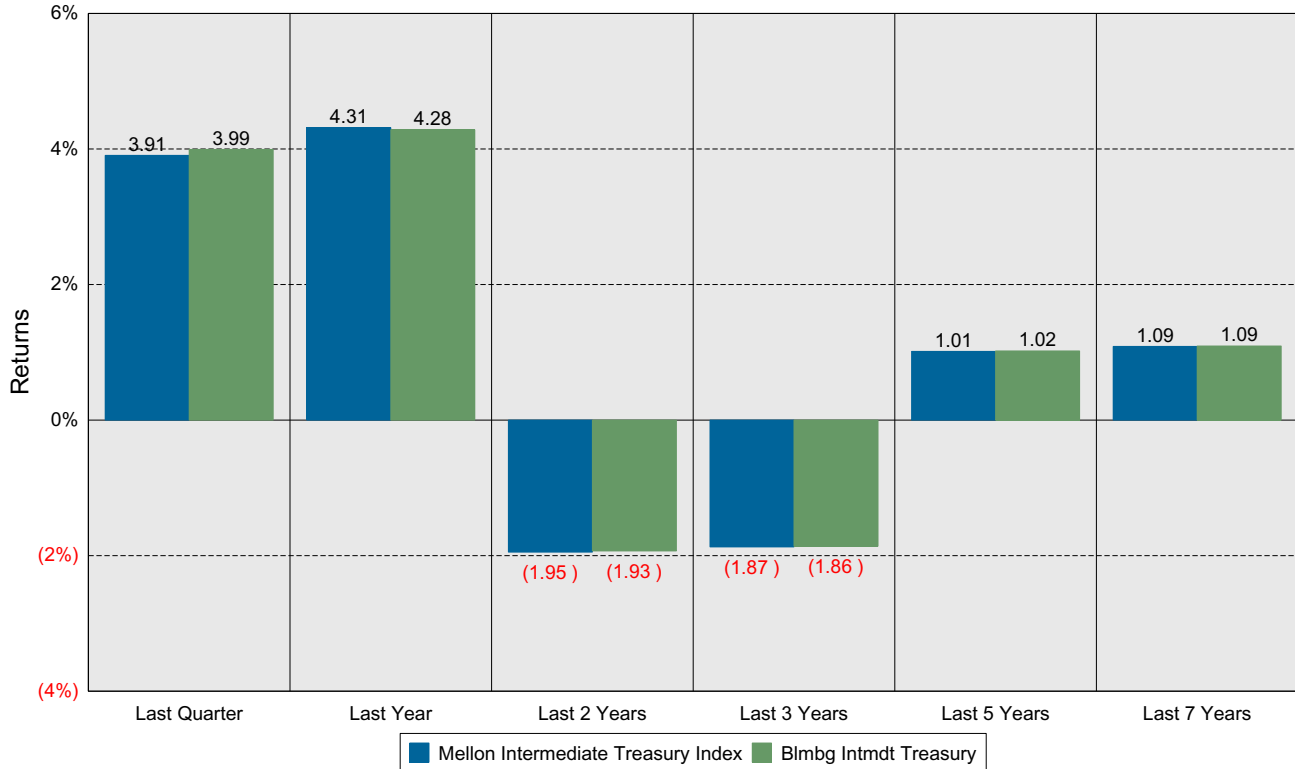
# Mellon Intermediate Treasury Index Period Ended December 31, 2023

## Return History

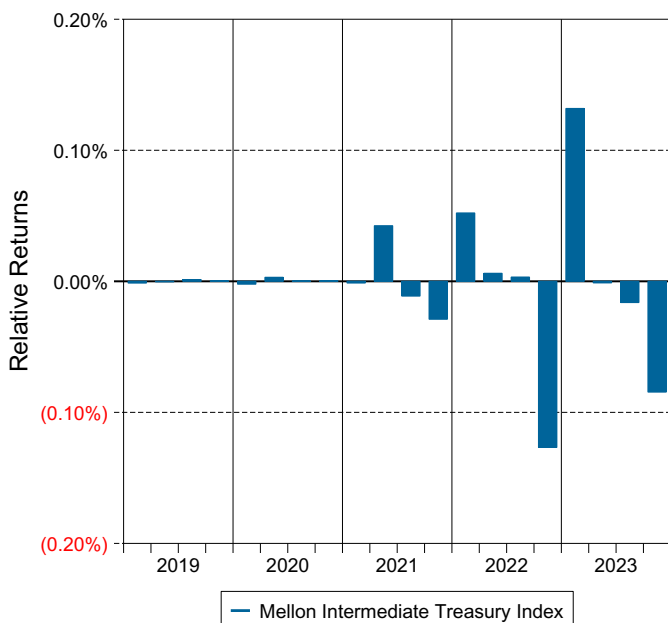
The Mellon Intermediate Treasury Index account was funded in March of 2021. Previous history reflects the manager's composite returns.

## Quarterly Summary and Highlights

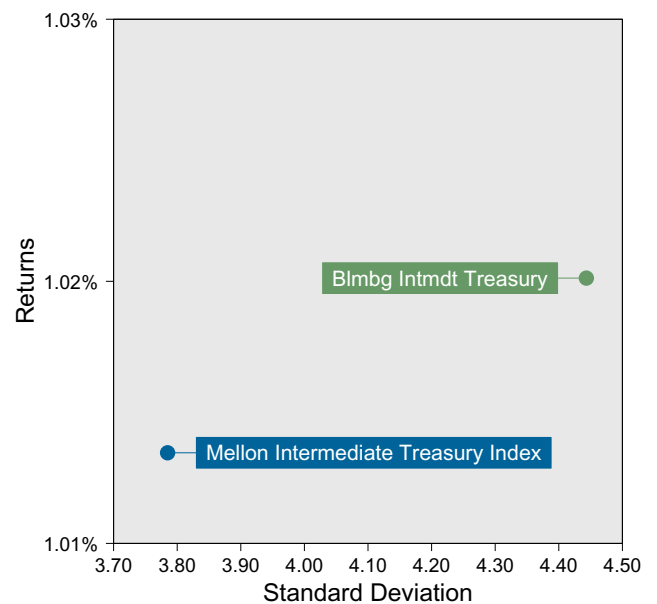
- Mellon Intermediate Treasury Index's portfolio underperformed the Blmbg Intmtd Treasury by 0.09% for the quarter and outperformed the Blmbg Intmtd Treasury for the year by 0.03%.



Relative Return vs Blmbg Intmtd Treasury



Annualized Five Year Risk vs Return

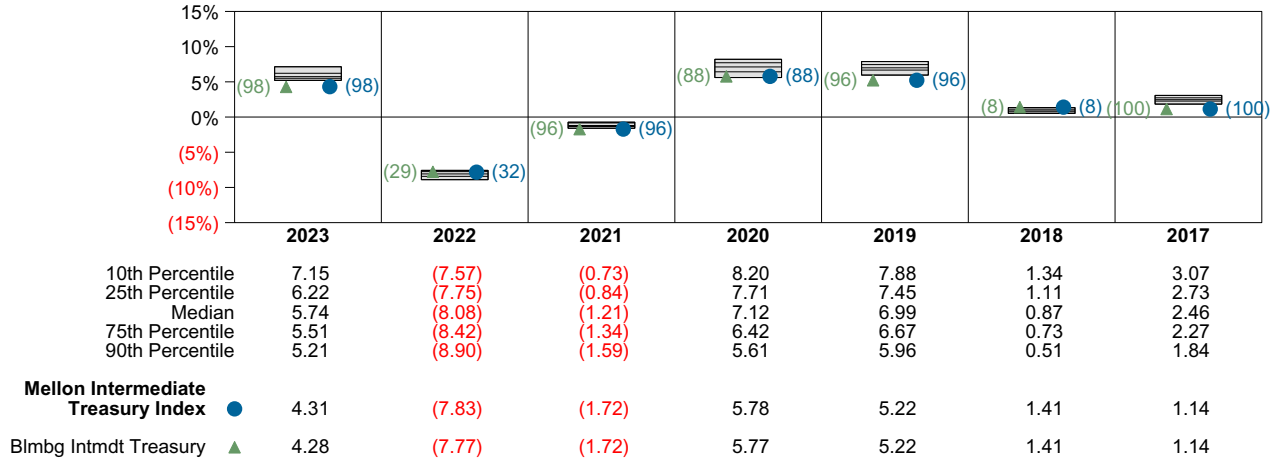


# Mellon Intermediate Treasury Index Return Analysis Summary

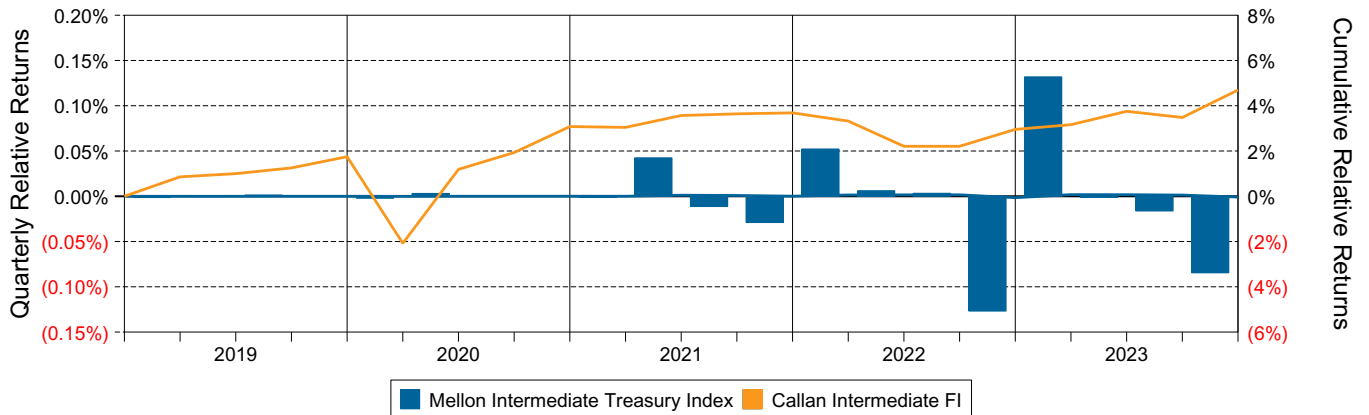
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

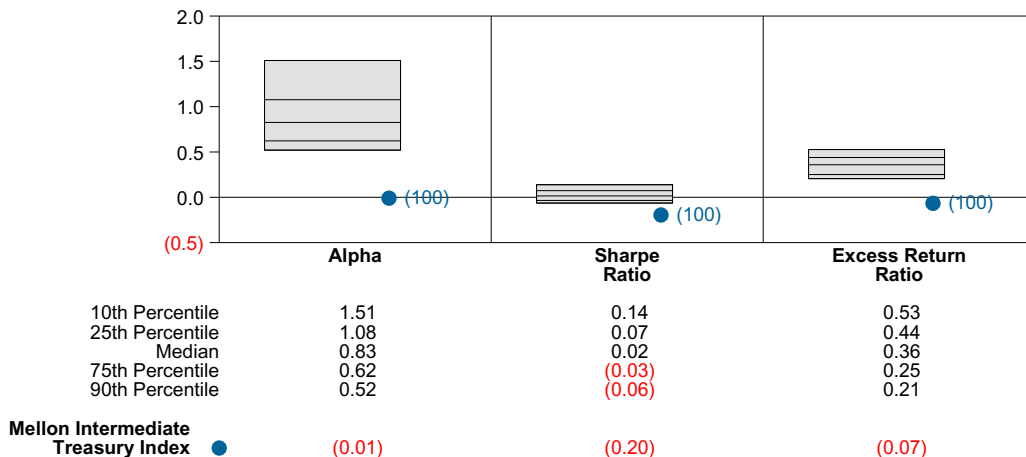
### Performance vs Callan Intermediate Fixed Income (Gross)



### Cumulative and Quarterly Relative Returns vs Blmbg Intmtd Treasury



### Risk Adjusted Return Measures vs Blmbg Intmtd Treasury Rankings Against Callan Intermediate Fixed Income (Gross) Five Years Ended December 31, 2023

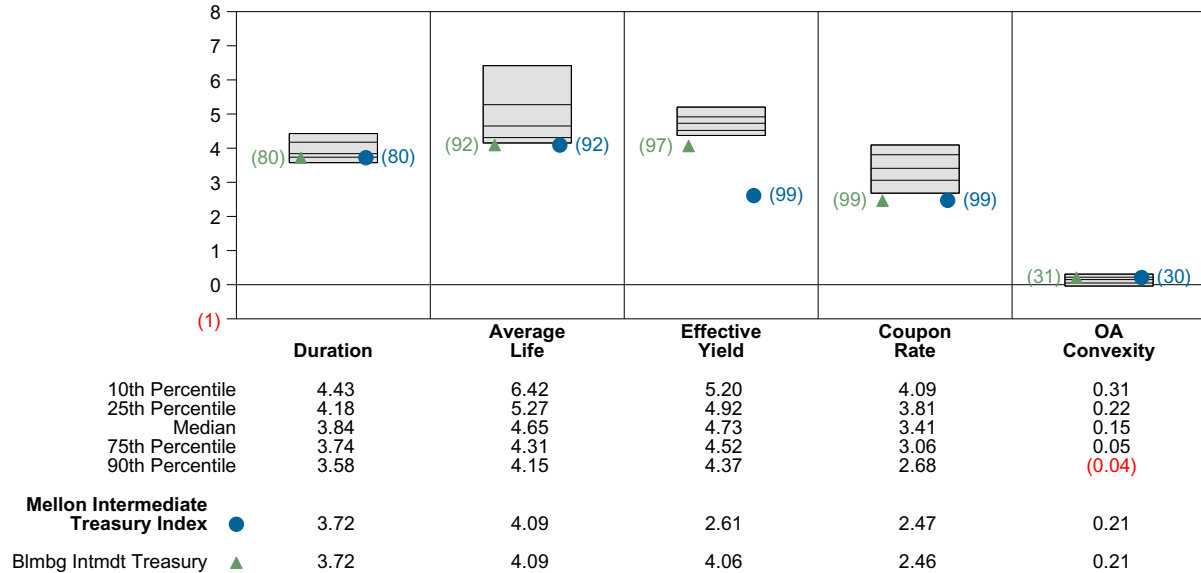


# Mellon Intermediate Treasury Index Bond Characteristics Analysis Summary

## Portfolio Characteristics

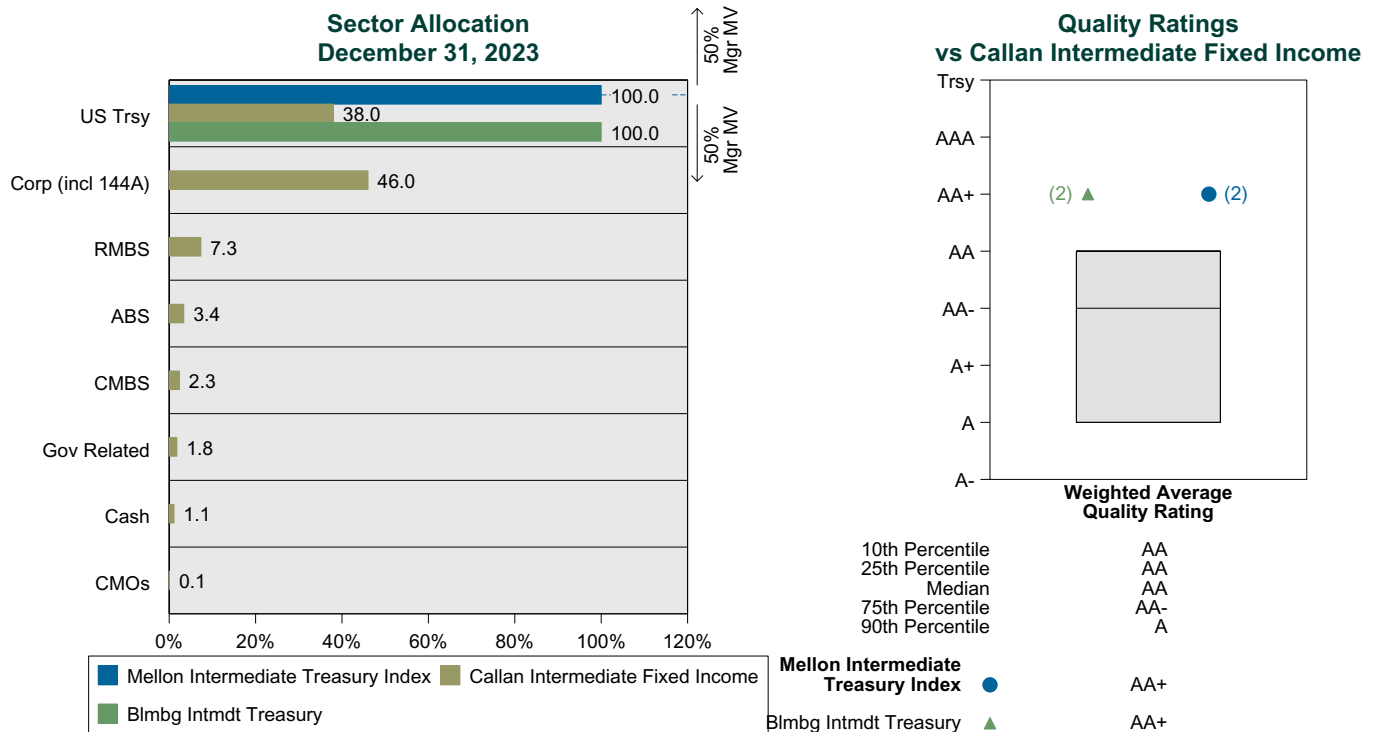
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Callan Intermediate Fixed Income as of December 31, 2023



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

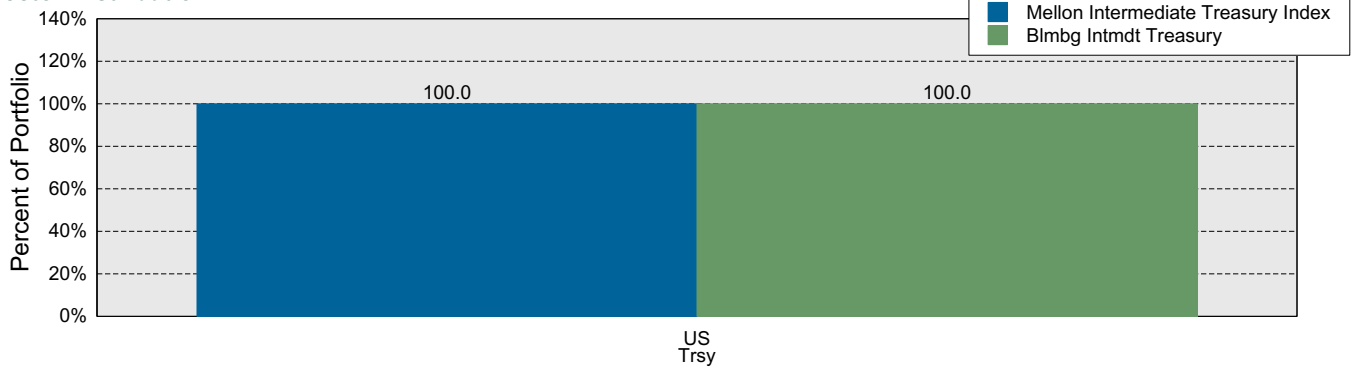


# Mellon Intermediate Treasury Index Portfolio Characteristics Summary As of December 31, 2023

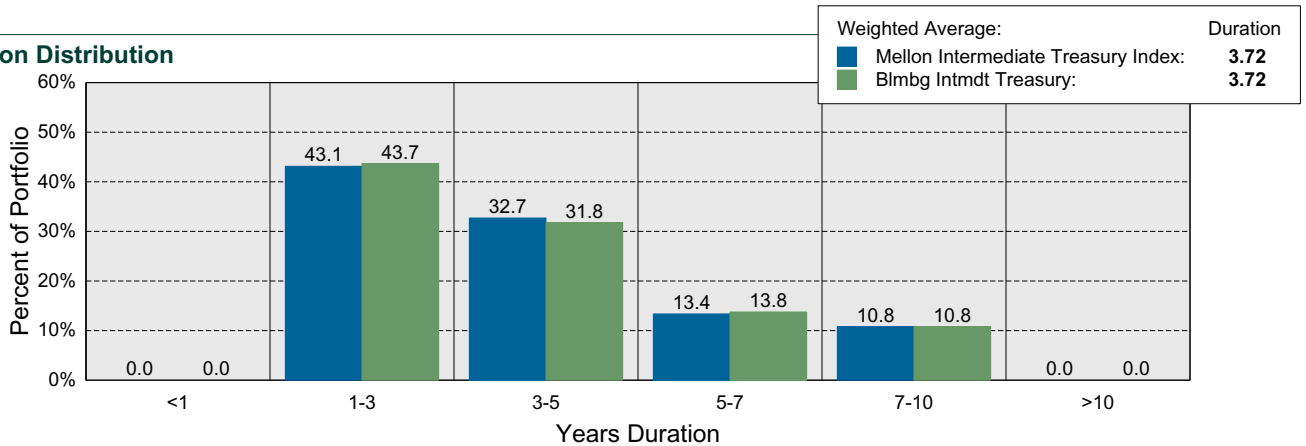
## Portfolio Structure Comparison

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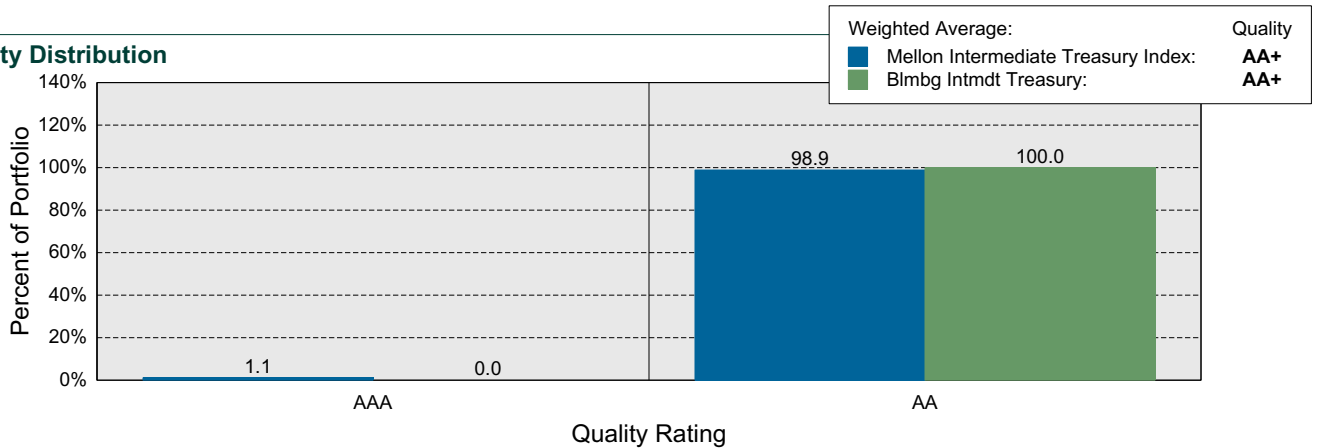
### Sector Distribution



### Duration Distribution



### Quality Distribution





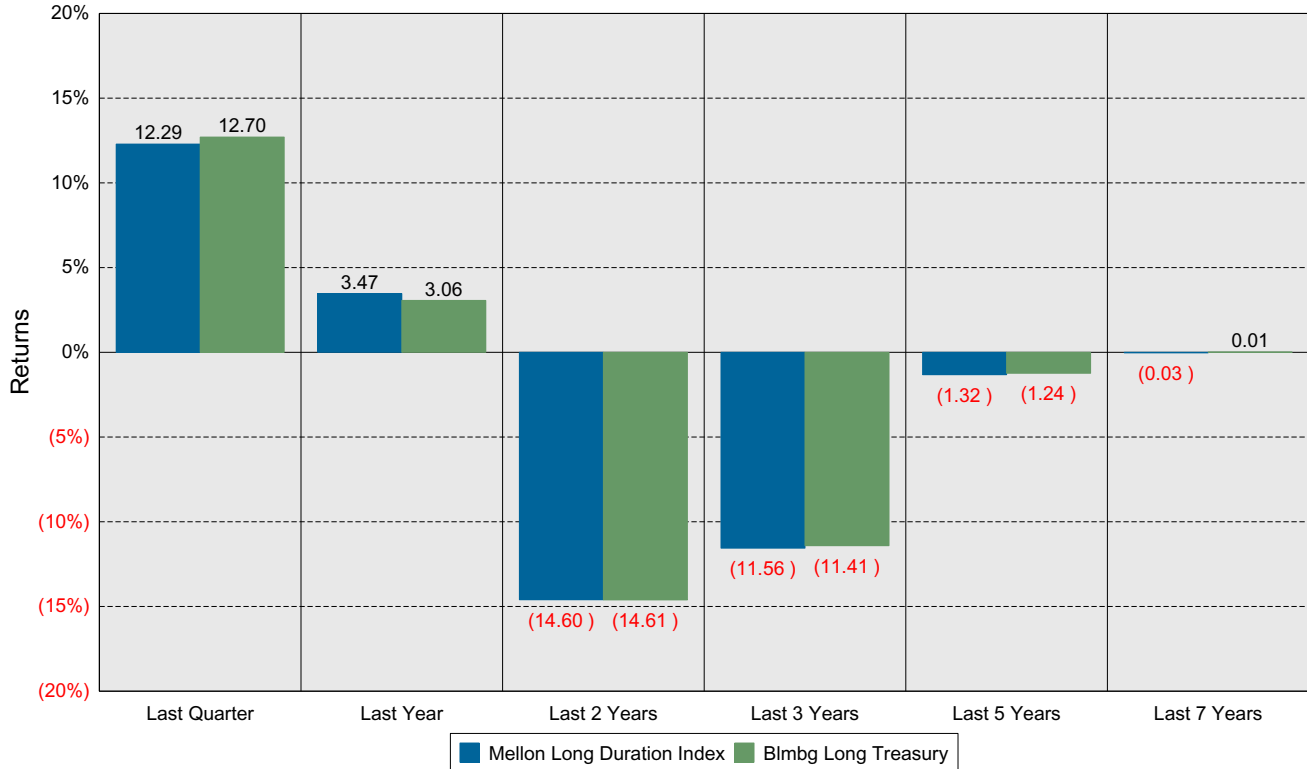
# Mellon Long Duration Index Period Ended December 31, 2023

## Return History

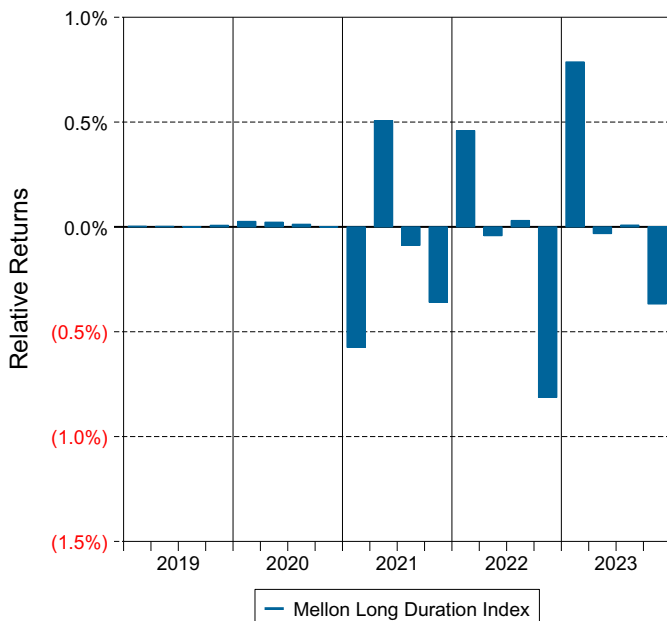
The Mellon Long Duration Index account was funded in March of 2021. Previous history reflects the manager's composite returns.

## Quarterly Summary and Highlights

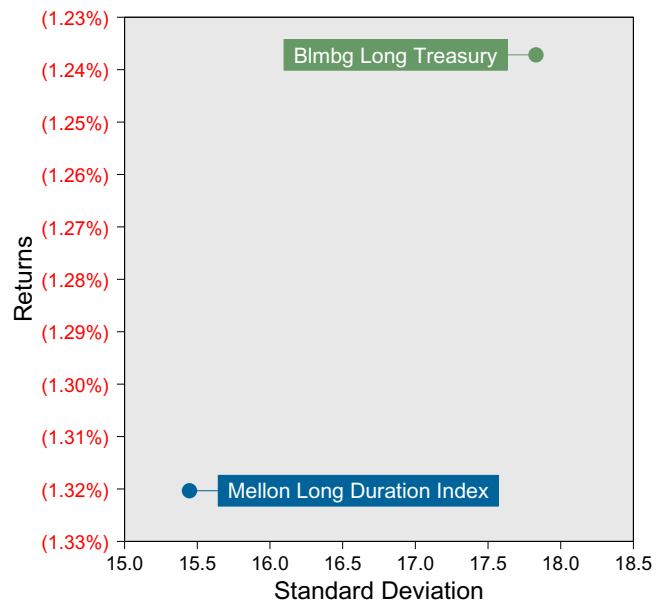
- Mellon Long Duration Index's portfolio underperformed the Blmbg Long Treasury by 0.41% for the quarter and outperformed the Blmbg Long Treasury for the year by 0.41%.



Relative Return vs Blmbg Long Treasury



Annualized Five Year Risk vs Return

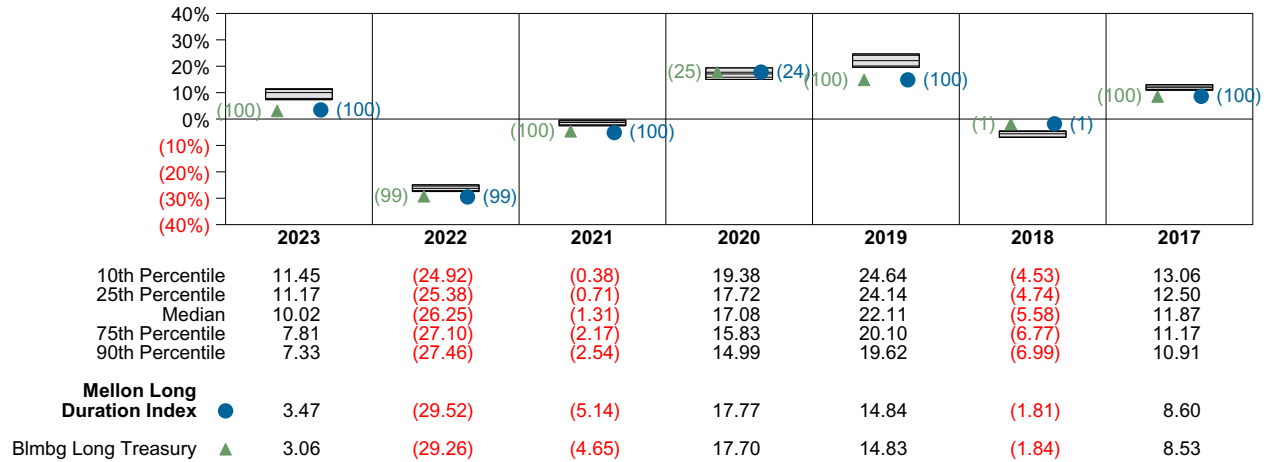


# Mellon Long Duration Index Return Analysis Summary

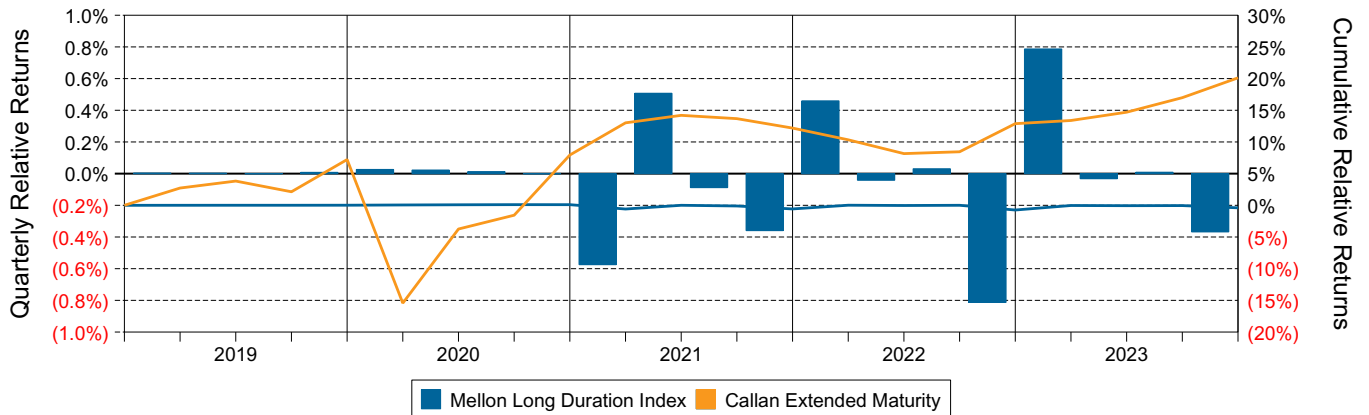
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

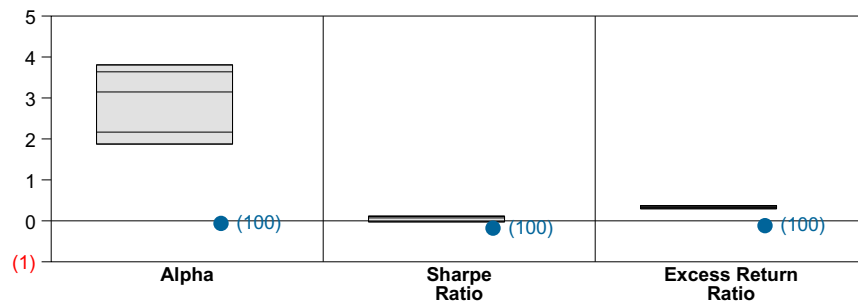
### Performance vs Callan Extended Maturity Fixed Income (Gross)



### Cumulative and Quarterly Relative Returns vs Blmbg Long Treasury



### Risk Adjusted Return Measures vs Blmbg Long Treasury Rankings Against Callan Extended Maturity Fixed Income (Gross) Five Years Ended December 31, 2023



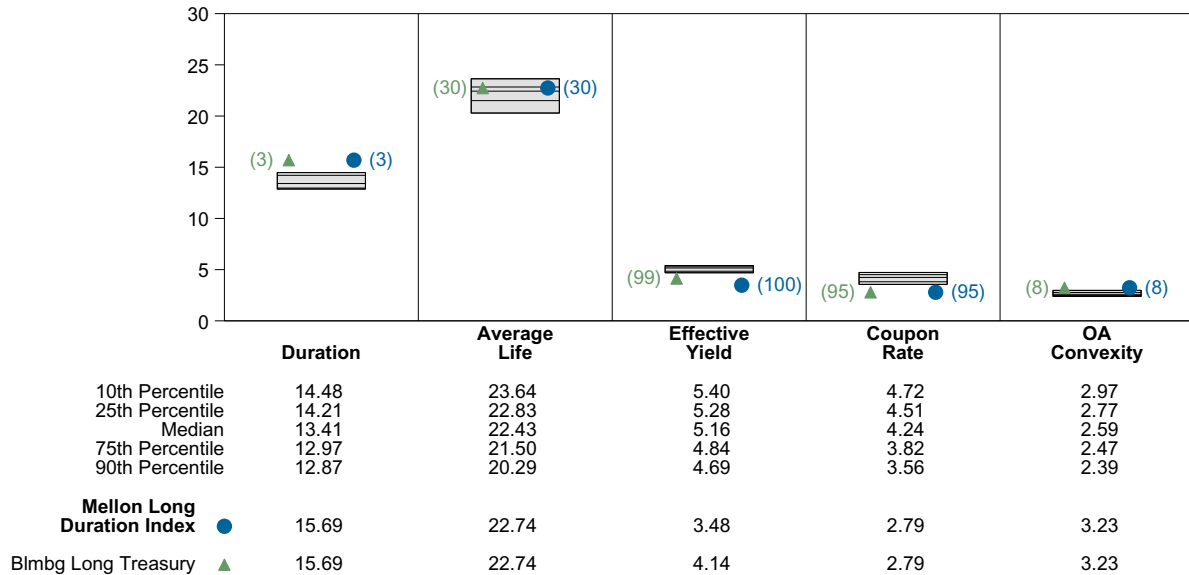
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	3.81	0.11	0.37
25th Percentile	3.64	0.11	0.36
Median	3.15	0.07	0.34
75th Percentile	2.17	(0.00)	0.32
90th Percentile	1.87	(0.03)	0.29
<b>Mellon Long Duration Index</b>	<b>(0.06)</b>	<b>(0.18)</b>	<b>(0.12)</b>

# Mellon Long Duration Index Bond Characteristics Analysis Summary

## Portfolio Characteristics

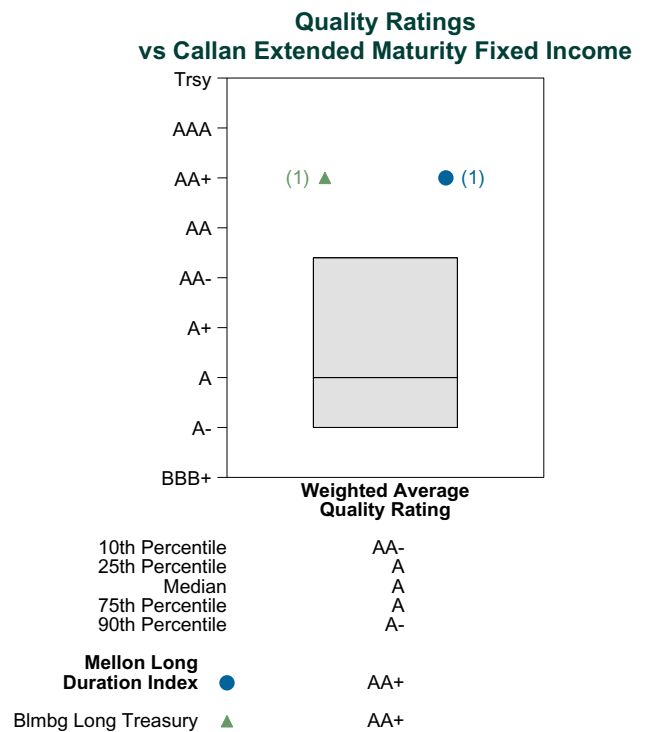
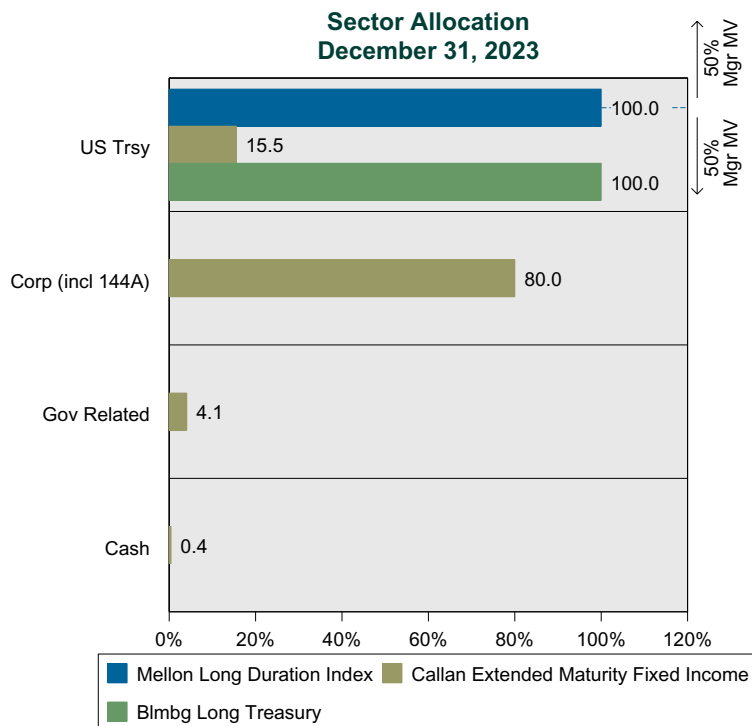
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Callan Extended Maturity Fixed Income as of December 31, 2023



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

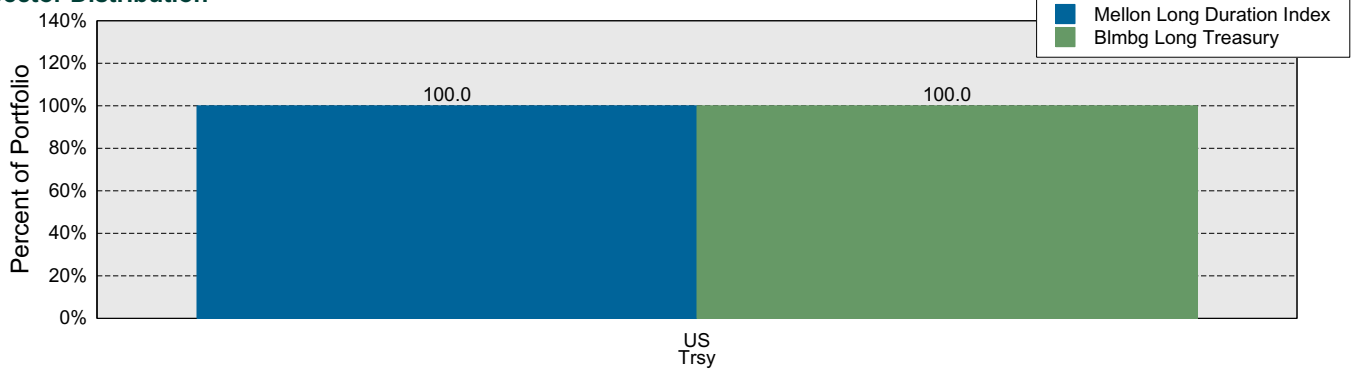


# Mellon Long Duration Index Portfolio Characteristics Summary As of December 31, 2023

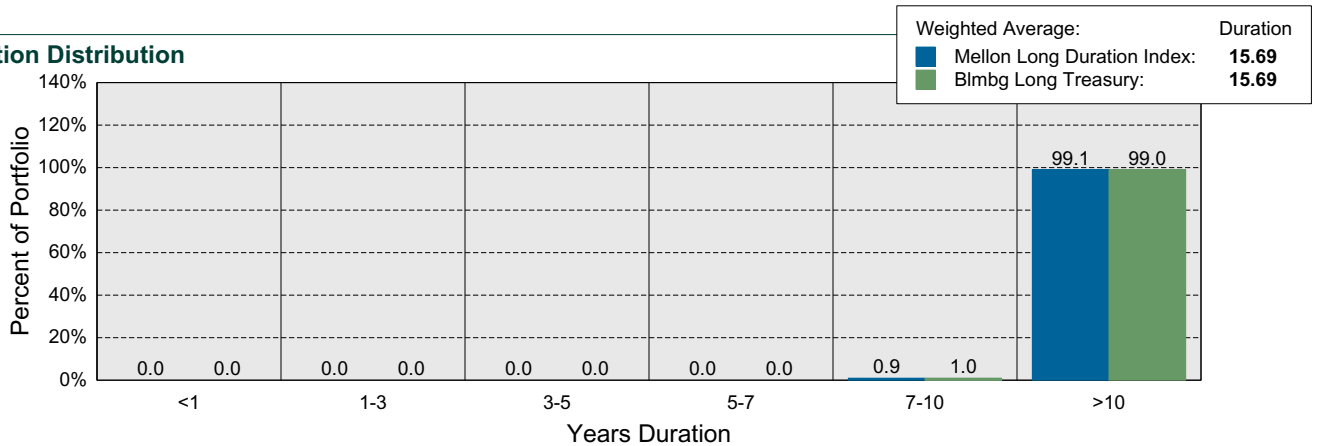
## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

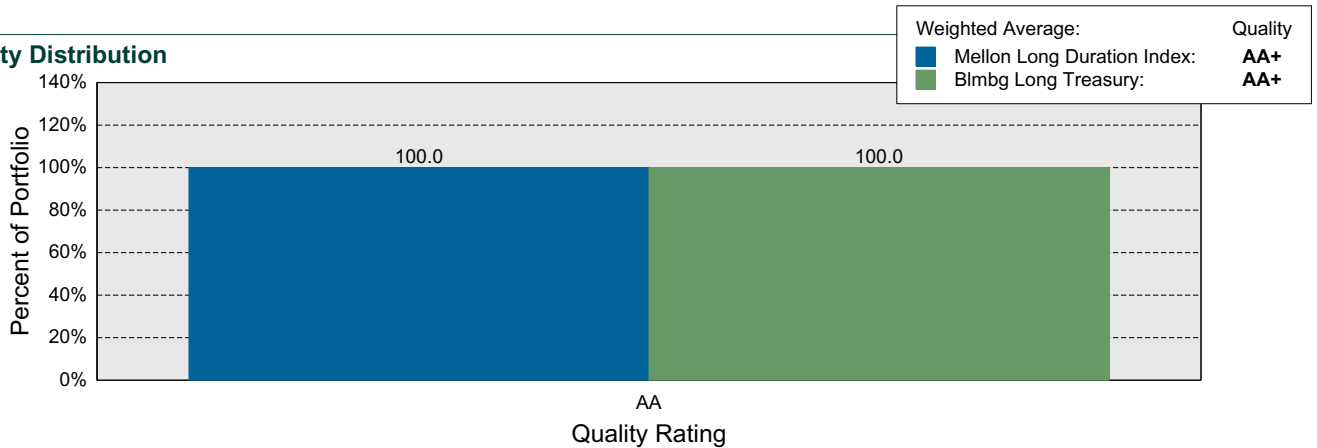
### Sector Distribution



### Duration Distribution



### Quality Distribution





# Fidelity HY CMBS

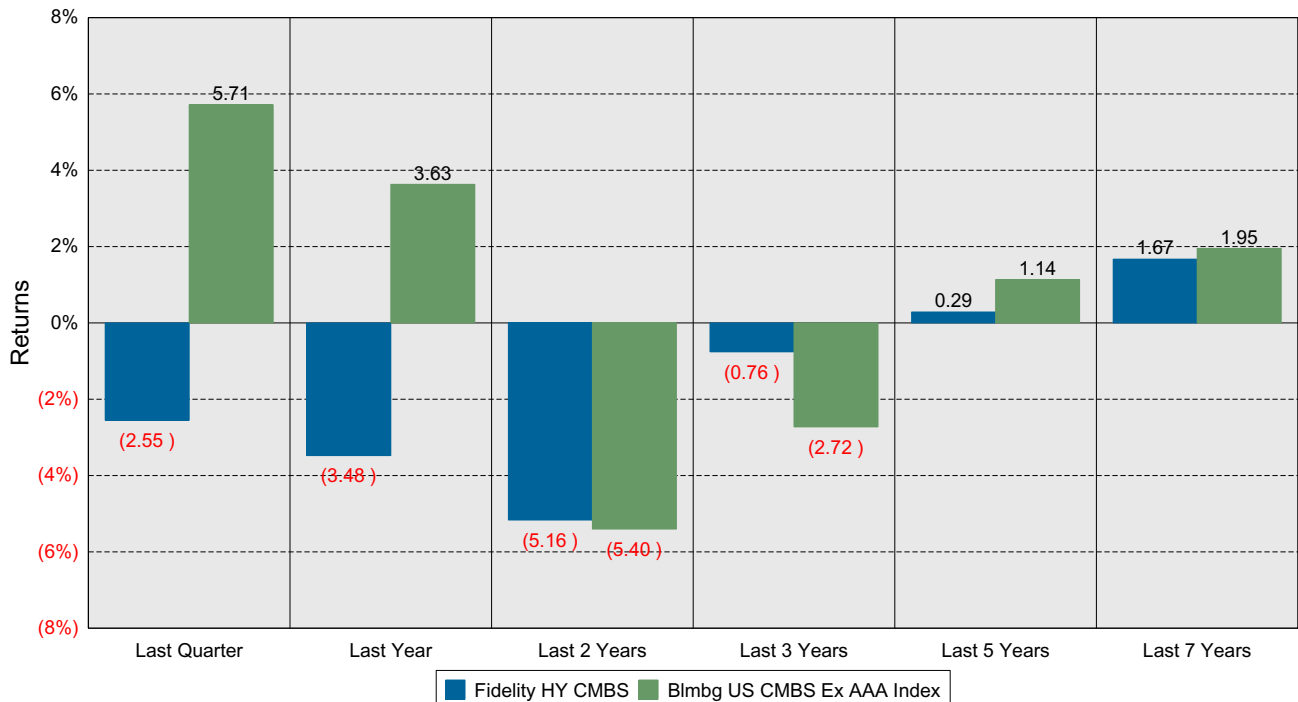
## Period Ended December 31, 2023

### Asset Class Membership Changes

Fidelity was included in the Opportunistic Fixed composite prior to 03/01/2021, included in the High Yield under the new fixed income structure from 03/01/2021 through 06/30/2022, and Legacy Fixed Income Structure, thereafter.

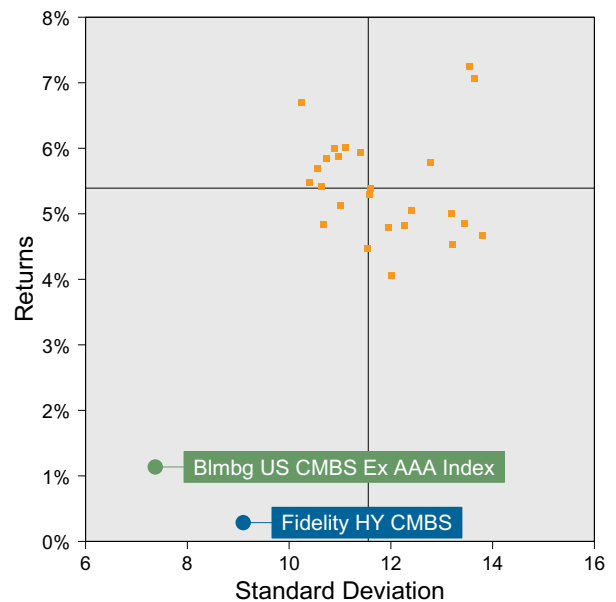
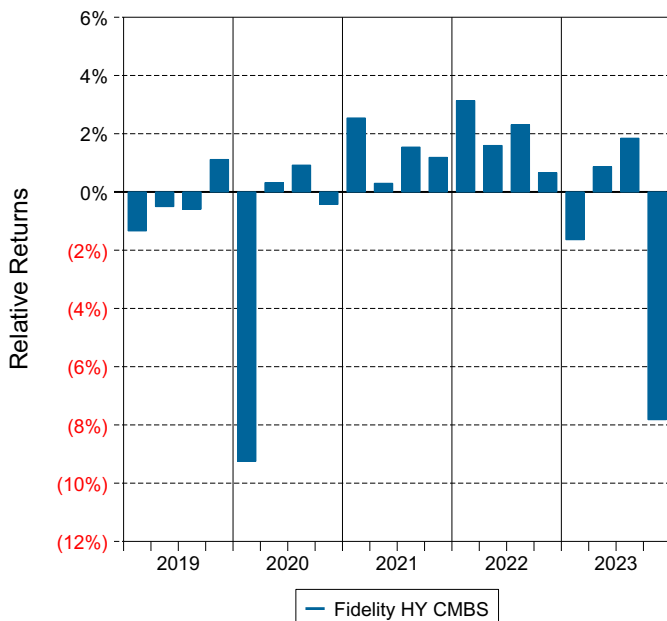
### Quarterly Summary and Highlights

- Fidelity HY CMBS's portfolio posted a (2.55)% return for the quarter placing it in the 100 percentile of the Callan Global Fixed High Yield group for the quarter and in the 100 percentile for the last year.
- Fidelity HY CMBS's portfolio underperformed the Blmbg US CMBS Ex AAA Index by 8.27% for the quarter and underperformed the Blmbg US CMBS Ex AAA Index for the year by 7.11%.



Relative Returns vs Blmbg US CMBS Ex AAA Index

Callan Global Fixed High Yield (Gross) Annualized Five Year Risk vs Return

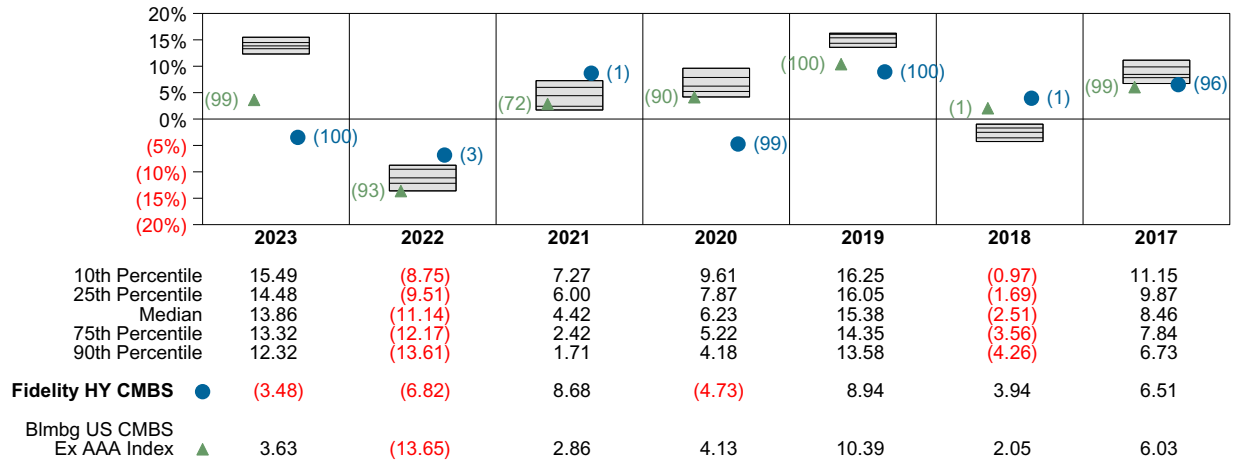


# Fidelity HY CMBS Return Analysis Summary

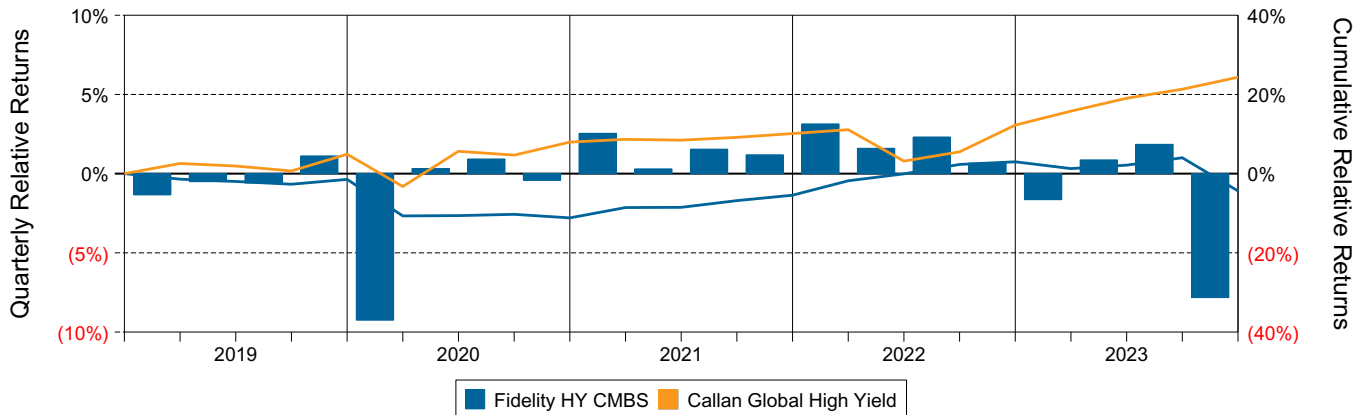
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

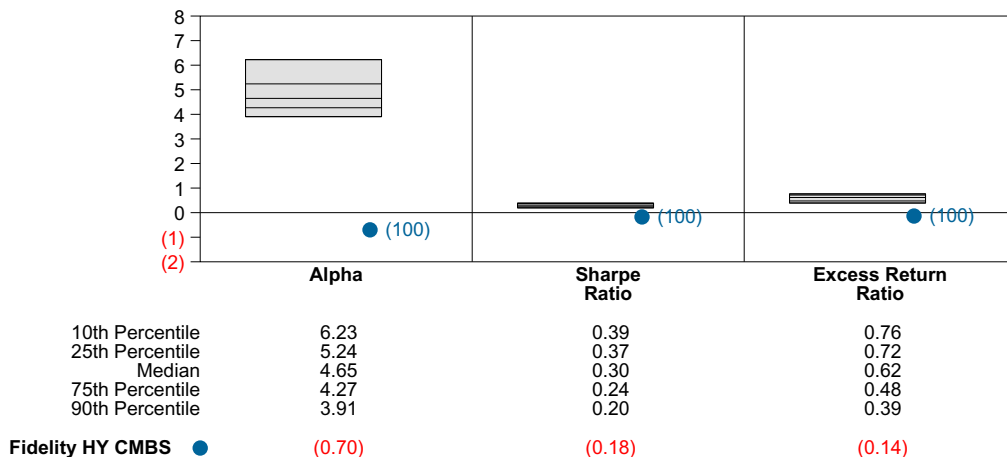
### Performance vs Callan Global Fixed High Yield (Gross)



### Cumulative and Quarterly Relative Returns vs Blmbg US CMBS Ex AAA Index



### Risk Adjusted Return Measures vs Blmbg US CMBS Ex AAA Index Rankings Against Callan Global Fixed High Yield (Gross) Five Years Ended December 31, 2023

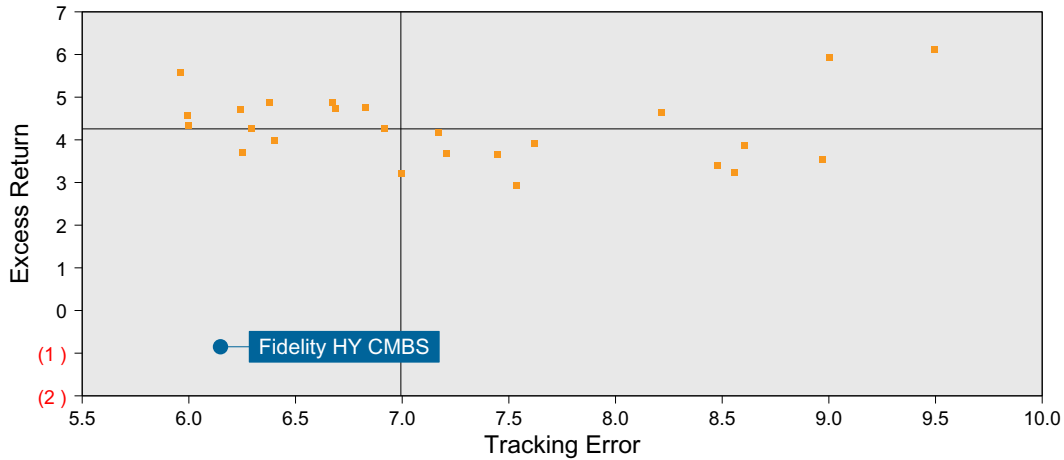


# Fidelity HY CMBS Risk Analysis Summary

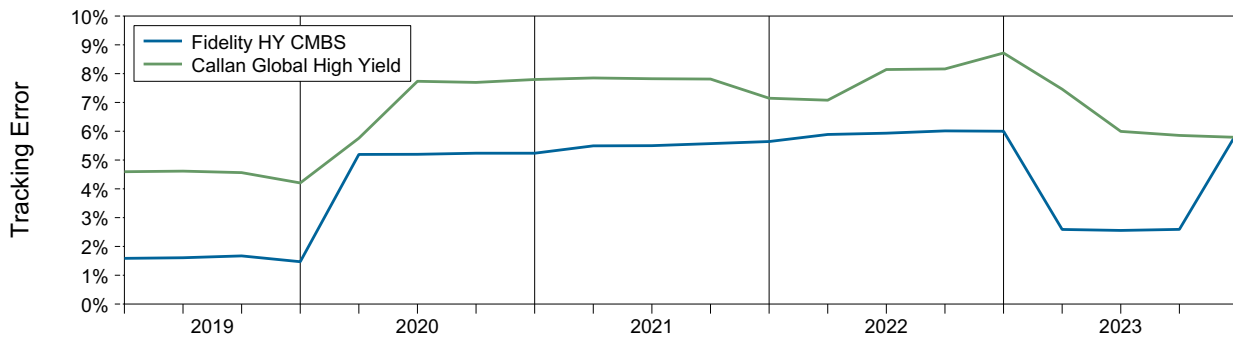
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

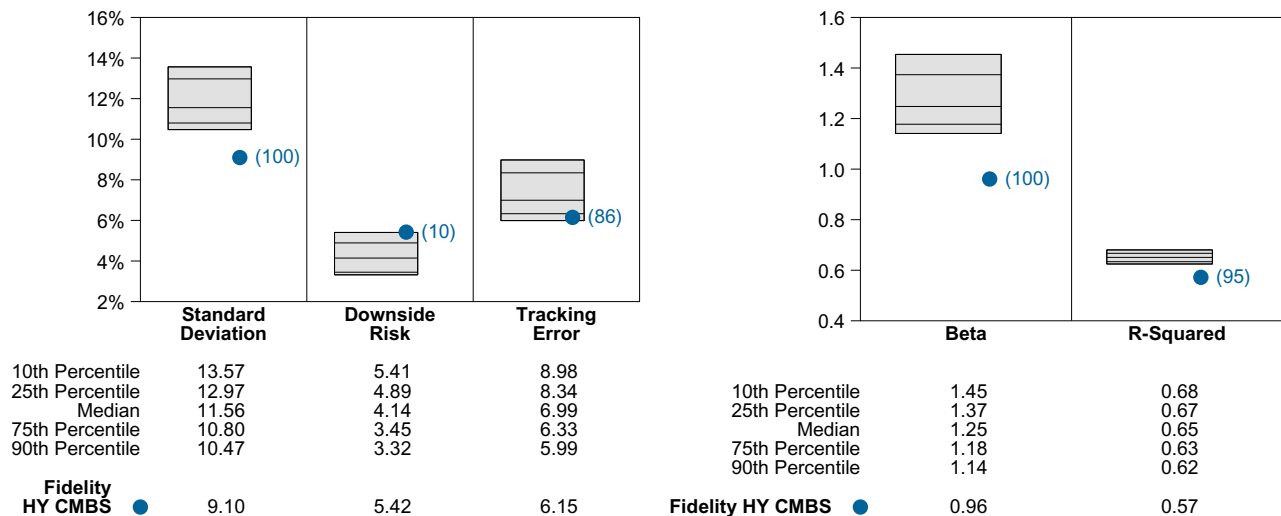
### Risk Analysis vs Callan Global Fixed High Yield (Gross) Five Years Ended December 31, 2023



### Rolling 12 Quarter Tracking Error vs Blmbg US CMBS Ex AAA Index



### Risk Statistics Rankings vs Blmbg US CMBS Ex AAA Index Rankings Against Callan Global Fixed High Yield (Gross) Five Years Ended December 31, 2023



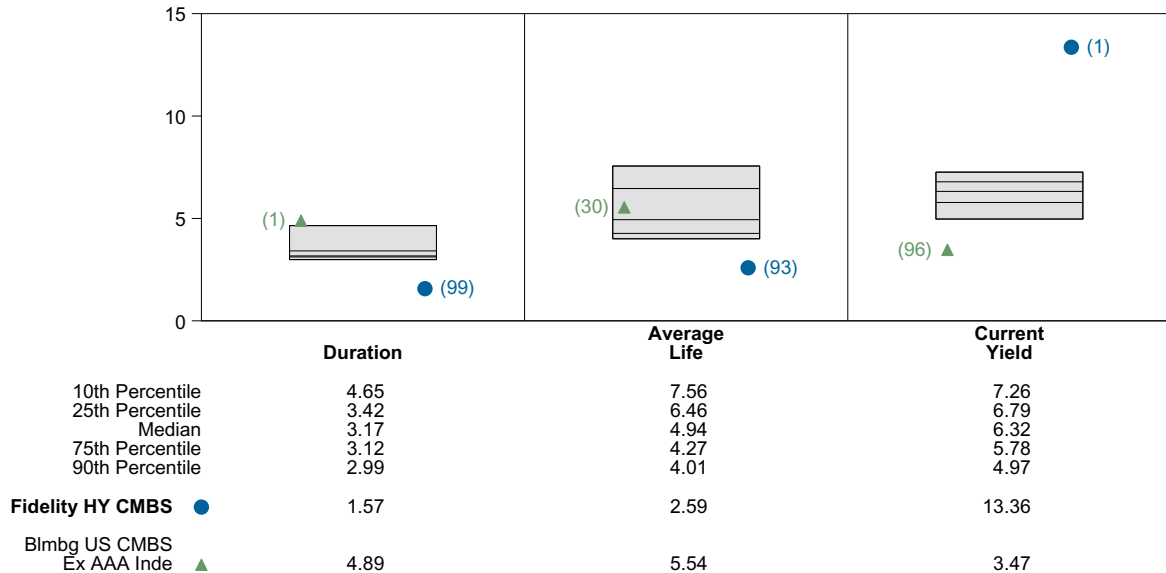


# Fidelity HY CMBS Bond Characteristics Analysis Summary

## Portfolio Characteristics

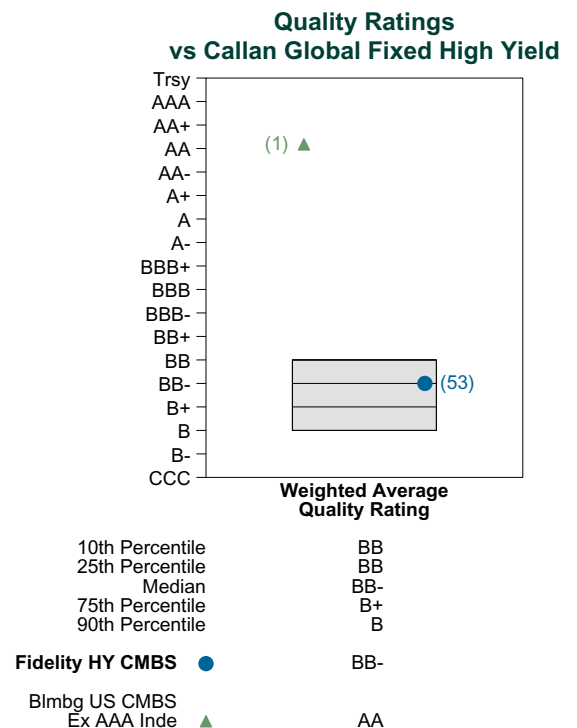
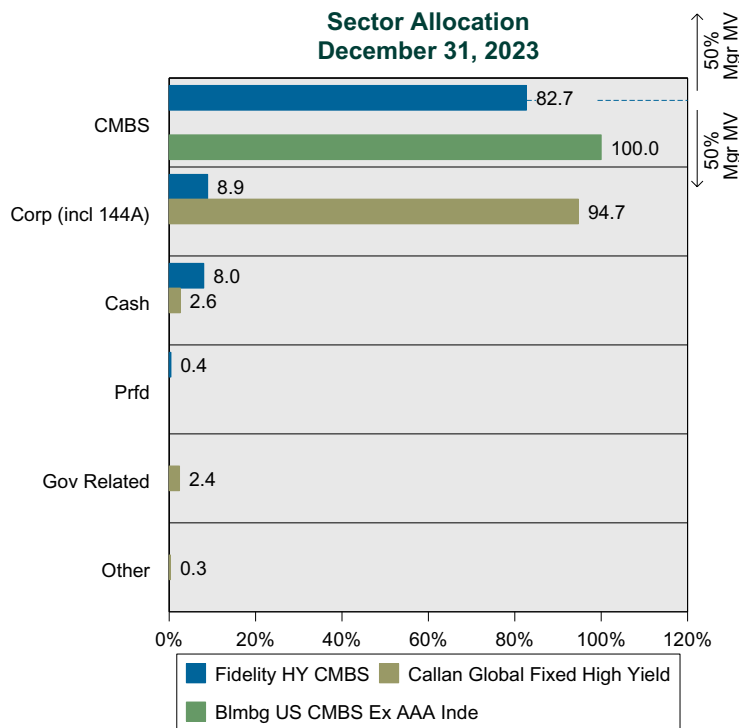
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Callan Global Fixed High Yield as of December 31, 2023



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

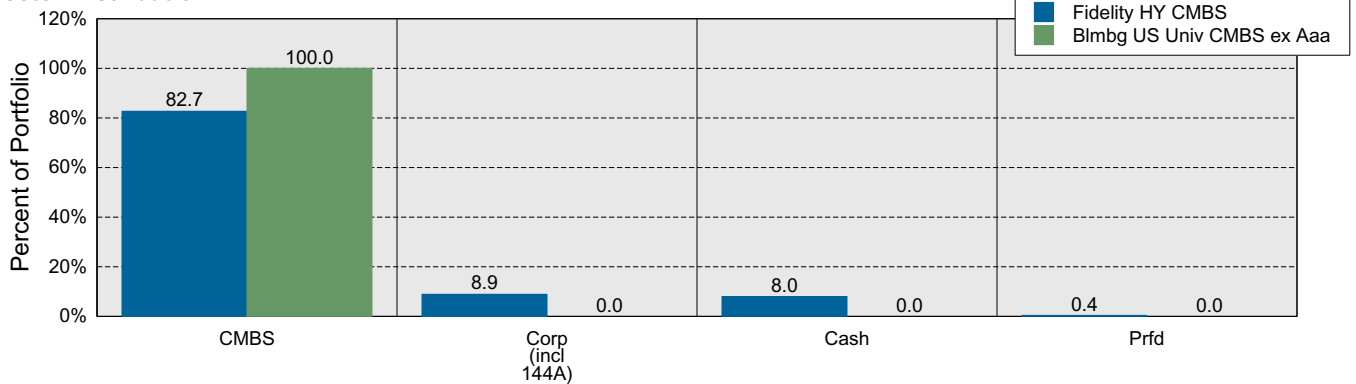


# Fidelity HY CMBS Portfolio Characteristics Summary As of December 31, 2023

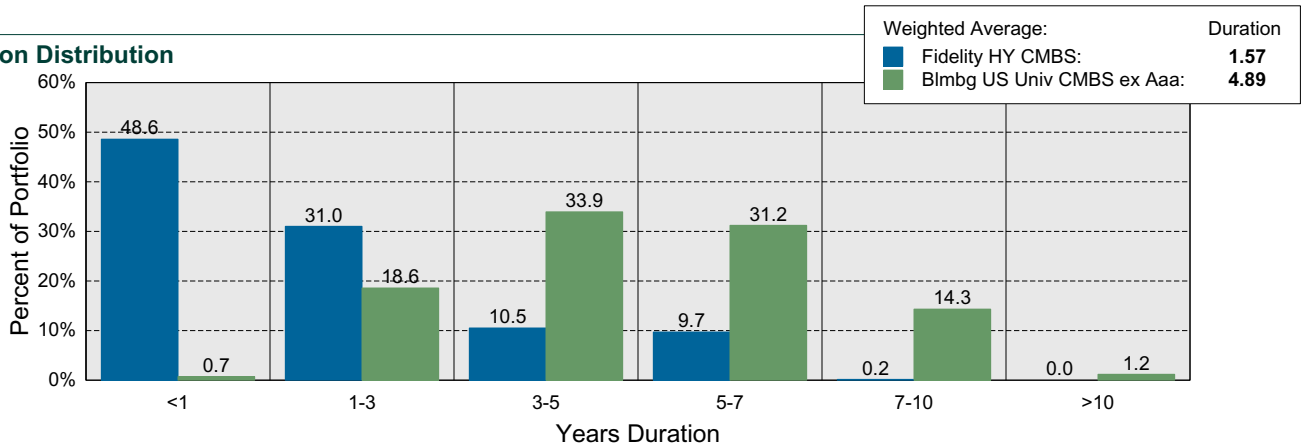
## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

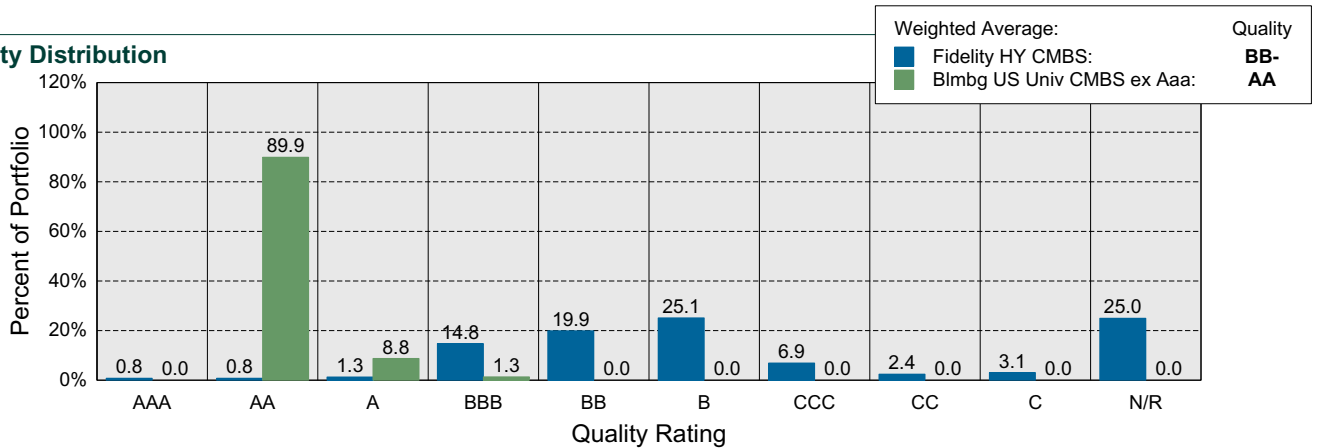
### Sector Distribution



### Duration Distribution



### Quality Distribution

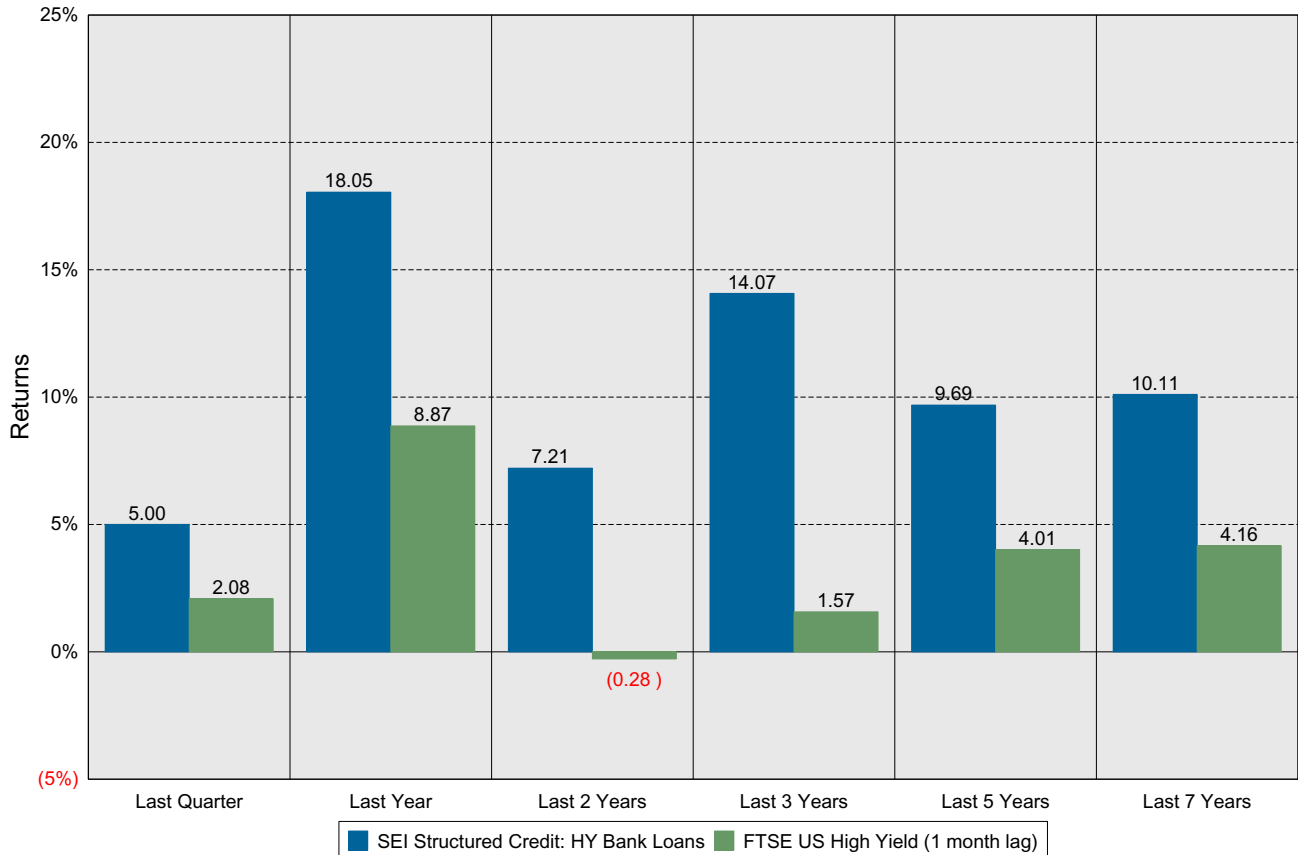


# SEI Structured Credit: HY Bank Loans

## Period Ended December 31, 2023

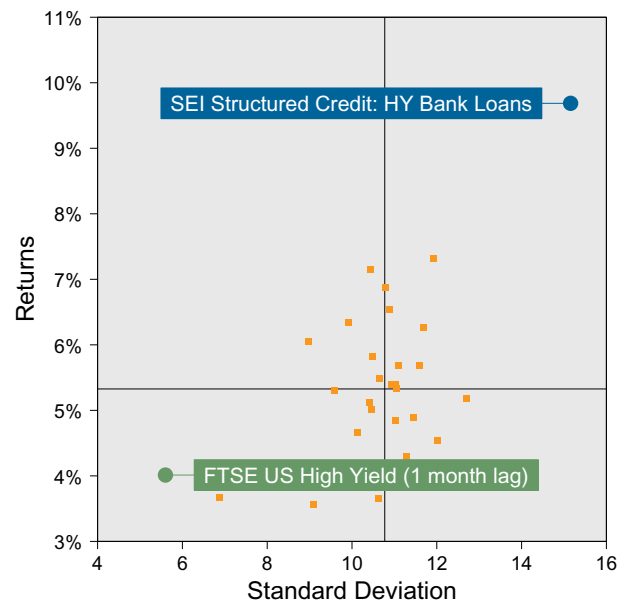
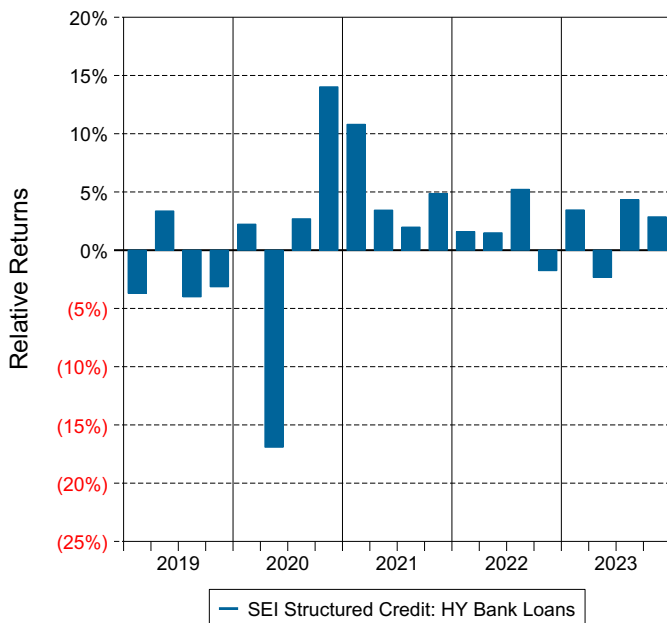
### Quarterly Summary and Highlights

- SEI Structured Credit: HY Bank Loans's portfolio posted a 5.00% return for the quarter placing it in the 46 percentile of the Callan Multi-Sector Credit group for the quarter and in the 6 percentile for the last year.
- SEI Structured Credit: HY Bank Loans's portfolio outperformed the FTSE US High Yield (1 month lag) by 2.92% for the quarter and outperformed the FTSE US High Yield (1 month lag) for the year by 9.18%.



**Relative Returns vs FTSE US High Yield (1 month lag)**

**Callan Multi-Sector Credit (Gross) Annualized Five Year Risk vs Return**

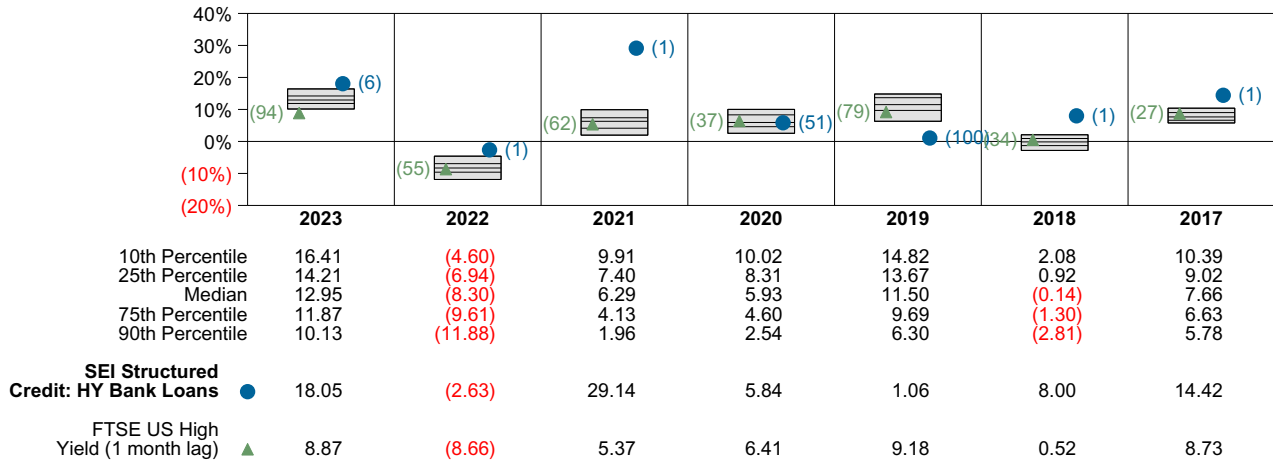


# SEI Structured Credit: HY Bank Loans Return Analysis Summary

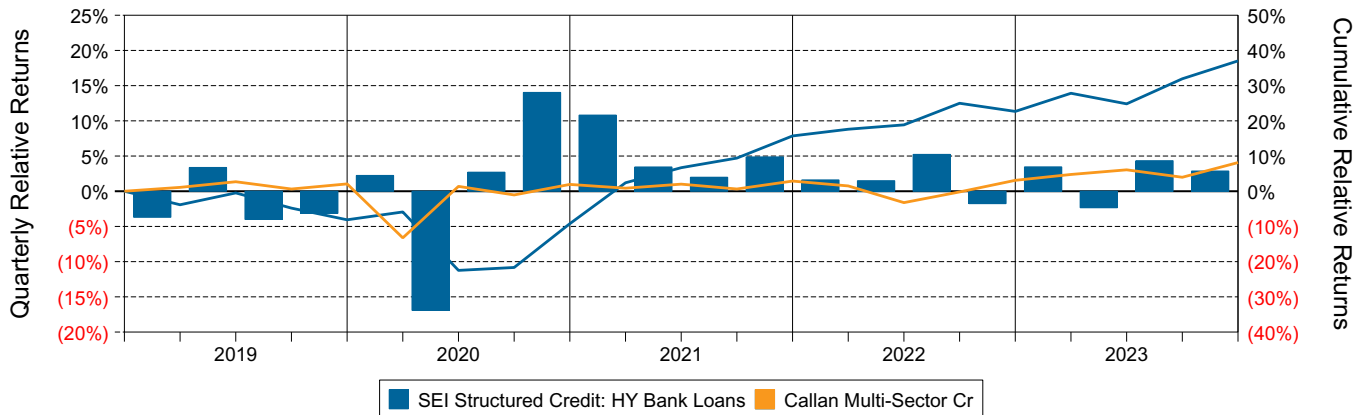
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

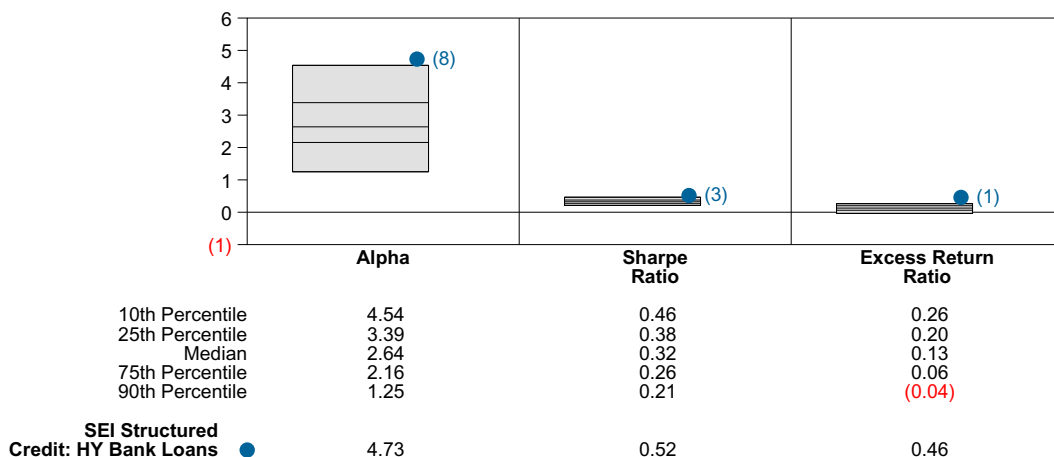
### Performance vs Callan Multi-Sector Credit (Gross)



### Cumulative and Quarterly Relative Returns vs FTSE US High Yield (1 month lag)



### Risk Adjusted Return Measures vs FTSE US High Yield (1 month lag) Rankings Against Callan Multi-Sector Credit (Gross) Five Years Ended December 31, 2023

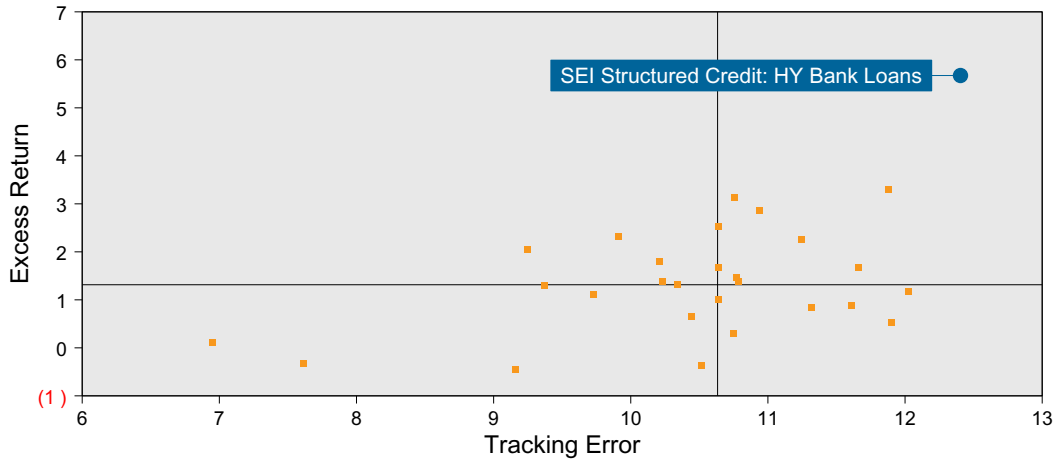


# SEI Structured Credit: HY Bank Loans Risk Analysis Summary

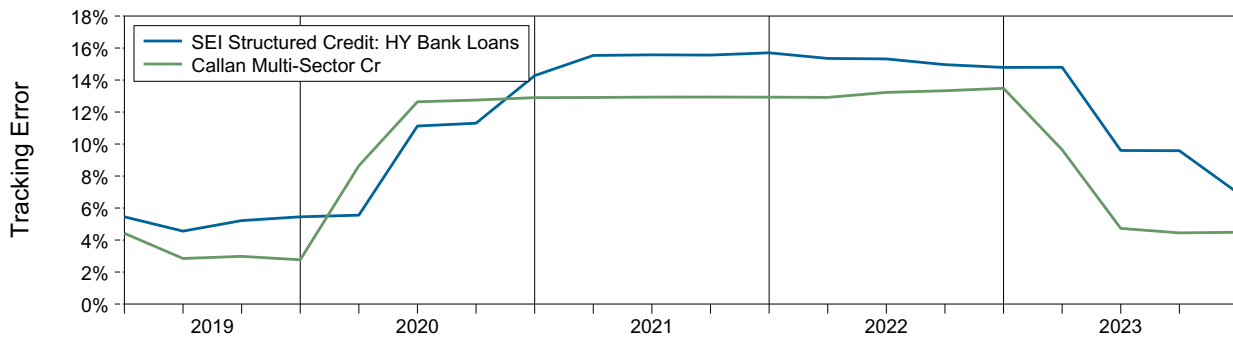
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

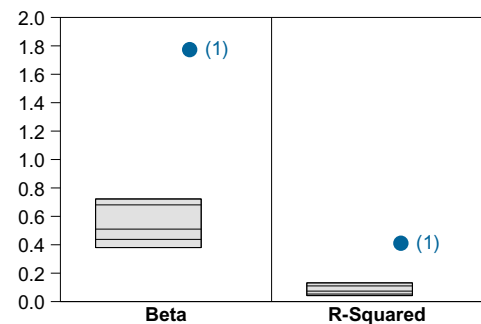
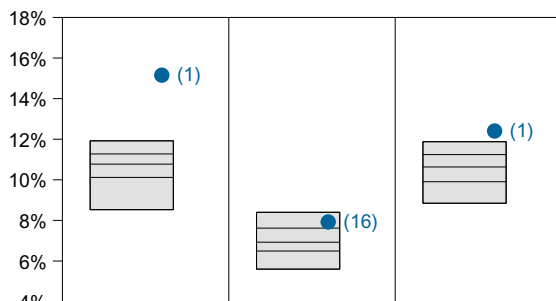
### Risk Analysis vs Callan Multi-Sector Credit (Gross) Five Years Ended December 31, 2023



### Rolling 12 Quarter Tracking Error vs FTSE US High Yield (1 month lag)



### Risk Statistics Rankings vs FTSE US High Yield (1 month lag) Rankings Against Callan Multi-Sector Credit (Gross) Five Years Ended December 31, 2023



10th Percentile  
25th Percentile  
Median  
75th Percentile  
90th Percentile

11.92  
11.27  
10.77  
10.12  
8.53

8.40  
7.62  
6.93  
6.49  
5.60

11.88  
11.24  
10.63  
9.91  
8.85

10th Percentile  
25th Percentile  
Median  
75th Percentile  
90th Percentile

0.72  
0.68  
0.51  
0.44  
0.38

0.13  
0.11  
0.07  
0.05  
0.04

SEI Structured Credit: HY Bank Loans ● 15.16

7.92

12.40

SEI Structured Credit: HY Bank Loans ● 1.77

0.41

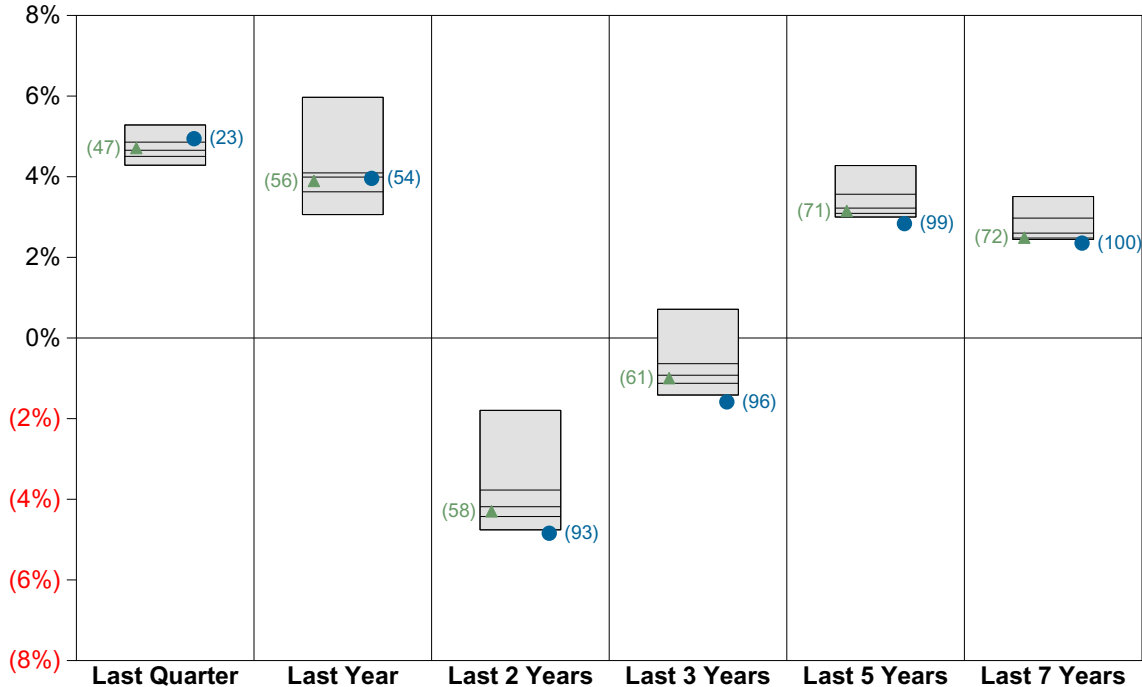


# Inflation Protection (TIPS) Period Ended December 31, 2023

## Quarterly Summary and Highlights

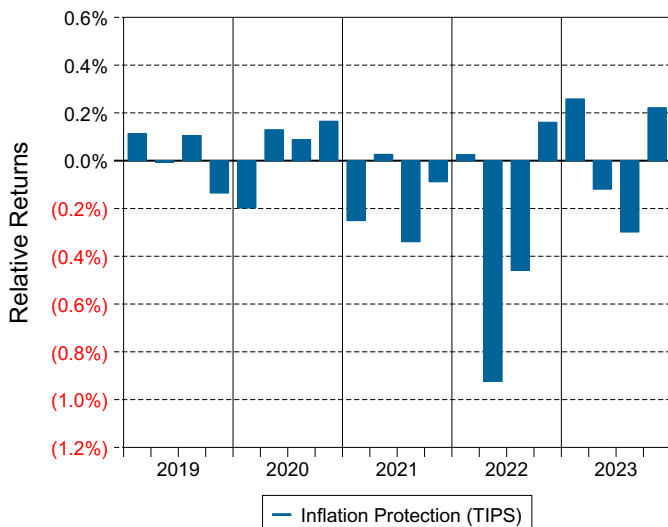
- Inflation Protection (TIPS)'s portfolio posted a 4.94% return for the quarter placing it in the 23 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 54 percentile for the last year.
- Inflation Protection (TIPS)'s portfolio outperformed the Blmbg TIPS by 0.23% for the quarter and outperformed the Blmbg TIPS for the year by 0.06%.

## Performance vs Callan Inflation Linked Bonds (Gross)

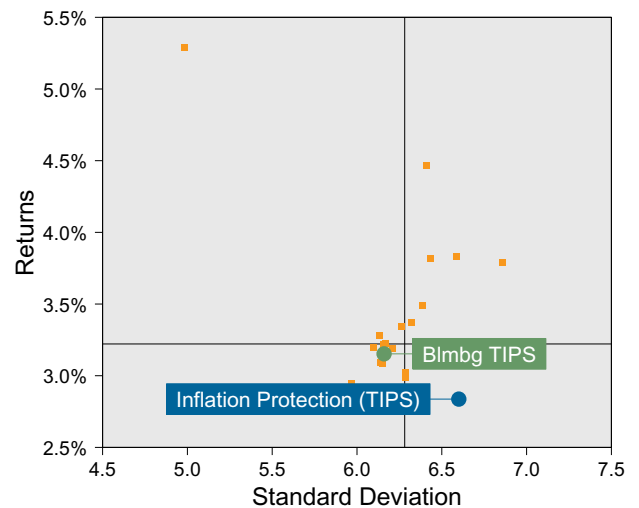


	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	5.28	5.97	(1.80)	0.71	4.28	3.51
25th Percentile	4.86	4.09	(3.77)	(0.64)	3.57	2.97
Median	4.66	3.99	(4.18)	(0.92)	3.22	2.60
75th Percentile	4.50	3.63	(4.43)	(1.12)	3.09	2.48
90th Percentile	4.29	3.06	(4.76)	(1.41)	3.00	2.44
<b>Inflation Protection (TIPS)</b>	<b>4.94</b>	<b>3.96</b>	<b>(4.84)</b>	<b>(1.59)</b>	<b>2.84</b>	<b>2.35</b>
<b>Blmbg TIPS</b>	<b>4.71</b>	<b>3.90</b>	<b>(4.30)</b>	<b>(1.00)</b>	<b>3.15</b>	<b>2.49</b>

Relative Return vs Blmbg TIPS



Callan Inflation Linked Bonds (Gross)  
Annualized Five Year Risk vs Return

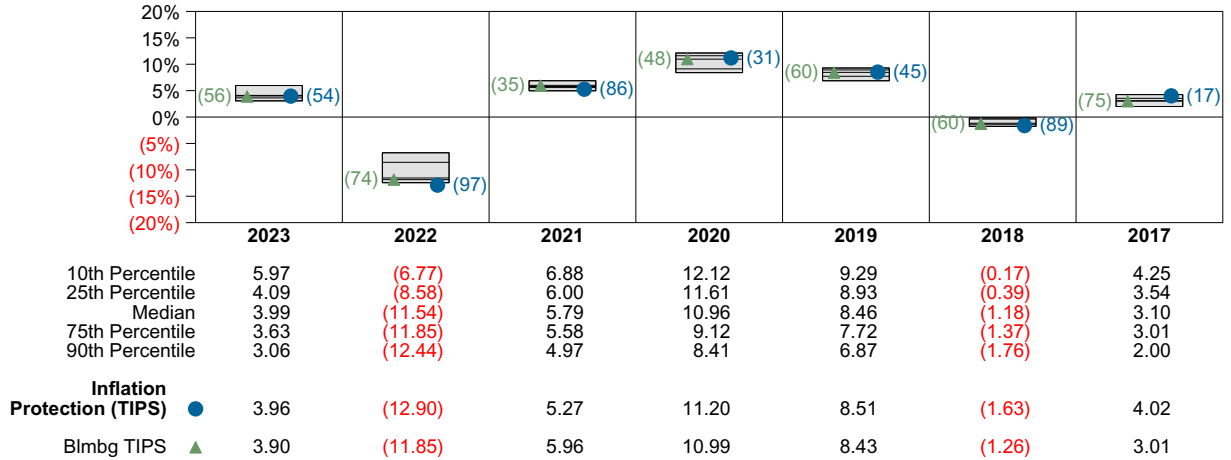


# Inflation Protection (TIPS) Return Analysis Summary

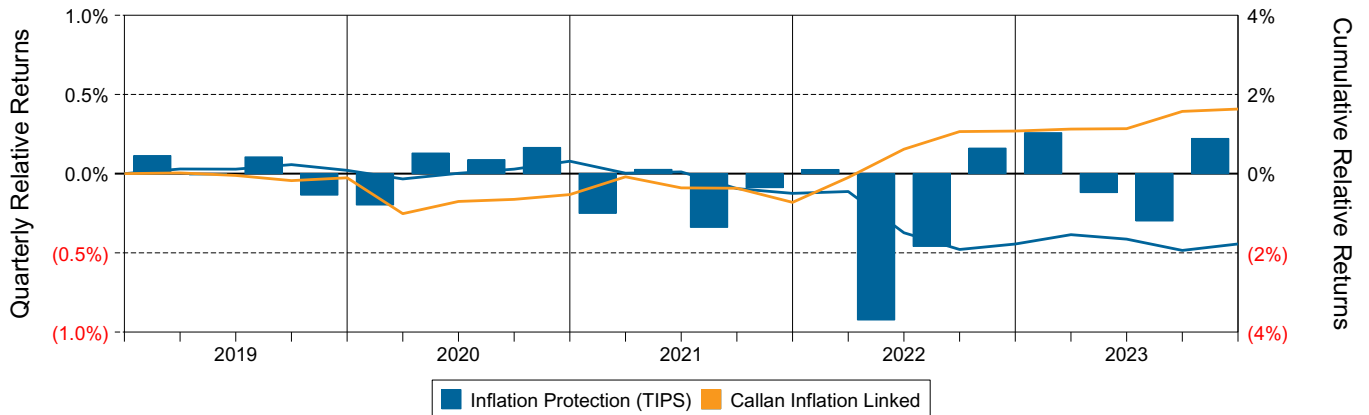
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

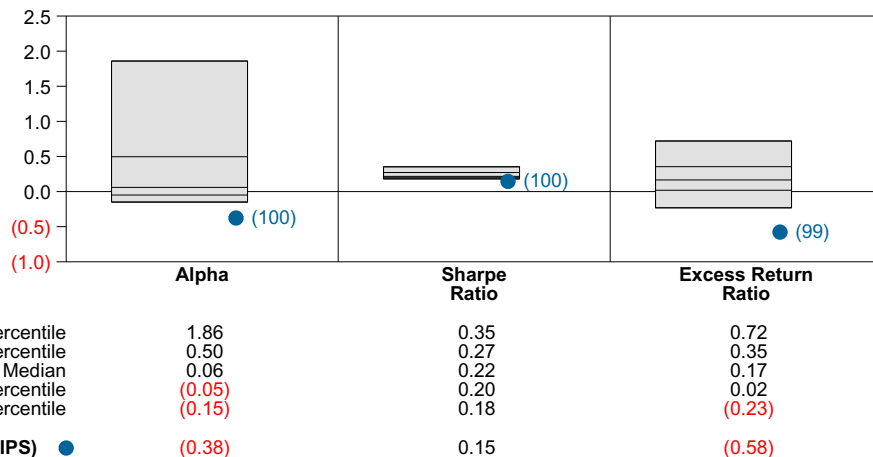
### Performance vs Callan Inflation Linked Bonds (Gross)



### Cumulative and Quarterly Relative Returns vs BImbg TIPS



### Risk Adjusted Return Measures vs BImbg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023



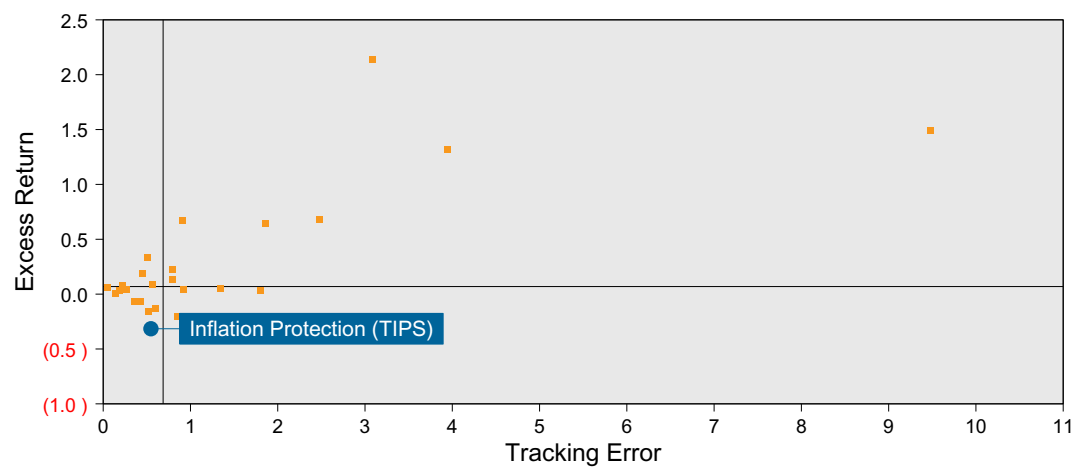


# Inflation Protection (TIPS) Risk Analysis Summary

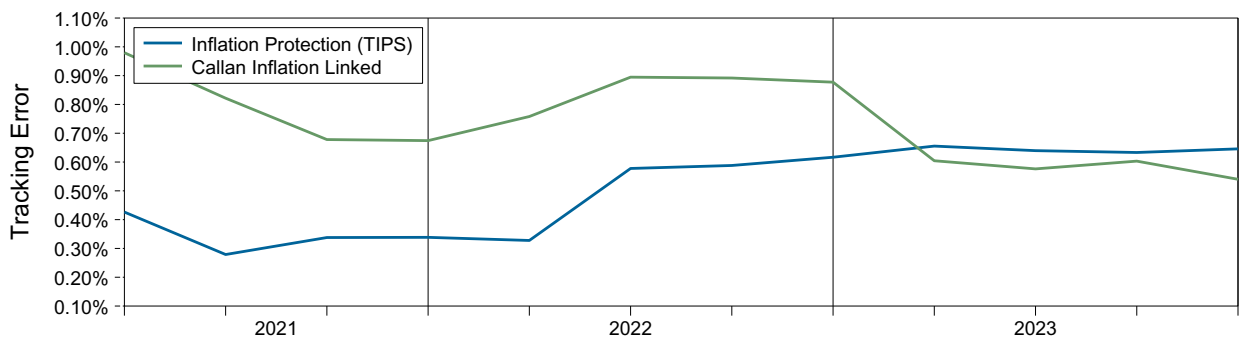
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

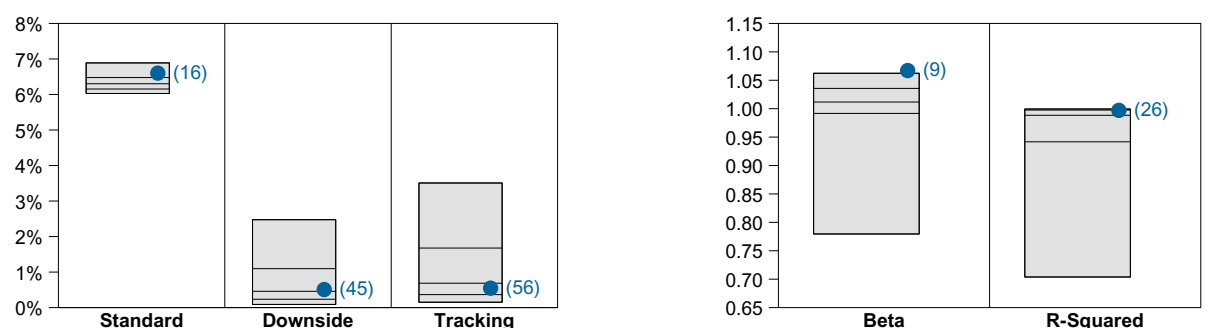
### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023



### Rolling 12 Quarter Tracking Error vs Bloomberg TIPS



### Risk Statistics Rankings vs Bloomberg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023



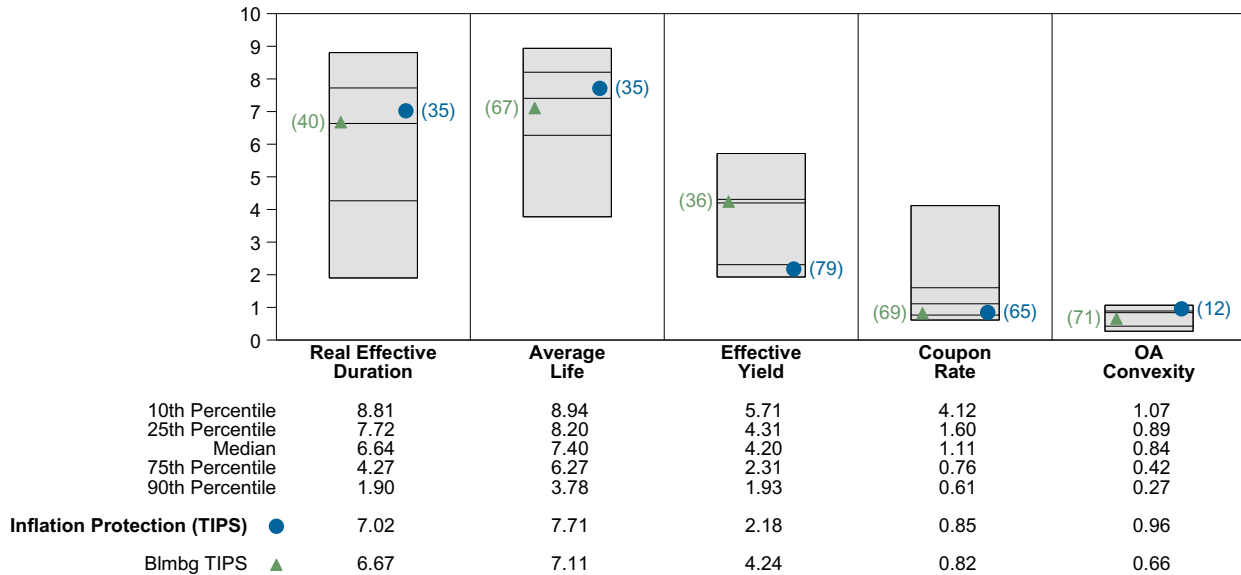
	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	6.89	2.48	3.51	1.06	1.00
25th Percentile	6.48	1.10	1.68	1.04	1.00
Median	6.30	0.46	0.69	1.01	0.99
75th Percentile	6.15	0.23	0.37	0.99	0.94
90th Percentile	6.03	0.09	0.15	0.78	0.70
<b>Inflation Protection (TIPS)</b>	<b>6.60</b>	<b>0.51</b>	<b>0.55</b>	<b>1.07</b>	<b>1.00</b>

# Inflation Protection (TIPS) Bond Characteristics Analysis Summary

## Portfolio Characteristics

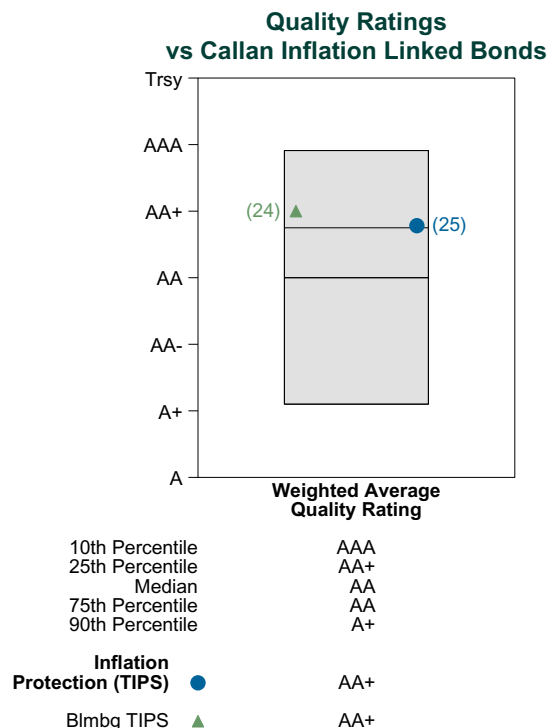
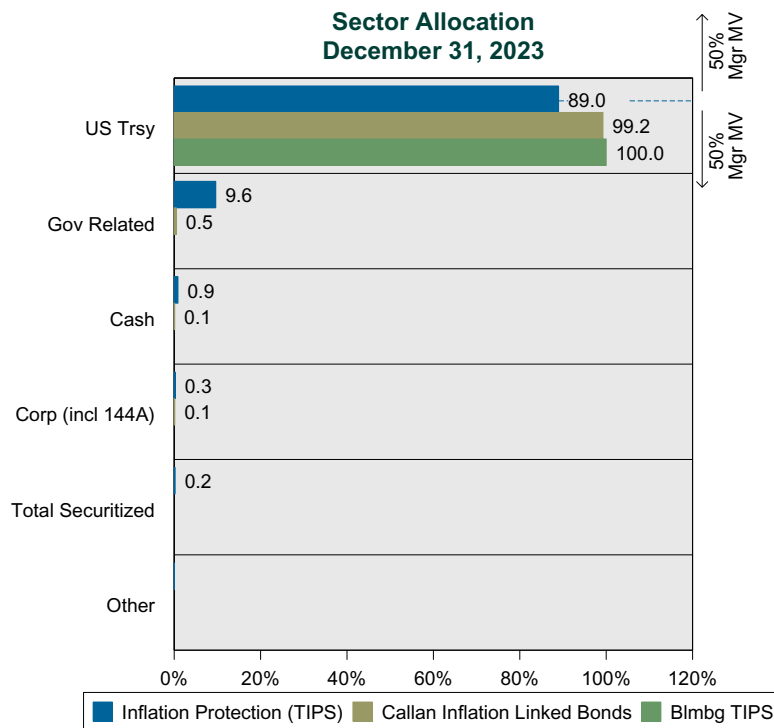
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds as of December 31, 2023



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

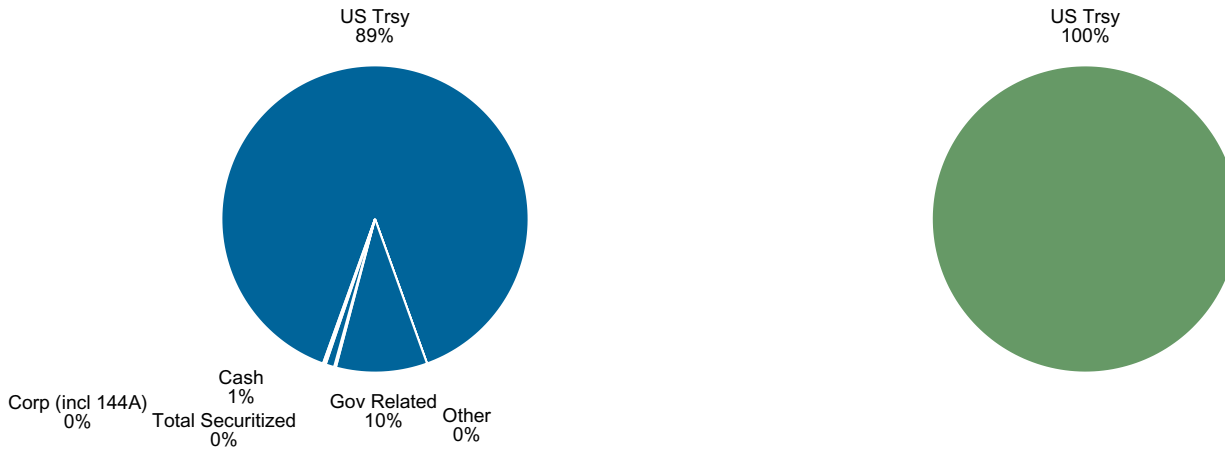


# Inflation Protection (TIPS) Portfolio Characteristics Summary As of December 31, 2023

## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

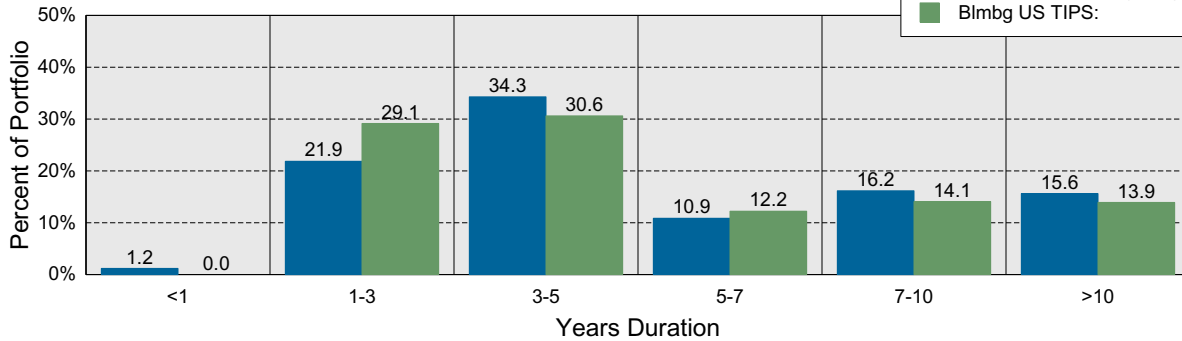
### Sector Allocation



### Inflation Protection (TIPS)

### Blmbg US TIPS

#### Duration Distribution



Weighted Average:	Real Duration
Inflation Protection (TIPS):	7.02
Blmbg US TIPS:	6.67

#### Quality Distribution



Weighted Average:	Quality
Inflation Protection (TIPS):	AA+
Blmbg US TIPS:	AA+



# Brown Brothers TIPS Period Ended December 31, 2023

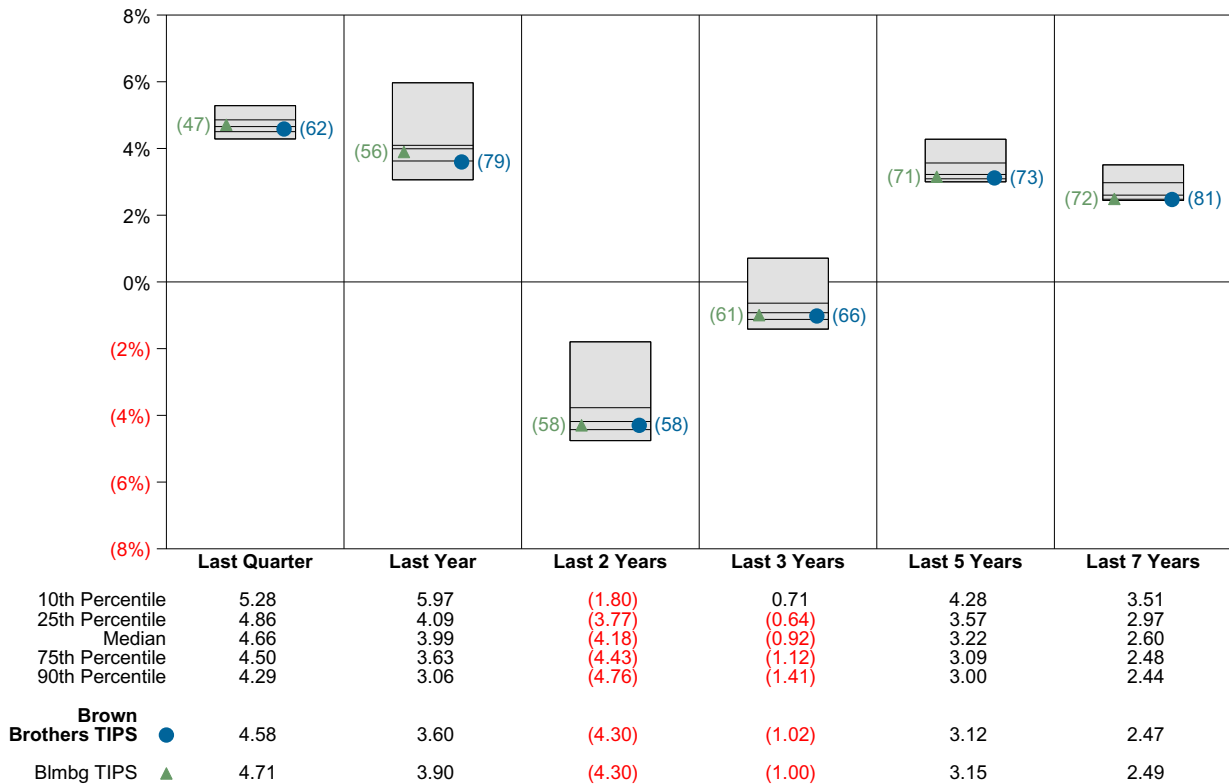
## Investment Philosophy

The BBH U.S. TIPS strategy seeks to capture a range of fundamentally-based and technically-based opportunities in the inflation-indexed securities market.

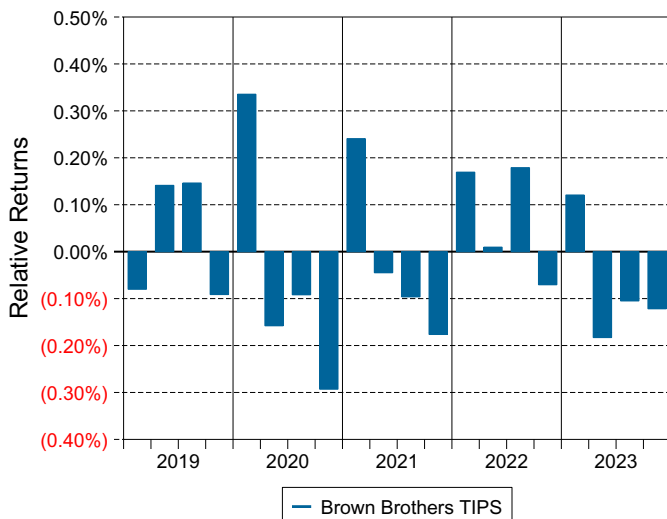
## Quarterly Summary and Highlights

- Brown Brothers TIPS's portfolio posted a 4.58% return for the quarter placing it in the 62 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 79 percentile for the last year.
- Brown Brothers TIPS's portfolio underperformed the Blmbg TIPS by 0.13% for the quarter and underperformed the Blmbg TIPS for the year by 0.30%.

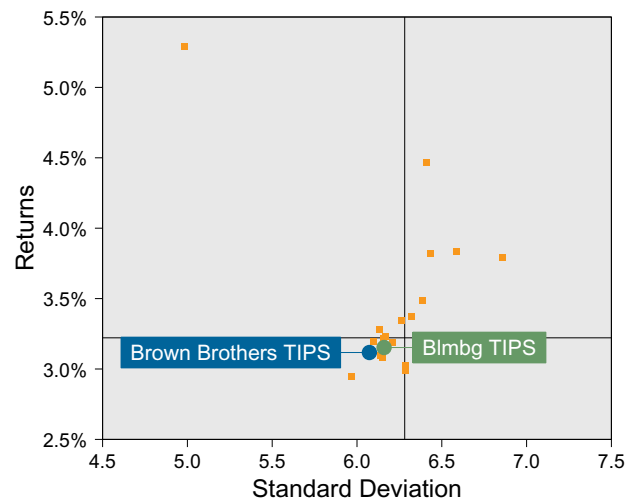
## Performance vs Callan Inflation Linked Bonds (Gross)



## Relative Return vs Blmbg TIPS



## Callan Inflation Linked Bonds (Gross) Annualized Five Year Risk vs Return

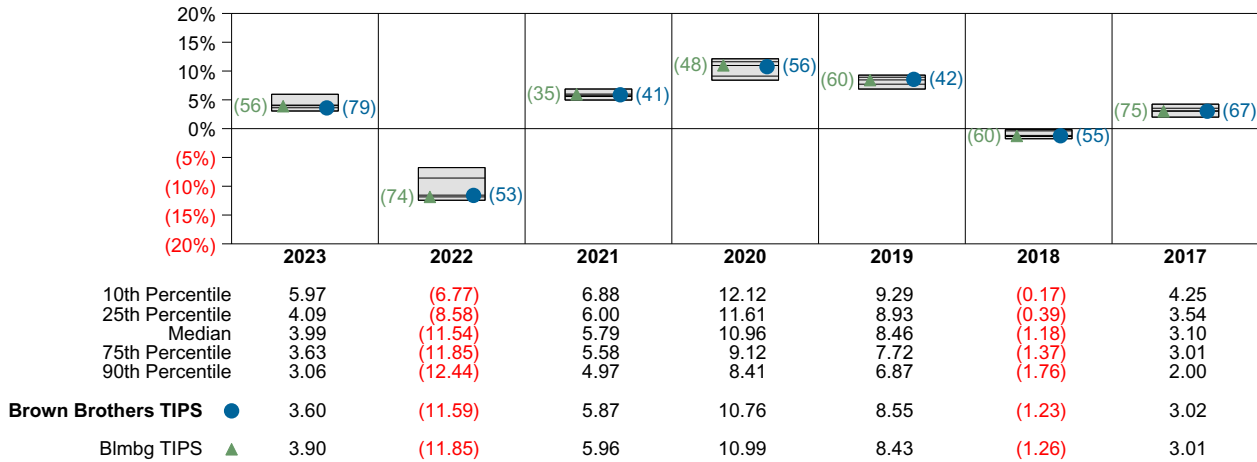


# Brown Brothers TIPS Return Analysis Summary

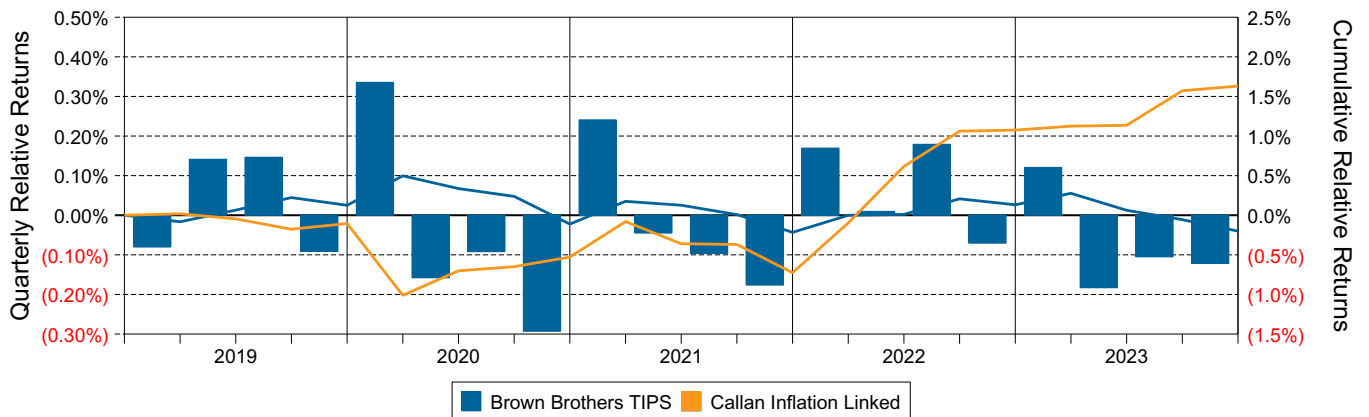
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

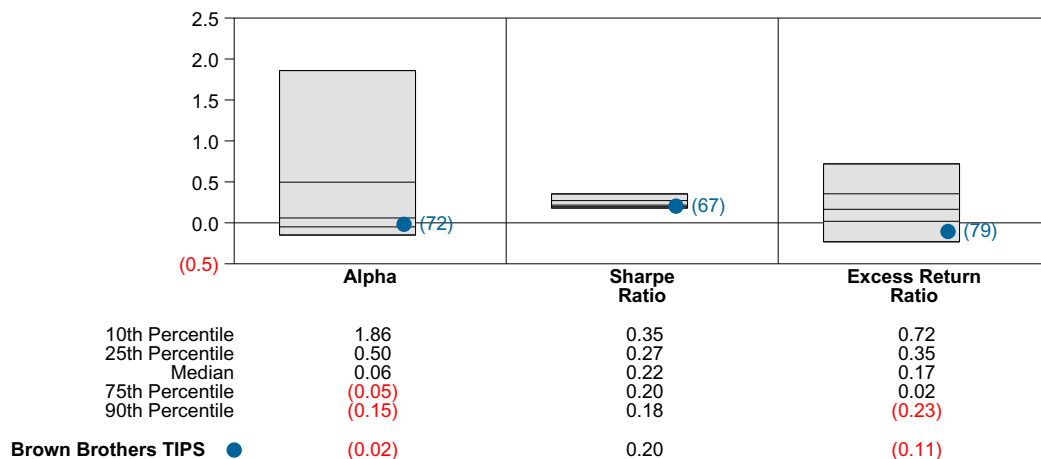
### Performance vs Callan Inflation Linked Bonds (Gross)



### Cumulative and Quarterly Relative Returns vs Blmbg TIPS



### Risk Adjusted Return Measures vs Blmbg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023



# Brown Brothers TIPS Risk Analysis Summary

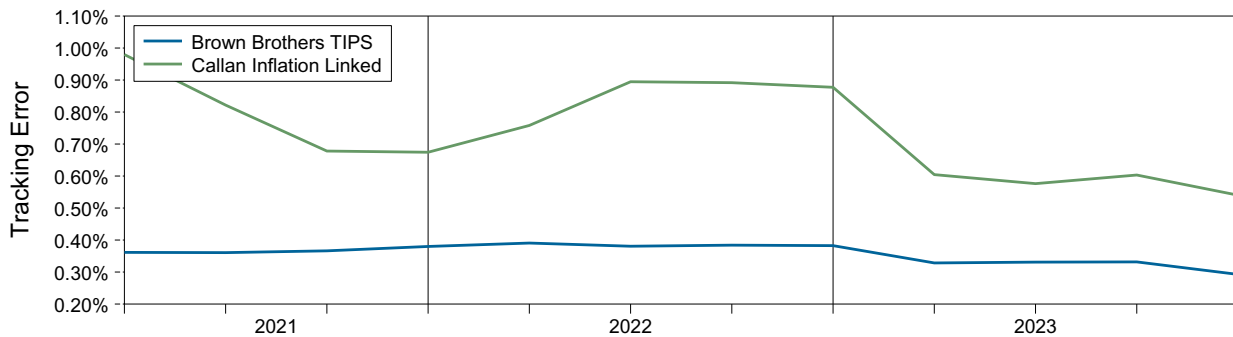
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

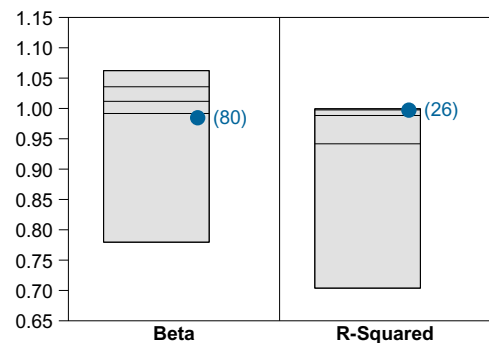
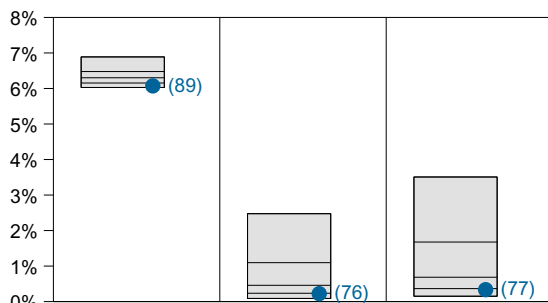
### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023



### Rolling 12 Quarter Tracking Error vs Bloomberg TIPS



### Risk Statistics Rankings vs Bloomberg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023



10th Percentile 6.89  
25th Percentile 6.48  
Median 6.30  
75th Percentile 6.15  
90th Percentile 6.03

**Standard Deviation**

**Downside Risk**

**Tracking Error**

10th Percentile 1.06  
25th Percentile 1.04  
Median 1.01  
75th Percentile 0.99  
90th Percentile 0.78

**Beta**

**R-Squared**

**Brown Brothers TIPS** ●

6.07

0.22

0.34

**Brown Brothers TIPS** ●

0.98

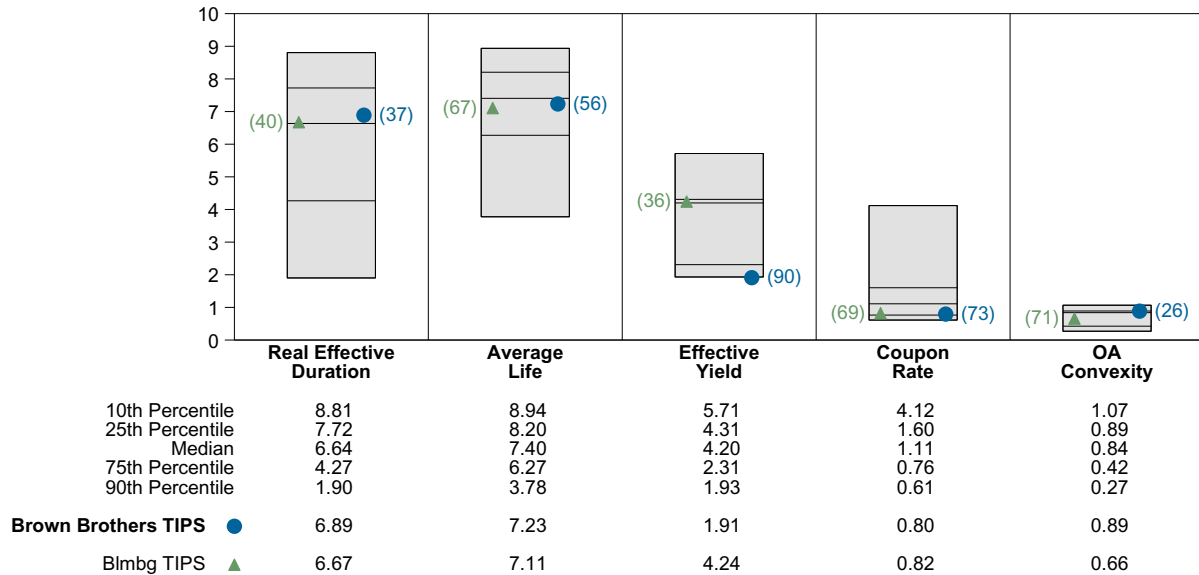
1.00

# Brown Brothers TIPS Bond Characteristics Analysis Summary

## Portfolio Characteristics

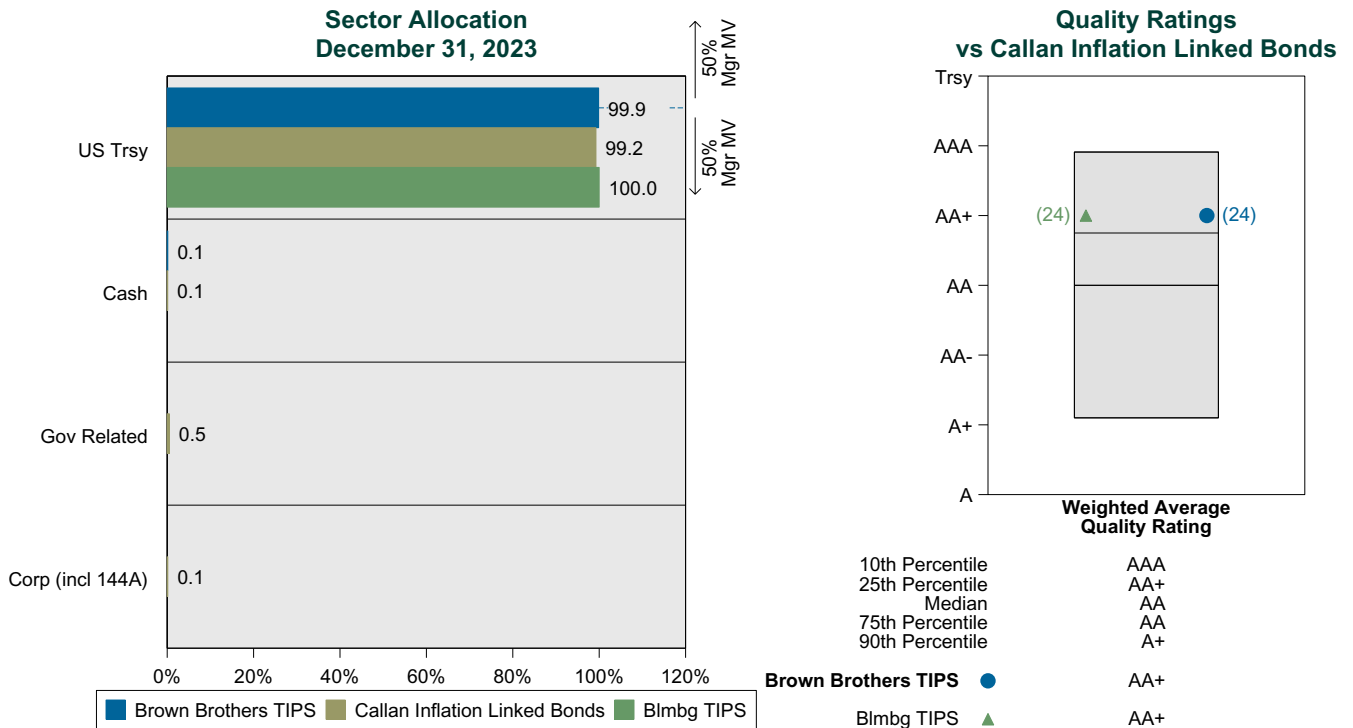
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds as of December 31, 2023



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.





# Brown Brothers TIPS Portfolio Characteristics Summary As of December 31, 2023

## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

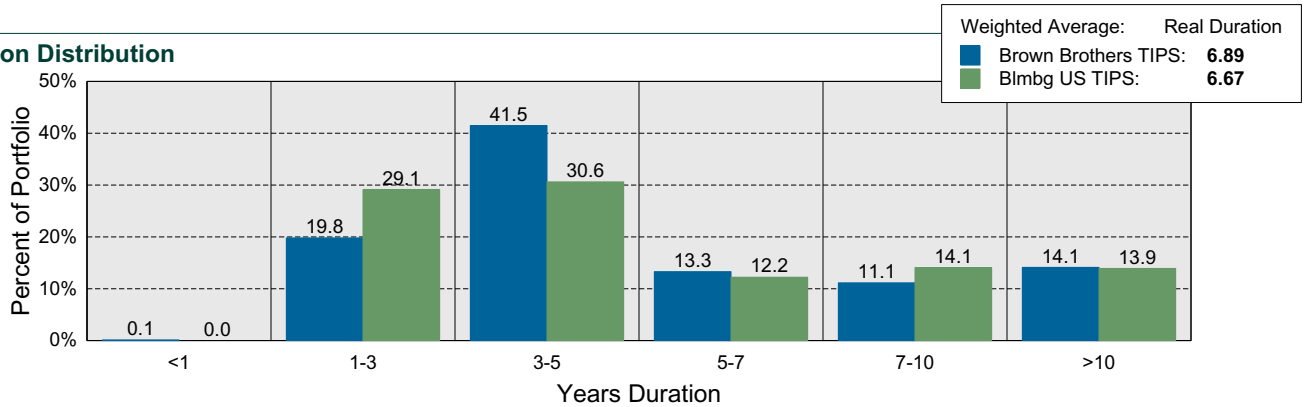
### Sector Allocation



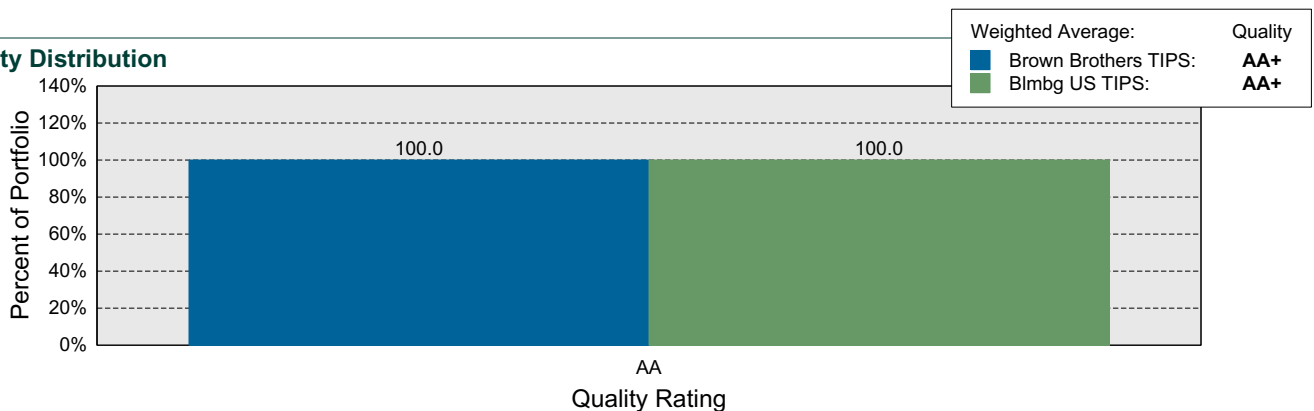
### Brown Brothers TIPS

### Blmbg US TIPS

#### Duration Distribution



#### Quality Distribution



# NISA Inv Adv TIPS Period Ended December 31, 2023

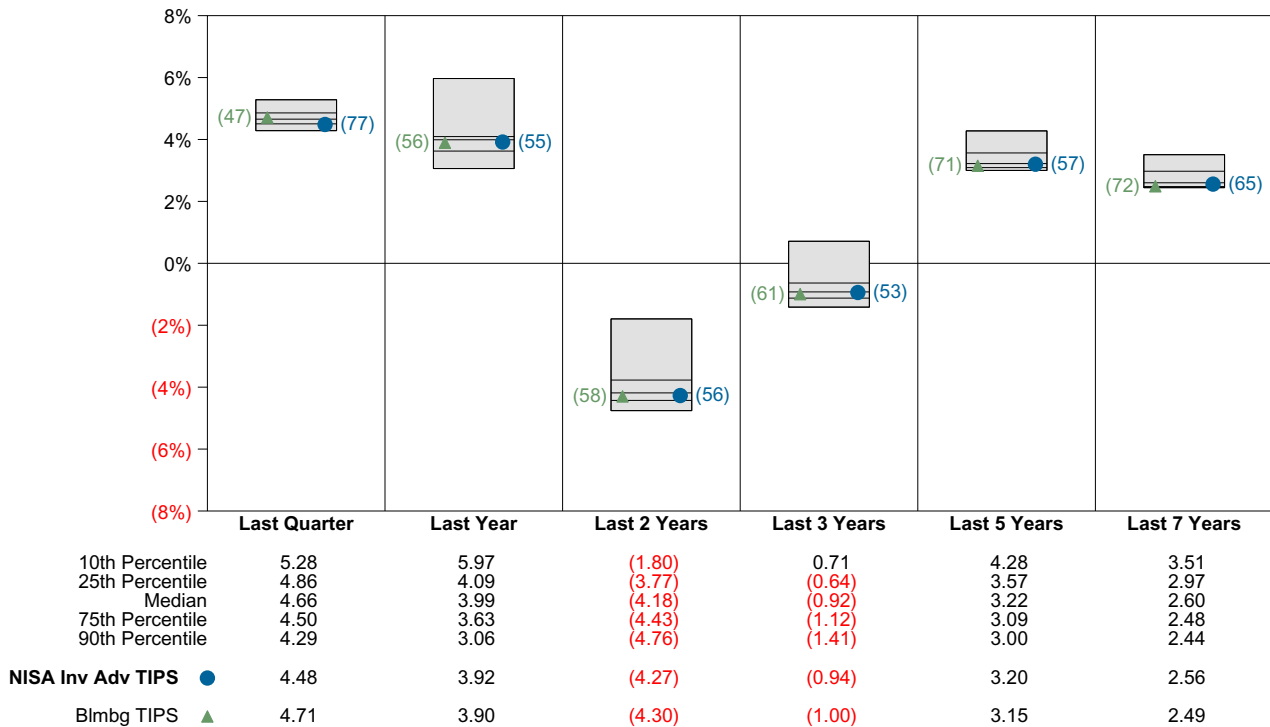
## Investment Philosophy

NISA believes that markets offer opportunities to capitalize on moderate inefficiencies for predictable gains. The team applies a fundamental approach and strategy to all fixed income portfolios, regardless of benchmark. Central to their investment philosophy is the following: practice active trading, hold high average credit quality, maintain tight duration collars, and avoid large exposure to any one entity.

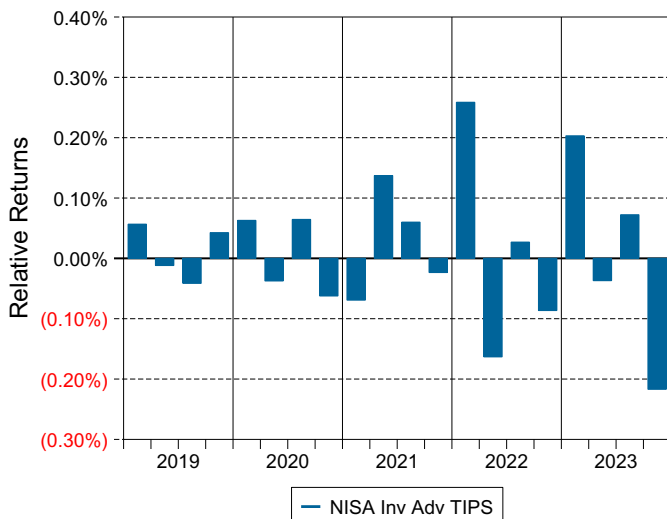
## Quarterly Summary and Highlights

- NISA Inv Adv TIPS's portfolio posted a 4.48% return for the quarter placing it in the 77 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 55 percentile for the last year.
- NISA Inv Adv TIPS's portfolio underperformed the Blmbg TIPS by 0.23% for the quarter and outperformed the Blmbg TIPS for the year by 0.02%.

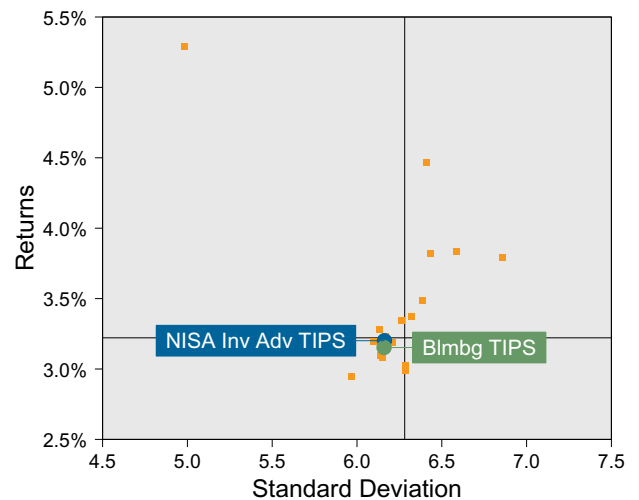
## Performance vs Callan Inflation Linked Bonds (Gross)



## Relative Return vs Blmbg TIPS



## Callan Inflation Linked Bonds (Gross) Annualized Five Year Risk vs Return

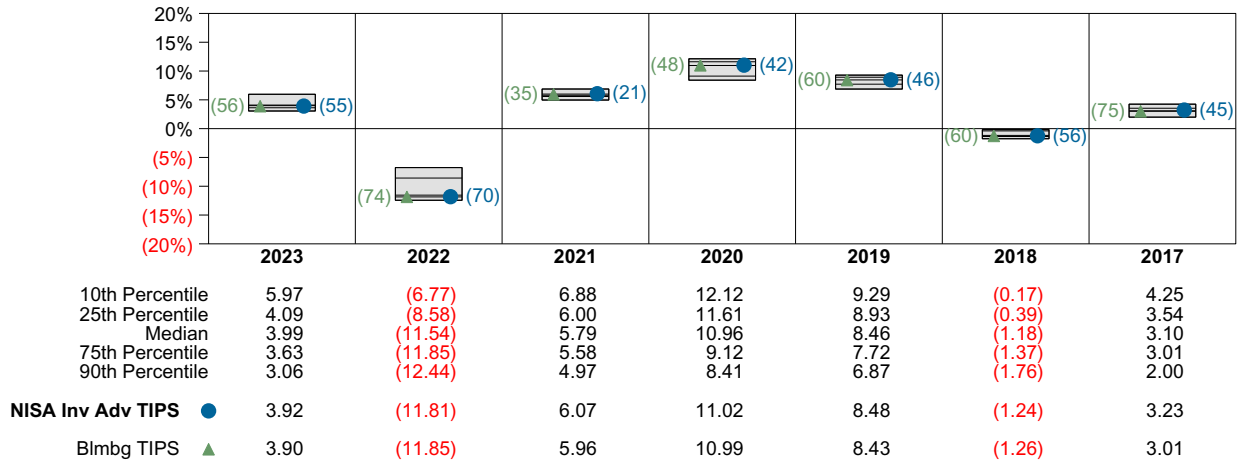


# NISA Inv Adv TIPS Return Analysis Summary

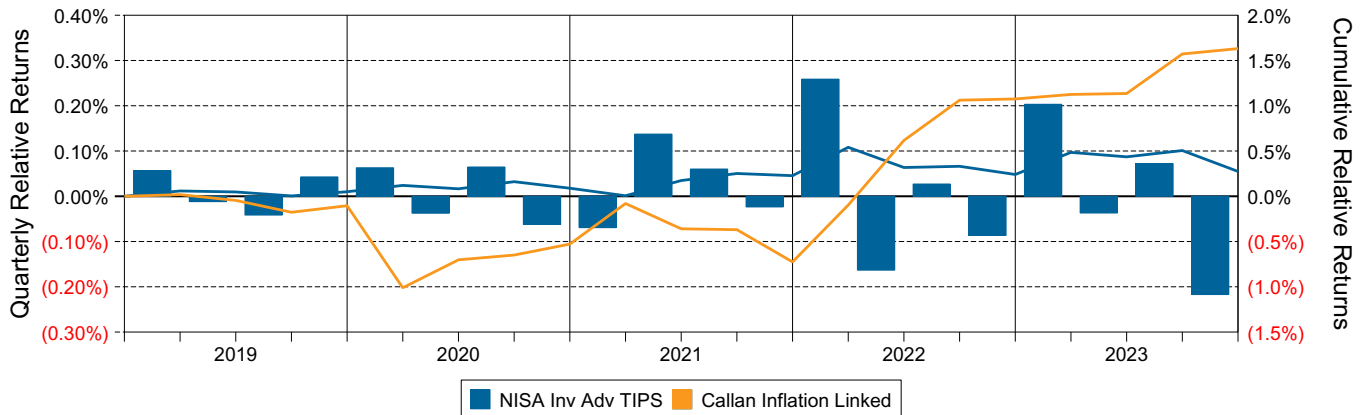
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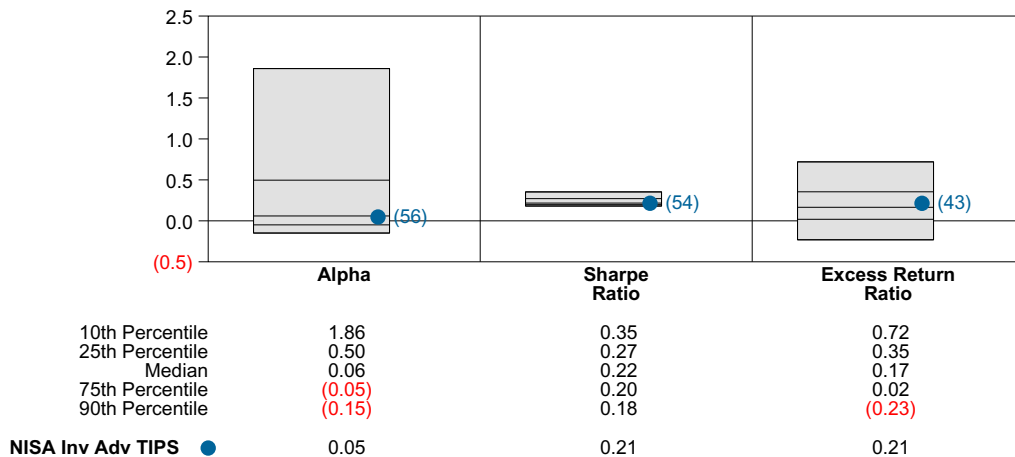
### Performance vs Callan Inflation Linked Bonds (Gross)



### Cumulative and Quarterly Relative Returns vs Blmbg TIPS



### Risk Adjusted Return Measures vs Blmbg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023

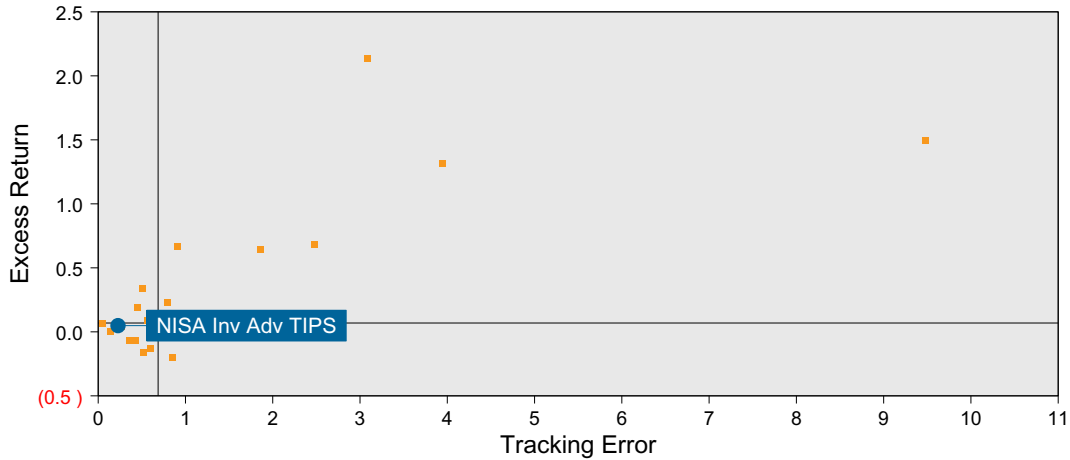


# NISA Inv Adv TIPS Risk Analysis Summary

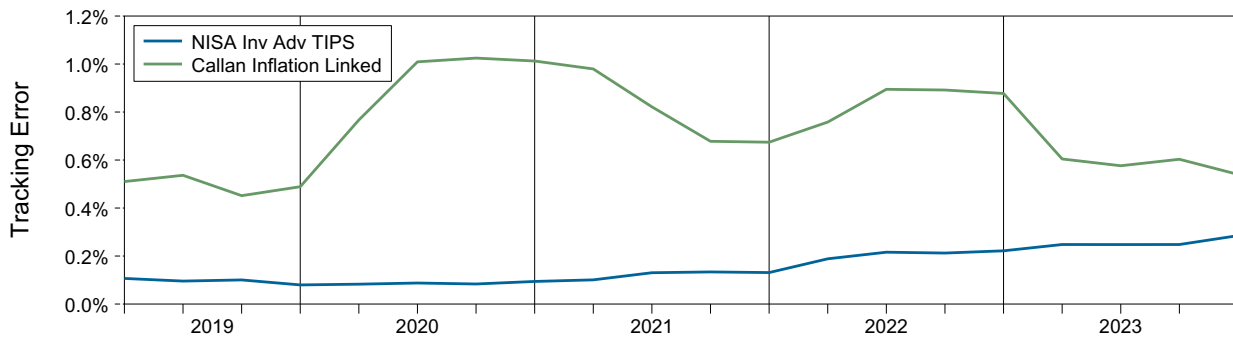
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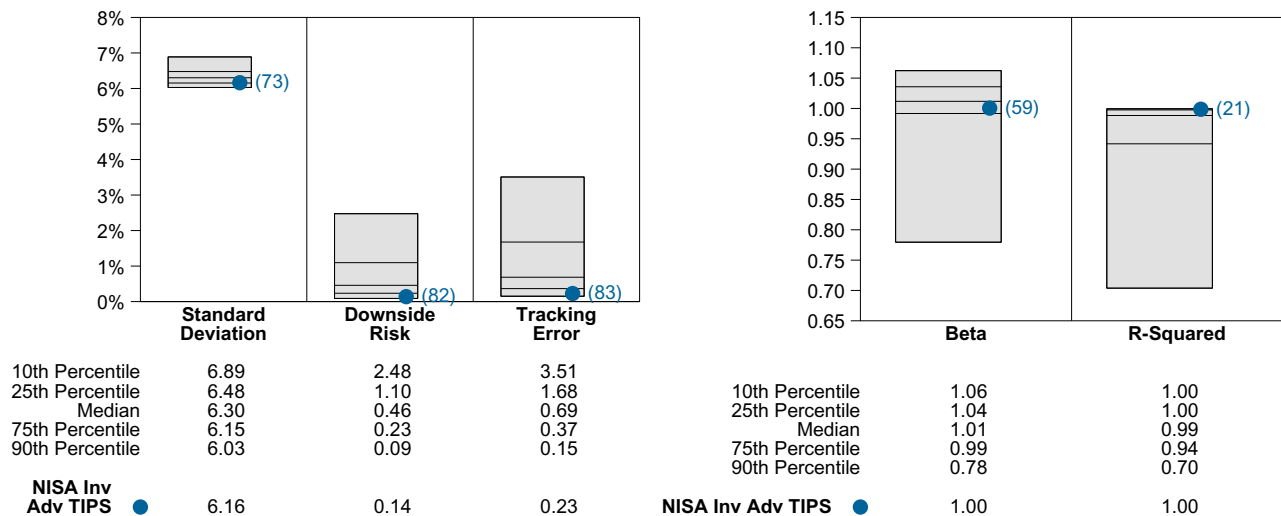
### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023



### Rolling 12 Quarter Tracking Error vs Bloomberg TIPS



### Risk Statistics Rankings vs Bloomberg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023

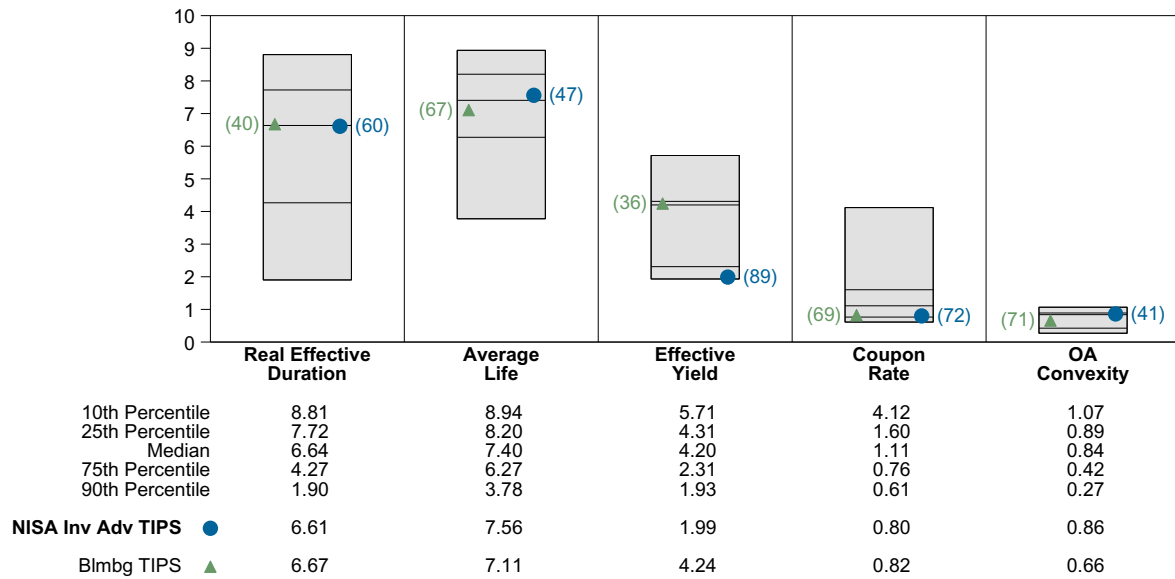


# NISA Inv Adv TIPS Bond Characteristics Analysis Summary

## Portfolio Characteristics

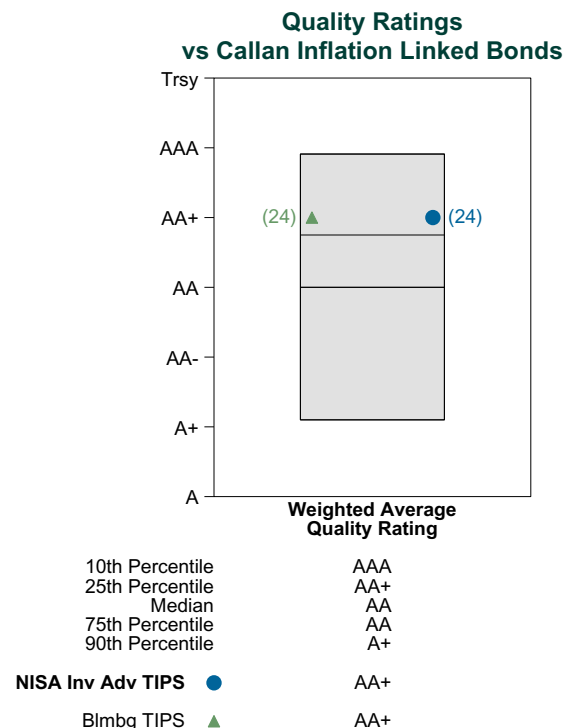
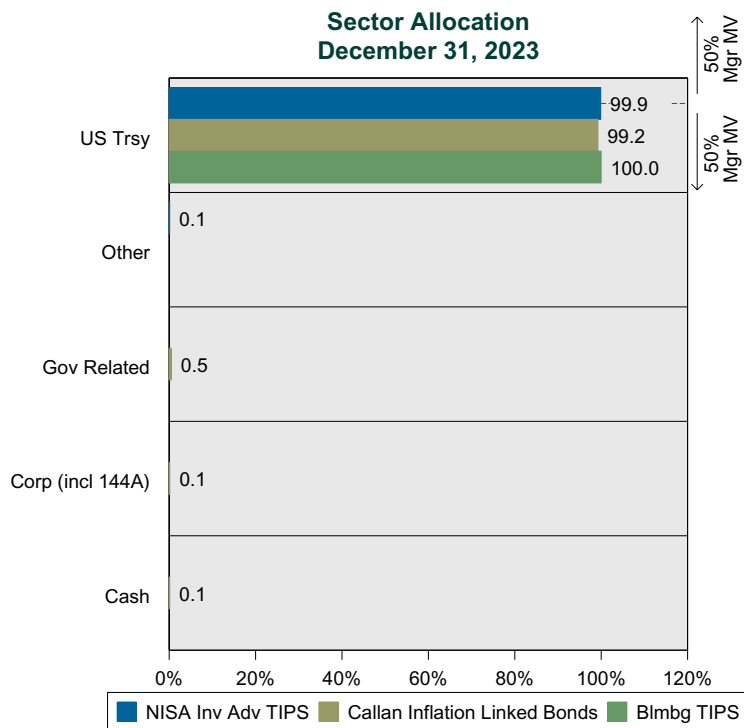
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## Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds as of December 31, 2023



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



**NISA Inv Adv TIPS  
Portfolio Characteristics Summary  
As of December 31, 2023**

**Portfolio Structure Comparison**

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

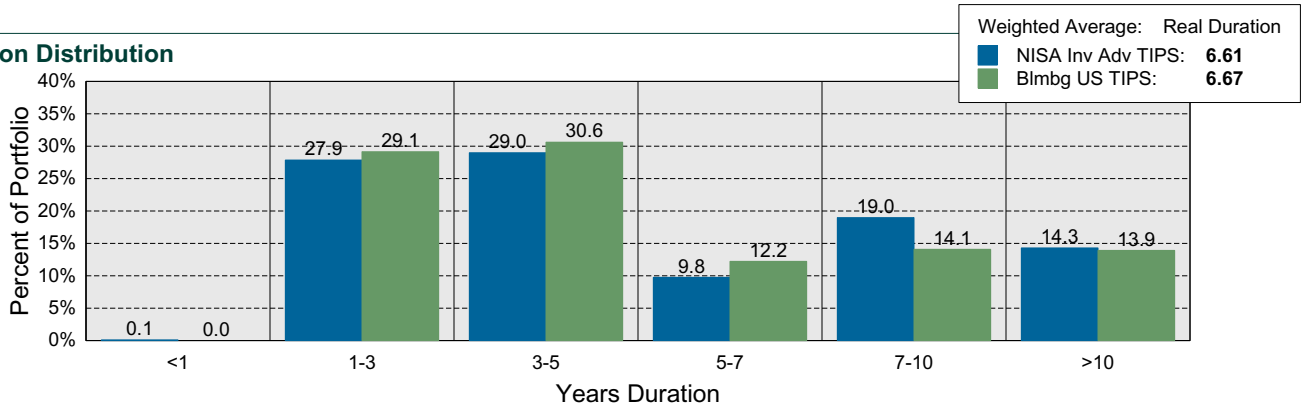
**Sector Allocation**



**NISA Inv Adv TIPS**

**Blmbg US TIPS**

**Duration Distribution**



**Quality Distribution**



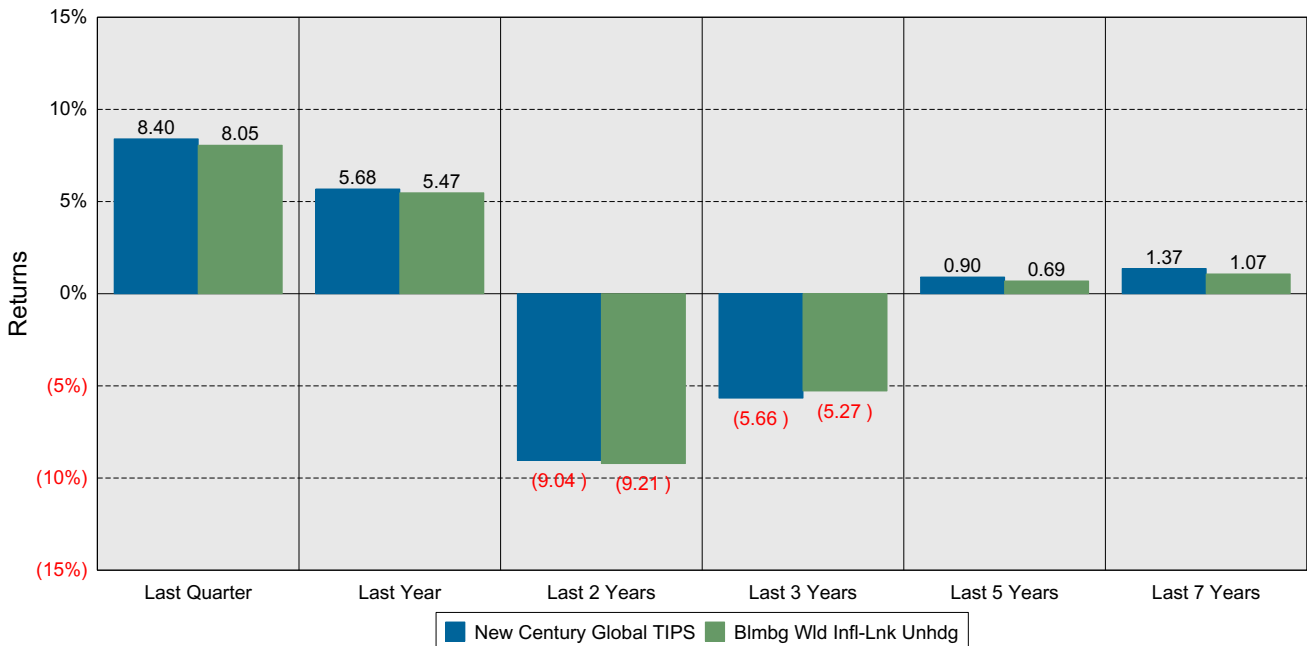
# New Century Global TIPS Period Ended December 31, 2023

## Investment Philosophy

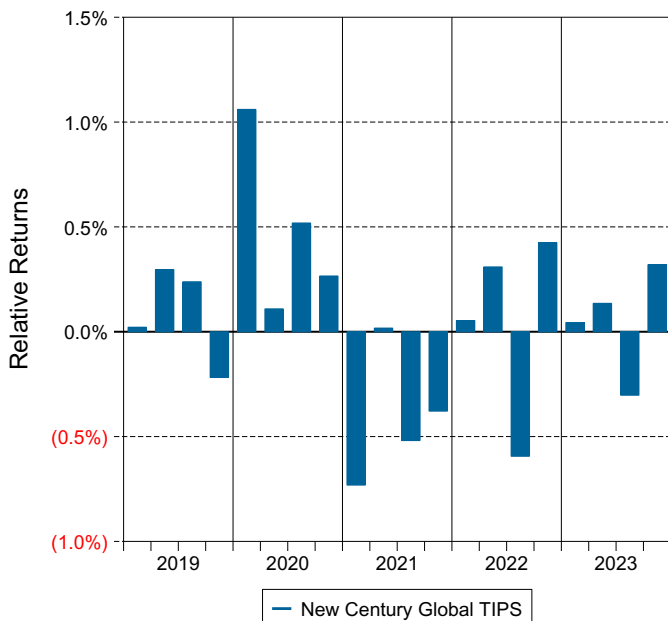
New Century Advisors believes there are five main sources of excess return that an active manager can capture in the Global Inflation Linked Bond Product: duration management, county selection, currency management, yield curve positioning, and nominal/linker relative value. New Century Advisors approach to adding value in each case is the same, a three pronged approach combining fundamental analysis, technical analysis and human judgment.

## Quarterly Summary and Highlights

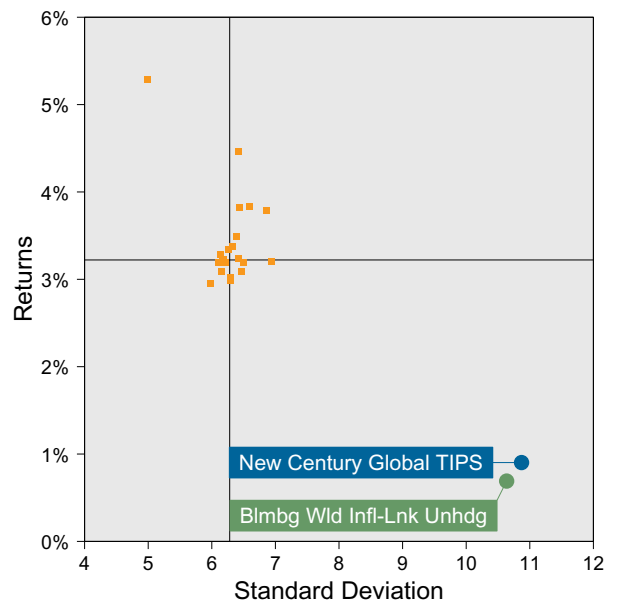
- New Century Global TIPS's portfolio posted a 8.40% return for the quarter placing it in the 1 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 13 percentile for the last year.
- New Century Global TIPS's portfolio outperformed the Blmbg Wld Infl-Lnk Unhdg by 0.35% for the quarter and outperformed the Blmbg Wld Infl-Lnk Unhdg for the year by 0.21%.



Relative Return vs Blmbg Wld Infl-Lnk Unhdg



Callan Inflation Linked Bonds (Gross)  
Annualized Five Year Risk vs Return

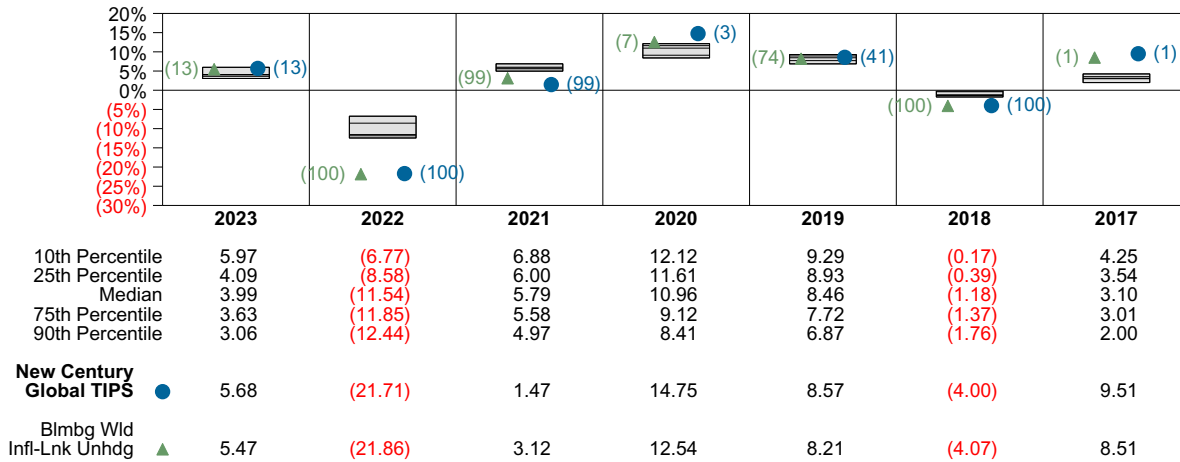


# New Century Global TIPS Return Analysis Summary

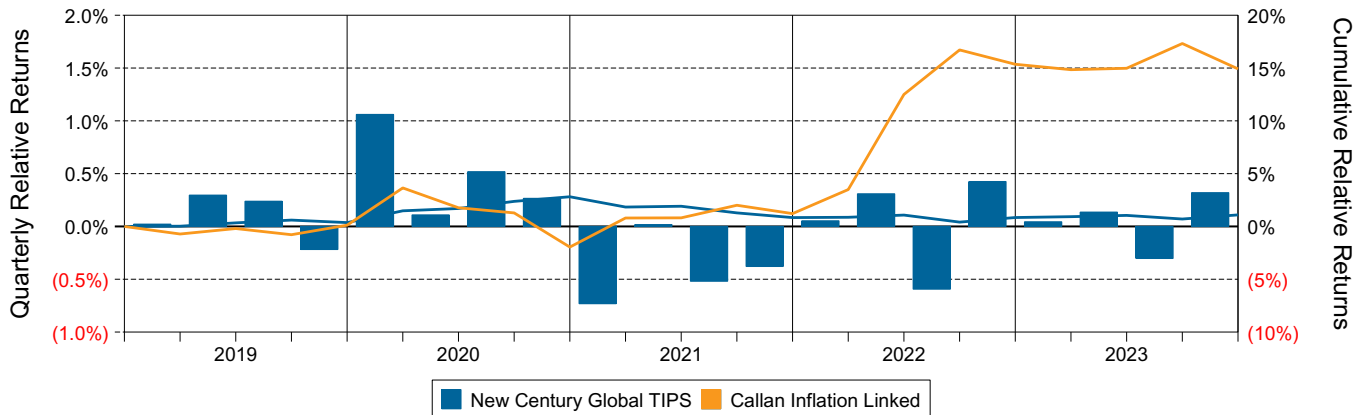
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

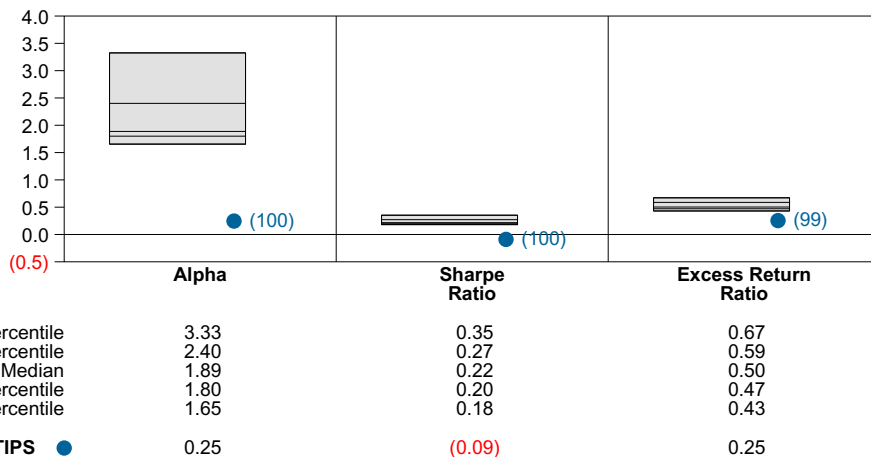
### Performance vs Callan Inflation Linked Bonds (Gross)



### Cumulative and Quarterly Relative Returns vs Bmbg Wld Inf-Lnk Unhdg



### Risk Adjusted Return Measures vs Bmbg Wld Inf-Lnk Unhdg Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023



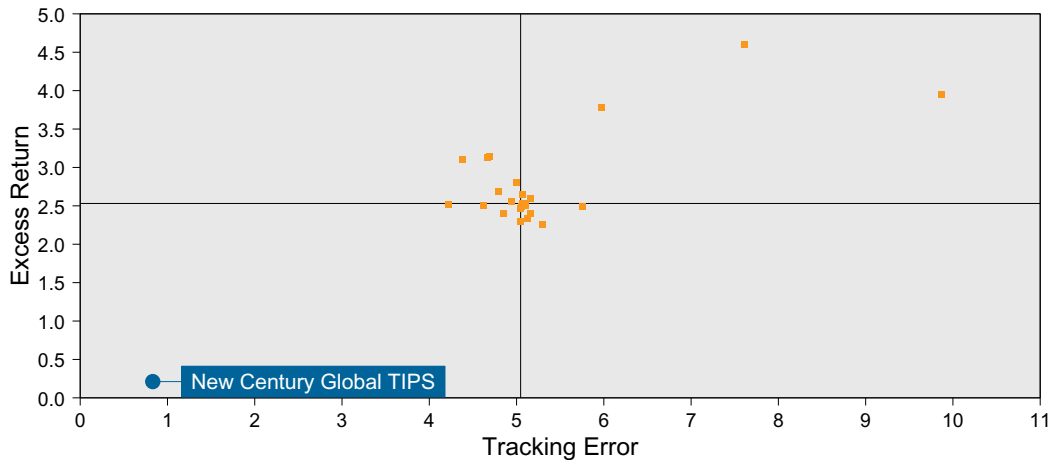


# New Century Global TIPS Risk Analysis Summary

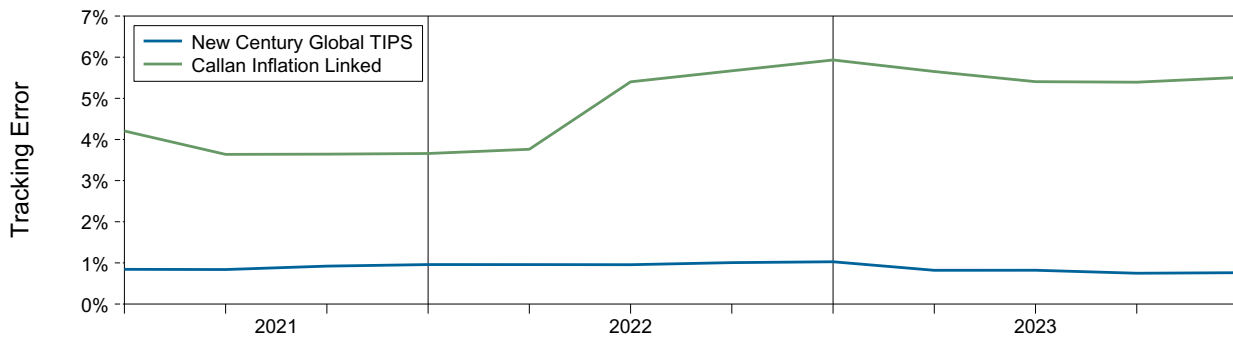
## Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

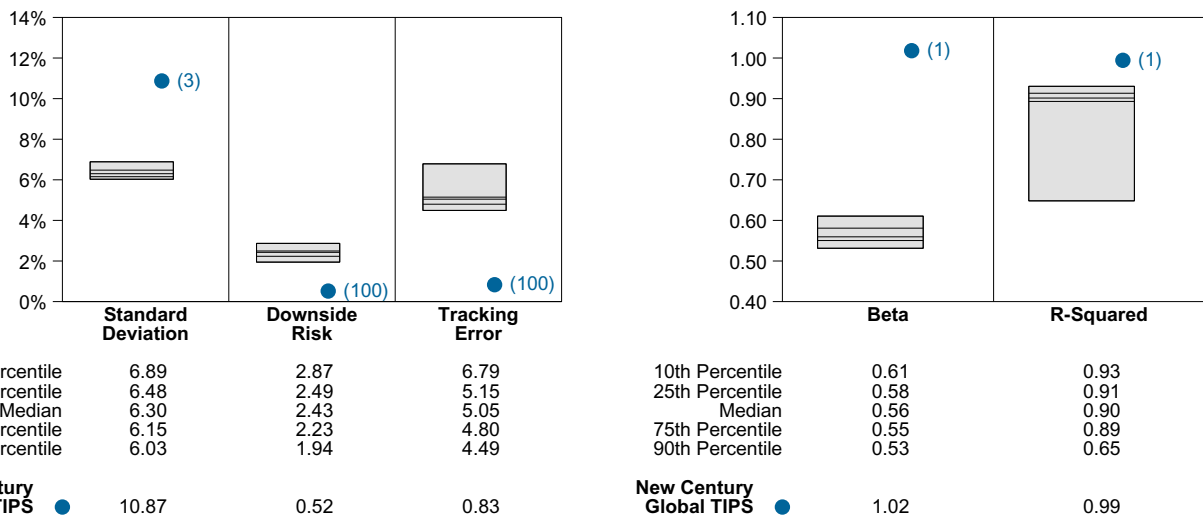
### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023



### Rolling 12 Quarter Tracking Error vs Bloomberg World Inflation-Linked Unhedged



### Risk Statistics Rankings vs Bloomberg World Inflation-Linked Unhedged Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended December 31, 2023

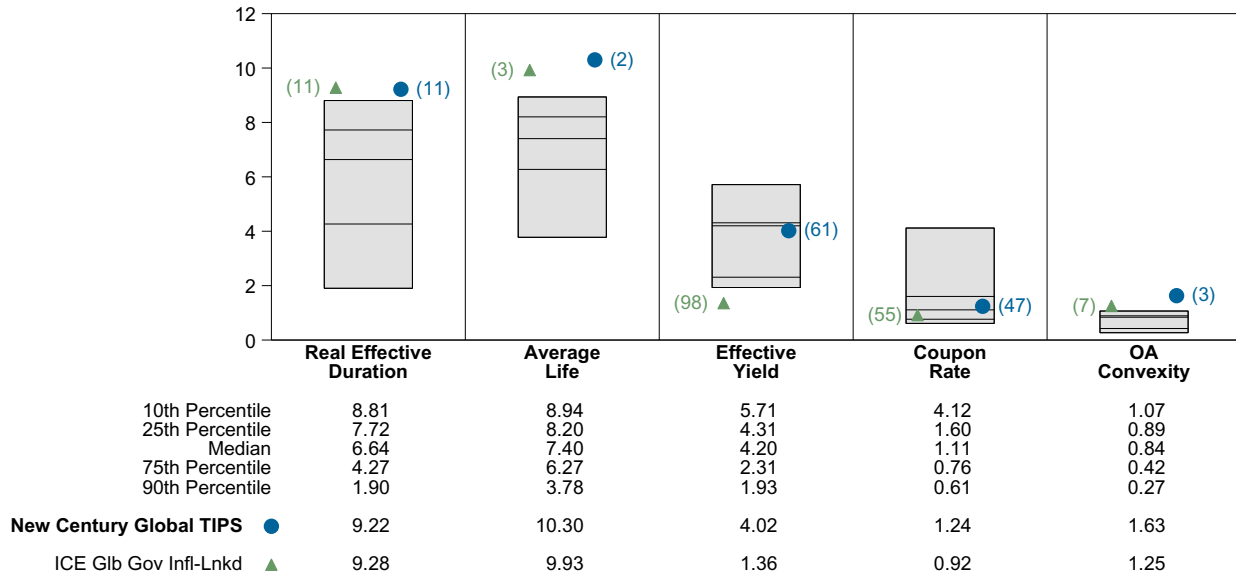


# New Century Global TIPS Bond Characteristics Analysis Summary

## Portfolio Characteristics

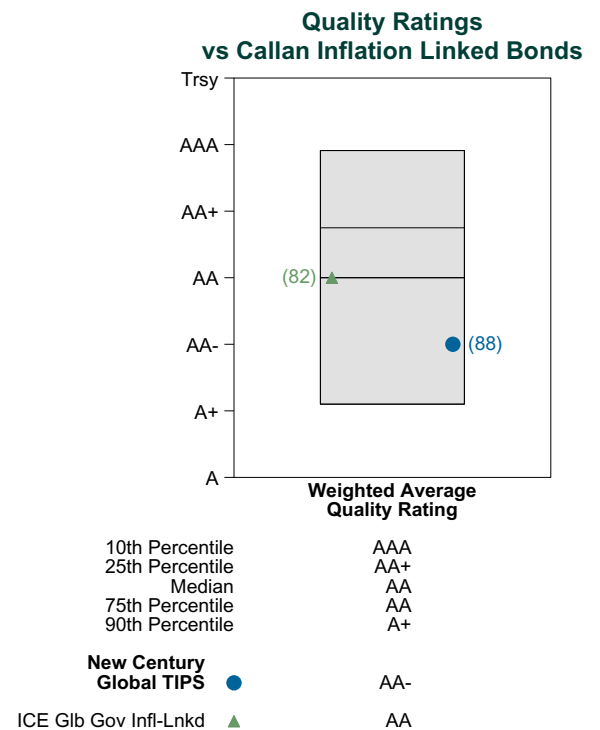
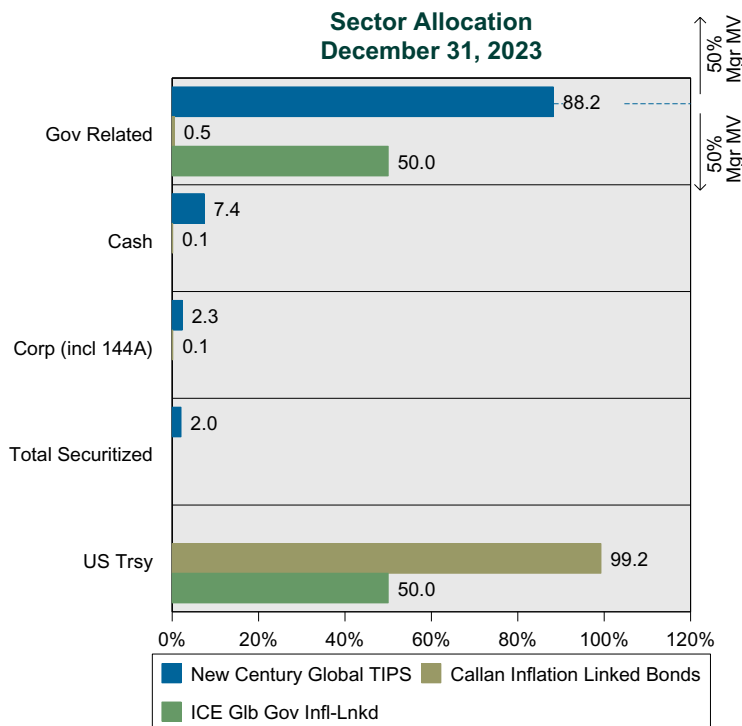
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds as of December 31, 2023



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



# New Century Global TIPS Portfolio Characteristics Summary As of December 31, 2023

## Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

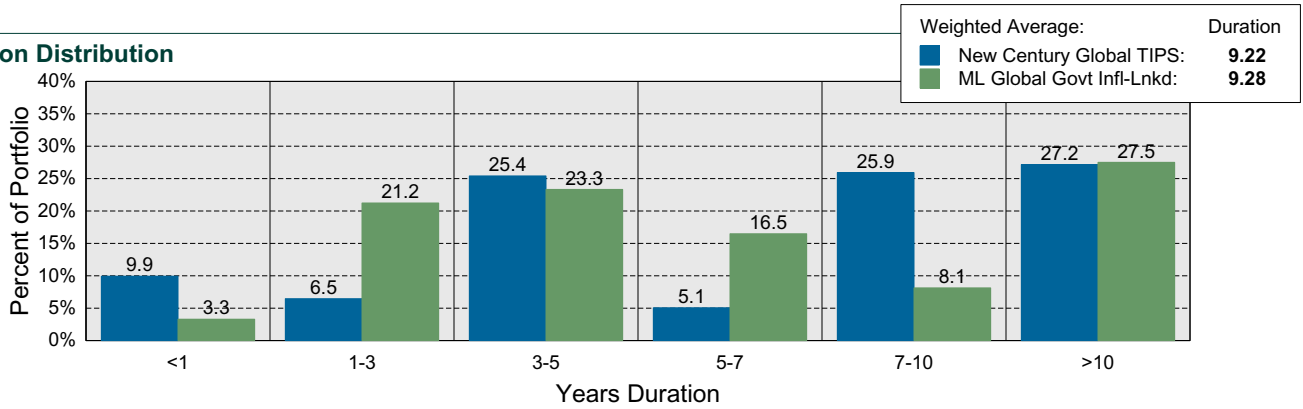
### Sector Allocation



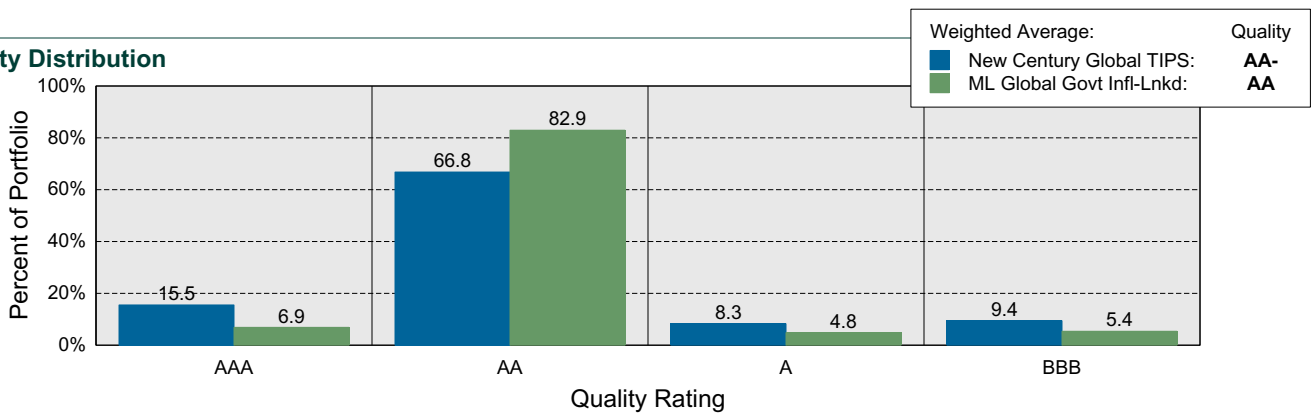
### New Century Global TIPS

### ML Global Govt Infi-Lnkd

#### Duration Distribution



#### Quality Distribution





## Quarterly Highlights

The Callan Institute provides research to update clients on the latest industry trends, carefully structured educational programs to enhance the knowledge of industry professionals, and events to enhance dialogue among investing professionals. Visit [www.callan.com/research-library](http://www.callan.com/research-library) to see all of our publications, and [www.callan.com/blog](http://www.callan.com/blog) to view our blog. For more information contact Barb Gerraty at 415-274-3093 / [institute@callan.com](mailto:institute@callan.com).

## New Research from Callan's Experts

**[2023 Nuclear Decommissioning Funding Study](#)** | Callan's annual study offers key insights into the status of nuclear decommissioning funding to make peer comparisons more accurate and relevant.

**[2023 Investment Management Fee Study](#)** | The purpose of the study is to provide a detailed analysis on fee levels and trends across multiple asset classes and mandate sizes, for both active and passive management.

**[2023 Asset Manager ESG Study](#)** | Callan's inaugural ESG Study analyzes responses to various environmental, social, and governance questions in Callan's manager database by firm size, asset class, country of domicile, and ownership structure.

## Webinar Replays

**[Research Cafe: Office-to-Residential Conversions](#)** | During this interview, Callan specialists Aaron Quach and Christine Mays of Callan's Real Assets Consulting Group discuss office-to-residential conversions.

**[Webinar: Callan's Retirement Conundrum](#)** | During this discussion, representatives from Callan and October Three (a human resource and actuarial consulting firm) discuss how a small provision in SECURE 2.0 has paved the way for cash-balance pension plans to meet retirement income needs.

## Blog Highlights

**[How Your Public DB Plan's Returns Compare](#)** | This 3Q23 update to our quarterly series of blog posts provides context for public defined benefit (DB) plans about their returns over time.

**[ILS on Pace for Banner Year in 2023](#)** | When reviewing hedge fund portfolios, those investing in insurance-linked securities (ILS) are finding that this oft-overlooked strategy is buoying performance.

## Quarterly Updates

**[Private Equity Update, 3Q23](#)** | A high-level summary of private equity activity in the quarter through all the investment stages

**[Active vs. Passive Charts, 3Q23](#)** | A comparison of active managers alongside relevant benchmarks over the long term

**[Market Pulse, 3Q23](#)** | A quarterly market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data on the capital markets

**[Capital Markets Review, 3Q23](#)** | Analysis and a broad overview of the economy and public and private markets activity each quarter across a wide range of asset classes

**[Hedge Fund Update, 3Q23](#)** | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

**[Real Assets Update, 3Q23](#)** | A summary of market activity for real assets and private real estate during the quarter

**[Private Credit Update, 3Q23](#)** | A review of performance and fundraising activity for private credit during the quarter

**[Callan Target Date Index™, 3Q23](#)** | Tracks the performance and asset allocation of available target date mutual funds and CITs

**[Callan DC Index™, 3Q23](#)** | Provides underlying fund performance, asset allocation, and cash flows of more than 100 large defined contribution plans representing approximately \$400 billion in assets

## Events

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A complete list of all upcoming events can be found on our website: [callan.com/events-education](https://callan.com/events-education).

*Please mark your calendar and look forward to upcoming invitations:*

### 2024 National Conference

April 8-10, 2024 – San Francisco

### June Regional Workshops

June 25, 2024 – Atlanta

June 27, 2024 – San Francisco

For more information about events, please contact Barb Gerraty: 415-274-3093 / [gerraty@callan.com](mailto:gerraty@callan.com)

## Education: By the Numbers

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**50+**

Unique pieces of research the Institute generates each year

**525**

Attendees (on average) of the Institute's annual National Conference

**4,845**

Total attendees of the "Callan College" since 1994

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## Education

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Founded in 1994, the "Callan College" offers educational sessions for industry professionals involved in the investment decision-making process.

### Alternative Investments

Feb. 21-22, 2024 – Virtual

Alternative investments like private equity, hedge funds, and real estate can play a key role in any portfolio. In our "Callan College" on Alternatives, you will learn about the importance of allocations to alternatives, and how to consider integrating, evaluating, and monitoring them.

### Introduction to Investments

March 19-21, 2024 – Virtual

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities.

Our virtual sessions are held over two to three days with virtual modules of 2.5-3 hours, while in-person sessions run either a full day or one-and-a-half days. Virtual tuition is \$950 per person and includes instruction and digital materials. In-person tuition is \$2,350 per person and includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Additional information including registration can be found at: [callan.com/events-education](https://callan.com/events-education)



"Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialogue to raise the bar across the industry."

Greg Allen, CEO and Chief Research Officer







